# CHAPTER 1: PURPOSE OF AND NEED FOR ACTION

## **Summary**

The proposed federal action is for the Olympic National Forest to issue an easement to authorize Clallam County to construct and maintain 12.1 miles of trail across National Forest System (NFS) land administered by the Pacific Ranger District. Most of the NFS land affected is located within the Sol Duc Watershed from west of Lake Crescent, parallel to State Route 101 (SR 101) to an area south of the Mary Clark Road.

#### **Document Structure**

The Forest Service has prepared this Environmental Assessment in compliance with the National Environmental Policy Act (NEPA) and other relevant Federal and State laws and regulations. This Environmental Assessment discloses the direct, indirect, and cumulative environmental impacts that would result from the proposed action and alternative.

- *Introduction:* The section includes information on the history of the project proposal, the purpose of and need for the project, and the agency's proposal for achieving that purpose and need. This section also details how the Forest Service informed the public of the proposal and how the public responded.
- Comparison of Alternatives, including the Proposed Action: This section provides a more detailed description of the agency's proposed action as well as alternative methods for achieving the stated purpose. Alternatives were developed based on significant issues raised by the public and other agencies. This discussion also includes possible mitigation measures. Finally, this section provides a summary table of the environmental consequences associated with each alternative.
- Environmental Consequences: This section describes the environmental effects of implementing the proposed action and the No Action alternatives. This analysis is organized by resource areas. Within each section, the affected environment is described first, followed by the effects of the No Action Alternative that provides a baseline for evaluation and comparison of the proposed action that follows.
- Agencies and Persons Consulted: This section provides a list of preparers and agencies consulted during the development of the environmental assessment.
- *Appendices:* The appendices provide more detailed information to support the analyses presented in the environmental assessment.

Additional documentation, including more detailed analyses of project-area resources, may be found in the project planning record located at the Pacific Ranger District Office in Forks, WA or at the Olympic National Forest Headquarters in Olympia.

# **Project Location**

The project area is located on the Pacific Ranger District of the Olympic National Forest, in Clallam County, Washington (Appendix 1, vicinity map). Most of the proposed activity would occur within the Sol Duc watershed, with a small portion on the west end in the Calawah River watershed and another small portion on the east end in the Lyre River/Twin River watershed. The legal description is: T 30 N, R 9 W, Section 15: T 30 N, R 10 W, Sections 22, 23, 28, 29, 30, 34, 35: T 30 N, R 11 W, Sections 25, 26, 27, 31, 32, 33: and T 29 N, R 12 W, Sections 5, 6, 7.

## **Background**

Clallam County is proposing to construct the Olympic Discovery Trail, a 150-mile paved multi-user route that extends across the Olympic Peninsula from Port Townsend on the east to LaPush on the west. The purpose of this trail is to provide for safe non-motorized use; such hiking, bicycling, equestrian, roller blade, and wheelchair use. The County's identified route includes a combination of overlapping efforts of the Olympic National Forest (ONF) and Olympic National Park (ONP) to utilize portions of the abandoned 1917 Spruce Division Railroad Grade for non-motorized interpretive trails, as well as using existing roadways and new trail construction.

Since the initial 29 miles of trail from Port Townsend to Port Angeles was constructed local planning has focused on completing links in the area on National Forest System land and on extending the trail westward along an alignment that would connect a number of local, state, and federal ownerships. This extension would result in a trail system that would offer non-motorized users an opportunity to traverse the Olympic Peninsula from coast to coast, with numerous public and private facilities for lodging and other services. Since 2002, several trail segments west of Port Angeles have been surveyed and approved, and construction on Washington Department of Natural Resources lands west of Elwah has been initiated.

In 2002, Clallam County received a grant from the Transportation and Community and System Preservation Pilot Program (TCSP) to construct trail segments of the Olympic Discovery Trail route between Lake Crescent and Forks, using American Association of State Highway and Transportation Officials (AASHTO) standards. As of February 2006, approximately 29 miles of the overall trail had been constructed: 4 miles of trail south of Port Townsend and 25 miles of trail from east of Sequim to Port Angeles. To date, 95% of the trail has been paved, with the remaining 5% being compacted gravel.

