Big Elk Trail

Environmental Assessment

Responsible Official:
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Rogue River National Forest

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CHAPTER I
PURPOSE of and NEED for the PROPOSED ACTION

A. Introduction

The Cascade side of the Ashland Ranger District has a high-use recreation area located around Fish Lake, south of Highway 140. Recreation planners are trying to accommodate an increasing number of different users that share existing recreation trails. The Klamath District on the Winema National Forest manages the Lake of the Woods recreation area located a few miles east of Fish Lake. Both these recreation areas and resorts provide a destination for many types of recreation users. The Pacific Crest National Scenic Trail (PCNST) is located between the two lakes offering hikers and equestrians a trail system through some of the most beautiful scenery in the Cascade Mountains. The two lakes are separated by the basalt lava flows of Brown Mountain, a 7,200 feet volcanic cone. Recreation planners are trying to reduce the inappropriate (non-conforming) use on the PCNST by non-motorized bicycles by providing a trail-loop opportunity south of Fish Lake. The Big Elk Trail Environmental Assessment (EA) addresses the physical, biological and social effects of constructing a new trail system through the Brown Mountain Lava Flows to link the Brown Mountain Trailhead with the Fish Lake Area.

The primary purpose of the Big Elk Trail EA is to facilitate a decision and to ensure that the policies and goals defined in the National Environmental Policy Act (NEPA) are used. The EA also provides the decision makers with pertinent information regarding the environmental affects of implementing this proposal, displays the alternatives in comparative form, defines the issues and provides a clear basis for choice among options.

B. Decisions to be Made

The Ashland District Ranger, as the Responsible Official, must decide whether to implement the project as proposed, implement portions of the project, implement a modification of the proposal, or choose the No-Action alternative.

C. Purpose and Need

The purpose for the proposed action is to provide a loop trail system designed for hikers, equestrians, and bicycles around Brown Mountain utilizing the High Lakes and Brown Mountain Trails. The need for this project is to prevent non-conforming uses on the PCNST. Since mountain bikes are not allowed on the PCNST, this trail is needed to provide a loop opportunity around Brown Mtn. for mountain bikes without compromising PCNST trail objectives.

The proposed trail construction project is located on the eastern side of the Ashland Ranger District, south of Highway 140, with a legal description of T.37S R.04E, in portions of Sections 10, 11, and 15; Willamette Meridian surveyed, Jackson County, Oregon (see vicinity map).
Vicinity map
D. Project Objectives

The objectives of this proposal include the intent to:

1. Provide for alternate trail-loop opportunities for non-motorized wheeled vehicles,
2. Prohibit motorized vehicle use on the trail,
3. Utilize the existing Brown Mountain Trailhead parking facility.
4. Implement the recreation plan outlined in the RRNF Forest Plan which states that this trail has been planned for construction in the first two decades,
5. Minimize the use of major travel routes (i.e. Forest Service Road 3705),
6. Decommission road systems determined not to be needed, and
7. Provide trail-users with an opportunity for a trail that traverses lava flows and shortens the distance needed to link other existing trail systems.

E. Management Direction

The 1990 Rogue River National Forest Land and Resource Management Plan (LRMP) establishes overall management direction and standards and guidelines for land administered by the USDA Forest Service. It also specifies management goals and objectives, as well as management prescriptions for each Management Strategy (MS). The Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl (ROD), also known as the Pacific Northwest Forest Plan, amended the LRMP and the Medford District Resource Management Plan in 1994, by creating additional land allocations and certain standards and guidelines.

This proposed action was designed using the procedural and substantive requirements of the amended LRMP, the Pacific Northwest Forest Plan, the Endangered Species Act, the National Forest Management Act, the National Environmental Policy Act, and other legal requirements.

As described in the LRMP as amended by the Pacific Northwest Forest Plan, this proposed action occurs within and is designed under the following land allocations:

**Late-Successional Reserve:**
Late-Successional Reserves were identified with an objective to protect and enhance late successional and old growth forest ecosystem conditions and associated species (B-1, Pacific Northwest Forest Plan, 1994). The proposed action is located outside of the any unmapped 100-acre Late-Successional Reserve Spotted Owl activity centers (see pages C-3 and C-10 in the Pacific NW Forest Plan).

**Back Country Non-Motorized (MS3):**
This Management Strategy aims to provide semi primitive, non-motorized recreation opportunities (see Chapter 4-43, LRMP, 1990).

**Brown Mountain Roadless Area (# 06145) (an inventoried RARE II Roadless Area):**
This Roadless area covers 6,667 acres. The LRMP states that a bicycle path is planned for this area for sometime in the first two decades (Appendices Final EIS, LRMP, 1990). The proposed action proposes to construct such a trail.
Riparian Reserves:
Riparian Reserves are a component of the Aquatic Conservation Strategy (see page B-9 in the Pacific Northwest Forest Plan), designed to restore and maintain the ecological health of watersheds and aquatic ecosystems contained within them on public land. The Proposed Action involves existing road segments which are technically within the designated Riparian Reserve (150ft either side of non-fish bearing streams.

