FINAL DECISION DOCUMENTATION

for

Slim Jim and Big Jim Timber Sales

Environmental Assessment Number OR118-04-014

United States Department of the Interior
Bureau of Land Management
Medford District
Glendale Resource Area
Douglas County, Oregon

INTRODUCTION

An environmental assessment (EA Number OR118-04-014), including a Finding of No Significant Impact (FONSI), for the Slim Jim Project was made available for a 30-day public review period on July 1, 2005. Thirty-three letters were received. The Bureau of Land Management's (BLM) responses to the comments in these letters are found in Addendum 1 and public comments were considered in reaching a final decision. A copy of the EA can be obtained from the Grants Pass Interagency Office, 200 NE Greenfield Road, Grants Pass, Oregon 97526. Office hours are Monday through Friday, 8:00 am to 4:00 PM, closed on holidays.

This decision conforms with the *Final Supplemental Environmental Impact Statement* and *Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl* (Northwest Forest Plan FSEIS,1994 and ROD, 1994); the *Final-Medford District Proposed Resource Management Plan/Environmental Impact Statement* and *Record of Decision* (EIS, 1994 and RMP/ROD, 1995); the *Final Supplemental Environmental Impact Statement: Management of Port-Orford-Cedar in Southwest Oregon* (FSEIS, 2004 and ROD, 2004); the *Final Supplemental Environmental Impact Statement and Record of Decision and Standards and Guidelines for Amendment to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines (*FSEIS, 2000 and ROD, 2001); and the *Final Supplemental Environmental Impact Statement Clarification of Language in the 1994 Record of Decision for the Northwest Forest Plan National Forests and Bureau of Land Management Districts Within the Range of the Northern Spotted Owl*, and *Proposal to Amend Wording About the Aquatic Conservation Strategy* (FSEIS, 2003 and ROD, 2004).

The BLM is aware of the recent U.S. District Court ruling which found portions of the *Final Supplemental Environmental Impact Statement to Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines* (FSEIS, 2004) inadequate. At this time the *Record of Decision to Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines* (2004) has not been vacated or withdrawn. Therefore there is no current requirement to complete surveys according to previous Survey and Manage protocols. The Court has not yet entered an order specifying what, if any, injunction will be ordered in regard to its findings on the adequacy of the 2004 FSEIS. Injunctions for National Environmental Policy

Act (NEPA) violations are common, but not automatic.

The BLM expects the Court's finding regarding the 2004 FSEIS will result in a court ordered remedy, but the extent of that remedy and whether it would be imposed pending possible appeal of the court's findings are unknown at this time. The BLM will reexamine individual project level NEPA documents in light of a potential court ordered remedy and will make revisions to environmental documents as necessary following issuance of the court's judgment. The BLM has provided advance notice to potential purchasers informing them that the court's ruling may result in delays in award of the sale to the high bidder or suspensions of operations. The appropriate processes are currently in place to provide the ability to delay award of timber sales or issue suspensions should they become necessary to comply with future court orders.

This decision document applies only to activities associated with commercial harvest on 220 acres occurring in two timber sales, Slim Jim and Big Jim. Implementation of these two timber sales is planned to occur within the next three years. A separate decision document will be issued for the other treatments (e.g., non-commercial density management, commercial smallwood removal, hazardous fuels reduction, and road closures) analyzed in the Slim Jim EA that are not part of the Slim Jim or Big Jim Timber Sales.

The Slim Jim Timber Sale will consist of 215 acres of commercial density management, a deferral of 246 acres for commercial density management in the Late Successional Reserve (LSR). Slim Jim will consist of 25 proposed treatment units in the South Umpqua/Galesville LSR and portions of Riparian Reserves that all contain relatively dense and uniform Douglas-fir stands that range in age from 22-53 years old. These treatment units are located in Township (T) 31 S, Range (R) 3 W, Sections 19, 29; T 31S, R 4W, Sections 25, 27; T 32S, R 4W, Sections 1, 3, 11, 13, and T 32S, R 3W, Section 7, 17, 18. Due to the deferral of 246 acres of commercial density management, a total of 0.6 miles of temporary roads will be constructed to access units instead of 0.88 miles as stated in the EA. Temporary use of existing roads and associated maintenance will occur as described in Table 2-4, p.25 of the EA. Activity fuels treatments (residual slash from density management treatments) will also occur on all 215 acres of commercial density management under the Slim Jim Timber Sale by manual methods of slash/handpile/burn or lop and scatter depending on the fuel loadings after density management. Future underburns may also be implemented within 2-7 years following the initial treatments and would be driven by the condition of the stand and re-growth of slashed vegetation.

The Big Jim Timber Sale will be five acres of regeneration harvest, a deferral of 52 acres of regeneration harvest, overstory removal, and commercial thinning. Big Jim will consist of one proposed treatment unit in Matrix containing mature Douglas-fir stands and located outside of northern spotted owl (NSO) critical habitat. Big Jim is located in Township (T) 32 S, Range (R) 3 W, Section 6. No temporary road construction will occur under the Big Jim Timber Sale. Temporary use of existing roads and associated maintenance will occur as described in Table 2-4, p.25 of the EA. The regeneration harvest unit will be treated for activity fuels by slash/handpile/burn method. Future underburns may also be implemented within 2-7 years following the initial treatments and would be driven by the condition of the stand and re-growth of slashed vegetation.

DECISION

Based on site-specific analysis, the supporting project record, management recommendations contained in the Upper Cow Creek Watershed Analysis (2005), South Umpqua/Galeville Late Successional Reserve Assessment (2004), 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 a modification of Alternative 2 which is hereafter referred to as the "Selected Alternative". Alternative 2 was analyzed in the Slim Jim EA, p. 13-17, and changes to the alternative are evaluated in a Supplemental Information Report (2005). These modifications are minor and do not change the scope of the action analyzed, nor do the modifications affect the adequacy of the analysis contained in the EA.

Modifications to the Selected Alternative:

1) Unit 30-1a (overstory removal) and Unit 30-1b (commercial thin) will be deferred as it is not economical to log at this time.

2) Eleven acres within Unit 6-3 (regeneration harvest) will be deferred. This deferral is primarily the result of implementing buffers on newly discovered streams. The remaining five acres will be cable yarded from an existing road.

3) The 100 foot strip of Unit 27-1 above road 31-4-27 will receive non-commercial density management treatment in order to protect the visual quality as seen from the road.

4) Unit 3-1b will be treated as a commercial density management unit by a cable logging system. The unit will receive a 60 foot stream buffer and will retain 30-40% canopy closure.

5) Following the "layout phase" of the Slim Jim Timber Sale, the actual temporary road mileages differed from what was predicted in the EA. The EA predicted that: "0.88 miles of temporary roads would be constructed and then decommissioned to access density management areas". In actuality, the temporary road construction will be 0.60 miles and will be decommissioned after use. This change results in a net decrease in 0.28 miles of temporary road construction compared to the proposal in Alternative 2 of the EA.

6) On page 12 of the EA, it states that "License agreements with adjacent landowners to have a third party haul timber have been completed." This is deleted as the third party will not be known until after the sales have been sold.

7) On page 24, in table 2-3, road numbers: Road numbers 32-3-7A, 32-3-7B1, and 32-3-7B2 are corrected to read: 32-4-7A, 32-4-7B1, and 32-4-7B2. Road 31-3-32 has been renumbered to 31-3-31.1A in order to match ownership and existing roads. The addition of hauling across existing roads 32-3-5C and 32-4-1.2C will add 0.25 miles of additional road maintenance.

8) On page 31, under section *2.3.7 Yarding of Timber*, the fifth paragraph is changed to read, "To minimize soil disturbance the use of blades while tractor yarding would not be permitted and would walk over as much ground litter as possible to reduce compaction and keep soil organics on site."

9) On page 32, under section 2.3.8 *Roads*, the first paragraph, first sentence is changed to read, "Where practical existing skid roads would be used without using tractor blades."

10) On page 33, under section 2.3.8 *Roads*, the thirteen paragraph, second sentence is changed to read, "These roads include: 31-3-31, 31-3-31.1, 31-4-27, 32-4-1, and 32-4-4 road at their junctions with the Cow Creek Road (County Road 36)."

11) On page 63, Katie Wetzel's primary responsibility is changed to "Visual Quality, Recreation".

12) One page 65, 5.2.3 *NOAA Fisheries (National Marine Fisheries Service),* fourth sentence is changed to read "The portion of the Slim Jim Project that is above the Galesville Dam is exempt from consulting with NOAA Fisheries."

ALTERNATIVES CONSIDERED

The alternatives considered in detail included the No Action Alternative (Alternative 1) which serves as the baseline to compare effects, the Proposed Action (Alternative 2) which initiated the environmental analysis process, and Alternative 3 which was developed in response to concerns (alternative uses of available resources) identified by the public. A description of each alternative is found on pages 13 – 35 of the EA.

REASONS FOR THE DECISION

My rationale for the decision is as follows:

1. The Selected Alternative addresses the purpose and need of implementing the Medford RMP through harvesting timber in Matrix lands and providing a commodity by-product within the LSR as described in the 2003 O&C Settlement Agreement. While doing so, actions within the LSR will comply with the objectives in the Medford District ROD to manage LSR's "to enhance and/or maintain late-successional forest conditions" (USDI 1995, pg. 21).

2. Alternative 1 was not selected because this alternative would not meet the purpose and need of the project (described in Chapter 1 of the EA) to enhance late-successional forest conditions and produce a commodity by-product as described in the 2003 O&C Settlement Agreement.

3. Alternative 3 would defer an additional five acres of regeneration harvest within the Matrix and 42 acres of commercial thinning (Units 3-1a, 13-1a, 29-2a, and 18-2) of dispersal habitat within the LSR. Alternative 3 was not selected as it did not do as good of a job at meeting the project objectives for Matrix lands, to "provide for a sustainable supply of timber and other forest commodities to provide jobs and contribute to community stability" and for the

LSR to accelerate the development of late-successional habitat. Although the Selected Alternative entails 0.60 miles of temporary road construction, it would not change the function of adjacent late-successional habitat for wildlife species and would not affect water quality (EA, pp. 44 and 82).

4. 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 and providing a commodity by-product within the LSR as described in the 2003 O&C Settlement Agreement.

5. The 33 letters received in response to the 30-day comment period on the EA and FONSI, among several topics, urged the BLM to stop logging late-successional habitat, not to build temporary roads, and opposed slash/handpile/burn and lop & scatter treatment (refer to Addendum 1 for full disclosure of public comments and BLM's response to those comments).

   Unit 6-3 (Big Jim Timber Sale) is the only treatment area (5 acres total) that contains late-successional habitat to be implemented by this decision. In addition, the silvicultural prescription for this unit will "[r]etain eighteen conifers across the range of diameters over 20" dbh [diameter at breast height] per acre" (EA, p.139). This treatment is consistent with the Medford District RMP and the Bureau's Special Status Species policy.

The effects of temporary road construction were adequately analyzed in the EA. The benefit of accessing units to implement a thinning treatment to accelerate the development of late-successional habitat outweighs the impacts to soil productivity on 1.45 acres. "Temporary road construction was designed to reduce impacts such as placement on the ridgetop, on low slope conditions, and minimization through granitics and other sensitive soils," (EA, p.17). As a result, the temporary road construction will increase compacted and displaced soils within Cow Creek-Galesville HUC 6 watershed by no more than 0.01%. These levels are within Medford District RMP/EIS guidelines of 12% (pp. 4-12 & 13).

Post-activity fuels reduction treatments will occur on a total of 215 acres under the Selected Alternative through slashing, hand piling, hand pile burning, underburning, or lop-and-scatter treatments for the long term (3-5 years after treatment). This is a very small portion of the fifth-field watershed (0.5 percent) and the cumulative effect of increasing the fire risk is minimal.

FINDING OF NO SIGNIFIANT IMPACT

Thirty-three letters were received during the 30-day review period for the EA and FONSI. Those letters did not provide new information, nor did they identify a flaw in assumptions, analysis, or data that would alter the environmental analysis disclosed in the EA or conclusions documented in the FONSI. It is my determination that the Selected Alternative 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 in context or intensity as defined in 40 CFR § 1508.27. Therefore an environmental impact statement will not be prepared.

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 the Slim Jim and Big Jim Timber Sales will not become effective, or be open to formal protest, until the first Notice of Sales appear 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 Glendale Field Manager 200 NE Greenfield Road, 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.

IMPLEMENTATION DATE

If no protest is received by the close of business (4:00 p.m.) within 15 days after publication of the Notice of Sale, 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

CONTACT PERSON

For additional information contact either Katrina Symons, Glendale Field Manager, 200 NE Greenfield Road, Grants Pass, OR 97526; telephone 541-471-6920 or Michelle Calvert; telephone 541-471-6935.

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

ADDENDUM 1

PUBLIC COMMENT TO OR118-04-014 AND BLM RESPONSE

The Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) were released for public comment from July 1, 2005 to August 1, 2005. A public notice was placed in the Daily Courier newspaper of Grants Pass, Oregon on July 1. The EA and FONSI were sent to 54 parties that had expressed an interest in the project. A total of thirty-two letters were received as a result of this scoping. Public comments (direct quotes) and BLM's (Bureau of Land Management) response to those comments are presented in this addendum to the EA.

Joseph Vaile, Campaign Director, Klamath Siskiyou Wildlands Center

comment a: *"Commentors support and endorse the proposed non-commercial density management, portions of the variable density commercial thinning, fuels reduction, road decommissioning and blocking of roads. We do not support the logging of older forests, particularly through regeneration harvest and overstory removal. We do not support the proposed road construction, or the degradation of late-successional habitat in the LSR. We also are not supportive of commercial thinning that removes large trees or degrades late-successional habitat.*

While Alternative 3 is not perfect, and we still have issues over soil compaction, large tree cutting and canopy reductions in the LSR, as well as water quality concerns, this alternative is far more desirable than Alternative 2. Alternative 2 fails to be endorsed by the community that surrounds this potential project. The legal concerns, coupled with the social concerns, leave the decision maker with the only logical choice – Alternative 3.

BLM Response: No response required as comment states preference for an alternative rather than concerns with the adequacy of the environmental analysis.

comment b: *"We do not agree that the forests in the watershed are not of region-wide importance as asserted by the BLM. 'The action alternatives are site-specific actions directly involving approximately 1,451 acres of BLM…administered land that by themselves do not have international, national, region-wide, or state-wide importance.' FONSI at 5. In a 2001 letter from prominent forest scientists in the Pacific Northwest, offered to Glendale RA office on several occasions, the importance of the remaining older forests on public land is made abundantly clear. These forests are extremely rare due to logging, development and land conversion, and they are unique repositories for plants and animals, recreational experiences, and clean water."*

BLM Response: The lands located within the Slim Jim Project Area are not of international, national, region-wide, or state-wide importance since similar types of

forests are present elsewhere in the Glendale Resource Area or Medford District and do not contain a higher quality of late successional habitat than other areas.

