Decision Record
for the
Double Bowen Forest Management Project
DOI-BLM-OR-M050-2014-001-EA

Introduction

The Medford District Bureau of Land Management, Butte Falls Resource Area (BLM) has completed the analysis in the *Double Bowen Forest Management Project Environmental Assessment* (DOI-BLM-OR-M050-2014-001-EA) (EA) for proposed forest management activities on approximately 858 acres of matrix lands and 14 acres of riparian reserves. The EA also analyzed road renovation, closure, and decommissioning; water source restoration at 2 sites; and a 21-acre meadow restoration project. The BLM analyzed two alternative ways of meeting the project's identified Purposes and Needs (EA, p. 3–6). A no action alternative was also included.

The Double Bowen Forest Management Project is located on BLM-administered lands within the Big Butte Creek fifth field watershed in

- Township 35 South, Range 2 East, sections 13, 15, 23, and 25; and
- Township 35 South, Range 3 East, sections 7, 19, and 31;
  Willamette Meridian; Jackson County, Oregon.

Public Involvement

The Butte Falls Resource Area began outreach for this project on February 19, 2014 by mailing scoping flyers to 66 individuals, businesses, organizations, tribes, and government agencies. The purpose of the flyer was to introduce adjacent landowners and interested parties to the Double Bowen project and solicit public participation in developing the project. The scoping flyer was also posted on the Medford District's NEPA Analysis Web site. The BLM received a total of six comments in return. Comments were from American Forest Resource Council, Klamath Siskiyou Wildlands Center, Oregon Wild, and three private citizens.

Based on those comment letters and input from the Project's interdisciplinary team of resource specialists, the BLM identified three issues to include for analysis in the EA: Forest Condition, Northern Spotted Owl Habitat, and Economics (EA, p. 7). Issues raised during scoping that were not analyzed in detail in the EA were addressed in Appendix A, Issues Considered but Eliminated from Detailed Analysis (EA, p. 78–81).

A 30-day public comment period for the EA was held from August 29, 2014 to September 29, 2014. The BLM notified the public through a letter mailed August 28, 2014 to 42 individuals, organizations, tribes, grazing lessees, and government agencies and a legal notice of EA availability published in the *Medford Mail Tribune* newspaper on August 29, 2014. The EA was also posted on the Medford District's NEPA Analysis Web site. The BLM received three letters containing comments on the EA from the following: American Forest Resource Council, Klamath Siskiyou Wildlands Center, and one private citizen.

EA comments generally fell into 12 topic areas: (1) early seral habitat; (2) resource management plan; (3) tree age; (4) riparian reserves; (5) shelterwood harvest; (6) mistletoe and root rot; (7) selection harvest; (8) northern spotted owl, (9) sensitive species, (10) fire hazard, (11) cumulative effects, and (12) purpose and need. Comments are addressed in Attachment 1.

Plan Consistency

Projects proposed and analyzed in the EA conform to the following:

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

Consultation and Coordination

The federally threatened northern spotted owl is the only wildlife species in the Project Area listed as Threatened or Endangered (T&E) under the Endangered Species Act (ESA). The BLM consulted with the U.S. Fish and Wildlife Service (Service) on the potential effects of this project on the northern spotted owl pursuant to Section 7(a)(2) of the ESA. The Medford District BLM prepared a Biological Assessment for proposed timber harvest projects and meadow restoration included in the Double Bowen Forest Management Project and submitted it to the Service on July 9, 2014. The BLM received a Biological Opinion from the Service on November 24, 2014 (FWS Reference Number 01EOFW00-2014-F-0209). The Opinion concluded that implementation of the actions proposed in Alternative 2 would not jeopardize the continued existence of the northern spotted owl and would not destroy or adversely modify designated northern spotted owl critical habitat.

At the date of publication, the EA (p. 164) acknowledged the presence of one gray wolf, listed as endangered under the ESA, near the Project Area. The EA stated, ". . . there is no evidence that wolves have become established or created den sites in the Project Area." In June 2014, that gray wolf, OR7, and a mate produced offspring in southwest Oregon's Cascade Mountains. The breeding pair and their offspring formed the Rogue Pack. In January 2015, the Oregon Department of Fish and Wildlife (ODFW) updated the Area of Known Wolf Activity for the Rogue Pack and the Double Bowen Project Area is not located within this area. However, if a den or rendezvous site is identified prior to or during project activities, the following project design feature, added by this Decision Record, will be implemented:

Project activities located within 1 mile of a den or rendezvous site will be restricted from March 1 to June 30. Because these sites are difficult to locate and can change from year to year, this will be assessed on an ongoing basis throughout the life of this project through annual updates and communication with the U. S. Fish and Wildlife Service and ODFW.

The Service issued a proposal to list the West Coast Distinct Population Segment (DPS) of fisher (*Pekania pennanti*) as a threatened species under the ESA on October 7, 2014. The Double Bowen Project falls within the range of the West Coast DPS of fisher. The EA (p. 163) discloses that 42 acres of shelterwood harvest would leave a residual canopy of less than 40% and fisher would likely avoid these areas until they again provide foraging habitat in 5 to 10 years. The remainder of the activities analyzed in the EA would maintain the forests for use by fishers for foraging and dispersal. In addition, 50 CFR 402.10 provides the procedures necessary for compliance with Section 7(a)(4) of the ESA, which establishes requirements for conferencing on proposed species and proposed critical habitat. According to the 6840 manual, BLM policy is to confer on all discretionary actions that are determined to be May Affect, Likely to Adversely Affect. The Medford BLM is planning to submit a conference report in 2015, prior to the potential listing of the fisher. The report will analyze potential effects to the fisher from projects on the Medford District, including the Double Bowen Project.

The Double Bowen Forest Management Project is within the range of one T&E plant: federally endangered Gentner's fritillary (*Fritillaria gentneri*). The Project Area also contains suitable habitat for the Gentner's fritillary. The BLM conducted surveys for this T&E plant in suitable habitat and no plants were discovered within proposed project boundaries. Therefore, the proposed actions would have no effect on T&E plant species (EA, p. 76).

The Double Bowen Forest Management Project Area contains one T&E fish species, the federally threatened Southern Oregon/Northern California Coast coho salmon. The project fish biologist determined the actions proposed in this project would have no effect on coho salmon, coho critical habitat, or essential fish habitat; therefore, consultation was not required (EA, p. 76).