The Environmental Policies and Procedures Handbook specifies that an Environmental Impact Statement is written when management proposals are made “that would substantially alter the undeveloped character of an inventoried roadless area of 5,000 acres or more” (FSH 1909.12). The Big Elk Trail Project proposes constructing only 1.8 miles of trail within the Brown Mountain Roadless Area (an area of impact involving less than 1 acre). As this is not a substantial area of land an EIS is not required and an EA is alternatively written. An EA is prepared instead of a Categorical Exclusion (CE), as criteria exist that precludes a CE process; namely an action partially within Inventoried Roadless Area and Riparian Reserve.

This EA also incorporates the High Lake Trail Environmental Assessment and Decision Notice.

F. Proposed Action Description

The Ashland Ranger District of the Rogue River National Forest (RRNF), as the lead Agency, proposes to design and construct a recreation trail from the Brown Mountain Trailhead (located on FS Road 3705) to the end of FS Road 900 (located south of Fish Lake). The trail would be designed for mixed-traffic users consisting of mountain-bikes, hikers, and equestrians. The trail would be on average 2-3 ft wide with some widening on sharp curves and switchbacks. Where appropriate, the trail surface would be constructed of native material. A majority of the trail (5.2 miles) would utilize existing road systems that would be decommissioned and closed to motorized traffic. Forest Service Roads 3705-375 and 350 are proposed to be decommissioned as system roads and commissioned as system trail. Approximately 1.8 miles of the trail would traverse the Brown Mountain lava flows within the Brown Mountain Inventoried Roadless Area. The Big Elk Trail has been analyzed on-the-ground and the location has been flagged. The best route has been carefully selected by recreation planners and assisted by the Forest Landscape Architect. The entire length of the Big Elk trail is expected to be 7.0 miles. The name Big Elk Trail would be dropped upon completion of the project and become an additional segment of the existing Brown Mountain Trail (#950).

G. Scoping Process

Scoping is the solicitation of public, Forest Service and other agency issues and opportunities regarding a proposal.

An invitation to comment was published in a legal notice in the Medford Mail Tribune newspaper on August 7, 1998.

The Big Elk Trail proposal was included in the Ashland Ranger District Project List or Schedule of Proposed Actions (SOPA) in 1998 to the present, in the Rogue River Currents quarterly publication.
Internal scoping consisted of an interdisciplinary team of resource specialists that met during two office meetings to discuss the issues and evaluate alternatives. Other specialists have conducted surveys and inventories of important habitats and determined (according to protocol) the presence or absence of certain species of plants or animals that could be affected by the proposed action.

There have been no scoping comments received from the public specifically for this project.

H. Important Issues

The Rogue River National Forest utilizes a systematic, interdisciplinary approach to "insure the integrated use of natural sciences, social sciences and environmental design arts in planning and in decision making, which may have an impact on the human environment," as stated in The National Environmental Policy Act, regulation 1507.2.

One of the primary tasks of the Interdisciplinary Team (IDT) is the editing and condensing of all previously identified issues and current issues received in the scoping process in order to focus on important or "substantial" environmental and social issues with regard to the proposed action. This is accomplished during the analysis phase, which involves the review of public comments, the collection of a variety of resource data through field investigations, recent research and in this case, previous field reconnaissance and examination conducted for Watershed Analyses. Emphasis is then placed on those important issues deserving of detailed study. The IDT focused on developing appropriate mitigation measures to meet project objectives, current management requirements, resolve resource conflicts when possible and to minimize adverse effects. A complete listing of participants in this final interdisciplinary effort can be found in Chapter IV.

The following site-specific issues were identified as being important for designing and evaluating the methods used to implement the proposed Big Elk Trail:

1) The effect of constructing a non-motorized recreation trail through the Brown Mountain Inventoried Roadless Area.

2) Cost and safety concerns of trail construction through the lava flows.

Note: Important issues are not listed in order of significance

I. Other Issues

Other issues identified by the IDT were not considered as important and/or were common to the alternatives. These issues were addressed during the project design and are reflected in the proposed action. These were:

1. The potential impacts to a northern spotted owl nest site located approximately ¼ mile from the proposed project.

2. The potential impacts to a bald eagle nest tree and site located approximately 1.0 mile from the proposed project,
3. The potential impacts to an osprey nest tree and site approximately 500 feet from the proposed trail location,

4. The potential effects on visual quality,

5. The potential spread of noxious weeds,

6. The potential impacts on wildlife harassment, and

7. The effect to the public and Forest Service administrative uses due to closing or decommissioning Forest Service Roads.

