

Draft Environmental Assessment

Reconstruction of the Spaur Road

Oregon Department of Forestry, Tillamook
County, OR

FEMA-1672-DR-OR (Public Assistance)

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U.S. Department of Homeland Security
FEMA Region X
130 228th Street SW
Bothell, WA 98021-9796



FEMA

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Abbreviations and Acronyms

AOP	Annual Operations Plan
APE	Area of Potential Effect
ARPA	Archaeological Resources Protection Act
BMP	Best Management Practice
CEQ	Council on Environmental Quality
CSC	closed single canopy
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
ESU	Evolutionary Significant Unit
FEMA	Federal Emergency Management Agency
FONSI	Finding of No Significant Impact
FY	fiscal year
HCP	Habitat Conservation Plan
LF	linear feet
MBTA	Migratory Bird Treaty Act
MOU	Memorandum of Agreement
NEPA	National Environmental Protection Act of 1969
NHPA	National Historic Preservation Act
NOAA	National Oceanic & Atmospheric Administration
NOI	Notice of Intent
OAR	Oregon Administrative Rules
OCMP	Oregon Coastal Management Program
ODA	Oregon Department of Agriculture
ODEQ	Oregon Department of Environmental Quality
ODF	Oregon Department of Forestry
ODFW	Oregon Department of Fish and Wildlife
ODSL	Oregon Department of State Lands
OHV	Off-highway motorized vehicle
OWRD	Oregon Water Resources Department
RAP	Recreation Action Plan
SHPO	State Historic Preservation Office
SR	state route
TMDL	Total Maximum Daily Load
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

1.0 Purpose and Need for Action

1.1 Introduction

The Department of Homeland Security's Federal Emergency Management Agency (FEMA) is proposing to support the Oregon Department of Forestry (ODF) by providing partial funding for the reconstruction of Spaur Road in the Tillamook State Forest, near Tillamook, Oregon (Figure 1.1-1). Access to timber management lands and recreation in the project area was lost in 2006 due to heavy rainstorms and resulting landslides on South Fork Jordan Creek Road, previously used to access this area. ODF and FEMA have determined it is not reasonable to rebuild the damaged South Fork Jordan Creek Road due to its proximity to the South Fork Jordan Creek so ODF has requested that FEMA consider funding an Alternative Project by relocating access to a ridge top location.

The National Environmental Policy Act (NEPA) of 1969 requires FEMA to review a range of potential alternatives for the project and analyze the effects of those alternatives. Two alternatives for the Spaur Road reconstruction are compared in this Environmental Assessment (EA); a No Action Alternative and the Proposed Action. Each alternative is evaluated for potential effects to soils, hydrology and water quality, vegetation and wetlands, fish and aquatic life, wildlife, threatened and endangered species, recreation, visual resources, public utilities and services, socioeconomics and environmental justice, cultural resources, transportation and access, and cumulative effects. Air quality and noise, topography, and land use, were evaluated during a screening process and it was determined that these resources would not be affected by the project. Thus, these resource areas are not covered further in this document.

The NEPA EA process will allow FEMA to determine whether to issue a Finding of No Significant Impact (FONSI) or a Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS), which is required under NEPA for federal actions that may have a significant impact.

1.2 Authority

Under NEPA, FEMA is obligated to evaluate the effects of the proposed project in an EA or an EIS. FEMA has determined that an EA is the appropriate document for the scope of this project and does not anticipate the need to prepare an EIS.

1.3 Proposed Federal Action

The proposed Federal Action by FEMA is to provide alternative project funding to ODF to build new road access to timber parcels that were once accessible by a road that was destroyed by landslides in 2006. The ODF preferred alternative would consist of building approximately 7,050 linear feet (LF) of new forest road (3,200 LF of full bench construction and 3,850 LF balanced or crown grading construction). A portion of the road will be located on an old alignment that was abandoned in the late 1950s after the Tillamook Burn salvage operation.

1.4 Purpose and Need

The purpose of this project is to provide access to ODF land in the vicinity of Hembre Ridge that

was eliminated by landslides and stream erosion. The ODF has a need to provide safe, year-around access to their timber property to meet their timber management responsibilities. Timber management activities include assessment, silviculture, fire management, and harvest.

1.5 Related Activities

1.5.1 ODF Timber Management

ODF is responsible for managing State Forest lands. ODF was established in 1911 and is under the direction of the State Forester who is appointed by the State Board of Forestry. Oregon Administration Rules (OAR Chapter 629, Division 35) direct the State Forester to act on all matters pertaining to forestry, including collecting and sharing information about the conditions of Oregon's forests, protecting forestlands and conserving forest resources.

Specific activities include:

- fire protection for 16 million acres of private, state and federal forests;
- regulation of forest practices (under the Oregon Forest Practices Act) and promotion of forest stewardship;
- implementation of the Oregon Plan for Salmon and Watersheds;
- detection and control of harmful forest insect pests and forest tree diseases on 12 million acres of state and private lands;
- management of 780,000 acres of state-owned forestlands;
- forestry assistance to Oregon's 166,000 non-industrial private woodland owners;
- forest resource planning; and,
- community and urban forestry assistance.

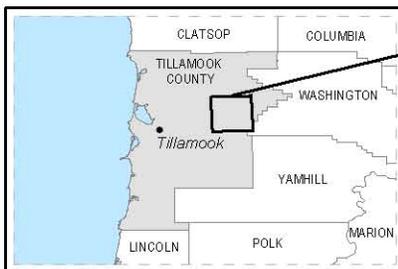
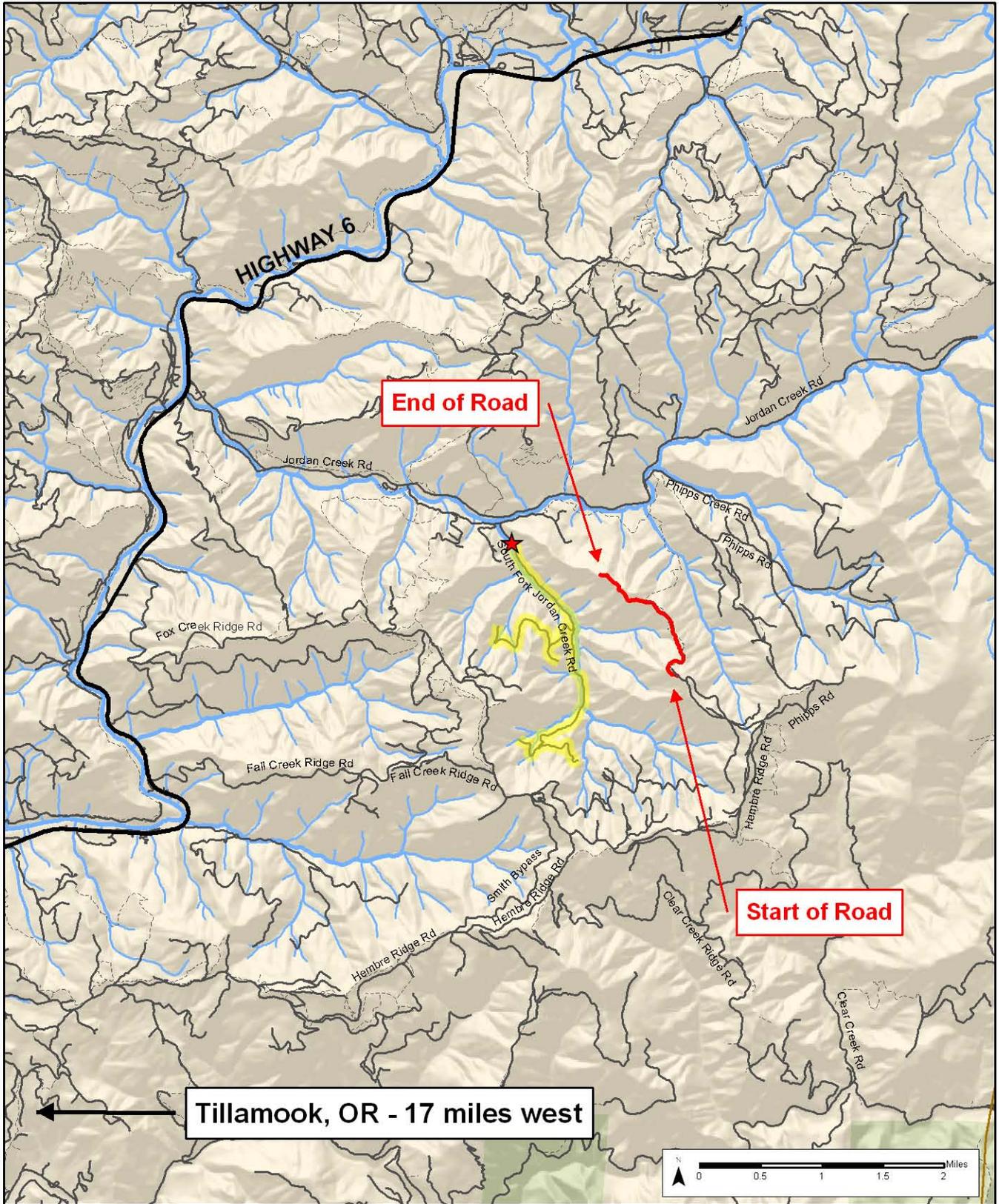
All State Forest lands are actively managed under adopted forest management plans to provide economic, environmental, and social benefits to Oregonians. Most of the revenue from timber sales goes to county governments and local taxing districts, and to the Common School Fund to benefit schools throughout the state. The project area is in the Tillamook District, which includes the western 252,000 acres of the Tillamook State Forest. ODF timber management will continue at the project site and in adjacent forest units.

1.5.2 Recreation

State Forests provide opportunities for public hiking, camping, fishing, hunting and picnicking as well as trails for horseback riding, mountain biking and off-highway motorized vehicles. To meet these needs, the Oregon Department of Forestry has developed long-range recreation plans for three State Forests, including the Tillamook State Forest – the Tillamook State Forest Recreation Action Plan 2000 (RAP). Implementation of the 2000 RAP is discussed in Section 3.7 Recreation.

1.6 Background and Location

In 2006 heavy rains resulted in stream erosion and landslides that destroyed sections of South Fork Jordan Creek Road beginning just south of its intersection with Jordan Creek Road, effectively eliminating access to timber lands and recreation in the project area.



- ★ Road Washout
- Inaccessible Roads
- Proposed Alignment
- State & County Roads
- Off Hwy Vehicle Trails
- Major Rivers & Streams
- Public Lands

Steam Donkey Road
Oregon Department of Forestry

Figure 1.1-1. Project Vicinity Map

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The project is located in the Tillamook State Forest about 26 miles northeast of the town of Tillamook. The project site is situated near Hembre Ridge, along a ridge top dividing Spaur Creek and South Fork Jordan Creek (Figure 1.1-1). The approximate starting and ending coordinates are N45.5143 W123.5158, and N45.5310 W123.5415.

1.7 Scoping and Issue Summary

1.7.1 Scoping

FEMA initiated the scoping process by sending out a scoping letter on January 9, 2008 to agencies and interested parties. The scoping letter explained the NEPA process and the proposal for constructing the new forest road access. The public, agencies, and Tribes were afforded 30 days to provide comments. The letter, mailing list, and received comments can be found in Appendix A.

The purpose of the scoping process was to inform the public about the proposed process and allow the public, agencies, and Tribes to provide comments regarding the scope of the project, the proposed alternatives, and any issues of concern that should be considered in the NEPA EA. The public involvement process is fully described in Section 4.0.

1.7.2 Summary of Issues

FEMA has identified a number of issues that need to be addressed in this EA. There was one response to the scoping letter from the Tillamook County Board of Commissioners in support of the project (Table 1.7-1). A copy of the response letter is located in Appendix A.

Table 1.7-1 Summary of Public Scoping Response issues

Category	Issue	Response in this EA
Forestry Road	<ul style="list-style-type: none"> • New road is vital to forestry operations – favor rebuilding the road consistent with protection of human and natural environment. Tillamook County Board of Commissioners	All aspects of potential road impacts have been reviewed in this EA.

2.0 Alternatives

2.1 Introduction

The following section describes the alternatives that are being considered for the Spaur Road reconstruction and the process that was used to develop these alternatives. Two alternatives are analyzed, the No Action Alternative and the Proposed Action Alternative. The following narrative describes the alternatives development process, alternatives eliminated from consideration, the No Action and Proposed Action, and elements common to both alternatives. South Fork Jordan Creek Road is closed at this time and ODF expects to fully vacate the road (Lettenmaier 2008). In accordance with applicable rules and regulations of the Forest Practices Act, and standards detailed in the ODF State Forests Program, Forest Roads Manual (ODF, 2000), ODF will assess the closed road to determine the necessary actions for vacating the road. Full vacation involves removing all stream crossing structures, installing maintenance-free drainage (outsloping, water bars, rolling dips, etc.), pulling back any sidecast material, grass seeding disturbed soil, and barricading the road. The road is effectively “put to bed.” All access is prevented, and there is no maintenance obligation. Cross drain culverts may be left in place but will not be considered as a functional drainage feature (ODF, 2000).

2.1.1 Alternatives Development

NEPA requires federal agencies to consider a reasonable range of alternatives that meet the purpose and need of a proposed action. The NEPA alternatives development process allows FEMA to work with interested agencies, Tribes, the public, and other stakeholders to develop alternatives that respond to identified issues.

The Proposed Action Alternative was developed in coordination with FEMA and ODF.

2.2 Alternative Elements Eliminated From Consideration

Development of the elements of the proposed action was discussed between FEMA and ODF. The purpose and need for the project is to construct a road to gain access to ODF land where access was lost from landslides. There are limited environmentally-friendly options of where to construct a new road that allows access to the ridge top. ODF and FEMA have determined that it is not reasonable to rebuild the South Fork Jordan Creek Road access due to its proximity to the South Fork Jordan Creek. ODF has considered accessing the ridge from other alignments in the Spaur Creek or South Fork Jordan Creek drainages but these are not feasible because of steep, unstable slopes and the potential to adversely affect surface waters and fish. These alternative routes were not analyzed further.

Helicopter access to this land parcel is not a cost efficient method to harvest timber for planned sales. The parcel is too small and the cost benefit ratio is high and would render such an operation infeasible. This alternative would not meet all of the needs of the project and was not carried forward through the EA analysis.

Limited comments received during the scoping process (See Section 1.0) did not cause FEMA to

consider adding or removing elements to the Proposed Action. Issues raised during the scoping process are addressed in the impact analysis for specific resources sections in Section 3.0.

2.3 Alternative A - No Action

Under the No Action Alternative, ODF would not reconstruct the Spaur Road and would not have access to their land where access was eliminated from 2006 landslides. The existing off highway vehicle (OHV) trail would remain in its present condition and available for use.

2.4 Alternative B - Proposed Action

ODF would construct a new road to gain access to the upper portions of the ridge feature between South Fork Jordon Creek and Spaur Creek. The road will be approximately 7,050 linear feet (LF). Approximately 1,200 LF of the new road will be built on an existing OHV trail and the remainder will be new construction. The typical road section will have a subgrade width of 16 ft and an average gravel surfaced width of 12 ft. The subgrade width will be slightly wider due to the excavation of cut slopes in locations where the alignment will traverse side slopes to avoid excessively steep grades along the ridgetop. The new road will include five turnouts to accommodate passing, one turnaround, and cleared area (a “landing”) designed for accumulating logs before they are transported.

The design, construction and long-term maintenance of the project would comply with applicable rules and regulations, including those contained in the Forest Practices Act. A Habitat Conservation Plan (HCP) has not been completed for the project area. ODF is in the process of completing a proposed HCP for threatened and endangered species and other species of concern on western Oregon state forests; however, no draft is currently available. Construction of the project would require ODF to adhere to their agreements with state and federal agencies regarding best management practices (BMPs) for road building and timber management. The project will be designed, constructed and maintained in accordance with the ODF State Forests Program, Forest Roads Manual (ODF, 2000), which includes road design, construction and maintenance standards (a.k.a BMPs). The road will be designed to capture surface water runoff in a manner that adheres to the ODF Forest Roads Manual. Construction will not occur when weather and/or ground conditions would cause excessive erosion. Standard ODF BMPs for construction sedimentation and erosion control will be implemented.

