



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Grants Pass Resource Area
2164 N.E. Spalding
Grants Pass, Oregon 97526

IN REPLY REFER TO:

1790 (ORM070)

DOI-BLM-OR-M070-2009-001-EA

JUL 29 2014

Dear Interested Party:

As the Grants Pass Resource Field Manager, I have signed the Decision Record (DR) for fuels reduction treatments associated with the East West Junction Vegetation Management Project. Forest management activities include Density Management/Hazardous Fuel Reduction on 290 acres, and Hazardous Fuel Reduction on 623 acres of Bureau of Land Management (BLM) Matrix lands.

The activities of the East West Junction Vegetation Management Project are analyzed in an Environmental Assessment (EA) (DOI-BLM-OR-M070-2009-001-EA). The EA was made available on March 19, 2012 for a 30-day public comment period. The BLM's responses to public comments are included with the DR. These comments were considered in reaching a final decision for the East West Junction Vegetation Management Project. The Selected Alternative is a portion of Alternative 2. The DR includes all Project Design Features and Best Management Practices in the EA.

This is a forest management decision. Administrative remedies are available to persons who believe they will be adversely affected by the decision. In accordance with the BLM Forest Management Regulations (43 CFR § 5003.2(a)), the decision for this project will not become effective, or be open to formal protest, until the Legal Notice appears in the *Grants Pass Daily Courier* on July 31, 2014.

43 CFR § 5003.3 subsection (b) states, "Protests shall be filed with the authorized officer and shall contain a written statement of reasons for protesting the decision." This precludes the acceptance of electronic mail (email) or facsimile (fax) protests. Only written and signed hard copies of protests that are delivered to the Grants Pass Interagency Office will be accepted. The protest must clearly and concisely state which portion or element of the decision is being protested and the reasons why the decision is believed to be in error.

You can review the DR at <http://www.blm.gov/or/districts/medford/plans/index.php>, the Medford District's internet site. Hard copies of the DR are also available at the Grants Pass Interagency Office, 2164 NE Spalding Avenue, Grants Pass, OR 97526. Office hours are Monday through Friday, 8:30 A.M. to 4:30 P.M., closed holidays. For additional information contact Ferris Fisher, at (541) 471-6639.

Sincerely,

Allen Bollschweiler
Field Manager
Grants Pass Resource Area

**DECISION RECORD FOR THE
EAST WEST JUNCTION VEGETATION MANAGEMENT PROJECT
DOI-BLM-OR-M070-2009-001-EA**

**United States Department of the Interior
Bureau of Land Management
Medford District, Grants Pass Resource Area**

I. INTRODUCTION

This is the second Decision Record (DR) for activities analyzed in the East West Junction Vegetation Management Project Environmental Assessment (EA), DOI-BLM-OR-M070-2009-001-EA. This DR approves a portion of Alternative 2 for fuels reduction treatments associated with the East West Junction Vegetation Management Project. These activities are listed below:

- 290 acres of Density Management/Hazardous Fuel Reduction
- 623 acres of Hazardous Fuel Reduction

There may be road maintenance work (EA pp. 27, 37-38) associated with the Density Management/Hazardous Fuel Reduction (DM/HFR) treatments (stewardship activities). This decision does not authorize road renovations/improvements or temporary route construction/reconstruction.

The activities of the East West Junction Vegetation Management Project are analyzed under the East West Junction Vegetation Management Project Environmental Assessment (DOI-BLM-OR-M070-2009-001-EA). For units in this DR the land use allocations are Matrix and Riparian Reserve as listed under the Medford District’s 1995 Resource Management Plan (RMP).

The Planning Area (PA) is east and south of the town of Cave Junction. The legal descriptions of the activities listed above are T39S-R7W-Sections 07, 08, 17, 18, 19, 20; T39S-R8W-Sections 13, 33, 34; T40S-R8W-Sections 03, 05, 07, 09 in Josephine County, Oregon, Willamette Meridian.

Table 1. East West Junction Vegetation Management Units

Township-Range-Section	Unit Number	Acres	Treatment Type
T39S-R7W-Section 7	7N-1	36	HFR
	7N-2	19	DM/HFR
	7N-3	14	DM/HFR
	7N-4	12	DM/HFR
	7N-8	1	HFR
	7N-9	7	DM/HFR
	7N-10	6	DM/HFR
T39S-R7W-Section 8	8-3	31	HFR
T39S-R7W-Section 17	17-1	29	HFR

Township-Range-Section	Unit Number	Acres	Treatment Type
	17-1D	50	HFR
	17-2	9	HFR
	17-4	5	HFR
	17-4A	2	DM/HFR
	17-10	51	DM/HFR
T39S-R7W-Section 18	18-1	31	HFR
	18-4	19	HFR
T39S-R7W-Section 19	19-1	92	HFR
	19-3	23	DM/HFR
T39S-R7W-Section 20	20-2	10	HFR
T39S-R8W-Section 13	13-3A	136	HFR
	13-3B	3	HFR
	13-6B	14	HFR
	13-14	41	DM/HFR
	13-16A	9	DM/HFR
	13-16B	38	DM/HFR
T39S-R8W-Section 33	33-5	41	DM/HFR
T39S-R8W-Section 34	34-1	13	DM/HFR
T40S-R8W-Section 03	3-4	69	HFR
T40S-R8W-Section 05	5-1	6	DM/HFR
T40S-R8W-Section 07	7S-2	27	HFR
	7S-3	15	HFR
	7S-6	7	HFR
	7S-6A	7	HFR
T40S-R8W-Section 09	9-8	19	HFR
	9-9	11	HFR

HFR = Hazardous Fuels Reduction DM = Density Management

II. PUBLIC INVOLVEMENT

Public involvement included two scoping letters, an open house public meeting and two field trips. The first scoping letter was released in December 2008. In 2011, the East West Junction Project's purpose was revised to include a contribution toward timber production while restoring dry and moist forest characteristics and a reduction in wildfire danger. A revised scoping letter was released in May 2011 to reflect this alteration in the project's purpose and need.

These scoping letters were mailed to individuals and organizations that have expressed interest in Grants Pass Resource Area projects along with landowners within ¼ mile of the East West Junction Project proposed units. Public comments were requested within 30 days for each of these letters. The BLM received approximately 15 public comments from letters, emails and phone calls during the 2008 scoping period and 10 comments during the 2011 scoping period.

A public meeting was held in April 2009 at the Illinois Valley High School. This meeting had over 23 participants. Two field trips were held in the fall of 2011 (November 18th and 29th). There were eight public attendees between the two field trips. The attendees were adjacent landowners and representatives of local organizations.

Contained within Appendix 3 of the East West Junction Project EA are the responses to all substantive comments received during the scoping process. Comments were considered in the development of the project. Issues identified during scoping were considered to determine if an alternative action would be developed. Appendix 1 of the EA summarizes this alternative consideration and explains why some alternatives were considered but not analyzed in detail and eliminated from further analysis.

The 30 day public comment period for the East West Junction Project EA was initiated on March 19, 2012 with the publication of a legal notice in the *Grants Pass Daily Courier*. Approximately 72 letters were sent to individuals and included groups and agencies that requested to be kept informed of the project. The letter provided a synopsis of the proposed action and disclosed the availability of the EA online and at the Grants Pass Interagency Office. In response to these public outreach efforts, 9 EA comment letters and approximately 266 form letters were received.

Substantive public comments were reviewed by the East West Junction Project interdisciplinary team. The BLM's responses to these comments are included in Attachment 1 of this DR. A Finding of No Significant Impact (FONSI) for the project was released on March 19, 2012 with the East West Junction Project EA.

III. PLAN CONFORMANCE, CONSULTATION & COORDINATION

Land Use Plan Conformance

- *Final-Medford District Proposed Resource Management Plan/Environmental Impact Statement and Record of Decision (EIS, 1994 and RMP/ROD, 1995) and the 2008 ROD/RMP¹*
- *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 FEIS, 1994 and ROD, 1994)*
- *Final Supplemental Environmental Impact Statement: Management of Port-Orford-Cedar in Southwest Oregon (FEIS, 2004 and ROD, 2004)*

¹ *On May 16, 2012, the U.S. District court, District of Oregon (Pacific Rivers Council et al v Shepard) vacated the 2008 Records of Decision/Resource Management Plans for western Oregon BLM districts and reinstated BLM's 1995 RODs/RMPs. As of May 16, 2012, the Medford District has reverted back to its 1995 ROD/RMP as the official land use plan of record. Due to previous ongoing litigation, the Medford District initiated planning and design for this project to conform to both the 2008 ROD/RMP and the 1995 ROD/RMP. Consequently, this project is consistent with the goals and objectives of the 1995 ROD/RMP.*

- *Final Supplemental Environmental Impact Statement 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 and 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)

Endangered Species Act, Section 7 Consultation

Northern Spotted Owl

Medford BLM submitted a Biological Assessment (July 2010 NLAA BA) to the U.S. Fish and Wildlife Service (USFWS) and received a Letter of Concurrence (July 2010 LOC, Tails #13420-2010-I-0178) stating that proposed treatments that will treat and maintain northern spotted owl habitat “may affect but are not likely to adversely affect northern spotted owls.” The East West Junction stewardship and fuels proposed treatments are Not Likely to Adversely Affect (NLAA) northern spotted owls.

The action alternatives do not occur in revised Critical Habitat (2008; Federal Register (73): 47329-47522) as designated by the USFWS nor do the proposed activities occur in the USFWS’s 2012 Critical Habitat Unit. The East West Junction Project PA does not occur in marbled murrelet critical habitat.

No other listed wildlife species or critical habitats are affected.

Lomatium cookii

In accordance with section 7 of the ESA the BLM analyzed project activities for their potential to affect the endangered Cook’s lomatium (*Lomatium cookii*). The Medford District submitted a Biological Assessment (Medford BLM FY 2009-2013 BA) to the USFWS and has received a Letter of Concurrence (LOC) on each of the BAs (TAILS#: 13420-2008-I-0136) stating the proposed treatments “may affect, but are not likely to adversely affect” *Lomatium cookii*. A separate BA (Medford BLM FY 2012-2013) was submitted by the Medford District to the USFWS and a LOC (TAILS#: 01EOFW00-2012-I-0019) was received stating the proposed treatments “may affect, but are not likely to adversely affect critical habitat” for *Lomatium cookii*.

The BLM is implementing all applicable Project Design Criteria in accordance with the mandatory terms and conditions as specified in the LOC. The USFWS stated that the proposed action will not jeopardize the continued existence of these species.

Survey and Manage and Bureau Sensitive Species Compliance

This project complies with current Survey and Manage standards and guidelines. 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.

The Ninth Circuit Court of Appeals issued an opinion on April 25, 2013 that reversed the District Court for the Western District of Washington's approval of the 2011 Survey and Manage Settlement Agreement and remanded the case back to the District Court for further proceedings.

On February 18, 2014 the U.S. District Court for the Western District of Washington issued an order vacating the 2007 ROD and stated that Agencies may proceed with projects in which any Survey and Manage pre-disturbance surveys have been initiated in reliance upon Settlement Agreement on or before April 25, 2013.

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 had entered into a stipulation exempting certain categories of activities from the Survey and Manage standard (hereinafter "Pechman Exemptions").

Judge Pechman's Order from October 1, 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, except that this order will not apply to:

- Thinning projects in stands younger than 80 years old, and
- The portion of projects involving hazardous fuels treatments where prescribed fire is applied.

Following the District Court's February 18, 2014 ruling, the Pechman Exemptions still remain in place. The East West Junction Fuels Hazard Reduction Decision for the Grants Pass Resource Area has been reviewed by the BLM interdisciplinary team in consideration of both the February 18, 2014 order and Judge Pechman's October 1, 2006 order. The East West Junction Fuels Hazard Reduction Project will be thinning in stands younger than 80 years old and involves hazardous fuels treatments with the occasional prescribed fire. This project does not include regeneration harvest or thinning in stands greater than 80 years old, thus the Grants Pass Resource Area interdisciplinary team has determined that this project meets Pechman Exemptions A and D.

Red Tree Vole

Red Tree Vole (RTV) protocol surveys (Survey and Manage Protocol – Oregon Red Tree Vole (*Arborimus longicaudus*) Version 2.0) were conducted. Based on active and associated inactive RTV nests located during the surveys, approximately 161 acres were buffered and removed from potential harvest across the PA.

Great grey owls

Great grey owl surveys were completed for proposed units with suitable habitat in 2011. No great grey owls were detected during survey (EA p. 163). There are no other 2001 Survey and Manage ROD wildlife species affected by this project.

Plants

Vascular and nonvascular plant surveys were conducted for the East West Junction Project consistent with court orders relating to the 2011 Settlement Agreement in Litigation over the Survey Manage Mitigation Measure in Conservation Northwest et al. v. Sherman et al., Case No. 08-1067-JCC (W.D. Wash.) that went into effect on July 21, 2011.

Cultural

Required cultural surveys were completed for the East West Junction Vegetation Management Project. Eligible sites will be protected using Project Design Features (PDFs) with no cut buffers. The State Historic Preservation Office concurred that the East West Junction Project will have no effect to cultural resources as cultural sites will be avoided during project implementation. The LOC is contained within the East West Junction Project EA Administrative Project Record.

The Confederated tribes of the Siletz and the Grande Ronde were notified about this project during scoping and the EA's public comment period. Phone conversations to these tribes did not identify cultural resource concerns for the proposed project. Josephine County Commissioners and the Josephine County forestry department were also contacted.

IV. DECISION

I have decided to implement a portion of Alternative 2 from the East West Junction Project EA referred to hereafter as the Selected Alternative. The Selected Alternative includes treating approximately 290 acres of Density Management/Hazardous Fuel Reduction and 623 acres of Hazardous Fuels Reduction. The Selected Alternative includes all Project Design Features (PDFs) and Best Management Practices (BMPs) described in the EA in Section 2.3.4. The following PDF has been modified:

- Mechanical piling of cut slash will only occur at landings.

This decision is based on site-specific analysis, the Administrative Project Record, management recommendations contained in the East Fork Illinois Watershed Analysis (2003), the Sucker Creek Watershed Analysis (2007), management direction contained in the Record of Decision and Standards and Guidelines of the Northwest Forest Plan (1994), Medford District Resource Management Plan and Record of Decision (1995) and public comments.

ALTERNATIVES CONSIDERED

Alternative 2 addresses many of the requests made through public comments, the additional public comments that were not addressed in Alternative 2 were used in the development and analysis of

Alternative 3. Due to the incorporation of public comments into Alternative 3 there were no additional alternatives to be considered.

DECISION RATIONALE

Based upon my review of the East West Junction Vegetation Management Project EA, best available science, comments received from the public and management direction contained in the Record of Decision and Standards and Guidelines of the Northwest Forest Plan (1994), Medford District Resource Management Plan and Record of Decision (1995), I have decided to authorize a portion of Alternative 2, known as the Selected Alternative. The Selected Alternative authorizes Hazardous Fuel Reduction treatments (HFR) and Density Management/Hazardous Fuel Reduction treatments (DM/HFR).

My rationale for the decision is as follows:

The Selected Alternative meets the BLM's obligation to implement the RMP and to address the primary needs identified for lands in the PA, as well as meeting the purpose and need of the project to implement forest management activities that would contribute to continuous timber production while restoring dry and moist forest characteristics and reducing wildfire danger.

The rationale for choosing the Selected Alternative over Alternative 3 is that the Selected Alternative best meets the purpose and need. The Selected Alternative would best meet the dry and moist forest restoration objectives of Drs. Franklin and Johnson, while meeting other resource objectives. Alternative 3 was not selected because it would minimize the opportunity to treat stands that would best meet the silvicultural goals of:

- a. restoring characteristic stand structure and composition,
- b. reducing stand density to increase long term growth quality and vigor of the remaining trees and increase resistance of the landscape to fire, drought and insects; and
- c. creating diversified stand structure (height, age and diameter classes) to enhance structural complexity and composition.

The Medford District RMP specifies that forests be managed toward a variety of structures, with stands containing trees of varying ages and sizes and stands with an assortment of canopy configurations. The Selected Alternative would best contribute to future forest commodity production while meeting other resource needs.

A Finding of No Significant Impact (FONSI) for the East West Junction Project EA was made available along with the EA on March 19, 2012. The BLM responded to the comments in Appendix 3 of the EA. The comments received during the 30-day comment period did not identify a flaw in assumption, analysis or data that would alter the environmental analysis disclosed in the EA or conclusions documented in the FONSI.

V. ADMINISTRATIVE REMEDIES

This is a forest management decision. Administrative remedies are available to persons who believe they will be adversely affected by this decision. In accordance with the BLM Forest Management Regulations (43 CFR § 5003.2(a)), the decision for this project will not become effective, or be open to formal protest, until the Legal Notice is published in the *Grants Pass Daily Courier*.

43 CFR § 5003.3 subsection (b) states, "Protests shall be filed with the authorized officer and shall contain a written statement of reasons for protesting the decision." This precludes the acceptance of electronic mail (email) or facsimile (fax) protests. **Only written and signed hard copies of protests delivered to the Grants Pass Interagency Office will be accepted.** The Grants Pass Interagency Office is located at 2164 NE Spaulding, Grants Pass, OR 97526.

43 CFR § 5003.3 subsection (c) states, "Protests received more than 15 days after the publication of the notice of decision or the notice of sale are not timely filed and shall not be considered." Upon timely filing of a protest, the authorized officer shall reconsider the project decision to be implemented in light of the statement of reasons for the protest and other pertinent information available to him. The authorized officer shall, at the conclusion of the review, serve the protest decision in writing to the protesting party. Upon denial of a protest, the authorized officer may proceed with the implementation of the decision as permitted by regulations at 5003.3(f).

VI. IMPLEMENTATION DATE

If no protest is received by the close of business (4:30 p.m.) within 15 days after publication of the Legal Notice, the decision will become final. If a timely protest is received, the decision will be reconsidered in light of the statement of reasons for the protest and other pertinent information available and a final decision will be issued in accordance with 43 CFR § 5003.3.

VII. CONTACT PERSON

For additional information contact either Allen Bollschweiler, Grants Pass Resource Area Field Manager, 2164 NE Spaulding Ave., Grants Pass, OR 97526, telephone (541) 471-6653; or Ferris Fisher, Environmental Planner, telephone (541) 471-6639.

