

**Decision Documentation
for the
Small Fortune and Swampwood Timber Sales
As analyzed under the West Thin Project Environmental Assessment
(EA# DOI-BLM-OR-M080-2009-0005-EA)**

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

I. INTRODUCTION

This Decision Documentation documents the decision regarding commercial thinning as analyzed under the West Thin Project Environmental Assessment (DOI-BLM-OR-M080-2009-0005-EA). The West Thin Timber Sale Environmental Assessment (EA) is a revision of the Revised Westside Project EA due to new information. However, these changes do not include those portions of the Revised Westside EA used to support the decisions for implementing the Chew Choo Timber Sale and the Westside Fuels Reduction Project. The West Thin EA includes only 351 acres of harvest compared to the 3,374 acres of harvest proposed under the Revised Westside EA. No regeneration harvesting is proposed. The Planning Area is located north of the community of Glendale. The legal description of the Planning Area is Township (T) 32 S, Range (R) 5 W, Sections 2-11,14-22, 29-33; T. 32 S, R. 6W, Sections 1-5,8-17,20-29, 33-36; T. 33 S, R. 5W, Sections 4-6; T. 33 S. R. 6W, Sections 1-4, 9-10 and T. 31 S, R. 5 W, Sections 30-32, Douglas County, Willamette Meridian.

II. PUBLIC INVOLVEMENT

Public scoping included mailing invitations to approximately 1,281 residents of the towns of Glendale and Azalea to attend a public scoping meeting. The public meeting was provided on April 28, 2005 at the Azalea Grange Hall. About 30 local residents attended. A scoping report was mailed to those attending the meeting and also to individuals and organizations expressing interest in Glendale Resource Area projects. The public comment period for the scoping report was from June 7, 2005 to July 7, 2005. The BLM received 32 public responses that were fully responded to in Appendix 3 of the Revised Westside EA, which the West Thin EA incorporates by reference. Comments were considered in the development of the alternatives. The Glendale Resource Area also accepts public comment of proposed forest management activities through the quarterly BLM Medford Messenger publication. A brief description of proposed projects, such as Westside, a legal location and general vicinity map are provided along with a comment sheet for public responses. The Westside Project was included in these quarterly publications beginning in fall, 2004.

An environmental assessment (EA, OR118-05-021) for the Westside Project was made available for public review in June 2006. Since the time of publicizing the EA, all BLM timber sales in Oregon have been under review due to litigation. The IDT reviewed the Revised Westside

Project Environmental Assessment for consistency. Based upon a review with agency direction and NEPA (National Environmental Policy Act) adequacy a decision was made by the Glendale Field Manager to provide a revised environmental assessment (DOI-BLM-OR-M080-2009-0005-EA) to replace the analysis outside of the Chew Choo Timber Sale and Westside Fuels Reduction Project.

Two comment letters were received and a full response is found in Attachment 2 of this decision.

III. CONSULTATION AND COORDINATION

Pursuant with the Endangered Species Act, BLM concurred on all actions authorized by this decision with the US Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS). Namely, all proposed projects are concurred by NMFS (Fisheries LOC 2008/04711). The BLM consulted with the FWS for this project (LOC Tails # 13420-2009-I-0093), in which the Service concurred that the District's proposed forest management activities for fiscal year 2009 may affect, but are not likely to adversely affect, the northern spotted owl and its critical habitat. The District notified the Confederated Tribes of the Siletz and the Grand Ronde as well as the Cow Creek Band of the Umpqua of this project during scoping and the public comment period

IV. DECISION

On July 16, 2009 the U.S. Department of the Interior, withdrew the Records of Decision (2008 ROD) for the Western Oregon Plan Revision and directed the BLM to implement actions in conformance with the resource management plans for western Oregon that were in place prior to December 30, 2008.

Since project planning and preparation of National Environmental Policy Act documentation for this project began prior to the effective date of the 2008 ROD, this project had been designed to comply to the land use allocations, management direction, and objectives of the 1995 resource management plan (1995 RMP).

Based on site-specific analysis, the supporting project record, management recommendations contained in the *West Fork Cow Creek Watershed Analysis*, as well as the 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 *Evaluation of the Medford Resource Management Plan Relative to Four Northern Spotted Owl Reports* (2005), I have decided to implement the proposed activities as described in **Alternative 2** in two separate decisions. This decision includes harvesting timber on approximately 351 acres of forest land by commercial thinning, density management thinning and riparian thinning treatments. Harvesting would be done by tractor yarding (182 acres) and cable yarding (169 acres) logging systems. Whole tree yarding would reduce the amount limbs, branches and residual slash left on site. Associated harvest activities include 17 miles of existing roads maintenance, 0.6 miles of road renovation, 0.3 miles of temporary road construction and decommissioning after use, and the decommissioning of 0.5 mile of existing road. Implementation of the 351 acre proposal includes a stewardship project that would commercially thin approximately 29 acres, treat 12 acres for density management in a progeny site and remove 1,000 feet of wildlife fence no longer needed. Harvesting and associated activities are planned to occur between 2009 and 2016.

ALTERNATIVES CONSIDERED

The alternatives considered in detail included the No Action Alternative (Alternative 1), which serves as the baseline to compare effects and the Proposed Action (Alternative 2), which initiated the environmental analysis process and was the Selected Alternative. A description of these alternatives and associated best management practices and project design features are found on pages 18 – 30 of the EA.

REASONS FOR THE DECISION

My rationale for the decision is as follows:

1. The Selected Alternative (Alternative 2) addresses the purpose and need “for permanent forest production... in conformity with the principles of sustained yield for the purposes of providing a permanent source of timber supply” (O&C Act) and “reduce stand density for residual tree development and provide an entry that is economical.”
2. Alternative 1 was not selected because this alternative would not meet the purpose and need of the project as described in Chapter 1 of the EA.
3. New information regarding the NSO from the following four reports was also considered in this decision.
 - *Scientific Evaluation of the Status of the Northern Spotted Owl* (Sustainable Ecosystems Institute, Courtney *et al.* 2004);
 - *Status and Trends in Demography of Northern Spotted Owls, 1985-2003* (Anthony *et al.* 2004);
 - *Northern Spotted Owl Five Year Review: Summary and Evaluation* (USFWS, November 2004); and
 - *Northwest Forest Plan – The First Ten Years (1994-2003): Status and trend of northern spotted owl populations and habitat, PNW Station Edit Draft* (Lint, Technical Coordinator, 2005).

To summarize these reports, although the agencies anticipated a decline of NSO populations under land and resource management plans during the past decade, the reports identified greater than expected NSO population declines in Washington and northern portions of Oregon, and more stationary populations in southern Oregon and northern California. The reports did not find a direct correlation between habitat conditions and changes in NSO populations, and they were inconclusive as to the cause of the declines. Lag effects from prior harvest of suitable habitat, competition with Barred Owls, and habitat loss due to wildfire were identified as current threats; West Nile Virus and Sudden Oak Death were identified as potential new threats. Complex interactions are likely among the various factors. This information has not been found to be in conflict with either the Northwest Forest Plan or Medford District RMP (*Evaluation of the Medford Resource Management Plan Relative to Four Northern Spotted Owl Reports*, 2005). The Selected Alternative meets the Medford District RMP goal regarding conservation of species while providing a sustainable supply of timber.

4. Two groups commented during the 30-day comment period on the EA and FONSI. The BLM has responded in full to the groups (Attachment 1). The commenters did not identify a flaw in assumptions, analysis, or data that would alter the environmental analysis disclosed in the EA or conclusions documented in the FONSI.

V. FINDING OF NO SIGNIFICANT IMPACT (FONSI)

The proposed treatments for the Small Fortune and Swampwood Timber Sales were analyzed under the West Thin Environmental Assessment (EA# DOI-BLM-OR-M080-2009-0005-EA). The EA included a Finding of No Significant Impact (FONSI). As mentioned above, two letters of comment were received during the 30 day public comment period for the EA and FONSI.

It is my determination that Alternative 2 will 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 for significance, outside what has been analyzed in the higher level environmental documents, in context or intensity as defined in 40 CFR § 1508.27. Therefore an environmental impact statement will not be prepared.

VI. PLAN CONSISTENCY

The implementation of this project will not have significant environmental effects beyond those already identified in the Record of Decision and Standards and Guidelines of the Northwest Forest Plan (1994) and *Medford District Resource Management Plan and Record of Decision* (1995). The proposed action does not constitute a major federal action having significant effects on the human environment; therefore, an environmental impact statement will not be prepared.

VII. ADMINISTRATIVE REMEDIES

This decision 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(1)), the decision for timber sales will not become effective, or be open to formal protest, until the first Notice of Sale appears in a newspaper of general circulation in the area where the lands affected by the decision are located.

To protest a forest management decision, a person must submit a written and signed protest to the Glendale Field Manager, 2164 NE Spalding Avenue, Grants Pass, OR 97526 by the close of business (4:00 p.m.) not more than 15 days after publication of the Notice of Sale. The protest must clearly and concisely state which portion or element of the decision is being protested and why it is believed to be in error, as well as cite applicable regulations. Faxed or emailed protests will not be considered.