Construction activities will involve clearing and grubbing, culvert installation, excavation of cutbanks, fill, grading, and laying of gravel surface, and seeding, fertilizing and mulching disturbed areas. Clearing, grubbing, and brushing will involve the removal and disposal of all snags, down timber, brush, surface objects and protruding obstructions within the clearing limits. Clearing limits would be 4 ft on either side of the planned subgrade width. Removal of brush would occur an additional 4 ft on either side. Clearing and brushing limits would range from 32 ft to 46 ft in cut slope locations. An average clearing limit width of 40 ft has been assumed for analyzing impacts in this EA. All danger trees, leaning trees, and snags outside the clearing limits that could fall into the construction area would be removed. Clearing and grubbing material will be disposed of by scattering in openings in the timber outside of the cleared right of way. Rock for road surfacing will come primarily from the ODF Pit-Run Pit, located a little over one mile by road to the southeast of

the project site on Phipps Road (Inman, 2008). ODF's Hembre Pit, located approximately four miles by road to the southwest of the project site, could also be used as a source for road surfacing rock as needed (Inman, 2008). Both pits are owned by ODF and located on ODF land. ODF has a Memorandum of Agreement (MOU) with Oregon Department of State Lands (ODSL) regarding operation of the pits and no other permits are required (Lettenmaier, 2008).

Construction is expected to be conducted over one season. At the project site, the construction season extends from May through November. Specific standards to minimize impacts during construction include, but are not limited to: (1) limiting ground disturbance (clearing, grubbing, grading) to that essential for construction of the project; (2) timing construction activities that expose large areas of soil to occur during the dry spring, summer or early fall when the threat of erosion from disturbed areas is minimal; (3) incorporating erosion control measures such as (mulching, seeding or planting); and (4) completing construction activities prior to the onset of the rainy period, around the middle of October.

Specific standards to minimize erosion and sediment production during operation of the project include, but are not limited to: (1) a crowned road surface to allow for quick surface drainage; (2) avoiding flat grades wherever possible; and (3) use of crushed rock for the running surface to improve overall road drainage and reduce sediment production.

The Oregon Forest Practices Act establishes a regulatory obligation to maintain forest roads. Forest road maintenance goals, objectives and strategies are detailed in the ODF Forest Roads Manual (ODF, 2000). Long-term maintenance of the road would be conducted by ODF, and would be conducted in accordance with the ODF Forest Roads Manual. Specific maintenance requirements and strategies include, but are not limited to: (1) maintaining the road to design standards; (2) maintaining a fully functional drainage system; (3) minimizing soil disturbance during maintenance activities; (4) minimizing impacts to water quality, aquatic habitat, wildlife habitat, and other natural resources during maintenance activities; (5) inspections will be conducted annually, or more frequently if warranted; (6) regular inspections will be conducted during periods of heavy hauling; (7) maintenance activities will be conducted at a time when weather conditions allow for a minimal amount of soil disturbance and sediment movement; and (8) follow-up monitoring of maintenance activities will be conducted to ensure their effectiveness.

2.5 Elements Common to Both Alternatives

While the No Action and Proposed Action Alternatives represent distinctly different alternatives, there are some common elements between the two alternatives. These common elements are:

Water Quality, Erosion and Sediment Control

ODF will continue to implement measures to preserve the water quality of local streams and prevent excess erosion and sedimentation associated with its project lands and facilities. Current measures for erosion control and BMPs for forest management will continue to be implemented by ODF.

Cultural and Historic Resources

ODF will continue to comply with Sections 106 and 110 of the National Historic Preservation Act (NHPA), the Archaeological Resources Protection Act (ARPA), and the Native American Graves

Protection and Repatriation Act. FEMA and ODF, as required under 36 CFR 800, will consult with the Oregon State Historic Preservation Office (SHPO) and interested Tribes to determine if sites are eligible for inclusion on the national Register of Historic Places (National Register), evaluate effects of an action on eligible properties, and identify preservation or mitigation options. Specifically, ODF will monitor construction activities for any new or upgraded facilities and stop work and consult with the Tribes and the SHPO if any cultural resources are discovered during construction.

Access

The public will continue to have access to ODF lands in accordance with current policies that consider public safety and protection of cultural and natural resources.

Public Information

ODF will continue to apply its standards for appropriate, clear, and consistent signage regarding public use of their lands and facilities. ODF also will continue to provide information materials through existing entities, websites, fee stations, and recreation areas.

2.6 Summary of Impacts

Table 2.6-1 provides a summary of the impacts discussed in Section 3.0.

Table 2.6-1 Summary of Impacts of the No Action and Proposed Action Alternatives

Resource Area	Alternative A – No Action Alternative	Alternative B - Proposed Action
Soils and Geology	No effects.	Soil disturbance and minor erosion effects from constructing new road
Hydrology and Water Quality	No effects.	Long-term, minor contribution to sediment source from new road. There are no directly adjacent water bodies but the new road alignment intercepts the start of drainage basin where the headwaters to a stream begin to form, and the new road will contribute to total road miles in the basin.
Vegetation and Wetlands	No effects.	6.5 acres of upland mixed forest will be removed.
Fish and Aquatic Life	No effects.	No effects
Wildlife	No effects.	6.5 acres of upland habitat would be removed. Typical upland wildlife supported from this habitat would be affected. There would be some short-term disturbance to local wildlife from road building.
Threatened, Endangered, and Sensitive Species	No effects	No effects
Recreation	No effects	Temporary closure of the area to recreation users during road construction. After construction is complete ODF would limit off road use in the area to motorcycles only.
Visual Resources	No effects.	No effects
Environmental Justice	No effects	No effects
Cultural and Historical Resources	No effects.	No effects
Transportation and Access	No effects.	No effects
Cumulative Impacts	No effects.	Added length of road will contribute to total of road miles in the watershed. There would be a minor contribution of a long-term sediment source from building of the new road, even with BMPs.

3.0 Affected Environment and Environmental Consequences

3.1 Soils and Geology

3.1.1 Affected Environment

The Tillamook District is located within the Tillamook Highlands geologic province, which is a large area in the north Coast Range consisting of volcanic flows, igneous rock, and derived sediments. This province formed in the Eocene (35 to 55 million years ago). It is dominated by igneous extrusive and intrusive rock (generally basalt and volcanic breccia), with inter-fingered sedimentary rock (generally siltstone and sandstone). The large scale geologic structure is dome-shaped, with significant amounts of folding and faulting due to past tectonic activity. The rock formed originally as an offshore island and has since been accreted, uplifted, and eroded. The result is landforms that are steep in places with areas of potentially high landslide risk (ODF, 2003).

The landforms of the Oregon Coast Range are geologically youthful as a result of on-going uplift and erosion. The high precipitation levels combined with steep slopes result in high erosion rates dominated by mass wasting. Forecast landslides that result in debris slides are a dominant geologic process on this landscape. The major soil series in the district are Rye, Killam, and Jewell. Characteristics include deep, well-drained soils with site indexes ranging from 100 to 130, based on 50-year site index (ODF, 2003).

The project site is situated near Hembre Ridge, atop a ridge dividing Spaur Creek and South Fork Jordan Creek (Figure 3.1-1). The elevation of the ridge along the project corridor ranges from approximately 2,400 at the project start to 1,800 feet at the project end. Slopes on either side of the project site range from 55% to 90%. Geology in the project area is primarily lithic bedrock overlain with colluvium deposits. Soils include Klistan-Harslow-Hemcross complex, Harslow-Rock outcrop-Klistan complex, Caterly-Laderly-Murtip complex, Murtip-Caterly-Laderly complex, and Laderly-Caterly-Rock outcrop (NRCS, 2007).

3.1.2 Threshold of Significance

Significance under NEPA is determined by assessing the impact of a proposed action in terms of its context and the intensity of its effects. Forest roads are recognized as sources of landslides, erosion resulting in the loss of valuable topsoil and sedimentation, and can affect wildlife and aquatic habitat. Therefore, the No Action Alternative and the Proposed Alternative were determined to result in a significant effect on soils and geologic stability if they:

- would present a substantial risk to people or property due to geologic hazards such as landslides; or
- would result in soil erosion rates substantially greater than natural levels; or
- would result in an accumulation of sediment in aquatic habitats.

3.1.3 Environmental Consequences

This section discusses the potential impacts of the No Action Alternative and the Proposed Action on soils and geology within the immediate vicinity of the project. Mitigation measures to offset any identified impacts are also provided, as applicable.

Alternative A: No Action

Under the No Action Alternative, no road construction or related activities would take place and existing soils and geologic conditions at the project site would be unaltered.

Alternative B: Proposed Action

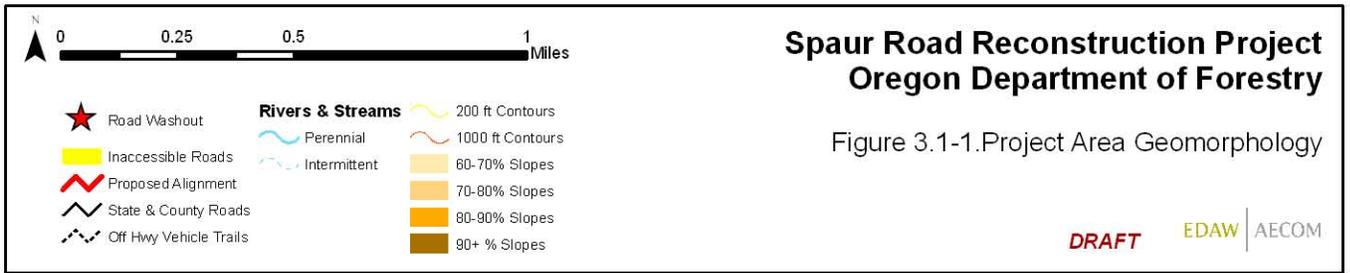
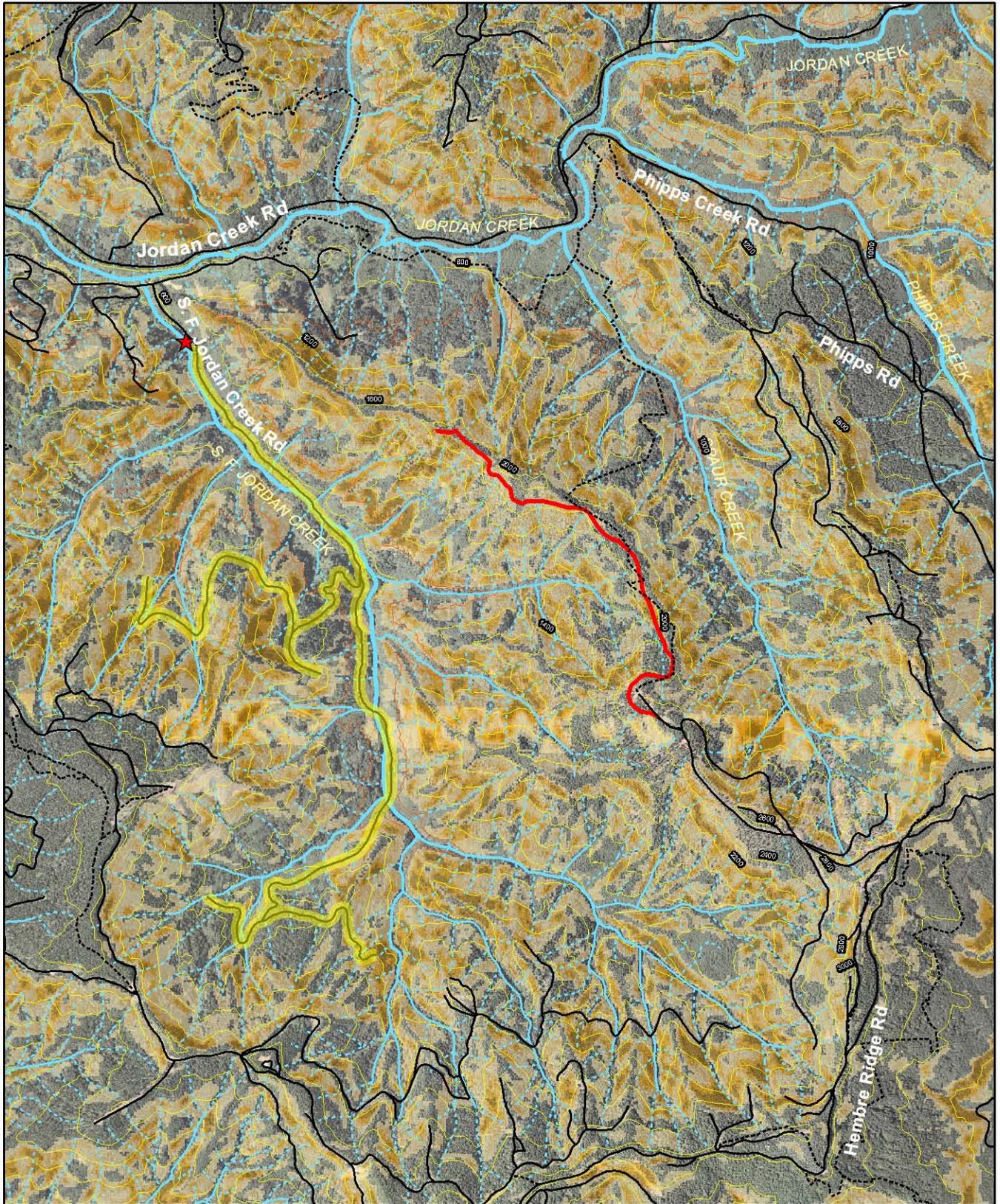
Under the Proposed Action, the new road will be located along a ridgetop. However, in order to meet grade requirements, the road will traverse steep side slopes in several areas. Full-bench construction methods will be used to construct the new road where slopes are greater than 55 percent and waste materials will be hauled to fill sites or approved dump sites. Road-related landslides are typically associated with steep sidecast material. Construction activities (clearing and brushing, grubbing, excavation, and grading) will disturb approximately 6.5 acres of soil along the length of the road alignment (7,050 LF) and within the clearing and brushing limits.

The new roadway does not traverse any slide areas or other high risk sites, and is not expected to affect geologic stability in the project area.. The construction activities described above would create minor increases in erosion during and after construction. In order to minimize these effects, the project will be designed and constructed in accordance with the ODF State Forests Program, Forest Roads Manual (ODF, 2000), which includes road design, construction and maintenance standards for minimizing erosion and sedimentation.

Specific strategies to minimize erosion during construction include, but are not limited to: (1) limiting ground disturbance (clearing, grubbing, grading) to that essential for construction of the project; (2) timing construction activities that expose large areas of soil to occur during the dry spring, summer or early fall when the threat or erosion from disturbed areas is minimal; (3) incorporating erosion control measures such as (mulching, seeding or planting); and (4) completing construction activities prior to the onset of the rain period, around the middle of October.

The new road will be used for both commercial (forestry) and public (recreational) purposes, and is intended for heavy vehicles/equipment associated with forestry operations, as well as off-highway motorized vehicle (OHV) use. Road use is expected to be heavy during periods of log hauling, and may have a high level of recreational usage during parts of the year. Specific strategies to minimize erosion and sediment production during operation of the project include both design and long-term maintenance strategies. These include, but are not limited to: (1) a crowned road surface to allow for quick surface drainage; (2) avoiding flat grades wherever possible; and (3) use of crushed rock for the running surface to improve overall road drainage and reduce sediment production. Long-term maintenance of the new road would be conducted in accordance with requirements and strategies detailed in the ODF Forest Roads Manual (ODF, 2000) and discussed in Section 2.0.

Although utilization of the ODF Forest Roads Manual design, construction and maintenance standards will minimize erosion and sediment production to less than significant, the new road



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would be a minor long-term source of sediment to streams down-slope of the project area. There would be no significant impacts associated with the implementation of Alternative B.

Mitigation Measures and Residual Impacts

No mitigation measures are proposed under either alternative. ODF will implement its standard road design and construction BMPs in accordance with its standard practices. Residual impacts are previously discussed in the above narrative.

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3.2 Hydrology and Water Quality

3.2.1 Affected Environment

The northwest Oregon state forests are in two distinct hydrologic areas: the Coast Range and the Cascades. The project area is located in the Coast Range hydrologic area in the Tillamook basin.

The Coast Range has a maritime climate, with wet winters and relatively dry summers. Precipitation occurs mainly as rainfall, averaging between 50 and 90 inches annually along the coast and east of the Coast Range crest, but totaling as much as 200 inches at higher elevations in the mountains (Beschta et al. 1995 cited in ODF, 2001).

