Speaking Coyote Project
Scoping Report

DOI-BLM-OR-M070-2012-0002-EA

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MEDFORD DISTRICT

Responsible Official: Katrina Symons
Grants Pass Field Manager
2164 N.E. Spalding Avenue
Grants Pass, Oregon 97526

Abstract: The Speaking Coyote Project is located on Bureau of Land Management land near the communities of Wolf Creek and Sunny Valley. The initial proposed action is to commercially thin approximately 1,115 acres and remove vegetation on approximately 20 miles of roadway as daylighting maintenance. The Grants Pass Resource Area is soliciting public input for the Speaking Coyote Project. Scoping is one form of public involvement in the National Environmental Policy Act.

Table of Contents

Chapter 1.0 Purpose and Need

1.1 Introduction

The Speaking Coyote Project Scoping Report discloses proposed forest management activities on the human environment in the Speaking Coyote Project Planning Area. Chapter 1 discloses to the reader:

- What the BLM proposes to do (Proposed Action).
- Location and description of the Planning Area.
- Why the BLM is proposing these forest management activities (Purpose and Need).

The analysis utilizes field data, ground verification by resource specialists and Geographical Information System (GIS) technology to estimate acres, road miles and produce reference maps. Estimates are intended to aid the reader in understanding the Proposed Action. The reader should be aware that electronic technology can produce information that appears precise but is still dependent on further field work.

1.2 Project Location

The Speaking Coyote Project Planning Area (PA) is located within the Grave Creek watershed. near the communities of Wolf Creek and Sunny Valley. The PA includes the London Peak area west of Interstate-5 and the Speaker road and Coyote Creek road areas located east of I-5. The Mackin Gulch area is west of I-5 near Sunny Valley.

Table 1. Legal description of the Speaking Coyote Project Planning Area

ownship	Range	Sections
32 S	6W	25,36
32 S	5W	29-33
33 S	6W	1,12,13,21-24
33 S	5W	1-36
33 S	4W	19,30-33
34 S	6W	2-5,9,10
34 S	5W	1,2,11,12
34S	4W	4-8

Willamette Meridian, Josephine County, Oregon

1.3 Proposed Action

The Speaking Coyote Project includes approximately 1,115 acres of proposed commercial thinning in overstocked conifer stands and approximately 20 miles of roadway daylighting maintenance. There are approximately 35 conifer stands which range from 30 to 130 years of

age. The majority of harvested timber will be from 7 to 30 inches diameter at breast height (DBH).

The proposed commercial harvest would generally thin from below and retain the most dominant and co-dominant trees. The residual stocking after thinning is expected to be about 35 to 50 trees per acre. The residual units would retain at least 40% canopy cover in spotted owl dispersal habitat and 60% canopy cover in spotted owl nesting, roosting, and foraging habitat. Treatments within the Riparian Reserve, outside of the no cut buffer, would retain canopy cover above 50%.

Within harvest units, snags and hardwoods would be retained, where feasible, to meet other resource objectives. A small number of the units contain large diameter remnant mature pine. Competing conifer trees around the bole of the pine would be removed.

Removal of commercial trees would be accomplished by ground-based yarding on approximately 325 acres, and cable and/or helicopter yarding on 791 acres. To facilitate yarding, approximately 2.6 miles of new temporary routes would be constructed across 17 separate segments and 0.5 miles of temporary routes would be reconstructed across 4 separate segments. These new temporary routes would be constructed along ridgetops and then decommissioned after use. These new routes are being proposed to avoid using the existing haul routes from the previous harvest entry. The existing routes are inconsistent with Resource Management Plan (RMP) direction due to restrictions on slopes exceeding 35 % and operations within Riparian Reserves.

1.4 Purpose and Need of the Proposal

The O & C Lands Act requires the Secretary of the Interior to manage O&C lands for permanent forest production in accord with sustained yield principles. The Speaking Coyote Planning Area is within O & C lands administered by the Department of the Interior, BLM National System of Public Lands "for permanent forest production… in conformity with the principles of sustained yield for the purposes of providing a permanent source of timber supply" (O&C Act).

The Speaking Coyote Project is designed to meet BLM's obligation to implement the RMP and to address two primary needs identified for lands in the Planning Area. The two primary needs identified for lands in the Planning Area are: 1) the need for production of commercial and non-commercial forest products; 2) the need for improved forest health and vigor. The Proposed Project is designed to address each of the needs and achieve each of the associated objectives which would assist in moving the current conditions found on the Speaking Coyote PA toward desired forest conditions for lands within the Matrix land allocation

Forest Management is appropriate at this time to manage stands in the Speaking Coyote Timber Sale PA in order to reduce stand density for residual tree development and vigor and provide an entry that is economically feasible (RMP pp. 179-180; RMP/EIS p. 2-62).

Objectives for production of commercial and noncommercial forest products

Harvest proposals under this alternative are designed to meet the following objectives for Matrix lands:

- Produce a sustainable supply of timber and other forest commodities to provide jobs and contribute to community stability.
- Control stand density, maintain stand vigor, and place or maintain stands on developmental paths so that desired stand characteristics result in the future.
- Reduce post-activity based fuel hazards through methods such as prescribed burning, mechanical or manual manipulation of forest vegetation and debris, removal of forest vegetation and debris, and combinations of these methods.
- Apply thinning and other silvicultural treatments to promote the development of large trees for an eventual source of large woody debris to stream channels.
- Maintain road system infrastructure to provide adequate sight distance for motorist safety, reduce road failures by having longer durations of dry roads, potentially extend dry condition road use, and reduce road maintenance costs by reducing vegetation decomposition on road surfaces and to recover side cast rock.

1.5 Conformance with Land Use Plans and Other Documents

The actions proposed and analyzed in this Scoping Report were developed to be consistent with the management objectives for public lands identified in the following documents:

- *Final Supplemental Environmental Impact Statement and Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl* (Northwest Forest Plan FSEIS 1994 and ROD 1994);
- *Final-Medford District Proposed Resource Management Plan/Environmental Impact Statement* and *Record of Decision* (EIS 1994 and RMP/ROD 1995);
- *Final Supplemental Environmental Impact Statement: Management of Port-Orford-Cedar in Southwest Oregon* (FSEIS 2004 and ROD 2004);
- *Final SEIS for Amendment to the Survey & Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines* (2000), and the *Record of Decision and Standards and Guidelines for Amendment to the Survey & Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines* (2001);
- *Medford District Integrated Weed Management Plan Environmental Assessment (1998*) and tiered to the *Northwest Area Noxious Weed Control Program* (EIS 1985).