The Olympic Discovery Trail would provide the following benefits:

- Provide several local communities the opportunities to increase tourism to offset the reduced economic conditions resulting from decreased timber harvest;
- Provide additional recreation opportunities for members of several local communities; and

• Meet the safety needs identified by the Washington State Department of Transportation to provide a safer alternative for non-motorized traffic and vehicles along SR 101.

# **Purpose and Need for Action**

The purpose and need is defined by the Council of Environmental Quality's regulations as the underlying purpose and need to which an agency is responding.

The need for this project was established when Clallam County made a formal request in September 2002 to the Forest for authorization to construct and maintain 12.1 miles of the Olympic Discovery Trail across National Forest System land.

The purpose of the proposed action is to respond to the County's request, and comply with Federal regulations and Forest Service policies regarding the use of Federal lands for purposes other than disposition of timber, minerals, and the grazing of livestock.

# **Proposed Action**

The proposed action by the Forest to meet the purpose and need is to grant an easement across NFS land to Clallam County to build and maintain 12.1 miles of the Olympic Discovery Trail system. Trail design standards are described later in this section. The non-motorized recreation trail on NFS land would connect with planned trail segments crossing adjacent private and public lands. Construction and maintenance of the trail would be governed by an Operating and Maintenance (O&M) Plan prepared by the County and approved by the Forest, and made a part of the easement. Merchantable trees which need to be cut during trail construction activities would be identified by the Forest and potentially sold. The future treatment of danger trees along the trail would be included in the proposed activities.

Parcels of private and other public ownership (trail segments 6 and 11) are intermingled along the portion of trail which contains the NFS land included as part of the proposed action. Trail segments across NFS land would be constructed once easements across all ownerships are secured by the County.

Construction of the trail segments (Appendix 1, Map 2) on National Forest System lands includes:

- 1.2 miles of new construction (Segments 4, 8, 9, 10);
- Approximately 0.3 miles widening and improving of the existing Mt. Muller trail (Segment 9);
- 2.0 miles of reconstruction of the abandoned Spruce Railroad grade (Segment 1, 2, 7);
- Use of 8.6 miles of existing Forest Service system roads (Segment 3: FSR 2929-070, Segment 0-C: FSR 3079-011, Segment 0-B: FSR 2902, Segment 0-A: FSR

2902-300, and Segment 5), 3.8 miles of which would be resurfaced (Segments 3, 5, and 0-C).

**Table 1 Trail Segments** 

Segment	Length (miles)	Description	Activity	Paved
0-A/B	4.75	FSR 2902, 2902-300	Existing road, no work done	No
1	0.75	Railroad grade	Reconstruct	Yes
2	0.77	Railroad grade	Reconstruct	Yes
3	3.02	FSR 2929-070	Improve	Yes
4	0.23	NFS land	New construction	Yes
5	0.27	FS non-system road	Improve	Yes
6		Private		Yes
7	0.45	Railroad grade	Reconstruct	Yes
8	0.23	NFS land	New construction	Yes
9	0.30	Mt. Muller Trail	Widen/Improve	Yes
10	0.74	NFS land only	New construction	Yes
11		Olympic National Park		Yes
0-C	0.55	FSR 3079-011	Improve	Yes

#### **Trail Design Standards**

The County's proposal requires that the trail design standards meet the American Association of State Highway and Transportation Officials (AASHTO) standards to adhere "to certain standards to efficiently and safely move people and goods" (AASHTO mission statement). The trail design standards require a 20 foot clearing of vegetation to construct a 10 foot wide (surfacing width would be 12 feet on FSR 2929-070 (segment 3) to accommodate wheel base of timber harvest equipment) chip sealed or asphalted surface to accommodate touring and mountain bike use, a 4 foot shoulder on one side to accommodate horse use and a 2 foot shoulder on the other side (Appendix 2, Proposed Olympic Discovery Trail Design Standards). Forest Service Roads 2902 and 2902-300 (segments 0-A and 0-B) are outside the area covered by the County's grant, and as such this section of trail does not need to comply with AASHTO standards. Road and resource conditions on these existing roads are such that they would be left in their existing condition and would not be improved as part of this proposed action.

The trail surface would be designed to accommodate use by administrative vehicles. In Segment 3, where the trail overlays existing Forest Service system roads, it would be constructed to engineering standards that would withstand use by heavy equipment and log trucks. All work would require heavy equipment and chainsaw use.