Allen Bollschweiler, Field Manager
Grants Pass Resource Area

Date

ATTACHMENT 1

PUBLIC COMMENT ON THE EAST WEST JUNCTION PROJECT AND ENVIRONMENTAL ASSESSMENT (DOI-BLM-OR-M070-2009-011-EA) AND BLM RESPONSE

The East West Junction Project Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) were made available for public comment from March 19, 2012 to April 19, 2012. A public notice appeared in the Grants Pass Daily Courier newspaper on March 19, 2012. Notification of the comment period included: the publication of a legal notice in the Daily Courier, newspaper of Grants Pass, Oregon and on the Medford District Bureau of Land Management website at <http://www.blm.gov/or/districts/medford/index.php>; and a letter was mailed to those individuals, organizations, and agencies that have requested to be involved in the environmental planning and decision making processes for forest management activities.

Nine comment letters were received from Klamath Siskiyou Wildlands Center (KS Wild), Oregon Wild, American Forest Resource Council (AFRC), and area residences (Gordon Lyford, Gregory Bennett, Jay Haber, Monty LaComb, Greg and Mary Walter, and Elaine Wood) as well as 266 form letter emails.

BLM responses to substantive comments to the EA are present in this Attachment to the Decision Document.

Forest Management

Comment 1 (form letter emails and Gregory Bennett): The commenter requests the BLM to retain forest canopy and large-diameter trees.

BLM Response: The East West Junction Project integrates the ecological forestry principles of Dr. Jerry Franklin (Professor of Ecosystem Science, School of Forest Resources, University of Washington) and Dr. Norm Johnson (Professor of Forestry Resources, College of Forestry, Oregon State University). This approach strives to restore forests to more natural conditions that would have existed pre-European settlement periodic disturbance and post-settlement human influence of southwest Oregon, which is about 150 years ago. As a part of this approach, trees 150 years old and older would be retained, which would also include retention of large-diameter trees.

A major component of the purpose and need for this project is to restore dry and moist forest characteristics including reducing the risk of the loss of older trees from wildfire and competition while favoring retention of more fire and drought tolerant tree species (ponderosa pine, sugar pine, incense cedar). Criteria used to identify and select old trees for retention are derived from Robert Van Pelt's Identifying Old Trees and Forests. The guide was recommended and provided Dr. Jerry Franklin in response to a BLM request for scientific characteristics and guidelines to identify old trees.

Stands would be treated to satisfy multiple resource objectives. Forest canopies would be retained that meet consultation coverage for the northern spotted owl with the U.S. Fish and

Wildlife Service (USFWS). The USFWS concluded “[based on] the effects of the proposed action, and the cumulative effects, it is the Service's biological opinion that the District’s proposed action, is not likely to jeopardize the continued existence of the spotted owl. The Service reached this conclusion because the action area is expected to continue to fulfill its role in the survival and recovery of the spotted owl because implementation of the proposed action will retain 99 percent of currently occupied or un- surveyed suitable spotted owl NRF and dispersal habitats in the action area.”

The Proposed Action is also intended to incorporate ecological forestry principles into silvicultural prescriptions while maintaining some level of timber production as another objective. The land use allocation for this project is largely Matrix, which purpose is also for timber production.

Comment 2 (LaComb): Requests trees greater than 18 inches in diameter to be retained as he is concerned brush will dominate, the fire hazard will be increased, and his aquifers that his developing farm is dependent on will be affected.

BLM Response: To limit the prescription to cutting trees less than 18 inches would not meet the objectives for dry forest restoration nor the overall goals of the Medford District RMP for the current stand development stages of these units.

The Proposed Action utilizes an ecological forestry approach that creates structural and compositional heterogeneity throughout the stand. This is a shift from a standard traditional forestry approach that creates spatially uniform stands or merely thins from below, which can eliminate some tree size classes. Ecological forestry aims to stimulate large tree development, vertical and horizontal heterogeneity by creating gaps and opportunities for understory regeneration components.

Recognizing that natural stands undergo competitive thinning that displays spatial variation in tree densities, growth rates, and tree sizes, the silvicultural design that utilizes ecological forestry principles plans for treatments that replicate gap-forming-processes and dynamics as well as the natural occurrence of competition-based mortality. This approach would help mimic the more natural mosaic forest composition for southwestern Oregon. Trees >150 years in age would be prescribed for retention which includes large older trees of stands. However, some large younger trees may be removed.

The silvicultural prescriptions were designed to meet relative stand density objectives that have shown to prompt long-term growth of remaining trees and to retain fire resilient trees and tree species. As stated in the response to Comment 1, the land use allocation for this project is largely Matrix, which purpose is also for timber production.

Regarding fire hazard, Appendix 2: Fire Hazard and Fire Risk, and Section 3.2 of the EA discloses that fire hazard would be reduced in 97% of the proposed treatments of the project through Variable Density Thinning, Commercial Thinning, Density Management, and Hazardous Fuel Reduction units (1,198 acres). The Variable Retention Harvest units (9-12A & 9-12B, totaling 20 acres) would experience an increased fire hazard for 5 to 20 years, depending on the percent canopy closure retained slash treatment.

Landing, machine, and hand piles may present a short term increase (1-2 years) in fire hazard until the piles are treated.

In regard to concerns about the project affecting aquifers, all intermittent and perennial streams would have no extraction in the Riparian Reserve (185-370 ft), except for three units proposed for Riparian Thinning and these units would have a 75-100 ft no timber extraction buffer to protect water sources. Additionally, all intermittent seeps would be buffered (no treatment) by leaving one row of overstory trees or a 25 ft diameter (whichever is greatest), from the outer edge of instability, for soil stabilization. Therefore, the project would not affect aquifers water supply.

Comment 3 (Klamath Siskiyou Wildlands Center and Wood): Requests the BLM to thin small diameter trees to bring the Planning Area closer to its natural range of variability and to increase forest resiliency. The commenter states this would produce timber while avoiding controversy and would also meet the objectives noted in the purpose and need statement, such as reducing stand densities, minimizing fire potential and restoring forest health.

The Forest Service recently implemented the East I.V. Young Managed Stands project. Responding to public comment, the Forest Service decision maker developed and selected an action alternative that is producing significant volume by targeting small diameter white-fir and Douglas fir, the result of prior logging activities and fire suppression, while avoiding new road construction. Such a “win-win” alternative is possible in the East West planning area as well, one that produces wood while also protecting large trees that pre-date fire suppression and avoiding loss of valuable habitat and new road construction.

BLM Response: Ecological forestry aims to create structural and compositional heterogeneity throughout the stand rather than to selectively concentrate growth to create spatially uniform homogenous stands. A portion of trees from all size classes would be retained. Moreover, by retaining trees >150 years in age, large trees that predate early settlement would be retained. Trees >150 years in age are legacies from the introduction of domestic livestock that began about 150 years ago and caused vegetation shifts in southwest Oregon. Therefore applying this approach is striving to reach a more natural range of variability found in southwest Oregon. Trees in dry forests begin to exhibit characteristics of old trees at these ages and the 150-year age is the demarcation advocated by Drs. Franklin and Johnson in their southwest Oregon forest restoration strategy.

The Rogue River-Siskiyou National Forest’s East I.V. Young Stands Project proposes activities in previous clear-cut plantations across several thousand acres, with little product extraction. This project is not intended to meet all the resource management objectives of the Forest Service. It is also important to note that the U.S. Forest Service does not manage O&C lands, which requires the Secretary of the Interior to manage O&C lands for permanent forest production.

Pre-commercial thinning is proposed under Alternative 2 for the East West Junction Project on 262 acres. Across the Grants Pass Resource Area, young stand management is occurring under the GPRA Young Stand Management (FY2011-2014) Categorical Exclusion/Decision Record and the 2012 Silviculture Practices - Reforestation, Young Stand Management, and Forest Condition Restoration Treatments (FY12-FY17) Categorical Exclusion/Decision Record.

Comment 4 (Klamath Siskiyou Wildlands Center): The commenter asks for a pre-decision field review of gap creation in mature stands, especially in section 29 and a sample mark of one or two units with gaps identified.

BLM Response: BLM field personnel provided a sample mark with flagging for unit 29-8 twice due to the flagging being ripped down two times by unknown parties.

The BLM has conducted sample marking on other dry forest restoration projects with Klamath Siskiyou Wildland's review in the past year. The proposed action utilizes an understanding of natural processes and resulting patterns to design silvicultural practices that put key concepts of ecological forestry into practice while meeting other land management objectives (GTR NRS-19). Gap locations are prescribed to avoid the oldest stand components and highest quality habitat, such as draws. Gaps would more likely occur along ridgelines where larger openings would result from yarder set-up location. Gap placement would also avoid older legacy trees such as pine and cedar and would also avoid ecological features that are notably in decline. Gaps are not mini-clearcuts, but retain structure of hardwoods and legacy trees.

Comment 5 (Klamath Siskiyou Wildlands Center and Wood): An 80-acre BLM parcel at the beginning of Road 39-7-21.1 and the section 29 units has substantial old growth white oak and wildflowers that are being shaded out by fir and manzanita (Photo 9). We recommend radial thinning around larger oaks and removal of the majority of encroaching Douglas fir. Fuels treatment seems appropriate for this parcel because it is in relatively close proximity to residences and Highway 46.

We object to the proposed cutting of broad-leaved trees up to 8 inches (EA p. 23 "Pre-commercial /Hardwood control) because broad-leaved trees are extremely important to wildlife and have been found to reduce fire severity (Hager 2007; Perry et al 2011). We request that all "tree form" oak species 4 inches dbh and greater be retained. Please also retain all uncommon species (e.g. yew, elderberry, chokecherry) and all riparian species (cottonwood, alder, maple, ash etc.). We also recommend retention of tree form madrone >4 inches dbh within 20-40 feet of roads because these sunny road-side exposures are likely to result in very healthy trees with annual berry production.

All tree form tanoak over 4 inches diameter should to be retained because tanoak is known to suppress fires when mixed with conifer overstory. Several studies have found that hardwoods reduce the intensity of wildfire (Perry et al. 2011:709, Borman et al. 2006, Perry 1988). Raymond and Peterson (2005) as cited in Perry et al 2011 speculated that mature hardwoods shaded dead fuels and slowed their desiccation, reduced wind speed within stands, and blocked the propagation of heat upwards into conifer canopies. Thus, the anticipated removal of hardwoods due to arbitrary spacing prescriptions would likely increase fire hazard. The EA failed to identify the need for protecting hardwoods to reduce fire hazard and reduce fire mortality of mature conifers within units. We also object to arbitrary spacing of trees because it's ecologically important to maintain the natural clumping of tree species. The use of arbitrary spacing for cutting eliminates or reduces the natural appearance of forests and has adverse ecological effects as well.

BLM Response: The BLM agrees that oaks are an important ecological component on the landscape (EA, p.74-75). The effects of fire suppression have seen a reduction in shade intolerant white oak individuals and communities across the landscape where shade tolerant Douglas-fir have made inroads thereby outcompeting other species. Other important tree species such as ponderosa pine, incense cedar, and sugar pine have seen their numbers decrease whereas the numbers of Douglas-fir, a shade tolerant species, have increased. Therefore, the majority of harvest trees in the Project Area are Douglas-fir. Meanwhile, the prescription aims to promote the retention of vigorous drought tolerant and fire resilient species.

Another aim of ecological forestry creates structural heterogeneity where size classes are not selectively discriminated or favored. The retention of the age criterion for trees >150 years is an ecological retention feature desired in a forest restoration strategy utilizing ecological forestry principles. Imposing an arbitrary diameter criterion across a continuum of tree growth is not ecologically or silviculturally desired. Understory clumping would exist in 10-15% of each unit.

Conifers are not the only species that undergo the effects of inter-tree competition among the same species. Oaks can compete among each other, reduce the growth of other oaks, and weaken other oaks to a point that density related competition mortality can ensue. Restoring southwest Oregon forests may involve the removal of subordinate trees competing against more desirable, better formed, and more vigorous associates. Density reduction would occur to allow more desirable, larger, better formed, and more vigorous oak and pine species to thrive.

The Medford District Resource Management Plan (BLM 1995) provides management direction for program implementation and priority activity scheduling for the Southern General Forest Management Area (SGFMA). Tanoak in particular should have understories reduced to more natural levels (BLM 1995 p. 193). Understories in the Tanoak Plant Series receive high priority for understory density control treatment (BLM 1995 p. 194).

Fire is the principal inhibitor of tanoak dominance (Tappeiner et al., 1990; see EA for citation). According to the West Fork Illinois River Watershed Project (USDI 2003) higher tree densities and increased ground fuels in stands have escalated the threat of stand replacing crown fires which were historically rare. Moreover, because non-stand replacing fires are important to the maintenance of many plant communities, its exclusion has contributed to a reduction in the quantity and quality of habitats including oak woodlands, meadows, conifer forests and chaparral. Due to the success of fire suppression efforts over the last 70 years, overall presence of this species has increased in the watershed (USDI 2003). Fire suppression has had a significant effect on the presence of white fir, Douglas-fir, and tanoak. Shade-tolerant and less fire resistant species, such as white fir or tanoak have occupied growing space at the exclusion of fire-resilient ponderosa pine and white oak. Wildfires would have kept Douglas-fir, white fir, and tanoak numbers relatively low, especially in the under-story.

Residential development has expanded to make the use of wildfire an unreliable tool for density control. Management intervention is a more controlled tool to reduce densities and favor more appropriate species composition naturally suited for the site. Research by Atzet and Martin (1991, see EA for citation) found that fire exclusion in Douglas-fir forests has contributed to reducing fire disturbance by more than twice the historical average. This has created significantly greater risks of

stand-replacement fires. The West Fork Illinois River Watershed Project (USDI 2003) and the East Fork Illinois River Watershed Analysis (USDA/USDI 2000), note that at the landscape level there is less diversity, stands are more homogenous, and canopy closures have increased where specifically, ponderosa pine species has decreased in numbers while tanoak and Douglas-fir, conversely, have increased at the stand level and across the landscape.

Depending on site conditions, sometimes limiting the cutting of hardwoods to 4 inches in Hazardous Fuel Reduction prescriptions would meet fuel reduction objectives. However, the unit selection and the prescription that is developed for each Hazardous Fuel Reduction unit must meet the purpose and need of the project, which includes “reducing wildfire danger” for dry and moist forests and the project objectives which includes increasing “resistance of the landscape to fire” and “reduce both natural and activity based fuel hazards”. In some sites, the fuel loading may be greater where limiting hardwood cutting to 4 inches may not accomplish these goals and would not reduce ladder fuels enough to substantially reduce a wildfire’s potential to carry to stand crowns. The prescriptions are developed to balance the objectives for other resources such as wildlife and the natural vegetative components of the stand through the interdisciplinary process. The prescription would retain mature hardwoods. For more details about the proposed Hazardous Fuel Reduction treatments see Section 2.2.1 and Appendix 4 (Silvicultural Prescription).

Comment 6 (Klamath Siskiyou Wildlands Center): The commenter requests retention of Section 20 in its current baseline condition.

BLM Response: The BLM 40 acre parcel within Section 20 is designated as forest timber base land. Its Land Use Allocation is the Southern General Forest Management Area with expected availability as a timber resource. The BLM 40-acre parcel is timber production Matrix land and has been previously logged. Commercial harvesting occurred on 29 acres in 1976 and 8 acres in 1993. The Variable Density Thinning treatment proposed by the BLM utilizes untreated skips and gaps, thins other areas, leaves clusters of trees, and maintains a portion of the unit at 60% crown closure. This variable density treatment would result in a mosaic of stand conditions that would resemble the natural development of forested stands. The treatment is designed to model patterns of disturbance and mortality that would occur under a natural disturbance regime that involves the death of individuals or small groups of trees within otherwise intact stands (Franklin et al., 2007). The approach to variable density thinning uses natural disturbances and stand development processes as a model to incorporate silvicultural prescriptions. The approach is not intended to be a destructive practice far removed from the stand development processes that the stand would undergo under a natural disturbance regime.

Comment 7 (Klamath Siskiyou Wildlands Center and Wood): Conduct manual rather than machine piling of activity slash. Do not utilize bulldozers to build project fire lines.

The commenter is concerned about the proposed tractor/machine piling on soil resources without specific locations identified.

BLM Response: Since the release of the EA, the activity of machine piling will not occur under the East West Junction Timber Sale to reduce impacts to soils as the practice of machine piling is

not be limited to designated skid trails. Please note this change described in the body of the Decision document for this sale.

Comment 8 (Gregory Bennett): Requests the BLM to convert Variable Density Thinning and Variable [Retention] Harvest units to Hazardous Fuel Reduction (HFR) to protect large trees and hardwood vegetation.

BLM Response: The Proposed Action aims to manage BLM Matrix commercial forestland for sustainable timber production: “produce a sustainable supply of timber and other forest commodities to provide jobs and contribute to community stability” (USDI 1995). The Medford District Resource Management Plan (USDI 1995 p.193) provides guidance to retain a minimum of two large hardwoods, if present, per acre. Hardwoods are not prescribed for removal. No hardwoods are designed to be cut unless OSHA standards require it or otherwise inadvertently affected. The BLM would leave an average of 7 large hardwoods per acre per unit. Converting these units to HFR treatments only would be too limiting to achieve objectives for density management.

Comment 9 (Gordon Lyford): The commenter interprets VDT, VRH, DM, PCT, and CT as only having subjective differences. Lyford thought VDT and VRH treatments are widely different treatments, and doesn’t understand why one image (EA, p.22) is representing both prescriptions. The commenter believes these two treatments differ in that one cuts mostly big trees, and the other cuts mostly small and medium trees.

Lyford would like small trees and manzanita be thinned with the HFR treatment applied across all of the project lands as an EA Alternative 4. The comment states since the Rough and Ready Mill is nearby perhaps the cuttings could be transported to the mill’s cogeneration plant as biomass and burned.

BLM Response: The original prescription developed for the VRH unit retained 10 trees greater than 20 inches at diameter at breast height per acre. That proposal has been modified to retain 16-25 trees per acres greater than 20 inches at diameter at breast height. None of the proposals for the East West Junction Project are designed to cut and remove mostly big trees. Treatment types are defined by the silvicultural objectives the treatments are to accomplish. See EA, p. 19-24 for a full description of each of the forest treatment proposals.

Variable Density Thinning (VDT) – Treatment goals are based on ecological forestry principles to reduce ladder fuels and the risk of the loss of older trees from wildfire and competition while favoring retention of more fire and drought tolerant tree species (ponderosa pine, sugar pine, incense cedar). Removes mostly small and medium sized trees, but can include removal of some larger young trees. Older trees are defined as those at least 150 years of age.