Recent Court Rulings

Survey and Manage

On December 17, 2009, the U.S. District Court for the Western District of Washington issued an order in *Conservation Northwest, et al. v. Sherman, et al.*, No. 08-1067-JCC (W.D. Wash.), granting Plaintiffs' motion for partial summary judgment and finding NEPA violations in the *Final Supplemental to the 2004 Supplemental Environmental Impact Statement to Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines* (USDA and USDI, June 2007). In response, parties entered into settlement negotiations in April 2010, and the Court filed approval of the resulting Settlement Agreement on July 6, 2011. Projects that are within the range of the northern spotted owl are subject to the survey and management standards and guidelines in the 2001 ROD, as modified by the 2011 Settlement Agreement.

The Speaking Coyote Project is consistent with the Medford District Resource Management Plan/Forest Land and Resource Management Plan as amended by the 2001 *Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines* (2001 ROD), as modified by the 2011 Settlement Agreement.

Project Consistency: The Speaking Coyote Project applies the Survey and Manage species list in the 2001 ROD (Table 1-1, Standards and Guidelines, pages 41-51) and thus meets the provisions of the 2001 *Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines*, as modified by the 2011 Settlement Agreement.

Pechman Exemptions

The Speaking Coyote Project applies a 2006 Exemption from a stipulation entered by the court in litigation regarding Survey and Manage species and the 2004 Record of Decision related to Survey and Manage Mitigation Measure in *Northwest Ecosystem Alliance v. Rey*, No. 04-844-MJP (W.D. Wash., Oct. 10, 2006). Previously, in 2006, the District Court (Judge Pechman) invalidated the agencies' 2004 RODs eliminating Survey and Manage due to NEPA violations. Following the District Court's 2006 ruling, parties to the litigation entered into a stipulation exempting certain categories of activities from the Survey and Manage standards and guidelines, including both pre-disturbance surveys and known site management. Also known as the Pechman Exemptions, the Court's Order from October 11, 2006 directs:

> *"Defendants shall not authorize, allow, or permit to continue any logging or other ground-disturbing activities on projects to which the 2004 ROD applied unless such activities are in compliance with the 2001 ROD (as the 2001 ROD was amended or modified as of March 21, 2004), except that this order will not apply to:*
> *a. Thinning projects in stands younger than 80 years old:*
> *b. Replacing culverts on roads that are in use and part of the road system, and removing culverts if the road is temporary or to be decommissioned;*

c. Riparian and stream improvement projects where the riparian work is riparian planting, obtaining material for placing in-stream, and road or trail decommissioning; and where the stream improvement work is the placement large wood, channel and floodplain reconstruction, or removal of channel diversions; and
d. The portions of project involving hazardous fuel treatments where prescribed fire is applied. Any portion of a hazardous fuel treatment project involving commercial logging will remain subject to the survey and management requirements except for thinning of stands younger than 80 years old under
subparagraph a. of this paragraph."

Per the 2011 Settlement Agreement, the 2006 Pechman Exemptions remain in force:

"The provisions stipulated to by the parties and ordered by the court in Northwest Ecosystem Alliance v. Rey, No. 04-844-MJP (W.D. Wash. Oct. 10, 2006), shall remain in force. None of the following terms or conditions in this Settlement Agreement modifies in any way the October 2006 provisions stipulated to by the parties and ordered by the court in Northwest Ecosystem Alliance v. Rey, No. 04844-MJP (W.D. Wash. Oct. 10, 2006)."

Western Oregon Plan Revision (WOPR)
On March 31, 2011, the United States District Court for the District of Columbia vacated and remanded the Secretary of the Interior's decision to withdraw the 2008 RODs/RMPs (Douglas Timber Operators et al. v. Salazar). Plaintiffs in the Pacific Rivers Council V. Shepard litigation filed a partial motion for summary judgment in the U.S. District Court for the District of Oregon on Endangered Species Act (ESA) claims and requested the court to vacate and remand the 2008 RODs/RMPs. A magistrate judge issued findings and recommendations on September 29, 2011 and recommended granting the Plaintiffs motion for partial summary judgment on their ESA claim. The Court recommends setting aside the agency action, vacating the 2008 RODs and reinstating the Northwest Forest Plan as the appropriate remedy. The Court will review and rule on any objections prior to issuing a final order.

Given the current uncertainty surrounding planning in western Oregon, the Medford District has designed projects to conform to both the 2008 ROD/RMP and the 1995 ROD/RMP. Consequently, this project is consistent with the goals and objectives in both the 1995 RMP and 2008 RMP.

1.6 Permits and Approvals Required

The following permits and approvals are required prior to project implementation:

- License agreements and/or other authorization with adjacent landowners to have a third party haul timber and use of landings.
- All prescribed burning activities on the Grants Pass Resource Area, Medford District would comply with the Oregon Smoke Management Plan administered by the Oregon

Department of Forestry.

1.7 Public Scoping

An initial Speaking Coyote Project map was made available to residents within the Wolf Creek and Sunny Valley by mailings to all 720 residents having postal delivery. The Grants Pass Resource Area held a public field trip on November 5, 2011 in the Wolf Creek area.

1.8 Decisions to be Made

The Grants Pass Field Manager is the official responsible for deciding whether or not to prepare an Environmental Impact Statement (EIS) or Environmental Assessment (EA).

Chapter 2.0 Alternative Ways of Accomplishing the Objectives

2.1 Introduction

This chapter presents alternative ways of meeting the project objectives identified in Chapter 1, by describing and comparing Alternative 1 (No Action Alternative) and Alternative 2 (Proposed Action) as specified in 40 CFR (Code of Federal Regulations) § 1502.14. Descriptions summarize potential environmental consequences and focus on potential actions and outputs. Best Management Practices (BMPs) and Project Design Features (PDFs) were identified and are included in this Chapter here to ensure project compliance with the federal Clean Water Act and higher-level National Environmental Policy Act (NEPA) documents, laws and BLM guidelines.