The concerns of whether to harvest old-growth trees, whether to allow commercial timber harvest of these lands, or whether to use timber harvest in general, to achieve landscape management objectives was already decided upon. The Medford District BLM has already completed an Environmental Impact Statement for the Resource Management Plan, known as the 1995 Medford District Resource Management Plan/Environmental Impact Statement (RMP-EIS). The RMP is itself an implementation of the Northwest Forest Plan (NFP) which was also prepared by federal agencies, including the BLM. These EISs, and the corresponding RODs, specifically contemplated the ecological significance of the areas in which commercial and non-commercial timber harvest activities would be planned. The Slim Jim Project EA conforms to the analysis of these impacts already contained in these programmatic EISs.

"The reduction of suitable habitat and degradation to owl sites within Matrix is within the assessment of the NFP and the FY 04-08 Biological Assessment, and a shift to increasing numbers of owl sites in maturing large reserves is expected to contribute to the recovery goals and conservations needs of the spotted owls by providing multiple clusters of breeding spotted owls (USDA/USFWS 2003 BO, p.103)," (EA, p.42).

comment c: *"Commentors are specifically concerned about the lack of late-successional habitat in the Upper Cow Creek Watershed. The Watershed Analysis states the following about the LSOG habitat in the watershed and Slim Jim project area:*

> *There are 5,277 acres of BLM-administered stands over 80 years of age out of a total of 9,930 acres of BLM-administered land in the watershed. Of these 5,277 acres, 1,618 acres have received partial timber harvest and are referred to as "modified" in Map 12, and probably do not possess all of the characteristics of late successional forest. In addition, stands less than 150 years of age are not likely to have all the characteristics of late-successional forests as listed on page 73, in particular "moderate to high accumulations of large logs and snags" and "moderate to high numbers of trees with physical imperfections such as cavities, broken tops, and large deformed limbs". It is likely for mature seral (80-200 yr old) stands to continue to develop late-successional and old-growth characteristics. With 87% of the BLM-administered land in this watershed designated as LSR, project emphasis will be on late-successional habitat improvement in this land allocation. Past harvest activities have occurred in all portions of BLM-administered land in this watershed as shown by Map 24 Forest Clearing Detection Satellite Image Comparison. This has reduced the amount of large blocks of mature and late-successional forests but increased the variety of habitat types and habitat "edge" effect.*

Late-successional and old-growth in the Upper Cow Creek Watershed is important to protect for the myriad species that depend on that habitat…The remaining older forests are invaluable, and should be conserved. If project emphasis is going to be developing late-successional forest, the BLM should pick Alternative 3 in this project.

BLM Response: Fifty-three percent of the BLM managed Upper Cow Creek Watershed is over 80 years of age and 27% of stands within the watershed are greater than 150 years of age (not including 81+ Modified Stands). Northwest Forest Plan standards and guidelines state that at least 15% of fifth field watersheds should be managed to retain

late-successional patches (ROD, C-44). The proposed activities are in compliance with the 15% Standard and Guideline. KS Wild's quotation that, "[s]tands less than 150 years old, that may not have all the characteristics of late-successional forests," is taken out of context. The rest of the sentence states that these stands are "likely…to continue to develop late-successional and old-growth characteristics."

Developing late-successional forests is the project emphasis for treatments within the LSR land use allocation; however the Slim Jim Project also includes a portion of Matrix lands. The objective of matrix lands, as stated in the RMP (p.38) and in the EA (p.11) is to, "[p]rovide for a sustainable supply of timber and other forest commodities to provide jobs and contribute to community stability".

comment d: *"The information and recommendations contained in the WA should contribute to planning in the watershed. In fact, many issues in the Revised Upper Cow WA were seemingly ignored by the agency. The Slim Jim does not address all the information or recommendations in the WA.*

BLM Response: Information and recommendations in the WA were used consistent with the purpose and need for action as identified in the EA. The Slim Jim EA proposed road decommissioning, road gating, and road barricading to reduce traffic and sedimentation as well as riparian thinning, thinning of young stands (1-80 years old), and fuel reduction treatments, as recommended in the Upper Cow Creek Watershed Analysis (2005).

comment e: *"The BLM and USFWS should be recovering the Northern spotted owl, not simply preclude 'the ability of the CHU to function as intended.' EA at 6. How is the overstory removal, commercial thin to 40% canopy, or regeneration harvest in older units in the Slim Jim project going to help recover the spotted owl? That is the question the USFWS and BLM must answer. It will, indeed, further limit habitat in the planning area and contribute to the already downward trend of this threatened species...CHU removal of current, existing late-successional forest is not recovering the owl, but driving it closer to the edge of extinction. Removing or downgrading owl habitat in the project will not only prevent recovery of the owl it will, in fact, remove habitat and push owls into a take situation. Thus, it is illegal to pursue those timber sale units in this CHU.*

Currently owls are not in good shape in the watershed. 'Movement and support of owls in the LSR is currently inhibited by many young dense stands not yet suitable habitat for owls. Many of the young stands average 6-10" in diameter, and do not contribute meaningfully to habitat for owls.' EA at 42. While the BLM 'writes off' the small blocks of habitat that are scheduled for logging under Alternative 2, it must admit that '[h]arvesting late-successional stands would reduce the viability of owl sites…' EA at 45."

BLM Response: The 2004 Revision to the South Umpqua/Galesville Late Successional Reserve Assessment, exempted "commercial thinning treatments up to 50% of the treated acre to be in heavily thinned patches (i.e. from 25 to 50 dominant and co-dominant trees per acre)," (Regional Ecosystem Office Memorandum, May 2004). Such prescriptions

produce a stand with 30 to 40% canopy closure after treatment. When these stands were originally planted after harvest activities, 22 to 53 years ago, they were not designated as Late Successional Reserves. They were instead planted for optimal timber production, resulting in densely packed and shaded stands. Had these stands been planted with late successional conditions in mind, there would be wider tree spacing. Silvicultural treatments are proposed to release the dense conditions, provide adequate spacing for tree diameter development and sufficient light for hardwood species. Once treatment has occurred it is expected that stands will regain a closed canopy within 10-30 years (see below).

Commercial and non-commercial density management units in the LSR that reduces young dispersal habitat canopy cover to 40% would also retain the function of the critical elements of forage availability, and canopy cover for roosting and protection from predators and weather elements. Though "reductions of canopy to below 40% may not provide adequate protection from predators or weather elements, and could reduce effectiveness of these acres to function as dispersal habitat", [these canopy reductions] "would not preclude spotted owls from dispersing through the project area through the use of contiguous habitat that are dispersal capable" (EA, p.47). Such areas would regain dispersal suitability in approximately 10 years.

The Medford District Resource Management Plan (RMP) incorporates the Northwest Forest Plan – a plan based on adaptive management and associated monitoring to, in part, contribute to recovery of the Northern Spotted Owl (NSO). 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 (hereinafter collectively referred to as "the 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* (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 interagency review and summary of the findings from those reports is described below. The BLM planning regulations require that the District Manager monitor and evaluate the plan at "established intervals … and at other times as appropriate to determine whether there is sufficient cause to warrant amendment or revision of the plan" (see 43 CFR 1610.4-9). As a key element of the Northwest Forest Plan (NWFP) monitoring strategy, completion of the NSO status and trend portion of *The First Ten Years* monitoring report, as well as the other timely studies pertinent to the NSO, is considered appropriate to warrant this focused evaluation. The monitoring report and this

evaluation carry out the process of monitoring and adaptive management envisioned by the Northwest Forest Plan, as adopted and implemented through the Medford District RMP.

Following is the interagency review and summary of key findings from the four reports regarding the NSO. This summary has been reviewed by report authors Dr. Steven P. Courtney and Dr. Robert G. Anthony to ensure that it accurately reflects their findings. In addition, agency representatives Terry Rabot and Joseph Lint reviewed the document to verify that the USFWS five-year review and the ten-year NSO status and trend report, respectively, were appropriately incorporated.

In southern Oregon and northern California, NSO populations were more stationary than in Washington (Anthony et al. 2004). The fact that NSO populations in some portions of the range were stationary was not expected within the first ten years, given the general prediction of continued declines in the population over the first several decades of NWFP implementation (Lint 2005). The cause of the better demographic performance on the southern Oregon and northern California study areas, and the cause of greater than expected declines on the Washington study areas are both unknown (Anthony et al. 2004). Courtney et al. (2004) noted that a rangewide population decline was not unexpected during the first decade, nor was it a reason to doubt the effectiveness of the core NWFP conservation strategy.

Lint (2005) indicated that loss of NSO habitat did not exceed the rate expected under the NWFP, and that habitat conditions are no worse, and perhaps better than expected. In particular, the percent of existing NSO habitat removed by harvest during the first decade was less than expected. Courtney et al. (2004) indicated that models of habitat growth suggest that there is significant growth and development of habitat throughout the federal landscape. Courtney et al. (2004) also noted that management of matrix habitat has had a lower impact on NSO populations than predicted. Owls are breeding in substantial numbers in some matrix areas. The riparian reserve strategy and other habitat management guidelines for the matrix area appear to preserve more and better-distributed dispersal habitat than earlier strategies, and there is no evidence to suggest that dispersal habitat is currently limiting to the species in general (Courtney et al. 2004). Anthony et al. (2004) noted declining NSO populations on some study areas with little harvest, and stationary populations on other areas with consistent harvest of mature forest. No simple correlation was found between population declines and timber harvest patterns (Courtney et al. 2004). Because it was not clear if additional protection of NSO habitat would reverse the population trends, and because the results of their study did not identify the causes of those trends, Anthony et al. (2004) declined to make any recommendations to alter the current NWFP management strategy.

Reductions of NSO habitat on federal lands are lower than those originally anticipated by the Service and the NWFP (Courtney et al. 2004). The threat posed by current and ongoing timber harvest on federal lands has been greatly reduced since 1990, primarily because of the NWFP (Courtney et al. 2004). The effects of past habitat loss due to timber harvest may persist due to time-lag effects. Although noting that it is probably

having a reduced effect now as compared to 1990, Courtney et al. (2004) identified past habitat loss due to timber harvest as a current threat. The primary current source of habitat loss is catastrophic wildfire (Courtney et al. 2004). Although the total amount of habitat affected by wildfires has been small, there is concern for potential losses associated with uncharacteristic wildfire in a portion of the species range. Lint (2005) indicated that the NWFP recognized wildfire as an inherent part of managing NSO habitat in certain portions of the range. Courtney et al. (2004) stated that the risk to NSO habitat due to uncharacteristic stand replacement fires is sub-regional, confined to the dry eastern and to a lesser extent the southern fringes of the NSO range. Wildfires accounted for 75 percent of the natural disturbance loss of habitat estimated for the first decade of NWFP implementation (Courtney et al. 2004). Lint (2005) cautioned against relying solely on the repetitive design of the conservation strategy to mitigate effects of catastrophic wildfire events, and highlighted the potential to influence fire and fire effects through active management.

Anthony et al. (2004) indicated that there is some evidence that Barred Owls may have had a negative effect on NSO survival in the northern portion of the NSO range. They found little evidence for such effects in Oregon or California. The threat from Barred Owl competition has not yet been studied to determine whether it is a cause or a symptom of NSO population declines, and the reports indicate a need to examine threats from Barred Owl competition.

The synergistic effects of past threats and new threats are unknown. Though the science behind the NWFP appears valid, new threats from Barred Owls, and potential threats from West Nile Virus and Sudden Oak Death may result in NSO populations in reserves falling to lower levels (and at a faster rate) than originally anticipated. If they occur, such declines could affect NSO recovery (Courtney et al. 2004). According to Courtney et al. (2004), there exists a potential for habitat loss due to Sudden Oak Death in the southern portion of the range, however the threat is of uncertain proportions. In addition, Courtney et al. (2004) indicated there is no way to predict the impact of West Nile Virus, which is also identified as a potential threat. The reports do not provide supporting analysis or recommendations regarding how to deal with these potential threats. Courtney et al. (2004) concluded that the risks currently faced by the Northern Spotted Owl are significant, and their qualitative evaluation is that the risks are comparable in magnitude to those faced by the species in 1990.

According to the Service (November 2004), the current scientific information, including information showing declines in Washington, northern Oregon, and Canada, indicates that the NSO continues to meet the definition of a threatened species. Populations are still relatively numerous over most of the species' historic range, which suggests that the threat of extinction is not imminent, and that the subspecies is not endangered even in the northern part of its range where greater than expected population declines were documented (USFWS, November 2004). The Service (November 2004) did not consider the increased risk to NSO populations due to the uncertainties surrounding Barred Owls and other factors sufficient to reclassify the species to endangered at this time.

In summary, although the agencies anticipated a decline of NSO populations under the LRMPs 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. The status of the NSO population, and increased risk to NSO populations due to uncertainties surrounding Barred Owls and other factors, were reported as not sufficient to reclassify the species to endangered at this time. The reports did not include recommendations regarding potential changes to the basic conservation strategy underlying the NWFP. Moreover, 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 proposed activities meets the Medford District RMP goal regarding conservation of species while providing a sustainable supply of timber and providing a commodity by-product within the LSR as described in the 2003 O&C Settlement Agreement.

In addition, demographic data from northern spotted owls in the Klamath Demographic Study Area collected from 1985 – 2003 indicate that populations appear to be stable in the Klamath study area as a result of high survival and number of young produced by territorial females, which were stable over the period of the study (USDA/USDI 2004b).

comment f: *"The Slim Jim and the Biological Opinion that it tiers to do not explicitly analyze if the project would push any specific owl pairs into take. From the WA, it is clear that the owls are not reproducing very well. See Table 17 of the WA. Please disclose to the public if the Slim Jim project will push any owls into, or further into, a take situation. We understand how much suitable habitat is in take, but there was never an analysis of each owl pair and whether those owls would be pushed into "take".*

BLM Response: The last Biological Opinion that assessed take of specific spotted owls was in fiscal year 1997-1998. The spotted owl sites in the Planning Area affected by the Proposed Action are not expected to change the population trend in the Klamath Province. The survival of spotted owl sites within the Klamath Demographic Study Area would remain stable, and contribute to a stable population within the Klamath Province (USDA/USDI 2004b)," (EA, p. 45). Consultation with the U.S. Fish and Service has been completed by assessing impacts to the northern spotted owl through suitable owl habitat (stands greater than 80 years old) acres removed, degraded, and/or downgraded. Since '98-'99, consultation does not assess whether individual nest sites would be removed.

comment g: *"The EA states the following about the Critical Habitat Unit that would be logged in the Slim Jim Project:*

> *Thirty-seven percent of the unit [CHU OR-62] is within the Cow Creek LSR. This unit coincides with the Rogue-Umpqua Area of Concern, which provides an essential link in connecting the Western Cascades Province with the southern portion of the Coast Ranges and northern end of the Klamath Mountains Province. This unit provides the single link from the Western Cascades Province to the Klamath Mountains Province and associated Area of Concern. (USDI/USFWS 2003, BO p. 76). EA at 46.*

The EA goes on to say that the Critical Habitat Unit would be adversely impacted:

> *Unit 30-1a and 30-1b are in Critical Habitat Unit OR-32. Harvesting would remove 29 acres containing nesting structure, and downgrade 28 acres from nesting to foraging/dispersal habitat. Unit 30-1a and 30-1b are part of a contiguous habitat block approximately 200 acres in size, which would be adversely modified…EA at 47.*

The Critical Habitat in OR-32 is clearly important on at least the regional scale. Logging would degrade this habitat and make it less able to function as 'the single link from the Western Cascades Province to the Klamath Mountains Province.' Commentors ask that the BLM refrain from logging these older forests in the CHU at this time."