Variable Retention Harvest (VRH) – Treatment goals are to substantially reduce the stand density to establish an understory conifer component. The oldest trees and 20-30% of stand

would be retained. Stand retention involves untreated portions of various sizes (20% of area). Ten percent of the stand would be retained as individual trees of strong dominants and trees generally older than 150 years including legacy trees amounting to 16-25 live green conifers per acre \geq 20 inches dbh. Natural opportunities that the stand offers would be utilized for leave patches (e.g. seeps, rock outcrops, hardwood groves, hiding cover, etc.). One stand in the Tanoak Series is identified for this prescription. Activity fuels would be treated. Low levels of tree planting (150-225 trees per acre) to the natural character of the plant community (namely, Douglas-fir, sugar pine, and ponderosa pine) would follow.

Commercial Thin (CT) treatments are proposed for Alternative 3 only, as these prescriptions were modified from VDT proposal of Alternative 2. For the CT prescription, canopy closure retention was increased to 60% for units with nesting roosting, and foraging habitat and to 40% for units with dispersal habitat, in order to maintain spotted owl habitat. Skips and gaps would be applied for CT, but would be limited to 0.25 acre incorporated into these prescriptions.

For Density Management commercial timber extraction may occur under this treatment however such material would be a by-product of the treatment and is not a driver for this treatment type. Cutting some commercial sized trees would enable larger trees to survive a wildfire that would otherwise not continue to develop and to create defendable space for pines, larger hardwoods and older conifers.

PCT treatments are focused on treating the understory to reduce densely patched stands. Exclusively thinning small trees and manzanita under a Hazardous Fuel Reduction treatment across *all* stands in the Project Area would not meet the purpose and need of this project which is to produce dry forest restoration. The project objectives include to reduce densely packed stands, to adequately reduce ladder fuels, to create a fire resilient stand that would reduce the risk of loss of older trees, and to create structural heterogeneity of dry forest ecosystems which is characteristic of late-successional forests, and the natural mosaic composition of southern Oregon forests where fire is a natural process of the landscape (Section 3.4.1 of the EA).

Hazardous Fuel Reduction was applied after reviewing stand data and evaluating stands in the field to determine where this treatment would meet project objectives considering stand conditions. The proximity to the Wildland Urban Interface and strategic fire suppression locations are additional factors that assist in unit prioritization.

Comment 10 (Gordon Lyford): The commenter is concerned that the BLM did not fully consider an increase in fire hazard and “loss of forest character through logging of large trees” adjacent to residential neighborhoods.

BLM Response: See response to Comment 2 regarding fire hazard, in summary the fire hazard would be reduced in 97% of the proposed treatments of the project through Variable Density Thinning, Commercial Thinning, Density Management, and Hazardous Fuel Reduction units (1,198 acres).

In regards to concerns about “loss of forest character”, it is important to note the majority of the

lands in the East West Junction Project are Oregon and California Railroad Revested Lands, which requires the Secretary of the Interior to manage O&C lands for permanent and rotational forest production. The BLM manages these lands under the direction of the Northwest Forest Plan and the Medford District Resource Management Plan, which strives to balance multiple uses on the landscape while providing timbered forest products. The money earned from timber coming off BLM managed lands helps to fund county schools.

Comment 11 (Gregory Bennett): Commenter is concerned about decrease in soil productivity and increase in soil compaction in treatment units.

BLM Response: The analysis for soil productivity and compaction is in Section 3.3.2.2 of the EA which states, “each action alternative that would result in an estimated 29.7 acres of soil compaction and displacement over new and existing footprints and would reduce soil productivity by an estimated 1.7% in the Project Area”.

Compaction/disturbance values for this project would be below the 5% productivity loss per unit and less than 12% compaction/disturbance associated with ground based harvest systems (BLM 1995, p. 166). Design of the project to meet established standards for soil productivity loss maintains desired soil productivity on BLM managed lands across the landscape (EA, p.71).

Comment 12 (Klamath Siskiyou Wildlands Center and Wood): Requests selection of Alternative 3 with reduced thinning intensity, reduced units and no prescribed logging of old growth trees > 32 inches diameter at breast height or > 150 years of age.

BLM Response: The Proposed Action integrates principles of ecological forestry which retains trees >150 years in age. Identifying and protecting trees >150 years of age will be implemented during tree marking. A tree by tree rating determined the age of a tree using the companion guide to Robert Van Pelt’s *Identifying Mature and Old Forests in Western Washington* (Van Pelt, 2008). This book was sent to the BLM project silviculturalist from Dr. Jerry Franklin on April 4, 2011 in response to a specific request for identifying trees over 150 years in age on Medford District BLM forestland. The inside front cover of the guide states: “The guide is intended as a tool for agency forestland managers and others interested in the complexities and ecological relationships that give rise to older forests.” The intent of the guide is to aid in the identification and protection of these unique forest structures.

Van Pelt, R. 2008. *Identifying Old Trees and Forests in Eastern Washington*. Washington State Department of Natural Resources, Olympia, WA. 166 p.

Comment 13 (Klamath Siskiyou Wildlands Center): The BLM provided the public with current stand conditions for units 9-12, 8-2, 8-3, and 5-9. Computer generated “treatments” indicated that substantial numbers of large trees/acres would be cut, including old growth trees >32 inches dbh that are likely over 150 years old. The cutting prescription generated for unit 9-12 would cut an estimated 9 large trees/acre (>20 inches dbh) of which 3 trees/acre would be 32-46 inches dbh (Photo 2). The cutting prescription modeled for unit 8-2 would cut an estimated 21 large trees/acre (>20 inches dbh) of which 4 trees/acre would be 32-38 inches dbh. The cutting

prescription modeled for unit 5-9 would cut an estimated 15 large trees/acre 20-30 inches dbh.

The intensity of large tree logging, especially the removal of substantial numbers of old growth trees, is not consistent with recent dry forest pilot project prescription at Pilot Joe; the RMP that directs management to minimize impacts on 150 year old trees; or with restoration of ecologically desirable stand structure; will directly inhibit attainment of the project objectives to utilize ecological forestry principles and reduce fire hazard, and is highly controversial with the public.

We recommend that silvicultural prescriptions increase removal of small trees so as to actually reduce stand density and fuel hazard as identified in the project’s purpose and need statement. We are not recommending a diameter limit for mature tree cutting because there are instances when cutting large trees would be ecologically desirable.

BLM Response: The figures noted by the commenter above is based on silvicultural computer modeling, which serves as a starting tool for further field investigation to develop the silvicultural prescription. This particular model does not capture within-stand variation and differentiation, nor does it depict vertical and horizontal diversity. Growth and yield models are designed for pure, or nearly pure, even aged stands of uniform composition. They are not designed for complex variable density prescriptions with skips and gaps or retention of specific tree ages, such as the 150 year old retentions to be applied to this project. As such, the numbers above are not a true reflection of the number of trees to cut for each diameter class. Reviewing the marking guide would better indicate the parameters for which trees would be cut, while the timber cruise information would show the final result of trees marked for cutting, before the timber sale is offered for sale.

In Section 2.2.1 of the EA, the description for prescription Variable Density Thinning includes: “Removes mostly small and medium sized trees, but can include removal of some larger young trees.” This application is consistent with the ecological forestry principles advocated by Norm Johnson and Jerry Franklin’s August 15, 2009 paper *Restoration of Federal Forests in the Pacific Northwest*. When describing forest conservation strategies in Dry Forests, Johnson and Franklin include a restoration approach that calls for the “removal of some larger young trees.” We define old trees as those over 150 years old. Instances where larger trees were removed included where they increased risk to older trees, to avoid uniform or heterogeneous distribution of forest structural elements, and to meet objectives of restoring spatial heterogeneity at the stand scale. Although the majority of tree removal would be mostly small and medium sized trees, restoration forestry is not entirely a ‘thin from below’.

Several trees cored with an increment borer were used to calibrate tree ages with the Van Pelt guide. Douglas-fir increment core samples showed the following ages in relation to their diameter at breast height:

Unit	Species	Diameter	Age
8-2	Douglas-fir	27.6	74
8-2	Douglas-fir	30.9	99

8-2	Douglas-fir	31.3	118
8-2	Douglas-fir	28.7	81
8-2	Douglas-fir	25.9	117
9-12	Douglas-fir	29.6	109
9-12	Douglas-fir	27.7	96
9-12	Douglas-fir	29.0	110
9-12	Douglas-fir	26.1	111
9-12	Douglas-fir	36.1	142
9-12	Douglas-fir	26.3	114
9-12	Douglas-fir	31.0	120
9-12	Douglas-fir	35.7	118
5-9	Douglas-fir	20.1	132
5-9	Douglas-fir	28.4	122
5-9	Douglas-fir	24.8	136
5-9	Douglas-fir	22.2	145

Comment 14 (Klamath Siskiyou Wildlands Center): The EA Fails to Fully Disclose the Intensity of Thinning Impacts. The EA Fails to Disclose Trees/Acre in Relevant Size Classes for the No Action Baseline and Reduced Tree Densities in the Two Action Alternatives.

“Significantly” as used in NEPA requires consideration of both context and intensity (40CFR part 1508.27). The EA fails to adequately disclose the intensity of logging proposals with quantification of parameters or descriptions that would provide clear differences among the alternatives. Scientific descriptions of forests typically include the seral stage, size and number of trees/acre, dominant tree species, basal area, canopy cover, and snag densities (BLM stand data, Manning et al. 2011, Firemon plot data). While canopy cover is informative, we recommend that BLM estimate the number and size of trees present in units (No Action baseline) and the number of trees/acre that would be removed in the two action alternatives. Decreased trees per acre would provide a clear quantitative comparison of the vegetative effects of the alternative that affect human uses of the forest (e.g. nature based recreation by members of our organizations). Rather than quantify existing forest conditions, the No Action Alternative is generally used by the BLM in this EA as a platform to advocate for logging activities. Courts have repeatedly rejected this approach to NEPA.

Our experience of the forest environment is adversely affected when large trees are cut and this impact must be disclosed (CFR part 1508.14 “Human Environment” shall be interpreted comprehensively to include the natural and physical environment *and the relationship of people with that environment.*” emphasis added). At a minimum we request that the BLM provide the estimated number of live trees per acre for No Action, Alternative 2 and Alternative 3 in the following suggested dbh size classes: 8-20 inches, 20-32 inches and >32 inches. Analysis would also benefit from reporting snags/acre >14 dbh. These size classes are relevant ecologically, legally, economically, and recreationally. The public and our members place high recreational value on forests with an intact canopy cover comprised of larger overstory trees.

BLM Response: The information disclosed in an EA document must be adequate for the decision maker to make an informed decision. The further details requested would not further contribute to the decision making process. The Council of Environmental Quality (CEQ) (40 CFR Parts 1500-1508) states that “Ultimately, of course, it is not better documents but better decisions that count. NEPA’s process is not to generate paperwork-even excellent paperwork-

but to foster excellent action” (40 CFR § 1500.1 (c)). CEQ clearly states in the same paragraph that “The NEPA process is intended to help public officials make decisions that are based on understanding of environmental consequences...”

Prescriptions are written for tree markers to strive to leave trees older than 150 years in age among other specifications. The treatments are a thinning to a basal area/acre with the intent to leave a forest behind after harvesting. Outside of the EA, the next best determination is to view the ground work that has been done in marking stands for treatment.

The information requested requires intensive dissection of growth and yield reports by species and diameter class which is not practical or financially feasible for this office. For example, the growth and yield reports show breakdowns in diameter classes, but there is no ascertaining what species are represented in each class. Nor will a model accurately project the exact number of trees left per acre after a complex variable density thinning prescription with skips and gaps is applied. A growth and yield model cannot key out a 150 year old tree and retain it from harvest. Only on the ground professionals can make that field determination. If the BLM knew as a certainty that the numbers requested were absolute fact, this may be time worth the taxpayers’ expense. However, most if not all natural resource professionals and scientific academia understand that models provide general information to be further investigated in the field to ensure appropriate application. Even the projections provided by the BLM are not perfectly reflective of how timber stands are marked. The BLM may provide final figures, but those should be viewed as estimations only and is advised not to read more into them.

Appendix 2 and 10 of the EA evaluated the potential impacts to recreation use of the area and concluded the proposed activities would meet the management guidelines of the Medford District RMP including for Visual Resource Management Class II and III designated lands.

Comment 15 (Klamath Siskiyou Wildlands Center and Wood): The commenter believes the visual representations of proposed thinning in the EA are not representative of what is being proposed. KS Wild states that most if **not** all the stands proposed for Variable Density Thinning are natural stands with uneven aged characteristics and clumping rather even-aged young planted stands as the illustration on p.21 shows.

KS Wild states the illustration on p.22 of the EA does not represent Variable Retention Harvest and did not find it in GTR NRS-19, 2007. Rather KS Wild states Photo 1 from GTR NRS-19 (Franklin et al. 2007:4) is more illustrative of the 66 ft spacing prescribed for unit 9-12 (EA, p.170). KS Wild further states, “Structural Retention mimics a patchy clearcut with remnants of former continuous forest and average canopy reduced to below 40% (Franklin et al. 2007:27; Figure 25).” The commenter believes the caption describing proposed activities for Density Management on p. 24 is not representative of the intensity of logging proposed. KS Wild states the EA fails to provide illustrations that allow the reader to conceive of the canopy reductions being proposed.

The commenter states Unit 9-12 should be managed similar to nearby units 3-3/3-4 because the context (as per NEPA) is the same, each is bordered by several residences, and has high densities of encroaching small conifers. “Reducing fire hazard from small conifer trees and ground fuels

from along the northern border would seem to be the highest priority for Unit 9-12. We recommend pre-commercial thinning of dense conifer patches and radial thinning of small conifers/shrubs adjacent legacy trees, large deciduous oaks, and large pines...Most if not all large fire resistant trees would be retained. Requests all tanoak over 4 inches diameter be retained”.

“We strongly object to the Variable Retention Harvest described on p. 198 (Alternative 2). The 66 ft spacing for the largest trees would result in many large fire resistant trees being removed and replaced with flammable small conifer trees, shrubs, and herbaceous plants which will inhibit attainment of several of the project objectives. Stand data provided to us by the BLM indicate this unit has an estimated 25 large trees per acre, ranging from 20”dbh to over 52”dbh. This density of large trees currently meets the SGFMA standard of maintaining 16-25 large trees/acre. The proposed Variable Retention harvest would cut 9 large trees per acre including 2.4 trees/acre that exceed 32 inches dbh (see 116673 Post Cut Per Acre Stand Table at 122 Years For All Species). We contend that the proposed removal of 9 large trees/acre to the minimum large tree standard for SGFMA appears arbitrary and contrary to the intent of the SGFMA large tree standard.

Stand data indicates that unit 9-12 has 8 trees per acre that exceed 32 inches dbh. This means the stand has achieved the live tree component for classification as old growth (Franklin and Spies 1986:80). Trees over 32 inches dbh are likely over 150 years old must be retained consistent with RMP direction for SGFMA. Logging these larger trees would be contrary to the RMP:192 that says to manage for minimal loss of intact forest habitat over 150 years of age.

Stand data for unit 9-12 indicates Relative Density Index is 0.624. We see no pressing ecological need to log large trees to reduce it to 0.383. A reasonable reduction of Relative Density can be attained with logging *mostly* small trees. We cannot make informed and substantive comments if we are not provided numeric estimates of the size and number of trees per acre that would be logged”.

KS Wild states Tables 3-6, 3-7, 3-8, 3-9 do not provide a side-by-side comparison of alternatives that is helpful in evaluating the differences between the two action alternatives. “One can study these tables intensively and not find any tangible differences between the alternatives because the intensity of logging is not numerically reported”.

BLM Response: The concepts conveyed in GTR NRS-19 and the photos depicted therein are not intended to provide absolute rigid models. The closing sentences of this document state:

“Our intent is not to provide a cookbook for developing such systems nor to provide comprehensive silvicultural prescriptions. This is an impossible task given the diversity of ecosystems, objectives, and conditions that must be considered. Moreover, an attempt to do so would be contrary to the creative intent of silviculture as a discipline. Rather, we hope that by distilling key concepts into practical guidelines we can facilitate the development of practices that are adaptable to meet the varied needs and conditions in a wide array of forest ecosystems.” (GTR NRS-19 Franklin et al. 2007).

The photo used in page 21 of the EA was used to explain some fundamental concepts of tree competition and forest development and not intended to depict an exact before/after

representation of the stand conditions. An explanation followed that intended to convey to the reader that reduced competition and improved vigor can be achieved, at varying degrees, by traditional forest practices of evenly spaced thinning, as well as through utilizing ecological forestry principles which the BLM is proposing. These principles more fully incorporate the specific ecological conditions created by natural disturbances and stand development into silvicultural prescriptions. Its intent was to convey the message of thinning to improve vigor and growth, while also adding the elements of structural heterogeneity and without compromising existing structural heterogeneity. In the Introduction of GTR NRS-19 the statement is made that elaborates this point:

“The implementation and expression of ecological forestry concepts will vary in practice based upon specific goals for management, characteristics of tree species and ecosystems, variation in starting conditions of stands and sites, and landscape context. However, our premise in this report is that some fundamental principles for ecological forestry transcend systems, conditions, objectives and context, and can be applied in varying degrees in virtually all setting where melding of ecological and economic goals is an objective.”

The GTR NRS-19 document acknowledges that land management involves the managers balancing ecological and economic objectives within what they describe as “the real-world constraints of managing for wood production”; GTR NRS-19 continues: “In this case, the objective is to devise innovative ways to incorporate the three-legged stool of ecological forestry into silvicultural prescriptions, while still maintaining some level of timber production as another objective.” Unit 3-3 is proposed for Hazardous Fuel Reduction in the EA, not thinning.

Unit 9-12 was commercially thinned in 1997 and currently exhibits a simplified structure. Now the stand is ready a prescription that would promote multi-layer structural development. Application of another intermediate commercial thin would not meet these resource objectives.

The BLM manages O&C land in a checkerboard ownership pattern which is interspersed with private and other ownerships across the landscape. These same lands are designated as Matrix O&C commercial forestland. One of the objectives on Matrix commercial forestland is to “produce a sustainable supply of timber and other forest commodities to provide jobs and contribute to community stability” (USDI 1995). The BLM is progressively melding ecological and economic goals as objectives.

Tables 3-6 through Table 3-9 are intended to be a quick visual summary of the effects discussed from Section 3.4.2.

Comment 16 (Klamath Siskiyou Wildlands Center): Gaps appear to be inappropriately placed among older stands of trees. Apparently during a November 18, 2012 public field trip the BLM identified a specific grove of trees for gap creation. This stand is an even-aged grove of mature Douglas-fir. We recommend that this gap and others of similar aged trees and composition not be targeted for gaps. We recommend that gaps be created in the youngest aged portions of units that are often associated with relatively recent fir encroachment into white oak areas or sparsely forested ridges. We recommend that whenever possible gaps be created in

adjacent young aged plantations immediately adjacent to mature stands.