In addition, some issues were identified, initially reviewed, but later dropped from further detailed study because the analysis indicated that these issues would have little or no relevance to the proposed action, such as, access to the dispersed recreation site located on FS Road 3705350.
CHAPTER II
ALTERNATIVES

A. Alternatives Considered, but Not Fully Developed

During the analysis process, the Interdisciplinary Team discussed several alternatives or possible trail routes. Alternatives included different ways of meeting the objectives by using existing systems and managing them differently. The IDT analyzed these alternatives and identified the best alternative that met the project objectives and issues; all of the others were not fully developed.

B. Alternatives Considered in Detail

Recreation planner and the Interdisciplinary Team used a strategic, ground-based method for locating the best location for this trail. Aerial photos, topographic maps and extensive field surveys were used while considering other resource factors, such as, wildlife connectivity, scenic-quality location and wildlife and botanical areas. Cost estimates for a similar trail construction project were used to determine the most economic trail location. (The High Lakes Trail Project linked Fish Lake and Lake of the Woods across lava flows that lie south of Highway 140.) The IDT determined that one proposed action alternative would adequately represent all of the issues that were identified with this project.

**Alternative 1 (No-Action)**

This alternative represents no change from the existing condition and is used as a baseline against which to compare Alternative 2. As trail construction activities would not occur under this alternative at this time, the application of additional mitigation measures or management requirements would not be necessary. This alternative does not propose the decommissioning of any Forest Service road.

**Alternative 2 (Proposed Action)**

This alternative would construct a single-track trail and utilize existing Forest Service Roads to create an approximate 7.0 mile link between Brown Mountain Trailhead and the end of Forest Service Road 900. The trail is designed to be approximately 2-3 feet wide and would use native material for a surface. It would be designed for use by hikers, equestrians and non-motorized mountain bikes. Cross-country (Nordic) skiers would also use this trail in the winter months. No motorized vehicles would be permitted at any time. Forest Service Roads 3705375 and 3705350 would be decommissioned to prevent conflicts of mixed traffic on the roads.

Starting from the Brown Mountain Trailhead and working to the north, the first segment (1.0 mile) would construct new trail on flat tree-covered ground in a previously harvested unit of the Brown Mountain Timber Sale. Few, if any trees, would be removed for the construction of this segment. This segment would tie-in with FS Road 3705375 and utilizes a decommissioned segment of road (2.3 miles). No ground-disturbing activities would occur on this segment.
The next short segment (0.3 miles) would utilize the paved portion of FS Road 3705 as it crosses the South Fork of Little Butte Creek. No ground-disturbing activities would occur on this segment. FS Road 3705350 would be the next segment of decommissioned road that the trail would utilize, which lies within Riparian Reserve land allocation. A dispersed recreation site lies approximately one tenth of a mile down this road, at which point the road is blocked. The road would require minimal reconstruction work to continue the trail from the recreation site to the end of the road. The road ends at a tree plantation. The trail would continue along the edge of the plantation and the lava flow. Minimal trail construction is required for this segment (0.6 miles).

The last segment of trail would traverse the Brown Mountain lava flow and Roadless Area. This area would require the greatest amounts of surveying and placement to safely and cost-effectively construct. The majority of this segment would be across large boulder-sized basalt rocks where few, if any trees, would be removed (none greater than 3 inches in diameter). Careful rock placement by the trail crews would be important to fill-in the voids left from lava rock removal. Additional (weed-free) material would have to be imported to complete the trail surface, which would make this the most expensive portion of the trail project. The northerly trailhead would be at the end of FS Road 900. Parking would be available at the junction of FS Road 900 and 930 when the road is open, and at the lockable gate when the road is closed.

The trail would be marked with Nordic trail signs to assist cross-country skiers to locate the trail during the winter. Information signs would be placed at the trailheads providing trail users with a map of the trail and other pertinent information. The trailheads would require Northwest Forest Pass parking permits for trail-users who park and use the facility.

The following map shows the trail segments associated with the Proposed Action.
Alternative 2 map (PROPOSED ACTION)
C. Mitigation Measures and Management Requirements

The following specific mitigation measures and management requirements and constraints described below were designed to apply to Alternative 2 (Proposed Action).

- Minimize impacts to the osprey (Pandion haliaetus) nest site:
  Any activities creating an adverse impact should not occur within ¼ mile of the nest site from March 1\textsuperscript{st} to August 31\textsuperscript{st}. During the nesting season, motorized equipment should not be used within ¼ mile of the occupied nest site. Hand tools only are recommended within ¼ mile of the nest site and a Wildlife Biologist should determine if there is any potential for disturbance during hand trail construction. If a Wildlife Biologist determines that the nest site is not occupied, the seasonal restriction may be lifted, and mechanical (motorized equipment) may be used.

General trail construction mitigation:

- Minimize the removal of any trees during trail construction (only removing trees less than 3 inches DBH).

- Require that all machines used for trail construction would be washed and free of noxious weeds/seeds prior to working on the site.