BLM Response: The quotation noted above is in reference to CHU OR-32 not OR-62 which is located in the Roseburg District BLM. The EA analyzed effects to spotted owls and the US Fish and Wildlife Service issued a Biological Opinion that determined the proposed activities would not preclude the ability of the CHU to function as intended (USDI/USFWS 2003). The rest of the last sentence you quote on p. 47 of the EA states, "…but [would] still function as nesting, roosting, foraging, and dispersal habitat."

comment h: *"In Alternative 2, road construction would occur in the LSR. Nearly one mile of road construction is proposed (.88 miles). Nowhere in the EA does the BLM explain whey this road is necessary. Large trees in the road prism would be logged and surely the fragmentation and edge effects of the road would harm the LSOG characteristics of the LSR. Commentors are unequivocally against road building in LSRs and believe that such an activity violates standards and guidelines of the NFP. 'Some trees larger than 20" diameter at breast height may be removed for spur construction, or placement of yarding towers…' EA at 44. However, the BLM states that one of the objectives of the project is to correct problems associated with high road density. EA at 11."*

The benefits of road access do not outweigh the impacts of road construction. In many soil types, road construction can cause slope failure, sedimentation into streams, and cause massive impacts to fisheries. In granitic soils, newly constructed roads are estimated to erode at tons of sediment per mile during the first year of construction and continue to erode at elevated levels for the life of the road, even if closed. New road construction is regarded as the greatest negative watershed effect on salmonid habitats, far overshadowing the effects of other management. Reiman and Clayton 1977. And, obliterating the roads initially increases erosion, and the obliterated roads will continue to erode at levels significantly elevated above natural levels for more than 6 years after obliteration. Potyondy, et. Al. 1993.

Road construction also fragments forest habitat. Edge effects from road can last decades and penetrate hundreds of meters into a forest stand. Fragmentation of habitat poses a grave threat to spotted owl populations. The ISC report developed by the USDI in 1993 to assess threats to the NSO concludes that the literature of conservation biology described many examples where fragmentation of formerly widespread terrestrial habitats into remnants of various sizes and degrees of isolations has resulted in extinction. The report noted that fragmentation and edge effects are major concerns for species threatened with the systematic removal of suitable habitat. With respect to NSO populations in particular, habitat fragmentation increases the ratio of edge to habitat area, causes increased susceptibility of forest stands to windthrow, and is associated with lowered density, decrease productivity, decreasing success of juvenile dispersal, increased competition with other owl species, and increased predation upon resident NSOs. The permanent increase in habitat fragmentation associated with the project is contrary to the objectives declared for CHUs and LSRs and must be disclosed and analyzed in the EA.

BLM Response: Temporary road construction is proposed to access treatment units where no roads exist or road conditions are overgrown and inaccessible. As described on p. 16 of the EA and in Appendix 1 (page 74), units without current accessibility were first evaluated to determine if helicopter logging would be an economically feasible method to remove commercial timber. Since "the commercial by-product produced from commercial density management was not substantial enough for it to be an economical feasible alternative without incorporating additional commercial product to be retrieved from other areas" (EA p.74), these units were then evaluated for temporary road construction as another means to access suppressed stands in need of thinning. "Temporary road construction was designed to reduce impacts such as placement on the ridgetop, on low slope conditions, and minimization through granitics and other sensitive soils," (EA, p.17). The effects of constructing the proposed temporary roads on late-successional habitat were analyzed in the EA. "Six spur roads would be constructed…would not contribute…. to interior fragmentation of any blocks of late successional habitat. The spur road construction would not change the function of adjacent late successional habitat for wildlife species, and would allow for accelerated development of adjacent young stands by providing access for silvicultural late successional reserve density management harvest prescriptions," (EA, p.44).

As stated in the NFP (p.C-16) and RMP (p.87), "Construct roads in Late-successional reserves if the potential benefits of silviculture, salvage, and other activities exceed the costs of habitat impairment. Road maintenance may include felling hazard trees along rights-of-way. Leaving material on site should be considered if available coarse woody debris is inadequate." When you quoted that "trees greater than 20" diameter at breast height may be removed for spur construction" you did not include the rest of the sentence that states "and would be retained within forested habitat as large down woody debris." The 2004 Revised South Umpqua/Galesville Reservoir Late Successional Reserve Assessment notes (p.88), "where possible, new road construction should be limited to *temporary roads* which can be rehabilitated following use." There is no permanent road construction proposed in the Slim Jim EA, only temporary roads.

Temporary roads do not contribute to the overall road density since they are decommissioned after use (ripped with a winged subsoiler, waterbarred, mulched and seeded).
The cumulative effect of proposed activities on soils is disclosed in the EA on p. 61-62. "The amount of increased erosion as a result of the logging and fuels projects within this HUC 6 watershed include the additional road use, and maintenance associated with these activities, and erosion from the additional estimated maximum of 0.23% of disturbed land from yarding corridors, new landing construction, additional road building of approximately one mile by federal agencies and non-federal owners within the watershed, and the decommissioning and subsoiling of roads, landings, and tractor skid trails under the Slim Jim project…[Erosion is] expected to remain within the Oregon turbidity standards required under the Clean Water Act."

The project does correct problems associated with high road density by blocking 0.54 miles of road by gating or trench barricade and has a net decrease in roads by decommissioning 0.80 miles to reduce overall road density.

"The proposed activities would not preclude the ability of the CHU to function as intended (USDI/USFWS 2003)," (EA, p. 48).

comment i: *"Of the 447 acres of commercial density management it is not clear what portion would take place in young managed stands. Some of the stands are natural in the sense that they have naturally regenerated from a stand replacing fire. Portions of units 1-4 and 11-1 are nearing 70 years of age and have regenerated from natural disturbances. KS Wild encourages the Glendale BLM to focus on thinning young managed stands in LSRs in a fashion that hastens the development of late-successional forests and not in naturally regenerated stands that are already on a trajectory toward late-successional habitat.*

Researchers have commented on the rarity of young natural stands. One of the primary authors of the Northwest Forest Plan, Jerry Franklin, advocates for the protection of these forests, while pursuing a robust program of thinning young managed stands."

BLM Response: As described in Silvicultural Prescription – Appendix 3, 400 acres of the 447 acres of commercial density management (CDM) are within young managed stands. All CDM units except for 1-4 and 11-1 are young stands that have resulted from past timber harvests. Unit 1-4 and 11-1 are older stands that are currently listed as CHU (Critical Habitat Unit). The silvicultural prescription for these two units notes, "[e]xisting pole size conifers are capable of responding to a treatment that reduces competition from adjacent vegetation." Hardwoods are dying due to shading. "The current stand development trajectory [without treatment] will result in a loss of desired late successional stand characteristics such as: long crowns; large diameter branches; a mix of conifers, hardwoods, and shrubs; and canopy gaps."

Since these stands would develop into late-successional conditions within a relatively

short timeframe (10-30 years), should thinning treatments occur, they were selected as a priority for treatment. The desired future condition resulting from actions in both of these units would be stands that had two very distinct canopy layers. The upper canopy layer would consist of primarily Douglas fir. Large hardwoods would be retained within the unit. The understory would consist of hardwoods, shrubs and Douglas-fir regeneration that became established within canopy gaps created by the thinning. Treatment that reduced stand density and canopy cover would help to keep larger hardwoods alive within the stand," (EA, p.115). In addition, both of these units will retain 60% canopy cover. The prescriptions are consistent with the direction of the South Umpqua/Galesville Late Successional Reserve Assessment.

comment j: *"In southwest Oregon, the average diameter of a late-successional tree is 17 inches at breast height (See Mt. Ashland LSR Assessment, Rogue River National Forest). KS Wild does appreciate the 20" DBH limit for trees to be cut in the LSR, but we think that is a bit too high. The standards and guidelines state that the BLM must maintain or restore the late-successional characteristics of the forests in the LSR."*

BLM Response: The Regional Ecosystem Office exempt silvicultural treatments in LSRs for the Oregon and California Klamath Provinces that allows for up to 20 inch diameter trees (July 19, 1996 Memorandum). The average sized tree selected for thinning was 10.8 inches dbh and the overall range was trees from 6-20 inches diameter at breast height (dbh). Though thinning will be primarily in the understory, some will occur across the natural range of tree diameters present. In 2004 the Regional Ecosystem Office Exempt (May 19, 2004 Memorandum), "proportional thinning across diameter classes…to achieve the desired diameter distribution".

comment k: *"In order to maintain and enhance late-successional characteristics in the forests in the LSR, the BLM must maintain good canopy cover. Removing canopy to 30 to 40% is only appropriate if there will be portions of the units that are left alone (small areas of this amount of opening, with other areas with greater canopy or left entirely alone). This is called the 'skip – gap' method of variable density management that has been advanced by researchers like Spies, Franklin, and Carey. KS Wild would like to see closer to 60% canopy across a unit to ensure that these forests are still functioning habitat and will develop into late-successional forests in the future (see Variable Density Thinning Discussion Below)."*

BLM Response: As stated in the silvicultural prescription (Appendix 3 of EA), variable density thinning management techniques to be implemented include variable spacing, creating small openings (canopy gaps) by marking two-three adjacent trees, and quarter acre openings within units where all but 2-4 conifers are removed. Where the openings are applied, conifers retained would be those that are most likely to remain standing after wind and/or snow events. Openings may not be circular in shape.

comment l: *"We wish that you would use variable density thinning prescriptions in all young managed stand thinning in LSRs. Uniformly spaced prescriptions do not hasten successional pathways and do not maintain or restore the late-successional structure of*

young managed stands."

BLM Response: See response to comment k. Variable density spacing is written into the prescriptions of all LSR commercial density management and non-commercial density management (NDNM) treatment areas except 3 narrow units that were previously right-of-way roads and one NDNM unit (7-1). The prescription objective for units that were previously right-of-way roads is to retain the largest trees and a greater percent canopy cover within these smaller areas, therefore the narrow and small acreage of these units do not provide an adequate area for variable density spacing. Due to higher concentrations of older trees within portions of Unit 7-1, the prescriptions for non-commercial density management would not affect canopy closure since trees only less than 10 inches in diameter would be thinned. One of the objectives of variable density spacing is to create varied spacing of the canopy composition.

comment m: *"One of the big challenges of VDT or any restoration thinning regime, is that thinning 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. Managing for decadence in young stands is not a trivial issue because among the many other valuable attributes of dead wood, it is strongly associated with healthy populations of many small animals species that in turn help support populations of at-risk predators such as spotted owls, goshawk, fisher, marten, etc. When determined to be necessary, snag creation must be a creative endeavor. Trees killed in different ways will die and decay in different ways. A variety of techniques should be used within and between stands: girdling, topping, infecting with heart rot fungus or other native pathogens, etc."*

The Mt Hood National Forest has made an effort to mange for decadence in the Cloak Thinning EA, 11/2004 http://www.fs.fed.us/r6/mthood/projects/cloak-thinning/CloakEA.pdf Design Critera #6 (p 23) indicates that, "live trees would also be selected as leave trees that have the 'elements of wood decay' as described in the DecAid advisor. This may include trees with features such as dead tops, broken tops and heart rot." This technique will be applied not only in thinning native second growth but also in thinning dense young plantations. The agency should incorporate this design element in all projects and instruct marking crews and cutting crews to "look up" so they can retain key elements of structural complexity such as broken tops, forked trees, etc.

BLM Response: "…all regeneration and overstory removal harvest units would be guided by the 'Guidelines for Snag and Down Wood Prescriptions in Southwestern Oregon' (USDA 2000). 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.35).

The Northwest Forest Plan notes, "[t]his 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," (NFP, C-41; Emphasize green-tree and snag retention in matrix management).

As stated in the Silvicultural Prescription – Appendix 3, "[u]nlike prescriptions designed to increase or accelerate the growth of trees for wood volume, trees of a variety of conditions such as those containing decay, trees that have numerous and large branches, and trees with broken tops or past snow damage are to be retained in addition to trees that would be retained in a 'traditional' commercial thin" (EA, p.99).
Marking crews and cutting crews are instructed to "look up" so they can retain key elements of structural complexity such as broken tops, forked trees, etc.

comment n: *"A vast body of research demonstrates that tree plantations are more vulnerable to fire than natural forests (see Ingalsbee 1997, Sapsis & Brandow 1997, DellaSala et al. 1995). The increased susceptibility of plantations to severe wildfire is due to:*

1) *High tree stocking levels and uniformly dense tree canopies; structures that facilitate hotter, more severe fires (Frost & Sweeny 2000);*

2) *Warmer, windier and drier conditions than natural forests (Weatherspoon 1996, Countryman 1955); and*

3) *Large volumes of post-logging "slash" materials accumulate that rarely, if ever, are cleaned up (USDA 1994).*

In a study of fire severity in northwest California, researchers found that tree plantations of any age were "more receptive to combustion" than other forests (Odion et al., 2004). Perry (1995) suggested that once even-age tree plantations are established on a proportion of forest landscape, "the potential exists for a self-reinforcing cycle of catastrophic fires." Extensive networks of roads constructed to facilitate logging and planting also increase the risk of human-caused ignitions during hot, dry conditions (USDA 2000)."