The BLM mailed a scoping flyer and a notice of EA availability to the following tribes with a connection to lands in southern Oregon: Cow Creek Band of Umpqua Tribe of Indians, Confederated Tribes of the Grand Ronde Community of Oregon, and Confederated Tribes of the Siletz Indians of Oregon.

Decision

My decision is to implement the actions proposed and analyzed in the Double Bowen Forest Management Project EA under Alternative 2, with the following exception: the silviculture prescription for a timber harvest unit in T35S, R3E, section 19 will change from shelterwood regeneration harvest to selection harvest.

The EA analyzed the shelterwood prescription as follows:

- 12 to 25 green trees per acre greater than 20 inches DBH would be retained.
- Overstory trees in excess of 6 to 8 trees per acre could be harvested after 15 to 30 years.

- The most vigorous trees based on tree crown ratio and form would be retained.
- Hardwoods greater than 16 inches DBH would not be cut.
- Douglas-fir, sugar pine, ponderosa pine, incense cedar, and hardwood trees are the preferred leave species.
- In stands infested with Douglas-fir mistletoe, the infected Douglas-fir would be targeted first for removal.
- Harvested trees would be tractor yarded.
- Canopy cover after harvest would be 20% to 40%.
- Harvest would *remove* 42 acres of northern spotted owl nesting roosting, foraging habitat.

The selection harvest prescription is as follows:

- The desired basal area and tree crown ratio and form would be used to determine which trees to leave or remove.
- Poor vigor trees, as defined by crown form and crown condition, would be harvested from across *all* diameter classes.
- Trees would be removed to a target basal area range of 80–120 square feet per acre.
- Drought- and fire-tolerant species such as ponderosa pine, incense cedar, Douglas-fir, sugar pine, and hardwood trees would be the favored leave species.
- In stands infested with Douglas-fir mistletoe, the infected Douglas-fir would be targeted first for removal.
- Harvested trees would be tractor yarded.
- Canopy cover after harvest would be 40% to 60%.
- Harvest would *downgrade* 42 acres of northern spotted owl nesting roosting, foraging habitat.

After further review of the stands proposed for shelterwood harvest in section 19, BLM foresters determined that areas within the stands do not currently contain the 12–25 green trees per acre greater than 20 inches DBH that the EA analyzed would remain after shelterwood harvest. These areas are overstocked with trees that are generally 20 inches DBH or smaller. The stands are variable and exhibit an uneven-age structure that does not lend itself to a standard shelterwood treatment the RMP recommends for even-age stands on northern GFMA matrix lands. The preferred prescription for this unit is selection harvest, where poor vigor trees from across *all* diameter classes would be removed to reduce stand densities in overstocked stands and make site resources (water, sunlight, nutrients, and growing space) available for remaining trees. The objective is to selectively harvest low vigor trees to a target basal area range of 80–120 square feet per acre. In areas where healthy, vigorous pine trees are present, the target basal area will be closer to the 80 square feet per acre range. Areas dominated by Douglas-fir or white fir will be retained closer to the 120 square feet per acre.

Resource specialists have determined the effects of selection harvest on the stands analyzed for shelter wood harvest would be within the anticipated effects disclosed in the EA. Poor vigor trees would be removed in overstocked stands to accelerate the growth of the remaining trees and improve stand health. The most vigorous trees, as defined by crown form and crown condition, would be retained. Northern spotted owl nesting, roosting, and foraging habitat that would be removed by shelterwood harvest to become capable habitat would instead be downgraded under selection harvest to dispersal habitat. The difference in timber volume between the two prescriptions would be minimal because nearly all trees greater than 20 inches DBH would be retained under shelterwood harvest in order to meet the 12–25 green tree retention requirement. Because selection harvest would remove poor vigor trees across all diameter limits, a portion of the trees larger than 20 inches would be harvested.

My decision will implement actions in locations shown on Map 1 and will include all required project design features, as described in the EA (p. 16–23) and as included in this decision. These project design features were developed using resource protection measures identified by the Interdisciplinary Team and the Best Management Practices identified in the Medford District ROD/RMP (p. 151–175) and any plan amendments in effect at the time this document is published.

My decision is based on site-specific analysis; supporting project record; management recommendations in the Central Big Butte and Ginger Springs Watershed Analyses; management direction in the Medford District ROD/RMP; and public comments. The Interdisciplinary Team and responsible official reviewed the written comments received in response to the EA. The review concluded the EA comments would not lead to changes in the EA document and no new information or issues were presented that had not been analyzed or addressed in the EA. The BLM responded to those comments in Attachment 1 of this Decision Record.

A Finding of No Significant Impact (FONSI) was completed for this project and I have determined this project does not constitute a major federal action that will have a significant impact on the human environment.

My decision is to authorize the following actions:

- Density management (leaving 40% canopy cover)—386 acres of matrix lands
- Density management (leaving 60% canopy cover)—121 acres of matrix lands
- Selection harvest (leaving 40% canopy cover)—202 acres of matrix lands
- Selection harvest (leaving 60% canopy cover)—31 acres of matrix land
- Selection harvest— 42 acres of matrix land
- Riparian thinning—14 acres of riparian reserves
- Small diameter thinning—76 acres of matrix lands and riparian reserves
- Temporary route construction (including decommissioning after use)—0.4 mile
- Temporary route reconstruction (including decommissioning after use)—0.2 mile

- Temporary route renovation (including decommissioning after use)—0.3 mile
- Road renovation—31 miles
- Road closure—0.6 mile (3 sites)
- Partial road decommissioning—2.7 miles
- Full road decommissioning—0.6 mile
- Activity slash treatment (lop and scatter, slash pile and burn, underburn, or biomass removal) —872 acres
- Water source restoration—2 sites
- Meadow restoration—21 acres.

Decision Rationale

My decision to authorize the proposed action is in compliance with the Medford District ROD/RMP and the Northwest Forest Plan (EA, p. 8). The proposed action complies with applicable laws, rules, regulations, standards, and guidelines (EA, p. 8-9). The BLM has completed all required T&E species, Special Status Species, Survey and Manage species, and cultural surveys and will apply mitigations where appropriate.

My decision to implement Alternative 2 (as Modified) is based on consideration and evaluation of how well the purpose and need are met, the Decision Factors listed in the EA (p. 8), and the associated environmental consequences of implementing or not implementing the Double Bowen Forest Management Project, as analyzed in the EA and documented in the FONSI. I have read the comment letters we received during the EA public review period and I have considered them fully. I have determined that my decision outlined above best meets the purposes of and needs for this project, as identified in Chapter 1 of the Double Bowen Forest Management Project EA.