Coast Range streams and rivers generally have steep gradients in their headwater sections, and very flat gradients in their lower reaches. Stream densities are high in this region, ranging from two to three miles of stream per square mile of land. Streams originating on the west slopes generally flow into the Pacific Ocean, and streams that drain the east slopes are tributaries to the Willamette River. On the North Coast, a number of streams drain north directly into the Columbia River (ODF, 2001).

The project area is located in the headwater sections of the Wilson River watershed (a subbasin of the Tillamook basin), which drains directly into Tillamook Bay and the Pacific Ocean. The Wilson River is one of five rivers in the Tillamook basin draining into Tillamook Bay, and is part of the Wilson-Trask-Nestucca major hydrologic area described by the U.S. Geological Survey (USGS). The Wilson River watershed encompasses approximately 194 square miles and is the largest watershed in the Tillamook Bay drainage; the highest elevation point is 3,691 feet (Tillamook Bay Watershed Council, 2008).

The ODF districts divide their state forests lands into management basins. These are based primarily on fifth-order watershed boundaries as defined by the Oregon Water Resources Department (OWRD), but have been adjusted to follow roads or topographic features in some places, for easier identification on the ground. The project area is located in the Tillamook District Wilson Management Basin. The Wilson Management Basin has a drainage area of approximately 65,273 acres (ODF, 2001).

The project site is located in the headwater areas of the Wilson River watershed, in the Jordan Creek subbasin, on a ridge dividing Spaur Creek and South Fork Jordan Creek, both tributaries of Jordan Creek. Surface hydrology in the project area includes several small perennial tributaries that flow down the slopes on either side of the ridge into Spaur Creek and South Fork Jordan Creek. These originate down-slope of the project corridor and are fed by numerous small intermittent drainages. Additional intermittent drainages flow directly into Spaur Creek and South Fork Jordan Creek. In the Oregon Forest Practices Act, perennial streams are defined as having surface flow after July 15th, and intermittent streams are defined as streams that normally do not have surface flow after July 15th. Figure 3.2-1 depicts the surface hydrology in the project area, along with their duration of flow.

The Oregon Department of Environmental Quality (ODEQ) administers the Federal Clean Water Act (CWA) in Oregon. Every two years, ODEQ assesses water quality and reports to the U.S.

Environmental Protection Agency (EPA) on the condition of Oregon's waters. ODEQ prepares an Integrated Report that meets the requirements of the federal Clean Water Act for Section 305(b) and Section 303(d). CWA Section 303(d) requires identifying waters that do not meet water quality standards where a Total Maximum Daily Load (TMDL) needs to be developed. Oregon's 2004/2006 Integrated Report Section 303(d) list was approved by the EPA on February 26, 2007. ODEQ's online database of Section 303(d) list water bodies was reviewed to see if it included any water bodies in the project area. No water bodies in the Jordan Creek subbasin are listed on ODEQ's 2004/2006 Section 303(d) list (ODEQ, 2007).

3.2.2 Threshold of Significance

Significance under NEPA is determined by assessing the impact of a proposed action in terms of its context and the intensity of its effects. Therefore, the No Action Alternative and the Proposed Alternative were determined to result in a significant effect on hydrology and water quality if they would:

- violate any water quality standards or waste discharge requirements, create or contribute runoff water that would provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality; or
- alter the existing drainage pattern of the project site in a manner that would result in substantial erosion or siltation on or off the site, result in flooding on or off the site, or exceed the capacity of existing or planned stormwater drainage systems.

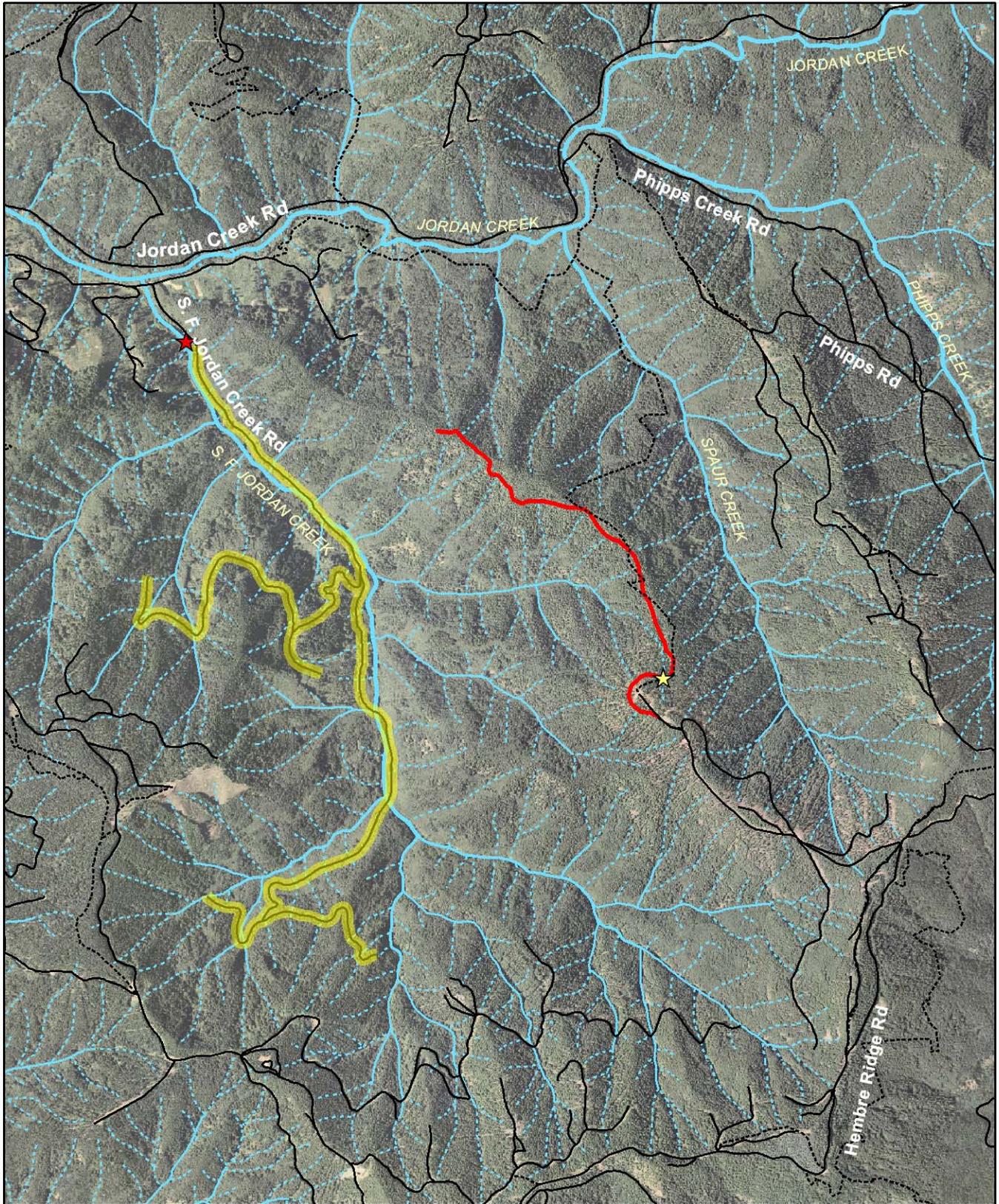
3.2.3 Environmental Consequences

This section discusses the potential impacts of the Proposed Action and the No Action Alternative on local hydrology and water quality within the immediate vicinity of project. Mitigation measures to offset any identified impacts are also provided, as applicable.

ODEQ's water quality program for forest lands is administered by the Board of Forestry through the Forest Practices Act's administrative rules. Oregon forest practices rules are approved as sufficient to implement water quality standards under the CWA. These rules specify BMPs for forest operations, which ensure that water quality will meet ODEQ standards. Any forest operation that complies with the rules is deemed to comply with the state's water quality standards. ORS 527.710, 527.765, and 527.770 contain the Forest Practices Act rules to achieve these water quality standards.

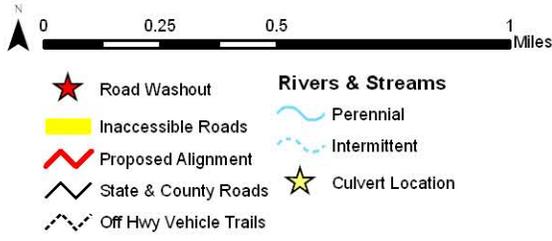
Coastal Zone Management Act

The Coastal Zone Management Act (CZMA) requires federal agency activities, including federal license or permit activities and federal financial assistance activities, that have reasonably foreseeable effects on any land or water use or natural resource of the coastal zone, to be consistent to the maximum extent practicable with the enforceable policies of a coastal state's federally approved coastal management program. The Oregon Coastal Management Program (OCMP) is administered by the Oregon Department of Land Conservation and Development and consists of a coordinate package of various state statutes for managing Oregon's coastal lands and waters, and includes three basic components: (1) 19 Statewide Planning Goals which are Oregon's standards for comprehensive land use planning, (2) City and County Comprehensive Land Use Plans, and (3)



**Spaur Road Reconstruction Project
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Figure 3.2-1. Project Area Surface Hydrology



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State Agencies and Natural Resource Laws (including the Oregon Beach Bill and Removal/Fill Law).

The OCMP applies to Oregon's Coastal Zone, which extends from the Washington border to the California border, to the crest of the coast range, and three miles out to sea [to the outer limit of Oregon's territorial sea]. The project area is located within Oregon's Coastal Zone; however, the project will result in no foreseeable significant effects on any land or water use or natural resource of the coastal zone.

Alternative A: No Action

Under the No Action Alternative, no road construction or related activities would take place and local hydrology and surface water quality would be unaltered.

Alternative B: Proposed Action

The new road alignment under the Proposed Action does not cross, abut, nor is it adjacent to surface water features, and will require no in- or near-water work or alter the existing drainage patterns in the area. The new road alignment does intercept the start of a small drainage basin where the headwaters of the South Fork Jordan Creek Tributary 1 begin to form. No defined channel or surface flows were evident where the new alignment intercepts the start of the drainage during a site visit on June 13, 2008; however, some subsurface flow is likely, and ODF plans to install a culvert at this location (approximately Station 11+30). Surface flows emerge several hundred feet down-slope of this point in a small gravel-lined channel approximately 16-20 inches wide and one to several inches deep. Less than one inch of water was flowing in the channel at the time of the June 13, 2008 site visit. The new road alignment skirts this drainage area along the side of the ridge and averages a distance of approximately 100 feet or more from the small stream channel.

Construction activities (clearing and brushing, grubbing, excavation and grading) would create minor increases in soil erosion during and after construction, however, are not expected to result in a significant increase in sediment to streams in the area or violate any water quality standards. The new road would be a minor long-term source of sediment to streams down-slope of the project area. The road will be designed to capture surface water runoff in accordance with ODF Forest Management Guidelines and ODF standard BMPs for road construction and maintenance.

Mitigation Measures and Residual Impacts

No mitigation measures are proposed under either alternative. ODF will implement its standard road design and construction BMPs in accordance with its standard practices. Residual impacts are previously discussed in the above narrative.

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3.3 Vegetation and Wetlands

3.3.1 Affected Environment

Vegetation Communities and Dominant Species

Vegetation and plant communities in the Tillamook State Forest have been modified from the original native composition by silviculture and forest fires. The forest is dominated by closed single canopy (CSC) conifer and hardwood stands 25 to 45 years old. Riparian areas are dominated by hardwood species, especially adjacent to perennial streams. Dominant understory species include sword fern (*Polystichum munitum*), salmonberry (*Rubus spectabilis*), and vine maple (*Acer circinatum*) (ODF, 2003).

The project site and surrounding areas burned in the 1933 (Tillamook) and the 1945 (Wilson River) fires and were replanted in 1953 (ODF, 2006b). This area has no prior stand management (ODF, 2006b). Currently, vegetation communities on the project site and in the surrounding areas are mixed species stands of hemlock (*Tsuga heterophylla*), Douglas-fir (*Pseudotsuga menziesii*) and scattered alder (*Alnus rubra*) (growing in old road beds, stream buffers, and openings) that are approximately 53 years old (ODF, 2006a; ODF, 2006b; L. Howard, personal observation, June 13, 2008).

Understory shrub species are comprised primarily of sword fern (*Polystichum munitum*), salal (*Gualtheria shallon*), and Oregon grape (*Mahonia sp.*) (ODF, 2006b; L. Howard, personal observation, June 13, 2008). Wood sorrel (*Oxalis oregona*) dominates an herbaceous groundcover that is relatively continuous except along the top of the ridge (L. Howard, personal observation, June 13, 2008).

Harvest and stand management activities are planned on approximately 210 acres on and surrounding the project area, referred to as the Steam Donkey sale area (ODF, 2006b), for the third quarter of ODF's fiscal year 2009, which falls in April 2010 (Lettenmaier, 2008). This operation will consist of a partial cut on approximately 105 acres, where Douglas-fir and hemlock will be thinned to meet stand structure goals; and, a retention cut on another 105 acres designed to harvest alder and conifer and retain larger conifers (ODF, 2006b).

No wetland habitats occur on or adjacent to the project site, or in the immediate project area (L. Howard, personal observation, June 13, 2008). Some riparian habitat occurs along the small drainage basin described in Section 3.2 where the headwaters to South Fork Jordan Creek Tributary 1 form (L. Howard, personal observation, June 13, 2008).

Special-status Plant Species

For the purposes of this EA, special-status plants species in this section are defined as plants that are legally protected or that are otherwise considered sensitive by State resource conservation agencies and organizations. Specifically, this includes species that are State listed as rare, threatened, or endangered, those considered candidates for listing as threatened or endangered, or species listed by the Oregon Department of Agriculture (ODA) as plant species of special concern.

Special-status plant species which are known to occur or that could potentially occur within the

Tillamook District are listed in Table 3.6-2 (ODF, 2003). Species with legal protection under the federal Endangered Species Act (ESA) are discussed in Section 3.6.

Table 3.3-1. Special-status plant species that are known to occur or could potentially occur within the Tillamook District, and within the Steam Donkey Road Project area.

Common Name	Scientific Name	ODA Status¹	Potential to Occur in the Project Area
Saddle Mt. bittercress	<i>Cardamine pattersonii</i>	SC	None
Chamber’s paintbrush	<i>Castilleja chambersii</i>	SP	None
Frigid shootingstar	<i>Dodecatheon austrofrigidum</i>	SP	None
Coast Range fawn-lilly	<i>Erythronium elegans</i>	ST	Low
Queen-of-the-forest	<i>Filipendula occidentalis</i>	SC	None
Saddle Mt. saxifrage	<i>Saxifraga hitchcockiana</i>	SC	None
Bristly-stemmed sidalcea	<i>Sidalcea hirtipes</i>	SC	None

¹ ODA Status: SE=State Endangered; ST=State Threatened; SC=State Candidate; SP=Plants of Special Concern
Source: ODF, 2003

Chamber’s paintbrush (a.k.a. Clatsop paintbrush) is a newly described rare species known from three small, geographically restricted populations located in southern Clatsop County. This species is endemic to high elevation peaks (2300 – 3100 ft) where it grows in open rocky areas and on grassy ledges (OFP, 2008).

Frigid shootingstar (a.k.a. Tillamook shooting star) is endemic to northwestern Oregon and southwestern Washington where it occurs on high elevations Coast Range peaks and in coastal river systems (OFP, 2008; CPC, 2008). At high elevations it is found primarily on basalt cliffs near streams and waterfalls, and sometimes on rotting wood; at low elevations it is found only in basalt rock crevices along rivers, below the ordinary high water line (OFP, 2008; CPC, 2008).

Saddle Mt. bittercress is endemic to northwestern Oregon where it occurs on high elevation Coast Range peaks and coastal river systems (OFP, 2008). It grows on grassy balds, moist cliffs, rock crevices, moss mats over bedrock, and in gravel along streams in forested areas.

Queen-of-the-forest is endemic to northwestern Oregon and southwestern Washington where it occurs on high elevation Coast Range Peaks and coastal rivers systems. It grows in shady damp sites; on river banks, in rock crevices and seeps just above high water level; damp salmonberry shrublands; on Onion Peak on rock cliffs in remnant stands of *Abies* and *Pseudotsuga*; moist areas in full sun or partial shade.