- Use only weed-free material during the construction of the trail. All imported fill materials would be certified weed-free.

- Trail maintenance, beginning the year following construction, would remove noxious weeds from the project area.
CHAPTER III
ENVIRONMENTAL CONSEQUENCES

A. Introduction

This section describes the environmental consequences of implementing each alternative in terms of its effects on the physical, biological, economic and social aspects of the human environment. Short-term effects are related to the period when the proposal is being implemented or at the time implementation is completed. Long term consequences generally refer to effects predicted to occur over an extended period; normally 5 years or more from the time project implementation is initiated.

B. Effects of Implementation: Important Issues

The following discussions relate directly to the important issues described in the previous section and followed by discussion of other secondary issues.

**Alternative 1 (No-Action)**

1) *The effect of constructing a non-motorized recreation, trail, through the Brown Mountain Inventoried Roadless Area.*

As the No-Action Alternative would not construct trail or decommission any Forest Service Roads, there would be no effects to the Brown Mountain Roadless Area.

2) *Cost and safety concerns of trail construction through the lava flows.*

Under the No-Action Alternative, there would be no costs and no safety issues, as trail would not be constructed.

**Alternative 2 (Proposed Alternative)**

1) *The effect of constructing a non-motorized recreation, trail, through the Brown Mountain Inventoried Roadless Area.*

Under alternative 2, the Big Elk Trail would be designated as a non-motorized trail suitable for mountain bikes and signed for winter cross-country use. Both of these activities are presently permitted within the Roadless Area, and are consistent with Late-Successional Reserve and Riparian Reserve Allocations. although mountain bike use is practically impossible across the lava flows. However, there are some small areas of the Brown Mountain Roadless Area that is not covered with lava flow or basalt rocks where mountain bikes could be used. During the winter, snow covers most of the lava flow attracting a few Nordic skiers that wish to ascend to the summit of Brown Mountain. There would be no change to this type of experience.
This alternative proposes to construct a transportation system within a Roadless Area. The trail is designed to be approximately 2-3ft wide, but would still modify the area and could affect a recreational experience by impacting the scenery with a linear transportation system. However, the project area would affect an area of land less than one acre.

2) Cost and safety concerns of trail construction through the lava flows.

Recreation Planners and a Landscape Architect have conducted an extensive survey to minimize the amount of trail required across the lava flows. For this reason, there is (according to the IDT) only one acceptable and cost-effective way through the lava flows that meets the objectives of this trail project. Trail grades have been engineered to be fairly gradual so a few trail switchbacks would be integrated into the design to improve safety.

C. Effects of Implementation: Other Issues

This section discusses issues that were identified during the analysis process, but through the design of the alternatives and application of current management direction, laws and policies, were determined to have little or no effect with regard to the proposed action. The following statements include a description and the rationale for eliminating these issues from detailed analyses.

1. The potential impacts to a northern spotted owl nest site located approximately ¼ mile from the proposed project.

A northern spotted owl is located ¼ mile from FS Road 3705350. The Wildlife Biologist has determined that this project would have no little to no effect on the northern spotted owl and their habitat; no tree removal would occur within the ¼ mile area therefore habitat would be maintained. The trail is far enough removed from the nest site so that construction noise and activities would not affect the site.

2. The potential impacts to a bald eagle nest tree and site located approximately 1.0 mile from the proposed project,

The Fish Lake bald eagle site is located approximately 1.0 mile from any proposed trail construction. The Wildlife Biologist has determined that this project would have no little to no effect on the bald eagles or their habitat.

3. The potential impacts to an osprey nest tree and site approximately 500 feet from the proposed trail location,

An active osprey nest is located approximately 500 feet from the proposed trail. A Wildlife Biologist has determined mitigation measures that would prevent any adverse affects to the site (see Chapter II: C. Mitigation Measures and Management Requirements).

4. The potential effects on visual quality,

Visual quality objectives would be met with all alternatives. No openings would be created and very few trees would be cut during trail construction. The trail would be routed around all large trees and vegetative pockets. The area would remain much as it is now under alternative 2 and minimal
negative impacts to the visual quality environment are expected.

5. The potential spread of noxious weeds,

Alternative 2 would have mitigation measures that respond adequately to this concern (see Chapter II: C. Mitigation Measures and Management Requirements)

6. The potential impacts on wildlife harassment,

Hunting pressures would be reduced from road hunters as Alternative 2 proposes to decommission four roads and turn them into the trail system.

7. The effect to the public and administrative uses of closing or decommissioning Forest Service Roads.

No scoping comments have been received from the public to date. Internal scoping is on-going and the IDT has not received any comments from agency employees. There are four roads proposed for decommissioning that would be used for the trail system. Access to this area would still be available, but only using a non-motorized method.

Other general concerns for the proposed action have been mitigated or are briefly mentioned below.

Wetlands

Field surveys and aerial photography interpretation identified no springs or wetlands within the proposed trail area, as defined by Executive Order 11990.