The EA analyzed three alternatives for the management of the BLM-administered lands in the project area: Alternative 1 (No Action), Alternative 2 (Selected Alternative), and Alternative 3. A comparison of the key features of the action alternatives (Alternatives 2 and 3) is included in the EA in Table 2-1 (EA, p. 15–16). Because all action alternatives were designed to meet the purposes of and needs for the project, the degree to which each alternative best meets the purposes and needs varies and provides the basis for my decision.

Alternative 1 (No Action) would not meet the purpose and need for this project because no actions would be taken at this time. Forest management and timber harvest activities would not occur. No timber volume would be made available for use, no revenue would be produced for the Federal Treasury, and no full-time jobs would be supported. Stand densities would not be reduced and would continue to increase. Roads would not be closed, decommissioned, or improved and localized road sediment would not be decreased. Meadow restoration would not occur to slow or reverse the loss of meadow habitat from the encroachment of brush and conifers.

Alternatives 2 and 3 proposed the same amounts and levels of small diameter thinning and riparian thinning to reduce tree densities and restore stand vigor, resiliency, and stability. Both

alternatives would restore two water sources to make more water available for firefighting and wildlife habitat and restore 21 acres of meadows to obtain the desired vegetation condition. The number of miles of temporary route construction, reconstruction, and renovation needed for harvest is the same. The differences between the two action alternatives are in the types of silviculture prescriptions proposed.

Alternative 2, the Selected Alternative, would produce more timber volume (7.0 MMBF in Alternative 2 and 6.4 MMBF in Alternative 3), revenue for the Federal Treasury ($2.5 million in Alternative 2 and $2.2 million in Alternative 3), and full-time jobs (63 jobs in Alternative 2 and 58 jobs in Alternative 3) when compared to Alternative 3. Forest management activities would reduce stand densities to make site resources available to the remaining trees. Density management and selection harvest would reduce stand densities and maintain a minimum of 40% canopy cover in northern spotted owl dispersal habitat and 60% canopy cover in nesting, roosting, foraging habitat. The selection harvest in the previous shelterwood harvest stand in T35S, R3E, section 19 would maintain multiple canopy, multiple aged stands but would downgrade nesting, roosting, foraging habitat.

Alternative 3 would produce less timber volume, revenue for the Federal Treasury, and full-time jobs as compared to Alternative 2. Alternative 3 would implement ecological forestry principles through the use of restoration thinning and selection harvest. Restoration thinning would reduce stand densities and create structural diversity by making small openings and retaining small unthinned patches next to snags, large coarse down woody debris, deformed trees, and seeps or hardwood clumps across the Project Area. Existing stand diversity would contribute to these unthinned patches and small openings in the Project Area. Restoration thinning would maintain a minimum 40% canopy cover in northern spotted owl dispersal habitat and a minimum 60% canopy cover in northern spotted owl nesting, roosting, and foraging habitat. Selection harvest would maintain a minimum of 40% canopy cover in northern spotted owl dispersal habitat and 60% canopy cover in nesting, roosting, and foraging habitat.

Alternative 2 provides a set of actions that best meet the various purposes and needs identified for this project, including providing timber volume, revenue for the Federal Treasury, full-time jobs, and benefitting stand health while maintaining northern spotted owl habitat in CHU and home ranges (except where disease is affecting stand health and longevity) in the Project Area. For the reasons listed above, I have decided Alternative 2 (with the additional project design feature and the change of prescription from shelterwood to selection harvest) will best meet the purposes of and needs for this project.

In preparing the EA, the BLM interdisciplinary team analyzed the effects of the proposed action for the following issues: forest condition, northern spotted owl habitat, and economics. I have determined the effects will be within those analyzed in the *Medford District Proposed Resource Management Plan and Environmental Impact Statement* (PRMP/EIS 1994) or were otherwise insignificant. This action takes into consideration cumulative effects of past, present, and future management activities in the Project Area on nearby private and Federal lands. Discussion of those effects can be found in the EA (p. 24–74).

In making my decision, I considered the Decision Factors identified in the EA (p. 8) to

- reduce competition-related mortality and wildfire risk, and increase tree vigor and growth;
- provide for the establishment and growth of conifer species while retaining structural and habitat components, such as large trees, snags, and coarse woody debris;
- promote the development of healthy, late-successional characteristics;
- generate revenue to the Federal Treasury;
- reduce the short- and long-term costs of managing the lands in the Project Area;
- reduce erosion and subsequent sedimentation from roads;
- provide a long-term benefit for northern spotted owl critical habitat;
- maintain or improve existing highly suitable northern spotted owl habitat within the provincial radius (1.2 miles) of known active northern spotted owl sites and all or substantially all of the older and more structurally complex, multilayered conifer forests; and
- maintain or improve the older growth, high quality, and occupied forest habitat as necessary to meet the northern spotted owl recovery goals.

I have chosen Alternative 2 because it best meets the identified purpose of and need for the project for the following reasons:

- Reducing competition related mortality by reducing stand densities on 872 acres, retaining old trees, favoring drought-tolerant species, and increasing structural complexity while maintaining existing highly suitable northern spotted owl habitat.
- Reducing the potential risk of wildfire that may result from the slash (branches, twigs, and bark) produced during harvest treatments. Following harvest activity, a fuels assessment within each unit will determine the fuel hazard and fire risk based on surface fuel loading, aspect, slope, access, location of each unit, and treatment needed (e.g., lop and scatter, slash pile and burn, underburn, biomass removal).
- Maintaining critical habitat within the project area on 573 acres by retaining canopy cover, decadent woody material, and multicanopy and uneven-aged tree structure within Critical Habitat Unit 10.
- Reducing the short-term costs of managing the lands by providing vehicular access to harvest units through 0.4 mile of temporary route construction, 0.2 mile of temporary route reconstruction, and 0.3 mile of temporary route renovation on stable locations.
- Maintaining or improving existing highly suitable northern spotted owl habitat within the 1.2-mile provincial home range of known active northern spotted owl sites and maintaining substantially all of the older and more structurally complex, multilayered conifer forests within the Project Area by planning treatments outside these areas.
- Providing an economical timber sale and stewardship contract that will produce revenue for the Federal government and contribute approximately 7 million board feet of timber toward the Butte Falls Resource Area's and Medford District's Allowable Sale Quantity.