Saddle Mt. Saxifrage (a.k.a. Hitchcock’s saxifrage) is endemic to higher elevation peaks (2200 – 3400 ft) in the northwest Oregon Coast Range, where it occurs in thin, rocky soils on grassy balds, and in rock crevices (OFP, 2008).

Bristly-stemmed Sidalcea (a.k.a. hairy stemmed checker mallow) occurs in Oregon’s Coast Range at low and high elevations (0 – 550 ft, 1450 – 3300 ft) (OFP, 2008). It grows in open meadows, grasslands, balds, coastal bluffs and mountain peaks (OFP, 2008).

The Coast Range Fawn-Lilly (a.k.a. elegant fawn-lilly) is a rare species that is geographically highly restricted in its distribution. It has been found growing in only five localities, all in the

northern Coast Range of Oregon, where it occurs on high elevation peaks (2,700 – 3,350 ft). Although geographically highly restricted, it has been found growing in a wide variety of habitats, from bare soil to completely vegetated ground; in either full sun or deep shade on dry shale road cuts and saturated Sphagnum moss. Habitat types where it has been found or may potentially occur include the edges of sphagnum bogs, mountain bogs, open moist meadows (with *Gualtheria*, *Vaccinium*, *Lupinus*, *Fragaria*, and mosses), open sites on rocky slopes and cliffs, and rocky balds, brushland, and in open or closed canopy coniferous forest (under *Picea*, *Pseudotsuga* or *Thuja*). All known populations are found on Federal or private land. This species is not known to occur on or around the project site, and due to its limited distribution the likelihood of it occurring on or in the vicinity of the project is low. However, potential habitat (open/closed canopy coniferous forest) is present in the project area. (CDC, 2008; OFP, 2008; ONHIC, 2008).

EDAW biologist, Linda Howard, conducted a site visit on June 13, 2008 to collect information on general site conditions, special habitat features and vegetation communities along the project corridor. Most of the special-status species listed in Table 3.3-1 have specific habitat requirements that are not met on the project site. None of the species listed above were observed during the site visit.

3.3.2 Threshold of Significance

Significance under NEPA is determined by assessing the impact of a proposed action in terms of its context and the intensity of its effects. The project area is located on State forest land managed for timber harvest. The project footprint does not encompass nor is it in close proximity to wetlands, riparian habitat, or any other identified sensitive natural communities. Therefore, these vegetation habitats are not discussed further in this report. In addition, only one special-status plant species, the Coast Range fawn-lilly, could potentially be present in the project area. Therefore, the No Action Alternative and the Proposed Alternative were determined to result in a significant effect on vegetation if they would:

- Directly reduce the number or restrict the range of any plant species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by or ODA.

3.3.3 Environmental Consequences

This section discusses the potential impacts of the No Action Alternative and the Proposed Action on vegetation and wetlands within the immediate vicinity of the project. Mitigation measures to offset any identified impacts are also provided, as applicable.

Alternative A: No Action

Under the No Action Alternative, no road construction or related activities would take place and existing vegetation at the project site would be unaltered. Therefore, there are no potential effects to the Coast Range Fawn-Lilly under the No Action Alternative.

Alternative B: Proposed Action

Under the Proposed Action, construction activities (clearing and brushing, grubbing, excavation, and

grading) will permanently displace approximately 6.5 acres of vegetation, including both mixed species coniferous forest (Douglas fir and western hemlock) and patches of red alder, along with an understory shrub layer and herb layer. Trees in the project area are approximately 53 years old (ODF, 2006b). Conifer trees in the project area average 12-inches in diameter at breast height (dbh) (ODF, 2006b); red alder average 14-inches dbh. Understory shrubs that would be removed are primarily western sword fern, salal, and Oregon grape. The project footprint encompasses open and closed canopy coniferous forest, considered to be potential habitat for the Coast Range fawn-lily. This species is not known to occur on or around the project site, and due to its limited distribution the likelihood of it occurring within the project footprint is low. This species was not observed during the June 13, 2008 site visit. Thus, there would be no significant impacts associated with the implementation of Alternative B.

Mitigation Measures and Residual Impacts

No mitigation measures are proposed under either alternative. ODF will implement its standard road design and construction BMPs in accordance with its standard practices. Residual impacts are previously discussed in the above narrative.

3.4 Fish and Aquatic Life

3.4.1 Affected Environment

The ODF Tillamook District has over 300 miles of fish-bearing streams. Some of these streams have important populations of native salmonids. Anadromous runs on the district include coho, chum, spring and fall chinook salmon, summer and winter steelhead, and sea-run cutthroat trout. Resident cutthroat trout populations are also found in the district’s streams. Salmon Anchor Habitats (SAH) are designated in the North Fork Nehalem, Lower Nehalem, Miami, Kilchis, Wilson and Trask basins. These SAHs incorporate approximately 95,917 acres (38%) of the Tillamook District (ODF, 2003). Coho are listed as threatened under the Federal ESA, and are discussed in Section 3.6.

As discussed previously, the project area is located in the Wilson River basin, within the Jordan Creek subbasin. Tributaries to the Wilson River are important salmonid spawning habitat (ODF, 2003). Within the Jordan Creek subbasin, Jordan Creek, South Fork Jordan Creek, and Spaur Creek are all Type F (fish-bearing) streams (ODFW, 2003; ODF, 2006b). The ODFW has conducted fish surveys on some of the perennial tributaries to Spaur Creek and South Fork Jordan Creek, while fish presence on others is unknown. Two perennial tributaries of South Fork Jordan Creek are Type F streams in their lower reaches and Type N (non-fish-bearing) streams in their upper reaches (ODFW, 2003; ODF, 2006b). These are referred to as Spaur Creek Tributaries 1 and 2 in this report. One of the surveyed Spaur Creek tributaries is a Type N stream along its entire length, while another is Type F in its lower reaches and Type N in its upper reaches (ODFW, 2003; ODF, 2006b). These are referred to as South Fork Jordan Tributaries 1 and 2 in this report.

Jordan Creek is used by fall chinook and summer and winter steelhead as spawning and rearing habitat (ODFW, 2004). Winter steelhead are also known to use tributaries of Jordan Creek as spawning and rearing habitat, including the lower reaches of South Fork Jordan Creek and Spaur Creek (ODFW, 2004). Table 3.4-1 summarizes fish use in each of these streams, along with species and habitat use, and approximate distance from the project site.

Table 3.4-1 Fish use in project area streams

Stream	ODF Stream Type	Species Present	Habitat Use	Distance from Project Site (feet)
Jordan Creek	Type F	fall Chinook summer and winter steelhead	spawning and rearing habitat	2,500 ft
South Fork Jordan Creek	Type F	winter steelhead	spawning and rearing habitat	2,000 ft
South Fork Jordan Creek Tributary 1	F - lower reaches	winter steelhead	spawning and rearing habitat	1,000 ft
	N - upper reaches			600 feet
South Fork Jordan Creek Tributary 2	F - lower reaches	winter steelhead	spawning and rearing habitat	1,300 ft
	N - upper reaches			1,250 ft
Spaur Creek	F	winter steelhead	spawning and rearing habitat	1,300 ft
Spaur Creek Tributary 1	F - lower reaches	winter steelhead	spawning and rearing habitat	2,500 ft
	N - upper reaches			2,000 ft
Spaur Creek Tributary 2	N	n/a	n/a	2,000 ft

Sources: ODFW, 2003 and 2004; ODF, 2006

The project corridor is located more than 500 feet from any of the perennial tributaries flowing down the slopes on either side of its ridge-top location. However, the headwaters to South Fork Jordan Creek Tributary 1 form in a drainage basin that is intercepted by the proposed road alignment at its extreme beginning. Observations of the drainage basin on June 13, 2008, indicate that water flows subsurface in the extreme upper portion of the drainage. Surface flows emerge several hundred feet down-slope to form a small channel described in Section 3.2 (L. Howard, personal observation, June 13, 2008). The stream is classified as intermittent in this headwater area. Figure 3.4-1 shows streams in the project area, along with their fish-bearing status.

3.4.2 Threshold of Significance

Significance under NEPA is determined by assessing the impact of a proposed action in terms of its context and the intensity of its effects. Therefore, the No Action Alternative and the Proposed Alternative were determined to result in a significant effect on fish and aquatic life if they would:

- interfere substantially with the movement of any native resident or migratory fish species;
- conflict with any local policies or ordinances protecting fish and other aquatic life;
- conflict with the provisions of an approved local, regional, or state habitat conservation plan; or
- result in the degradation of streams in the vicinity of the project.

3.4.3 Environmental Consequences

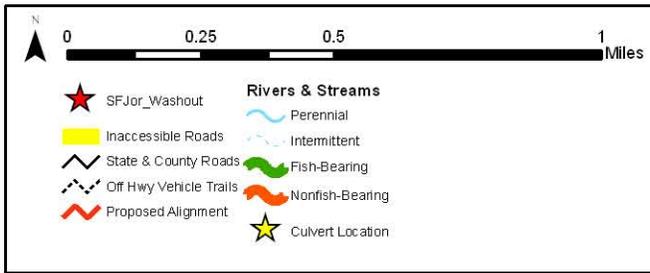
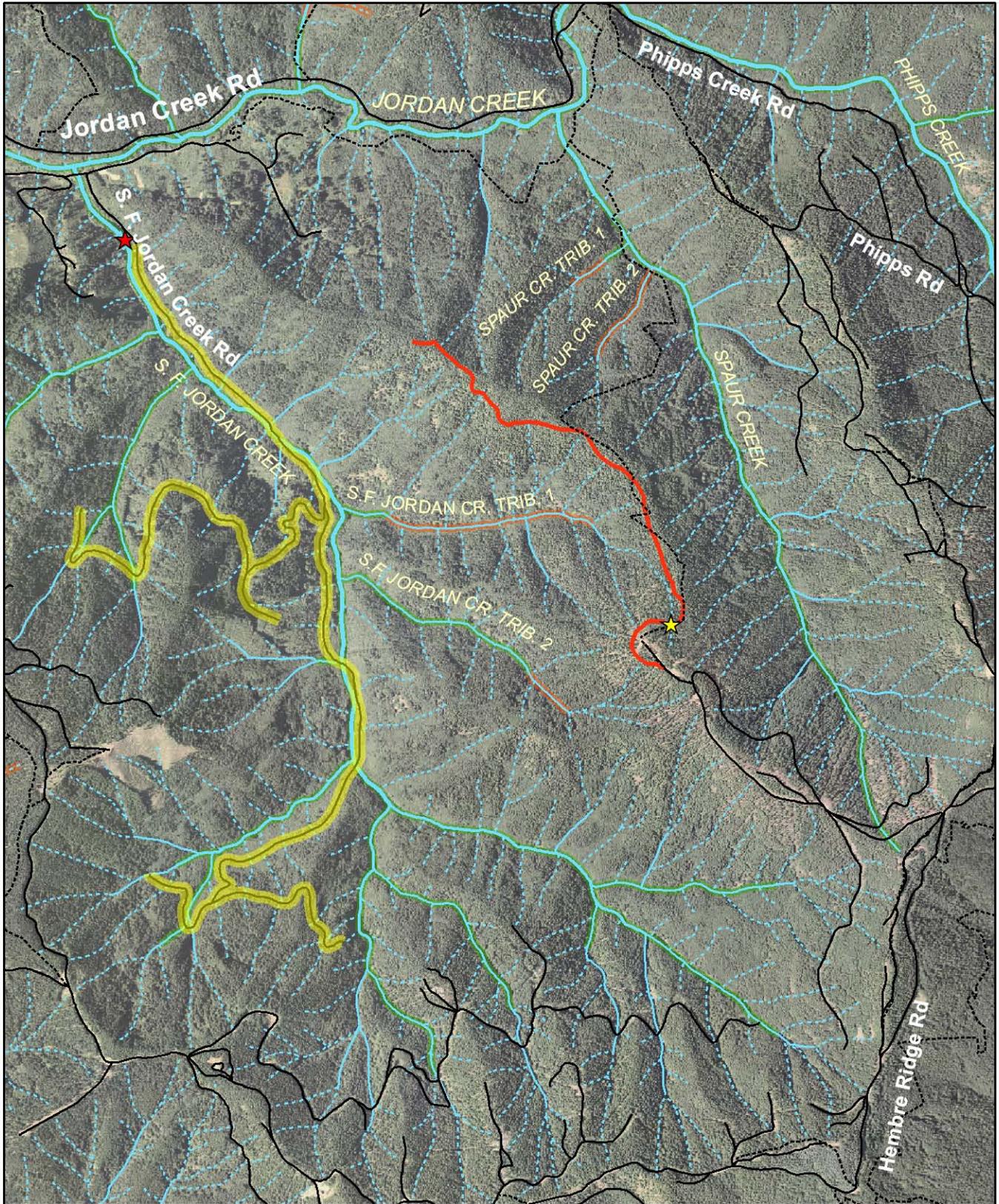
This section discusses the potential impacts of the No Action Alternative and the Proposed Action on fish and aquatic life within the immediate vicinity of the project. Mitigation measures to offset any identified impacts are also provided, as applicable.

Alternative A: No Action

Under the No Action Alternative, no road construction or related activities would take place and surface water features in the vicinity of the project would remain unaltered.

Alternative B: Proposed Action

The new road alignment under the Proposed Action does not cross, abut, nor is it adjacent to surface water features, and will require no in- or near-water work or alter the existing drainage patterns in the area. However, the new road alignment does intercept the extreme beginning of the small drainage basin where the headwaters of the South Fork Jordan Creek Tributary 1 begin to form and where flows are subsurface. A culvert will be installed at this location (approximately Station 11+30). Construction activities (clearing and brushing, grubbing, excavation and grading) could create minor increases in erosion and sediment during construction and will require the development of an erosion and sediment control plan for the project. The road alignment will not traverse or be in close proximity to any other aquatic habitats in the area (wetlands, stream channels, floodplains or riparian areas); therefore, the potential for the Proposed Action to affect fish or other aquatic life in the vicinity of the project is considered extremely low. The new road would be a minor long-term source of sediment to streams down-slope of the project area. The road will be designed to capture



**Spaur Road Reconstruction Project
Oregon Department of Forestry**

Figure 3.4-1.
Fish Presence in Project Area Streams

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surface water runoff in accordance with ODF Forest Management Guidelines and ODF standard BMPs for road construction and maintenance. There would be no significant impacts associated with the implementation of Alternative B.

Mitigation Measures and Residual Impacts

No mitigation measures are proposed under either alternative. ODF will implement its standard road design and construction BMPs in accordance with its standard practices. Residual impacts are previously discussed in the above narrative.

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3.5 Wildlife

The following section discusses terrestrial wildlife in the project area, including migratory bird species protected under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act. Federally listed species [species list under the Endangered Species Act (ESA) of 1973 (16 U.S.C. 1531-1544)] are addressed separately in Section 3.6.

The Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) provides that it shall be unlawful, except as permitted by regulations, “to pursue, take, or kill...any migratory bird, or any part, nest or egg of any such bird, included in the terms of conventions” with certain other countries (16 U.S. Code [USC] 703). This prohibition includes direct and indirect acts, although harassment and habitat modification are not included unless they result in direct loss of birds, nests, or eggs. The current list of species protected by the MBTA includes several hundred species and essentially includes all native birds, including the recently de-listed bald eagle.

The Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act, originally passed in 1940, prohibits the take, possession, sale, purchase, barter, offer to sell, purchase, or barter, transport, export or import, of any bald or golden eagle, alive or dead, including any part, nest, or egg, unless allowed by permit (16U.S.C 668(a); 50 CFR 22). “Take” means to “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb” a bald or golden eagle. The term “disturb” under the Bald and Golden Eagle Protection Act was recently defined within a final rule published in the Federal Register on June 5, 2007 (72 Fed. Reg. 31332). “Disturb” means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle; (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior; or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.

3.5.1 Affected Environment

General Wildlife

The Tillamook State forest contains many indigenous mammal, bird, reptile and amphibian species, including mule deer (black-tailed deer [*Odocoileus hemionus*]) elk (*Cervus Canadensis*), black bear (*Ursus americanus*), and cougar (*Puma concolor*) (ODF, 2003). Over much of the forest, habitat is currently dominated by dense single-species stands that do not allow sunlight to reach the forest floor, resulting in limited available forage. However, recent commercial thinning and clearcuts have opened up many stands and increased forage, and elk populations in large portions of the forest are at or above management objectives (ODF, 2003). Mule deer and a pair of black-backed woodpeckers were observed in the vicinity of the project by EDAW biologist, Linda Howard, during the June 13, 2008 site visit. Other evidence of wildlife observed during the site visit includes elk tracks, coyote scat, numerous woodpecker cavities in snags, and some unidentified songbird vocalizations (L.