## **Decision Framework**

Given the purpose and need, the Responsible Official, Forest Supervisor Dale Hom, will review the proposed action and the No Action alternative in order to make the following decisions:

- Whether to issue an easement to Clallam County, authorizing the construction and maintenance of the Olympic Discovery Trail on National Forest System lands, and
- If so what management requirements and mitigation measures will be implemented.

The decision will include a determination of the significance of the effects and a statement regarding consistency with the standards, guidelines, goals and objectives of the Forest Plan, and other laws and regulations.

# **Management Framework**

#### The Forest Plan

The 1990 Olympic National Forest Land and Resource Management Plan (1990 Forest Plan or LMRP), as amended provides management direction for the National Forest System lands (NFS) within the project analysis area. Direction is provided in the form of goals and objectives, and Forest-wide and Management Area standards and guidelines (S&Gs). Amendments include the 1994 Record of Decision which adopted and modified the FSEIS on Management of Habitat of Late-Successional and Old-Growth Related Species Within the Range of the Northern Spotted Owl (referred to as the Northwest Forest Plan), the 1994 ROD and FSEIS Amending Resource Management Plans for Seven Bureau of Land Management Districts and Land and Resource Management Plans for Nineteen National Forests Within the Range of the Northern Spotted Owl to Clarify Provisions Relating to the Aquatic Conservation Strategy, and the 2005 Pacific Northwest Region FEIS for the Invasive Plant Program.

The 1994 ROD (USDA and USDI 1994) incorporates seven land allocations, which amend the allocations described in the 1990 Forest Plan. There is considerable overlay among some allocations, and more than one set of standards and guidelines may apply (such as Riparian Reserve requirements within a Late Successional Reserve). In addition, where the standards and guidelines of the 1990 Forest Plan are more restrictive or provide greater benefits to late-successional forest-related species than do those of the 1994 ROD, the existing S&Gs apply (Appendix 1, maps 2 and 3).

The 1994 amendment also includes additional forest-wide standards and guidelines, and an Aquatic Conservation Strategy, with four components—Riparian Reserves, Key Watersheds, watershed analysis, and watershed restoration—that are designed to help improve the health of the aquatic ecosystem.

# Land Allocations within the Project Area

The following land allocations are found within the analysis area:

Late Successional Reserve (LSR): Late Successional Reserve areas are designated to protect and enhance conditions of late successional and old growth forest ecosystems, which serve as habitat for late successional and old growth forest related species including the northern spotted owl (1994 ROD, A-4). The Calawah Ridge Block of the Soleduck LSR is located within the analysis area, but no project activities would occur within this area. The west end of the proposed trail utilizes FSR 2902-300 which forms the boundary between LSR and AMA allocations.

**Riparian Reserves:** Riparian Reserves, a major component of the Aquatic Conservation Strategy (ACS), includes areas along all streams, wetlands, ponds, lakes, and unstable or potentially unstable areas (1994 ROD, A-5). Riparian Reserves overlay all other management areas. Generally, standards and guidelines for Riparian Reserves prohibit or regulate activities that retard or prevent attainment of ACS objectives.

Adaptive Management Area (AMA): AMAs have been assigned the primary goal of developing and implementing innovative management practices that integrate economic and ecological values. The AMA land allocation in the project area was designated by the 1990 LMRP as:

- E1 Timber Management Prescription for timber production, and
- A2 Scenic Management Prescription to protect, maintain or enhance scenic values as viewed from major travel routes, use areas, or waterbodies.

**Scenic:** The goal of Management Prescription A2 is to manage specific landscapes in such a manner that their scenic values are protected, maintained, and/or enhanced as viewed from major travel routes, use areas, or water bodies. The desired future conditions is that landscapes are providing pleasing scenery as viewed from travel routes, use areas, and water bodies. These landscapes will accommodate management activities that are not evident, or are visually subordinate to the natural landscape, when viewed by casual forest visitors.

*Pileated Woodpecker/Pine Marten Habitat Area:* The goal of Management Prescription C2 is to provide mature forest habitat for the pileated woodpecker and marten, the indicator species for wildlife associated with mature habitats. Additional goals are to: 1) provide a long-term natural gene pool of all species, plant and animal, that are found in this ecosystem; 2) provide an area to study this type of ecosystem; and 3) provide for aesthetic needs.