2.2 Description of the Alternatives

2.2.1 Alternative 1 (No Action)

The No Action Alternative provides a baseline for the comparison of the Proposed Action and describes the existing condition and the continuing trends within the Planning Area. This alternative would not meet the purpose and need of the project described in Chapter 1.

Future vegetation treatments would not be precluded and could be analyzed under a subsequent EA. Harvest project development would not occur at this time, nor would the associated employment opportunities for local communities or the opportunity to fund and implement maintenance projects. Under the No Action Alternative, the present environmental conditions and trends will continue.

2.2.2 Alternative 2 (Proposed Action)

The Proposed Action would commercial thin approximately 1,115 acres of overstocked conifer stands and daylight approximately 20 miles of roadway through road maintenance. There are approximately 35 conifer stands which range from 30 to 130 years of age. The majority of harvested timber will be from 7 to 30 inches diameter at breast height (DBH).

Commercial harvest would generally thin from below and retain the most dominant and co-dominant trees. The residual stocking after thinning is expected to be about 35 to 50 trees per acre.

Within harvest units, snags and hardwoods would be retained, where feasible, to meet other resource objectives. A small number of the units contain large diameter remnant mature pine. Competing conifer trees around the bole of the pine would be removed.

Removal of commercial trees would be accomplished by ground-based yarding on approximately 325 acres, and cable and/or helicopter yarding on 791 acres. Approximately 2.6 miles of new temporary routes would be constructed across 17 separate segments and 0.5 miles of temporary routes would be reconstructed across 4 separate segments. These new temporary routes would be constructed along ridgetops and then decommissioned after use. These new routes are being proposed to avoid using the existing haul routes from the previous harvest entry. The existing routes are inconsistent with Resource Management Plan (RMP) direction due to restrictions on slopes exceeding 35 % and operations within Riparian Reserves.

Commercial Thinning

Thinning is a silvicultural practice generally applied to control stand density, maintain stand vigor, and place or maintain stands on developmental paths so that desired stand characteristics result in the future. This treatment would promote improved stand health, as well as increased vigor and crown development on retained trees. Mortality of remaining conifers would decrease. Over time, crowns of remaining trees would become fuller and overall stand vigor and growth would improve. Growth and yield are important considerations in applying commercial thinning treatments. Production of some wood volume at the present time and an increase/maintenance of growth rates for wood volume production in the future are primary objectives. Residual stands would maintain at least:

- 60% canopy cover or greater in nesting, roosting, and foraging habitat (NRF) of northern spotted owl habitat.
- 40% canopy cover or greater in dispersal spotted owl habitat.
- 50% canopy cover or greater in Riparian Reserves.

Canopy Visual Representations – Current conditions and Post-treatment

Figure 1. Photograph at left depicts a representative existing canopy cover of approximately 95%. The photograph at right depicts a representative post treatment at approximately 60% canopy cover.

Canopy Visual Representations – Current conditions and Post-treatment

Figure 2. Photograph at left depicts a representative existing canopy cover of approximately 60%. The photograph at right depicts a representative post treatment at approximately 40% canopy cover.

Riparian Thinning

Alternative 2 would thin within the Riparian Reserves that are outside the variable width Ecological Protection Zone (EPZ). Canopy closures would remain above 50%, and species diversity would be maintained. See Figure 3 below.

Riparian thinning would improve or maintain stand vigor, promote larger future woody debris, enhance species diversity, reduce the existing fire hazard, and promote fire resiliency. Ecological Protection Zones (EPZ) would be established within Riparian Reserves and would be based on field stream survey information. EPZ width would be measured from the stream bankfull width (by slope distance) and would be applied along streams and perennial springs and seeps to protect stream channel structure and water quality. The EPZ would be a no harvest buffer.