Howard, personal observation, June 13, 2008).

Habitat in the immediate vicinity of the project is primarily mixed species conifer or alder patches with little layering of the tree crowns, with a single shrub layer (sword fern, salal and Oregon grape) and little diversity in the understory. Snags and downed wood are prominent features on the landscape in the project area. A small drainage basin where the headwaters to South Fork Jordan Creek Tributary 1 form contains some surface water (less than one inch of flow was observed during the June 13, 2008 site visit) and a very narrow band of riparian habitat beginning several hundred feet down-slope from where the proposed alignment intercepts its extreme beginning. No wetlands or other aquatic habitat occur in the vicinity. Nonetheless, riparian habitat lower in the landscape, along Jordan Creek, South Fork Jordan Creek, Spaur Creek and their tributaries provide valuable habitat for wildlife, including amphibians, neo-tropical migrant birds, raptors, small mammals, deer, elk and other mammals.

Special-status Wildlife Species

For purposes of this EA, special-status wildlife species in this section are defined as wildlife species that are legally protected or that are otherwise considered sensitive by State resource conservation agencies and organizations. Specifically, this includes species that are State listed as rare, threatened, or endangered, those considered as candidates for listing as threatened or endangered, or species listed by the ODFW as wildlife species of special concern. The bald eagle, listed as threatened under the State ESA, is the only special-status wildlife species known to occur in the project area (ODFW, 2008; ODF, 2003; ODF, 2006a; ODF, 2008).

Bald Eagle (*Haliaeetus leucocephalus*)

The bald eagle was delisted by the USFWS on July 9, 2007, but is still listed as threatened under the Oregon ESA and is legally protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. Bald eagles are found on and adjacent to state forest lands year-round, using available habitats for nesting, foraging and roosting (ODF, 2008). Eight nesting territories are known to occur in the Tillamook State Forest (ODF, 2003); however, no nesting sites are documented in the project area (OSU, 2006).

3.5.2 Threshold of Significance

Significance under NEPA is determined by assessing the impact of a proposed action in terms of its context and the intensity of its effects. Therefore, the No Action Alternative and the Proposed Alternative were determined to result in a significant effect on wildlife if they would:

- have a significant adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by ODA;
- substantially degrade the quality of the environment, substantially reduce the habitat of a wildlife species, reduce the number or restrict the range of a State endangered, rare or threatened species.

- interfere substantially with the movement of any native resident or migratory wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- conflict with the provisions of an approved local, regional, or state habitat conservation plan; or
- conflict with any local policies or ordinances protecting wildlife resources.

3.5.3 Environmental Consequences

This section discusses the potential impacts of the No Action Alternative and the Proposed Action on wildlife within the immediate vicinity of the project. Mitigation measures to offset any identified impacts are also provided, as applicable.

Alternative A: No Action

Under the No Action Alternative, no road construction or related activities would take place and existing wildlife habitat at the project site would remain unaltered. Therefore, there are no potential effects to wildlife under the No Action Alternative.

Alternative B: Proposed Action

Under the Proposed Action, construction activities (clearing and brushing, grubbing, excavation, and grading) will permanently displace approximately 6.5 acres of vegetation, including both mixed species coniferous forest (Douglas fir and western hemlock) and patches of red alder, along with an understory shrub layer. Trees in the project area are approximately 53 years old (ODF, 2006b). Conifer trees in the project area average 12-inches in diameter at breast height (dbh) (ODF, 2006b); red alder average 14-inches dbh. Understory shrubs that would be removed are primarily western sword fern, salal, and Oregon grape. Snags and downed wood in varying stages of decay are dominant features in the landscape (L. Howard, personal observation, June 13, 2008). These habitat features do occur within the project clearing limits in some locations and would need to be removed. Due to the lack of overall habitat diversity, including the lack of riparian or other aquatic habitat on the project site, the proposed action is expected to have only minor impacts on wildlife which are described below.

The Proposed Action is likely to have little impact on amphibians, as most require riparian or other aquatic habitat for breeding and foraging. However, some species of amphibians are both aquatic and terrestrial, and adults use downed woody debris and the forest floor for resting and feeding. Two of these, Cope's giant salamander (*Dicamptodon copei*) and Pacific giant salamander (*Dicamptodon tenebrosus*) use clear, high to low gradient streams for breeding, which are present down-slope of the project area. According to the wildlife species lists in the Northwest Oregon State Forest Management Plan (ODF, 2001), these species are known to use the stand types present in the project area. Adults of these species could potentially use the forest floor in the project area. Snakes, such as the rubber boa (*Charina bottae*) and the common garter snake (*Thamnophis sirtalis*) are also found in forested areas and are known to occur in the stand types present in the project area (ODF, 2001). Clearing of the forest floor in the project area would remove some potential habitat for these

species.

A variety of songbirds, including neo-tropical migrants, are likely to nest (live trees or snags) and forage in trees and on the forest floor (winter wrens also use downed wood for nesting) on the project site. Most of these species are likely to be found in higher densities in higher quality riparian habitats down-slope of the project site. However, the removal of live trees, snags, or downed wood would directly affect many of these species by removing potential nesting or foraging habitat (ODF, 2001). These effects are considered to be insignificant as higher quality habitat is located nearby.

Small mammals such as shrews, voles, moles, deer mice (*Peromyscus maniculatus*), bats (use snags for breeding), chipmunks, Douglas squirrels (*Tamiasciurus douglassii*), raccoons (*Procyon lotor*), porcupines (*Erethizon dorsatum*) (uses snags and downed logs for breeding), and long-tailed weasels (*Mustela frenata*) are known to use the stand types in the project area. These generally use mixed deciduous-conifer forest stands with greater percent cover of red alder (ODF, 2001). Most of these species are likely to be found in higher densities in higher quality riparian habitats down-slope of the project site. However, the removal of any snags or downed wood would directly affect many of these species by removing potential nesting or breeding habitat (ODF, 2001). These effects are considered to be insignificant as higher quality habitat is located nearby.

Vegetation to be removed as part of the proposed action provides little forage for deer, elk, or black bear, and trees lack the minimum diameters needed for species such as the pileated woodpecker (*Dryocopus pileatus*) and northern flying squirrel (*Glaucoymys sabrinus*).

Overall, the removal of potential habitat on or adjacent to the project site is not expected to result in a significant effect to wildlife as it will not have a significant adverse effect on any special-status species, including MBTA species and the bald eagle; most wildlife species potentially in the area would frequent nearby riparian/aquatic areas as their primary habitat and would use habitat on the project site only peripherally.

Mitigation Measures and Residual Impacts

No mitigation measures are proposed under either alternative. ODF will implement its standard road design and construction BMPs in accordance with its standard practices. Residual impacts are previously discussed in the above narrative.

3.6 Threatened, Endangered and Sensitive (TES) Species

3.6.1 Affected Environment

Federally listed threatened and endangered species include all plant, fish, and wildlife species designated by the USFWS and the National Oceanic and Atmospheric Administration's Fisheries Service (NOAA Fisheries [NOAA]) as threatened, endangered, or as candidates for listing under the federal Endangered Species Act (ESA) of 1973, as amended.

Federally listed species that are known to occur or that could potentially occur within the Tillamook District and within the project area are listed in Table 3.6.12 (USFWS, 2008a; NOAA Fisheries, 2008), along with effect determinations for each species. This discussion fulfills FEMA's requirements to evaluate effects to federally listed species. A separate Biological Assessment is not necessary.

Table 3.6-1. Federally listed threatened and endangered, and candidate species that are known to occur or that could potentially occur within the Tillamook District, and within the Steam Donkey Road Project area.

Common Name	Scientific Name	Status	Potential to Occur in the Project Area	Effect Determination
Nelson's checker-mallow	<i>Sidalcea nelsoniana</i>	FT, ST	Low due to lack of appropriate habitat	May effect, not likely to adversely effect
Marbled murrelet	<i>Brachyramphus marmoratus</i>	FT, ST	Low due to lack of suitable habitat	No Effect
Northern spotted owl	<i>Strix occidentalis caurina</i>	FT, ST	Low due to lack suitable habitat	No Effect
Coho salmon (Oregon Coast ESU)	<i>Oncorhynchus kisutch</i>	FT	Known to use Jordan Creek as spawning and rearing habitat	No Effect

Status: FE=Federally Endangered; FT=Federally Threatened; FC=Federal Candidate; SE=State Endangered; ST=State Threatened; SC=State Candidate;

Source: USFWS, 2008a; NOAA Fisheries, 2008)

Plants

Nelson's checker-mallow (*Sidalcea nelsoniana*)

Nelson's checker-mallow is the only federally listed plant species that is listed by the USFWS as potentially occurring within Tillamook County (USFWS, 2008a). It was listed in 1993 as a threatened species under the ESA, and is also listed as threatened under the State of Oregon ESA (Oregon ESA). The majority of sites where the species occurs are in the Willamette Valley of Oregon; the plant is also found at several sites in the Coast Range of Oregon and at two sites in the Puget Trough of southwestern Washington (USFWS, 2008b). There are 11 existing Nelson's checker-mallow sites in the Coast Range, distributed in Oregon's Yamhill, Washington, and Tillamook counties. The only extant population (population name – Devils Fork Lake) documented within Tillamook County is located within the Wilson-Trask-Nestucca subbasin on ODF lands, approximately 10 miles to the east of the project area (USFWS, 1998). This population is the closest known occurrence to the project. Coast Range Nelson's checker-mallow populations typically occur in open, wet to dry mountain meadows, intermittent stream channels, and along margins of coniferous forests, ranging from 1,600 feet to 1,960 feet in elevation (USFWS 2008b, USFWS, 1998).

Fish and Wildlife

Two wildlife species listed by the USFWS as potentially occurring within Tillamook County (USFWS, 2008a) may occur in the vicinity of the project. These are the marbled murrelet (*Brachyramphus marmoratus*) and northern spotted owl (*strix occidentalis caurina*). Critical habitat has been designated for both of these species.

Marbled Murrelet (*Brachyramphus marmoratus*)

The Washington, Oregon, and California populations of marbled murrelet were federally listed as threatened under the ESA in 1992 due to substantial loss and modification of nesting habitat (older forest) and mortality from net fisheries and oil. Critical habitat was designated for the species in 1996. The marbled murrelet is a seabird that uses mature or old growth coniferous forests within 50 miles of the ocean for nesting. These forests are generally characterized by large trees (>32 inches dbh), multi-storied stand, and moderate to high canopy closures. Trees must have large branches or deformities for nest platforms, with the occurrence of suitable platforms being more important than tree size alone (USFWS, 1997). The species is also listed as threatened under the Oregon ESA (ODF, 2008a).

The ODF, in cooperation with the ODFW has funded and completed intensive marbled murrelet surveys in and around timber sale areas on State lands since 1992. These surveys have resulted in the identification of many forest sites where marbled murrelets exhibit occupied behavior on State forest lands. The ODF, in consultation with ODFW and the USFWS, has developed a marbled murrelet Management Plan for State forest lands. The objectives are to (1) avoid take of the species and (2) provide flexibility in future forest management planning and Habitat Conservation Plan (HCP) development.

Marbled murrelets do currently use some areas of northwest Oregon state forests in the Coast Range for nesting (ODF, 2008b), and marbled murrelet management areas (MMMA) have been identified across the Tillamook District, encompassing over 11,200 acres (3,638 habitat acres and 7,588 buffer acres (ODF, 2003). However, there is no marbled murrelet suitable habitat in the project or surrounding areas. The nearest documented marbled murrelet occurrence is located approximately 2 miles south of the project on U.S. Forest Service (USFS) land.

Spotted Owl (*Strix occidentalis caurina*)

The northern spotted owl was federally listed as threatened under the ESA in 1990. In 1992, areas of critical habitat were designated on federal lands to further protect this subspecies on federal lands. Northern spotted owls live in forests characterized by dense canopy closure of mature and old-growth trees, abundant logs, standing snags, and live trees with broken tops. Although they are known to nest, roost, and feed in a wide variety of habitat types, these owls prefer older forest stands with variety: multi-layered canopies of several tree species of varying size and age, both standing and fallen dead trees, and open space among the lower branches to allow flight under the canopy. Typically, forests do not attain these characteristics until they are at least 150 to 200 years old (USFWS, 2008c). The species is also listed as threatened under the Oregon ESA (ODFW, 2008a)

Within the Tillamook District, a northern spotted owl cluster (Kilchis Cluster) has been designated in the Kilchis basin, and includes small portions of the lower Wilson and Trask basins totaling 8,556

acres. The cluster is adjacent to a Bureau of Land Management (BLM) Reserve Pair Area (RPA) which has a resident single female and totals 8,733 acres. At this time the Tillamook District has a total of three pairs, one each in the North Fork Nehalem, Lower Nehalem, and the Miami basins. A single owl is found on state forest land in the Miami basin. Owl sites are located on BLM, USFS, and Oregon Department of Parks and Recreation (ODPR) ownerships and influence management decisions on adjacent state forests (ODF, 2003).

The general disturbed nature of the project and surrounding areas do not provide suitable habitat for the northern spotted owl (*Strix occidentalis*). The nearest occurrences of spotted owls are located on USFS land about 2.25 miles south and southeast of the project area.

Oregon Coast ESU Coho salmon (*Oncorhynchus kisutch*)

The Oregon Coast ESU of Coho salmon was listed as threatened under the federal ESA by NOAA Fisheries on February 11, 2008. (NOAA, 2008). Critical habitat was also designated for this ESU on February 11, 2008 (50 CFR Parts 223 and 226). Coho use Jordan Creek and the lower reaches of South Fork Jordan Creek as spawning and rearing habitat (ODFW, 2004), and these streams are included in critical habitat designations (50 CFR Parts 223 and 226). Coho migrate to small tributaries in the Wilson River watershed September through January and spawn October through January (ODA, 2000). Fry and juveniles use stream edges and backwater pools for rearing. After one year of freshwater rearing, smolts migrate seaward during the spring (WDFW, 2005). The ODFW in-water work window for the Wilson River watershed and tributaries is July 1 through September 15 (ODFW, 2000).

3.6.2 Threshold of Significance

Significance under NEPA is determined by assessing the impact of a proposed action in terms of its context and the intensity of its effects. Therefore, the No Action Alternative and the Proposed Alternative were determined to result in a significant effect on threatened, endangered and sensitive species if they would:

- have a significant adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by USFWS or NOAA.
- conflict with the provisions of an adopted Habitat Conservation Plan or other approved regional or State habitat conservation plan, to the extent applicable; or
- substantially degrade the quality of the environment, substantially reduce the habitat of a fish and wildlife species, threaten to eliminate a plant community, reduce the number or restrict the range of an endangered, rare or threatened species.

3.6.3 Environmental Consequences

Alternative A: No Action

Under the No Action Alternative, no road construction or related activities would take place and existing conditions at the project site would remain unaltered. Therefore, there are no potential effects to federally listed threatened or endangered species under the No Action Alternative.

Alternative B: Proposed Action

Nelson's checker-mallow (*Sidalcea nelsoniana*)

Under the Proposed Action, construction activities (clearing and brushing, grubbing, excavation, and grading) will permanently displace approximately 6.5 acres of vegetation, including both mixed species coniferous forest (Douglas fir and western hemlock) and patches of red alder, along with an understory shrub layer. The project corridor ranges from 1,800 to 2,400 feet in elevation, overlapping the known elevation range for this species. The predominant habitat type within the project footprint is closed canopy coniferous forest; however scattered patches of more open, alder dominated areas are present. One intermittent stream channel occurs approximately 100 feet from the proposed road alignment in the drainage basin where the headwaters to the South Fork Jordan Creek Tributary 1 form. This drainage basin has been described in detail in earlier sections.

EDAW biologist, Linda Howard, conducted a site visit on June 13, 2008 to collect information on general site conditions, special habitat features and vegetation communities along the project corridor. Special attention was given to open areas in the drainage basin referenced above and the vicinity of the intermittent stream channel for evidence of this species. No observations of Nelson's checker-mallow or other mallow species were made during the June 13, 2008 site visit.