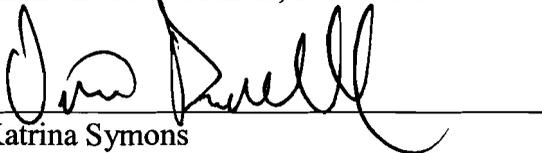
VIII. IMPLEMENTATION DATE

If no protest is received by the close of business (4:30 p.m.) within 15 days after publication of the Notice of Sale, the decision will become final. The Notice of Sale is expected to be published

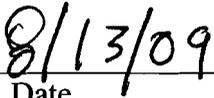
August 20, 2009. If a timely protest is received, the decision will be reconsidered in light of the statement of reasons for the protest and other pertinent information available, and a final decision will be issued in accordance with 43 CFR § 5003.3

IX. CONTACT PERSON

For additional information contact either Katrina Symons, Glendale Field Manager, 2164 NE Spalding Avenue, Grants Pass, OR 97526; telephone 541-471-6653 or Martin Lew, Environmental Planner, 541-471-6504.

for 

Katrina Symons
Field Manager, Glendale Resource Area
Medford District, Bureau of Land Management



Date

ATTACHMENT 1

RESPONSE TO COMMENTS WEST THIN ENVIRONMENTAL ASSESSMENT

- 1 **Comment:** Request stand ages in Environmental Assessment.
Organization: Oregon Wild, Klamath Siskiyou Wildlands Center, Cascadia Wildlands Project, Umpqua Watersheds,
Commenter: Doug Heiken, Francis Eatherington

Comment Excerpt Text: Could not find the age of the trees in each unit. The EA should clearly state the age and character of the affected stands in a section clearly labeled such as “affected environment.” We should not have to look this hard, but we could not find the age of the trees in the appendices either.

Response: The commenters have not identified specific concerns for stand ages other than to ask the BLM collect information for them. The Code of Federal Regulations (CFR § 1500.1) states that NEPA’s purpose is not to generate paperwork- even excellent paperwork- but to foster excellent action. The NEPA process is intended to help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment. The EA does not list stand ages but does provide specific stand information for potential harvest units in Appendix 3 of the West Thin Environmental Assessment (pp. 102 – 135). The West Thin silviculturist identified the condition of the stands and determined that commercial thinning is needed to reduce stand densities in order to “increase the availability of light, water, nutrients and growing space for selected retained trees. A commercial thin treatment would promote increased stand and tree vigor as well as development of larger crowns on retained trees. Fewer, but larger trees would make up these stands in the long term and overall stand health would be improved” (EA, p. 103). The decision to cut trees has already been analyzed under the Medford Record of Decision and Resource Management Plan. The West Thin Purpose and Need is consistent with the NWFP and states that one of the objectives (EA, p.14) is to, “Produce a sustainable supply of timber and other forest commodities on matrix lands to provide jobs and contribute to community stability (RMP, p. 38) by applying commercial thinning...[Commercial thinnings] would be designed to assure high levels of volume productivity in stands less than 120 years of age (RMP, p. 189).”

Those elements of the human environment that were determined to be affected define the scope of environmental concern (see Environmental Elements in Appendix 2 for full list of elements considered). The Affected Environment portion of Chapter 3 describes the current conditions and how they came to be. The relevant resources that could be potentially impacted are: affects to fire hazard; the northern spotted owl and its critical habitat; sediment/water quality; erosion and productivity (EA, p. 31).

- 2 Comment:** NEPA Alternatives
Organization: Oregon Wild
Commenter: Doug Heiken

Comment Excerpt Text: The EA should consider more than one action alternative.

Response: The National Environmental Policy Act directs federal agencies to study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources (Oregon Natural Desert Ass'n v. Singleton, 47 F.Supp.2d 1182, 1194 (D.Or. 1998)). Parties claiming a NEPA violation involving failure to consider a reasonable alternative must offer a specific, detailed, counterproposal that has a chance of success. Morongo Band of Mission Indians v. Federal Aviation Admin., 161 F.3d 569, 576 (9th Cir. 1998). An agency does not have to consider alternatives that would not accomplish the purpose of the proposed project. City of Angoon v. Hodel, 803 F.2d 1016, 1021 (9th Cir. 1986).

Since there were no unresolved conflicts concerning alternative uses of available resources identified by the interdisciplinary team, there was no procedural requirement to develop additional action alternatives.

As mentioned in the West Thin EA:

The West Thin Timber Sale Environmental Assessment (EA) is a revision of the Revised Westside Project EA due to new information. However, these changes do not include those portions of the Revised Westside EA used to support the decisions for implementing the Chew Choo Timber Sale and the Westside Fuels Reduction Project. The West Thin EA includes only 351 acres of harvest compared to the 3,374 acres of harvest proposed under the Revised Westside EA. No regeneration harvesting is proposed.

In Oregon Wild's comment to the Westside Project EA on July 24, 2006, you requested an alternative for commercial thinning and stated that: "*The thinning prescriptions proposed in this Citizen's Alternative would not reduce the canopy closures below 60% in order to meet US Fish and Wildlife Service minimum requirements for Northern spotted owl (NSO) suitable habitat.*"

The BLM has provided an alternative that commercial thins and meets 60% canopy cover in suitable habitat (See response to # 3 below regarding maintaining 60% canopy cover).

3 Comment: Snags and Down wood

Organization: Oregon Wild, Klamath Siskiyou Wildlands Center, Cascadia Wildlands Project, Umpqua Watersheds,

Commenter: Doug Heiken, Francis Eatherington

Comment Excerpt Text: The EA fails to consider an important aspect of the decision—that is, the effect of logging on snags and dead wood recruitment over time.

The FONSI is erroneous, Logging mature forests will cause significant adverse impacts on dead wood habitat, carbon storage/climate change, and adverse competitive interactions between owls. Adequately considering these issues will require an EIS.

Response: The two commenters provide recommendations but do not offer new information that would not require the BLM to: 1) modify alternatives including the proposed action, 2) develop and evaluate alternatives not previously given serious consideration by the agency, 3) supplement, improve, or modify its analysis, 4) make factual corrections (CFR 1503.4). The West Thin EA conforms to the Medford RMP and NWFP and their Environmental Impact Statements.

While the commenters cite various articles on snags, there is no new factual information that would change the snag guidelines in the Medford RMP/EIS or provide specific information to modify the analysis in the West Thin EA. The Project Design Feature identified in the West Thin EA states that “All non-hazardous snags would be retained in all harvest units. If it is necessary to fall snags for safety reasons, they would remain on site as down wood. All existing naturally occurring dead and down woody debris, greater than or equal to 16 inches diameter, would remain on site” (EA, p. 24).

The EA states specifically on page 39 that:

The function of owl habitat in each unit would be maintained. Nesting, roosting, and foraging habitat would retain at least 60% canopy cover, and when present, a multistoried, multi-species canopy with large overstory trees (greater than 30 inches in diameter); a high incidence of larger trees with various deformities, including mistletoe, large snags, large accumulations of fallen trees and wood on the ground, and all remnant trees or leave trees from previous harvesting would be retained. No treatment would occur within a 70 acre nest patch (described in USDA et al. 2007, corrected 9/2008, Appendix B of DA BA FH USDI 2008b).

Dispersal habitat would maintain at least 40 percent canopy closure. Decadent woody material would be retained as either large snags or down wood.

Anticipated beneficial effects which may result from the implementation of thinning include:

- Improved condition of the elements of spotted owl NRF habitat over time.
- Accelerated growth of residual trees, resulting in improved spotted owl NRF habitat.
- Treated stands would be healthier and less susceptible to severe losses from wildland fire or suppression-related diseases.
- Additional light in treated stands may improve forage for spotted owl prey species

Regarding climate change, the 2008 Western Oregon Plan Revision FEIS contains the most current analysis on carbon storage and climate change relevant to the West Thin project. Volume II states that under all alternatives, including the Northwest Forest Plan/1995 Medford RMP, total carbon storage [in all BLM-managed lands in Western Oregon] would increase over time from current levels.” Operation under the Northwest Forest Plan/1995 Medford RMP, which applies to the West Thin EA, “would average an annual accumulation of 1.69 million tonnes of carbon over the next 100 years.” The FEIS makes this conclusion based on the assumption that “all alternatives would increase the abundance of mature and structurally complex forests, which store more carbon than young or stand establishment forests...By 2016, the No Action Alternative [Northwest Forest Plan/1995 Medford RMP] would result in total carbon storage 3% higher than average historic conditions...all alternatives would continue to constitute 1% of the total carbon currently stored in forests and harvested wood in the United States and 0.02% of total carbon currently stored in vegetation, soil, detritus globally...The annual increase in carbon storage under all alternatives would continue to offset less than 0.0001% of the current annual increase in atmospheric carbon dioxide. This “is too small a portion of global carbon storage to detect any change in global carbon storage. No climate models have sufficient precision to reflect the effects on climate from such as small fractional change in global carbon storage.” Because of the global scale of climate change, analysis of carbon storage at the stand-level is not necessary to provide the decision maker with the information necessary to determine whether a Finding of No Significant Impact is appropriate or to make an informed decision on this project. Nor would stand-level analysis provide meaningful information to the public regarding the impacts of this project on global climate change.

4 Comment: Manage for Decadence

Organization: Oregon Wild, Klamath Siskiyou Wildlands Center, Cascadia Wildlands Project, Umpqua Watersheds,

Commenter: Doug Heiken, Francis Eatherington

Comment Excerpt Text: The EA should consider more than one action alternative.