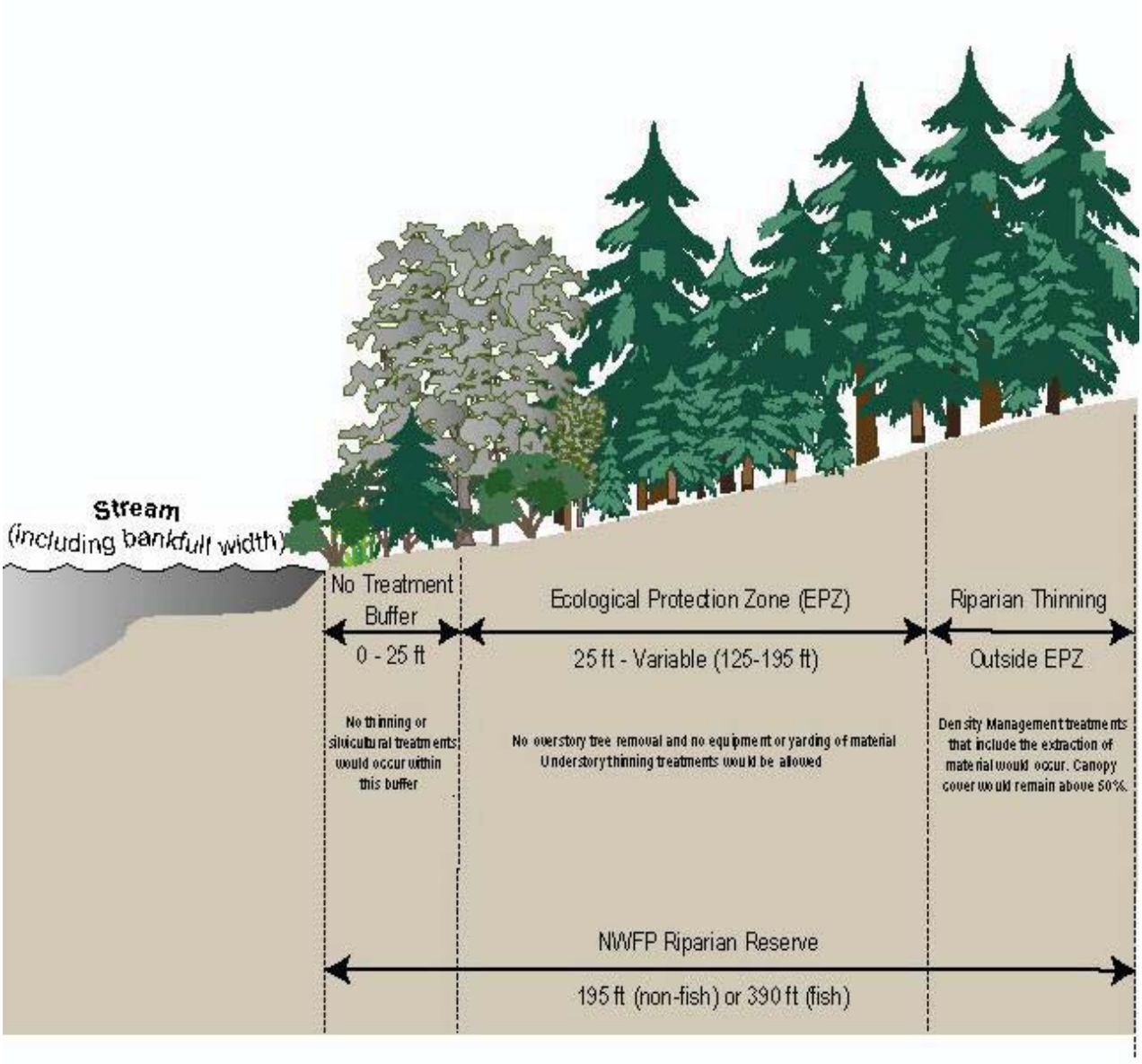


Figure 3. Stream Buffers for Riparian Treatments

Activity Slash

Slash created from thinning under Alternative 2 would be treated by underburning, lop and scatter, chipped on site and/or removed, or handpiled and burned to reduce the fire hazard. Treatment selection would, depend on the amount slash and its distribution within a unit.

Low intensity underburns may occur within 7 years of initial project implementation to reduce fuel loading, ladder fuels and reduce sprouting hardwoods and/or other brush vegetation.

Biomass Removal
Under Alternative 2, whole-tree yarding is the preferred harvest method and would facilitate biomass removal to existing roads and landings. Biomass removal would occur via whole-tree yarding or yarding with attached tops to reduce ground disturbance and fuel loading.

Temporary Route Construction
Under Alternative 2, approximately 2.6 miles of temporary spur route construction would occur to facilitate the removal of commercial products and biomass. Temporary spur routes are not intended to be part of the permanent or designated transportation network system and would be decommissioned after use. Temporary spur routes would be returned as close as possible to pre-treatment conditions by ripping, mulching, and seeding. Temporary spur routes would be barricaded after use. No construction of permanent roads would occur under Alternative 2.

Temporary Route Reconstruction
Approximately 0.5 miles of temporary route reconstruction would occur. Reconstruction restores an existing road to its original or modified condition. Reconstructed routes would be decommissioned after harvesting and activity fuels are treated for this project.

Road Maintenance
Activities would occur on existing roads to keep the road at its original design standard. Work would include road blading and reshaping, spot rocking and surface replacement, ditch cleaning, culvert inlet and outlet cleaning, culvert replacement, removing vegetation along roadsides to improve site distance, and approximately 20 miles of daylighting.

2.3 Best Management Practices and Project Design Features

Best Management Practices (BMPs) are required by the Federal Clean Water Act to reduce nonpoint source pollution to the maximum extent practicable. The BMPs are methods, measures, or practices selected from Appendix D of the 1995 ROD/ RMP to ensure that water quality will be maintained at its highest practicable level. BMPs in this Section are noted by an asterisk *. Project Design Features (PDFs) are specific measures included in the site specific design of the Proposal to eliminate or minimize adverse impacts on the human environment

2.3.1 Soil Productivity, Residual Trees, and Coarse Woody Debris

- Existing skid trails would be utilized whenever practical. New skid trails would be pre-designated and approved by the Authorized Officer.
- Productivity loss resulting from topsoil disturbance and soil compaction would not exceed a combined calculated total of 5%.
- Total compaction, including compaction associated with pre-existing skid trails within the unit, would be reduced to less than 12% within thinning units, upon completion of harvest (RMP, p. 166).

- To reduce soil compaction, minimize sedimentation, and improve site productivity temporary routes, existing skid trails, and landings would be winterized prior to October 15th of the harvest year and rehabilitated within 18 months of harvest. New skid trails would be stabilized and winterized, and intermittently rehabilitated in areas where the roots of leave trees would not be significantly affected. Winterized areas would be seeded, mulched, and water-barred as necessary to keep erosion on site. Rehabilitated areas would be discontinuously sub-soiled, seeded, mulched, have slash placed over, water-barred, and blocked. For all sub-soiling, a winged ripping device would be used to sub-soil the full width of the skid trail, rips would be no more than 36 inches apart, and would be to a depth of 18 inches or to bedrock, whichever is shallower. All rehabilitation activities that utilize heavy equipment would be required to take place at same time as sub-soiling to prevent machinery from driving back over sub-soiled ground. Waterbar spacing and drainage angles would be based on the NWFP Standards and Guidelines erosion control measures for timber harvest which considers slope and soil series (RMP, p. 167).
- All temporary routes would be blocked, decommissioned, and stabilized. In addition, where cut and fill construction was utilized, fill material would be placed back over the route bed prior to the implementation of the stabilization measures.
- Temporary routes would not be located on or above a headwall or on slopes in excess of 70%.
- Tractors would be equipped with an integral arch to minimize soils disturbance and compaction.
- To minimize soil disturbance and root damage, the use of blades while tractor yarding would not be permitted in order to keep soil organics on site.
- Harvest equipment used off of designated skid trails would operate on ground less than 35% slope, have an arm capable of reaching at least 20 feet and minimize turning. When practical, the harvest equipment must walk on a mat of existing or created slash. To prevent operations from exceeding the maximum 5% soil productivity loss or 12% compaction levels across the harvest unit, equipment use may be restricted depending on soil type, soil moisture, ground pressure of the equipment, and presence of slash to operate on.
- Lateral yarding would be required on all units to protect residual leave trees and existing conifer regeneration. Yarding carriages would be required to maintain a fixed position during lateral yarding to reduce damage to the residual stand.
- The number of cable yarding corridors would be minimized to reduce soil compaction and displacement from cable yarding. Cable yarding corridors would be located approximately 150 feet apart at the tail end.
- All non-hazardous snags would be retained within harvest units. If it is necessary to fall snags for safety reasons, they would remain on site as down wood. All existing naturally occurring dead and down woody debris would remain on site.
- Whole tree yarding with tops attached to the last log would be permitted as long as contractor can operate without causing unacceptable damage from bark slippage,

girdling, broken tops, or damage to live crowns. If it is determined by the Authorized Officer that unacceptable amounts of damage is occurring, trees would be required to be bucked and limbed as directed by the Authorized Officer. Delivered log length not to exceed 41 feet.