Marbled Murrelet (*Brachyramphus marmoratus*)

Marbled murrelet are not known to occur in the project area and marbled murrelet suitable habitat is not present in the project area. Therefore, the Proposed Action will have no effect on this species.

Spotted Owl (*Strix occidentalis caurina*)

Spotted Owl are not known to occur in the project area and spotted owl suitable habitat is not present in the project area. Therefore, the Proposed Action will have no effect on this species.

Oregon Coast ESU Coho salmon (*Oncorhynchus kisutch*)

As discussed in earlier sections of this report, the Proposed Action is not expected to have significant effects (from landslides, erosion or sedimentation) to streams down-slope of the project area. The nearest surface water feature to the project site is the intermittent stream channel which forms the headwaters to South Fork Jordan Creek Tributary 1 (Figure 3.4-1) located approximately 100 feet from the project site. The new road would be a minor long-term source of sediment to this and other streams down-slope of the project area. However, the road will be designed to capture surface water runoff in accordance with ODF Forest Management Guidelines and ODF standard BMPs for road construction and maintenance, and due to the distance of fish-bearing streams from the project site, the Proposed Action is not expected to have an adverse effect to coho salmon spawning and rearing habitat in Jordan Creek or South Fork Jordan Creek.

3.6.4 Mitigation Measures and Residual Impacts

No mitigation measures are proposed under either alternative. ODF will implement its standard road design and construction BMPs in accordance with its standard practices. Residual impacts are previously discussed in the above narrative.

3.7 Recreation

3.7.1 Affected Environment

The project site is located in the Tillamook State Forest, a popular regional outdoor recreation destination (Fig. 3.7-1). For management purposes, ODF classifies the site as being within the Wilson basin and the Jordan Creek sub-basin. Recreation activities common in the Wilson basin include OHV use, camping, hiking, fishing, mountain biking, hunting, swimming, picnicking, kayaking, scenic driving, hang gliding, and para-sailing (ODF, 2003). OHV use is identified as the most popular year-round recreation activity in the Tillamook State Forest. Recreational visitors to the Wilson basin tend to be from the Portland region and other areas to the east of the State Forest (ODF, 2003).

The project site is within a Motorized Off Road Use zone in the Jordan Creek sub-basin, which includes 37 miles of designated, signed OHV trails and the Jordan Creek OHV Staging Area (ODF, 2003). The Jordan Creek Staging Area, located approximately 1.75 miles northwest of the project site, is designated for year-round day-use and has six camping sites. In 2008, the campground's open period will run from April through October; the open period has been reduced in recent years due to low demand in late autumn and early spring and due to the cost of operations (Zeller, 2008a). Records for Fiscal Year (FY) 2003-2005 show that the number of camper-days per month at the Jordan Creek Staging Area is highly variable. During summer months, approximately 125-200 camper-days were recorded per month, but visitation rates as high as 332 camper-days have been recorded during some one-month periods (Zeller, 2008b). ODF staff expect that short-term increases in camping activity are associated with organized OHV events (Zeller, 2008a). Seven to ten OHV events are held each year in the Wilson basin (ODF, 2003). Although a popular OHV area, use-data for OHV trails is not available.

OHV recreation within the State Forest began in the late 1960s, after the final fire of the Tillamook Burn in 1951, and well before ODF formally began to manage OHV use in 1994 (Zeller, 2008c). Many of the existing OHV trails were created prior to management and do not meet modern standards for trail location and design. The Duanes trail, a one-way (downhill) motorcycle trail, runs for 2.1 miles from the Spaur timber sale spur road along the proposed road alignment and then downhill to the Spaur Creek trail. Portions of this trail are located very near to Spaur Creek and have been washed out a number of times in recent years. Due to a recent wash-out and because of proposed logging activity, this trail has been indefinitely closed (ODF, 2007). Plans for rerouting of this trail and construction of a bridge over Spaur Creek have not yet been finalized (Zeller, 2008c).

Dispersed recreation activities also occur in the vicinity of the project site; hunting is a popular dispersed activity in the area. Dispersed camping may also take place, although more common locations are those closer to rivers and streams.

The current recreation guidance document for the State Forest is the Tillamook State Forest Recreation Action Plan 2000 (RAP), which identifies specific policies and projects applicable through 2010. Implementation of RAP policies and projects is directed by the annual operations plan (AOP). The 2008 AOP notes that a Facility and Trail Maintenance Management Plan has been developed for the Jordan Creek OHV Area (ODF, 2008). This includes a complete trail and facility assessment as well as a long term plan for maintenance, upgrades and trail re-routes. The 2008 AOP

does not identify any major projects in the vicinity of the project site. An Off-Highway Vehicle Trail Plan for the Jordan Creek sub-basin is also being created, as a companion document to the RAP (Zeller, 2008a).

3.7.2 Threshold of Significance

No Action Alternative and the Proposed Alternative were determined to result in a significant effect on recreation if they:

- would increase the use of existing recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated;
- would include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment; or
- would have a substantial direct or indirect impact on the quantity or quality of recreational activities in the vicinity.

3.7.3 Environmental Consequences

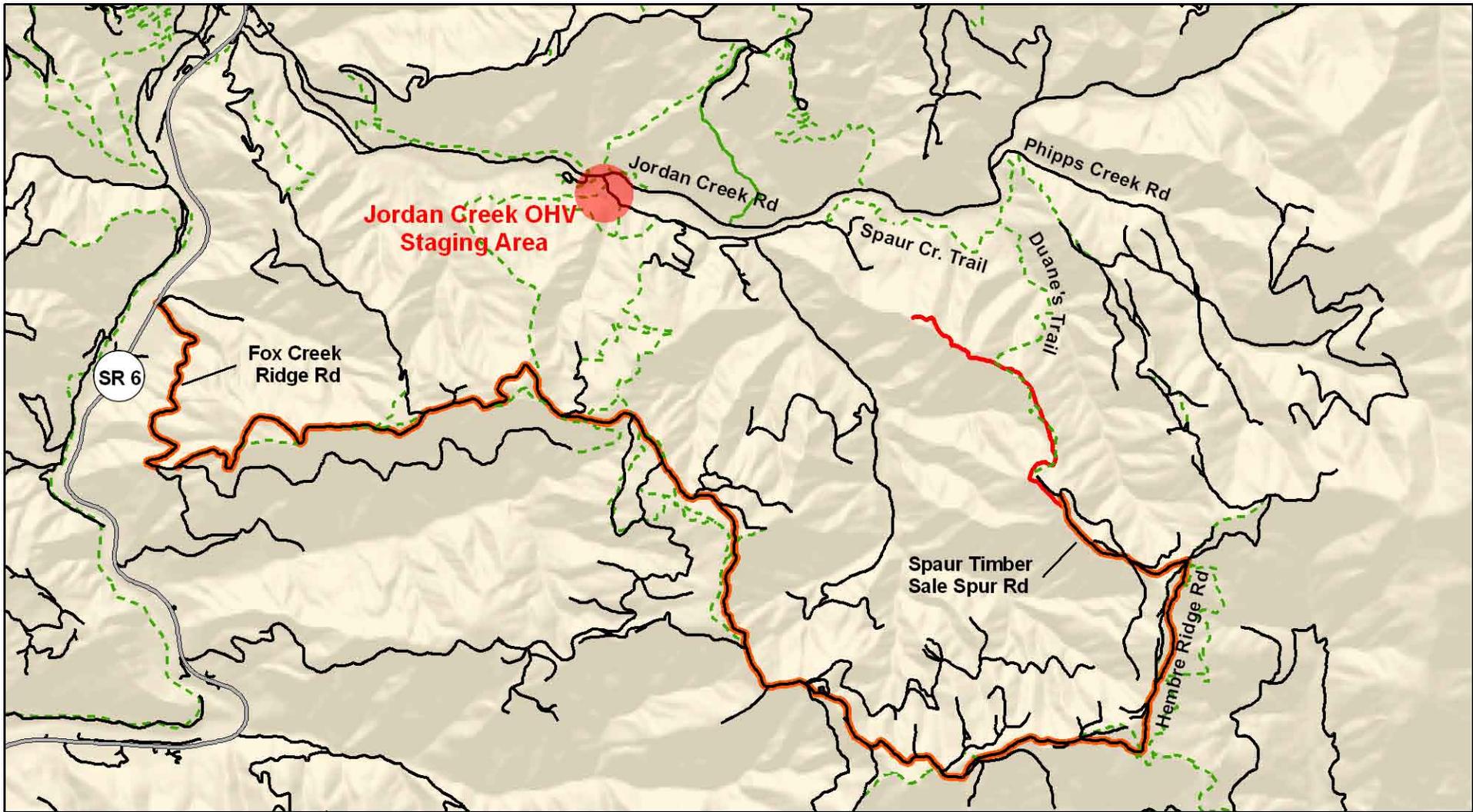
Alternative A: No Action

Under the No Action alternative, Spaur Road would not be constructed and no related activities would take place. Impacts on recreation beyond the existing conditions would not occur and associated thresholds of significance would not be exceeded.

Alternative B: Proposed Action

Under the Proposed Action alternative, Spaur Road would be constructed to provide access to two 105-acre timber sale areas located on the northeast side of the ridge. Approximately 1200 feet of the Duanes trail would be removed during construction of the road. The proposed road alignment and trail diverge in a number of places; therefore to accommodate road design requirements, discontinuous portions of the trail will remain. Since this trail has been closed for recreational purposes due to erosion damage, construction of the road would not impact use of the trail. ODF staff have recommended that, after reconstruction of Duanes Trail, vehicular access from Hembre Ridge Road to the Spaur timber sale spur road and the project vicinity should be limited to motorcycles to decrease conflicts between OHV use and hunting, limit creation of illegal OHV trails, and reduce need for road maintenance (Zeller, 2008c). Upon reconstruction of Duanes Trail, recreational facilities within the project area would be of a type and scale approximating those which existed prior to construction of Spaur Road. Recreational facilities would not be expanded, and because a substantial increase in the use of Duane's trail facilities is not expected as a result of its reconstruction, the threshold of significance would not be exceeded.

Duanes Trail is the only formal recreational facility which crosses the project site. During active logging, warning signs are required by ODF where trails enter a timber sale area (Zeller, 2008c). Dispersed recreation activities at the project site, including hiking and seasonal hunting, also occur within the project site. Such uses would be temporarily affected during construction. These activities would resume after proposed harvest activity is completed, but conversion of Spaur Road to a motorcycle-only route at that time would decrease access by hunters operating OHVs. These access changes are intended to decrease negative impacts on the local environment and on local recreation;



**Spaur Road Reconstruction Project
Oregon Department of Forestry**

Figure 3.7-1. Local Roads and Recreation Trails



-  Proposed Alignment
-  SR 6
-  Local Roads
-  Off Hwy Vehicle Trails
-  Primary Access Route

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they would not have a substantial direct or indirect impact on the quantity or quality of recreational activities in the vicinity and would not exceed the threshold of significance.

Mitigation Measures and Residual Impacts

No mitigation measures are proposed under either alternative. ODF will implement its standard road design and construction BMPs in accordance with its standard practices. Residual impacts are previously discussed in the above narrative.

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3.8 Visual Resources

3.8.1 Affected Environment

The project site is located along a forested ridge in the Tillamook State Forest, approximately 3.5 miles east of the Wilson River Highway (SR 6). The surrounding landscape is characterized by steep hills and dense Douglas-fir and alder forest ranging from 35 to 50 years of age (ODF, 2003). Forest canopy at the project site and in its vicinity is generally unbroken.

ODF has assigned a visual classification of Level 3 (low sensitivity) to the project area and stated that no scenic impacts are expected from proposed nearby timber harvests (ODF, 2006). The Level 3 classification is applied to areas that have low levels of public use or have low visibility. Per this designation, residual affects of management activities, including road construction, do not need to be addressed at the stand level to meet visual management objectives (ODF, 2001). This classification also applies to the proposed project, due to its proximity to the sale areas.

Neither the forested ridge nor the project site are visible from Oregon SR 6. Portions of the forested ridge are visible from short segments of Jordan Creek Road. Views of the ridge from other forestry roads in the vicinity are very limited, but it is visible from some locations where vegetation does not obscure views. Photo 3.8-1 illustrates a view of the ridge from Phipps Road.

Evidence of human presence in the vicinity of the project site primarily exists in the form of forest lands subject to harvesting activity. Due to dense vegetation along roads, these are only occasionally visible and do not have a significant impact on visual resources at the landscape scale. Existing forest roads are only occasionally visible due to dense vegetation and do not have a significant impact on visual resources at the landscape scale. At the southeastern end of the project site, where the proposed road will meet the Spaur timber sale spur road, a large opening in the canopy has been created by the construction of a landing/staging area for timber harvesting activities. This is moderately visible due to its size and ridgetop location (Photo 3.8-1). The Hembre pit, a quarry which provides a local source of road surfacing rock, is located approximately 4 miles by road to the southwest of the site (ODF, 2003). A second, unnamed pit-run pit is located directly adjacent to Hembre Ridge Road, approximately 0.4 miles east of the intersection of the Spaur timber sale spur road and Hembre Ridge Road (Photo 3.8-2).

The project site is located within a Motorized Off Road Use zone (see Section 3.7). The Duanes trail, a motorcycle trail that crosses the project site, is the only major recreation-related feature visible in the vicinity of the project (Photo 3.8-3). Within the site, this trail is visible only at close distances and has no impact on visual resources at the landscape scale. ODF staff have stated that visual evidence of dispersed recreation activities can be found in the area (Zeller, 2008c). These may include camping sites, illegal trails, and evidence of target shooting. During a June 13, 2008 site visit by EDAW staff, the only observed signs of recreational activities near the project site were the Duanes trail and two pieces of motorcycle fender.

3.8.2 Threshold of Significance

No Action Alternative and the Proposed Alternative were determined to result in a significant effect on visual resources if they:

- would exceed visual impacts permitted under the visual classification assigned to the site by ODF.

3.8.3 Environmental Consequences

Alternative A: No Action

Under the No Action alternative, Spaur Road would not be constructed and no related activities would take place. Impacts on visual resources would not be created and associated thresholds of significance would not be exceeded.

Alternative B: Proposed Action

Under the Proposed Action alternative, Spaur Road would be constructed to provide access to two 105-acre timber sale areas located on the northeast side of the ridge. Proposed work would consist of clearing and grubbing along the road alignment, excavation of cut slopes in at least two locations, grading of the road subgrade, and construction of the gravel surface. Clearing limits would range from 32 – 46 feet in width and would include removal of brush 8 feet back from the road subgrade width on either side of the road and adjacent to turn-outs. The existing landing/staging area would be used for vehicle parking, temporary stockpiling of harvested timber, and stockpiling of waste soil excavated during road construction (Inman, ROC, 2008). An additional waste soil collection area has been identified on the north side of the proposed road alignment near its eastern end. Pit run rock for road construction would be delivered to the project site as needed and would not be stockpiled on site (Inman, ROC, 2008).

Existing tree cover adjacent to the road alignment would initially obstruct views of construction work, but removal of timber along the alignment would create a linear gap in the forest canopy. Because the proposed road would be located at or near the ridgeline, gaps in the canopy would be expected to have some visibility. Rock for surfacing of the road would be quarried at an unnamed pit run pit located on Phipps Road (Inman, ROC, 2008). Visual impacts due to quarrying would be mitigated according to Forest Practice Rules and BMPs.

Waste soil that is not used as fill during road construction would remain at one or both of the waste soil collection locations. These collection locations would only be visible from the immediate vicinity and would not have a significant impact on visual resources.

After construction, but prior to harvest of the two sale areas, timber adjacent to the road alignment would obstruct views of the proposed road. After harvest, portions of the proposed road located along the upslope edge of the sale areas and extends into one of the sale areas would have greater visibility. This visibility would remain until harvest units have regenerated sufficiently (approximately five years).

Because of the project site's low visibility and the relatively limited amount of clearing involved, impacts on visual resources under Alternative B would not exceed those permitted under the visual classification assigned to the site by ODF and thresholds of significance would not be exceeded.

Mitigation Measures and Residual Impacts

No mitigation measures are proposed under either alternative. ODF will implement its standard road design and construction BMPs in accordance with its standard practices. Residual impacts are discussed in the above narrative.