Unit 29-8 is adjacent to a 30-year-old plantation where gaps could be created that would have little adverse ecological impact. Based on what we view as poor judgment in gap site selection for Unit 29-8, we want to visit each unit and inspect areas where BLM intends to create gaps prior to decisions. The decision needs to provide some guidelines about gap selection.

BLM Response: See response to comment 4 regarding sample unit marking review.

Drs. Norm Johnson and Jerry Franklin recommended the use of gaps up to 2 acres in size. The BLM determined that 1 acre gap sizes were sufficient for this project. Therefore, the BLM thoughtfully reduced the intensity of logging in gaps compared to the full extent of Johnson and Franklin's approach. The BLM utilizes gaps as part of an ecological forestry approach that creates openings for specific purposes of releasing, nurturing, and protecting older legacy tree structure within the gap. The gaps are not meant to be 100% openings, but rather would continue to leave some structure within, particularly legacy ponderosa pine, incense cedar, or sugar pine trees that are losing prominence on the landscape. In addition, large hardwoods are not designed for removal in any harvest unit. Gaps surrounding these unique features would provide protection and a suitable site for establishing seedlings. Ponderosa pine, particularly, are favored as leave trees within gaps as explained in the Species Composition portion of Section 3.4.1 in the EA:

“Due to the success of fire suppression over the last 70 years, overall cover of ponderosa pine has decreased while overall cover of tanoak and tanoak sites has increased, subsequently enhancing tanoak's competitive status increasing its absolute cover and relative density (USDI 2003, Atzet and Wheeler 1982, Atzet et al. 1996).

Fire suppression has greatly reduced a major disturbance agent commonplace to and relative to southwest Oregon forests. GTR NSR-19 describes disturbance scale:

“Disturbances are scaled to those involving individuals, to groups of overstory trees, and, finally to large-scale mortality events, commonly described as stand-replacement disturbances . . . Tree-scale and gap-scale mortality events leave the forest largely intact such that the forest matrix still dominates the post-disturbance environment . . . tend to create or perpetuate stand structural heterogeneity, although in greater degrees with gap- scale events.”

The report also describes disturbance agents as important dimensions of tree-regenerating disturbances which provide cohorts of tree seedlings and saplings. Ponderosa pine requires sunlight to regenerate and establish on sites. The release of legacy pine would not only protect the individual tree but also stimulate its seed production and proliferation; the additional growing space would provide a suitable sunlit seedbed for pine to establish. Although pine legacy tree structure would be occupying some of the gap space, the needle arrangement on a pine tree makes it possible for the species to regenerate itself under its own canopy. Pine may also be planted in such openings to supplement natural regeneration. All gaps have been GPS traversed and tree planting recommendations within these gaps, together with appropriate species mix,

were recorded in BLM's Micro*Storms inventory database.

Comment 17 (Klamath Siskiyou Wildlands Center): Unit 8-2: We recommend alternative 3 treatment: CT/PCT to retain > 60% canopy. Stand data provided to KS Wild indicates that CT to 65% would reduce basal area of Douglas fir from 354 sq. ft. to 188 sq. ft. This provides for about a 50% reduction in basal area- however, much of the basal area reduction comes from the removal of large trees. Logging would remove 21 trees/acre >20 inches dbh; 4 trees/acre would be 32-38 inches dbh. Stand data indicates that Unit 8-2 meets at least one of the criteria/standard for "old growth" due to 14 trees/acre that are 32-46 inches dbh. We recommend that most if not all fire resistant "old growth" trees > 32 inches dbh be retained and more smaller, fire-prone trees be removed in the 4-14 inches diameter classes (see RMP retention for 150 year old trees; Franklin and Spies 1986 discussed for unit 9-12). Post logging stand data indicates that post treatment would retain 128 trees per acre in the 4-14 inches diameter bracket (Photo 4). We recommend more intensive commercial logging of these small fire prone trees and pre-commercial thinning/fuels treatment to remove most of the non-commercial trees in order to attain project objectives.

Current modeling and anticipated logging of old growth trees is a significant impact due to controversy about logging old growth trees and the irreplaceable nature of losing 150 + year old habitat. The EA fails to disclose the intensity of old growth tree logging in unit 8-2 and others. The 1995 programmatic RMP impact statement does not exempt the BLM from the need to disclose significant impacts in project level actions.

Unit 8-2 had a relatively strong black oak component. Many of the larger black oaks are dead or dying. Nevertheless, we recommend that management of this unit emphasize releasing the larger live black oaks from encroaching Douglas-fir (Photo 3). The EA fails to adequately identify the need to culture larger black oaks and identify special techniques to retain large black oak snags. In general this would entail logging Douglas-fir trees that are smaller in diameter than the black oak being released. We also recommend that encroaching Douglas-fir trees tangled in the crown of large black oaks be identified for retention and subsequent snag creation. This is necessary to protect the black oak from indiscriminant felling to remove the commercially valuable Douglas-fir. We also recommend that all large (>15 inches dbh) black oak snags be marked for retention as wildlife "trees" which may also require marking adjacent firs for retention and subsequent snag creation.

Stand data and the EA fail to estimate the number of large snags/acre in this unit. We recommend that Firemon plot(s) be established to provide for adequate estimates of large snags/acre. We recommend that BLM monitor this unit for post-logging snag loss/retention. We would provide field assistance to BLM staff to monitor large snags in unit 8-2 (assuming that unit 8-2 is commercially logged).

BLM Response: Please see response to comment 14 (second paragraph) regarding the application of silvicultural modeling and that further field investigation is applied to develop the silvicultural prescriptions for each unit. It is important to note that the modeling described in response to comment 14 does not account for 150 year old tree retention, and as such further

field work is done to translate what is applicable from the modeling. The information noted from the commenter about tree diameter sizes is based on this approximated data and is not 100% true to what would be cut.

The project would meet the management guidelines as outlined in the Medford District RMP (see PDFs in Section 2.3.4.1 of the EA).

Comment 18 (part a) - Unit 17-10: The western portions of this unit above and below Road 39-17-17.3 have steep-sloped ravelly areas dominated by canyon live oak and old growth Douglas-fir (Photo 6). We recommend dropping these anomalies from the unit due to poor soil conditions and general lack of small trees suitable for thinning. A stream channel is located in the western portion of the unit (NWNW Sec 17). This stream channel needs at least a 100 ft no cut Ecological Protection Zone due to steep side slopes prone to erosion. Much of the southern portion of unit (west of Road 39-7-17) is a young dense forest that would benefit from thinning. Deciduous oaks and tree form tanoak over 4 inches dbh need to be retained. We object to 45 ft spacing of oaks. These broad-leaved trees need to be retained as explained for unit 9-12. We also recommend retention of tree form madrone >4 inches dbh within 25-50 ft of roads because these sunny road-side exposures are likely to result in very healthy trees with annual berry production.

BLM Response: Unit 17-10 is prescribed as a Density Management/Hazardous Fuels Reduction treatment that combines both commercial thinning and understory reduction. The treatment was selected because the BLM recognizes that the stand needs density control with minor amounts of commercial sized timber extraction. The majority of work that would be performed in this unit is the reduction of dense ladder fuels to mitigate the fire hazard. The spacing of hardwoods would be determined on a case by case basis and Unit 17-10 is not an exception. The range of spacing for hardwoods was selected to cover the wide variety of conditions present in the Project Area. The removal of commercial sized trees would be minimal.

Comment 18 (part b) - Unit 20-1: This unit is within an isolated BLM 40 acre parcel. Red marking on some of the larger trees suggests previous BLM timber sale planning would have degraded the ecological integrity of this stand with excessive cutting. The forest in this 40 acre patch offers an outstanding nature based recreational experience because it appears to have never been logged, has a desirable canopy of large trees of several species, very little understory, and offers superior solitude (Photo 7). We recommend no treatment for this unit and adjacent /Units 20-4, 20-3 and 20-2. The location of the proposed temporary road construction could not be identified in the field and we question its need. R. Nawa could not locate proposed Riparian Reserve logging (EA 32). Please provide precise mapping of Riparian Reserves. We suggest retaining the ecological and recreational values of this uniquely isolated 40 acre forest.

BLM Response: The BLM 40 acre parcel is designated as Southern General Forest Management Area (SGFMA) Matrix land under the Northwest Forest Plan. Matrix lands have the primary objective of producing a sustainable supply of timber. This 40-acre parcel had 29

acres logged in 1976 and 8 acres in 1993. Unit 20-1 is 3.5 miles behind a BLM locked gate and its only access is from BLM road #39-7-21.1. The last mile of road requires four wheel drive or ATV to access to the BLM parcel. This unit is not accessible and does not represent superior recreation opportunities.

The Variable Density Thinning treatment proposed by the BLM utilizes untreated skips and gaps, thins other areas, leaves clusters of trees, and maintains a portion of the unit at 60% crown closure. This Variable Density Treatment would result in a mosaic of stand conditions that would resemble the natural development of forested stands. The treatment is designed to model patterns of disturbance and mortality that would occur under a natural disturbance regime that involves the death of individuals or small groups of trees within otherwise intact stands (Franklin et al. 2007). The approach to Variable Density Thinning uses natural disturbances and stand development processes as a model to incorporate silvicultural prescriptions.

The temporary route re-construction proposed for Unit 20-1 was not flagged in the field as this particular route is to be located on the only ridge present in the area, so it was not necessary to flag this route at that point in the planning process. This route is a “swing” road which is used to swing logs up to a separate road used for hauling the logs out.

Comment 18 (part c) - Unit 21-6: This low elevation unit has excessive Douglas-fir encroachment due to fire suppression. We recommend that thinning focus on removing Douglas-fir (radial thinning) to directly benefit specific larger pines and large deciduous oaks. Larger trees are clumped. We recommend that large tree co-dominants be retained (Photo 8). Due to encroachment there are many large snags in this unit. We recommend that snags be monitored in this unit and a special effort be made to retain larger snags by buffering them from logging. A severe infestation of scotch broom is along the road bordering this unit. Treatments will require follow up to prevent scotch broom expansion into the unit.

BLM Response: The prescription for this unit matches the recommendation made by the commenter. The BLM is aware of the scotch broom presence along the 39-7-21.1 road which borders Unit 21-6. The BLM shares the same concern of controlling noxious weeds along this route and in our forests. Some noxious weed sites have already received treatment in 2011 under Medford District’s *Integrated Weed Management Plan and Environmental Assessment OR-110-98-14*. Post treatment assessment surveys on this and any other unit would reveal the presence of further site treatments.

Comment 18 (part d) - Units 17-2, 17-1D, 17-1: We recommend that fuels treatments be limited to the first 50-200 ft from roads adjacent the units. Treatment would be similar to Deer Willy and Cheney Slate decision. Unit 17-1 has talus/rocky ravelly soils with tan oak/canyon live oak/hazel understory (Photo 10). The overstory is suppressing the understory with little or no threat from ladder fuels. The higher elevation moist units in section 17 do not appear to be suffering from fir encroachment due to fire suppression. These units are several miles from any residences. If the BLM nevertheless elects to treat these units, we recommend a 4-inch diameter limit on all oak species with pruning to prevent fire reaching the crowns. Del Norte salamanders are likely present in talus areas and would be adversely affected by fuels treatment.

BLM Response: These units are located along a strategic ridgeline, between two road systems, and adjacent to private ownership. Treating the entire units increases suppression capabilities, and creates strategic holding points for fire suppression personnel. See response to Comment 5 above regarding a 4 inch diameter cut limit on oak species.

Units 17-2, 17-1D, and 17-1 are in the Matrix land use allocation with expected availability for conifer commercial growth and yield. Stand exam field surveys revealed that the proportion of noncommercial hardwoods outweighs commercial conifers (overall, 55% hardwoods to 45% conifers). The growing space is occupied mostly in the 0-10 inch size classes. Diameters over 8 inches dbh are considered commercial sized trees; therefore, the size limit for understory reduction is 8 inches. The species proportion for trees less than 8 inches diameter proportion currently shows 61% hardwoods to 39% conifers which does not meet our resource objectives. Any further understory diameter limits would conflict with resource management objectives. Hardwoods would be left within the specified range not to exceed 45 ft spacing. In other words, a minimum of 22 hardwoods per acre would still be retained to satisfy biological diversity goals while still satisfying timber productivity objectives. There are currently 73 hardwoods per acre over 8 inches dbh, none of which would be cut with the current diameter limit of 8 inches.

The 1995 Medford District RMP specifies leaving a minimum of two large hardwoods per acre (p.193). There are currently 22 large hardwoods per acre which would all be left and surpasses the required 2. A diameter limit of 4 inches for hardwoods while slashing conifers up to 8 inches would only increase the proportion of hardwoods, which would continue to move this stand outside of its ability to produce a stand for timber production. Favoring the promotion of conifers in the understory would satisfy the land use objectives of providing expected commercial availability in the long term. Throughout this project, the silviculturist and fuels specialists have and will continue to work together on a unit by unit basis to determine the best appropriate spacing for the management objective. In this case the objective on commercial forestland is to shift the disproportional representation from hardwoods to conifers.

Del Norte salamanders are not listed as Sensitive or Strategic species in Final State Director's Special Status Species List. There are no known sites East of I-5 for the Del Norte salamander; therefore, there are no anticipated impacts to this species.

Comment 18 (part e) - Unit 8-3: We recommend retention of all oak species > 4 inches dbh. Pruning is recommended for low growing branches of evergreen oaks, especially along roads and openings. We recommend cutting encroaching Douglas-fir to release sunny exposure to deciduous oaks. Retain tree form madrone >4 inches dbh along first 20-40 ft of roads.

BLM Response: Unit 8-3 is prescribed as Hazardous Fuels Reduction with a diameter limit of 8 inches. In this unit or in any given unit, leaving an 8 inch diameter limit for hardwoods, even at the widest spacing of 45 feet, would still retain 22 hardwoods per acre. The 1995 Medford District RMP requires leaving a minimum of two large hardwoods per acre for biological diversity. In this unit there are more than 5 large hardwoods per acre from 16 to 33 inches in diameter and, with an 8 inch diameter limit, left uncut. Pruning often occurs along roadsides in combination with understory thinning.

Comment 18 (part f) - Units 7S-6a, 7S-6, 7S-9, 7S-2, 7S-3: We recommend that these units not be treated because of threat of spreading *Alyssum* and lack of ecological justification (Duren and Muir 2010). The EA discussion on p. 147 fails to assess the site-specific nature of the risk of spreading *Alyssum* as explained on the November 29 field trip by Gordon Lyford and your botany staff. If you do treat these units we recommend limiting treatment to the first 50-200 ft along western road access as discussed during November 29 field trip with retention of all deciduous oaks and madrones >4 inches DBH. We recommend radial thinning to release oaks within the units and thinning of small pines. We recommend retention of interior shrub patches (i.e. chaparral) because there is no ecological benefit from shrub cutting (Duren and Muir 2010). Woodrats inhabit unit 7S-2 and are likely living in other units. Their nest sites need to be buffered. These units are not adjacent any residence or valuable timber resource. The proximity of these units adjacent Rough and Ready ACEC must be considered with impact assessment as per NEPA. 40CFR part 1508(b) (3) states “Unique characteristics of the geographic area such as *proximity* to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.” Emphasis added. The dismissal of impacts to Rough and Ready ACEC on p.144 is disappointing. We recommend management that is consistent with management of the ACEC because recreational values would be harmed by fuels treatment that destroys the current natural appearance of vegetation adjacent the ACEC (i.e. aesthetics.)

BLM Response: There have been no observations of *Alyssum murale* and *Alyssum corsicum* within activity units. Proposals to reduce the spread of yellowtuft are important, but it is outside the scope of this EA. The BLM as a pivotal member of the *Alyssum* Steering committee, which “is a larger concerted effort with interagencies, local government, and organizations for the eradication of *Alyssum corsicum*”, (EA, p.141). (*Alyssum murale* was not mentioned in that statement as it was inadvertently left out). BLM has been actively participating in efforts to thwart yellowtuft since 2007.

The units in Section 7 are appropriate for Density Management and Hazardous Fuel Reduction. The purpose for entering these units is to reduce stand densities that have excluded natural thinning mechanisms from an aggressive fire suppression policy. Allowing sites such as these to go undisturbed for prolonged periods inhibits meeting long term timber production management objectives.

The Units 7S-2, 7S-3, 7S-6, and 7S-9 are allocated for commercial matrix timber production. Commercial harvest treatments were removed from consideration early in the planning phase because of Deferred Timbered Management Areas (DTMA) under the 2008 Medford District RMP designations and other constraints. Unit 7S-9 was removed from treatment due to botany special plant status considerations. The land use allocation of SGFMA commercial timber productivity determines that timber resources are available and expected. This determination places the responsibility on land managers to ensure such stands are productive and not inhibited by overstocking. With up to 610 total trees per acre, 15% of trees in the overstory exhibit stem decay in Unit 7S-6, and up to 300 ft² of basal area/acre exists, all of which indicate overstocking. Douglas-fir, a species conducive to rapid fire spread, dominates the understory of these units which is a direct result of fire suppression. Removing fire from the landscape of a fire prone ecosystem also removed a tool that limited the establishment of Douglas-fir. In the lack of natural disturbances, these units were proposed for understory reduction to keep these sites

productive and vigorous.

Woodrats are not listed as Sensitive or Strategic species in Final State Director's Special Status Species List. However, habitat patches to benefit wildlife species, including woodrats would be retained, see Section 2.3.4.7 (Wildlife). "These patches would maintain habitat diversity, a variety of vegetative structure, and utilize unique landscape features in the Planning Area. Where present, landscape features, such as wildlife and botany buffers, hardwood areas, chinquapin patches, rocky outcrops, wet areas, and areas with large woodrat nests, would contribute to or serve as these leave areas. Approximately 10% or more of the planning area would be untreated. Untreated areas would be a minimum of ¼ to ½ acre in size". Woodrat populations are abundant in the Planning Area and local population levels are not anticipated to be impacted by the project.

Comment 19 (Haber): Adjacent landowner concerned about proposals in units 29-1, 29-8, 29-11, 29-17, and 29-4, including the increased trespassing from open space that would be created from VDT, CT, and PCT. Notes trespassing from hikers, bikers, and ATV users of the West Fork trail system. Concerned the gaps greater than ¼ acre in size every 6 to 7 acres will impact the visual landscape. He has a pond fed by a stream on BLM that is also in units (29-1, 29-8, and 29-11). He is concerned the logging will transfer sediment into their pond and clog their pump. States temporary routes proposed connect to roads on their property. Want adequate assurances for safe decommissioning – not "tank traps" to prevent further trespass. Wants a "19 ft" diameter sugar pine protected on their property by establishing a 100ft buffer from BLM activities. Concerned about use of 39-8-31. Requests slash be chipped as it is accumulated, rather than after the operation is finished, as he is concerned about an increase in fire hazard near his home.