- Merchantable sawlogs would be removed from yarded material, and any remaining debris at the landing sites would be piled and burned on the immediate downhill side of existing roads, chipped, or removed for biomass utilization.
- Activity slash remaining in units would be lopped-and-scattered, chipped, or handpiled and burned to prevent an increase in fire hazard.
- Firelines would be constructed by hand.
- Snags identified for retention (approximately 20" in diameter) would have all slash and duff cleared around base prior to underburning.
- A minimum 20 foot distance on the ground would be cleared of activity slash around each landing pile to prevent escaped fire. Each landing pile would be covered with a large enough piece of 4 mil black plastic to ensure a dry ignition spot (not to exceed10 ft x 10 ft). To minimize scorch and mortality, landing piles would not be placed adjacent to or within 15 feet of leave trees. To facilitate desired consumption, landing piles would be as free of dirt as reasonably possible.
- Each hand pile would be covered with a large enough piece of 4 mil black plastic to ensure a dry ignition spot (generally 5 ft x 5 ft or large enough to cover 90% of the pile). Handpile size not to exceed 8' diameter and 8'height and minimum 6' diameter and 5' in height. All 4 corners and the middle of plastic sheets shall be anchored with slash or other debris. To minimize scorch and mortality, hand piles would not be placed adjacent to or within 10 feet of leave trees or large woody debris.
- Piles would be burned in the fall to spring season after one or more inches of precipitation have occurred. Patrol and mop-up of burning piles would occur when needed to prevent treated areas from reburning or becoming an escaped fire.
- Prescribed fire burn plans would be completed before ignition, as would smoke clearance to minimize impacts on air quality.
- Slash piles would not be allowed on roadways, turnouts, shoulders, or on the cut bank.

Fragile Soils

Fragile Gradient Restricted for logging

- Yard with full suspension (year-round) or one-end suspension during the dry season (generally May 15th – Oct 15th). For dry season operations, this season may be further restricted to a portion of the dry season if it is determined by the authorized officer that unacceptable damage would occur.
- Hand waterbars would be constructed within cable corridors on these units immediately following use on slopes in excess of 65%, and in areas where bare soil occurs on slopes under 65%.

- Activity slash would be placed on bare soils within yarding corridors and below landing sites. Slash depth would not exceed 18 inches and would be left on site during fuels reduction treatments.
- Landing locations would not be placed on slopes over 70%. If landing locations occur on slopes over 70% or above dry draws, silt fencing or haybails will be used.

Fragile Gradient Restricted for burning

- Lop-and-scatter activity slash over yarding corridors then across remaining FGR soils in unit. Where slash quantity is such that lop-and-scatter treatment alone would result in an increase in the fire hazard classification, handpile and burn high concentration areas outside yarding corridors.

Fragile Grade Restricted (FGR) for road work

- Temporary routes proposed on FGR areas would not be located on or above a headwall or on slopes in excess of 70%.
- Routes on FGR areas will be constructed, utilized, and decommissioned during the dry season of a single year (FGR).
- On FGR areas, routes would be located on the upper slope or ridge, and would not cross through any Riparian Reserves.
- All temporary routes would be blocked and decommissioned following use on FGR areas, including subsoiling, mulching, water-barring, and placement and stabilization of fill material back over the route bed where cut and fill construction was needed.
- Additional drainage features that are added during road maintenance activities on FGR would be located away from steep draws and would be designed to disperse water back into the hillside.
- Downspouts or energy dissipaters would be utilized for drainage outlets on FGR soils areas.

Fragile Suitable Restricted Groundwater (FWR) for logging

- All logging operations would be limited to the dry season (May 15-Oct 15). This season may be further restricted to the latter portion of the dry season (July/Aug – Oct) if it is determined by the authorized officer that unacceptable damage would occur as a result of wet soils and/or high water tables.
- No temporary route construction would occur on soils classified as FWR.
- Rip and waterbar operational skid trails determined to be blocking natural drainages

Fragile Suitable Restricted Nutrient (FNR)

- Minimize burning on these units. No broadcast burning and minimize under-burning on slopes greater than 70% and southerly aspects.
- Minimize building temporary natural surfaced roads.
- Do not scarify or mechanically pile slash

- Minimize whole tree yarding and biomass removal

2.3.2 Air Quality / Smoke Management

- All prescribed burning would be managed in a manner consistent with the requirements of the Oregon Smoke Management Plan administered by the Oregon Department of Forestry and the regulations established by the Air Quality Division of the Oregon Department of Environmental Quality.
- Local residents would be advised of prescribed burning prior to seasonal burning through news releases.

2.3.3 Cultural Sites

- Prior to any project implementation under this EA, a cultural resource survey would be completed and site-specific protection measures would be implemented to preserve the integrity of all recorded cultural sites, referred to as Historic Properties in cultural resource protection laws and regulations.
- If cultural resources are found during project implementation, the project would be redesigned to protect the cultural resource values present, or evaluation and mitigation procedures would be implemented based on recommendations from the Resource Area archaeologist, with input from Tribes, and with concurrence from the Field Manager and State Historic Preservation Office.