Photo 3.8-1: View of ridge and landing/staging area from Phipps Road



Photo 3.8-2: Unnamed pit run pit on Hembre Ridge Road



Photo 3.8-3: Duanes trail

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3.9 Environmental Justice

3.9.1 Affected Environment

Federal agencies are required, by Executive Order 12898 (Environmental Justice, 59 Fed. Reg. 7629 [1994]), to achieve environmental justice by addressing "disproportionately high and adverse human health and environmental effects on minority and low-income populations." In order to do this, the demographics of the affected area are examined to determine whether minority populations, low income populations, or Indian Tribes are present in the area impacted by a proposed action. If so, a determination must be made as to whether the implementation or development of the proposed project may cause disproportionately high and adverse human health or environmental effects on these populations.

The Council on Environmental Quality (CEQ) defines "minority" to consist of the following groups: Black/African American, Asian, Native Hawaiian or Other Pacific Islander, American Indian or Alaskan Native, and Hispanic populations (CEQ, 1997). Additionally, for the purposes of this analysis, "minority" also includes all other non-white racial categories within the U.S. Census Bureau's 2000 Census of Population and Housing such as "some other race" and "two or more races."

For the purpose of evaluating environmental justice impacts, the affected environment is defined as Tillamook County; statistics for Oregon State are also provided for comparison. Table 3.9-1 presents the race and ethnicity of Tillamook County and Oregon state residents as reported by the 2000 U.S. Census of Population and Housing.

Table 3.9-1 Race/Ethnicity in Tillamook County and Oregon State, 2000

Race/Ethnicity	Tillamook County (Percent)	Oregon State (Percent)
White	93.9	86.6
Black	0.2	1.6
American Indian and Alaska Native	1.2	1.3
Asian	0.6	3.0
Pacific Islander and Native Hawaiian	0.2	0.2
Some other race	1.9	4.2
Two or more races	2.0	3.1
Hispanic or Latino (of any race)	5.1	8.0

Source: U.S. Census Bureau, 2004.

The U.S. Census Bureau's 2005 poverty estimates are used to determine low-income populations, defined by the Census Bureau as those households with income at or below 80 percent of area median household income. Estimated median household income in Tillamook County in 2005 was \$37,926; for Oregon state as a whole it was \$43,065 (U.S. Census Bureau, 2008). Approximately 13.5% of the Tillamook County population lived below the poverty threshold, compared to 14.1% of the population of Oregon State as a whole.

3.9.2 Threshold of Significance

To define what constitutes a significant proportion of the population, the present analysis follows EPA guidelines published in *Final Guidance for Incorporating Environmental Justice Concerns in*

EPA's NEPA Compliance Analysis (EPA 1998). According to these guidelines, a minority population refers to a minority group that has a population of greater than 50 percent of the affected area's general population. Although not specifically stated in the text, the same rule is used for low-income populations; a low-income population exists if there is a community whose general population is comprised of 50 percent or more people living under the poverty threshold. Therefore, the No Action Alternative and the Proposed Alternative were determined to result in a significant effect on environmental justice if the affected environment:

- would include a minority group that has a population of greater than 50 percent of the affected area's general population; or
- would include a population with 50 percent or more of its residents living under the poverty threshold.

3.9.3 Environmental Consequences

Alternative A: No Action

Under the No Action Alternative, no road construction or related activities would take place and existing conditions at the project site would remain unaltered. In addition, data provided in Section 3.9.1 indicates that neither minority populations nor low-income populations constitute a significant proportion of the population within the affected environment. Therefore, disproportionate impacts on minority or low-income populations, which would constitute environmental justice impacts, would not be created and associated thresholds of significance would not be exceeded.

Alternative B: Proposed Action

Data provided in Section 3.9.1 indicates that neither minority populations nor low-income populations constitute a significant proportion of the population within the affected environment. Therefore, disproportionate impacts on minority or low-income populations, which would constitute environmental justice impacts, would not be created and thresholds of significance would not be exceeded.

The Proposed Action would provide equal-opportunity employment opportunities, as ODF would contract for road construction services using their standard bid procedure. ODF publishes bidding opportunities on the internet through the Oregon Procurement Information Network, which is accessible to the general public. All subcontractors submitting bids are required to sign a Contractor's certification of nondiscrimination in obtaining required subcontractors, in accordance with ORS 279A.110(4). This certification attests that the Contractor has not discriminated against minority, women or emerging small business enterprises in obtaining any required subcontracts, and that the Contractor is not in violation of any Discrimination Laws. No significant adverse impacts on environmental justice would be created as a result of this proposed method of contracting for construction services.

Mitigation Measures and Residual Impacts

No mitigation measures are proposed under either alternative. ODF will implement its standard road design and construction BMPs in accordance with its standard practices. Residual impacts are previously discussed in the above narrative.

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3.10 Cultural and Historical Resources

In developing the Area of Potential Effect (APE) for an undertaking, consideration must be given to those effects that will occur immediately and directly as well as those that are reasonably foreseeable and may occur later in time, be farther removed in distance or be cumulative, but still result from the undertaking. Areas immediately and directly affected by the Proposed Action include those areas within the project footprint. The Proposed Action will result in construction of a new road allowing access to ODF forest lands adjacent to the project area on either side of the ridgeline where the new road will be located. Management and harvest activities on these lands are considered to be a cumulative effect of the Proposed Action. Therefore, the APE for the Proposed Action has been defined to include the construction area for the entire length of the new alignment from the beginning of the new road to the end, and 100 feet to either side.

3.10.1 Affected Environment

Cultural resources include resources of historical and/or archaeological significance. For the purposes of this document, “archaeological resources” is used to refer to prehistoric or historic subsurface sites or objects, and the term “historic resources” is used to refer to historic structures and districts.

According to correspondence received from the Oregon SHPO, their statewide cultural resource data base shows no previous cultural resource surveys near the project area. While the Oregon SHPO reported no known archaeological or historic sites in the area, it did indicate that the area has a significant potential for the presence of archaeological sites, and recommended caution during any ground disturbing activities (Appendix B).

Although not contained in the Oregon SHPO statewide cultural resource database, ODF reported the partial remains of two Steam Donkeys discovered in the vicinity of the project. The remains consist mainly of log skids. The remains of the two Steam Donkeys are located on opposite sides of Phipps Road, approximately one-mile southeast by road of the project start and outside of the APE for the project.

Humans have inhabited the State of Oregon for as long as 13,000 years. The northern coastal river valleys are of cultural importance to the Nehalem Tillamook Indians (now included among the Confederated Tribes of Siletz Indians). Further, Euro-american occupation of the area extends back to the middle of the nineteenth century.

3.10.2 Threshold of Significance

As discussed in Section 2.5, above, the guiding elements for addressing potential effects to cultural resources are found in the National Historic Preservation Act (especially in Section 106), the Archaeological Resources Protection Act, and the Native American Graves Protection and Repatriation Act. Additional direction is provided by ORS 358.905 and ORS 97.740, protecting archaeological sites and objects and human remains. The unanticipated discovery of and previously unreported cultural resources during project work will trigger additional consultation with the Oregon SHPO and Tribal interests under the appropriate laws and implementing regulations.

3.10.3 Environmental Consequences

The likelihood that cultural resources are present within the area of potential effect for the proposed project is considered to be low. Therefore, the proposed project would have no effect on cultural resources.

Alternative A: No Action

Under Alternative A, no new road would be constructed. The OHV trail portion of the road (approximately 1.3 miles) would continue to be used as it is at present. Any casual or inadvertent effects from this use to cultural resources in the area of the trail would continue at their present level.

Alternative B: Proposed Action

Under Alternative B, a total of about 7050 feet of forest management road would be constructed. About 1200 feet of this road would be built along a prior road alignment abandoned in the late 1950s after the Tillamook Burn salvage operation and along which the Duanes trail now runs. Within this portion of the project, most if not all of the work will occur within areas disturbed by prior construction and use of the road. Within this area, the likelihood of any effect on cultural resources is considered very low. The remaining 5850 feet lie along or just below a high, steep sided ridge at elevations between 1200 and 1800 feet above sea level, in an area not well suited to human habitation. The likelihood of any effect on cultural resources within this portion of the project is also considered to be low.

Mitigation Measures and Residual Impacts

No mitigation measures are proposed under either alternative. ODF will implement its standard road design and construction BMPs in accordance with its standard practices. Residual impacts are previously discussed in the above narrative. If cultural resources are encountered during construction of the project all earthmoving activity will be stopped and the SHPO will be contacted.

3.11 Transportation and Access

3.11.1 Affected Environment

The Wilson River Highway, also known as Oregon State Route 6 (SR 6), serves as the primary means of access to central portions of the Tillamook State Forest and the project site (Fig. 3.11-1). SR 6 runs from U.S. 101, near the City of Tillamook, east through the Tillamook State Forest and across the Northern Oregon Coast Range to U.S. 26. U.S. 26 continues east to Portland. SR 6 is the only major road crossing the Coast Range between Tillamook and Portland but is not heavily used, with the portion of the highway closest to the site carrying approximately 2,300-2,600 vehicles per day in 2006 (ODOT, 2006).

With the exception of SR 6, roads in the vicinity of the project site are forest roads. These are typically 12- to 14-foot wide, single lane gravel roads with pullouts (Zeller, 2008c). However, roads may conform to other design standards, depending on traffic levels or other factors (ODF, 2000). Primary forest roads are maintained by the Oregon Department of Forestry while timber sale purchasers maintain timber sale access roads. Data on traffic loads on forest roads is not currently available but traffic loads are typically very light.

Two primary routes may be used to access the project site. The first is from SR 6 via Jordan Creek Road, Phipps Road, Hembre Ridge Road, and the Spaur timber sale spur road (Fig. 3.7-1). A second route, via Kansas Creek Road, Smith Bypass, Hembre Ridge Road, and the Spaur timber sale spur road also exists. Access to the site is only feasible by private vehicle. Tillamook County Transportation District provides daily express bus service between Tillamook and Portland, but the only local stop is at the Tillamook Forest Center (Tillamook County Transportation District, 2008).

The project site is located within a Motorized Off Road Use zone (see Section 3.7) and roads in the vicinity are commonly used by recreational visitors as well as by forestry- and fire protection-related traffic. Jordan Creek Road serves as the primary route from SR 6 to the Jordan Creek OHV Staging Area, a nearby day-use area and campground. Hunting is also a common seasonal activity in the area. Some roads in the Wilson basin may be temporarily gated in October and November for hunting season.

The Tillamook District is in the process of developing a transportation plan, with the Wilson basin serving as a pilot project (ODF, 2008). The plan, which will include an inventory of road conditions and needs assessment, is expected to be completed in or after FY 2008 (Zeller, 2008b).

3.11.2 Threshold of Significance

The No Action Alternative and the Proposed Alternative were determined to result in a significant effect on transportation and access if they:

- would cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the road system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion); or
- would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., recreation and forestry vehicles)

3.11.3 Environmental Consequences

Alternative A: No Action

Under the No Action alternative, Spaur Road would not be constructed and no related activities would take place. Impacts on transportation and access would not occur and associated thresholds of significance would not be exceeded.

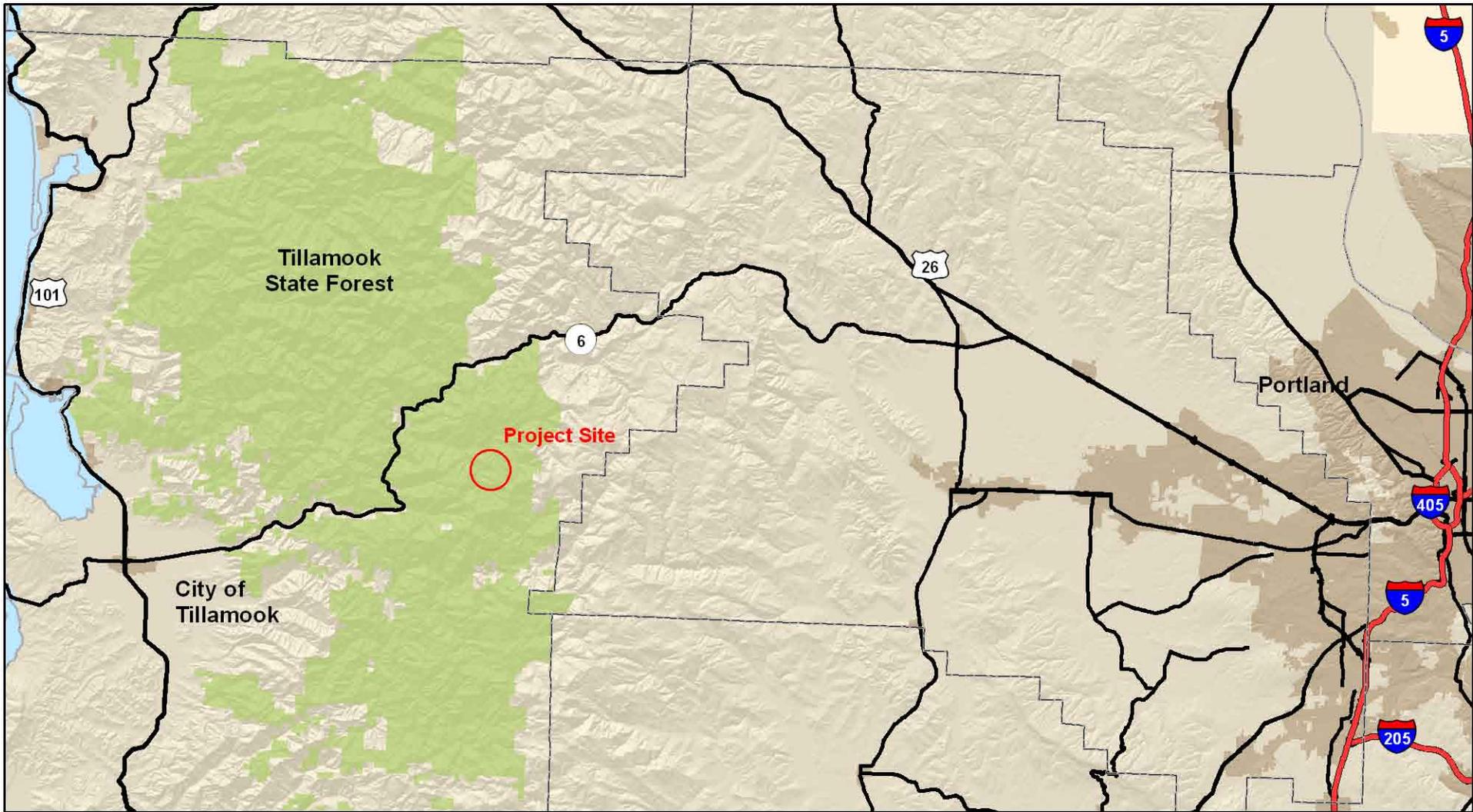
Alternative B: Proposed Action

Under the Proposed Action alternative, Spaur Road would be constructed to provide access to two 105-acre timber sale areas located on the northeast side of the ridge. Construction of Spaur Road would create a minor, temporary increase in traffic during the construction period. The greatest increase in traffic would be due to hauling of rock along the route between the proposed pit run pit, located approximately 0.4 miles northeast of the intersection of Hembre Ridge Road and Phipps Road and the project site. Pit run rock may also be collected at the Hembre pit, located approximately 4 miles southwest of the project site or from other quarries as needed. Traffic would also be generated by vehicles hauling timber harvested during clearing and grubbing of the road alignment. Transportation of equipment to and from the site and daily trips by road construction workers would constitute a third source of traffic on the route between SR 6 and the project site. Although road construction is expected to result in excess cut soil, this waste material will not be trucked off-site but collected at the existing landing site and at a location on the north side of the proposed road alignment near its eastern end. Existing traffic loads on the proposed travel routes are relatively light and ODF may exclude the public from these roads to facilitate forestry activities if traffic loads become significant. For these reasons, the proposed project would not substantially increase traffic and the threshold of significance would not be exceeded.

The proposed design of Spaur Road would be required to meet all applicable forest road design standards and would not be expected to substantially increase hazards due to its design. ODF staff have recommended that, after reconstruction of Duanes Trail (See Section 3.7), vehicular access from Hembre Ridge Road to the Spaur timber sale spur road and the project vicinity should be limited to motorcycles to decrease conflicts between OHV use and hunting, to limit creation of illegal OHV trails, and to reduce need for road maintenance (Zeller, 2008c). Spaur Road would not be accessible to most motorized vehicles and would not serve as a regular forest road. This would further decrease potential for conflicts between incompatible uses.