There is a widely held belief that growing big trees faster by thinning, also benefits snag associated wildlife and fish because if there are bigger trees, there must also be bigger snags faster. Avoidance is just to leave stands unthinned and let them naturally grow and recruit mortality over time.

One of the challenges of any restoration thinning regime is that virtually all logging tends to “capture mortality,” yet the trees that are removed represent future snags and down logs and are valuable (even essential) components of any complex forest.

Response: The West Thin Project is not a “restoration thinning.” As stated in the EA, one of the objectives is to:

Produce a sustainable supply of timber and other forest commodities on matrix lands to provide jobs and contribute to community stability (RMP, p. 38) by applying commercial thinnings would be designed to assure high levels of volume productivity in stands less than 120 years of age (RMP, p. 189).

While the commenters express their interests and opinions regarding decadence, their objection appears to be with the Northwest Forest Plan. The decision to harvest trees has already been made. The West Thin Project EA is consistent with the management direction of the Northwest Forest Plan and Medford RMP. The NWFP states that for green-tree and snag retention the Medford District will meet the standards and guidelines by providing 640 acre blocks (Connectivity/Diversity Blocks) as currently spaced that are managed on 150-year rotation. When an area is cut, 12 to 18 green trees will be retained. In the remainder of the matrix, retain 6 – 8 green trees per acre in harvest acres (p. C-42). The NWFP clarifies that “This limitation does not apply to intermediate harvests (thinning) in even-age young stands because leaving untreated portions of young stands would retard stand development and be detrimental to the objective of creating late successional patches (p. C-41).

The West Thin Project EA is consistent with the management direction of the Medford RMP. The Medford RMP provides specific objectives for managing lands under the matrix land allocation. Those objectives include retaining 15 percent late successional forest, and provide a renewable supply of large trees for cavity using birds, etc. Commercial thinning are scheduled after developing stands reach a combination of stem diameter and surplus volume to permit an entry that is economical (RMP, p. 185).

The RMP (pg. 72) only allocated approximately 17 percent of the Medford District’s landbase to the matrix land use allocation, from which the majority of the timber harvest is to be derived. The RMP allocated the lands in this project area primarily for timber production and with the general prescription of modified even-aged management that would trend toward a forest composed of stands containing a variety of structures, ages, sizes, and canopy configurations (RMP, p. 187). Matrix lands were not set aside for developing old growth forests.

5 Comment: Recognize the Many Values of Snags, Decayed Wood and Associated Functions and Species

Organization: Oregon Wild, Klamath Siskiyou Wildlands Center, Cascadia Wildlands Project, Umpqua Watersheds,

Commenter: Doug Heiken, Francis Eatherington

Comment Excerpt Text: The NEPA analysis must recognize that mechanical treatments unavoidably reduce snag habit, if for no other reason than the habitual removal of snags for safety reasons. Even restoration thinning intended to accelerate development of large trees reduces mortality that is another key attribute of late successional forests.

Almost all of the agencies' focal species use dead wood for important aspects of their life cycle. Pileated woodpeckers and cavity excavators use dead wood for nesting, foraging, and possibly communication. Goshawks, owls, and other raptors use dead wood for nesting, roosting, and to support a healthy prey base. Pacific fisher and American marten for denning, travel, cover, foraging, and prey base. Deer and elk use dead wood for cover and protection of bedding and fawning areas. Salmon, trout, and other aquatic species use dead wood for shade and stream cooling, hiding cover, spatial partitioning of habitat, energy dissipation, capture-storage-release of sediment and nutrients, and substrate and energy input for the food web that provides their food.

Secondary cavity nesters include numerous species of conservation concern including the Pacific fisher, American marten, bufflehead, flammulated owl, western bluebird, Vaux's swift, northern flying squirrel, and several bat species, plus bears, amphibians, invertebrates, and many others.

Response: See response to #4 above. The commenters merely cite numerous articles and individuals to demonstrate their opposition to harvesting. The Purpose and Need of the Westside Project (p. 13) clearly states that the:

O & C Lands Act requires the Secretary of the Interior to manage O&C lands for permanent forest production in accord with sustained yield principles

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

Forest Management is appropriate at this time to manage developing stands in the West Thin PA in order to reduce stand density for residual tree development and provide an entry that is economical.

The comments do not appear aware that the West Thin Project is a thinning project. Effects of thinning were evaluated by the wildlife biologist and determined that:

Anticipated beneficial effects which may result from the implementation of thinning include:

- Improved condition of the elements of spotted owl NRF habitat over time.
- Accelerated growth of residual trees, resulting in improved spotted owl NRF habitat.
- Treated stands would be healthier and less susceptible to severe losses from wildland fire or suppression-related diseases.

- Additional light in treated stands may improve forage for spotted owl prey species

While Oregon Wild cites various articles on snags, it does not provide new factual information that would change the snag guidelines in the Medford RMP/EIS or provide specific information to modify the analysis in the West Thin EA.

6 Comment: New information on Snags.

Organization: Oregon Wild

Commenter: Doug Heiken

Comment Excerpt Text.

The Forest Service cannot provide any assurance that its plans and projects will assure viable populations of native wildlife that depend on dead trees. The Forest Service does not know how many snags are necessary to support viable populations of cavity associated species. The Forest Service has provided no credible link between DecAID tolerance levels, potential population levels, and/or viable populations. The Forest Service has also failed to reliably quantify existing and projected habitat for snag associated species.

Response The Medford RMP is specific to activities on BLM managed lands and not Forest Service managed lands

While Oregon wild cites various articles on snags, it does not provide new factual information that would change the snag guidelines in the Medford RMP/EIS or provide specific information to modify the analysis in the West Thin EA. The Project Design Feature identified in the Westside EA states that “All non-hazardous snags would be retained in all harvest units. If it is necessary to fall snags for safety reasons, they would remain on site as down wood” (EA, p. 26).

In addition to the retention of snags, future sources of snag recruitment are retained. "Nesting, roosting, and foraging habitat would retain at least 60% canopy cover, and when present, a multistoried, multi-species canopy with large overstory trees (greater than 30 inches in diameter); a high incidence of larger trees with various deformities, including mistletoe, large snags, large accumulations of fallen trees and wood on the ground, and all remnant trees or leave trees from previous harvesting would be retained" (EA, p. 39).

7 Comment: Significant new information on spotted owls (and barred owls)

Organization: Oregon Wild

Commenter: Doug Heiken

Comment Excerpt Text.

New information on the Threatened northern spotted owl indicates that there are significant new uncertainties for the owl that have not been fully considered at the regional or local scale. As recognized by the spotted owl status review, all existing suitable habitat could be critical to the survival of the spotted owl. These new concerns include:

- Competition and displacement from the **barred owl** which is dramatically increasing in numbers throughout the range of the spotted owl. The current plan for spotted owls does not account for the effects of barred owls which compete with spotted owls and exclude spotted owls from otherwise suitable habitat.
- The effects of **West Nile Virus** which is fatal to the spotted owl; **Implications:** A larger population may be better able to survive the stochastic pressures of this disease. It may be important to avoid any further "take" of birds or habitat at least until the disease has run its course. Isolated stands of old-growth may also be important because they may be dryer and have fewer mosquito vectors. Geographic isolation might also help protect them from the contagious spread of the disease
- **Avian malaria** that was recently discovered in spotted owls. Ishak HD, Dumbacher JP, Anderson NL, Keane JJ, Valkiūnas G, et al. (2008) Blood Parasites in Owls with Conservation Implications for the Spotted Owl (*Strix occidentalis*). PLoS ONE 3(5): e2304. doi:10.1371/journal.pone.0002304
- The potential loss of habitat from **Sudden Oak Death** syndrome; **Implications:** Loss of habitat to SOD, makes remaining habitat more valuable than previously considered in any programmatic NEPA document.
- Greater than expected **loss of habitat to wildfire** over the last several years; **Implications:** Loss of habitat to fire and the risk of more such losses, makes all remaining habitat more valuable than previously considered in any programmatic NEPA document.
- The potential effect of **climate change** in terms of longer fire seasons;
- Overly **Aggressive Fuel Reduction Logging** and Misapplication of the Healthy Forest Initiative and Healthy Forest Restoration Act. **Implications:** While it is true that some treatments if carefully done could help reduce the risk of fire while also retaining some owl habitat values, many such fuel reduction treatments in owl habitat will degrade or downgrade some existing owl habitat (or put that habitat at greater risk of fire or barred owl invasion), so the remaining owl habitat throughout the owls range becomes more important than previously considered in any programmatic NEPA document.
- **Fuel reduction objectives conflict with owl habitat objectives.** The authors of the Northwest Forest Plan expected that 80% of the reserves will become late successional habitat after a period of restoration and recovery. However, recent "Science Findings" from PNW Research reveals that in the dry provinces, "requiring landscape treatments to earn a profit negatively impacted both habitat and fire objectives" and fuel reduction objectives are only compatible with owl habitat objectives, if the owl habitat objective is maintained at 40%. PNW Research Station. 2006.
- There has also been a continuous **loss of suitable owl habitat on non-federal lands** that should be considered as a cumulative impact on the viability of the species. There

have been almost twice as many acres of owl habitat lost due to stand replacing timber harvest on non-federal lands than that caused by fire on all land allocation combined with logging on federal land allocations. According to Raphael et al (2006) 583,500 acres of owl habitat “losses” can be attributed to “regeneration harvest” on non-federal forest lands from 1994 to 2004. **Implications:** Continued loss of habitat on private lands renders remaining suitable habitat on federal land more valuable than it was in 1994 when there was more owl habitat on all ownerships. See WOPR DEIS page 195.