- Improving 2 existing water sources to allow use for fire suppression and by wildlife.
- Restoring 21 acres of upland meadows where tree and brush species are encroaching.

I have considered how the alternatives analyzed in the EA meet the purpose and need, the associated environmental effects, and public input. Based on these considerations, I have decided Alternative 2 as analyzed in the Double Bowen Forest Management Project EA best meets the purpose and need described for this project, while minimizing the potential for adverse effects on the environment. The required implementation of project design features will provide for the protection of resources consistent with existing laws and policy and direction in the 1995 ROD/RMP.

Administrative Remedies

The decision described in this document is a forest management decision and is subject to protest by the public. In accordance with Forest Management regulations at 43 CFR Subpart 5003—Administrative Remedies, protests of a decision, including a timber sale decision, may be filed with the Authorized Officer within 15 days of the publication date of the Notice of Decision or Notice of Sale in the *Medford Mail Tribune* newspaper, Medford, Oregon. The protest must clearly and concisely state which portion or element of the decision is being protested and the reasons why the decision is believed to be in error.

When timber is offered for sale, a Notice of Sale will be published in a newspaper of general circulation, in this case the *Medford Mail Tribune*. Publication of the *first* Notice of Sale establishes the effective date of the decision for the Double Bowen Timber Sale. The protest of the Double Bowen Timber Sale must be made within 15 days of the publication of the *first* Notice of Sale.

In accordance with BLM Forest Management Regulation 43 CFR § 5003.2 (a and c), the effective date of this decision, as it pertains to actions that are **not** part of an advertised timber sale, will be the publication date of the Notice of Decision and FONSI in the *Medford Mail Tribune*. This date applies to the following actions: small diameter thinning (76 acres), road closure (0.6 mile), partial road decommissioning (2.7 miles), full road decommissioning (0.6 mile), water source restoration (2 sites), and meadow restoration (21 acres). Publication of this notice establishes the date initiating the protest period provided in accordance with 43 CFR § 5003.3.

43 CFR § 5003.3 subsection (b) states, "Protests shall be filed with the authorized officer and shall contain a written statement of reasons for protesting the decision." This precludes the acceptance of electronic mail (email) or facsimile (fax) protests. **Only written and signed hard copies of protests delivered to the Medford District Office will be accepted.** The Medford District Office is located at 3040 Biddle Road, Medford, Oregon.

43 CFR § 5003.3 subsection (c) states: "Protests received more than 15 days after the publication of the notice of decision or the notice of sale are not timely filed and shall not be considered." Upon timely filing of a protest, the authorized officer shall reconsider the project decision to be implemented in light of the statement of reasons for the protest and other pertinent information available to him. The Authorized Officer shall, at the conclusion of the review, serve the protest

decision in writing to the protesting party(ies). Upon denial of a protest, the Authorized Officer may proceed with the implementation of the decision as permitted by regulations at 5003.3(f).

If no protest is received by the close of business (4:30 p.m.) within 15 days after publication of the Notice of Decision or *first* Notice of Sale, this decision will become final. If a timely protest is received, the project decision will be reconsidered in light of the statement of reasons for the protest and other pertinent information available, and the Butte Falls Resource Area will issue a protest decision.

6/19/2015

Teresa J. Trulock
Field Manager
Butte Falls Resource Area

Date

Attachment 1

BLM Response to Public Comments

The BLM received three letters in response to the release of the Double Bowen Forest Management Project EA. Comment letters were received from American Forest Resource Council (AFRC), Klamath-Siskiyou Wildlands Center (KSWC), and one private citizen. The BLM's responses to those comments follow.

Early Seral Habitat

Comment: The important role of early seral habitat has been recognized over the past several years, particularly its role in the context of biological diversity. Some of the recent science even suggests that high quality early seral habitats are more diverse than high quality late-seral habitats. So why then does the BLM state on page 38 that "proposed regeneration harvest in Alternative 2 would reduce structural components, and lower biological diversity?" Since retention of large green trees, coarse woody debris, and snags are built in to the silvicultural prescriptions, what components will be reduced? (AFRC, p. 2).

BLM Response: The EA on page 38 does not say structural components would be reduced. The EA states, "Proposed regeneration harvest in Alternative 2 would reduce structural complexity, lower biological diversity, and increase habitat fragmentation . . . ." In fact, the EA (p. 37) states "The retained overstory trees and down logs would provide for structural and biological legacies." However, structural complexity (unthinned patches and small openings) (EA, p. 39) would be reduced within the regeneration harvest stands as the spatial distribution of the trees becomes more uniform (EA, p. 54).

Comment: We believe that the comment made on page 42 of the EA that states that "the gaps created during restoration thinning would provide pockets of early seral stands" to be false. In reality, gaps are not created during restoration thinning. The only successful method that the BLM has to create early seral habitat in order to comply with RMP requirements for Matrix lands is through regeneration harvest (AFRC, p. 2).

BLM Response: Gaps, as well as skips, are not typically *created* during restoration thinning; they are often already present in the stand. However, if additional gaps are needed to meet the restoration thinning prescription, gaps would be "created where vigorous understory regeneration is present, in root rot pockets, or in areas of lower site productivity" (EA, p. 123). The EA (p. 95) states, "the inherent diversity within a stand [would be used] to identify and locate patches and openings." Restoration thinning would "use existing stand diversity to identify and locate patches and openings" (EA, p. 113). In previously logged stands, canopy gaps are typically present so most of the structural diversity would be added by retaining unthinned patches (EA, p. 122).

Existing stand characteristics were also used to provide the skips. The unit boundaries reflect riparian, wildlife, and plant buffers, as well as unstable slopes and seeps. These features were used to define where to place some of the skips used in the restoration thinning prescriptions. Skips "could be left adjacent to snags; large coarse woody debris; deformed trees; and existing dense pockets, seeps, or hardwoods clumps" (EA, p. 123).

Resource Management Plan

Comment: The EA makes clear that treatments under all alternatives are tiered to the Medford District ROD/RMP and the land allocations defined in it. However, based on Appendix B, it appears that factors other than the land allocations defined in the RMP are dictating management direction (AFRC, p. 2).

BLM Response: Other factors based on laws and regulations may indeed dictate management directions. Actions on BLM lands managed under the 1995 RMP must be consistent with all laws, regulations, and policies (EA, p. 9). Some of these legal requirements may direct actions the BLM can or cannot undertake, despite the land use allocation on a particular piece of land. For instance, the ESA requires the BLM to ensure that management of O&C lands will not likely result in jeopardy to listed species or destruction or adverse modification of critical habitat (ROD/RMP, p. 18).