Mitigation Measures and Residual Impacts

No mitigation measures are proposed under either alternative. ODF will implement its standard road design and construction BMPs in accordance with its standard practices. Residual impacts are previously discussed in the above narrative.



**Spaur Road Reconstruction Project
Oregon Department of Forestry**

Figure 3.11-1. Regional Transportation Network

- State Forest
- Interstate Highways
- U.S. Highways
- State Highways

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3.12 Cumulative Impacts

Cumulative impacts are those that result from the incremental impact of a proposed action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other action (40 CFR 1508.7). Only those resources associated with cumulative effects are discussed below.

The Proposed Action is for FEMA to support ODF by providing partial funding for the reconstruction of Spaur Road in the Tillamook State Forest, near Tillamook Oregon. Potential cumulative effects from the Proposed Action in addition to other activities in the area are primarily from clearing of vegetation and soil disturbance. These activities could have minor cumulative effects to soils; hydrology and water quality; vegetation; fish and aquatic life; general wildlife; and Coho salmon, a listed species. In addition to potential minor cumulative effects summarized above and described in more detail below, the Proposed Action would result in a beneficial cumulative effect as construction of the new road would make it easier and less costly to manage and harvest forest lands in the project area.

The project is located in rural Tillamook County on State forest lands managed for timber harvest. Land disturbing activities in the Jordan Creek subbasin and in the project area include forestry and associated road construction, off-highway motorized vehicle use, and trail construction and maintenance activities related to mountain biking, horseback riding, hiking and other recreational activities. The proposed project is being planned to provide ODF access to a planned timber harvest on the steep slopes on either side of the ridge where the project site is located. Timber harvest activities on steep slopes can also affect slope stability which can lead to landslides. However, the new road is not expected to contribute to any cumulative effects on geologic stability due to its ridge top location. Timber harvest activities involve land clearing and soil disturbance, and are likely to contribute to increased erosion in the area and sedimentation in streams down-slope of the site. Excessive sediment in streams can alter stream hydrology and can reduce water quality for salmon, including Coho, which depend on clean, clear water and exposed gravel for spawning beds. The new road would be an additional, but minor, long-term source of erosion and sediment in the area in addition to the effects from forestry activities and natural processes.

Construction of the new road will require clearing approximately 6.5 acres of forest habitat, including any snags and downed wood within the clearing limits. Although the habitat within the project footprint is low compared to higher quality riparian habitat along streams, this would involve an additional, but minor cumulative impact to general wildlife in addition to tree removal that would take place as part of forestry activities planned in the project area.

The Proposed Action, partial funding of the road construction project by FEMA, will contribute to implementation of ODF's forest management and harvest activities planned in the project area for April 2010 (the Steam Donkey sale). Additional harvest and stand management operations and forest road construction projects will continue be undertaken by ODF in the vicinity of the project site in order to fulfill the Department's forest management responsibilities. Such activities would have the potential to create impacts on recreation activities in the vicinity of the project site. Because it is ODF's responsibility to balance economic, environmental, and social benefits, potential impacts on recreation due to silvicultural activities would continue to be addressed as part of each forest

operation planning process.

Use of the Tillamook State Forest as a site for recreational activities is expected to increase as local and regional populations grow. ODF has developed and will continue to develop long-range recreation plans which address increased demand for recreational facilities in the State Forest. Implementation of these plans is expected to maintain recreational activities and facilities at a level that does not create significant negative impacts.

4.0 Consultation and Coordination

4.1 Public Involvement

FEMA sent a scoping letter to agencies, Tribes, and local interested parties January 9, 2008. The letter provided a description of the proposed project and requested that comments on issues and concerns, the range of alternatives, and potential impacts regarding the project. The scoping letter distribution list and a summary of received comments are found in Appendix A.

4.1.1 Comments on the Draft EA

FEMA's Draft EA will be released for public review. The public will be afforded 30 days to review and provide comments on the Draft EA.

4.2 Agency Consultation and Coordination

FEMA consulted with several Federal and local agencies throughout the EA process to gather valuable input and to meet regulatory requirements (see scoping list). This coordination was integrated with the public involvement process.

4.2.1 Endangered Species Act

The evaluation of endangered species contained in this EA serves as FEMA's biological assessment as required under the Endangered Species Act (ESA). FEMA has determined that the Preferred Alternative will not affect any federally listed or proposed threatened or endangered species.

4.2.2 National Historic Preservation Act

During the scoping process FEMA contacted the Oregon SHPO and requested that they inform FEMA if they were aware of cultural resources or other important sites in the vicinity of the project. The SHPO has responded that there are no known cultural resources in the project vicinity.

4.2.3 Other Laws and Regulations

The relationship between Federal agencies and sovereign Tribes is defined by several laws and regulations addressing the requirement of Federal agencies to notify or consult with Native American groups or otherwise consider their interests when planning and implementing Federal undertakings. Among these are the following:

- National Environmental Policy Act
- Executive Order 12875, Enhancing the Intergovernmental Partnership
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
- Presidential Memorandum: Government-to-Government Relations with Native American Tribal Governments
- Executive Order 13084, Consultation and Coordination with Indian Tribal Governments

FEMA has adhered to these laws and regulations as applicable to the development of the EA.

5.0 Preparers

Federal Emergency Management Agency

Jerry Creek, Environmental Specialist
Charles E. Diters, Historic Preservation Specialist

Oregon Department of Forestry, Tillamook District

Blake Lettenmaier, P.E., P.I.S., District Engineer

EDAW, Inc.

Jim Keany, Senior Ecologist, Project Manager
Linda Howard, Environmental Planner
Michael Schuler, Urban Planner

6.0 Distribution List

U.S. Fish and Wildlife Service
Kemper McMaster, State Supervisor
Oregon Fish & Wildlife Office
2600 S.E. 98th Ave, Ste 100
Portland, OR 97266

NOAA Fisheries
Chief Protected Resources Division National Marine Fisheries Service - F/NWO3
1201 NE Lloyd Boulevard, Suite 1100
Portland, OR 97232-1274 Phone: (503) 230-5400 Fax: (503) 230-5441

U.S. Corps of Engineers
Regulatory Branch
CENWP-0D-GP ATTN: Kathryn Harris
333 SW First Avenue, P.O. Box 2946
Portland, OR 97208-2946

FEMA – Public Assistance Program
Dennis Burton
130 228th St. SW
Bothell, WA 98021

Oregon Emergency Management
Julie Slevin
P.O. Box 14370
Salem, OR 97309-5062

Oregon Department of Forestry
Tillamook District
Blake Lettenmaier, District Engineer
5005 Third Street
Tillamook, OR 97141
Oregon State Historic Preservation Office

Oregon State Historic Preservation Office
Attn: Susan Lynn White, Assistant State Archaeologist
725 Summer St NE, Suite C
Salem, OR 97301-1266

Oregon Department of Land Conservation
Attn: Dale Blanton, Federal Consistency Coordinator
Coastal Management Program
635 Capitol St. NE, Suite 150
Salem, OR 97301-2540

Oregon Department of Agriculture
Native Plant Conservation Program
Attn: Robert Meinke, Program Supervisor
635 Capitol St NE
Salem, OR 97301

Oregon Department of Fish and Wildlife
Attn: Herman Biederbeck and Dave Plawman
4907 Third Street
Tillamook, OR 97141
503-842-2741

Tillamook County Commissioners
201 Laurel Avenue
Tillamook, OR 97141

Tillamook Estuaries Partnership
Attn: Mark Trenholm
613 Commercial - P.O. Box 493
Garibaldi, OR 97118
503-322-2222

Tillamook Bay Watershed Council
Attention: Denise Lofman
605 Garibaldi Avenue
PO Box 509
Garibaldi OR 97118-0509
503-322-0002

Barrett Brown
PO Box 1280
North Plains, OR 97133
503-647-6499

7.0 Bibliography

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7.2 Personal Communications

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APPENDIX A

1. FEMA Scoping Letter, January 9, 2008
2. Scoping Letter Distribution List
3. Tillamook County Commissioners Response Letter, January 23, 2008



FEMA

January 9, 2008

See Distribution List

Subject: Scoping of Issues – Proposed Realignment of Oregon Department of Forestry Spaur Road (aka Steam Donkey Road) in the Tillamook State Forest.

The Department of Homeland Security's Federal Emergency Management Agency (FEMA) is proposing to support the Oregon Department of Forestry (ODF) by providing partial funding for the realignment of Spaur Road in the Tillamook State Forest, near Tillamook, Oregon. Access to timber management lands was lost in 2006 due to heavy rainstorms and resulting landslides. ODF and FEMA have determined it is not reasonable to rebuild road access in the original road alignment due to its proximity to a stream, so ODF has requested that FEMA consider funding an Alternative Project by relocating access to a ridge top location.

The purpose of this letter is to invite you to participate in the "Scoping Process" and review the initial proposal and provide your comments to support the development of an Environmental Assessment (EA). The National Environmental Policy Act requires FEMA to evaluate the impacts of this proposed action on the human and natural environments. FEMA intends to develop an EA for the action of constructing and operating this new road alignment. We are asking your assistance to identify issues and concerns, develop a range of alternatives to the current conceptual alignment, and identify potential impacts of implementing this project.

The purpose of this project is to provide FEMA–Public Assistance funding to ODF to construct an access route to their property in the vicinity of Hembre Ridge. The ODF has a need to provide safe, year-around access to their timber property to meet their timber management responsibilities. Timber management activities include assessment, silviculture, fire management, and harvest.

The ODF preferred alternative would consist of building approximately 11,100 lineal feet (LF) of new forest road (8,000 LF balanced grading construction and 3,100 LF of full bench construction). A portion of the road will be located on an old alignment that was abandoned in the late 1950s after the Tillamook Burn salvage operation. The road will be surfaced with compacted road rock. The subgrade will be 16 feet wide and the surfaced width will be 12 feet. All bare soil will be scarified, seeded (grass) and fertilized. The starting and ending approximate coordinates are N45.5143 W123.5158, and N45.5310 W123.5415, respectively, near Hembre Ridge in the Tillamook State Forest (see attached figure for location).

See Distribution List
January 9, 2008
Page 2

There may be deviations to the preferred alternative route depending on comments and other alternatives identified through the Scoping Process or the development of the EA. It is anticipated there will be minor changes based on final engineering design considerations.

I request that you send your written comments (comments must be received by February 14, 2007) on this proposal to FEMA's consultant:

Jim Keany – Jim.Keany@edaw.com
EDAW
815 Western Avenue, #300
Seattle WA, 98104

If you have questions about this letter, the project, or if you want to receive a copy of the Draft EA for review and comment please feel free to contact Jerry Creek, Environmental Specialist, via email (jerry.creek@dhs.gov) or phone (425-482-3748), or me via email (mark.eberlein@dhs.gov) or phone (425-487-4735).

Sincerely,



Mark Eberlein
Regional Environmental Officer
FEMA Region 10

Enclosure: Map

Distribution List

JC:bb

**Steam Donkey Road Realignment Environmental Assessment
Scoping Letter Distribution List**

Kemper McMaster, State Supervisor
USFWS
Oregon Fish & Wildlife Office
2600 S.E. 98th Ave, Ste 100
Portland, OR 97266

NOAA Fisheries
Chief Protected Resources Division National Marine Fisheries Service - F/NWO3
1201 NE Lloyd Boulevard, Suite 1100
Portland, OR 97232-1274 Phone: (503) 230-5400 Fax: (503) 230-5441

U.S. Corps of Engineers
Regulatory Branch
CE/NWP-0D-GP ATTN: Kathryn Harris
333 SW First Avenue, P.O. Box 2946
Portland, Oregon 97208-2946

Tillamook County Commissioners
201 Laurel Avenue
Tillamook, OR 97141

Oregon Department of Fish and Wildlife
Attn: Herman Biederbeck and Dave Plawman
4907 Third Street
Tillamook, OR 97141
503-842-2741

Tillamook Estuaries Partnership
Attn: Mark Trenholm
613 Commercial - P.O. Box 493
Garibaldi, OR 97118
503-322-2222

Tillamook Bay Watershed Council
Attention: Denise Lofman
605 Garibaldi Avenue
PO Box 509
Garibaldi OR 97118-0509
503-322-0002

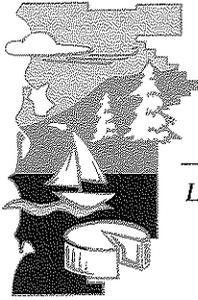
Barrett Brown
PO Box 1280
North Plains, OR 97133
503-647-6499

**Steam Donkey Road Realignment Environmental Assessment
Scoping Letter Distribution List
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Oregon Emergency Management
Julie Slevin
P.O. Box 14370
Salem, Oregon 97309-5062

FEMA -- Public Assistance Program
Dennis Burton
130 228 St SW
Bothell, Washington 98021

Oregon Department of Forestry
Blake Lettenmaier
District Engineer
Oregon Department of Forestry
5005 Third Street
Tillamook, Oregon 97141



Land of Cheese, Trees and Ocean Breeze

201 Laurel Avenue
Tillamook, Oregon 97141

Tillamook County Commissioners
Charles Hurliman, Tim Josi, Mark Labhart
503-842-3403
FAX 842-1384
TTY Oregon Relay Service

January 23, 2008

Jim Keany
EDAW
815 Western Avenue
Suite 300
Seattle, Washington 98104

Re: Written Comments on Steam Donkey Road Realignment
Environmental Assessment.

Dear Mr. Keany:

Thank you for the opportunity to provide written comments regarding an Environmental Assessment for the realignment of Spaur Road (aka Steam Donkey Road) in the Tillamook State Forest, near Tillamook, Oregon. This road is vital to ODF in its access to timber management lands that were lost in 2006 due to heavy rainstorms and resulting landslides.

Tillamook County supports the rebuilding of this road in a safe manner consistent with the protection of human and natural environments in the surrounding area. To this end, we have reviewed the ODF preferred alternative contained within FEMA's January 9, 2008 Scoping of Issues letter and agree with ODF's alternative provided therein.

Sincerely,

**THE BOARD OF COMMISSIONERS
FOR TILLAMOOK COUNTY, OREGON**

A handwritten signature in black ink, appearing to read "Charles J. Hurliman", written over a horizontal line.

Charles J. Hurliman, Chair

A handwritten signature in black ink, appearing to read "Tim Josi", written over a horizontal line.

Tim Josi, Vice-Chair

A handwritten signature in black ink, appearing to read "Mark Labhart", written over a horizontal line.

Mark Labhart, Commissioner

APPENDIX B

State Historic Preservation Office (SHPO) Response Letter



Oregon

Theodore R. Kulongoski, Governor

Parks and Recreation Department

State Historic Preservation Office

725 Summer St. NE, Suite C

Salem, OR 97301-1266

(503) 986-0707

FAX (503) 986-0793

www.hcd.state.or.us



Nature
HISTORY
Discovery

February 1, 2008

Mr. Charles Diters
USDHS FEMA
1009 College St SE
Lacey WA 98503

RE: SHPO Case No. 08-0113
Spaur Rd (Stema Donkey Rd) Proposed Road Proj
Scoping process
FEMA/ODF
1S 7W 2 and 1N 7W 35, 34, 33, Tillamook State Forest, County

Dear Mr. Diters:

Our office recently received a request to review the proposal for the project referenced above. In checking our statewide cultural resource database, I find that there have been no previous cultural resource surveys completed near the proposed project area. However, the project area lies within an area generally perceived to have a high probability for possessing archaeological sites and/or buried human remains.

While not having sufficient knowledge to predict the likelihood of cultural resources being within your project area, extreme caution is recommended during future ground disturbing activities. ORS 358.905 and ORS 97.740 protect archaeological sites and objects and human remains on state public and private lands in Oregon. If any cultural material is discovered during construction activities, all work should cease immediately until a professional archaeologist can assess the discovery.

If you have any questions about my comments or would like additional information, please feel free to contact our office at your convenience. In order to help us track your project accurately, please be sure to reference the SHPO case number above in all correspondence.

Susan Lynn White, RPA
Assistant State Archaeologist
503- 986-0675
Susan.White@state.or.us