- **WOPR** — The entire Northwest Forest Plan is premised on the existence of the network of reserves. BLM has revised six RMPs in western Oregon that all significantly reduce large block reserves, riparian reserves, and mitigations for all kinds of logging. This logging will cause further loss of suitable habitat and will have long-term consequences. It is arbitrary and capricious to allow implementation of a plan premised on the existence of reserves if those reserves are going away. **Implications:** If there is a chance that BLM reserves will no longer be protected, then all remaining suitable habitat must be protected to retain options for the conservation of the Threatened spotted owl, marbled murrelet, and SONC Coho salmon. The spotted owl cumulative effects analysis in the 1994 SEIS is no longer valid and must be reconsidered at the regional scale. No project-level NEPA document can rely on the 1994 effects analysis because the publication of the NOI means that elimination of the reserves is a "reasonably foreseeable" action.
- **Fragmentation has gotten worse** not better since the NWFP was adopted. The Northwest Forest Plan was supposed to reduce fragmentation and enhance large blocks of owl habitat, but "Trends in most Washington and Oregon provinces, since 1994, indicate slight increases in habitat fragmentation [from stand-replacing timber harvest and wildfires] based on landscape division indices. The Oregon Coast Range province shows the most increase in fragmentation since 1994, based on the splitting index." **Implications:** To reduce fragmentation and improve habitat conditions for the spotted owl as anticipated by the Northwest Forest Plan, existing mature & old-growth forests should be protected from harvest, and regeneration harvest should be disfavored.

The agencies can no longer rely on the 1994 Northwest Forest Plan FSEIS because there is significant new information that could alter the results of the previous analysis. “[A]n agency preparing a SEIS cannot simply rest on the previous EIS or SEIS if there is new information that may alter the environmental analysis. The agency must be alert to new information that may alter the results of its original environmental analysis” Friends of the Clearwater v. Dombeck, 222 F.3d 552, 557 (9th Cir. 2000). NWEA vs. Mark Rey, W.D. Washington. No. C04-844P. Judge Marsha Pechman, Aug 1, 2005.

Response: Regarding impacts to the northern spotted owl (NSO), Oregon Wild’s comments fail to recognize that the NFP is a comprehensive land management strategy that more than adequately addresses the needs of the NSO. The federal agencies consulted with the U.S. Fish and Wildlife Service (USFWS) on the level of timber harvest, including removal of suitable NSO habitat that was to occur under the Plan, and received a biological opinion from

the expert federal agency charged with conserving the NSO and its habitat. In short, removing and downgrading suitable NSO habitat was anticipated in two EISs, and does not now trigger the need to prepare yet another EIS when the record shows that the federal agencies have more than taken the necessary “hard” look at these issues. Further, BLM consulted with the FWS for this project (LOC Tails # 13420-2009-I-0093), in which the Service concurred that the District’s proposed forest management activities for fiscal year 2009 may affect, but are not likely to adversely affect, the northern spotted owl and its critical habitat.

The EA clearly states on page 4 that:

The 2008 ROD allowed for transition projects, such as West Thin, to be implemented consistent with the management direction of either the 1995 RMP or the 2008 RMP, at the discretion of the decision maker (2008 Medford ROD/RMP, pp. 5-6).

The West Thin Timber Sale is in compliance with the 1995 RMP, and meets the requirements designated in the 2008 ROD for such transition projects:

1. A decision was not signed prior to the effective date of the 2008 ROD.
2. Preparation of the National Environmental Policy Act documentation began prior to the effective date of the 2008 ROD. The EA for the Westside Project was made available to the public in June 2006.
3. A decision on the project will be signed within two years of the effective date of the 2008 ROD.
4. Regeneration harvest would not occur in a Late-Successional Management Area or any harvest in a Deferred Timber Management Area.
5. There would be no destruction or adverse modification of critical habitat designated for species listed as endangered or threatened under the Endangered Species Act.

Oregon Wild has not provided any new information. The barred owl, west Nile virus, and the sudden oak death syndrome were considered. As stated on pages 36 and 37 of the West Thin EA:

The Bureau of Land Management (BLM), Forest Service (FS), and US Fish and Wildlife Service (USFWS) have conducted a coordinated review of four recently completed reports containing information on the NSO. The reviewed reports include the following:

- *Scientific Evaluation of the Status of the Northern Spotted Owl* (Sustainable Ecosystems Institute, Courtney et al. 2004);
- *Status and Trends in Demography of Northern Spotted Owls, 1985-2003* (Anthony et al. 2004);
- *Northern Spotted Owl Five Year Review: Summary and Evaluation* (USD I USFWS, November 2004); and
- *Northwest Forest Plan – The First Ten Years (1994-2003): Status and trend of northern spotted owl populations and habitat, PNW Station Edit Draft* (Lint, Technical Coordinator, 2005).

The reports did not find a direct correlation between habitat conditions and changes in NSO populations, and they were inconclusive as to the cause of the declines. Even though some risk factors had declined (such as habitat loss due to harvesting) other factors had continued such as habitat loss due to wildfire, potential competition with the barred owl, West Nile virus, and sudden oak death (USDI USFWS 2004, Lint 2005). The barred owl is present throughout the range of the spotted owl, so the likelihood of competitive interactions between the species raises concerns as to the future of the spotted owl (Lint 2005). Lint (2005) also found that between 1994-2003, federal lands in the Klamath Province lost 6.6% of spotted owl nesting habitat to stand-replacement fire, mainly to the Biscuit Fire (almost 500,000 acres). The decline rates include effects on spotted owls from factors such as West Nile Virus, barred owl, avian malaria, sudden oak death, wild fires, and climate changes.

Oregon Wild cites new information regarding avian malaria. Avian malaria is transmitted by mosquitoes and research is attempting to determine whether avian malaria was introduced by the barred owl. Oregon Wild has not identified a direct correlation between avian malaria and changes in NSO populations beyond the four studies listed above.

Oregon Wild should be aware that this project does not propose any regeneration harvest.

8 Comment: Young stand thinning recommendations

Organization: Oregon Wild

Commenter: Doug Heiken

Comment Excerpt Text.

1. When conducting commercial thinning projects take the opportunity to implement other critical aspects of watershed restoration especially pre-commercial thinning, restoring fish passage, reducing the impacts of the road system, and treating invasive weeds.
2. Focus on treating the youngest stands that are most "plastic" and amenable to restoration.
3. Generally retain all the largest trees, then "free thin from below" retaining some smaller trees in all age-size classes.
4. Retain and protect under-represented conifer and non-conifer trees and shrubs.
5. Strive for a variable density outcome. Use your creativity to establish diversity and complexity both within and between stands. Use skips and gaps within units to help achieve diversity. Gaps should be small, while skips should be a little larger, but even small clumps and patches of trees are desirable. Gaps should not be clearcut but rather should retain some residual structure in the form of live or dead trees. Landings do not make good gaps because they are clearcut, highly compacted and disturbed, more likely subject to repeated disturbance, and directly associated with roads. Using "designation by description" results in a small amount of within stand variability, but it is a significant compromise compared to the amount of variability that is ecologically desired both within and between stands and that could reasonably be accomplished with a little more effort.
6. The scale of patches in variable density thinning regimes is important. Ideally variability should be implemented at numerous scales ranging from small to large, including: the

scale of tree fall events; pockets of variably contagious disturbance from insects, disease, and mixed-severity fire; soil-property heterogeneity; topographic discontinuities; the imprint of natural historical events; etc.

7. Retain abundant snags and course wood both distributed and in clumps so that thinning mimics natural disturbance. Retention of dead wood should generally be proportional to the intensity of the thinning, e.g., heavy thinning should leave behind more snags not less. Retain wildlife trees such as hollows, forked tops, broken tops, leaning trees, etc.
8. Continuous recruitment of snags is critical to development of old growth forest habitat. This is especially critical in uplands that are already short of snags and in riparian areas where recruitment of large wood is important to stream structure. It is often asserted that thinning grows big trees faster and therefore results in more rapid recruitment of large snags, but FVS and other tools show this NOT to be true. In fact, thinning both reduces and delays recruitment of snags, first by removing trees that would otherwise suffer suppression mortality, and second by increasing stand vigor and postponing overall mortality. The implications are that heavy thinning should be used sparingly and generous unthinned patches should be retained WITHIN thinned stands in order to continue the snag recruitment process and mitigate for captured mortality.
9. Thin heavy enough to stimulate development of understory vegetation, but don't thin too heavy. Recognize that thinning captures mortality and that plantation stands are already lacking critical values from dead wood due to the unnatural stand history of all clearcut and planted stands.
10. If using whole tree yarding or yarding with tops attached to control fuels, the agency should top a portion of the trees and leave the greens in the forest in order to retain nutrients on site.
11. Avoid impacts to raptor nests and enhance habitat for diverse prey species. Train marking crews and cutting crews to look up and avoid cutting trees with nests of any sort and trees with defects.
12. Take proactive steps to avoid the spread of weeds. Use canopy cover to suppress weeds.
13. Buffer streams from the effects of heavy equipment and loss of bank trees and trees that shade streams. Mitigate for the loss of LWD input by retaining extra snags and wood in riparian areas. Recognize that thinning captures mortality that is not necessarily compensated by future growth.
14. Avoid road construction. Where road building is necessary, ensure that the realized restoration benefits far outweigh the adverse impacts of the road. Rank new road segments according to their relative costs (e.g. length, slope position, soil type, ease of rehabilitation, weed risk, native vegetation impacts, etc.) and benefits (e.g. acres of restoration facilitated), then use that ranking to consider dropping the roads with the lowest ratio of benefits to costs. Do not allow log hauling during the wet season. Once you have determined the relative acres accessed per mile of road, you can take the analysis one step further, to determine the "effective road density" of each segment? In other words, extrapolate as if that much road were required to reach each acre of the planning area, then compare the resulting road density to standards for big game, cumulative hydrological impact, etc? For example, if a new spur road accesses thinning opportunities at a rate of 200 acres of forest per mile of road, then divide 640 acres per section by 500 acres per mile to determine the effective road density of 3.2 mi/mi².