Appendix B assesses the condition of forest vegetation in the Lower South Fork Big Butte Creek sixth field watershed and provides management recommendations that apply the concepts and principles of ecological restoration. One of the purposes of this EA is to reduce tree densities to increase landscape resiliency to environmental disturbances (EA, p. 4). Restoration thinning would reduce the density of forest stands with the objectives of increasing stand vigor, reducing mortality of desired stand components, and reducing susceptibility of insect and disease attack and spread (RMP/ROD, p. 186). Applying restoration thinning to stands on matrix lands would reduce tree densities to increase landscape resiliency to environmental disturbances. The analysis in Appendix B helped the BLM to determine at what level, where, and how to harvest trees in order to increase landscape resiliency on BLM lands allocated to the programmed timber harvest base within the Project Area.

Tree Age

Comment: AFRC is opposed to any arbitrary age limit imposed in the Matrix. In this case why not 145 years? Or why not 155 years? Why would the BLM impose any age limit at all? Why not treat the stand according to the need of the stand? (AFRC, p. 3).

BLM Response: Alternative 3 in the Double Bowen EA proposed a restoration thinning prescription in which trees 150 years and older would be reserved from harvest. The objective for this prescription is to reduce tree densities to increase landscape resiliency to environmental disturbance (EA, p. 4). The prescription is based on a 2009 strategy outlined in *Restoration of Federal Forests in the Pacific Northwest: Strategies and Management Implications* by Drs. Norm Johnson and Jerry Franklin. The Johnson and Franklin paper outlines silviculture activities that would provide ecological restoration of dry forests such as those found in the Double Bowen Project Area. Part of the strategy is the conservation of older trees in dry forests, with those trees defined as being at least 150 years of age. The strategy recognized that "old growth stands can be found in dry forests, but conserving the older trees within them typically requires active management within these stands. This age was chosen because (1) trees in dry forests begin to exhibit some characteristics of old growth at these ages and (2) fire exclusion—through suppression of natural wildfires, fires set by Native Americans, and introduction of domestic livestock into these forests—began about 150 years ago" (Johnson and Franklin 2009, p. 4). The 150-year age limit is proposed only in Alternative 3.

Comment: Page 94 identifies the "Van Pelt rating system" as the guidance that BLM will use to identify trees over or under the age of 150. There is no scientific support to apply Van Pelt to stands in southwest Oregon. Furthermore, the Van Pelt guidelines are not part of the Medford RMP and would require adoption through the NEPA public comment process if used as a District standard (AFRC, p. 3).

BLM Response: As stated in the EA (p. 94), the BLM determines tree age using a variety of tools such as increment core samples, rating systems for determining the general age of trees, counting tree stump rings, or stand birthdate from the Micro*Storm data base. In addition to the Van Pelt rating system, the BLM used stand exams as another tool for collecting site-specific details (tree species, height, diameter, age, crown ratios, etc.) within the Project Area. In most instances, visual attributes (Van Pelt rating system) were used to determine if a tree is younger or older than 150 years. The visual rating system is not absolute but is generally a reliable indicator of tree age (EA, p. 94).

The BLM's Ashland Resource Area conducted implementation monitoring on the Pilot Thompson project in 2013 to determine how well the timber sale cruisers achieved the age-based criteria in commercial harvest units using the visual attributes identified in the Van Pelt rating system. During timber cruising, trees are tallied and measured to determine tree defect due to damage and disease, tree grade, and timber volume. The timber cruisers record the trees designated for harvest by 4-inch diameter classes. For instance, the 28-inch diameter class contains trees that range from 26.1 inches to 30 inches in diameter. BLM staff took increment core samples from 48 trees in the 28-inch age class and larger that were marked for harvest to determine tree breast height age. Of those trees, eight were determined to be 150 years or older and were reserved from harvesting. The 28-inch age class was chosen because BLM marking guidance suggests that trees 30 inches in diameter and larger have a greater chance of being 150 years old or greater.

Based on the data collected, the timber cruisers achieved the age-based criteria using the visual rating system for an estimated 83% of the trees. An additional 14 trees less than 26.1 inches DBH were bored to determine age; all were less than 150 years of age. The BLM determined a certain level of error in implementing age or any other marking criteria must be allowed; a 100% compliance threshold is an expectation that is difficult to meet within reasonable project timelines and budget constraints.

Riparian Reserves

Comment: Page 11 of the EA describes that a 20″ DBH limit would be implemented in riparian reserves. AFRC is unclear as to why such a limitation is being placed on riparian reserves and what objective it is meant to serve (AFRC, p. 4).

BLM Response: The proposed riparian reserve thinning was designed to meet the objectives for riparian reserves identified in the Medford District ROD/RMP (ROD/RMP, p. 26). Among those objectives is providing habitat for terrestrial species associated with late-successional habitat. Late-successional conditions are the stages in forest development that include mature stands, generally greater than 80 years old (EA, p. 88). The Northwest Forest Plan Final Supplemental Environmental Impact Statement identified that stands qualify as late-successional forest when they are dominated by conifer trees 21 inches DBH or more.

The BLM is proposing riparian reserve thinning adjacent to proposed upland thinning units in the Double Bowen Project Area to improve stand resiliency and accelerate ecosystem functions while meeting Aquatic Conservation Strategy objectives. The purpose of thinning overstocked riparian reserves is to improve individual tree and stand health, reduce risk for catastrophic wildfires, to restore ecosystem functions by promoting the growth of large trees quicker, and to provide an increase of large wood sooner.

Thinning in selected riparian reserves is essential for reducing stocking levels in stands identified as having high stand relative densities, which has caused reduced growth rates in individual trees due to competition for available resources including water, light, and nutrients. These overstocked stands are also at risk for catastrophic wildfires that could increase impacts, such as sedimentation, to aquatic systems and delay achieving desired outcomes in riparian reserves such as increased large woody debris and large trees to provide shade and habitat.

Comment: We are highly skeptical of proposed riparian reserve logging given: (1) the extensive ORV damage that could be exacerbated by opening up riparian reserve stands; (2) the proposal to construct new skid trails in riparian reserves; (3) the large amount of small-diameter thinning available outside of riparian reserves; and (4) the significant aquatic degradation that has already occurred due to past logging and road building activities, and (5) the important ecological benefit mistletoe and trees exhibiting late-successional character provide for Riparian Reserves, including depositing large woody debris into stream channels (KSWC, p. 2).