2.3.4 Noxious Weeds

- Seed and straw used for restoration, planting of bare soil, and post treatment throughout the Planning Area would be approved species and certified weed free to prevent the further spread of noxious weeds. All seeding would be contingent on seed availability.
- In order to prevent the potential spread of noxious weeds into the Medford District BLM, the operator would be required to clean all logging, construction, chipping, grinding, shredding, rock crushing, and transportation equipment prior to entry on BLM lands.
- Cleaning shall be defined as removal of dirt, grease, plant parts, and material that may carry noxious weed seeds into BLM lands. Cleaning prior to entry onto BLM lands may be accomplished by using a pressure hose.
- Only equipment inspected by the BLM would be allowed to operate within BLM lands. All subsequent move-ins of equipment as described above shall be treated the same as the initial move-in.
- Prior to initial move-in of any equipment, and all subsequent move-ins, the operator shall make the equipment available for BLM inspection at an agreed upon location off federal lands.
- In areas of roadside clearing, grass seeding will be done on areas susceptible to imminent noxious weed establishment
- Noxious weeds within BLM lands would be surveyed and treated for noxious weeds as

funding is available. Treatments would primarily consist of herbicide application, hand pulling, and mechanical cutting methods as analyzed in the Medford District Integrated Weed Management Plan and Environmental Assessment (USDI 1998).

2.3.5 Streams and Riparian Zones

- *On all units, a minimum 25 foot no treatment buffer, from bankfull width, would be used to protect streambank stability.
- *Within the variable width ecological protection zone (EPZ), canopy closure would remain at existing levels and vegetative species diversity would be maintained. Understory thinning activities would be allowed.
- *Treatments within the Riparian Reserve that are outside the variable width ecological protection zone would maintain canopy cover above 50%.
- *Unless unsafe, trees within Riparian Reserve boundaries (200') would be directionally felled away from the stream, and adjacent trees would not be felled into Riparian Reserves.
- Springs and perennial wet areas would receive a radial buffer that would prohibit any overstory canopy removal or ground disturbance. This buffer would extend outward from the edge of the riparian vegetation for a distance equal to the EPZ width designated for that unit, or 100 feet (whichever is smaller), in order to protect the ecology of these sites.
- *Trees in no-harvest portions of Riparian Reserves that are accidentally knocked over during falling and yarding operations would be retained on site for fish /wildlife habitat. These trees would not be treated with activity fuels.
- Upon completion of harvest, all existing skid trails utilized during this harvest activity within Riparian Reserves would be discontinuously sub-soiled, seeded, water-barred, mulched and blocked (as per described above for upland skid trails).
- Where new skid trail construction is necessary within the Riparian Reserve, new skid trails would either be 1) constructed and used during dry conditions and fully rehabilitated by discontinuously sub-soiling, seeding, mulching, having slash placed over, and water-barring prior to October 15; or 2) constructed and restricted to the driest time of the year (generally Aug-Oct 15th), as determined by the Authorized Officer. Equipment would be required to walk on slash and, as necessary to prevent offsite erosion, skid trails would be scarified, seeded, mulched, slash cover placed, and water-barred prior to October 15th.
- *Prior to winter rains, cable yarding corridors that are above or nearly perpendicular (approximately 60-90 degrees) to stream channels within Riparian Reserves, or hydrologically connected to ditchlines, would be water-barred and have slash placed over them to protect water quality (Best Management Practice, RMP p.167).
- *Avoid locating landings in areas that can contribute eroded fines to dry draws and swales.

- *Prior to the wet season of the harvest year, all temporary and reconstructed routes within the Riparian Reserve would be decommissioned, and all landings built or expanded within the Riparian Reserve would be rehabilitated. This would involve discontinuous sub-soiling (Davis, pp. 138 & 139) to depth of 18 inches with winged ripping teeth, mulching with weed free straw and/or native grass/forbs mixtures, water-barring and barricading. Sub-soiling, water-barring, and mulching would be accomplished in a single pass to avoid driving back over sub-soiled areas or water-bars. Sub-soiling may be accomplished with any number of winged ripping teeth, as long as rips are located no more than 36 inches apart upon completion.
- *Suspend storm-proofing/decommissioning operations and cover or otherwise temporarily stabilize all exposed soil if conditions develop that cause a potential for sediment laden runoff to enter a wetland, floodplain or waters of the state. Install sediment trapping device to disconnect site. Resume operations when sediment control devices are in place and conditions allow turbidity standards to be met.
- *Avoid blading and vegetation removal during road maintenance unless necessary to remove drainage impediments when maintaining inboard ditches. Sediment control measures will be evaluated and implemented if necessary, where ditchline blading is required within 100 feet of streams.
- Flowing water would be diverted around each culvert or cross drain installation or replacement site whenever there is sufficient water volume. Diverted water would be returned to the channel immediately downstream of the work site. Effective erosion control measures would be in place at all times during installation or replacement, and would be removed from the channel prior to October 15th of the same calendar year. Stored sediment behind erosion control devices would be removed from channel and disposed of in a stable location outside the EPZ.
- Under-burning operations would be allowed to back into Riparian Reserve EPZ and no-treatment areas, but no ignition would take place within the EPZ or no-treatment areas.
- Fire suppression foam would not be used within 150 feet of streams and wetland.
- Handpile burning and underburning operations within the EPZ would be required to wait a minimum of 12 months following the implementation of adjacent upslope density management treatments in order to ensure ground vegetation that could be trapping erosion from yarding activities is not removed.
- Contractors must prepare a Spill Prevention, Control, and Countermeasure Plan for all hazardous substances to be used in the contract area, as directed by the Authorized Officer. Such plan shall include identification of Purchaser's representatives responsible for supervising initial containment action for releases and subsequent cleanup. Such plans must comply with the State of Oregon DEQ OAR 340-142, Oil and Hazardous Materials Emergency Response Requirements.
- Hydraulic fluid and fuel lines on heavy mechanized equipment would be in proper working condition in order to minimize potential for leakage into streams. No re-fueling

of heavy equipment would occur within 150 feet of streams or stream crossings. Absorbent materials would be required to be onsite to allow for immediate containment of any accidental spills.

- Refueling of chainsaws and pumps would be done no closer than 150 feet of any stream or wet area. Spilled fuel and oil would be cleaned-up and would be disposed of at an approved disposal site.