15. If this project involves biomass utilization, the impacts need to be clearly disclosed. How will the biomass be moved from the remote corners of the treatment areas to the landings? Will there be extra passes made by heavy equipment? Will the landings be enlarged to make room for grinders, chip vans, and other equipment? Can the local forest roads accommodate chip vans? Will the roads be modified to make them passable by chip vans? What are the impacts of that? What are the direct, indirect, and cumulative impacts on soil, water, wildlife, and weeds?
16. Develop an alternative that addresses carbon and climate by (a) deferring harvest of older forests to store carbon and provide biodiversity and connectivity and (b) thin younger stands to increase forest resilience and diversity and connectivity. Recognize that there is a carbon cost associated with thinning. As stands develop from young to mature to old, they recruit large amounts of material from the live tree pool to the dead wood pool and this pool continues to accumulate large amounts of carbon for centuries. Logging, even thinning, can dramatically affect the accumulation of carbon in the dead wood pool by capturing mortality, diverting it from the forest, and accelerating the transfer of carbon to the atmosphere. Carbon stays out of the atmosphere much longer if it remains in the forest as live and/or dead trees, instead of being converted to wood products and industrial and consumer waste.
17. Leave a portion of the tree tops and branches in the forest to allow nutrients to be released and reassimilated by the forest.

Response: Oregon Wild provides a general list of 17 recommendations that reflect a lack of site specific knowledge of the area and conditions. Their recommendations do not contain specific new information that would require the BLM to: 1) modify alternatives including the proposed action, 2) develop and evaluate alternatives not previously given serious consideration by the agency, 3) supplement, improve, or modify its analysis, 4) make factual corrections (see CFR §1503.4). Many of the recommendations also reflect disagreement with policy decisions established by the Medford District Resource Management Plan, rather than project level decisions. For example, recommendations to defer harvest of older forests to store carbon, or to judge new road construction primarily by restorative benefits rather than other functionality, are issues that are decided in the land use planning process. The West Thin Project EA conforms to the Medford RMP and NWFP and their Environmental Impact Statements.

See response to comment #3 regarding carbon sequestration and consideration of potential impacts from activities within West Thin Environmental Analysis.

As an example of their general recommendations is their comment that: “When conducting commercial thinning projects take the opportunity to implement other critical aspects of watershed restoration especially pre-commercial thinning, restoring fish passage, reducing the impacts of the road system, and treating invasive weeds.”

The West Thin Project is not a restoration project. The Purpose and Need clearly states that:

The O & C Lands Act requires the Secretary of the Interior to manage O&C lands for permanent forest production in accord with sustained yield principles

The West Thin Planning Area is within O & C lands administered by the Department of the Interior, BLM National System of Public Lands “for permanent forest production... in conformity with the principles of sustained yield for the purposes of providing a permanent source of timber supply” (O&C Act).

Forest Management is appropriate at this time to manage developing stands in the West Thin PA in order to reduce stand density for residual tree development and provide an entry that is economical.

An example of lack of specific detail is Oregon Wild’s comment that “Thin heavy enough to stimulate development of understory vegetation, but don’t thin too heavy.” This is not new information or science. The West Thin EA prescriptions provide projected canopy cover estimates after harvest and thoroughly analyzed the effects in the EA.

These types of vague and non-specific comments are not considered substantive comments.

9 Comment: Thinning in riparian reserves.

Organization: Oregon Wild, Klamath Siskiyou Wildlands Center, Cascadia Wildlands Project, Umpqua Watersheds,

Commenter: Doug Heiken, Francis Eatherington

Comment Excerpt Text: ACS Objective #8 calls for maintaining “amounts and distributions of coarse woody debris sufficient to sustain physical complexity and stability.” The objectives require retention and long-term recruitment of abundant trees and wood especially large wood that provides long-lasting ecological services.

We are concerned that thinning captures mortality which reduces and delays recruitment of large wood needed to meet ACSO #8 among others. Thinning is often conducted in riparian areas based on the false assumption that thinning accelerates the recruitment of large trees and therefore large snags, but rigorous analysis using stand simulation software clearly shows that assumption to be false.

Thinning in stands of trees that are not yet of "pool forming" size should be beneficial, but after trees are of pool-forming size thinning might just capture and remove the mortality that should end up in the stream. (In simplistic terms, a pool-forming tree is one big enough to fall all the way across the stream, so it varies by stream size). See Roni and Beechie (2002) below.

Response: The commenters merely disagree with the Aquatic Conservation Strategy analysis done for this project. They do not offer site specific information that would alter

BLM's analysis. The fisheries biologist for the West Thin EA does not concur with your understanding of this ACS objective. The Aquatic Conservation Strategy Consistency Analysis found in APPENDIX 1 of the EA (pp. 77-83) concludes that "Based on this analysis at both the site and landscape scale of the proposed activities in Alternative 2, it was determined that the actions are consistent with the nine objectives and the four components of the ACS. This determination was based on the small spatial and temporal disturbances associated with the proposed action." Objective #8 does not refer to pool forming trees or coarse woody material to be placed in streams.

Specifically the ACS Analysis found that for Objective 8:

The species composition and structural diversity of plant communities in riparian areas and wetlands would be maintained at the site and landscape scales in the short and long term. Vegetation treatments in the Proposed Action were designed to enhance riparian conditions in the short and long term. Plant communities in riparian areas and wetlands would be maintained and enhanced through silvicultural prescriptions and no treatment buffers in order to provide for adequate summer and winter thermal regulation, nutrient filtering, appropriate rates of surface erosion, bank erosion, and channel migration and to supply amounts and distributions of coarse woody debris sufficient to sustain physical complexity and stability.

The commenters have not reviewed the West Thin EA enough to understand that there is no harvesting within 110 feet to 125 of any stream. There are few trees from this distance that would contribute to this "pool forming" size.

10 Comment: Variable density thinning

Organization: Oregon Wild, Klamath Siskiyou Wildlands Center, Cascadia Wildlands Project, Umpqua Watersheds,

Commenter: Doug Heiken, Francis Eatherington

Comment Excerpt Text: We wish that you would use variable density thinning prescriptions in all young stand thinning projects regardless of land allocation. Uniform spacing basically sets up the need for future thinning that the agency may not have sufficient funding, capacity, and public support to accomplish. Whereas variable density thinning leaves more options for either more or less intensive management in the future and is a good hedge against uncertainty. The benefits of variable density thinning include: creating a patchy variety of conditions of light, heat, wind, moisture, competitive stress, and hiding cover within the stand and the landscape; setting up the stand so that there are future "winners" and "losers" (the winners become big trees and the losers become snags and coarse woody debris), etc.

Response: The commenters are merely telling the BLM to use variable commercial thinning rather than the accepted commercial thinning method described in the Medford RMP and West Thin EA. The BLM clearly states in the purpose and need of the Anaktuvuk Thin EA that the project is for timber harvesting that is economical. Specifically:

The O & C Lands Act requires the Secretary of the Interior to manage O&C lands for permanent forest production in accord with sustained yield principles

The West Thin Planning Area is within O & C lands administered by the Department of the Interior, BLM National System of Public Lands “for permanent forest production... in conformity with the principles of sustained yield for the purposes of providing a permanent source of timber supply” (O&C Act).

Forest Management is appropriate at this time to manage developing stands in the West Thin PA in order to reduce stand density for residual tree development and provide an entry that is economical.

The RMP (pg. 72) only allocated approximately 17 percent of the Medford District’s landbase to the matrix land use allocation, from which the majority of the timber harvest is to be derived. The RMP allocated the lands in this project area primarily for timber production and with the general prescription of modified even-aged management that would trend toward a forest composed of stands containing a variety of structures, ages, sizes, and canopy configurations (RMP, p. 187).

While commercial thinning is an acceptable forestry practice, it is considered an intermediate harvest method and acknowledged as such in forest management practices taught at accredited forestry colleges and professional organizations such as the Society of American Forestry. Forestry research has not demonstrated that commercial thinning can be sustained in the long term. Douglas-fir is considered a disturbance dependant species needing sufficient light to grow in an open condition. Creating small gaps ultimately will close in due to crown expansion.