Floodplains

There are no floodplains, as defined by Executive Order 11988, within the project area.

Cultural Resources

Much of the area has been subject to previous heritage surveys during the 1970-1980’s, with negative results with the project’s area of potential effect. The 1998-1999 search found no cultural resources. The Big Elk Trail is determined to be a “no historic properties” undertaking relative to significant cultural resources.

Grazing

A trail system across the lava flows may open-up new areas and provide access to cattle. However, the lava flows contain no forage and offer little attraction to cattle. Alternative 2 should have no change to cattle-use patterns of the area.

Rare Plants

The Botanist determined that there would be no effect on Threatened, Endangered, Sensitive, Survey and Manage, and Protection Buffer Species of fungi, lichens, bryophytes and vascular plants, as they do not occur within the project area (see Appendix A and B – Biological Evaluation for Threatened, Endangered, and Sensitive Plant Species and additional report).

Big Elk Trail Environmental Assessment
Terrestrial Wildlife

The Wildlife Biologist conducted surveys for Survey and Manage Species under the Northwest Forest Plan Record of Decision in the spring and summer of 1999; however, none were found or are known to exist within the project area (see Appendix C – Biological Evaluation and Wildlife Input for the Big Elk Trail Construction).

Fish

The Fish Biologist determined that there would be no effect to Coho salmon and their critical habitat, and no impact to steelhead trout and coastal Chinook salmon (see Appendix D – Fish Biological Evaluation).

Aquatic Conservation Strategy

This project would maintain aquatic habitat conditions in full compliance with the LRMP, Northwest Forest Plan, Aquatic Conservation Strategy (ACS) and Standards and Guidelines as the Proposed Action involves utilizing existing road segments within the designated Riparian Reserve.

Consumers, Civil Rights, Minority Groups, and Women

No adverse effects on these groups would occur as a result of implementing any alternative, as they were designed to be within the limits of the Final Environmental Impact Statement for the Forest Plan (p. 154-159).

Environmental Justice in Minority and Low-Income Populations

Both alternatives are in compliance with Executive Order 12898. That order is designed to focus Federal attention on the environmental and human health conditions in minority communities and low-income communities with the goal of achieving environmental justice. That order is also intended to promote nondiscrimination in Federal programs substantially affecting human health and the environment, and to provide minority communities and low-income communities access to public information on, and an opportunity for public participation in, matters relating to human health or the environment.

Social Effects

Both alternatives would continue to provide natural recreational opportunities within the area of consideration. No adverse economic effects to the tourism sector are anticipated.

Irreversible or Irretrievable Commitments of Resources

Based on the analysis in this environmental assessment, it is predicted that neither alternative would result in any irretrievable or irreversible impacts to the resources evaluated.
CHAPTER IV
CONSULTATION WITH OTHERS

An Interdisciplinary Team (IDT) identified issues associated with the Big Elk Trail Project through a scoping process. Scoping is the solicitation of public, Forest Service and other agency issues and opportunities regarding a proposal. This process included a review and evaluation of information gathered through specialist input and public correspondence received.

Agency/Interest Groups Consulted

The following agencies were consulted during the planning process:

- USDC National Marine Fisheries Service
- U.S.D. I. Fish & Wildlife Service
- Oregon State Historic Preservation Office

An invitation to comment was published in a legal notice in the Medford Mail Tribune newspaper on August 7, 1998 and was sent to the following organizations or businesses:

- Headwaters
- Klamath Siskiyou Wildlands Center

Forest Service Participation

The following Forest Service specialists participated on the Interdisciplinary Team or provided input for the analysis:

- Linda Duffy
- Tom Lavagnino
- Melanie Bowden
- Mike Ricketts
- Gary Bartlett
- Gale Rible
- Ian Reid
- Su Maiyo
- Wayne Rolle
- Jeff LaLande
- Jeanette Williams

  - Ashland District Ranger/Decision Maker
  - IDT Leader/NEPA Coordinator
  - EA Writer/Editor
  - Recreation Planner
  - Landscape Architect
  - Wildlife Biologist
  - Fisheries Technician
  - Fisheries Biologist
  - Botanist
  - Cultural Resources
  - Range Conservation
APPENDICES

A. Biological Evaluation for Threatened, Endangered and Sensitive Plant Species

B. Report on Northwest Forest Plan Species, Survey and Manage Components 1 and 2, and Protection Buffer Species: Fungi, Lichens, Bryophytes, and Vascular Plants

C. Wildlife Biological Evaluation and Input

D. Fish Biological Evaluation
Appendix A

Biological Evaluation for Threatened, Endangered and Sensitive Plant Species
BIOLOGICAL EVALUATION (B.E.) FOR THREATENED, ENDANGERED, AND SENSITIVE PLANT SPECIES

PROJECT: Big Elk Trail Construction Project
DISTRICT: Ashland
PREPARED BY: Wayne Rolle
DATE PREPARED: Sept. 17, 1999

NOTES:
1. Northwest Forest Plan (NWFP) species (Survey & Manage, and Protection Buffer species) are discussed in a separate document.