BLM Response: The BLM, using an interdisciplinary process, identified **o**verstocked, even-aged, second growth stands in riparian reserves in the Project Area that could benefit from thinning to enhance and accelerate the production of healthy trees in the riparian area. The EA (p. 6) identified a need for reducing stocking levels in riparian stands identified as having high stand relative densities that has caused reduced growth rates in individual trees from competition for available resources including water, light, and nutrients. As stated in the EA (p. 156), "The Double Bowen project would restore species composition and structural diversity of plant communities in treated riparian reserves because this project would encourage healthy riparian forests by reducing stand densities to levels the sites have the resources to support."

The EA adequately addressed off-highway vehicle use that could result from timber harvest activity. The EA (p. 73) states, "Timber harvest on flatter ground has the potential to 'open up' land to off-highway vehicle intrusions. This would be mitigated with effective barricading adjacent to roadways using boulders, slash, and logs to block vehicle access." The EA accounted for the future unauthorized use of skid trails by incorporating project design features that would discourage this use (EA, p. 18-19).

Skid trails would not be "constructed" in riparian reserves; however, cut trees could be yarded through the outer 100 feet of the riparian reserve. Since no vegetation would be cut within the 90 feet closest to streams, no logs would be skidded in or through that buffer.

Comment: First the EA states that trees larger than 20 in. DBH would not be extracted [during riparian thinning], but is targeting mistletoe and trees exhibiting late-successional character for removal, trees generally larger than 20 in. DBH (KSWC, p. 3).

BLM Response: The EA did not state trees generally larger than 20 inches in diameter with mistletoe or late-successional characteristics would be targeted for harvest during riparian thinning. On the contrary, the EA repeatedly states trees 20 inches in diameter and larger would *not* be extracted from riparian reserves (EA, p. 11, 20, 52, 81, 98, 110, 120). The commenter concludes riparian thinning is "targeting mistletoe and trees and trees exhibiting late-successional character for removal" based on discussion in the EA (p. 142) that acknowledges riparian thinning would be used to slow the spread of root rot and mistletoe in the identified riparian thinning stands. Nowhere does the EA state trees greater than 20 inches in diameter would be cut in riparian thinning. The 20-inch limitation applies to all trees that would be cut in riparian reserves, regardless of the presence of root rot or mistletoe.

Comment: The agency is proposing logging [riparian reserve] stands down to 50% canopy, which is significantly lower than the 60% canopy necessary for NRF habitat. Such logging removes forest canopy necessary for late-successional forest character and reduces future snag and down wood recruitment. The BLM's conclusion that logging "the 14 acres of proposed riparian reserve[s] would increase long-term large wood recruitment" is entirely unfounded and 1) fails to consider the best available scientific information which finds the exact opposite from the BLM, and 2) fails to consider the NWFP which states such RR logging is illegal (KSWC, p. 4).

BLM Response: The project description for the proposed riparian thinning states, "A minimum of 50% canopy cover would remain in northern spotted owl *dispersal* [emphasis added] habitat and a minimum of 60% canopy cover would remain in northern spotted owl nesting, roosting, and foraging habitat" EA, p. 11). The minimum 50% canopy cover does not apply to nesting, roosting, and foraging habitat. The BLM's plans to thin within the riparian reserves are within the bounds of the Northwest Forest Plan. Activities in riparian reserves are regulated by the Standards and Guidelines to the Northwest Forest Plan ROD. The Northwest Forest Plan (Standards and Guidelines C-32) allows timber harvest in riparian reserves when needed ". . . to control stocking, reestablish and manage stands, and acquire desired vegetation characteristics needed to attain Aquatic Conservation Strategy objectives." The BLM is proposing riparian reserve thinning to increase large wood recruitment in the long term by reducing stand density and promoting the development of large diameter conifer trees.

Comment: The agency is not providing full riparian reserves, they are proposing to log 14 acres of RR, which will not continue to provide shade to streams, inhibit the recruitment of large woody debris, thereby putting the project out of compliance with ACS (KSWC, p. 6).

BLM Response: The BLM has described in the EA the effects of the proposed projects on compliance with the Aquatic Conservation Strategy (Appendix F: Aquatic Conservation Strategy, EA, p. 150-157. Appropriate analysis of ACS compliance is undertaken at both the watershed and project levels, and in both the short term and long term. A project that results in some degradation of one or more objectives in the short term does not, standing alone, constitute ACS noncompliance. Actions that maintain or restore riparian or aquatic ecosystems are valid exercises of agency discretion.

It is true that full riparian reserves would not be implemented in 14 acres proposed for riparian reserve thinning. However, the remaining 846 acres of riparian reserves in the Project Area would maintain the full 190-foot riparian reserves on non-fish-bearing perennial and intermittent

streams and 380-foot buffers on fish-bearing streams; only 1.6% of the riparian reserves in the Project Area would be thinned. The stands selected for thinning are overstocked and have high stand densities (average 73% relative density). Stand densities would be reduced in order to accelerate the growth of dominant, codominant, and minor amounts of intermediate trees.

A 90-foot, no-treatment buffer would be implemented within the 14 acres of riparian thinning. As a result, no vegetation would be cut within the primary shade zone and riparian reserves would continue to provide stream shade, sources of large wood, stream bank stability, and habitat for native riparian species (EA, p. 79). The EA (p. 155) states, "In the long-term, it is expected that large wood recruitment would increase within the 14 acres of riparian reserves proposed for thinning due to reducing stand densities and promoting large diameter conifer trees." Because the project would maintain stream shade and promote large wood recruitment, it would be in compliance with ACS objectives.

Shelterwood Harvest

Comment: The EA concludes in restoration recommendations, inapposite to the BLM's above-mentioned discussion of creating early seral stands: "Minimize the creation of early seral stands on BLM-administered lands." EA 91. The recommendations proposed in the EA and the prescriptions are incongruous and arbitrary depending on which prescription BLM is applying (KSWC, p. 9).