Variable density thinning is a silvicultural treatment tool to meet specific management objectives and is not a one size fits all approach. The Glendale Resource Area has prescribed commercial thinning with gaps to meet other objectives such as forage for elk as warranted. Commercial thinning, as defined in the Medford RMP is “The removal of merchantable trees from an even-aged stand to encourage growth of the remaining trees.” Commercial thinning, whether variable density management or not, cannot replace regeneration harvest for sustained rotations.

11 Comment: Thinning in the Matrix must be Restorative and Variable

Organization: Oregon Wild

Commenter: Doug Heiken

Comment Excerpt Text. The matrix is supposed to provide wildlife habitat and connectivity and VDT will help the matrix achieve these objectives while also improving the growth of favored commercial tree species. Matrix is not a tree farm. It still has a role to play in providing diverse habitats, so don’t just grow trees, grow forests.

Response: Oregon Wild made the same comments to the Westside EA. BLM incorporates by reference its response of these same comments regarding connectivity in this area (Westside EA, p. 26).

The N[W]FP considered the issue of connectivity and developed a system of reserves, connectivity blocks and 100 acre owl core areas. The Medford RMP EIS identified the concern for this east-west swath and stated in the analysis that “[h]abitat loss in these areas due to past logging could have already resulted in a significant loss of connectivity between physiographic provinces and consequent reproductive isolation.”

The Westside Project interdisciplinary team determined that the northern ridge does not provide a continuous west to east band of federal land because of heavily harvested private lands to the west, intermingled land ownership and the I-5 corridor, which forms a barrier, and runs north to south at the eastern edge of the Planning Area. The southern ridge also has the same barriers to the west to east movement of species because of intermingled private land and the I-5 corridor.

Regarding the concern that the Matrix is not a tree farm, see response to #10 above regarding the purpose and need of the West Thin EA and that the RMP only allocated approximately 17 percent of the Medford District’s landbase to the matrix land use allocation, from which the majority of the timber harvest is to be derived.

As mentioned in BLM response to #10 above, variable density thinning is a silvicultural treatment tool to meet specific management objectives and is not a one size fits all approach. The Glendale Resource Area has prescribed for commercial thinning with gaps (in another project) to meet other objectives such as forage for elk.

12 Comment: Chew Choo and Westside Timber Sales

Organization: Oregon Wild, Klamath Siskiyou Wildlands Center, Cascadia Wildlands Project, Umpqua Watersheds,

Commenter: Francis Eatherington

Comment Excerpt Text: While we appreciate the thinning-only change to the Westside project, the BLM should also consider not implementing the other Westside Projects sold in the Chew Choo timber sale. This should be accomplished by returning the bid bond and revoking the contract.

Response: It is out of the scope of the West Thin EA to make a decision on the Chew Choo Timber Sale. As stated in page 11 of the West Thin EA:

The West Thin Timber Sale Environmental Assessment (EA) is a revision of the Revised Westside Project EA due to new information. However, these changes do not include those portions of the Revised Westside EA used to support the decisions for implementing the Chew Choo Timber Sale and the Westside Fuels Reduction Project.

13 Comment: Northern Spotted Owl

Organization: Oregon Wild, Klamath Siskiyou Wildlands Center, Cascadia Wildlands Project, Umpqua Watersheds,

Commenter: Francis Eatherington

Comment Excerpt Text: The West Thin project is an ecologically important area, in critical habitat, and within the Rogue-Umpqua Area of Concern for connectivity for the northern spotted owl connecting the Western Cascades province with the southern portion of the Coast Ranges and northern end of the Klamath Mountains provinces. Since this area is already degraded by the checkerboard land ownership, the BLM ownership is even more critical. “This critical habitat unit includes areas not only important for linkage between provinces, but also areas which help maintain intra-provincial connectivity”. This means the BLM must fully consider cancelling Chew Choo, as also be very careful about maintaining NSO habitat in the West Thin project.

Response: See Response to #11 and #12 above

14 Comment: Canopy Closure

Organization: Oregon Wild, Klamath Siskiyou Wildlands Center, Cascadia Wildlands Project, Umpqua Watersheds,

Commenter: Francis Eatherington

Comment Excerpt Text: Some of the CHU is within matrix that the West Thin proposal will thin to prepare for a future regeneration harvest. This is not allowed in CHUs. The BLM can only thin in northern spotted owl CHUs to enhance spotted owl habitat.

The West Thin EA says one element of nesting, roosting, and foraging (NRF) habitat for the northern spotted owl is a canopy closure that exceeds 70%. Some of the units to be thinned will have their NRF habitat canopy closure reduced down to 60%. The BLM should explain why they are not being maintained at 70% canopy closure.

Response: The BLM does not state that the West Thin proposal will thin to prepare for a future regeneration harvest. See full response to description of commercial thinning at Response to #15 below.

The portion Umpqua Watersheds cite should read: The *current conditions* of forest stands in the project area that qualify as Habitat 1 and Habitat 2 suitable habitat generally exceed 70% canopy closure. The EA states on page 39 that the:

BLM will maintain the characteristics that classify a stand as NRF or dispersal habitat throughout the treatments for no loss of NRF or dispersal habitat. Treatments would retain the canopy percentages, structural components and species diversity important to owls and their habitat (09 NLAA DA BA FH pp.6-9). All treatments have been designed

to cause only insignificant changes to canopy cover percentages and understory vegetation for NRF and Dispersal habitat as indicated below.

The function of owl habitat in each unit would be maintained. Nesting, roosting, and foraging habitat would retain at least 60% canopy cover, and when present, a multistoried, multi-species canopy with large overstory trees (greater than 30 inches in diameter); a high incidence of larger trees with various deformities, including mistletoe, large snags, large accumulations of fallen trees and wood on the ground, and all remnant trees or leave trees from previous harvesting would be retained. No treatment would occur within a 70 acre nest patch (described in USDA et al. 2007, corrected 9/2008, Appendix B of DA BA FH USDI 2008b).

A description of Nesting, roosting and foraging habitat is found in the Biological Assessment (p. 6-9):

Nesting, Roosting, and Foraging (NRF) Habitat for the northern spotted owl consists of habitat used by owls for nesting, roosting, and foraging. NRF habitat also functions as dispersal habitat. Generally, this habitat is multistoried, 80 years old or more (depending on stand type and structural condition), and has sufficient snags and down wood to provide opportunities for nesting, roosting, and foraging. The canopy closure generally exceeds 60 percent, but canopy closure or age alone does not qualify a stand as NRF. . For spotted owls, features that support nesting and roosting habitat typically include a moderate to high canopy (60 to 90 percent); a multistoried, multi-species canopy with large overstory trees (greater than 30 inches in diameter); a high incidence of larger trees with various deformities, including mistletoe, large snags, large accumulations of fallen trees and wood on the ground; and flying space (Thomas et al. 1990). BO states that to *Treat and maintain spotted owl NRF habitat*: means a canopy cover of greater than 60 percent along with other habitat elements, including snags, down wood, tree-height class-diversity, and older hardwoods. These habitat elements will be maintained post project implementation, in accordance with the District's Resource Management Plan (RMP) (USDI BLM 2008), and in a manner that adequately provides for spotted owl nesting, roosting, and foraging within the stand.

15 Comment: Conflict with objectives

Organization: Oregon Wild, Klamath Siskiyou Wildlands Center, Cascadia Wildlands Project, Umpqua Watersheds,

Commenter: Francis Eatherington

Comment Excerpt Text: The EA says that NRF habitat will be retained after thinning. The EA also says the "Commercial thinning is an intermediate treatment prior to regeneration harvest." These objectives appear to conflict. A thinning treatment to prepare for regeneration harvest homogenizes the stand by evenly spacing retained trees to their optimum growing space. Maintaining NRF habitat should instead be a density management that will diversify tree spacing. The BLM should explain how these two very different silvicultural prescriptions would be accomplished on the same NRF habitat.

Response: BLM agrees that the functional definition of commercial thin could allow a reader to assume the next step is a regeneration harvest. The BLM has received comments in the past stating that “commercial thin” should be used instead of “density management” if wood is being extracted. The difference in the two terms is that the functional objectives are different. Your recognition of the definition of commercial thinning is correct. The definition of “density management” is almost identical except that “it can be used to improve forest health, to open the forest canopy, or to accelerate the attainment of old growth characteristics if maintenance or restoration of biological diversity is the objective” (RMP, p. 104).

The BLM has tended to use the term commercial thinning so the public will understand what the structural composition of the stand will resemble after harvest. Only in the more pronounced density management treatments, such as creating canopy gaps, will the public see a marked difference on the ground. Trees do not grow in a homogeneous pattern, so the stand would not look evenly spaced before or after harvest in most cases.

16 Thinning in Spotted Owl Conservation Areas (MOCAs)

Organization: Oregon Wild, Klamath Siskiyou Wildlands Center, Cascadia Wildlands Project, Umpqua Watersheds,

Commenter: Doug Heiken, Francis Eatherington

Comment Excerpt Text: This project is in spotted owl critical habitat. The agency must ensure that silvicultural prescriptions will result in high quality habitat, which is provided by retaining abundant large snags and complex down woody structure that is preferred by owl prey species. The West Thin EA failed to explain how it is meeting “Recovery Action 5: Manage habitat-capable lands within MOCAs to produce the highest amount and highest quality spotted owl habitat the lands are capable of producing.” Thinning is encouraged in young stands only if the agency can show “demonstrated long-term benefits” to spotted owls. Maintaining “highest quality” habitat requires greater retention and creation of snags and complex dead wood structures. Even dispersal habitat will benefit from retaining complex structure that can help provide foraging opportunities. Thinning projects should mimic disturbance by leaving behind many more snags and dead wood.