2. For most projects I create yet another document to address ALL botanical resources, including locally rare species, special plant communities, non-native species, etc. In this case, I am not submitting any additional documents other than this B.E. and the report on NWFP species. This is because there are no additional botanical resources that I am concerned about in this project area or that could be affected by the project.

STEP #1; PRE-FIELD REVIEW: The project area has no known or suspected occurrences, or potential habitat, for plant species listed or proposed under the Federal Endangered Species Act.

There are no known occurrences of Forest Service Region 6 sensitive plant species within the project area. There is potential habitat for Hazardia whitney ssp. discoidea, Iliamna latibracteata, and Cheilanthes intertexta in the project area. There is also potential habitat for a number of non-sensitive locally rare species.

Field reconnaissance has not been done on any significant portion of this project area in the past.

STEP #2; FIELD RECONNAISSANCE:

Field reconnaissance was conducted by myself and volunteer Norton Smith in July of this year. I can identify the species listed in the pre-field review (above) at that time of year. No sensitive species were found. No other rare or unusual vascular plant species were found.

STEP #3: CONFLICT DETERMINATION AND ANALYSIS OF SIGNIFICANCE OF EFFECTS:

There is no conflict because no sensitive species are present.

RECOMMENDATIONS:

1. I recommend no mitigation for sensitive plant species in the planning or implementation of this project.

/s/ Wayne Rolle
Wayne Rolle, Forest Botanist, Rogue River National Forest
Appendix B

Report on Northwest Forest Plan Species, Survey and Manage Components 1 and 2, and Protection Buffer Species: Fungi, Lichens, Bryophytes, and Vascular Plants
BIG ELK TRAIL CONSTRUCTION PROJECT

REPORT ON NORTHWEST FOREST PLAN SPECIES;

SURVEY & MANAGE COMPONENT 1 & 2, AND PROTECTION BUFFER SPECIES

FUNGI, LICHENS, BRYOPHYTES, AND VASCULAR PLANTS

From Wayne Rolle, Sept. 17, 1999

NOTES:

Survey and Manage components 3 and 4 are not discussed. We have no local responsibility for these species. Many are quite common. Several that could occur in the project area are common in southwestern Oregon and there is no conservation concern.

KNOWN OCCURRENCES PRIOR TO FIELD RECONNAISSANCE

None.

SPECIES WITH POTENTIAL TO OCCUR IN THE PROJECT AREA

Fungi
Component 1 species: Several, or more. I didn't try to identify these individually.
Component 2 species: Bondarzewia montana
Protection Buffer species: Aleuria rhenana, Otidea leporina, Otidea onotica, Otidea smithii, Polyozellus multiplex, Sarcosoma mexicana

Lichens
Component 1 species: Maybe one or two. I didn't try to identify these individually.
Component 2 species: None (outside the expected range of any component 2 lichens)
Protection Buffer species: none (there are no lichens in the protection buffer category)

Bryophytes
Component 1 species: Maybe one or two. I didn't try to identify these individually.
Component 2 species: Ptyidium californicum
Protection Buffer species: Buxbaumia viridis, Ptyidium californicum

Vascular plants
Component 1 species: [all these are also classified as component 2 (next line)]
Component 2 species:  *Allotropa virgata*
Protection buffer species: None (there are no vascular plants in the protection buffer category)

SPECIES SELECTED FOR FIELD RECONNAISSANCE

**Component 1 species:**
The NW Forest Plan does not require surveys for these species and I did not conduct them. However, I elected to watch for any component 1 species I could recognize, during my field reconnaissance for sensitive and rare vascular plants and the NW Forest Plan species listed at the bottom of this section.

**Component 2 and Protection Buffer Species:**
Our official survey protocol and Appendix J2 of the NW Forest Plan EIS require surveys and protection for the liverwort *Ptilidium californicum* on California lands only. In addition, this species in now known to be frequent in the southern Oregon Cascades. There is no conservation concern for *Ptilidium* in this part of its range.

The fungi listed above do not appear above ground every year. Therefore it is impractical to survey for them. One of them, *Sarcosoma mexicana* fruited in abundance in spring 1998 and appears to be throughout most of our true fir forests. It is not a conservation concern.

Therefore, the final list of NW Forest Plan species I designed my field reconnaissance to detect includes only the bryophyte *Buxbaumia viridis*, and the vascular plant *Allotropa virgata*.

FIELD RECONNAISSANCE RESULTS

I conducted the field reconnaissance in July this summer. None of the above species were found except *Ptilidium californicum* was found on one tree near the south end of the proposed trail. Also, field reconnaissance revealed that the only suitable habitat for any of the above species was the last 1/2 mile on the south end of the proposed trail.