2.3.6 Sedimentation and Soil Compaction

- Temporary routes, skid trails, road renovation/improvement construction and ground-based logging would not occur when soil moisture, at a depth of 4-6 inches, is wet enough to maintain form when compressed; or when soil at the surface would readily displace, causing ribbons and ruts along equipment tracks. These conditions are generally found when soil moisture at a depth of 4-10 inches is between 15-25% depending on soil type.
- *During roadside brushing remove vegetation by cutting rather than uprooting.
- Landings used during dry conditions within the wet season (October through May) that have the potential to release sedimentation into a stream or wet area, would have silt fencing or other sediment control measures in place during periods of non-use if they are hydrologically connected to streams.
- *Divert road and landing runoff water away from headwalls, slide areas, high landslide hazard locations or steep erodible fill slopes.
- *Prior to October 15 of the same operating season, winterization would occur on temporary routes, landings, corridors, skid trails, and other areas of exposed soils by properly installing and/or using water bars, berms, sediment basins, gravel pads, hay bales, small dense woody debris, seeding and/or mulching, to reduce sediment runoff as directed by the Authorized Officer.
- *Prior to wet season hauling activities, implement structural road treatments as needed to prevent discernible stream sedimentation from occurring during off season use, such as: increasing the frequency of cross drains, installing sediment barriers or catch basins, applying gravel lifts or asphalt road surfacing at stream crossing approaches, and cleaning and armoring ditchlines.
- *Maintain road surface by applying appropriate gradation of aggregate and suitable particle hardness to protect road surfaces from rutting and erosion under active haul where runoff drains to wetlands, riparian management areas, floodplains and waters of the state.
- Non-emergency road maintenance work shall occur during the dry season (generally between May 15 and October 15). Certain activities (blading of aggregate roads, rocking, brushing, cross drain installation) occurring a minimum of 200 feet away from any stream may be permitted during the wet season (generally Oct 15 -May 15) when conditions are dry. When dry conditions are experienced outside seasonal restrictions, coordination with area specialists for agreement on the activity needs to occur. No ditch

maintenance shall occur during the wet season unless for safety or resource protection. Work shall be suspended during precipitation events or when observations indicate that saturated soils exist to the extent that there is visible runoff or a potential for causing elevated stream turbidity and sedimentation. Emergency road work may be permitted during the wet season.

- *Prior to the wet season, provide effective road surface drainage through practices such as machine cleaning of ditches, surface blading including berm removal, constructing sediment barriers, cleaning inlets and outlets.
- *Blade and shape roads to conserve existing aggregate surface material, retain or restore the original cross section, remove berms and other irregularities that impede effective runoff or cause erosion, and ensure that surface runoff is directed into vegetated, stable areas.
- *Inspect and maintain culvert inlets and outlets, drainage structures and ditches before and during the wet season to diminish the likelihood of plugged culverts and the possibility of washouts.
- Avoid blading and vegetation removal unless necessary to remove drainage impediments when maintaining inboard ditches. Sediment control measures will be evaluated and implemented if necessary, where ditchline blading is required within 100 feet of streams.
- *Avoid undercutting of cut-slopes when cleaning ditchlines. Seed with native species and use weed free mulch on bare soils including cleaned ditchlines that drain directly to wetlands, floodplains and waters of the state.
- *Apply water or approved road surface stabilizers/dust control additives to reduce surfacing material loss and buildup of fine sediment that can enter into wetlands, floodplains and waters of the state. Prevent entry of road surface stabilizers/dust control additives into waters of the state during application.
- *Retain low-growing vegetation on cut-and-fill slopes.
- Waste material from road maintenance activities would be placed in stable disposal areas a minimum of 200 feet from any stream and in a location where sediment laden runoff can be confined. Where necessary, provide erosion control to minimize sediment delivery to streams.
- Haul would not occur on all hydrologically connected roads when water is flowing in the ditchlines or during any conditions that would result in any of the following; surface displacement such as rutting or ribbons; continuous mud splash or tire slide; fines being pumped through road surfacing from the subgrade and resulting in a layer of surface sludge; road drainage causing a visible increase in stream turbidities, or any condition that would result in water being chronically routed into tire tracks or away from designed road drainage during precipitation events. Hauling would not resume for a minimum of 72 hours following a storm event, or until road surface is sufficiently dry to prevent any of the above conditions from reoccurring.
- *Implement sediment reduction techniques such as settling basins, brush filters, sediment fences and check dams to prevent or minimize sediment conveyance.
- Stormproof open resource roads receiving infrequent maintenance that are utilized during this harvest activity to reduce road erosion and reduce the risk of washouts by concentrated water flows. Stormproof temporary roads if retained over-winter.

- *All natural surface or rocked roads that are re-opened for harvest operations or log haul would receive adequate surfacing for winter use (generally 6-12 inches of clean, compacted rock), be gated prior to the wet season, or would be blocked prior to the wet season and stabilized in such a way that no future maintenance would be necessary to prevent road damage or stream sedimentation.
- *Material removed during excavation would only be placed in locations where it cannot enter streams or other water bodies (RMP, p. 162)
- *Slumps, intermittent seeps, and other unstable areas would be buffered (no treatment) by leaving one row of overstory trees or a 25 foot radius (whichever is greatest), from the outer edge of instability around these areas for soil stabilization (RMP, p. 154).

2.3.7 Wildlife

- Any of the following measures may be waived in a particular year if nesting or reproductive success surveys conducted according to the U.S. Fish and Wildlife Service (USFWS) - endorsed survey guidelines reveal that spotted owls are non-nesting or that no young are present that year. Waivers are valid only until March 1 of the following year. Previously known well established sites/activity centers are assumed occupied unless protocol surveys indicate otherwise.
- Work activities (such as tree felling, yarding, temporary route construction, road renovation/improvement, hauling on roads not generally used by the public, and prescribed fire) would not be permitted within specified distances (see Table 2 below), of any nest site or activity center of known pairs and resident singles between March 1 and June 30 (or until two weeks after the fledging period) – unless protocol surveys have determined the activity center to be not occupied, non-nesting, or failed in their nesting attempt. March 1 – June 30 is considered the critical early nesting period; the restricted season may be extended during the year of harvest, based on site-specific knowledge (such as a late or recycle nesting attempt). The buffer distance to the prescribed area may be modified by the action agency biologist using topographic features or other site-specific information. Buffer distance for prescribed fire may be reduced if substantial smoke from prescribed fire would not enter the nest stand March 1 – June 30. The restricted area is calculated as a radius from the assumed nest site (point).