BLM Response: Density management treatments proposed in the EA are designed to reduce overstocked conditions so that the remaining trees may have enough space and light to continue to grow. All Slim Jim Project units will undergo fuels reduction treatments. Your quotation that "[l]arge volumes of post-logging 'slash' materials accumulate that rarely, if ever, are cleaned up" is inaccurate. Post-harvest slash is typically treated within six months to a year after commercial-harvest activity. The project would also reduce the risk of human-caused ignitions by blocking 0.54 miles of road by gating or trench barricade, and decommissioning 0.80 miles of roads to reduce overall road density. Temporary road construction does not contribute to the overall road density since they are decommissioned after use (ripped with a winged subsoiler, waterbarred, mulched and seeded).

comment o: *"Of the three methods commonly proposed by the Medford BLM to mitigate the significantly increased fire hazard created by logging slash, two generally are not effective. Computer simulations run by van Wagtendonk (1996) projected that low*

thinning combined with a pile-and-burn slash treatment on flat ground yielded nearly identical fire behavior to thinning without any slash treatment because pre-existing surface fuels were not affected. Lop-and-scatter practices "significantly increased subsequent fire behavior." In contrast, underburning (or broadcast burning) is the only method known to reduce fire intensity below pre-logging conditions. Burning in logged areas is an effective hazard reduction practice because fire consumes the finest fuels that present the greatest hazard (Deeming 1990). Other reviewed and published studies reach similar conclusions about the range of slash treatment options (Fahnestock 1968, Stephens 1998)."

BLM Response: As stated on page 5 of the EA: "fuels reduction treatments on 1,303-1,451 acres (586 acres for hazardous fuels reduction and 717-865 acres of post-harvest slash fuels reduction) is a very small portion of the fifth-field watershed (3 percent) and the cumulative effect of increasing the fire risk is minimal". There is no significant increase to fire hazard, public health and/or safety. In regard to Wagtendonk, treatments that don't address surface fuels, particularly in areas that had frequent fires historically and have been excluded from burning, will not essentially affect the surface fire behavior characteristics. Thinnings, especially thinning from below, is an activity to address fire behavior characteristics of crown fire initiation and crown fire sustainability (Scott and Reinhardt 2001, Carlton 1999, Graham et al 1999 and 2004). The surface fire spread and intensity is only one of the issues to be addressed in a fuels reduction activity.

comment p: *"Agee (1996) suggests a canopy bulk density threshold of 0.1 kg/ha as a general determinant for crown fire activity under extreme weather conditions. However, Keyes and O'Hara (2002) note the incompatibility of such open forest conditions with key forest management objectives including wildlife conservation and prevention of understory initiation and ladder fuel development, especially in the absence of an institutional commitment to stand maintenance.*

Omi and Martinson (2002) sampled wildfire areas to describe the effectiveness of fuel treatments on subsequent fire severity. The strongest correlation they found was that between crown base height and "stand damage," which they used as a measure of severity. Importantly, canopy bulk density was not strongly correlated to fire severity. Instead:

> *…height to live crown, the variable that determines crown fire initiation rather than propagation, had the strongest correlation to fire severity in the areas we sampled... [W]e also found the more common stand descriptors of stand density and basal area to be important factors. But especially crucial are variables that determine tree resistance to fire damage, such as diameter and height. Thus, "fuel treatments" that reduce basal area or density from above (i.e., removal of the largest stems) will be ineffective within the context of wildfire management (p. 22)."*

BLM Response: The silvicultural treatments prescribed, call for thinning primarily from the understory, however, some thinning may occur across all diameter classes. Thinning of some larger diameter trees (less than 20 inches in diameter) may create some openings in the canopy structure; however, these openings would begin to close within a few years after treatment.

comment q: *"While it seems difficult, the BLM even has to admit that overstory logging increases the potential for uncharacteristic fire. It states that in the regeneration and overstory removal units, "After the stand is re-established with small trees, however, it would have an increased fire risk until the stand develops into an older age class (generally greater than 80 years of age) or receives thinning treatment to prevent overstocking." EA at 39. Alternative 2 would therefore increase the fire hazards in the project area by logging large overstory trees.*

BLM Response: The proposed treatments in the EA totaled 29 acres of overstory removal and regeneration harvest. This is 0.06% of the fifth-field watershed which is not a significant increase to fire hazard, public health and/or safety.

comment r: *"Given the topographic diversity of the Slim Jim planning area and its unique acceptance of weather patterns during fire season, fuel treatments should be distributed with spatial patterns of fire spread in mind. Overlapping patterns of fuel treatment that reduce vertical fuel continuity can fragment the most extreme fire effects into smaller patches if they disrupt heading fires and increase the area burned by flanking fires (Finney 2001). Treatments on slope aspects facing away from frontal winds are a lesser priority because backing fires are most likely to exhibit mild behavior and intensity.*

Implement fuel reduction first in areas where relatively little resource investment may be able to create relatively fire resilient stand conditions. This may include low-productivity sites with little encroachment of small trees (e.g., dry southerly aspects) and open stands dominated by large conifers or hardwoods (e.g., existing fuel breaks). Targeting initial work in these areas will maximize the area to be treated with available funds and personnel, and thereby provide the greatest opportunity to quickly reduce fuels and restore ecosystem function at larger spatial scales."

BLM Response: Fuel reduction treatments were developed where all three fire factors are high: risk, hazard, and value. Hazard evaluates slope, aspect, position on slope, adjacent fuel model, ladder fuels, and estimated fuel loading to determine if an area would be rated as high.

comment s: *"Thinning may reduce total fuel loads (i.e., biomass weight per unit area), but it also opens forest canopies and allows increased solar radiation and wind to reach the forest floor (Agee 1996, Countryman 1956). The net effect is to reduce subcanopy moisture and increase the flammability of surface fuels:*

> *In the open, solar radiation impinges directly on the earth's surface. Because both the earth and the air above it are poor conductors, heat is concentrated at the surface and in the layer of air next to it. Ground fuels can thus become superheated … A mature, closed stand has a fire climate strikingly different from that in the open. Here nearly all of the solar radiation is intercepted by the crowns … Because of the lower temperature and higher humidity, fuels within closed stands are more moist than those in the open under ordinary weather conditions … [F]irebrands that do not contain enough heat to start a fire in a closed stand may readily start one in the open. Fires starting in the open also burn more intensely and build up to conflagration proportions more quickly since less of the heat produced by the fire is used in evaporating water from the drier fuels*

(Countryman 1956, 15-16).

Mechanical thinning also generates large quantities of flammable slash by transferring branches, twigs and needles from the canopy to the ground (Allen et al. 2002, Graham et al. 2004, Stephens 1998, van Wagtendonk 1996, Weatherspoon 1996). The CRS noted:

> *Timber harvesting removes the relatively large diameter wood that can be converted into wood products, but leaves behind the small material, especially twigs and needles. The concentration of these "fine fuels" on the forest floor increases the rate of spread of wildfires. Thus, one might expect acres burned to be positively correlated with timber harvest volume (Gorte 2000b)."*

BLM Response: Commercial thinning is considered treatment "to control (reduce) stand stocking to increase growing space for and redistribute growth to remaining selected trees for production of commercial products" as stated in Chapter 2 on p.15 of the EA. "Commercial density management (CDM) and non-commercial density management (NDNM) treatments within Late Successional Reserves are proposed so that desired late successional stand characteristics can develop, desired stand components may be retained, and stand growth/vigor is promoted," (EA, p.15). Reduction in canopy closure may slightly increase solar radiation to the forest floor however; canopies are expected to return to a closed condition within 10-30 years. Considering the scale of proposed treatments the cumulative effect of increasing the fire risk is minimal. See response to comment o.

comment t: *"Scientific understanding of the ecological effects of mechanical thinning is incomplete, but evidence suggests that such treatments, even when carefully implemented, can adversely affect the environment in key ways. Mechanical thinning can:*

- *Remove large trees that are disease and fire resistant (DellaSala et al. 1995, USGAO 1999, Gorte 2000a, 2000b).*
- *Increase mortality of residual trees due to pathogens and mechanical damage to boles and roots (Filip 1994, Hagle and Schmitz 1993).*
- *Damage soil integrity through increased erosion, compaction and loss of litter (Harvey et al. 1994, Meurisse and Geist 1994).*
- *Create sediment pulses in streams that harm fish (Grant and Wolff 1991, Beschta 1978).*
- *Retain insufficient densities of large trees and woody debris to sustain viable populations of cavity nesting and woody debris dependent species (DellaSala et al. 1995).*
- *Reduce habitat quality for sensitive species associated with cool, moist micro sites or closed canopy forests (FEMAT 1993)."*

BLM Response: Project Design Features are included in the timber sale contract to minimize the impact from mechanical thinning. "Yarding tractors would not exceed nine feet in width and would be equipped with an integral arch to minimize soils disturbance and compaction…Lateral yarding would be required on all units to protect residual leave trees and existing conifer regeneration…Yarding carriages would be required to maintain

a fixed position during lateral yarding to reduce damage to the residual stand…[stream] buffer distance used would be between 60 and 150 feet, and was ultimately designated based on the Ecological Protection Width Needs chart (B-15, Standards and Guidelines)," (EA, pp. 29 & 31). See response to comment m (first paragraph).
Your literature citations above do not provide site specific support on how mechanical thinning would have greater impacts than those identified in the Slim Jim Project EA.

comment u: *"Commentors generally support the fuels reduction aspects of the Slim Jim project. Alternative 2, however – as the BLM admits – would increase fuels and fire hazards in the project area and thus does not have our support. Mechanical thinning of large trees is antithetical to sound fuels reduction strategies."*

BLM Response: See response to comment j and q. Comment does not provide specific support of how mechanical thinning would have greater impacts than those identified in the Slim Jim Project EA.

comment v: *"The Slim Jim EA fails to account for significant new information contained in the recent Northern Spotted Owl Status Review. Dr. Franklin summarized the findings of the recent Northern Spotted Owl Status Review scientific review panel as follows:*

The implications of the scientific findings with regards to conservation strategies.

... in view of current uncertainties, such as the eventual outcome of the Spotted Owl/Barred Owl competition, West Nile Virus, and Sudden Oak Death, and whatever else comes along -- such as global change and other kinds of introductions -- existing suitable habitat could be important to the persistence of the Northern Spotted Owl. [repeated with emphasis] Existing suitable habitat could be important to the persistence of the Northern Spotted Owl, i.e., risk to Northern Spotted Owl may increase if additional suitable habitat is removed. It is not clear where the Spotted Owl may find the refuge or refuges from new threats within existing suitable habitat. Barred Owl intrusions do not negate the need for structurally complex forest habitat to sustain Northern Spotted Owl based on existing knowledge.

BLM Response: See response to comment e regarding the effects of barred owl competition, west nile virus, Sudden Oak Death syndrome, wildfire, and climate change on the northern spotted owl.

comment w: *"This is not just a hypothetical concern. According to recent monitoring of barred owl on the Willamette National Forest—*

> *The percentage of sites containing at least a single barred owl (Strix varia) increased dramatically between 2000 and 2001; the high level of barred owl responses continued into 2002 as well (Figure 5)... it is important to note that our survey methods are not designed to locate barred owls. ... The data do suggest, however, that barred owls are becoming increasingly common in the study area and several pairs of spotted owls have been either displaced or are inhibited from responding to our surveys as a result. In addition, a second hybrid owl was*

located on the study area in the Horse Creek LSR.

The Elliott State Forest had a spotted owl population study completed in the summer of 2003. Only 11 pairs of owls were found (down by 50% from 1993). NONE of the owls produced young last year, and for the first time in the public record, barred owls were found in the Elliott Forest, at eight spotted owl sites. Four of the new barred owl sites no longer have spotted owls.

BLM Response: See response to comment e regarding the effects of barred owl competition, west nile virus, Sudden Oak Death syndrome, wildfire, and climate change on the northern spotted owl.

comment x: *"The BLM makes no attempt to analyze or discuss the cumulative impacts the Slim Jim old-growth removal (through logging and road building) in conjunction with barred owl encroachment, and the Biscuit fire impacts on the Fishhook-Galice LSR, on NSO recovery. The BLM must address the findings of Dr. Franklin and the USFWS indicating that given increased threats to NSO recovery from barred owl encroachment, '[e]xisting suitable habitat could be important to the persistence of the Northern Spotted Owl, i.e., risk to Northern Spotted Owl may increase if additional suitable habitat is removed.'"*

BLM Response: See response to comment e regarding the effects of barred owl competition, west nile virus, Sudden Oak Death syndrome, wildfire, and climate change on the northern spotted owl.

comment y: *"We do not yet recognize the legality of the 2004 Survey and Manage Record of Decision. Please disclose if any Survey and Mange species are in the project area and would be impacted by the proposed activities. We are particularly interested in the late-successional habitat portions of the project area in terms of species that might be lost due to regeneration logging, commercial thinning of large overstory trees, or overstory removal. Are there Survey and Manage or Special Status species in the logging matrix logging units? Are there Red tree voles, an important food source for the Northern spotted owl? What are the impacts of the logging on these species? Will species viability be ensured at the landscape and project scale?"*

BLM Response: The Bureau of Land Management (BLM) is aware of the recent U.S. District Court ruling which found portions of the *Final Supplemental Environmental Impact Statement to Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines* (FSEIS, 2004) inadequate. At this time the *Record of Decision to Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines* (2004) has not been vacated or withdrawn. Therefore there is no current requirement to complete surveys according to previous Survey and Manage protocols. The Court has not yet entered an order specifying what, if any, injunction will be ordered in regard to its findings on the adequacy of the 2004 FSEIS. Injunctions for National Environmental Policy Act (NEPA) violations are common, but not automatic.

The BLM expects the Court's findings regarding the 2004 FSEIS will result in a court ordered remedy, but the extent of that remedy and whether it would be imposed pending

possible appeal of the court's findings are unknown at this time. The BLM will reexamine individual project level NEPA documents in light of a potential court ordered remedy and will make revisions to environmental documents as necessary following issuance of the court's judgment. The BLM has provided advance notice to potential purchasers informing them that the court's ruling may result in delays in award of the sale to the high bidder or suspensions of operations. The appropriate processes are currently in place to provide the ability to delay award of timber sales or issue suspensions should they become necessary to comply with future court orders.

"This project would not change the assessment predicted for the Pacific fisher in the NFP, and the impacts from the Proposed Action are expected to be minor," (EA, p. 50).

The Aquatic Conservation Strategy, Riparian Reserves, and Late Successional Reserve management guidelines are expected to maintain and develop adequate fringed myotis bat (Bureau Assessment) and Pacific pallid bat (Bureau Assessment) habitat in the Upper Cow Creek 5th field watershed. Some suitable snags may be removed due to safety concerns, in the removal of 6 acres of late-successional habitat. No caves/ rock structures with crevices supporting roosting or hibernacula would be disturbed. The viability level would be maintained as the NFP with Standards and Guidelines would provide 80% or greater likelihood of sufficient distribution of habitat (1994a p.3&4-187).

The red tree vole was removed from any Survey and Manage listing through the 2003 Survey and Manage Annual Species Review (signed December 19, 2003). Conducting surveys and protecting known sites are not required since the project area lies within the Xeric Zone.