Response: The 42 acres of shelterwood harvest (1.2% of BLM land in the Project Area) proposed in Alternative 2 would create early seral stands on matrix lands located outside of the transient snow zone; 100-acre known northern spotted owl activity centers; northern spotted owl home ranges, RA32 habitat, and critical habitat; and the Ginger Springs Municipal Watershed. Alternative 3 provided a different prescription—restoration thinning—on the same 42 acres that responded to the recommendations in Appendix B (EA, p. 82–99). The restoration thinning prescription provided the decision maker with a reasonable choice between alternatives. The EA (p. 3–5) identified multiple objectives for this project; all objectives do not apply to every acre of BLM lands in the Project Area. The restoration recommendations in Appendix B were just that, recommendations that provided an alternative way of meeting the multiple purposes and needs for this project.

Comment: Shelterwood logging is proposed for both Alt. 2 and Alt. 3 in the CHU, offering the decisionmaker no meaningful choice among alternatives (KSWC, p. 9).

Response: See Table 2-1 (EA, p. 15-16) and Table 3-2 (EA, p. 39). No shelterwood retention harvest is proposed in Alternative 3. "In Alternative 3, no stands are proposed for regeneration harvest" EA, p. 41). Shelterwood retention (proposed in Alternative 2) would not occur within northern spotted owl CHU. "These acres are outside of known owl home ranges and critical habitat . . ." (EA, p. 54).

Forest Pathogens

Comment: Much of the best available science indicates that logging may not help alleviate risks to adverse impacts from forest pathogens, but will rather degrade forest health and exacerbate insect and disease problems. The Double Bowen EA entirely fails to discuss this aspect of the problem—logging spreading forest pathogens—a particularly important adverse impact

considering that the agency is proposing disease prescriptions throughout the project area (KSWC, p. 12).

Response: The commenter did not provide citations for the "best available science" regarding the spread of forest pathogens by logging. They do reference a statement from the Forest Service's Upper Rogue River Watershed Analysis and a paragraph from the Big Butte Springs Timber Sales Draft EIS. Neither of these documents provides citations for those statements so we cannot verify their relevance or applicability to this project.

The BLM Silviculturist for this project referenced a general technical report by Theis and Sturrock (1995), *Laminated root rot in western North America* that discusses methods for managing laminated root rot stands (EA, p. 105). Page 17 of this report states that the incidence and intensity of the disease will increase after harvest *if the site is planted or regenerates naturally with Douglas-fir or another species highly susceptible to laminated root rot* (emphasis added). So while timber harvest followed by regeneration with species that are highly susceptible disease *will* increase the incidences of the disease, this project proposes to regenerate the stand by planting disease-resistant trees. The EA (p. 107) states, "In stands containing laminated root rot, no Douglas-fir would be planted; instead, a mix of sugar pine, ponderosa pine and incense cedar would be planted." This is a widely recognized method for treating root rot.

Selection Harvest

Comment: Under NEPA, the BLM needs to disclose site specific impacts, the number and location of trees over 21 inches DBH where the agency intends to log via a selection harvest prescription. Diameter is an objective measurement for 1) fire resiliency, 2) late-successional character, 3) indicating and quantifying the size and snags of downed wood that will be retained and ensures compliance with the RMP and NWFP in this regard, and 4) providing quantifiable impacts to both spotted owl and fisher habitat (KSWC, p. 13).

Response: The CEQ regulations require the BLM to obtain information if it is "relevant to reasonably foreseeable significant adverse impacts" and if it is "essential to a reasoned choice among alternatives" (40 CFR 1502.22). The BLM considered all relevant and applicable information in the EA. Not all information is required to be part of the document. If information or an issue is not relevant, it is not necessary to include in the NEPA document. BLM foresters conducted stand inventories in the Project Area that provided the information needed for resource specialists to analyze the impacts of the proposed silviculture prescriptions on their resources and provide the decision maker with enough information to make a reasoned choice between alternatives. Information regarding the number and location of individual trees of any diameter that may be harvested in the Project Area is not necessary for a project such as this that manages the landscape and not individual trees. Fire resiliency and late-successional character is made up of much more than just the presence of trees over 21 inches in diameter. Information in the EA about the condition of the stands (e.g., relative density, number of trees per acre, aspect, canopy cover, basal area) provides a more complete picture of the stands as a whole than the location of individual trees would provide.

Selection harvest would retain existing snags of all diameters and deterioration stages, except those that need to be felled for safety reasons, and existing coarse woody debris of all diameters and decay classes in the stands (EA, p. 97). Snags felled for safety reasons will be left on site to

provide coarse woody debris (EA, p. 17). Additional green trees will be reserved if necessary to meet the ROD/RMP target levels for snags (EA, p. 104).

Northern Spotted Owl

Comment: We are extremely concerned that despite barred owls being in the project area, the BLM failed to look for barred owls. "The BLM did not conduct surveys specifically for barred owls in the Project Area, but the species was detected during spotted owl surveys. BLM biologists observed barred owls at three locations within the Project Area." The letter of concurrence was therefore not informed by site-specific information as required by NEPA (KSWC, p. 13).

Response: The commenter is confusing two separate processes: consultation with US Fish and Wildlife Service and NEPA. NEPA makes no requirement for consultation on effects to threatened and endangered species; the Endangered Species Act provides that requirement. During consultation with the US Fish and Wildlife Service (Service), the BLM provided site-specific information in the Biological Assessment that included the detection of barred owls in three of the seven known spotted owl sites. In the Biological Opinion for the Double Bowen project, the Service acknowledged that although the BLM did not conduct surveys specifically for barred owls, "the influence of barred owls on spotted owl occupancy is likely accounted for because of the consistency and longevity of surveys at the affected sites" (Double Bowen Biological Opinion, Tails #01EoFW00-2014-F-0209).

The BLM used the 2011 Survey Protocol in the Double Bowen Project Area. The protocol serves two primary purposes: (1) provide a methodology that results in adequate coverage and assessment of an area for the presence of spotted owls, and (2) ensure a high probability of locating resident spotted owls and identifying owl territories that may be affected by a proposed management activity, thereby minimizing the potential for unauthorized incidental take. (Page 4 NSO Survey Protocol).

Neither the NSO survey protocol, nor the NSO Recovery Plan, require land-management agencies to survey for barred owls. Studies on the effects of barred owls on spotted owls are on-going and are being gathered and analyzed by the Service (NSO Recovery Plan, Listing Factor E). The Service will use this information to inform management of barred owls across the range of the Northern spotted owl. The Service is the primary agent to oversee implementation of any strategy for the management of barred owls (Page III-62, NSO Recovery Plan). State and Federal permitting of scientifically sound research on removal experiments will be necessary to answer the question of the impacts of barred owls on spotted owls (Page III-64, NSO Recovery Plan).