Critical Habitat for the northern spotted owl cannot be degraded. The EA should disclose if commercial thinning, for the purpose of preparing the stands for regeneration harvest, degrades critical habitat.

The EA failed to describe the age of the NRF habitat or if there were any acres that are structurally complex. If there are structurally complex acres, the EA should have explained how Recovery Action 32 would apply, which requires maintaining all of the structurally complex forests outside of MOCAs. If any of the West Thin units are structurally complex, thinning them as a “treatment prior to regeneration harvest” appears to be a conflict.

Response: There are no proposed West Thin harvest units within MOCAs. The West Thin Project considered spotted owl critical habitat and thoroughly analyzed this element on pages 43 and 44 of the EA:

The Proposed Action would not occur in the revised (2008) critical habitat units (CHU). Approximately 101 acres of nesting, roosting and foraging habitat within CHU OR-32 (established in 1992) would be treated with light/moderate thinning and maintain at least 60% canopy closure and primary constituent elements as a result of the proposed action. This includes units # 5-10A, 5-10C, 5-10D, 31-8B, 31-8G, and 31-8H. The reduction of canopy cover would be regained in approximately 10-15 years.

Approximately 96 acres of dispersal habitat within CHU OR-32 would be treated with light/moderate thinning and maintain 40%-60% canopy closure and primary constituent elements that occur within the units. This includes units # 5-8S, 5-10B, 31-1A, 31-1B, and 31-8E. The reduction of canopy cover would be regained in approximately 10-20 years. The thinning would retain some suppressed and defective trees, snags, and down wood if it occurs within the units.

Critical Habitat affected by construction of 2 temporary road segments totaling approximately .3 miles would have habitat removed in a narrow linear strip for units 31-1A (approximately 20 feet wide) and 31-1B (approximately 40 feet wide) in dispersal habitat. Canopy opening from the temporary road construction would be less than the ground clearing width, as the adjacent tree branches would extend into the opening. The opening as a result of road construction would not be large enough to adversely affect dispersal through the units or dispersal through the critical habitat unit.

No change to baseline acres of nesting, roosting, foraging, and dispersal habitat, would occur in the proposed action, and primary constituent elements would be maintained in all units, and at the forest stand level.

17 Comment: Riparian Reserves

Organization: Oregon Wild, Klamath Siskiyou Wildlands Center, Cascadia Wildlands Project, Umpqua Watersheds,

Commenter: Francis Eatherington

Comment Excerpt Text: The EA failed to tell the public the width of riparian reserves by giving us the average site-tree height. In a phone call, Martin Lew told me it was based on a 185-foot site-tree height, bringing the riparian reserve to 370 feet width along fish-bearing streams.

The EA also fails to disclose the buffers applied to streams within riparian reserves. In the conversation with Martin Lew, I was told the following prescriptions were to be applied, even though this is not included in the EA:

- * 0 to 25 feet: no-cut.
- * 25-60 feet: just a little cut, small enough to not change % canopy closure.
- * 60 to 110 or 125 feet. (the Ecological Protection Zone): Canopy will be reduced down to 50% outside of NRF habitat and 60% in NRF habitat
- * 125 to 185 or 370 feet: Canopy will be reduced down to 40% outside of NRF habitat and 60% in NRF habitat.

The BLM should reconsider thinning down to 40% canopy closure anywhere within Riparian Reserves. This level of thinning could remove stand diversity, further homogenize the reserves, and remove future snags that would be an important component of a mature stand.

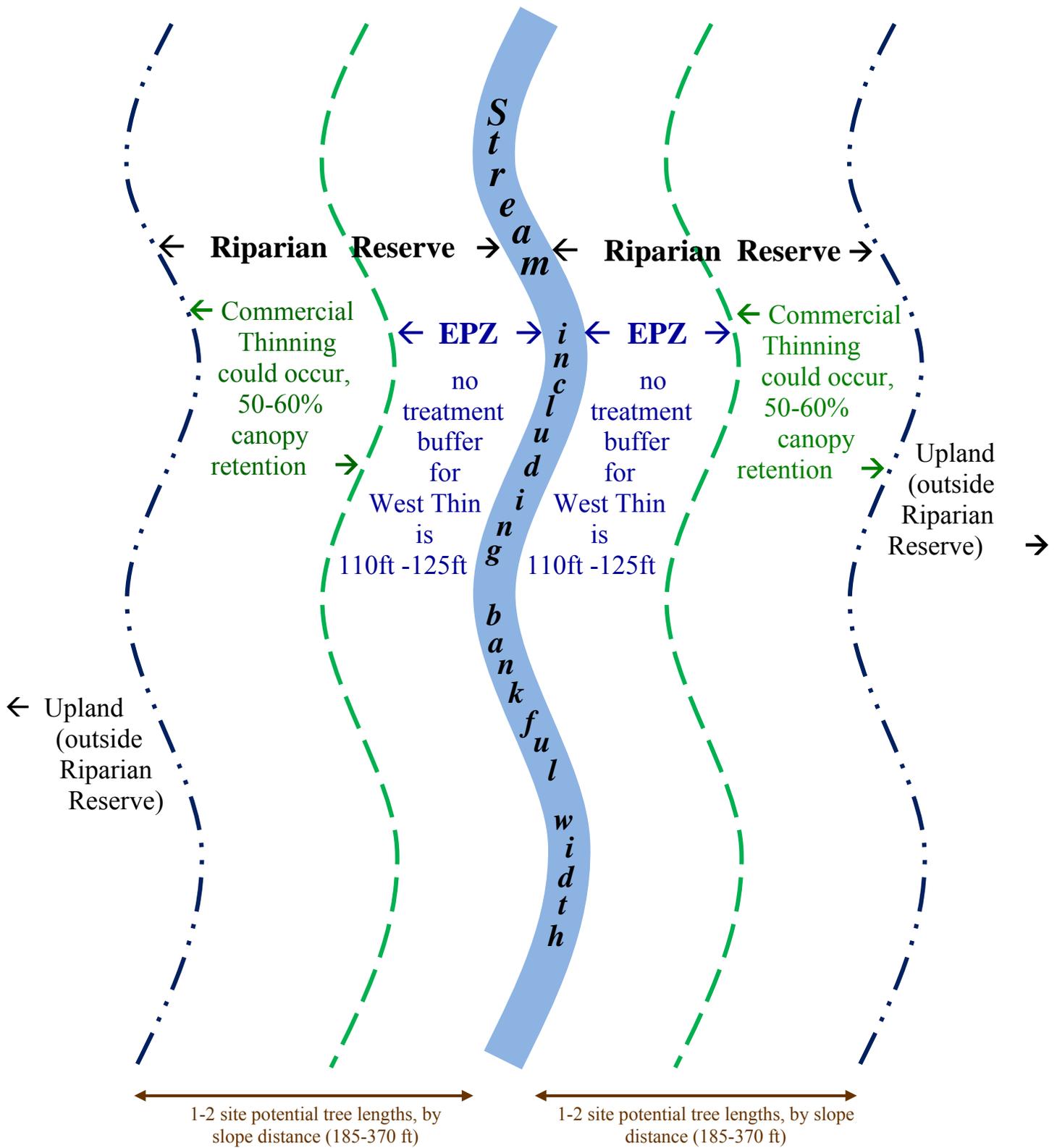
Unstable areas are a part of riparian reserves, and should be buffered with at least one site-tree height to protect slopes. However, page 21 of the EA states that unstable areas would be buffered by leaving only 25 feet. This is not in compliance with the Northwest Forest Plan. Unstable areas must be given a riparian reserve buffer of one-site tree height, 185 feet.

Thinning in reserves can only be done if “needed” to meet ACS objectives. The West Thin EA failed to show the reserves would not attain ACS objectives without thinning.

Response: BLM acknowledges your conversation with Martin Lew. The importance of the identifying site tree heights is for use as the reference mark for establishing riparian reserve distances. Martin was correct in saying the site tree height as 185’. The determination of 185’ can be found in the Silvicultural Prescriptions found in Appendix 3 (p. 109) of the EA: “Mark to retain at least 50% canopy cover within Riparian Reserves (125’- 185’ slope distance from the stream).” The 125’ refers to the no cut boundary and the 185’ refers to the width of the riparian reserve (site tree distance). See Riparian Illustration below.

The 25’ no cut applies only to the riparian reserve associated with unstable areas, if found. There are no known unstable areas. For thinning next to streams, the no cut boundary (specific only to West Thin) is 110’ to 125’ depending Ecological Protection Zone width as determined by the hydrologist. Umpqua Watershed’s understanding that harvesting would occur within 110’ to 125’ for West thin is incorrect. From 110’ or 125’ to the outer edge of the riparian reserve, canopy closure would be no less than 50%. Umpqua Watersheds is incorrect that canopy cover will be reduced down to 40% within the riparian reserves.