The proposed activities are consistent with BLM's Special Status Species policy.

comment z: *"Commentors are concerned about the soils in the planning area. Due to the large amount of private land, coupled with the plans of the BLM in the Slim Jim project, irretrievable loss of soil productivity could occur. The EA states that the BLM would rely on Best Management Practices to mitigate harm caused by the project. The generic use of BMP's and mitigation as a way of justifying degradation has been rejected by the courts for quite some time now.*

While the BLM has severely damaged watersheds while referencing a list of "best management practices", this practice can no longer be allowed to continue. Instead, the BLM must disclose the consistent failure of its "best management practices" to prevent significant water quality problems in the past. Sierra Club v. Morton, 510 F2d 813, 824; National Wildlife Federation v. U.S.F.S., 801 F.Supp. 360 (D.Or 1984). And, the BLM must "candidly disclose the risks and any scientific uncertainty" and scientific opposition to the chosen practices. Seattle Audobon Society v. Lyons, 871 F. Supp. 1291 (W.D. Wash. 1994). "Conclusory statements which do not refer to scientific or objective data supporting them do not satisfy NEPA's requirement for a 'detailed statement." Citizens Against Toxic Sprays v. Bergland, 428 F. Supp. 908 (D.Or. 1977).

There is no good evidence that the application of BMPs can reduce the impacts of logging and road construction at the watershed scale to an ecologically insignificant level, especially in light of existing conditions of the existing road density."

John Couburn, a professional hydrologist, states:

> *Such a cumulative effect could occur even if best management practices (BMPs) or the state's forest practice rules were implemented. BMPs, such as streamside protection (equipment exclusion) zones or proper road construction, help reduce but do not always stop cumulative effects. [Journal of Soil and Water Conservation, July-August, 1989, p. 2678.]"*

BLM Response: Soils were analyzed and adequately addressed on pages 52-58 of the EA. On any given landscape there are an infinite number of soil considerations; it would be infeasible to address every single one in detail.

Soil type is used in the Timber Production Capability Classification (TPCC) to determine relative site productivity/ site class and helps determine the types of silvicultural practices that may be appropriate at specific locations. Information for soils was derived from NRCS Josephine County Soil Surveys and has been ground-verified by BLM personnel. Survey maps and tables were used in determining suitability of individual sites. Tables contain chemical and physical characteristics of the soil series, including soil depth and associated vegetation.

The RMP ROD considers BMPs in Appendix D to be appropriate for use on all soil types, with the exception that BMPs for fragile soils (part VI, page 155), would be substituted for BMPs that are appropriate for other soil types.

As the Council on Environmental Quality (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 proposed action's cumulative effects, and secondly as a basis for identifying the proposed action's 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.

comment aa: *"Not so long ago, the Glendale RA acknowledged in the Bear Pen EA that 'An irretrievable loss in soil productivity would occur in timber harvest landings, skid trails and slash piles created by ground-based logging. Road construction represents an irretrievable loss, even after the road is closed and re-vegetated.' Bear Pen EA page 74. Please note that these irretrievable resource losses are a factor in determining that the proposed project has a significant impact on soils and the environment of the planning area."*

BLM Response: As discussed in pp. 5-8 of the EA. The impacts analyzed under the Ten Significance Criteria described in 40 CFR 1508.27 did not substantiate significance. The loss of soil productivity within the Slim Jim Project Area would be limited to "…approximately 7 acres of tractor yarding corridors, 16 acres of cable yarding corridors, 0.5 acres of helicopter yarding, 2.2 new temporary road acres (to be decommissioned after use), and the renovation of 2 acres of helicopter landings. Together, the incremental effects of compaction caused by these activities would reduce productivity in this watershed by approximately 0.16% above existing levels," (EA, p.56). "These levels are within RMP/EIS guidelines of 12% (pp. 4-12-13);" (EA, p.5).

The EA also notes, "[s]ubsoiling tractor trails, where practical, and temporary logging roads (See PDFs, sec 2.3.7) would reduce compaction on these sites by as much as 80% (Froehlich and Miles; Davis), substantially restoring the infiltration of water and nutrients into the soil. Productivity would also be increased as a result of the 2 existing road acres that would be decommissioned, and by subsoiling the existing tractor skid trails within thinning unit 17-1a. Fuels reduction treatments and density treatments on 1,451 acres of would reduce the amount of vegetation competing for soil nutrients and water, thus increasing site productivity. The isolated pile/burn/underburning activities are low intensity, reducing the depth the soil is affected to as little as 1cm, and generally leave a significant portion of the larger organics on site. This helps to maintain the productivity of the site in the long term, with a limited short term effect. Hazardous fuels reduction would reduce the likelihood of a high intensity, large scale uncontrolled burn occurring, which could have long term effects to the productivity of severely burned acres," (EA, p.56).

comment bb: *"Similarly, in the BLM's contends that 'It is unlikely that baseflow in small, headwater streams (1st, 2nd, and 3rd order) that are adjacent to most harvest units would increase immediately following harvest…' In reality, such small headwater*

streams surfaced in unit 20 of the Mr. Wilson timber sale (also in the West Fork Cow Creek Watershed) following the "regeneration" of the 400 year-old stand.

Where an Environmental Assessment relies on mitigation to reach a Finding of No Significant Impact, that mitigation must be assured and must 'completely compensate for any possible adverse environmental impacts.'
Cabinet Mtns. Wilderness/Scotchman's Peak Grizzly Bears v. Peterson, 685 F.2d 678, 682 (D.C. Cir. 1982).

If the effectiveness of such mitigation is not assured, then a FONSI cannot be signed and an EIS must be prepared. Foundation for North American Wild Sheep v. USDA, 681 F.2d 1172, 1178 (1982)."

BLM Response: Contrary to your comment, there are no known headstreams in Mr. Wilson timber sale unit 20.

comment cc: *"The courts have placed more stringent judicial review over EA's than EIS's. Case law indicates that even though the procedural requirements of an EIS are stricter, an EA requires more substantial proof that the mitigation will in fact result in no significant impact than an EIS. As per Steamboaters, if the public 'raises substantial questions whether a project may have a significant effect an EIS must be prepared.' Steamboaters v. FERC, F.2d 1382 (9th Cir. 1985). Courts will not accept merely conclusory statements that measures are effective. The agency must be able to back their assertion with evidence based on mitigation measures actually developed. Unproven mitigation measures will not suffice. Sierra Club v. Peterson, 717 F.2d 1409 (D.C. Cir. 1985)."*

BLM Response: As stated in the EA on page 53, "The Medford District RMP/EIS provides a series of BMPs designed to prevent unacceptable levels of degradation to the soil resource and related productivity (Vol. 2, pp. 30)." A project inspector would ensure that Best Management Practices (BMPs) and Project Design Features (PDFs) are implemented properly.

The EA analyzes the effectiveness of the BMPs on proposed activities. "Subsoiling tractor trails, where practical, and temporary logging roads (See PDFs, sec 2.3.7) would reduce compaction on these sites by as much as 80% (Froehlich and Miles; Davis), substantially restoring the infiltration of water and nutrients into the soil," (EA, p.56).

"Erosion from these activities [hauling on unpaved roads, removing timber by tractor and cable yarding corridors, temporary road building (and decommissioning after use), and renovation of helicopter landings] would be mitigated by seasonal restrictions, a requirement of one-end suspension for yarding, and the use of erosion control methods such as seed and mulch... Tractor logging would be mostly ridge-top or done using existing skid trails, and would only occur on slopes less than 35%. As a result, erosion from these actions would be minimal and short term," (EA, p. 56).

"[Handburn] piles would be burned in the fall to winter season after one or more inches of precipitation have occurred. This would reduce the potential for fire spread and scorch and mortality to the residual trees and shrubs. High soil and duff moisture would also prevent soil damage from burning," (EA, p.27).

Other Project Design Features include riparian buffer widths. "…'the predominant factors which influence the relationship between on-site erosion and sediment delivery (to the streams) are landslope and width of effective buffer strip to trap sediment (Amaranthus, 1981)'. By using the Ecological Protection Width Needs Chart, the eroded material that enters the streams is considerably reduced. These effects would be within the ACS guidelines, which are designed to maintain and improve aquatic habitat in the long-term, and would be expected to be immeasurable following the first flood event after treatments. This amount of sedimentation would not be expected to have any adverse effect on fish habitat, macroinvertebrate population compositions, or other aquatic organisms in the long term," (EA, p. 59).

EA provides sufficient proof that the mitigation will not result in any significant impacts.

comment dd: *"Forest soils contain a large diversity of structural and functional characteristics whose specificity must be addressed at individual project sites to ensure that management assumptions are properly applied. Soils mapped at a landscape level (DCSS) must be further analyzed at project sites and field verified by qualified personnel. None of the proposed Best Management Practices or Project Design Features reflects variability among soil types. The BLM has referenced generic "one-size-fits-all" mitigation measures that it will apply to all soils in the project area regardless of their unique characteristics. Mitigation measures have not been assessed for their effectiveness on a site-specific basis."*

BLM Response: See response to comment z regarding Best Management Practices and soil types.

comment ee: *"The cumulative effect "analysis" contained in the Slim Jim EA is woefully inadequate. The EA's treatment of the cumulative impacts of private lands logging, past BLM logging, and foreseeable BLM logging is particularly vague and lacks detailed discussion or analysis. The logging of mature and older forests in the project area, along with road construction, necessitates a detail cumulative effects analysis."*

The EA overlooked concurrent and reasonably foreseeable federal and private logging operations in the same watershed. Private land activities have had an enormous impact on aquatic ecosystems. Cumulative effects are also important to threatened and sensitive species, soil productivity, forest health, and fire hazard. The EA never addressed the site-specific cumulative effects of this action on many of these factors.

BLM Response: The EA discloses all concurrent and reasonably foreseeable federal logging operations in the Upper Cow Creek Watershed. See pages 40, 48, 52, 53, 54, and 60. Though it is not possible to determine all foreseeable private logging operations, the

Medford District RMP recognizes that all private timber managed land is not expected to exceed 40-60 years of age. The best method for tracking past logging activities is the Medford Change Detection Project, which track changes on the landscape through satellite imaging. Currently, the Glendale Resource Area has landscape change data for the years between 1974 to 2002.

"The cumulative effect is considered minimal when added to 19% vegetation cover reduction during the period from 1974 to 2002. Current information on cleared acres since 2002 has not yet been incorporated into the Medford Change Detection GIS system. Based on recent observations and preliminary data from the Medford Change Detection Project, there have been several large sections that have been logged on non-federal land since this time. An estimated 165 acres of open space were created between 2002 and fall of 2004 within the Galesville HUC 6, and observations estimate an additional 300-400 acres have been harvested since that time for this portion of the watershed. These operations are estimated to have increased the amount of open space within the fifth-field watershed from approximately 19% in 2002 to 20% based on preliminary data," (EA, p. 40-41).

In summary, Slim Jim treatments to reduce hazardous fuels and activity slash would occur on a total of 1,451 acres (3% of the fifth-field watershed) under Alternative 2 and on 1,303 acres (2.7% of the fifth-field watershed) under Alternative 3 through slashing, hand piling, hand pile burning, underburning, or lop-and-scatter treatments for the long term (3-5 years after treatment).

Foreseeable federal projects within the Upper Cow Creek Watershed include, "…the Galesville Valley Project, containing 309 acres of density management and hazardous fuels reduction….This treatment of fuels is expected to be completed within 1 to 2 years. Stands contained within this project are less than 60 years of age, the majority of treatments are in stands between 30 and 40 years of age, and no trees larger than 7 inches would be cut. In 2005, Wildcat Thin was harvested on approximately 110 acres within this fifth-field watershed. The U.S. Forest Service (USFS), Umpqua National Forest, Tiller Ranger District is developing the Cow Creek Shaded Fuel Break Project, a watershed-wide fuels reduction project for their managed portion of Upper Cow Creek watershed. The USFS is planning to implement this project on 1,877 acres within 3 to 5 years. This Forest Service project contains 142 treatment acres in CHU. The Roseburg District BLM plans to commercial thin 35 acres and construct approximately 1,100 ft of temporary roads within the Upper Cow Creek Watershed as a part of the Shively Creek LSR Density Management timber sale in June 2005. The 35 acre stand does not contain suitable habitat as it is 36 years of age and the average diameter is 11.6 inches.

The above describe activities a very small portion of the fifth-field watershed (less than 8 percent), the cumulative effect of increasing the fire risk in this watershed is minimal. The foreseeable projects may create disturbance to spotted owl foraging habitat for the short term, 1-2 years. Activities would largely remove portions of the understory, which could change the distribution and local density of prey items during this short term period until the understory brush begins to regenerate. The management is expected to be

within LSR and Matrix guidelines and effects are to be within the predictions of the FSEIS (USDA/USDI 1994).

The US Fish and Wildlife Service notes in its 2003 Biological Opinion that adverse effects would occur to this CHU in the form of nesting, roosting, and foraging loss or downgrading, the Service determined that the proposed activities would not preclude the ability of the CHU to function as intended (USDI/USFWS 2003).

The cumulative effects of other future projects within the Upper Cow Creek Watershed, is to remain poor for viable fisher populations due to disturbance and canopy reduction. Such actions reduce habitat suitability; however treatments also reduce the long term risk of habitat loss through fuels reduction. The suitability of habitat in the watershed for fisher is expected to remain low, until the LSR habitat matures over the next approximately 50 years. Checkerboard ownership with private and associated private harvesting may preclude the watershed from becoming well suited for fisher.

As a result of the activities proposed in the Slim Jim Project, compacted and displaced soils within Cow Creek-Galesville HUC 6 watershed have increased by no more than about 0.7%. This was calculated using a 60/40 split between tractor and cable yarding, since less tractor yarding occurs today, and includes the addition of 10 acres of road outside these units, raising the total existing percentage disturbed to about 6% of the watershed.

The combined percentage of compacted and displaced soils in this HUC 6 watershed, including all known past, present, and future operations on federal and private lands, would total a maximum of approximately 6.01% under alternative 1, 6.23% under alternative 2, and 6.20% under alternative 3. This change would increase the compaction by 0.13% over existing levels. Some of these effects for alternatives 2 and 3 would be mitigated on Medford BLM land through subsoiling of temporary roads, and skid trails, where possible, which can remove up to 80% of the compaction created.

Also see response to comment z (fourth through seventh paragraphs).

comment ff: *"While the Slim Jim EA speaks to cumulative impacts for various resources in the planning area, there is very little data to back up the conclusions. It is clear from the discussions that Alternative 2 would cause significant cumulative impacts compared to Alternative 3. An EIS would be necessary for the BLM to pursue alternative 2 due to the impacts on late-successional species like the spotted owl, fisher and others, as well as the impacts on water quality and soils for road construction."*

BLM Response: Neither of the action alternatives was found to have significant cumulative impacts (EA p.5-8). Analysis of proposed activities disclosed no change in species viability to the northern spotted owl, goshawk, Pacific fisher, fringed myotis bat, Pacific pallid bat; the change to compaction would increase by 0.13% in the HUC 6 of the project area over existing levels; erosion would be minimal and short term; no adverse affects to water quality above existing levels, and as a result of restoration

activities, sediment would be reduced in the long term". These impacts are not significant and do not necessitate an EIS.