Sensitive Species

Comment: The EA is completely silent as to the population dynamics, trends, and numbers for this species [black-backed woodpecker] in the planning area. NEPA requires site-specific impact analyses, and the Double Bowen EA fails to include information as to how logging mistletoe will impact cavity nesters and sensitive wildlife species (KSWC, p.15).

Response: The Double Bowen project Wildlife Biologist provided a brief analysis of impacts to Special Status and Survey and Manage wildlife species known or suspected in the Project Area in Appendix H (EA, p. 162–167). The analyses also included Birds of Conservation Concern and

Game Birds below Desired Condition that are known or suspected in the Project Area. If a species was not included in Appendix H, then it was "not suspected to be present in the Double Bowen Project Area based on habitat types, field survey data, and literature reviews" (EA, p. 162). The black-backed woodpecker was not included in the analysis because it was not suspected to be present in the Project Area. Appendix H provided impacts to species known or suspected in the Project Area that may use mistletoe. The EA (p. 163) revealed impacts to the Johnson's hairstreak butterfly that feeds on the shoots of dwarf mistletoe and the Great Gray Owl (p. 165) that uses dwarf mistletoe for nests.

Comment: There is no analysis of impacts to fisher and how the Double Bowen project will impact this BSS [Bureau sensitive species]. Fishers hunt in mistletoe trees and snags, what is the impact of selection harvest of these late successional trees on the fisher's ability to forage in the project area (KSWC, p. 15)?

Response: Since the publication of the Double Bowen EA in August 2014, the US Fish and Wildlife Service issued a proposal to list the West Coast distinct population segment of the fisher as a threatened species under the Endangered Species Act on October 7, 2014. The EA included a brief summary of the impacts to fisher in Appendix H (p. 163). The BLM's project wildlife biologist has completed a more thorough analysis of possible impacts to the fisher. It is included in this Decision Record.

Effects of this project on the fisher will be incorporated into a batched conference report to the US Fish and Wildlife Service later in 2015 that will analyze potential effects to the fisher on the Medford District.

Fire Hazard

Comment: A significant cumulative impact of regeneration harvest is the increase in fire hazard that puts nearby late-successional owl habitat at increased risk. There is no discussion in the fire and fuels sections of the EA of the impacts of regeneration harvest on fire hazard (KSWC, p. 22-23).

Response: The Double Bowen project was designed to meet multiple objectives that include "Reduce the potential risk of wildfire that may result from the fuels (e.g., limbs, branches, twigs) produced during harvest activities" and "Reduce tree densities to increase landscape resilience to environmental disturbances" (EA, p. 4). Fuels treatments after timber harvest will be based on an assessment by BLM fire and fuels specialists. The assessment will "determine the fuel hazard and fire risk based on surface fuel loading, aspect, slope, access, and location of each unit. . . . Most fuels treatments would begin within 90 days after completion of harvest activities" (EA, p. 13). The EA (p. 71) acknowledges "[i]mmediately following forest management activities and prior to slash disposal, fire behavior potential could increase from the current condition due to increased surface fuels." We do not agree this increase would be significant because only 42 acres, or 0.03%, in the 157,000-acre Big Butte Creek fifth-field watershed would be regeneration harvested. In addition, no harvest activities would occur within northern spotted owl RA32 habitat and within two 100-acre known northern spotted owl activity centers.

Cumulative Effects

Comment: The agency ignores cumulative impacts from ORVs and user created routes. There is no discussion of user created ORV routes to the soil resource, to wildlife, or to the watershed (KSWC, p. 27).

Response: Off-highway vehicle use was not identified as an issue for analysis (EA p. 7). The area of the Double Bowen Project is designated Open to off-highway vehicles and user-created off-highway vehicle routes have developed over the years (EA p. 73). Recreational use in the Double Bowen project area is generally low and dispersed in nature, consisting primarily of hunting, camping, and off-highway vehicle riding. Timber harvest on flatter ground has the potential to 'open up' land to off-highway vehicle intrusions. This would be mitigated with effective barricading adjacent to roadways using boulders, slash, and logs to block vehicle access. The decommissioning of user-created vehicle routes and the closing, gating, and decommissioning of BLM system roads would prevent off-highway vehicle access. Closed routes would still be available for hiking, equestrian, and bicycle travel opportunities (EA p. 73).

The BLM proposes to close and decommission roads that are not needed at this time but may be used in the future. Roads would be closed with a device similar to an earthen barrier or equivalent and would not be maintained in the future. Roads would be closed to vehicles on a long-term basis, but may be used again in the future. Closing and decommissioning roads in the Project Area would help reduce off-highway vehicle use, illegal firewood cutting, and poaching (EA p. 81).

The following Project Design Features would help in restricting user created off-highway vehicle routes:

- Place woody debris or other appropriate barriers (e.g., rocks, logs, and slash) on the first 100 feet of skid trails leading off system roads in all ground-based yarding units upon completion of yarding.
- Rip, mulch, water bar, block, and seed (where needed as determined by the BLM) new temporary routes and associated landings in the same season of use. If hauling on a temporary route is not completed in the same year the route is constructed, the route will be storm-proofed and blocked by October 15 or when soil moisture exceeds 25%.

Purpose and Need

Comment: We request the agency consider an alternative that meets the project's purpose and need: namely, small-diameter thinning to increase fire resiliency in these forest stands and preserve late-successional character in this heavily logged watershed (KSWC, p. 30).

Response: The BLM has included an adequate range of alternatives in the Double Bowen EA that meets the project's purposes and needs, including designing and implementing timber sales on matrix lands to produce revenue for the Federal government, to varying degrees. An alternative that consists solely of small diameter thinning that targets younger stands (less than 50 years old) would not address the need for reducing the number of trees in older, overstocked stands in order to produce more resilient stands or the purpose of reducing stand densities in stands greater than 100 years old. The BLM is required to include a discussion of a range of

reasonable alternatives to the proposed action, alternatives that are technically and economically feasible, that meet the purposes and needs, and that have a lesser environmental impact. An EA is a "concise public document" that discusses whether or not an EIS needs to be prepared, and provides the evidence for that decision. NEPA does not require a specific or minimum number of alternatives (43 CFR 46.310[b]; 43 CFR 46.415[b]). A "rule of reason" standard guides the range of alternatives, and does not require the BLM to include or evaluate every conceivable possible alternative.