BLM Response: There would be no hauling on BLM rd #39-8-31. There are specific Project Design Features (PFDs) (Section 2.3.2.9) to minimize increased use of OHVs, such as pulling vegetation over skid trails and blocking skid trails so they are un-usable.

Appendix 2 and 10 of the EA evaluated the potential impacts to Visual Resource Management Classes II & III located in proposed activity areas and concluded the project would meet the management guidelines of the Medford District RMP for these designations. In summary, it was determined after field review, these units were not visible from the Illinois State Park's trailhead due to the dense vegetation within the riparian zone and the geographic formations in sections 21 & 29. The Park's trailhead was selected as the Key Observation Point (KOP) per the guidance of the BLM Handbook 8431-1 Visual Contrast Rating (BLM 1986b).

See response to comment 2 (last paragraph) regarding the project's design to protect residential water sources. For the units in Section 29, no treatment would occur within 185 ft of intermittent, non-fish bearing streams and 370 ft for fish bearing streams.

All temporary routes would be decommissioned after harvest activities and activity slash is treated by blocking, ripping, waterbarring, and seeding/mulching after use.

Trees along BLM property boundaries are directionally felled into the BLM unit and away from

other adjacent property owners, which would protect the commenter's concern for protecting a "19 ft" diameter sugar pine on his property.

The specific treatment of slash is determined after harvesting is complete based on the assessment of fuel loading to best determine which method of treating slash would be appropriate for the site. The Variable Density Thinning proposed would reduce ladder fuels and the risk to older trees from wildfire and competition, while favoring more fire and drought tolerant tree species. Thinning treatments would reduce torching and crowning potential by increasing canopy base heights. There would be a short term increase in fire hazard from slash piled within units and at landing sites. These units could have a reduction in potential fire behavior following activity slash treatments (1-2 years).

Watershed Analysis

Comment 20 (Klamath Siskiyou Wildlands Center): States the BLM rejected their suggestion to consider watershed restoration (such as reducing road density) as asked for in their scoping comments and as recommended in the watershed analyses for the project area (EA, p.205). KS Wild states "road decommissioning in a salmon-bearing watershed that exceeds the NMFS road density threshold for proper functioning (in which the BLM is proposing addition road construction, landing construction and skid trails) can be accomplished and funded in many ways other than 'bartering'", such as done in the Skeleton Mountain/Evans Creek (Butte Falls RA) and Cottonwood (Ashland RA) decision documents call for decommissioning *more* roads than are being constructed to facilitate logging operations.

The commenter would like to the BLM to note that the Klamath BLM Wildgal Timber Sale decision calls for road decommissioning of existing BLM roads to aid aquatic values and implement the findings of the applicable watershed analysis. Please further note that two of these three projects are located in planning areas consisting of a checkerboard land ownership pattern.

BLM Response: Watershed Analysis is a procedure used to characterize conditions, processes and functions related to human, aquatic, riparian and terrestrial features within a watershed. Watershed Analysis is issue driven. Analysis teams of resource specialists identify and describe ecological processes of greatest concern in a particular "fifth field" watershed, and recommend restoration activities and conditions under which other management activities should occur. Watershed Analysis is not a decision making process. Rather, Watershed Analyses provides information and non-binding recommendations for agencies to establish the context for subsequent planning, project development, regulatory compliance and agency decisions (See Federal Guide for Watershed Analysis 1995 p. 1).

There are no roads available for decommissioning in the Project Area, at this time. The drainages noted above are dominated by non-BLM ownership, and the decommissioning of roads on private land is outside of the scope of this project. The BLM does not have the option to close these roads due to the reciprocal right-of-way agreements.

The Cottonwood Project Area falls within the Jenny Creek Fifth-field Watershed, which is a Tier 1 Key Watershed. Key watersheds have a management direction to have no net increase in road mileage. The East West Junction Project Planning Area is not located in a Key watershed.

Soils

Comment 21 (Klamath Siskiyou Wildlands Center): Please note that units 7N2, 7N3, 7N4 and 7N9 are all TPCC designated for Fragile Suitable Restricted Nutrient soils. The commenter is concerned about the proposed temporary route adjacent to identified TPCC soils (see EA page 63). The commenter is also concerned about the scale of cumulative effects analysis conducted for soils is on a “per harvest unit basis”. The commenter states this approach “largely ignores the existing significant cumulative impacts”.

BLM Response: The temporary route adjacent to identified TPCC soils is temporary re-construction of an existing road bed that can be clearly seen on 2011 aerial photography. The identified TPCC soils portion of this re-construction would occur on a total of up to 200 ft over an existing area of compacted and un-vegetated soil area. This existing road would be decommissioned upon completion of this action resulting in a net reduction of roads in this project area.

A cumulative effects analysis of soil erosion is done for route construction, road haul, road maintenance, skid trails, landings, yarding corridors, wildfire and prescribed fire reduction treatments (EA page 104-107). Soil compaction from federal and non-federal timber harvest actions and roads is discussed on a Planning Area scale on page 103-106 of the EA.

What the commenter is referring to as soil analysis on a “per harvest unit basis” is limited to the soil productivity analysis. This scale is appropriate for analyzing soil productivity as it is the affected area for soils to support tree establishment and growth on BLM managed land. The soil productivity is looking at the effects of compaction. Unlike many of the other affected resources for this project, effects to compaction and soil productivity are limited to the footprint of the activity.

Comment 22 (Wood): Believes BLM does “drive by” surveys to assess anticipated sediment production.

BLM Response: The BLM conducts field surveys on all proposed units for potential and existing sources of erosion, and for transport mechanisms such as skid trails, roads, or areas of instability that are in or near streams that could result in stream sedimentation. These surveys are available at the Grants Pass Interagency Office.

Roads

Comment 23 (form letter emails, Gregory Bennett, Wood): Concerned with proposal to build more roads as a part of the East West Junction Project. The commenter states there are too many logging roads in the Planning Area already.

Comment 24 (form letter emails): The BLM cannot afford to maintain or patrol its current

road system, off-road vehicle damage and illegal dumping is rampant in the area. The BLM needs to reduce, rather than increase, the number of logging roads to nowhere in this key watershed for salmon recovery.”

Comment 25 (form letter emails): Requests the project integrate road density reductions to contribute towards the recovery of coho salmon in Chapman Creek, Tycer Creek, and Kelly Creek.

BLM Response to comment 23-25: There are no roads available for decommissioning in the Project Area, at this time. The drainages noted above are dominated by non-BLM ownership, and the decommissioning of roads on private land is outside of the scope of this project. The BLM does not have the option to close these roads due to the reciprocal right-of-way agreements.

Comment 26 (Klamath Siskiyou Wildlands Center): Calculate road densities for Chapman Creek, Tycer Creek, and Kelly Creek.

BLM Response: Road Density was calculated for the Planning Area. It was found to be 4.3 mi/mi². Roaded Area was also calculated and found to be at 1.2%; which is below the 3-4% that research indicates measurable changes to peak flows may start to occur (EA pgs. 93-94). This project would not increase road density so further calculations of Road Density would not be useful for this analysis.

Comment 27 (Klamath Siskiyou Wildlands Center and Wood): Provide accurate maps of exact road locations for proposed temporary routes.

BLM Response: Placement of all temporary routes proposed for construction and reconstruction were determined in the field. These routes were GPSed, flagged, and entered into GIS which were displayed in the EA’s maps. For scoping, these routes are close representations of what is proposed on the ground, but may have not been GPSed at the time.

Comment 28 (Klamath Siskiyou Wildlands Center): We believe that the cumulative impacts of new road construction, landing construction, low water fords, and log haul in addition to the existing significant impacts of the BLM road system necessitate completion of an EIS.

BLM Response: The analysis showed that all impacts for this action were within the scope of what was expected for timber harvest actions under the RMP. It was concluded under this analysis that cumulatively (EA, p.108-109):

“Sediment from road maintenance and hauling associated with the East West Junction Project and the foreseeable BLM projects would not result in more than a 10% increase in stream turbidity, and would generally not measurably increase sediment deposits for more than 25 ft downstream of haul roads in streams without CCH. Given the magnitude, dispersed locations, extent, and short term nature of each of the water quality impacts that would occur during these projects, having multiple projects occur within the same watershed during the same time period would not cumulatively change the magnitude of impacts, or the extent that

was analyzed for the direct and indirect effects of each individual project. Logically it can be concluded that negligible increases in sediment from these activities would contribute to the overall amount of sediment entering streams from past, present, and future impacts within this sub-watershed, but sediment from these actions would be within ODEQ water quality standards and would not be distinguishable above baseline levels or have any effect on aquatic organisms.”

“Since implementation of these projects would only result in localized impacts to water quality that would not be distinguishable at the Planning Area or higher scale, actions within this HUC 5 watershed would be consistent with the Clean Water Act, State of Oregon water quality standards, and ACS objectives.”

Based on this conclusion, the impacts of temporary route construction and re-construction, landing construction, low water fords, and log haul, in addition to the existing impacts of the BLM road system do not reach the level that would require the completion of an EIS (EA, p.5-13).

Comment 29 (Klamath Siskiyou Wildlands Center): In our May 21, 2011 scoping comments KS Wild indicated that Trombulack and Frissell (2000) detailed some of the negative impacts of road construction and use on Terrestrial and Aquatic ecosystems. The BLM must address and avoid the harmful impacts detailed in this study.

BLM Response: Regarding the Trombulack and Fissel 2000 paper, BLM staff reviewed this paper and found it to focus on the effects of high use, open, permanent roads, and road construction. The roads associated with the East West Junction Project are distinct from those described in the paper in that they previously exist, are low use level roads, or are not hydrologically connected to any streams or wet areas (EA p. 182).

These routes are proposed on ridgelines or valley floors, except the temporary spur proposed into unit 29-1. The proposed roads on the valley floor are not hydrologically connected to any streams or wet areas and have negligible slopes and as such would not transport water or sediment to a stream or wet areas, or result in long-term productivity loss. The proposed construction and reconstruction would not cross dry draws or streams, except one for reconstruction that would cross the top of a dry draw (into unit 29-4). Field surveys have determined that the temp route reconstruction would be approximately 200 ft above the ephemeral channel, and the channel stays ephemeral on BLM managed land. The temp route reconstruction is also 1,500 ft above the ephemeral channel’s intersection with an irrigation ditch, so the temp route would not hydrologically connected to any intermittent or perennial streams.

These roads would result in a short term increase in onsite erosion, but would not result in any change to watershed hydrology or water quality. As such, Southern Oregon/Northern California Coast Coho Salmon though present in the East and West Forks of the Illinois River and Sucker Creek HUC 5 Watersheds would not be affected by this project. See Appendices 2 and 5 for further details.

These impacts are well below the level of significance.

Comment 30 (Klamath Siskiyou Wildlands Center): As evidenced by the recent Pilot Joe project decision document, the Medford BLM is in fact capable of preparing and implementing timber sale action alternatives that do not require new road construction.

BLM Response: The Pilot Joe Project was phase 1 of the overall Pilot Project for the Ashland Resource Area. Phase 2, Pilot Thompson, proposes temporary route construction. In order to cohesively manage the resources on the Medford District and to meet our resource management directives, additional access is needed to manage stands where there is currently no access. The design of one project cannot meet all the resource objectives of the entire Medford District.

Fire Hazard/Fire Resiliency

Comment 31 (Klamath Siskiyou Wildlands Center and Wood): Eliminate or reduce intensity of fuels treatment in south half of section 7 adjacent Rough and Ready ACEC.

BLM Response: These are lower priority units that are unlikely to be funded for treatment. As hazardous fuels funding decreases, only the highest priority units are receiving funding.

Comment 32 (form letter emails, Gregory Bennett, and Klamath Siskiyou Wildlands Center): Commenter is concerned that the creation of logging slash will increase fire hazard in the Wildland Urban Interface and that "variable retention" logging will remove large fire-resilient trees while increasing the number of small diameter trees that may burn at a higher fire intensity. The commenter requests the BLM "to develop a project that reduces (rather than increases) fire hazard".

BLM Response: See response to Comment 2 regarding fire hazard.

The treatment goals for Variable Retention Harvest are to substantially reduce the stand density to establish an understory conifer component. The oldest trees and 20-30% of stand would be retained. Stand retention involves untreated portions of various sizes (20% of area). Ten percent of the stand would be retained as individual trees of strong dominants and trees generally older than 150 years including legacy trees amounting to 16-25 live green conifers per acre \geq 20 inches dbh.

Landing and hand piles may present a short term increase in fire hazard because they have the potential to produce flame lengths that exceed the fire behavior threshold to the extent of increased spotting distance, until the piles are treated in 1-2 years.

Variable Density Thinning would aim to reduce stand basal area to remove mostly small and medium sized trees. Treatments would reduce ladder fuels and the risk to older trees from wildfire and competition, while favoring more fire and drought tolerant tree species. Thinning treatments would reduce torching and crowning potential by increasing canopy base heights. As stated in previous response to comments, fire hazard would be reduced in 97% of the proposed treatments of the project through Variable Density Thinning, Commercial Thinning, Density

Management, and Hazardous Fuel Reduction units (1,198 acres).

Comment 33 (Klamath Siskiyou Wildlands Center): We dispute the fire regimes (EA:54) and purported historical conditions used to justify heavy cutting of fir and planting of pine (e.g. unit 29-8, 29-1,29-9 and others). The EA failed to report that there is considerable scientific controversy about fire regimes and the usefulness of historical stand conditions for cutting prescriptions (Baker 2011, Odion and DeLaSalla 2011, Odion 2004).

BLM Response: Fire Regime Condition Class (FRCC) remains a measure of ecological departure used by the BLM to describe resource conditions. While this concept is most widely used in the fire, fuels, and forestry programs, it is also consistent with the concepts of land health. FRCC involves two pieces of information: the historic fire regime, and the condition class. LANDFIRE is a nationally consistent suite of geospatial products, which describe fuels, fire regimes, and vegetation. The fire regimes in East West Junction were determined using LANDFIRE data. Fire regime and fire regime condition class remain measures which can be used to describe ecological conditions and help to develop treatment areas. Identification of project areas within the community wildfire protection plan, and wildland urban interface are also considerations in project design and fuels treatments, which focus primarily on modifying fire behavior.

Riparian Reserves

Comment 34 (form letter emails, Klamath Siskiyou Wildlands Center, and Wood): Why is the BLM proposing to log stands that are protected as Riparian Reserves? Please implement the Forest Plan and protect these stream-side forests from logging activities.

BLM Response: There are three units proposed for Riparian Thinning. See Section 2.2 for a description of Riparian Thinning, “Riparian Reserves proposed for treatment would be selected based on field stream survey information and silvicultural review. Stands with conditions such as high conifer density and few canopy layers, stands with low species diversity and stands of low conifer and hardwood vigor would be high priorities for treatment. Treatments would occur in accordance with the following prescriptions to ensure protection of streams.

The specific EPZ distance per stream was developed using stated protection criteria from the Northwest Forest Plan² for individual elements of the Riparian Reserve including: bankfull and flood stage streambank stability; shade and temperature; surface erosion of streamside slopes; fluvial erosion of the stream channel; soil productivity; habitat for riparian-dependent species; the ability of streams to transmit damage downstream; the role of streams in the distribution of large wood to downstream fish bearing waters; and riparian microclimate. The Ecological Protection Width Needs chart is based on slope and rock type, and takes into account protection of streams from “surface erosion of streamside slopes, fluvial erosion of the stream channel, soil productivity, habitat for riparian-dependent species, the ability of streams to transmit damage downstream, and the role of streams in the distribution of large wood to downstream fish bearing waters”.

For all units, an Ecological Protection Zone (EPZ) ranging from 75-100 ft from the stream bankfull width (by slope distance) would be applied along streams to protect stream channel structure and water quality (Best Management Practice, RMP p.154)... Canopy cover would remain above 50%, and species diversity would be maintained. Activities in this area would be designed to ensure that habitat conditions for the wildlife and plant species that use this zone are not degraded.”

Comment 35 (Gregory Bennett and Wood): Commenter concerned about short increase in stream turbidity levels. Commenter finds proposal to haul on roads that ford hydrologically connected streams, and “industrial activities in riparian zones – including the construction of landings and mechanical piling of slash” troubling.

BLM Response: Timber haul on BLM road #39-8-29 would include fording a seasonally flowing creek at a stable low water crossing. As discussed in the EA (p.43), sediment production at this crossing would be minimal at this crossing as a result of the following; this crossing would occur across an intermittent stream that dry during the summer and thus fish are not present, has low and stable approaches and the stream bed is composed of firm gravel and large cobbles. According to the EPA (2005), the use of fords is best limited to areas where the stream bed has a firm rock or gravel bottom, where the approaches are both low and stable enough to support traffic, where fish are not present during low flow, and where the water depth is no more than 3 ft. It was concluded by the Fisheries Biologist during this analysis that use of this low water crossing during dry season would not result in any measurable impacts to fish or fish habitat.

There are a host of Project Design Features (PDFs) that direct the use and creation of landings to meet water quality standards (EA, p.43-44).

- Landings would be located in stable locations that minimize sediment delivery potential to streams (e.g. ridge tops, stable benches or flats, and gentle-to-moderate side-slopes), in areas with low risk for landslides, and outside jurisdictional wetlands.
- To the extent workable, avoid unstable headwalls, and steep channel-adjacent side slopes. (The East West Junction Timber Sale Decision modifies the PDF for “no new or expanded landings within one site potential tree of perennial streams and springs” to include intermittent streams and springs as well.
- To the greatest, extent practicable, avoid locating new landings in areas that can contribute eroded fines to dry draws and swales. If location cannot be avoided, ensure properly installed sediment control measures are placed and maintained, as needed, to keep eroded material on site.
- When utilizing existing landings that have the potential to release eroded fines into a stream or wet area, directly or via draws or ditchlines, ensure that silt fencing or other sediment control measures are properly placed and maintained during use and periods of non-use, to keep eroded material onsite.
- Divert road and landing runoff water away from headwalls, unstable areas, or stream channels.
- Landing piles would be burned, chipped, or otherwise removed from these sites within 18 months of unit harvest completion.