Table 2 Disturbance distances from various activities for spotted owls

Activity	Buffer Distance around Owl Sites
Heavy Equipment (including non-blasting quarry operations)	105 feet
Chain saws	195 feet
Prescribed fire	0.25 miles

- A minimum of 10% of each hazardous fuels treatment unit greater than 10 acres would remain untreated. The no treatment areas should be ¼ to 1 acre, unless they are linked to other no treatment areas designated for other resource concerns.
- Approximately 10% of handpiles during hand pile and burn treatments units would be left untreated.

2.3.8 Visual Quality

- Retain most large crowned trees and a variety of tree sizes and shapes to ensure that the resulting visual canopy does not distract from the surrounding landscape.
- Avoid fan shaped yarding corridors where necessary to meet Visual Resource Management
- In unit LP27-4, where seen from Hwy. 5 southbound lane, leave a 50-60% canopy

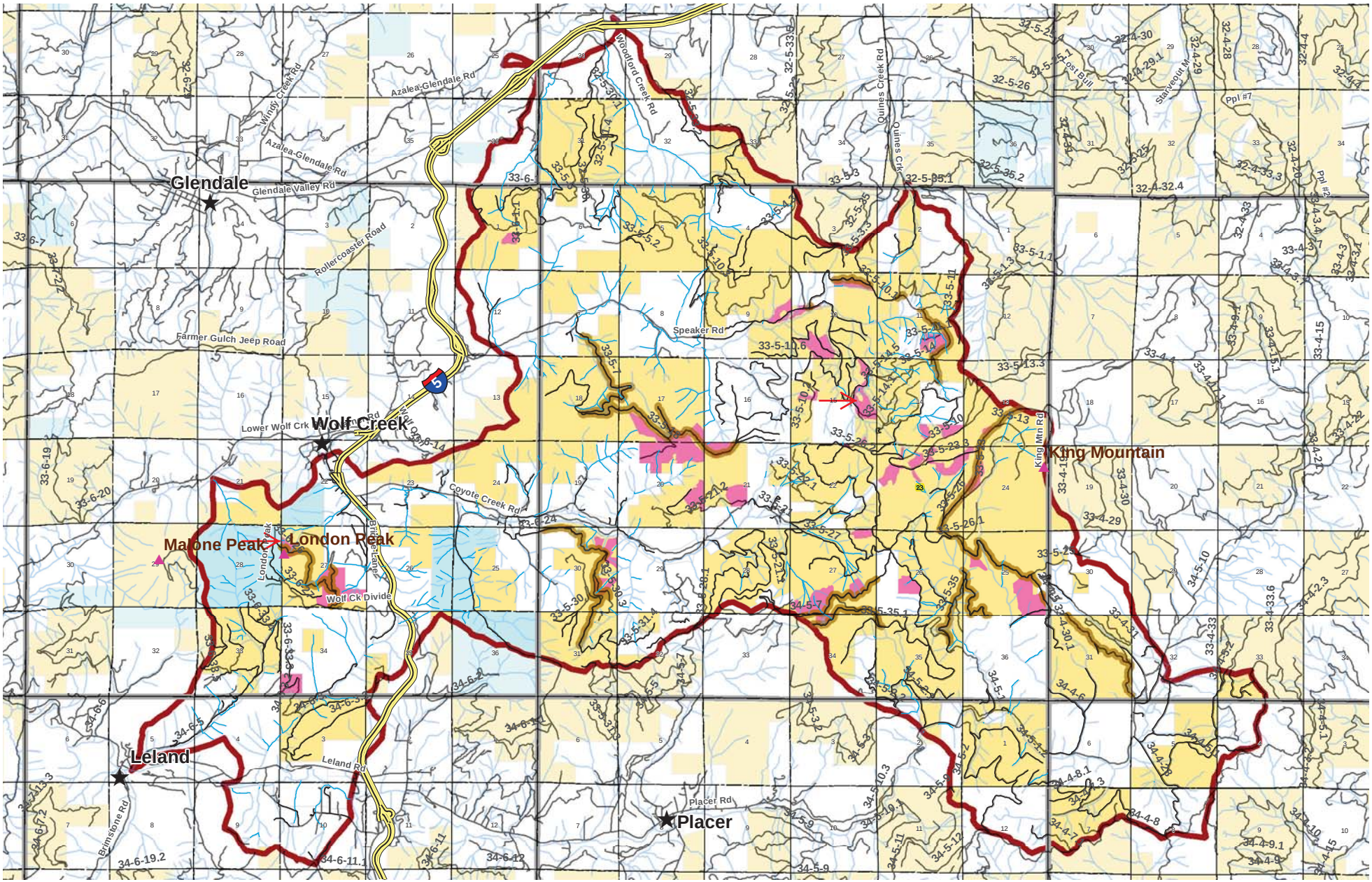
2.3.9 Rural Interface Area

- If activities fall within the traditional school season, September through June, additional precautions should be taken while moving large equipment, or transporting logs, on Speaker road, Coyote Creek road, Bridge Lane and Board Tree roads due to children walking to or waiting at school bus stops. Staging any equipment at official school bus turn-arounds is prohibited.
- Place signs on all roads, within downtown Wolf Creek, and leading to residential areas where hauling will occur stating "truck traffic ahead" or similar, during harvest and hauling activities.
- If a helicopter is used for harvesting purposes in units 17-2 and 20-1, locate helipads and landings away from site of, and sound distance from, residential areas as feasible. Helipads not located on existing roadways or other existing pre-disturbed areas should be re-vegetated after proposed harvest is completed.
- Dust abatement using water, lignin or other approved methods would be implemented as necessary on haul roads located near residences. Lignin would not be applied when the road is wet, when it's raining or when rain is expected to avoid direct delivery to any water body. Lignin would not be applied within 25 feet of any water body or stream channel.

2.3.10 Recreation

- Provide signage on hauling/activity roads leading to recreation areas such as London Peak and Burma Pond, King Mt if there are delays due to project implementation.
- Usage of recreation areas and trailheads for operation, parking or staging of equipment should be avoided

Speaking Coyote Project Scoping Map



Preliminary Project Units
Preliminary roadside treatment areas
Project Boundary
Existing Roads
Streams
Bureau of Land Management
State
Private

0 1 2 Miles

Prepared By: Stimmons
Current Date: 10/20/2011
MXD: W:\grants_pass\Speaking_Coyote\Scoping_map_8x11.mxd