DISCUSSION OF PROJECT EFFECTS ON THE SPECIES THAT WERE FOUND

The trail construction will not cut the large tree that the *Ptilidium* is on. It will not be affected.
RECOMMENDATIONS

1. I recommend no mitigation for Northwest Forest Plan bryophytes, lichens, fungi, or vascular plants.

SS/ Wayne Rolle, Forest Botanist
Appendix C

Wildlife Biological Evaluation and Input
Reply To: 2670

Date: 23 August 1999

Subject: Biological Evaluation and Wildlife Input for the Big Elk Trail Construction

To: District Ranger, Applegate Ranger District

Biological Evaluation

I have reviewed the project proposal for the construction of the Big Elk Trail. I am completing this Biological Evaluation in response to this project proposal. After review of the proposed project, I have determined that the project will not affect any Threatened, Endangered, Proposed or Sensitive (PETS) species.

A northern spotted owl nest site (pair #260) is located within 1/4 mile of FSR 3705-350. Since the portion of the proposed trail (within a 1/4 mile of the nest site) follows the existing road bed and no additional construction is needed, these owls or their habitat will not be affected.

The Fish Lake bald eagle nest site is located approximately 1.0 mile from the proposed project. This project will have no effect on the bald eagles or their habitat. Refer to the Fish Lake Bald Eagle Management Plan for more information.

Survey and Manage Species

Surveys were conducted for Survey and Manage Species under the Northwest Forest Plan Record of Decision in the spring and late summer of 1999. Abnormal rainfall for a week in mid-August made conditions suitable for the second mollusk survey. Mollusks were found, however, none were Survey & Manage species. No other Survey and Manage species are known or suspected in the project area.

Forest Plan Species

A species of concern under the Rogue River National Forest Land and Resource Management Plan (RRNF LRMP), the osprey (Pandion haliaetus) has an active nest site located approximately 500 feet from the proposed trail construction. Any activities creating an adverse potential impact should not occur within 1/4 mile of the nest site from March 1st to August 31st. During the nesting season, motorized equipment (vehicles, chainsaws, etc.) should not be used within 1/4 mile of the occupied osprey nest site. Hand tools only are recommended within a 1/4 mile of the nest site during this time and the biologist should be notified so that the osprey can be monitored for any potential disturbance during trail construction. If construction is planned during the nesting season within 1/4 mile of the nest site and the nest is not utilized or the osprey have left the nest site for the year, the seasonal restriction may be lifted.

Gail Rible
Wildlife Biologist
Appendix D

Fish Biological Evaluation
Date: June 7, 2000

REPLY TO: 2600

SUBJECT: Big Elk Trail Environmental Assessment: Fish Biological Evaluation.

TO: Linda Duffy, Ashland District Ranger

Executive Summary
It is my opinion that the proposed Big Elk Trail Construction is a “No Effect” determination for federally-threatened Southern Oregon/Northern California (SONC) coho salmon (Oncorhynchus kisutch) and their critical habitat, and “No Impact” (NI) for Klamath Mountain Province (KMP) steelhead trout (O. mykiss), a candidate species for listing, and Southern Oregon/Northern California Coastal chinook salmon (SONCC) (O. tshawytscha), non-warranted species.

This project is categorized as a programmatic federal action described as “trail construction and trail maintenance” listed in table 1 of the August 11, 1997 Letter of Concurrence issued by the National Marine Fisheries Service. No further informal consultation or conferencing is required for this project under the Endangered Species Act.

I. Introduction

The purpose of this document is to provide aquatic and riparian input, assessment and recommendations for the proposed Big Elk Trail Construction Project in reference to threatened, endangered, and sensitive aquatic species and their habitat. The proposed trail will cross the Upper South Fork of Little Butte Creek (Upper SFork) at one location (using an existing road), and will be located within the Riparian Reserve of Upper SFork for a short distance (approximately 1 mile). No anadromous fish are found in this section of Upper SFork.

II. Project Description Summary

This project is needed to reduce the inappropriate vehicle use on the Pacific Crest National Scenic Trail (PCNST), and to provide a loop trail system in the Brown Mountain Area for hikers, equestrians, and bicyclists. This project will use existing roads where possible to minimize the amount of ground disturbance and to reduce costs. Upon completion of the trail, these roads will be decommissioned for motorized vehicle use. Only 1.8 miles of new trail will be constructed, and much of this is in the Brown Mountain Lava Flow—an area with no potential riparian impact. One mile of new trail (near the Brown Mountain Trailhead) will be built adjacent to UPPER SFORK, but few, if any, trees will be removed for construction of this segment and no ground-disturbing activities will occur. Native material and weed-free fill will be used in trail construction. An in-depth project description and site location can be found within the Environmental Assessment for this project.