- Landings used during dry conditions within the wet season (generally October through May) that have the potential to release sedimentation into a stream or wet area via ditchlines or other means, would have silt fencing or other sediment control measures in place during periods of non-use if they are hydrologically connected to streams.

Mechanical piling of slash will not occur in the East West Junction Timber Sale, as it has been removed from the Selected Alternative as described in the Decision document above.

Comment 36 (Gregory Bennett): The commenter finds the proposal for a stream to haul logs on BLM road (#39-8-29) antithetical to the Aquatic Conservation Strategy to plan a timber sale that includes a haul road through a watercourse that is hydrologically connected to critical coho salmon habitat (West Fork Illinois River). The commenter is concerned about the crossing not being perpendicular but would “travel down the channel for a distance” and would include crossing a secondary channel from an upstream pond. These ponds support juvenile winter steelhead, foothill yellow-legged frogs, Pacific giant salamanders, western toads, and are in close proximity to ponds that support western pond turtles. The commenter states the riparian vegetation includes *Lomatium cookii* and *Limnanthes gracilis*.

The commenter requests the BLM to consider the cumulative effects from the landowner of the section of the proposed haul road from grazing and potential livestock entry into the riparian zone.

BLM Response: Contractually, use of the ford crossing would be limited to when the stream is dry. Therefore its use would not affect coho salmon. The presence of the ford would be in place regardless of the East West Junction Project, since it is the BLM’s responsibility to maintain this road under a road use agreement on private land used for private access.

Comment 37 (Klamath Siskiyou Wildlands Center): The commenter states the EA maps do not illustrate the precise location of Riparian Reserves Thinning. R. Nawa states he field surveyed these units for Riparian Reserve delineation on March 29, 2012, but found “[n]o field delineation of Riparian Reserve boundaries were found associated with these units”. The EA p. 75 indicates Riparian Reserve logging for unit 29-1, however, no riparian thinning is proposed for unit 29-1 in Table 2-1 (p. 33).

² Ecological Protection Width Needs chart (Northwest Forest Plan Record of Decision, p. B-15); **Forest Ecosystem Management Assessment Team (FEMAT)** 1993; and the Northwest Forest Plan Temperature Total Maximum Daily Load (TMDL) Implementation Strategies, U.S. Forest Service and BLM, 2005)

KS Wild states that they have consistently found forests in Riparian Reserves to be mature with many large conifer trees and some black oak >20 inches dbh. The commenter states the Riparian Reserve visited on the Nov.29 field trip is not in need of commercial logging, “because it already meets all ACS standards”. The NWFP prohibits logging in riparian reserves unless it is needed to meet ACS objectives. The EA fails to explain why logging as needed, and does not discuss whether natural processes (without logging) will lead to attainment of ACS objectives.

The commenter notes EA, p.70 as stating the BLM is proposing new landings within Riparian Reserves and believes this “will directly inhibit attainment of the objectives of the ACS”.

The commenter states “Page 107 of the EA indicates that proposed riparian reserve logging is designed to expedite late successional, multi-story, structurally diverse forest conditions. In fact, those forest conditions already exist in proposed riparian reserve logging units such that commercial logging (canopy removal, skid trails and log landings) within the riparian reserves is in no way needed. Additionally, please note that the EA fails to contain accurate or detailed information regarding the baseline current vegetative conditions of the riparian reserves proposed for logging”.

The commenter is concerned that if Riparian Reserves canopy closures are reduced to 50%, that they will not meet nesting, roosting, and foraging habitat requirements.

BLM Response: Stream surveys for the East West Junction Project were started in 2008. Field delineation for proposed Riparian Thinning can be done up to the time of unit layout.

The Medford District RMP states, “Apply silvicultural for riparian reserves to control stocking, reestablish and manage stands, and (to) acquire desired vegetation characteristics needed to attain Aquatic Conservation Strategy and riparian reserve objectives”.

Table 2-1 of Chapter 2 of the EA lists which units are proposed for Riparian Thinning and the Ecological Protection Zone distances established for each of these units. Though unit 29-1 was under consideration for Riparian Thinning during public scoping on the project and was visited on the November 29th field trip, it is no longer proposed for Riparian Thinning. The notation on p. 75 is a photo caption describing an example of stand conditions and outcomes where Riparian Thinning is proposed, the notation of unit 29-1 in this caption is carry over for when it was still a proposal for this unit. The Decision Document (enclosed) will clarify where Riparian Thinning can be implemented. Public maps illustrating proposed Riparian Thinning would not add additional clarity beyond the treatment tables due to the scale availability. It would be very difficult to distinguish the amount of feet difference between entry and no entry at that scale.

Regarding landing construction in Riparian Reserves, the EA states there would be no new or expanded landings within one site potential tree of perennial streams and springs. The proposed activities of this project including where landing use would occur within Riparian Reserves were evaluated for consistency with the Aquatic Conservation Strategy (ACS) objectives (Appendix 5) and the EA concluded the project would meet these objectives due to the application of Project Design Features. In summary, timber removal under the East West Junction Project

would result in a small increase in the upslope onsite erosion but would not contribute to the degradation of streambed conditions or aquatic habitat.

See Appendix 4 for a description about the current baseline vegetative condition in Riparian Reserves proposed for thinning. The silviculturalist and hydrologist worked together to determine where Riparian Thinning was needed.

To reiterate as stated in the EA, Riparian Thinning in units with nesting, roosting, and foraging (NRF) habitat would retain a 60% canopy closure. Thinning to 50% canopy for Riparian Thinning would be limited to units with canopy closure retentions of 40% in the uplands where the habitat type is dispersal or where spotted owl habitat is not present.

Comment 38 (Klamath Siskiyou Wildlands Center): The commenter interprets p. 109 of the EA as stating the BLM intends to only analyze and apply the ACS, the CWA and state water quality standards at the HUC 5 watershed scale. KS Wild further states, “[t]his approach is unlawful. The BLM has an affirmative duty to analyze and protect water quality at the site/project scale. This duty has been repeatedly confirmed by the 9th Circuit in caselaw concerning implementation of the ACS”.

BLM Response: The ACS analysis of the EA states (p. 205), “For the purposes of this analysis the watershed scale will be discussed in terms of site or project scale and will be at the HUC 6 and 7 watersheds. The landscape scale will be at the HUC 5 watershed level.”

Wildlife and Fisheries

Comment 39 (Gregory Bennett): Commenter concerned about the short-term (20-40 years) reduction of local bird populations that prefer mature forest habitat.

BLM Response: The EA (p.219) states:

“Untreated late-successional forest habitat would continue to provide adequate hiding cover, foraging, and nesting habitat within the Planning Area for birds that use older forests. Habitat for birds that use early seral habitat would increase as a result of Variable Retention Harvest treatments and small gap openings in Variable Density Thinning. Species, such as the Rufous Hummingbird, which use nectar producing plants would benefit from the increase in forbs and flowering shrubs that would occur post treatment.”

“There would be no complete removal of any type of potential bird habitat under Alternative 3. Treatments would maintain key habitat features, which would minimize impacts within the Planning Area.”

“However, untreated areas adjacent to the treatment areas would provide refuge and nesting habitat, minimizing short-term loss of habitat. In treated stands, riparian areas not receiving treatment would also serve as refugia in proposed harvest units.”

Additionally, a Memorandum of Understanding (MOU) was signed between the USFWS and the

BLM in April, 2010, which identified strategies to avoid or minimize adverse impacts on migratory birds. The East West Junction Project would follow these guidelines where feasible to reduce the impacts to migratory birds. For example, many of the PDFs listed to mitigate effects to some species, such as seasonal restrictions, would also benefit migratory birds.

Comment 40 (Gregory Bennett): States “the forested ridges and draws in section 29 (T39S-R8W) provide excellent biological connections between the West Fork Illinois River and valley bottom and the wildlands to the west”. The commenter states “the Variable Density Thinning would degrade this important biological dispersal corridor and these units should be reassigned to Hazardous Fuel Reduction for the protection of the large trees and broadleaf vegetation. Unconfirmed American pine marten sightings have been reported in this area supporting the idea that this habitat provides quality travel and dispersal routes for a variety of vertebrate species. Note, Keith Slauson and William Zielinski (USDA Southwest Research Station) have documented the presence of American pine marten in the upper reaches of Rough and Ready Creek indicating it is plausible these animals are using these habitat patches for part of their life histories and home ranges.

BLM Response: American pine martins are not listed as Sensitive or Strategic species in Final State Director's Special Status Species List (BLM 2008a) or USFWS Birds of Conservation Concern for BCR 5 (USFWS 2002); therefore, they have no status for federal management. The activities proposed for this project would not affect local populations as their dispersal across the landscape is not limited to the Section level.

Comment 41 (Klamath Siskiyou Wildlands Center and Wood): Requests 60% canopy closure retention in the 136 acres of spotted owl foraging habitat and defer or greatly reduce thinning nesting, roosting, and foraging habitat within the 0.5 mile spotted owl core area.

BLM Response: Limiting the cutting to 60% canopy would limit obtaining the ecological and silvicultural objectives for this project and would require these stands to be entered again within a shorter timeframe. Such multiple entries would create more disturbance and impacts to owls.

Comment 42 (Klamath Siskiyou Wildlands Center): The EA p.118 states that “[v]ariable Retention Harvest and Variable Density Thinning, where it would reduce canopy below 40%, would remove 62 acres of suitable NRF spotted owl habitat and 32 acres of suitable “dispersal-only” habitat (See Table 3-13). These acres would not be expected to provide suitable NRF or “dispersal-only” habitat for many years post-treatment because specific key habitat elements would be removed, including large-diameter trees with nesting cavities or platforms, multiple canopy layers, adequate cover, and hunting perches (USDI 2011).”

Lastly, it is important to note that as disclosed on page 120 of the EA, through implementation of alternative 2 of the East West Project, combined with the West Fork and Althouse Sucker timber sales, the BLM is proposing to downgrade or remove up to 25% of existing NSO NRF habitat in the Planning Area via FY 2011 and FY 2012 projects. This rate of NRF removal is clearly significant, unsustainable, and necessitates documentation via a full Environmental Impact Statement.

Given that on page 112 of the EA the BLM indicates that only 18% of the project area currently supports NSO Nesting Roosting and Foraging (NRF) habitat and that only 36% of the project area is comprised of Dispersal habitat, we are surprised that the agency is proposing to removal and downgrade additional NSO habitat.

Please note that via the Althouse Sucker and West Fork timber sales the Resource Area has already committed to removing and downgrading suitable spotted owl habitat in the planning area. Page 120 of the EA indicates that the BLM intends to downgrade or remove up to 25% of the NRF habitat in the planning area in the immediate future. This rate of habitat destruction is significant and unsustainable.

The BLM's contention that the impacts of such habitat destruction is "minimal" because it is not occurring within known spotted owl ranges (EA page 118) is disingenuous given that the agency has elected not to survey for additional owl sites in the planning area (EA page 113).

The significant impacts to owl habitat can be avoided via implementation of Alternative 3. As stated on page 119 of the EA, in Alternative 3 "thinning and density management is proposed to retain key structural elements...while reducing overly dense stands and protecting habitat from stand replacing fire."

BLM Response: The proposed actions for the East West Junction Project were consulted with the U.S. Fish and Wildlife Service (USFWS) and USFWS concluded that there are proposed harvest treatments that remove or downgrade spotted owl habitat "may affect and are likely to adversely affect northern spotted owls", and others would "treat and maintain spotted owl habitat "may affect but are not likely to adversely affect northern spotted owls". The Service concluded in their Biological Opinion that "[based on] the effects of the proposed action, and the cumulative effects, it is the Service's biological opinion that the District's proposed action, *is not likely to jeopardize* the continued existence of the spotted owl. The Service reached this conclusion because the action area is expected to continue to fulfill its role in the survival and recovery of the spotted owl because implementation of the proposed action will retain 99 percent of currently occupied or un-surveyed suitable spotted owl NRF and dispersal habitats in the action area."

In un-surveyed suitable spotted owl habitat, the BLM will continue survey the Planning Area until the project is implemented.

Comment 43 (Klamath Siskiyou Wildlands Center): The commenter states, "The RMP (p.192) directs the agency to manage for owl reproductive (NRF) habitat which requires at least a 60% overstory canopy. The RMP (p. 192) 40% canopy standard is applicable to *regeneration harvest*, not the variable density thinning being proposed."

The RMP says to manage for reproductive habitat not for dispersal habitat. Alternative 3 thinning must be designed "toward an increase in the amount of spotted owl reproductive habitat". Merely maintaining stands as "dispersal habitat" may be in compliance with ESA consultation, but it is not complying with the intent of the RMP. We believe the EA failed to disclose that thinning

would retard or delay development of reproductive habitat as directed by the RMP. The project must comply with both the RMP and the ESA.

BLM Response: See response to Comment 42.

Comment 44 (Klamath Siskiyou Wildlands Center): New information has found that even light thinning significantly reduces prey species such as flying squirrels for at least 12 years (Manning et al. 2011). We recommend that the 136 acres of thinning in 0.5 mile core areas be dropped or greatly reduced. We recommend that thinning NRF habitat within the 0.5 mile core area be dropped or greatly reduced.

BLM Response: The consultation for the northern spotted owl on this project included assessment of the potential effects on owl prey species. The U.S. Fish and Wildlife Service issued a Biological Opinion which included a no jeopardy determination for northern spotted owls.

As stated in the EA regarding project effects to spotted owl prey species, treatment implementation would be spread out temporally and spatially within the East West Junction Planning Area, which would provide areas for spotted owl foraging during project implementation and reduce the impact of these effects at the project level.

Comment 45 (Klamath Siskiyou Wildlands Center): Despite “incidental fisher observations” in the planning area, the BLM elected to not quantify any information regarding pacific fisher population dynamics and project impacts in the planning area.

The commenter disagrees with using NSO habitat as an indicator for effects to the fisher. The commenter states the East West Junction Project would downgrade or remove up to 25% of spotted owl habitat in the planning area in the immediate future. “Such widespread and immediate habitat loss could have significant impacts on pacific fisher population dynamics requiring completion of an EIS.” The commenter states impacts to denning sites cannot be known unless surveys are completed.

BLM Response: The anticipated impacts to the Pacific fisher are analyzed in Section 3.7 of the EA. This analysis concluded, “Disturbance from project activities would be temporally and geographically limited and would occupy a geographic area smaller than the average fisher home range. Telemetry studies have determined that fishers are wide-ranging animals (Zielinski et al. 2004). Seasonal restrictions listed as PDFs for other resources (see Section 2.3.4.7) would benefit fishers by restricting project activities until young are approximately six weeks old, which is approximately the age when fisher move young from natal dens and become more mobile. Fishers have large home ranges and would be able to move away from the action area while the disturbance is occurring without impacting their ability to forage and disperse within their home range” (EA, p.125).

Comment 46 (Klamath Siskiyou Wildlands Center): C-42 of the NWFP ROD requires that “the BLM in Oregon south of Grants Pass retain 16 to 25 large green trees per acre in harvest units. Hence the BLM is not permitted to utilize the RTV buffer in unit 9-12 to avoid the green

tree retention standards of the Forest Plan. The retention standards apply “per acre” not per harvest unit. The intent of the Forest Plan is not to provide survey and manage buffers surrounded by a virtual clearcut in which matrix tree retention standards are waived outside of survey buffers. Please implement the NWFP and the Medford RMP and retain green trees throughout proposed logging units.

BLM Response: The Medford RMP intends for this retention number to be an average per acre, as there are other treatments such as Group Select and Selective Cutting that provide small gaps. In such treatments, it would not be achievable to reach this figure on every acre either.

Comment 47 (Klamath Siskiyou Wildlands Center): Requests the BLM to identify sediment producing activities and initiate consultation with National Marine Fisheries Service.

BLM Response: As stated in Chapter 5 of the EA (p.136), “The action alternatives proposed within the Rogue River Basin and the range of the federally threatened Southern Oregon/Northern California coho salmon, would have no effect on coho or critical habitat. Consultation for the Endangered Species Act with NOAA is not needed as the action alternatives would not affect listed species or their habitat. No consultation is needed under the Magnuson-Stevens Fishery Conservation and Management Act as there is no adverse effect to Essential Fish Habitat for coho and chinook within the Rogue River Basin.”

This conclusion was reached because (EA, p.151) “all timber harvest treatments, yarding, landing construction and rehabilitation, temporary route construction and reconstruction (including associated decommissioning), road renovation, and fuels and understory thinning treatments would not result in measurable inputs of sediment to streams due to project design. In addition, the land adjacent to the East and West Forks of the Illinois River (and their major tributaries) have gentle lower slopes combined with heavy vegetation, which slows the flow of water, allowing for settling of sediment and infiltration of water before it reaches streams under undisturbed conditions. In general, slopes are below 50% and riparian buffers will be utilized to prevent the transport of activity generated sediment from entering streams.”

“Slight increases in turbidity would occur in the short term in localized areas as a result of road activities [hauling and road maintenance] in streams without CCH. Best Management Practices (BMPs) would be implemented to minimize the amount and duration of sediment entering these stream channels. Such increases in turbidity would not measurably alter the biological, physical, or chemical integrity of streams. Aquatic and riparian dependent species’ survival, growth, reproduction, and migration would be maintained...Sediment would not be expected to enter CCH as a result of haul or maintenance of haul roads, with dry condition haul, well-vegetated ditch lines, properly functioning cross drains, and existing filter strips, or sediment barriers installed, where needed, to prevent sediment delivery into CCH... Changes in embeddedness, interstitial spaces, and pool depth would not be measurable. Road maintenance would result in a minimal amount of sediment reaching stream channels without CCH. Increased sediment levels from road maintenance would not be detectable above background levels following the first few substantial rain events, therefore sediment input would be short term. Negligible changes to stream channels without CCH from sediment input would be expected” (EA, p.207 and 208).

Comment 48 (Klamath Siskiyou Wildlands Center): States “a recently published study from western Oregon supports watershed analyses recommendations because road densities have been found to be negatively correlated with adult coho spawner counts (Firman et al. 2011). This means that lower road densities in small subwatersheds will support more adult coho than subwatersheds with higher road densities. Currently, the road density for the planning area (4.3 mi/mi²) is too high for desired adult coho densities (EA: 93). We believe forest restoration and watershed restoration planning must be integrated at the watershed scale as intended by the RMP and supported by science (Carnefix and Frissell 2009).”