For further details see responses to comments y (third through sixth paragraphs), aa, and ee regarding no significant cumulative impacts to fire risk, special status species, soils, and water quality.

comment gg: *"The BLM fails to discuss, analyze or disclose the presence (or absence) of non-suitable woodlands in the Planning Area as required by the Medford RMP."*

BLM Response: Although there are some TPCC withdrawn lands within the Planning Area, only one unit (13-1b) overlaps this designation by a few acres. Unit 13-1b is a non-commercial density management unit (NDNM). As stated in the EA (p.15), NDNM "would not remove commercial size trees from the site (although some merchantable size trees up to 10" dbh may be felled or girdled and left on the site for wildlife or other objectives)." Thinning will be completed with manual means (chain saws). As stated in the Medford RMP "timber harvest [on TPCC withdrawn] will occur only as part of strategies to enhance other resources such as riparian habitat, wildlife habitat, or management of special areas." The silvicultural prescription is consistent with this objective. See response to comment z (second paragraph).

comment hh: *"The BLM fails to discuss, analyze or disclose the increased risk of noxious weed spread from logging road and landing construction, and from yarding corridors."*

BLM Response: The EA determined on page 79 that:

> Units within the Slim Jim Planning Area were surveyed for noxious weeds in the spring of 2004. Although the Planning Area is known to have invasive weeds along many roadsides, only three noxious weed species, Meadow knapweed (*Centaurea pratensis) (3 sections),* scotchbroom *(Cytisus scoparius)* (1 section), and Tansy ragwort (*Senecio jacobaea*) (2 sections), were found within the proposed treatment units.
>
> Prior to initial move-in and all subsequent move-ins into the Planning Area, heavy equipment would be washed to remove soil and plant parts that could spread invasive and noxious weeds. As such, the Proposed Action is not anticipated to increase the spread of noxious weeds and/or invasive non-native plant species.
>
> Construction of 0.88 miles of temporary roads, one helicopter landing, and the use of 23.5 acres of existing yarding corridors would create 27.8 acres of soil disturbance. As stated above, these areas would be seeded with native grass/forb to greatly reduce the invasion of noxious weeds into these areas. The effects of the proposals on the spread of noxious weeds are negligible, for a variety of reasons. First, noxious weeds were only found to cover 0.007 acres, or 0.00048% of the units; these numbers suggest the possibility of infestations reaching

uncontrollable levels is not probable. Second, sites noted in the project area units have been reported, and will be eradicated in the near future, whether or not this project goes forward.

comment ii: *"The EA does not fully analyze or disclose the impacts to Northern goshawks."*

BLM Response: The EA discloses that the goshawks would not be affected by the proposed action. There are "[n]o known sites within the project area, goshawks have been observed near Azalea and is likely to occur within the 5th field watershed" (EA Appendix 2, page 87). Removal and thinning of late successional habitat and thinning on Matrix land would reduce habitat suitable for nesting. However, the EA also notes, (p.87), "[t]here is sufficient mix of seral stages including large trees in the project area, including late successional reserve, and deferred or withdrawn habitat within Matrix to provide nesting, fledging, and foraging habitat. 925 acres of commercial thinning, non-commercial density management, and fuels treatment would promote development of suitable habitat by opening understories. Viability rating would remain high and unchanged. (USDA/USDI 1994a 3&4 p179)."

comment jj: *Please maintain the visual quality of the planning area, including those areas in VRM class 1, 2, and 3.*

BLM Response: The potential visual impacts of proposed activities for each Visual Resource Management Class were evaluated by the Glendale Resource Area's Visual Quality specialist (see EA, p. 89). Through the planning process, project design features (p. 28 of EA) were developed that would protect the visual quality of the landscape and were incorporated into treatment prescriptions. Techniques such as (1) retaining a higher percent canopy cover on steep sections and flatter sections near Galesville Reservoir, (2) utilizing alternative logging system methods near Galesville Reservoir, (3) retaining a higher percent canopy along Cow Creek Road, (4) locating yarding corridors out of sight from Cow Creek Road or Galesville Reservoir (5) retaining trees along ridgelines, and (6) placement of landings away from visual view protect the visual quality of the landscape (Section 2.3.4). The Visual Contrast Rating Worksheet notes the following: The proposed units have been designed to meet the Visual Resource Management guidelines as directed by the Medford District Resource Management Plan (pg. 70).

comment kk: *"The Pacific fisher is a candidate for listing under the Endangered Species Act. The U.S. Fish and Wildlife Serve recently affirmed the continued threat of habitat loss to this species by issuing a positive 90-day determination that it should be considered for listing. The Glendale BLM, however, is removing and degrading its habitat at an alarming rate and is thus taking actions would lead to the need to list this species under the ESA. Alternative 2 would harm this species greatly, while Alternative 3 would not.*

> *'Regeneration/overstory removal prescriptions on Matrix land allocation would remove up to 16 acres of fragmented late-successional upland habitat (Unit 6-3) and 13 acres (Unit 30-1a) of a large (greater than 100 acres) late-successional block. Up to 28 acres*

(unit 30-1b) of suitable late-successional habitat would be degraded from Matrix commercial thinning." EA at 50.'"

BLM Response: The fisher was analyzed in the NFP and failed to pass the species viability screens due to its dependence on interior forest habitat and large, down woody debris (Appendix J-2, USDA/USDI 1994). All alternatives including the no action alternative would not change the trend predicted in the NFP (EA, p. 38-39).

comment ll: *"KS Wild does not recognize the legality of the 2004 ACS Record of Decision. The Slim Jim EA calls for logging areas in areas that have been designated as riparian reserves. "Riparian thinning would also occur within… 808 acres, up to 25-150 ft of the stream bankful width." Slim Jim EA at 9. KS Wild asks that these areas will be protected from soil erosion, loss of stream bank stability, and other deleterious impacts. The distance that sediment can travel depends on the type of forest management activity and the condition of the riparian zones. Ketcheson and Megahan 1996. Concentrated sediment sources, such as road cross-drains, can produce large volumes of sediment that have the potential to reach streams regardless of how far upslope they are. NMFS 1997. Sediment travels farther through riparian areas that are degraded by road building and logging than undisturbed riparian areas because roads and ditches form pathways for sediment to travel downslope that do not exist in roadless riparian reserves. Chamberlin et al. 1991."*

BLM Response: Although KS Wild may not recognize the 2004 Aquatic Conservation Strategy Record of Decision, the BLM does recognize and implements actions consistent with this ROD. The Ecological Protection Needs chart (B-15, Standards and Guidelines) that designated no activity stream buffer distances dependent on slope and rock type also considered widths needed to protect riparian areas where forest management activities would occur such as timber removal with road access. See section 3.4.1.2 of the EA for the environmental impact analysis on soils.

comment mm: *"The BLM choose to analyze only two action alternatives for the Slim Jim project. NEPA demands a wide range, not the narrow range offered by the project. What about non-commercial density management for the entire project? An alternative could have met the purpose and need and small operators could have utilized the byproducts of legitimate forest health thinning operations. While the mere two action alternatives are close, the impacts are much greater from Alternative 2 and it should be chosen."*

BLM Response: Appendix 1 of the EA (p. 74-76) identifies the "unresolved conflicts concerning alternative uses of available resources".

The Glendale Resource Area has received comment letters from the public identifying two primary concerns, road construction and removal of late successional habitat. Concerns identified regarding road construction (permanent or temporary) are loss of soil productivity and increased risk of sediment delivery to streams. Concerns identified with removal of late-successional habitat are loss of habitat for species such as the northern spotted owl.

As identified on p. 10 of the EA, one of the objectives of the purpose and need is to, "provide a commodity by-product as described in the 2003 O&C Settlement Agreement". Packaging sales with timber exclusively less than 10 inches has frequently resulted in no-bid sales.

An alternative was developed in consideration of the activities proposed by commentors that would at least partially meet the purpose and need of providing a commodity by-product to the local economy. Alternative 3 emphasizes avoiding road construction and removal of late successional habitat. This alternative deferred all 29 acres of regeneration harvest and overstory removal units, 28 acres of commercial thinning, 91 acres of commercial density management, and all 0.88 miles of temporary road construction proposed under alternative 2.

In the Morongo Band of Mission Indians v. Federal Aviation Admin., parties claiming a NEPA violation involving failure to consider a reasonable alternative must offer a specific, detailed counterproposal that has a chance of success. Also in other cases it was determined that an agency does not have to consider alternatives that are not feasible, Headwaters, Inc., 914 F.2d at 1180-1181 and 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).

comment nn: *"Please explore the possibility of service contracts for the thinning projects. Options for log sort yards should also be explored. This way you separate the logger from the log and ensure that ecological and economic motives are evenly represented in the thinning operation."*

BLM Response: This comment is beyond the scope of the EA.

Michael and Lane Sharkey, Friends of Cow Creek, Azalea, Oregon

comment oo: *"We hope the BLM refrains from logging these older forests in our watershed. My wife and I can support the proposed use non-commercial density management, portions of the variable density commercial thinning, fuels reduction, road decommissioning and blocking of roads. We do not support the logging of older forests, particularly through regeneration harvest and overstory removal. We do not support the proposed road construction, or any degradation of late-successional habitat in the LSR. The community may be able to support Alternative 3 with minor adjustments. The community cannot support Alternative 2 as it is currently designed."*

BLM Response: No response required as comment states preference for an alternative rather than concerns with the adequacy of the environmental analysis.

Marcia Rodine, Azalea, Oregon

comment pp: *"I appreciate the opportunity to comment on the Slim Jim project, since I live adjacent to proposed parts of it. I was alarmed to hear of the proposed overstory*

removal, regeneration cuts, and commercial logging of 'matrix' forests which touch upon the clearcut that Seneca started and Swanson continues around my ranch (unit 29-2a) in the Maple Creek watershed. I have witnessed decrease in stream water and increase in sediment from the pond this last year! This is the water we depend upon for domestic and irrigation use! This area is also near the owl core area. I ask you to refrain from cutting in this area and consider the cumulative effects of logging next to these clearcuts."

BLM Response: Unit 29-2a is located outside of the spotted owl core and no other activities are proposed within the core. The objective of the proposed treatment adjacent to the core was developed to promote development of early seral stands into older growth conditions.

The EA discloses the cumulative effects analysis of soils and water quality on pages 61 & 62. "Combined, these activities [activities proposed in the Slim Jim EA] are expected to result in a short term [during the first winter season] increase the amount of erosion occurring in this watershed. Much of this erosion is expected to be stored on site where vegetation, and downed organics still remain, and within the riparian zone vegetation where it is already present. Where this is not the case, all logged sites must be planted within 3 years under OFPR [Oregon Forestry Practices Act], and many sites are often planted sooner. Once vegetation has re-established on a site, the amount of erosion that moves off site is drastically reduced, decreasing the amount of soil mobilized off-site. Roads and areas where clearcut [non-federal practice] logging extends into the ecological riparian buffers would likely contribute the major portion of the erosion related sediment to the streams and waterways. Erosion coming from these activities would be expected to pulse during winter months when streams are highest, and would therefore be expected to remain within the Oregon turbidity standards required under the Clean Water Act. There could be a short term increase in the stream substrate embeddedness and percentage of fines immediately downstream of streamside logging operations. All federal projects would retain adequate riparian vegetation to trap sediment, thus it would not be expected that a measurable increase in the embeddedness of stream substrate or the percentage of fines in streams would result from any activities associated with the Slim Jim Project. Road maintenance activities would mitigate some chronic erosion by improving road surfaces and road drainage prior to use. Road decommissioning under Slim Jim would also reduce some chronic sediment sources as discussed above. The Slim Jim project has been designed to minimize the effects to water quality in such a way that all state water quality standards and federal NWFP aquatic conservation strategy objectives are met under all alternatives."

Since there are no adverse affects to water quality above existing levels and as a result of restoration activities sediment would be reduced in the long term, these impacts are not significant.

comment qq: *"Of special concern is unit 6-3 that surrounds our "community recreation area". This is a section of unentered older growth Doug fir. This has been a special place for "Cow Creekers" over the decades. We swim, hike, play volleyball, hunt, fish,*

camp, and picnic in this beautiful older growth Doug fir area that we greatly appreciate for its unique and irreplaceable beauty. This a place we show our children what ancient forests look like compared to the "plantation forests" that are surrounding us."

BLM Response: As noted in the silvicultural prescription (Appendix 3 of the EA, p.139) Unit 6-3, "[r]etain an average of eighteen conifers across the range of diameters over 20"dbh [diameter at breast height] per acre." A no activity buffer of one site potential tree length (170 ft) will be retained along Snow Creek. See response to comment b (second paragraph) regarding the decision to log old-growth in Matrix lands.

comment rr: *"I am asking you as managers of the public land to help restore and preserve what's left of the forests in this valley before this is devastated. Our valley is hurting environmentally, aesthetically, and health wise…".*

BLM Response: As stated in the EA (p.11), the primary objective for matrix land is to "[p]rovide for a sustainable supply of timber and other forest commodities". The majority of treatment acres are located in LSR. Slim Jim forest management activities within the LSR are designed to:

> "1) Provide a distribution, quantity, and quality of old-growth forest habitat sufficient to avoid eliminating future management options.
> 2) Provide habitat for populations of species that are associated with late-successional forest.
> 3) Help ensure that late-successional species diversity will be conserved.
> 4) Provide a component of the Aquatic Conservation Strategy offering core areas of high quality stream habitat."
>
> (South Umpqua/Galesville Late Successional Reserve Assessment, Amended May 2004, p. S-1)," (EA, p.11).

See response to comment ff (first paragraph) regarding effects to the environment. No impacts to public health are anticipated by the activities proposed in the EA including air quality, environmental justice, and hazardous or solid waste (see Appendix 2 of the EA).

The proposed units have been designed to meet the Visual Resource Management guidelines as directed by the Medford District Resource Management Plan (p. 70). The Visual Quality protection measures have been included into the silvicultural prescription (see Section 2.3.4 and pp. 105-110 of the EA).

Wayne and Kelina Chevalier, Azalea, Oregon

comment ss: *"As biologists (and environmentalists) we are adamantly opposed to any harvesting of mature stands (old growth forests) and especially any removal of the overstory. The statement in your first paragraph is surprising in that you have determined that the harvesting you suggest 'will have no significant affect for humans or the environment' or that these actions 'are of no region or state-wide importance.' The terms 'Riparian Reserves' and 'watersheds' alone should raise significance with you as it does with those of us who live here. This is our PRIMARY watershed even though you*

term it as a 'fifth-field watershed'.