III. Description of the Species

Upper South Fork Little Butte Creek, a sixth field watershed, supports resident fish populations of rainbow trout (O. mykiss) and eastern brook trout (Salvelinus fontinalis), an introduced species. Coho salmon and their critical habitat, chinook salmon, and steelhead trout are found substantial distances downstream of the proposed project site (approximately 7 miles, 15 miles, and 6 miles respectively) in the mainstem of South Fork Little Butte Creek.
Federal Endangered Species Act status of these fish species is as follows:

- **SONC coho salmon** - listed as **threatened** by the National Marine Fisheries Service (NMFS), May 6, 1997 (62 Federal Register (FR) 42588)
- **SONC coho salmon habitat** – listed as **Critical Habitat** by NMFS on May 5, 1999 (64 FR 24049)
- **KMP steelhead trout** – NMFS concluded that a listing was not warranted for the KMP steelhead. They were deemed a proposed **candidate** species for listing by NMFS, March 19, 1998 (63 FR 13347).
- **Southern Oregon/California Coastal cutthroat trout (SOCC) (anadromous form)** - **not warranted** for listing by NMFS, April 1999.
- **SONCC chinook salmon** – was proposed for listing under the ESA on March 9, 1998 (63 FR 11482), but new information led the NMFS to conclude on September 16, 1999 (64 FR 50394) that the proposed evolutionarily significant unit (ESU) was in fact composed of two separate ESUs. The NMFS further concluded that the newly delineated ESU relevant to this consultation, the SONCC chinook salmon, currently does **not warrant** listing under the ESA.
- **No special status** exists for resident SOCC coastal cutthroat trout, rainbow trout, eastern brook trout or any other fish species not stated above, but found in the Upper SFork drainage.

SONC coho salmon, KMP steelhead trout, and SONCC chinook salmon are sensitive species on the Regional Forester's Sensitive Species list.

**IV. Effects of Proposed Actions on Threatened, Sensitive, Candidate species or Habitat**

The proposed project will minimize sediment inputs in the watershed since:

- 5.2 miles of existing roads will be decommissioned to motorized vehicle use;
- Most new trail construction will occur in the Lava Flow area;
- The majority of the trail will be low gradient and constructed on gentle terrain.

The Aquatic Conservation Strategy (ACS) of the Northwest Forest Plan (NWFP) states that activities on public lands must “maintain or improve” the current condition of aquatic habitats within the project area. The Big Elk Trail Project appears to be consistent with those guidelines of the ACS. This project will not include removing any trees or other riparian vegetation from the project site, and sediment impacts will probably be negligible.

Actions from this project are expected to maintain essential aquatic habitat functions, and should not impede recovery of SONC coho salmon and KMP steelhead trout habitat. This project would maintain habitat conditions in full compliance with Rogue River National Forest Land and Resource Management Plans, Northwest Forest Plan, Aquatic Conservation Strategy and Standards and Guidelines.

A “No Effect” determination for SONC coho salmon and its critical habitat, and “NI” determination for KMP steelhead trout and SONCC chinook salmon were based on the following criteria:

The project design should have little sediment short-term effect, if any, and no long-term adverse effects to threatened SONC coho salmon and their critical habitat (7 miles downstream), and non-listed salmonids immediately downstream. Few, if any, trees will be removed in the Riparian Reserves of Upper SFork. All trees removed will be less than 3”
DBH. This project will improve existing conditions by decommissioning 5.2 miles of roads to motorized vehicle use.

V. **Recommended Project Design Criteria**

The project should follow these measures to further reduce the potential impacts to aquatic species in Upper SFork near the project area:

1. Follow ODFW Guidelines for Timing of In-Water Work (July 15th – September 15th).

2. Minimize brushing by leaving a ten-foot buffer along intermittent and ephemeral streams, and a 20-foot buffer along perennial streams when trails occur within Riparian Reserves or where appropriate.

3. Consider relocating mobile infrastructure away from potential hazard trees. Where relocation is not feasible, consider limbing or topping to alleviate the potential hazard. Where falling is deemed necessary directionally fall trees toward stream channels and Riparian Reserves (and leave the tree on site) where it is safe and feasible to do so.

4. Do not remove downed wood from sites (except to clear trail) within one site potential tree of a stream channel, unless fisheries personnel determine that large woody material (LWM) objectives for stream and Riparian Reserves in the proposed project area are met (as defined by WA and/or ROD S&G's). Take steps to prevent firewood gathering and theft within RR.

5. For downed logs within the trail tread, retain the maximum feasible length. This could include using non-traditional methods or relocating trails.

6. Prevent and minimize erosion from trails by designing and maintaining proper crown and drainage structure with adequate spacing of water bars especially before stream crossings.

7. Dispose of small (<3 cubic meters) slide and slump materials in stable areas and away from stream channels.

8. Refuel power equipment at least 100 feet away from streams, lakes, or wetlands (or use absorbent pads for immobile equipment) to prevent direct delivery of fuel or oil into a waterbody.