Comment 49 (Klamath Siskiyou Wildlands Center): States distribution and habitat conditions of coho salmon in the Planning Area was not described and impacts to coho salmon and its critical habitat were not adequately assessed. Coho salmon are known to spawn in both forks of Chapman Creek, Tyser Creek, and Kelly Creek and critical coho habitat (CCH) habitat likely extends upstream to within a mile of where logging is proposed in the headwaters of these streams. States new information was not used to analyze coho impacts in EA. Stated the BLM failed to consult with NMFS about sediment and road impacts that would affect critical coho habitat.

The EA incorrectly states that “[s]ediment would not be expected to enter CCH as a result of haul or maintenance of haul roads, with dry condition haul, well-vegetated ditch lines, properly functioning cross drains, and existing filter strips, or sediment barriers installed, where needed, to prevent sediment delivery into CCH.” The EA, p.99 states that “[a]ccess to the units in T39S-R8W- Section 29 would be along BLM road #39-8-29 where the BLM would use a ford across an intermittent stream.” This private land coho stream crossing is not suitable for log haul because it is currently fenced as a livestock pasture and will likely remain waterlogged well into the summer. Log haul is certain to create large amounts of dust on native surface and rocked roads that will eventually enter coho streams and adversely affect CCH. The EA fails to mention the need for dust abatement to prevent pollution of coho critical habitat.”

Similarly, barriers that collect sediment at stream crossing only delay the eventual deposition of fine sediment into critical coho habitat. An effective technique to reduce inputs of fine sediment is to hydrologically disconnect the road system from the stream system with outsloping, placement of additional cross drains, critical dips and rerouting roads to ridge tops. None of these effective techniques have been identified in the EA for implementation, thus the sediment impacts will persist. Quantitative methods are available to estimate the amount of sediment delivered to channels from the existing “connected” road system but the EA has failed to use them and properly inform the public and decisionmaker of actual sediment risks.

The EA failed to report the road densities for each coho spawning population at the 7th field sub-watershed scale. The EA reports road density for the planning area (4.3mi/mi²) but not for individual smaller watersheds within the planning area where coho spawn. This is important because Firman et al. (2011) found that spawning coho salmon numbers in western Oregon are negatively correlated with road densities in 7th field watersheds. This means that excessively high road densities are likely suppressing coho salmon populations and could lead to their local extirpation. Firman et al. (2011) provides quantitative proof of what has been generally known but not analyzed at appropriate scales in the EA.

The EA, p.100 states that “[m]anagement techniques for this project would be implemented to greatly reduce the amount of compaction and erosion that would occur as a result of timber management.” The EA is inadequate because it does not report the amounts of erosion and resulting sediment pollution to coho critical habitat from ground disturbance, some of which would involve tractor logging and machine piling. Assertions in the EA (p. 106) that Northwest Forest Plan Riparian Reserves will prevent all sediment from reaching streams are false and misleading. Riparian Reserves will reduce but not eliminate sediment runoff from disturbed areas in this project. Overland flow during intense rainfall will transport sediment from disturbed areas to swales, unchanneled valleys, and headwalls that are connected to stream channels. Even if sediment pollution is “reduced” from what is was prior to Forest Plan implementation the EA must still report the residual sediment pollution. Techniques are available for estimating the amount of sediment pollution from ground disturbance (see Biscuit Fire FEIS and Timbered Rock FEIS).

The EA failed to consider recovery actions identified in the coho salmon recovery plan released in January 2012 (NMFS 2012). The EA failed to seriously consider the most important recovery actions for BLM lands in the planning area: reduce BLM road densities and disconnect the BLM road system from the stream system.

The EA p. 109 makes uncorroborated statements about purported negligible effects of sediment: “Logically it can be concluded that negligible increases in sediment from these activities would contribute to the overall amount of sediment entering streams from past, present, and future impacts within this sub-watershed, but sediment from these actions would be within ODEQ water quality standards and would not be distinguishable above baseline levels or have any effect on aquatic organisms.” The EA also makes unsupported assertions that logging Riparian Reserves will improve coho critical habitat. Contrary to these assertions, our analysis indicates the East West Project project would likely adversely affect coho salmon. Although the NMFS has found the Northwest Forest Plan adequate for protecting listed fish species, this determination does not exempt the BLM from consulting with NMFS on the East West Project because it will likely adversely affect coho salmon and certainly not contribute to coho recovery in the streams affected.

BLM Response: The distribution of coho within the Planning Area was fully known and considered when BLM analyzed the potential for impacts to coho and their critical habitat (CCH). As stated in the Water Resources and Erosion Section (EA pp. 86-110) and in Appendix 2, two stream crossings were hydrologically connected to CCH. Sediment control measures would be installed there and where needed to prevent sediment from entering CCH (see EA, p.99).

Project Design Features (pp. 39-51) include a thorough list of practices and methods to prevent and minimize the potential for sediment to be entrained to water bodies. The commeter’s statement that “None of these effective techniques have been identified in the EA for implementation, thus the sediment impacts will persist.” is incorrect.

BLM did not analyze road densities for the 7th field and smaller scales of Tycer, Kelly and Chapman Creeks because this was not necessary to accurately assess the baseline condition of fish habitat in these drainages. These drainages are dominated by non-BLM ownership, and the decommissioning of roads on private land there is outside of the scope of this project. The BLM actions would not add to the suppression of coho populations in these drainages because road densities on BLM ownership would not increase and BMPs and PDFs would be implemented.

Use of the ford on road #39-8-29 to cross an intermittent stream would be limited to the dry season (generally May 15 through Oct 15 of the same calendar year).

The statement that sediment pollution to CCH will result from ground disturbance from management actions is unfounded. The Water Resources and Erosion analysis (Section 3.5.2) thoroughly covers this topic and concludes that Oregon Water Quality standards would be met.

The BLM reviewed and provided requested input to the Coho Recovery Plan Draft released in January 2012. This document is in draft form and as such is not policy.

The BLM analyzed the actions for potential to impact coho and their critical habitat and concluded there would be no effect on aquatic organisms. As stated in Appendix 2, there would be no effect on coho and CCH. BLM is not required to consult with NMFS on proposed actions which would not affect coho or CCH.

Comment 50 (Klamath Siskiyou Wildlands Center): The commenter recommends that a temporary bridge be placed across a stream channel to access units in Section 29 on BLM rd #39-8-29 to reduce damage to the stream banks, reduce contamination of the active channel, and limit damage to riparian vegetation. The commenter states “we object to driving log trucks through this riparian feature in the strongest possible terms.”

BLM Response: Contractually, use of the ford crossing would be limited to when the stream is dry. Therefore its use would not affect coho salmon. For further details see response to comment 36.

Snags

Comment 51 (Klamath Siskiyou Wildlands Center): The EA fails to report the long-term loss of snags and consequences to wildlife due to the logging of mature forest stands. Once logged, these trees can never provide snag habitat or down wood. We are concerned that current snag densities will be significantly decreased with logging because they are intermingled with trees proposed for removal. We recommend that all large snags in black oak plant association groups and low elevation units (e.g. unit 8-2; 21-6) be marked for retention and buffered to reduce the need to fell large snags for safety reasons. We request large snag densities be measured prior to logging with Firemon plot methods.

BLM Response: The project would meet the snag retentions per the management direction of the Medford District RMP. See Section 2.3.4.1 for the PDFs to be applied for snag retention.

Lomatium Cookii

Comment 52 (Klamath Siskiyou Wildlands Center): The commenter believes *lomatium cookii* (Endangered Species Act-listed plant species and its critical habitat) is present in proposed logging units and so states is a factor arguing for completion of an EIS for this project.

Please note that page 130 of the EA indicates that the BLM intends to log 5 units serving as critical habitat that provide for the hydrological function of Lomatium habitat. Our organizations have frequently observed negative hydrological impacts to logging units from harvest activities, particularly from yarding.

It is unclear why the BLM refuses to disclose or analyze the cumulative impacts of the West Fork Illinois timber sale in conjunction with the East West Junction timber sale on Lomatium Cookii and its critical habitat. Please see EA page 130.

BLM Response: As stated in Appendix 2 of the EA, the East West Junction Project Planning Area has 25 populations of *Lomatium cookii* in the East West Junction Project Planning Area; however, there are no populations located in proposed units during survey completed in 2009. Additionally there are no previously known sites in proposed units.

This project would have no effect on federally listed species because there are no locations within or adjacent to activity units.

Critical habitat for *Lomatium cookii* is present in the East West Junction Project Planning Area and proposed units. The U.S. Fish and Wildlife Service provided Letters of Concurrence (TAILS#: 13420-2008-I-0136 and TAILS#: 01EOFW00-2012-I-0019) from the Biological Assessments submitted by the Medford District (Medford BLM FY 2009-2013 BA and Medford BLM FY 2012-2013) that critical habitat for *Lomatium cookii* located in proposed units for this project would continue to function as necessary for the species to persist and expand.

PDFs have been developed by the project's IDT to maintain the surface and subsurface flow of water for the primary constituent element of hydrologic function for lomatium cookii's critical habitat (see Section 2.3.4.5). These PDFs include restricting yarding activities to dry conditions, single end suspension, subsoiling, waterbarring, and slash placement on skid trails, seeding, no mechanized treatment in Hazardous Fuel Reduction units, restrictions on burn pile size and distribution, and installation of energy dissipators for crossdrain replacement.

Specifically, the PDFs would reduce the amount of compaction that could affect the hydrology flowing into the *Lomatium cookii* critical habitat, and would allow water to spread across the landscape and return the hydrology to pre-project condition. Given the Illinois Valley receives an average of 60 inches of annual precipitation, the BLM botanist ascertains that rainfall is the main contribution of water to the critical habitat, where the terrain is flat and the soils have a strong clay component, while surface and subsurface flows play a lesser role.

The West Fork Illinois Landscape Management Project is located in lomatium cookii critical

habitat. As stated in the EA (p.133), “Currently, the West Fork Illinois Project is under protest and cannot be implemented until the protest is resolved, at that time units located in critical habitat would be assessed for their potential effects to critical habitat and if needed PDFs would be added to the contract to maintain the function of the critical habitat”.

This sale cannot be awarded until a new U.S. Fish and Wildlife Service Biological Opinion is issued. As such, this project is not truly a foreseeable action and it would not be expected that the West Fork Illinois Project would occur concurrently with the East West Junction Project.

Port-Orford-Cedar (POC)

Comment 53 (Klamath Siskiyou Wildlands Center): The commenter states the BLM ignores the significant POC issues identified in the watershed analysis (and repeated in our May 2011 scoping comments). The commenter does not support use of the POC “risk key” analysis in the EA as they believe it is generic and they do not acknowledge the data or analysis completed for it. The commenter would like to know who completed it. The commenter believes the BLM’s statement (EA, p. 239) that “no measures or mitigation for Port-Orford Cedar are required” is arbitrary and capricious and believes it is directly contradicted by pages 131 and 132 of the West Fork Illinois Watershed Analysis and by page T-7 of the East Fork Illinois Watershed Analysis.

BLM Response: The EA analysis includes the Port-Orford-Cedar information relevant to BLM’s management of the Project Area. The BLM incorporated the *Final Supplemental Environmental Impact Statement for the Management of Port-Orford-Cedar in Southwest Oregon* (December 2003) (EIS) and its *Record of Decision* (May 2004) (ROD), into the East West Junction Project EA as a part of its management direction. The EA states on page 164 that the project is within natural range of Port-Orford-cedar. Accordingly, the Port-Orford-cedar (POC) Coordinator prepared a POC Risk Key Analysis (POC ROD, p. 33), which is appropriately documented in EA Appendix 9 for the EA (p. 226).

The POC EIS ROD (noted above) prioritized addressing POC root disease by apply management practices that would (1) minimize its spread into watersheds not currently infected and (2) to treat POC where it is at highest risk. As stated in the POC EIS ROD, “When a project-specific application of the risk key shows the risk [of POC root disease spread] is low, no additional management practices are needed...The objective of the risk key is to identify project areas/situation where new infections should be avoided, and guide the application of one or more of the management practices until the is acceptably mitigated. The risk key describes the circumstances under which the various risk reducing management practices will be applied where needed,” (p.33). The POC EIS ROD also notes (p.15), “The objective is to provide cost-effective mitigation for controllable activities creating appreciable additional risk to important uninfested POC, not to reduce all risk to all trees at all cost.”

The East West Junction Project Planning Area does not have an un-infested 7th-field watershed nor does it have watersheds with high risk areas for POC root disease. Through the POC Risk

Key, unit by unit analysis, the POC Risk Key Analysis (EA p. 155-166) it was determined no management specific to POC and POC root disease (*Phytophthora lateralis*) is required and the Proposed Action is consistent with management direction in the Port-Orford-cedar EIS. This is due to the fact that the activity area is not within an uninfested 7th field watershed and the project will not introduce appreciable additional risk of infection to these uninfested POC watersheds.

Project Design Features for this project would require heavy equipment, to be pressure washed to remove dirt, grease, plant parts, and material that may carry noxious weed seeds into BLM lands, which could also help reduce any potential spread of POC root disease. Equipment would be inspected to verify that the equipment has been cleaned.

The West Fork Illinois Watershed Analysis notes “Prevent export of POC root disease to uninfested sites. On infested sites, implement management objectives consistent with management of other resources”. The East West Junction Project applies this management direction. The East Fork Illinois Watershed Analysis was written in 2000 and recommends eradication of POC, which is before the POC EIS ROD was issued in 2004. The 2004 POC EIS ROD states (p.15), “[t]he objective is to provide cost-effective mitigation for controllable activities creating appreciable additional risk to important un-infected POC, not to reduce all risk to all trees at all cost”.

Gating and Off Highway Vehicle (OHV) Concerns

Comment 54 (Gordon Lyford): Finally, most of the BLM roads around the project units need to be gated and vigorously patrolled by BLM law enforcement to prevent vandals and looters on OHVs from terrorizing the residents and dumping trash. The roads around units 7S need to be gated to prevent the spread of yellowtuft.

BLM Response: There are three gates distributed at entry points into the Rough and Ready ACEC located in section 7. The terrain at these locations is very flat. In such terrain, it is difficult to limit access with gates as many can drive around them. The local airport is installing fencing to reduce OHV activity, which will assist in limiting the spread of yellowtuft.

Comment 55 (Gregory Bennett): States the Proposed Action would provide motorized access to areas that would likely be degraded by off road vehicle use and illegal activities including the dumping of trash.

BLM Response: In total, 0.9 miles of temporary route construction and re-construction is proposed across five short dead-end spurs, ranging from 0.06 to 0.13 miles. These short segments would be decommissioned after use. Therefore they are not anticipated to increase OHV use.

There are specific Project Design Features (PFDs) (Section 2.3.2.9) to minimize increased use of OHVs, such as pulling vegetation over skid trails and blocking skid trails so they are un-usable.

Comment 56 (Klamath Siskiyou Wildlands Center and Wood): The commenter

recommends the BLM close rd #40-8-12 to motorized public access by gating access from Fernwood Drive on the west and Scherier Rd on the east. The commenter would like motorized access be limited to administrative and permitted uses (e.g. timber sale purchasers) and believes the one private landowner in section 9 is supportive of limiting public motorized access as well as adjacent private land-owners. KS Wild states they are not requesting an administrative prohibition of

OHV in Logan Cut area, rather a physical gate to prevent non-permitted public use of the road and coordination with adjacent land-owners. The commenter has observed trash dumping, unauthorized shooting ranges, damage to soil and vegetation at French Flat ACEC and wetlands along the West Fork Illinois River, timber theft of BLM trees, stolen vehicles dumped and stripped for parts. Private property, public property and public safety are at risk. "This specific road closure need not be delayed for East West decision or RMP revisions since significant resource damage and threats to public safety [are] ongoing and significant."

BLM Response: It appears the commenter is actually referring to rd #40-8-4. Recently 3,000 ft of "buck and pull" fencing was installed adjacent to road #40-8-4 to limit illegal trash dumping, OHV use, resource degradation, and fire risk into the French Flat and Logan Cut areas. There is more work fencing and gating work to come within the next year.

Comment 57 (Klamath Siskiyou Wildlands Center): The biggest fire threat in the Rough and Ready ACEC area is not from fuel hazard in T40S- R08W-07. The fire threat is from high risk of human fire ignitions from unauthorized motorized access, motorized camping, and illegal motorized occupancy. We recommend that the Power Line access road bisecting Airport Road and western access road system in section 7 be physically blocked, gated, and enforced. This is also a public safety issue because motorized access to this remote area invites criminal activity (e.g., dumping toxic waste, car theft, drug trafficking, poaching). Please note that fuel (fire) hazard is identified by the BLM as part of the purpose and need of the project (EA page 15). Hence this action is within the purview of the East West Junction purpose and need.

BLM Response: See response to Comment 56 above.

Comment 58 (Klamath Siskiyou Wildlands Center and Wood): Requests BLM Road #39-7-21.1 to have an Earthen Berm at Highway 46 to Restrict Motor Vehicles. Motorists are driving around the gate and causing soil damage. They seem to be going through to Thompson Creek/McMullin Creek area via an unnumbered private road in section 8. Dry forest restoration is more than simply logging trees- it should involve a suite of actions designed to improve forest resiliency, forest health and aquatic function.

BLM Response: The BLM is considering such road blocking, but before implementing such work further investigation is needed to ensure that it would be a solution that would last beyond the immediate future.

Mining

Comment 59 (Klamath Siskiyou Wildlands Center): It is essential that the agency analyze and disclose the cumulative impacts of past and ongoing mining activities on these same forest

resources.

BLM Response: The geology and minerals shop of the Medford District are the information holders of mineral activity on the District. The mining baseline information is present in the “Affected Environment” sections of Chapter 3 for each of the affected resources. Since the East West Junction Project would have no effect on fisheries, there would be no incremental effect of this project on fish beyond the effects of the ongoing mining activities occurring in the Planning Area. The EA analyzed the effects to threatened and endangered, Survey and Manage, Bureau Sensitive species. Any effects to threatened and endangered wildlife species whether from East West Junction project or mining activities on federal land have been consulted with the U.S. Fish and Wildlife Service.

Accuracy

Comment 60 (Gordon Lyford): The treatment acres throughout the text and tables do not add up correctly and are in discrepancy by hundreds of acres or about 25%. Do these errors also affect the maps? Perhaps a revised EA needs to be provided to the public so that they may comment on accurate information.

BLM Response: The document figures in the EA were re-checked since receiving this comment and there were no errors to be found in the acreage figures. The commenter did not specify where he felt these errors occurred in the EA.

Comment 61 (Klamath Siskiyou Wildlands Center): The statement (EA page 9) that no unique or unknown risks were identified during the scoping period is in error.

Additionally, on page 125 of the EA the BLM states that “[p]roject activity disturbance effects to fishers are not well known.” This is a direct acknowledgment that project implementation involves unknown risks and scientific uncertainty.