BLM Response: See response to comment b (second paragraph) regarding the decision to log old-growth on matrix lands. The term fifth-field watershed is not a designation of importance but rather a determination of the size of land area drained by a particular set of streams, creeks, and/or rivers. The boundary of the Upper Cow Creek Watershed extends from Galesville Reservoir to approximately 10 miles to the east and a mile north of Galesville Reservoir to approximately 10 miles to the south.

The term "significantly" has been determined by the Council on Environmental Quality as noted in Code of Federal Regulations (40 CFR 1508.27). "Significantly as used in NEPA requires considerations of both context and intensity." See pp. 5-8 of the EA.

comment tt: *"The area that involves the Slim Jim Project is directly adjacent to land being harvested by private timber companies and not far from USFS logging projects. Both BLM land and timber company land are directly adjacent to 'Spotted Owl Cores'. Because of the other logging taking place simultaneously, the regulations are not sufficient in protecting the forests and its inhabitants or the community. We are particularly concerned with 'treatment' areas adjacent to the spotted owl 'cores' (Sec 29 and Sec 30 – though it is certain the spotted owl is found throughout the area). We are opposed to ANY activity taking place in these areas and would be interested to know how long ago the area was checked for nesting sites and by whom."*

BLM Response: See response to comment ee regarding analysis of logging activities occurring on private and other federally managed land within this watershed.

The objective of the proposed treatment adjacent to the core was developed to promote development of early seral stands into older growth conditions consistent with management recommendations contained in the South Umpqua River/Galesville LSR Assessment (2004).

Demographic spotted owl surveys are completed annually on the Glendale Resource Area. The project area was last surveyed for owl sites between 2004 and 2005.

comment uu: *"..we are stunned at your statement on page 36 that 'no individual past actions have been identified that would have a cause and effect relationship with the Slim Jim proposal;" yet you then state (page 41 of the EA) the damage occurring because of extensive harvesting, past and present. This watershed has been heavily logged including the above mentioned project taking place right now by the Swanson Timber Co. directly adjacent to Section 29."*

BLM Response: See responses to comment pp and z (fourth through seventh paragraphs).

comment vv: *"Your EA (page 60) states that the effects of Slim Jim cannot be 'soundly made when put in context with other activities within the watershed'…yet the proposal*

remains. And how can it be that you have only given a 25 foot 'buffer' for the streams in several of the units? The erosion that will occur remains to be a large concern as well."

BLM Response: Your quotation from page 60 is taken out of context. The EA states on p. 60, "Because water quality and soil productivity standards are at the project level, cumulative effects of these environmental elements have been analyzed at the HUC 6 scale. The effects of Slim Jim, when measured at the HUC 5 scale would be minimal and undetectable, and would not allow a sound decision to be made as to the effects of this project when put in context with other activities within the watershed." The meaning of these two sentences is to convey that analysis for soils and water quality was completed at the sixth-field watershed because analyzing impacts at the larger fifth-field watershed would be too dilute to be measurable or detectable. Analyzing at a smaller scale is more effective in detecting the presence of any impacts to natural resources thus assisting to make more "sound" decisions.

The selection of a 25 foot no activity buffer within streams for non-commercial density management and fuels units was determined by the following and also stated in the EA (p.29). "Studies have shown that 'vegetation immediately adjacent to the stream channel is most important in maintaining bank integrity' (FEMAT 1993). Twenty-five feet is roughly equal to the largest crown width that is generally present on trees occurring within riparian stands that have been chosen for treatment under this project. For Douglas fir trees typical of these stands, crown width generally relates to the extent of the root network (Kocher) that is helping to stabilize the streambanks. In addition to the stabilizing effect of the root network, adjacent trees also dissipate stream energy during high or overbank flows, further reducing bank erosion (FEMAT 1993)."

"For streams within commercial density management units, an additional stream no activity buffer of variable width would be utilized," (EA p.29). The buffer distance used would be between 60 and 150 feet (see table 2-1 of the EA), and was determined based on the Ecological Protection Width Needs chart (B-15, Standards and Guidelines). "This 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' (B-15, Standards and Guidelines). Also included within this buffer is full protection of the primary shade zone, as described in the NWFP Temperature TMDL Implementation Strategies (US Forest Service and BLM, 2005), and sufficient canopy closure within the secondary shade zone to maintain or improve microclimate conditions within the riparian zone in the long term, without measurably increasing stream temperatures in the short or long term," (EA, p.29 & 30). On streams within young, dense stands designated as fuels and non-commercial density management units, no timber harvest yarding would occur," (EA, p.29).

See response to comment cc regarding the effectiveness of the streams' no activity buffer widths to prevent sediment delivery.

comment ww: *"…we encourage you to look at the thousands of acres of dense 'industrial' tree farms on BLM land that need to be thinned to meet your criteria to produce a commodity, rather than converting mature stands into more of the same, creating hazardous flammable brush fields. Your EA states (page 42) the problems that the density of these young stands create for the owls."*

BLM Response: See responses to comment b (second paragraphs) concerning the decision to log old-growth on matrix lands, comment i for the selection of treatment stands and silvicultural prescriptions within the late successional reserve (LSR), and comment q regarding the impact to fire risk of proposed activities on matrix land.

The objectives for matrix and LSRs are not synonymous. See response to comment c (last paragraph) for a description of the differences between the objectives of these land use allocations. Lands designated as Matrix are to be harvested on a 100 year interval between regeneration harvests. Once a stand is harvested, it would be replanted and managed to develop into a mature (81-200 years old) stand containing multi-canopy structure, with a component of hemlock, white fir, incense cedar, sugar pine, and hardwoods.

comment xx: *"…we are opposed to Alternative 2. This does not mean we support Alternative 3, but given the fact that there are only two 'alternatives', this is the least invasive."*

BLM Response: No response required as comment states preference for an alternative rather than concerns with the adequacy of the environmental analysis.

James Ince, Azalea, Oregon

comment yy: *"…I live in the immediate proximity of the Slim Jim Project. My family and I personally use this resource base for many activities of great importance to us. Examples of our favorite uses include hiking, camping, canoeing, horseback riding, wildlife viewing and photography, snowshoeing and cross-country skiing, as well as picnics, general relaxation and spiritual rejuvenation. Accordingly, as this area is so close (next door to our property), we feel particularly impacted by your decision-making on Slim Jim. We feel that it is incumbent upon you to weigh highly any input from the surrounding community, within the context of 'Multiple Use'."*

BLM Response: The community "swimming hole" is located on private land. Also see response to comment b (second paragraphs) concerning the decision to harvest timber on Matrix lands and comment qq for retention measures.

comment zz: *"Especially offensive in this proposal is the use of 'Regeneration Harvests', or in plain terms (which I encourage you to use in all communications with the lay community), clearcuts. The day has passed when these extraction methods and style of logging were an acceptable means to 'get the cut out'. Other values have superceded antiquated models, in long range, big picture forest economics, sustainability models and*

to satisfy multiple allocation objectives. I wish to note two treatment units in particular that we feel should be dropped from any planning and implementation alternatives. First is Unit 6-3, a small 'Regen' in Section 6 of tremendous and historic importance to our local community. Our 'swimming hole' in Cow Creek is located just to the northeast and would be highly devalued as the traditional site for our neighborhood get-togethers, volleyball games, summer swimming and other recreational activities."

BLM Response: The BLM has not practiced clearcutting since the implementation of the Northwest Forest Plan. Clearcutting removes all trees on a given area. Regeneration harvests leave at least 6-8 large (>20" dbh) conifers per acre. These conifers would be composed of existing species and would be across the range of diameters. Additional trees would be left where coarse woody debris present on the site did not meet RMP standards. In addition, three-five large hardwood trees per acre would be retained (where available) as well as existing snags and down logs. The regeneration harvest unit would be burned, if necessary, to prepare the site and then planted.

The BLM is required to follow the directives of the Oregon and California Revested Lands Sustained Yield Management Act (O & C Act), Northwest Forest Plan, and Medford District RMP. The Oregon and California Revested Lands Sustained Yield Management Act (O & C Act) which requires the Secretary of the Interior to manage O & C lands for permanent forest production in accord with sustained yield principles (RMP, p.17). Management plans must be in accordance with the laws and the NFP and RMP do not preempt the O&C Act.

In 2003, a collective of local timber companies, individuals, school districts, counties, and Secretaries of the Interior and Agriculture entered into the O&C Settlement Agreement to rectify the gap between the annual supply of timber and the analyzed sustainable volume level in the RMP. The 2003 O&C Settlement Agreement states, "Agencies [Forest Service and BLM] will use their best efforts every year beginning in Fiscal Year 2005:...to offer thinning sales [where development of late successional or riparian habitat is the primary objective] of approximately 300 million board feet per year to the extent that and for so long as such sales are consistent with the ecological objectives of the Northwest Forest Plan," (Oregon and California Railroad Act Settlement Agreement 2003, 3.0 Agreements (3.2)).

See responses to comment qq regarding effects on recreation near Unit 6-3. The treatment proposed is consistent with the Visual Resource Management guidelines as directed by the Medford District Resource Management Plan (p.70).

comment aaa: *" The second unit I admonish you to abandon is number 29-2a in Section 29, where the cumulative effects of…clearcutting, coupled with your treatment proposal, threatens an important Spotted Owl core, as well as the peaceful enjoyment of several local neighbors in the immediate area, particularly Ms. Marcia Rodine."*

BLM Response: See response to comment pp regarding unit 29-2a and concerns to the adjacent spotted owl core.

There are no spotted owl sites located in Unit 29-2a, as "there are no owl sites on the Matrix portion of the Planning area" (EA, p.41).

Mike Kohn, Medford, Oregon

comment bbb: *"The scenic and recreational opportunities that the area provides will change if Alternative 2 is adapted. That alternative cuts in unentered forest containing old growth trees. These forests are necessary for wildlife habitat, water quality and scenic, aesthetic considerations. On the other hand, Alternative #3 is preferred because it is less intrusive into untouched forest, is more distant from Spotted Owl habitat and is more moderate in its cut."*

BLM Response: See responses to comment qq and jj regarding visual quality and recreation opportunities under Alternative 2. There are no anticipated adverse affects to water quality above existing levels for this alternative. Analysis of proposed activities disclosed no change in species viability to the northern spotted owl, goshawk, Pacific fisher, fringed myotis bat, Pacific pallid bat.

comment ccc: *"…I would like to state the Cow Creek Valley has seen an ever increasing amount of 'clearcut' practice, in doing has extended the time needed for the forest to attain a 'climax' state. I do not wish to see the current trend of 'clearcutting' to continue."*

BLM Response: The BLM has not practiced clearcutting since the implementation of the Northwest Forest Plan and does not have jurisdiction over activities occurring on private land. Also see response to comment zz.

Eric Edner, Azalea, Oregon

comment ddd: *"…unit 29-2a is neighbor to an already threatened Spotted Owl 'core'. The Swanson group has been and is in the process of aggressively logging areas around this protected area, and more logging does not seem safe. This cut lies directly above a major stream and tributary to Cow Creek. The effects of this cut will certainly affect the already threatened fish species in both Snow Creek and Cow Creek. As well as damage the famous and beloved Snow Creek 'swimming hole', used by the community and many people from surrounding towns. The aesthetic beauty and health of the land is why I continually come back and live here, as I have done for over a decade. Alternative 3 along with a few adjustments is the closest to just that. Less commercial thinning and more public land treatment is what this damaged valley needs."*

BLM Response: See responses to comment qq regarding treatment in unit 29-2a.

Regarding fish species, as stated in Appendix 2 of the EA (p.80), "Currently, adult OC [Oregon Coast] coho salmon and winter steelhead are planted by ODFW [Oregon Department of Fish and Wildlife] on a regular basis in Galesville reservoir for sport

fishing. Winter steelhead are candidate T/E [Threatened and Endangered] species. However neither of these species above Galesville Dam are considered to be part of the threatened Evolutionary Significant Unit (ESU), since they are artificially planted and landlocked, making it impossible for juvenile fish to migrate downstream to complete their lifecycle and contribute to the recovery of the species. As a result, there are no T&E anadromous species in Upper Cow Creek watershed." Snow Creek and Cow Creek are both located above Galesville Dam therefore there are no threatened fish species in these creeks. There is one unit located below Galesville Dam, 30-1c. This unit is a "hazardous fuels treatment located in the adjacent Evans Creek watershed" and "would have no effect on Southern Oregon/Northern California coho salmon (ESA-listed as Threatened). Project Design Features, combined with treatment technique and location, would prevent sediment from entering streams and from altering peak flow in the species' nearest habitat, 1.3 miles downstream in Evans Creek."

Garth Torvestad, Azalea, Oregon

comment eee: *"It seems to me that the commercial nature of the project has almost certainly had a greater influence on the guidelines than management for ecosystem stability and health."*

BLM Response: Silvicultural prescriptions for the LSR were developed with the objective to develop and enhance late successional conditions. Commercial product may be extracted as a by-product of treatments but did not direct harvest selection. Also see response to comment m regarding the retention and creation of wildlife habitat structures.

Although the silvicultural prescriptions for the Matrix portion were developed to supply *sustainable* timber and other forest commodities, there are other objectives. They are (EA, p. 91 & 92): provide connectivity (along with other allocations such as riparian reserves) between Late-Successional Reserves, provide habitat for a variety of organisms associated with both late-successional and younger forests, provide for important ecological functions, and provide early successional habitat.

comment fff: *"Please reconsider the proposal to clear-cut the area adjacent to the Snow Creek swimming hole, as it is a favorite spot for people all over the Cow Creek area."*

BLM Response: See response to comment qq.

comment ggg: *"Also, please evaluate whether the decision to remove overstory and commercially manage Late Successional Reserves will truly benefit long term ecosystem health, or are a short-term decision to boost revenue."*

BLM Response: There is no overstory removal proposed in the Late Successional Reserve (LSR). LSRs are not commercially managed. Treatments within the LSR such as thinning treatments are prescribed to promote late successional and old-growth conditions. Such treatments may result in commercial by-product but prescriptions are not designed to extract timber as the primary objective.

Joshua Rodine and Elesha Snocker

comment hhh: *"…unit 29-2a, is next to the Owl Core Area. This unit is also adjacent to a clearcut currently being done by the Swanson group, and I am concerned with the cumulative effects of this logging on the canopy for the owl."*

BLM Response: See response to comment pp regarding treatment in unit 29-2a.

comment iii: *"…I am opposed to logging in unit 6-3 as this is currently an unentered stand of mature Douglas fir which is greatly valued by the community."*

BLM Response: See response to comment qq regarding the retention measures for this unit.

comment jjj: *"This area is in direct view from our property, and as artists whom have clients visit our studio and hold retreats the visual impacts is all the more disturbing."*

BLM Response: Unit 6-3 would retain 18 conifers across the range of diameters over 20 inches in diameter per acre. This unit is located within Visual Resource Management Class IV, which allows for moderate levels of change to the characteristic of the landscape.