Riparian Thinning Adjacent to Streams, Illustrated



18 Comment: Riparian reserve cut acres

Organization: Oregon Wild, Klamath Siskiyou Wildlands Center, Cascadia Wildlands Project, Umpqua Watersheds,

Commenter: Francis Eatherington

Comment Excerpt Text: The EA mentions the Density Management in Riparian Reserves will be on 25 acres. To be clear, is this 25 acres from the 25' no-cut next to streams, all the way out to the 370 foot reserve on fish-bearing streams? 25 acres seems low when looking at the streams on the EA map. The EA failed to map the riparian reserves, or give some indication which streams in the project area are fish-bearing and would have the full 370 foot riparian protections.

The EA states that expansions of landings would occur within riparian reserves (page 25). Is this expansion included within the 25 acres? Landings incur equipment pollution, such as oil and gas leaks, and exhaust fumes. This pollution will occur during logging, as well as during slash burning. (Slash will be piled at each of the 34 proposed landings). This pollution is not allowed in Riparian Reserves if other options are available. The EA failed to look at options for placing landings outside of reserves.

One reason for being clear on the acres and volume of riparian reserve logging is to accurately determine how much volume from this project will be attributed to the ASQ. The table on page 120 implies that the only density management is in the progeny test site. There is no indication density management will be applied in riparian reserves also. This table is in error and should be corrected. When this project is implemented on the ground, it should be clear to everyone which acres are being prepped for a future regeneration harvest, and which acres are being prepped for a future old growth forest.

Response: See Response to #15 above regarding commercial and density management thinning. Calculations for riparian thinning begin at either 110' or 125', not 25'. This could be why Umpqua Watersheds perceives more riparian thinning acres. The maps provided with the West Thin EA are adequate for the decision maker to make an informed decision. Attempting to map riparian reserves and their widths would not be useful at the map scale appropriate for an EA document. The EA clearly states on page 11 that:

The analysis utilizes field data, ground verification by resource specialists and Geographical Information System (GIS) technology to estimate acres, road miles and produce reference maps. Estimates are intended to aid the reader in understanding the proposed actions. The reader should be aware that electronic technology can produce information that appears precise but is still dependent on further field work. During implementation, unit boundaries are posted and surveyed and unforeseen features, such as water sources, are appropriately buffered. It has been the experience for past Glendale Resource Area environmental assessments that estimates of treatment acres in the EA have been generally more than the actual acres treated on the ground

19 Comment: Roads

Organization: Oregon Wild, Klamath Siskiyou Wildlands Center, Cascadia Wildlands Project, Umpqua Watersheds,

Commenter: Francis Eatherington

Comment Excerpt Text: The EA documents there are 4.6 miles of road per every square mile within the project watershed. NMFS has identified anything over 2 miles per square mile as detrimental to watershed functions. The West Thin project proposes to build .3 miles of temporary road and decommissions .5 miles of existing roads. While that amount appears to be insignificant in relation to the damage that exists, the BLM missed the opportunity to decommission a significant number of roads. That should have been considered in an EA alternative.

The EA failed to offer alternatives for building roads in Riparian Reserves. Page 56 tells us one new road would be .53 miles long within a riparian reserve but outside the “ecological buffer zone” of 125 feet. Does the BLM have any data showing that 125 feet is the cut-off of impacts to reserves? The EA also tells us new roads will cross two streams but fails to describe if the streams are fish-bearing or the impacts of new roads on the streams they cross. While the new roads will be decommissioned, they could be allowed to over-winter with detrimental impacts during a large storm event.

Additionally, the EA map fails to map where the .5 miles of existing roads are that will be decommissioned. Appendix 6, Summary of Road Work, fails to list any decommissioning at all. Appendix 6 and the project maps should be corrected in the decision to reflect where the .5 miles of decommissioning will occur.

Response:

The hydrologist for the project concluded on page 63 that:

Chronic erosion will continue to occur at the sub-watershed scale due to road densities of 4.5 mi/mi². National Marine Fisheries Service (NMFS) target of 2 mi/mi² for streams to be considered in properly functioning condition (USFS, et al., 2004)) and as a result of this HUC 6 watershed having approximately 87% unpaved roads. This project would not increase the number of permanent roads within this sub-watershed, as all new roads would be decommissioned following use. Road densities within the Cow Creek-Fortune Branch HUC 6 sub-watershed would be expected to increase due to operations on non-federal lands to approximately 4.6 mi/mi². No future permanent road construction is planned on federally managed lands within this sub-watershed.

The EA concludes on page 70 that “The West Thin Project would not increase the number of permanent roads or the road densities within these drainages, as all new roads would be decommissioned following use. This project proposes the construction or renovation of six temporary routes. Two of these existing roadbeds cross stream draws, and as a result would

result in minor inputs of sediment entering the stream during the renovation, use, and decommissioning of these roads.”

20 Comment: Off-Site Pine

Organization: Oregon Wild, Klamath Siskiyou Wildlands Center, Cascadia Wildlands Project, Umpqua Watersheds,

Commenter: Francis Eatherington

Comment Excerpt Text: The EA documents that there are large acres of “off-site pines” planted within the project area, and that the thinning would reduce the number of off-site pines. However, the EA failed to document the ecological impacts of off-site pine reaching cone producing age and the impacts of negatively and permanently impacting the native pine reproduction in the area. Off -site pines should be eliminated not reduced, before they can mix with native pine and produce lower quality pine regeneration.

Response: The West Thin Project is not a restoration project or a site conversion project. The Silvicultural Prescriptions (Appendix 3, p. 115) clearly states that “In areas containing off-site pine, focus on removing the off-site pine.” The West Thin follows the Citizens alternative of not regeneration harvesting or clearcutting. Umpqua Watersheds recommendation of eliminating off-site pine would create clearcut openings.

21 Comment: NEPA

Organization: Oregon Wild, Klamath Siskiyou Wildlands Center, Cascadia Wildlands Project, Umpqua Watersheds,

Commenter: Francis Eatherington

Comment Excerpt Text: Thinning NRF habitat in Critical Habitat and Riparian Reserves should have included the following NEPA information in order to make a rational and informed decision about this project:

- The quality, extent, direction, and likelihood of habitat for spotted owls, owl prey, dead wood associated species, management indicator species, and other relevant fish and wildlife during the entire time period that treatments have an effect on those habitats.
- When disclosing the effects of treatments on future recruitment of snags and dead wood, use the 80% DecAID tolerance levels as the objective. Since this project claims to be justified on the grounds that it helps protect spotted owl habitat, the goals should be high quality habitat with abundant snags and dead wood, not just bare minimum levels of dead wood.
- Even though canopy cover may recover relatively quickly after thinning, the EA failed to account for the long-term duration of adverse effects to dead wood structure caused by logging.
- The location and abundance of red tree voles and all other survey and manage species.
- Provide an integrated analysis of how fuel removal can both reduce fire hazard and increase fire hazard. Provide a framework to weigh the alleged benefits of canopy removal vs. the expected risks associated with large slash accumulations, and a hotter, dryer, windier microclimate, and the growth of future surface and ladder fuels.

- The carbon consequences of logging NRF habitat for short-term wood products compared to conservation of carbon in long-lived forests. Please provide supplemental EA information that includes a complete and rational carbon analysis that accounts for all the carbon emissions, accelerated decomposition, and waste in the process of logging, milling, manufacturing, and transportation all along the way.
- Consider the need to retain more suitable spotted owl habitat to mitigate for the invasion of the barred owl and habitat rendered unavailable due to barred owl occupancy. This is especially important in the short-run before barred owl control measures have been approved or implemented. This is another situation when probability has to be considered. The barred owl threat is real and immediate, while the fire threat is distant and speculative. Please quantify this.
- Disclose and consider a range of alternative standards for snags and dead wood to replace the scientifically discredited potential population methodology in the current standards. Disclose the consequences of alternative replacement standards in terms of spotted owls, owl prey, fish & wildlife associated with dead wood, and other ecosystem services including carbon storage.
- Be sure to conduct full protocol surveys for survey and manage species. The elimination of the survey program was illegal as explained in our pending lawsuit.

Response: The BLM has considered the relevant environmental elements necessary for the decision maker to make a rational and informed decision. Oregon Wild provides recommendations but does not offer new information that would require the BLM to: 1) modify alternatives including the proposed action, 2) develop and evaluate alternatives not previously given serious consideration by the agency, 3) supplement, improve, or modify its analysis, 4) make factual corrections (CFR 1503.4). The West Thin EA conforms to the Medford RMP and NWFP and their Environmental Impact Statements.

The BLM has responded to most of these same comments in its 21 Responses provided above. As stated previously, the project is a thinning and not a regeneration harvest treatment.

The timber sale does not remove forest stand suitable habitat, important habitat elements in spotted owl suitable habitat are retained, and red tree populations in proposed action units would not be affected. (Appendix 2, p. 100)

If S&M standards were reinstated, West Thin occurs within the Mesic Zone of the red tree vole, and survey and manage requirements for the red tree vole were removed in the 2003 Annual Species Review ([IM OR 2004-034](#)). Red tree vole surveys were not conducted in the West Thin units (except one unit in Fortune Stew- a potential nest was found and was marked for retention but not identified as red tree vole nest.) There are no known red tree vole nests or other survey and manage wildlife sites that would require protection per the last Annual Species Review in 2003.