BLM Response: Approximately 987 acres (86 %) of suitable fisher denning and resting habitat would be retained throughout the Planning Area, under Alternative 2. The important habitat features for fishers would be retained such as large snags and hardwoods with large limbs.

The commenter does not include the context of its statement above, which is followed by what is known about fishers and anticipated impacts from the project. “Disturbance from project activities would be temporally and geographically limited and would occupy a geographic area smaller than the average fisher home range. Telemetry studies have determined that fishers are wide-ranging animals (Zielinski et al. 2004). Seasonal restrictions listed as PDFs for other resources (see Section 2.3.4.7) would benefit fishers by restricting project activities until young are approximately six weeks old, which is approximately the age when fisher move young from natal dens and become more mobile. Fishers have large home ranges and would be able to move away from the action area while the disturbance is occurring without impacting their ability to forage and disperse within their home range.”

Comment 62 (Wood): States the BLM must weigh the cumulative effects of the project’s

“degradation of late- and mid-successional forest habitat (especially snag removal) in light of past actions. There are few references to cumulative impacts of areas adjacent to the project area, nor of cumulative effect of the action.”

BLM Response: See Chapter 3 of each affected resource for the cumulative effects analysis of foreseeable projects (federal and non-federal) in the East West Junction Project Planning Area. The Planning Area boundary which is 35,186 acres is used since it includes the watersheds where activities are planned and affects are not anticipated to be measurable outside this area from this project.

Under 43 CFR § 46.115 it states that when considering cumulative effects analysis, it must analyze the effects in accordance with relevant guidance issued by the Council on Environmental Quality (CEQ). As the CEQ, in guidance issued on June 24, 2005, points out, the “environmental analysis required under NEPA is forward-looking,” and review of past actions is required only “to the extent that this review informs agency decision-making regarding the proposed action.” Use of information on the effects on past action may be useful in two ways according to the CEQ guidance. One is for consideration of the action alternatives’ cumulative effects, and secondly as a basis for identifying the action alternatives’ direct and indirect effects.

The CEQ stated in this guidance that “[g]enerally, agencies can conduct an adequate cumulative effects analysis by focusing on the current aggregate effects of past actions without delving into the historical details of individual past actions.” This is because a description of the current state of the environment inherently includes the effects of past actions. The CEQ guidance specifies that the “CEQ regulations do not require the consideration of the individual effects of all past actions to determine the present effects of past actions.” Our information on the current environmental condition is more comprehensive and more accurate for establishing a useful starting point for a cumulative effects analysis, than attempting to establish such a starting point by adding up the described effects of individual past actions to some environmental baseline condition in the past that, unlike current conditions, can no longer be verified by direct examination.

The second area in which the CEQ guidance states that information on past actions may be useful is in “illuminating or predicting the direct and indirect effects of a proposed action.” The usefulness of such information is limited by the fact that it is anecdotal only, and extrapolation of data from such singular experiences is not generally accepted as a reliable predictor of effects.

Chapter 3 of the EA provides baseline information for each of the affected resources. The baseline data takes into account past actions that has occurred in the Planning Area. Chapter 3 also contains the direct, indirect, and cumulative effects including fire hazard, soil compaction and productivity, vegetative resources, water resources and erosion, spotted owl, fisher, and lomatium cookii.

Noxious Weeds

Comment 63 (Gordon Lyford): States *Alyssum murale* and *Alyssum corsicum* (yellowtuft) were not adequately addressed in the EA (see response to comment 25) and states that *Alyssum*

murale was ignored on p.139 and p. 141 of the EA.

The commenter requests:

- The EA to note yellowtuft as a priority for treatment, as it has been assigned a top priority in the western U.S. for eradication. It is present in the Illinois Valley which is the only location of yellowtuft in the Pacific Northwest, and one of only a few locations in North America.
- The EA should note that an interagency yellowtuft steering committee was established in 2011 and the BLM is a member.
- The EA should describe specifically what actions the BLM will take to prevent the spread of the Class A yellowtuft noxious weed in the Illinois Valley according to the plans adopted by the steering committee. The BLM botanist for the Grants Pass Resource Area is well aware of this issue and can map the yellowtuft infestations relative to the EA project lands.

BLM Response: The commenter’s note about p.139 and 141 is regarding Appendix 1 of the EA which summarizes public comments to the proposed actions, in Appendix 1 there was an inadvertent error in not listing *Alyssum murale* with the notation regarding *alysuum corsicum*; however, both *alysuum murale* and *alysuum corsicum* were equally and adequately addressed in the analysis of the EA, see Appendix 2 (EA, p.146).

The ODA Class A listed noxious weeds *Alyssum corsicum* and *Alyssum murale*, collectively known as ‘yellowtuft,’ are present within the Illinois Valley and within the East West Junction Project Planning Area; however, there have been no observations of *Alyssum murale* and *Alyssum corsicum* within activity units. See Section 2.3.4.6 for the Project Design Features to be applied to reduce the spread of noxious weeds, including the cleaning and inspection of equipment. The analysis for noxious weeds for the project is also in Appendix 6 of the EA.

Though the EA did not note the “Interagency Yellowtuft Steering Committee,” specifically, the botanist section was referring to the interagency steering committee in the EA, on page 141, by stating, “There is a larger concerted effort with interagencies, local government, and organizations for the eradication of *Alyssum corsicum*, outside the scope of the East West Junction Project.” However, *Alyssum murale* was not mentioned in that statement as it was inadvertently left out. BLM has been actively participating in efforts to thwart yellowtuft since 2007.

Proposals to reduce the spread of yellowtuft is important, but it is outside the scope of this EA. In addition to botany surveys – which include looking for noxious weeds – the BLM, as a pivotal member of the *Alyssum* Steering committee, is well aware of yellowtuft sites within the Illinois Valley.

Comment 64 (Klamath Siskiyou Wildlands Center): The threat of noxious weed spread from new road construction, landing construction, yarding, and log haul is significant.

BLM Response: There are three main reasons why potential weed establishment is not expected to result in a detectable effect to overall ecosystem health. First, surveys indicate that a very small percentage, less than 1% of acreage within the activity units, are affected by noxious

weeds. Second, these sites located in units proposed for treatment have been reported during predisturbance surveys, and have received weed treatment under Medford District's *Integrated Weed Management Plan and Environmental Assessment OR-110-98-14*.

Lastly, the project area will be monitored for yellowtuft as part of an ongoing effort of the Yellowtuft Alyssum Steering Committee. New sites found within the East West Junction Project Planning Area will be mapped, treated, and re-assessed annually as funding allows.

EIS

Comment 65 (Gregory Bennett): The commenter believes an EIS is required for Alternative 2. The commenter states the EA does not adequately address (1) the loss of nesting, roosting, foraging, and dispersal habitat for the Northern Spotted Owl, (2) the effects of an increase in road density in a watershed that has been identified as critical habitat for coho salmon, and (3) seasonal restrictions on tree felling as it pertains to nesting migratory bird species protected under the Migratory Bird Treaty Act.

BLM Response: Per the BLM National Environmental Policy Act Handbook (H-1790-1) (2008), Section 7.2, "Actions whose effects are expected to be significant and are not fully covered in an existing EIS must be analyzed in a new or supplemental EIS (516 DM 11.8(A))."

The following actions normally require preparation of an EIS:

1. Approval of Resource Management Plans
2. Proposals for Wild and Scenic Rivers and National Historic Scenic Trails.
3. Approval of regional coal lease sales in a coal production region.
4. Decisions to issue a coal preference right lease.
5. Approval of applications to the BLM for major actions in the following categories:
 - a. Sites for stream-electric power plants, petroleum refineries, synfuel plants, and industrial structures
 - b. Rights-of-way for major reservoirs, canals, pipelines, transmission lines, highway and railroads
 - c. Approval of operations that would result in liberation of radioactive tracer materials or nuclear stimulation
 - d. Approval of any mining operation where the area to be mined, including any area of disturbance, over the life of the mining plan is 640 acres or larger in size.

See the Finding of No Significant Impact at the beginning of the EA. The East West Junction Project action alternatives were reviewed and were determined to be not major federal actions and would not significantly affect the quality of the human environment, individually or cumulatively with other actions in the general area. No environmental effects meet the definition of significance in context or intensity as defined in the Code of Federal Regulations (40 CFR 1508.27). Therefore, an environmental impact statement is not needed. This finding is based on context and intensity. Consultation with the State Historic Preservation Office, U.S. Fish and Wildlife Service, and local federally recognized Native American Tribes also determined the action alternatives would not violate any federal, state, or local law requirements for the protection of the environment (Criteria #10: intensity of significance). Had there been an

affected of listed fish species or their habitat consultation with National Oceanic and Atmospheric Administration would have helped determine if there were any significant impacts on fish species.

Recreation

Comment 66 (Gregory Bennett): Commenter finds proposal to log in areas adjacent to public recreational areas troubling. States the Proposed Action would degrade recreational experiences for the community. The commenter notes that the EA states that logging and log hauling would not be out of the range of normal activities for this specific area, but disagrees with that EA statement. Rather the commenter states “due to the shift to recreational activities and the fact that logging has not occurred in this section for decades”. This area is adjacent to Forks State Park and the West Fork Trailhead and is a popular recreational area for hiking, horseback riding, and mushroom gathering. This area provides access to BLM land, which is a de facto extension of the park system. To heavily log this area degrades the recreation experience, harms mushroom patches with slash and compaction, and is incompatible with neighborhood activities.

Comment 67 (Klamath-Siskiyou Wildlands Center): Requests the level of logging to be reduced in Section 29 to retain the recreational values currently provided by these forests.

BLM Response to comment 66 and 67: Appendix 2 and 10 of the EA evaluated the potential impacts to recreation use of the area and concluded the proposed activities would meet the management guidelines of the Medford District RMP for the Visual Resource Management Class III designated land associated with Section 29. In summary, it was determined after field review, these units were not visible from the Illinois State Park’s trailhead due to the dense vegetation within the riparian zone and the geographic formations in sections 21 & 29. The Park’s trailhead was selected as the Key Observation Point (KOP) per the guidance of the BLM Handbook 8431-1 Visual Contrast Rating (BLM 1986b).

Comment 68 (LaComb and Walter): Residents use forests for hiking daily. Found the scoping report confusing. States the low elevation of the area is a gateway to public lands. “There are more people than you think that use and recreate on these lands [Forks State Park and Logan Cut] than what is recognized.” States in favor of cutting trees less than 18 inches in diameter. Believes “timber is the only driver for economics rather than watershed health, recreation, and other uses of the forests.”

BLM Response: Please see response to comments 66 and 78 regarding recreation considerations. See response to comment 9 for clarity on types of proposed treatments and comment 2 regarding the request to cut trees less than 18 inches.

The majority of the lands in the East West Junction Project are O&C lands, which requires the Secretary of the Interior to manage O&C lands for permanent forest production. The BLM manages these lands under the direction of the Northwest Forest Plan and the Medford District Resource Management Plan, which strives to balance multiple uses on the landscape while providing timbered forest products.

Monitoring

Comment 69 (Klamath-Siskiyou Wildlands Center): We request that all units over ten acres have at least one Firemon Plot established prior to logging or fuels treatment to monitor trees, fuels, and snags with appropriately sized plots.

BLM Response: In order to monitor forest management activities the BLM intends to install a series of plots that would measure forest vegetative characteristics within the project area. FIREMON plot data would be collected prior to treatment and after the initial treatments are completed. As funding allows, all plots would be re-sampled to further evaluate secondary treatment results (underburning) and/or the effective lifespan of treatments within the project area.

Economics

Comment 70 (American Forests Resource Council): AFRC believes that several of the six objectives listed for this project on page 15 of the EA are inconsistent with your management plan. Particularly to “utilize ecological forestry principles to restore characteristic structure and composition” and to “create diversified stand structure.” The BLM’s RMP clearly lists five objectives for the Matrix LUA, yet this project references objectives outside of this plan. The above two listed objectives are more consistent with the Late Successional Reserve LUA which mandates management for late successional forest ecosystems, such as a diversified stand structure. The EA goes on to state that the proposed alternative’s primary objective is to contribute to continuous timber production while restoring dry and moist forest characteristics. While timber production is clearly stated as a Matrix LUA objective, dry and moist forest restoration is not. How will this restoration help future stands better meet the actual objectives described in the RMP?

BLM Response: All of the objectives listed for the East West Junction Project are consistent with the Medford District’s RMP. There are several silvicultural prescriptions listed in the RMP that would create heterogeneity in the Matrix land use allocation including “Selective Cuts” and “Group Selective Cuts”. Reducing the fire hazard is also clearly stated as a management objective under this plan (p. 62), “Treatments are intended to restore the ability of stands to respond to other management and to reduce the risk of mortality from insects, disease, and wildfire. Treatments will consist of thinning of stands...reduction of understory vegetation, reduction of fuel ladders, and restoration of more stable plant communities”.

This forest restoration prescriptions proposed for this project will help future stands better meet RMP objectives by reducing stand density to increase long term tree growth, quality, and vigor of the remaining trees and increase resistance of landscape to fire, drought, and insects. Creating a diversified stand structure (height, age, and diameter classes) will also help in meeting these objects as variability assists in survivability of a stand.

Comment 71 (American Forests Resource Council): The commenter is concerned about the economics of this sale. Would like to see language that specifies damage tolerance levels rather than firm restrictions which would allow for more months of operation for maximum efficiencies

and cost savings.

BLM Response: Some logging operations and haul may occur during the winter months during dry conditions. See Chapter 2, Section 2.3.4.3 for techniques to protect water quality.

Comment 72 (American Forests Resource Council): The commenter requests the BLM consider use of certain ground equipment such as fellerbunchers and processors in the units to make cable yarding more efficient and economically viable.

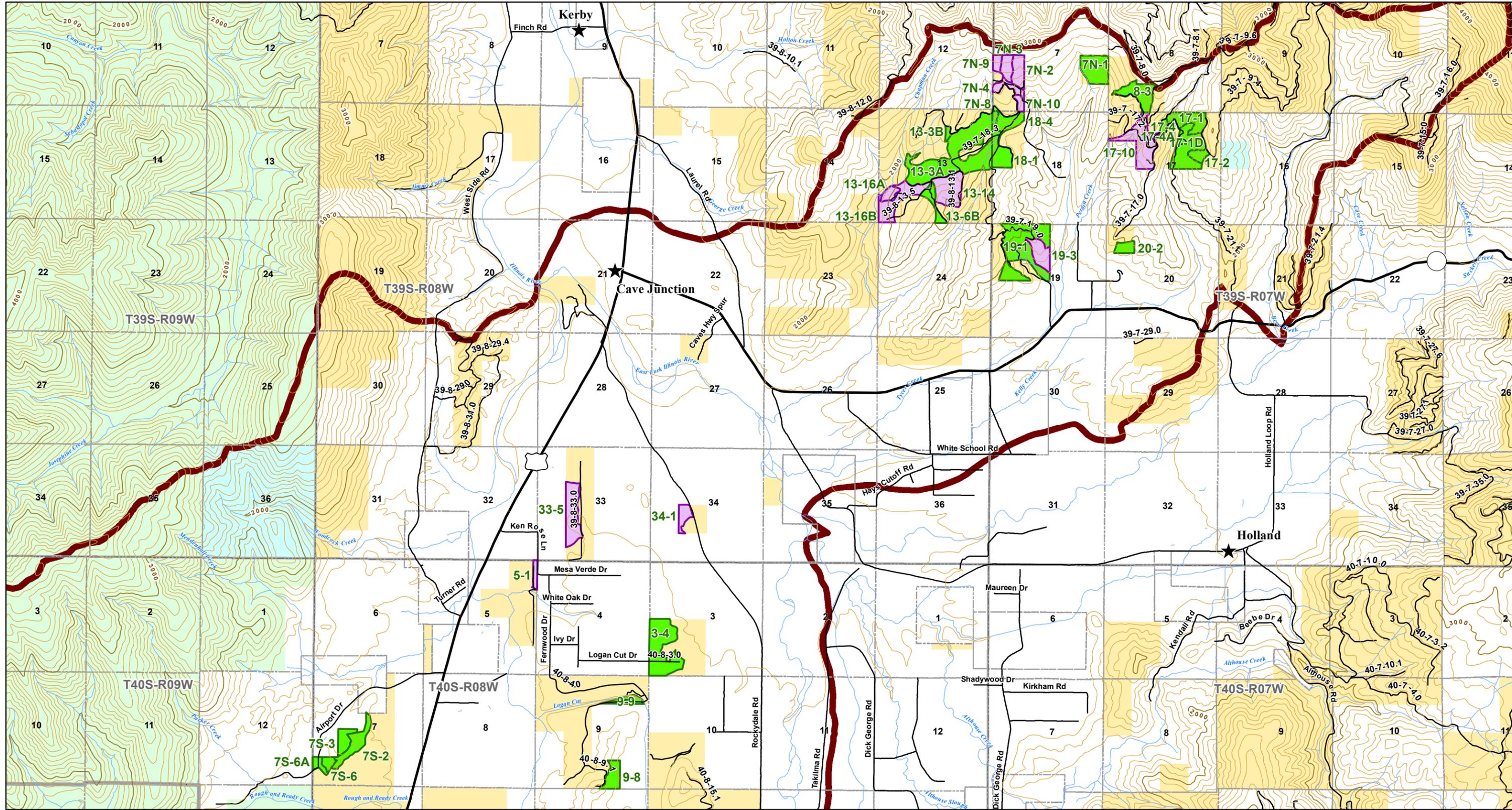
BLM Response: See Chapter 2, Section 2.3.4.3 for the logging systems considered for this project.

Comment 73 (American Forests Resource Council): Recommends permanent road construction for short and long term benefits since units in the western portion will likely receive future treatments to fully achieve the objectives of the land use allocation.

BLM Response: Access construction for this project would be temporary route construction and temporary route re-construction. The temporary routes would be decommissioned after harvesting and activity fuels are treated. The existing route re-construction would be blocked and stabilized because they are on private land.

East West Project

Decision Record - Density Management / Hazardous Fuels Reduction



Legend

- | | | |
|--|---|---|
| <ul style="list-style-type: none"> Road Perennial Stream BLM Resource Area Boundary East West Project Area | <p>East West Project Units</p> <ul style="list-style-type: none"> Hazardous Fuels Reduction Density Management/Hazardous Fuels Reduction | <p>Ownership</p> <ul style="list-style-type: none"> Bureau of Land Management U.S. Forest Service <p>State</p> <ul style="list-style-type: none"> State Private |
|--|---|---|



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Current Date: 07/09/2014