Diana and Rick Sparks, Azalea, Oregon

comment kkk: "…the management of BLM forests has a significant impact on this area."

BLM Response: As discussed in pp. 5-8 of the EA. The impacts analyzed under the Ten Significance Criteria described in 40 CFR 1508.27 did not substantiate significance. Also see response to comment ff.

comment lll: *"When the Northwest Forest Plan was established, it was our understanding that the public forests in this watershed would be managed as Late Successional Reserves. We are therefore extremely concerned about the proposed regeneration cuts, overstory removal, and commercial logging of matrix forests."*

BLM Response: In 1994, Northwest Forest Plan designated the land use allocations of BLM and USFS lands within the range of the northern spotted owl. Of the 47,416 acre Upper Cow Creek Watershed, 1,213 acres is designated as matrix land (approximately 2.6% of the watershed) and 8,707 (approximately 87.6% of the watershed) acres as Late Successional Reserves.

comment mmm: *"Along with most of our neighbors, we are in favor of non-commercial density management and of portions of the variable density commercial thinning proposal. We also support proposed fuels reduction, road decommissioning and the blocking of roads."*

BLM Response: No response required as comment is supportive of some of the proposed activities.

comment nnn: *"We are opposed to the logging of older forests, particularly through regeneration harvest and overstory removal; to the proposed road construction; and to the degradation of late-successional habitat in the LSR. We don't support commercial thinning which removes large trees or degrades late-successional habitat."*

BLM Response: No response is required as comment does not identify concerns with the adequacy of the environmental analysis.

comment ooo: *"We agree with our community's consensus that we could support Alternative 3 with some minor alternations, but we cannot support Alternative 2.*

BLM Response: No response required as comment states preference for an alternative rather than concerns with the adequacy of the environmental analysis.

Marcus Koch, James Graham, Barbara Mulford – Azalea, Oregon

comment ppp: *"…we would like to address some of the concerns in unit 29-2a which are next to the Owl Core Area. This land is adjacent to a clearcut currently being done by the Swanson group and we are concerned about the accumulative effects of this logging with yours on the canopy for the Owl."*

BLM Response: See response to comment pp regarding treatment in unit 29-2a.

comment qqq: *"In Unit 6-3 we are opposed to logging this section as it is currently an unentered stand of mature and older Douglas Fir which we greatly value for their unique and irreplaceable beauty. This area of Snow Creek is the community 'swimming hole'. Disturbance of this area would result in destroying the aesthetics, affects on the creek from logging among other things. We want to preserve this special area for swimming, hiking, and visual enjoyment."*

BLM Response: See response to comment qq.

Barbara Mulford, Azalea, Oregon

comment rrr: *"Please don't cut the old growth."*

BLM Response: See response to comment b (second paragraph) regarding the decision to log old-growth in Matrix lands.

Marcus Koch, Azalea, Oregon

comment sss: *"I prefer alternative 3. Please maintain the integrity of the forest as much as reasonably possible."*

BLM Response: The Medford RMP directs the BLM to provide for a supply of timber and other forest commodities on a sustainable basis and to be in accordance with federal environmental laws such as the Endangered Species Act and Clean Water Act.

James Graham, Azalea, Oregon

comment ttt: *"Please leave 'old-growth' near swimming area on Snow Creek road…I prefer alternative 3 of your proposal."*

BLM Response: See response to comment qq.

Ryan Brink, Azalea resident, Marline Koch, Lane Sharkey, Kathy Dubbs, Heather Wagner, Terry Strecker, J. Lang, Roger Hardage, Sandra and George Gibson, Marty Ginsburg, Robert Ankeney, Jean Busby, Nancy Evans, Ran Beerman, Samuel Packard, LJ Wind, John and Peggi Lowne, Gerry Thuressor

comment uuu: *"Many of us thought that when the Northwest Forest Plan was established, the public forests in the Upper Cow Creek watershed were to be managed as Late Successional Reserves. Upon learning about the proposed regeneration cuts, overstory removal, and commercial logging of 'matrix' forests, we were alarmed. We hope that the BLM refrains from logging these older forests in our watershed."*

BLM Response: See response to comment lll regarding land use allocations within the Upper Cow Creek Watershed.

comment vvv: *"Most everyone in the community supports the proposed non-commercial density management, portions of the variable density commercial thinning, fuels reduction, road decommissioning and blocking of roads. We do not support the logging of older forests, particularly through regeneration harvest and overstory removal. We do not support the proposed road construction, or the degradation of late-successional habitat in the LSR. We also are not supportive of commercial thinning that removes large trees or degrades late-successional habitat."*

BLM Response: No response required as comment states preference for activities rather than concerns with the adequacy of the environmental analysis.

Marline Koch

comment www: *"Don't cut old growth in section 6 (Unit 6-3)."*

BLM Response: See response to comment qq.

Heather Wagner

comment xxx: *"Please do not cut old-growth."*

BLM Response: See response to comment b (second paragraph) regarding the decision to log old-growth in Matrix lands.

Terry Strecker

comment yyy: *"Please no old-growth cutting on Snow Creek."*

BLM Response: See response to comment qq.

Marty Ginsburg

comment zzz: *"I am not opposed to selective logging but no clearcutting!!"*

BLM Response: See response to comment ccc regarding clearcutting.

Samuel Packard, Azalea, Oregon

comment aaaa: *"People are spraying poisonous chemicals in very large quantities. It travels downhill and into the creeks when it rains. The very creeks that may of us use for survival. You claim that the chemicals that you spray will not harm anyone…"*

BLM Response: As stated on p.82 of the EA, "No herbicides or pesticides would be used in conjunction with this project." The BLM has not used aerial application of herbicides since the implementation of the Northwest Forest Plan in 1994. Herbicide application, though rare, is limited to hand application for noxious weeds. The BLM managed land is intermingled with private, county, and state lands. The BLM has no jurisdiction of activities occurring on non-BLM managed lands.

SUPPLEMENTAL INFORMATION REPORT

Slim Jim Project

August 24, 2005

USDI - Bureau of Land Management
Oregon State Office
Medford District
Glendale and Butte Falls, Resource Area
Douglas and Jackson Counties, Oregon

INTRODUCTION

The Slim Jim Project is located approximately 6 miles east of the town of Azalea, Oregon, in Douglas and Jackson Counties and approximately 30 miles northeast of Grants Pass, Oregon. Project activities are proposed on federal land managed by the Glendale Resource and Butte Falls Resource Areas, Medford District, BLM (Bureau of Land Management). The project area lies within the Upper Cow Creek and Evans Creek 5th field watersheds (Cow Creek Galesville & Upper West Fork Evans Creek 6th field watersheds). The project entails harvesting commercial timber, noncommercial density management, fuels reduction treatments, temporary road construction, road renovation, road decommissioning and blocking/gating roads on approximately 1,451 acres.

An environmental assessment (EA # OR-118-04-014) was completed on July 1, 2005. Consultation pursuant to the Endangered Species Act for the northern spotted owl was completed with U.S. Fish and Wildlife Service's Biological Opinion for FY04-08 (1-15-03-F-511) and the portion of the project that is above the Galesville Dam is exempt from consulting with NOAA Fisheries. Hazardous fuels reduction treatments below Galesville Dam, in the Evans Creek Watershed, do not require consultation since activities would have no effect on Southern Oregon/Northern California coho salmon.

The purpose of this report is to document the recent review of this project for compliance with laws, regulations, executive orders, and Bureau direction, and to determine if additional environmental disclosures or changes to the Slim Jim Project Environmental Assessment are necessary as a result of the following: (1) constructing 650 feet of additional temporary spur road in the Late Successional Reserve (LSR), (2) a net reduction of 0.28 miles of proposed temporary road construction in the LSR due to 42 acres of deferred commercial treatments, (3) 52 acres of deferred commercial timber harvest in Matrix, (4) modification of 246 acres commercial density management, and (5) conversion of eight acres from non-commercial density management to commercial density management with 30-40% canopy cover retention and a 60 foot no-activity stream buffer.

An additional 650 feet of temporary road construction (T31S, R3W, 19) would allow for access into unit 19N-2 and would be entirely contained within that unit. The prescribed logging system assigned to this unit in the EA was cable logging from road #31-3-25. After further evaluation it

was determined that cable logging from the road above would create more ground disturbance within the unit than building a temporary spur road along the western border of the unit. Cable yarding from the new temporary road would allow for shorter corridors and better suspension ability.

Impacts from modifying 246 acres of commercial density management proposed in the EA to non-commercial density management and/or hazardous fuels reduction (see table below), would be less than those proposed in the EA since yarding logging systems are no longer necessary for this type of treatment. The modifications in the LSR and deferrals in Matrix are primarily the result of determining proposed treatments were economically infeasible to implement at this time or implementing buffers on newly discovered streams. A 25 foot no activity buffer width would be applied to these non-commercial density management and hazardous fuels reduction treatment acres to protect the primary shade zone and sufficient canopy closure within the secondary shade zone to maintain or improve microclimate conditions within the riparian zone in the long term, without measurably increasing stream temperatures in the short or long term. The 100 foot strip of unit 27-1 above road 31-4-27 will receive non-commercial density management treatment in order to protect the visual quality as seen from the road.

Unit 3-1b was incorrectly listed as a non-commercial density management in Alternative 2 in the EA. This unit will instead be treated by commercial density management with a cable logging system. Due to the deferral of 246 acres from commercial density management to lighter treatments, changing eight acres to commercial density management would not change the environmental impact analysis beyond the scope of the EA.

Big Jim Timber Sale

Unit	Treatment	Selected Alternative Acres	Alternative 2 in the Environmental Assessment Acres
6-3	Regeneration Harvest	5	16

Slim Jim Timber Sale

Unit	Treatment	Selected Alternative Acres	Alternative 2 in the Environmental Assessment Acres
25N-1a	Commercial Density Managment	3	5
25N-1b		2	
25N-2a		11	15
25N-3a		5	44
25N-3b		1	
25N-4		2	2
27-1		7	25
1-1a		19	32
1-3a		3	4

Unit	Treatment	Selected Alternative Acres	Alternative 2 in the Environmental Assessment Acres
1-3c	Commercial Density Managment	3	3
1-3d		1	1
1-4		15	18
3-1a		11	8
3-1b		6	8
11-1		29	29
13-1a		12	13
13-2e		3	3
13-2f		3	3
19N-2		18	34
19N-3a		13	15
19N-7		1	2
29-2a		10	35
7-2		9	22
17-1a		13	16
18-1a		6	11
18-2		9	19

Modified Acres to be Considered for
Non-Commercial Density Management or Fuels Reduction Treatment

Unit	Treatment	Acres
25N-1a	Non-Commercial Density Management and/or Fuels Reduction Treatment	26
25N-1b		
25N-2a		4
25N-3a		38
25N-3b		
27-1		18
1-1a		13
1-3a		1
1-3b		11
1-4		3
3-1a		3
3-1b		2
13-1a		1
19N-2		16
19N-3a		2
19N-7		1
29-2a		25
7-2		13
17-1a		3
18-1a		5
18-2		10
28-1		14
34-1		37

ENDANGERED SPECIES ACT

NOAA Fisheries:

Since the temporary road construction and modified acres are located above Galesville Dam, these activities are exempt from consultation with NOAA Fisheries.

United States Fish and Wildlife Service:

The 650 feet of temporary spur road construction in 19-N2 is consistent with the analysis of other temp spurs within the proposed project. The function of the suitable nesting/roosting/foraging/dispersal habitat stand, adjacent to the proposed spur in northern spotted owl critical habitat, would not be measurably changed from the impacts discussed in the EA. Approximately three trees 18" DBH would be removed within the spur development (approximately 1/4 acre). Since the modified treatment areas were already included in consultation with US Fish and Wildlife Service, the impact of the project on this element of the environment is within the scope of the EA and Biological Opinion.

MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT

Pursuant to BLM Instruction Memorandum No. 2001-158, the Bureau is required to consult with on all new Federal actions that have been determined to adversely affect Essential Fish Habitat, while consultation is not required for actions determined not likely to adversely affect Essential Fish Habitat. NOAA Fisheries has agreed that ESA section 7 procedures described in the interagency streamlined consultation process are adequate to meet all Essential Fish Habitat consultation requirements for listed species.

As stated in the EA, p. 83. No anadromous fish can occur in the portion of Slim Jim project above the Galesville dam since it is a complete barrier to fish passage. Thus the area above the dam is not considered Essential Fish Habitat under the Magnuson-Stevens Fisheries Conservation and Management Act. As such, the Bureau is not required to consult with NOAA Fisheries on Essential Fish Habitat.

PLAN CONSISTENCY

The proposed treatments conform to the *Final Supplemental Environmental Impact Statement* and *Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl* (Northwest Forest Plan FSEIS,1994 and ROD, 1994); the *Final-Medford District Proposed Resource Management Plan/Environmental Impact Statement* and *Record of Decision* (EIS, 1994 and RMP/ROD, 1995); the *Final Supplemental Environmental Impact Statement: Management of Port-Orford-Cedar in Southwest Oregon* (FSEIS, 2004 and ROD, 2004); the *Final Supplemental Environmental Impact Statement and Record of Decision and Standards and Guidelines for Amendment to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines (*FSEIS, 2000 and ROD, 2001); and the *Final Supplemental Environmental Impact Statement Clarification of Language in the 1994 Record of Decision for the Northwest Forest Plan National Forests and Bureau of Land Management Districts Within*

the Range of the Northern Spotted Owl, and *Proposal to Amend Wording About the Aquatic Conservation Strategy* (FSEIS, 2003 and ROD, 2004).

New information regarding the northern spotted owl (NSO) from the following four reports was also considered in the determination of plan consistency.

- *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).

FONSI

Thirty-three letters were received during the 30-day review period for the EA and FONSI. Those letters did not provide new information, nor did it identify a flaw in assumptions, analysis, or data that would alter the environmental analysis disclosed in the EA or conclusions documented in the FONSI. It is my determination that the selected alternative 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 in context or intensity as defined in 40 CFR § 1508.27. Therefore an environmental impact statement will not be prepared.

CONCLUSION

I have determined that a new environmental assessment is not necessary for the following reasons: 1/ there will be no substantial changes to the action as originally proposed in the EA # OR-118-04-014 and 2/ there are no significant new circumstances, information, or facts relevant to environmental concerns or impacts which were not addressed in the EA.

APPROVED BY:

_____ _____

Katrina Symons Date
Field Manager
Glendale Resource Area