**Bald Eagle Management Areas:** The goal of Management Prescription C3 is to provide sufficient habitat for nesting and wintering bald eagles so as to expedite their removal from the Federal and state threatened or endangered species lists. Additional goals are to: 1) provide a long-term natural gene pool of all species, plant and animal that are found in this ecosystem; 2) provide an area to study this type of ecosystem; and 3) provide for aesthetic needs.

## **Public Involvement**

Informal tribal consultation began with discussion with representatives of the Quileute Tribe on December 16, 2003. Formal Tribal consultation with the Quileute Tribe

occurred on February 2, 2004. After receiving their input on February 18, 2004, public scoping was initiated.

In January 2004, the proposal was listed in the Forest's Schedule of Proposed Actions, and was provided to the public and other agencies for comment during scoping in February 2004. In addition, as part of the public involvement process, the agency identified organizations who expressed an interest in notification regarding this type of project and adjacent property owners (Appendix 3, Contact List for Olympic Discovery Trail Public Scoping). These individuals received a letter describing the project in February 2004. On February 25, 2004, a public notice appeared in the newspaper of record, the Peninsula Daily News. We received three letters, one e-mail and two phone calls. All the issues identified over time either internally or externally by the Quileute Indian Tribe, federal/state/local agencies and the public, are listed in Appendix 4, Olympic Discovery Trail Issues Identified.

Using the comments from the public, other agencies, and the Quileute Tribe (see Issues section), the interdisciplinary team developed a list of issues to address.

### **Issues**

The Forest Service separated the issues into two groups: significant and non-significant issues. Significant issues were defined as those directly or indirectly caused by implementing the proposed action. Non-significant issues were identified as those: 1) outside the scope of the proposed action; 2) already decided by law, regulation, Forest Plan, or other higher level decision; 3) irrelevant to the decision to be made; or 4) conjectural and not supported by scientific or factual evidence. The Council on Environmental Quality (CEQ) NEPA regulations require this delineation in Sec. 1501.7, "...identify and eliminate from detailed study the issues which are not significant or which have been covered by prior environmental review (Sec. 1506.3)..." Indicators (or measures) follow each significant issue to allow for comparison of how each alternative addresses or impacts the resource concern. A list of non-significant issues and reasons regarding their categorization as non-significant may be found in appendix 4.

The Forest Service identified four significant issues:

#### **Issue #1: Invasive Plant Species**

Concerns were expressed that trail construction activities would involve equipment use and movement of material (such as soil or rock), which could spread existing populations of invasive plants and introduce new populations. There was also a concern that removal of vegetation and exposure of mineral soil would provide new host areas for invasive plant species. Another invasive plant species concern relates to the potential increased stock use of the trail area and the potential for introduction of new invasives via manure if the stock consumes non weed free feed.

Indicators: Narrative description of how each alternative responds to this issue.

#### Issue #2: Wildland Fire Risk

There were concerns related to the increased slash associated with trail construction activities in that once fires were ignited they would burn with increased intensity and rate of spread. There was also a concern that increased use of the area associated with the trail would increase the risk of wildland fire occurrence.

Indicators: Narrative description of how each alternative responds to this issue.

#### **Issue # 3: Aquatic Habitat**

There were concerns about reduction in quality and availability of suitable spawning habitat due to increased erosion and sedimentation related to: an increase in impermeable surface area due to pavement of some trail segments, and disturbance of soil and vegetation in riparian areas. Additional concerns were raised related to an increase in stream crossings, loss of recruitment of large woody debris, potential impacts to forested wet areas, water quality, and road density.

Indicators: Narrative description of how the alternatives respond to the following indicators taken from the "Matrix of Pathway and Indicators": sediment/substrate embeddedness, channel width/maximum depth, streambank condition, drainage network increase, road density and location, and function of riparian reserve. Qualitative values of acres of impermeable surface and miles of new trail will also be used.

#### **Issue #4: Terrestrial Species and Habitat**

Concerns were expressed that trail construction could fragment habitat, which impairs movement of some species and results in new edge which can increase predation of some species. Trail construction would also remove both existing and potential future habitat which potentially could result in a decrease in capacity to support species populations. There were also concerns related to the potential for adverse effects to some species related to direct mortality, noise and activity disturbance, road density increases, and litter/garbage associated with trail construction.

Indicators: Narrative description of how each alternative responds to the issue, as well as qualitative values for amount of new edge, acres of habitat removed, and miles of new trail construction.