



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

### MEDFORD DISTRICT OFFICE



## FINDING OF NO SIGNIFICANT IMPACT (FONSI)

### for the

## PILOT THOMPSON PROJECT

(DOI-BLM-OR-M060-2013-0003-REA)

### INTRODUCTION

The Revised Environmental Assessment (REA) for the Pilot Thompson Project (DOI-BLM-OR-M060-2013-0003-REA) documented the environmental analysis conducted to estimate the site-specific effects on the human environment that may result from the implementation of the Pilot Thompson proposal. In response to Interdisciplinary Team and public comments received during the original Pilot Thompson EA review period, a revision of the Environmental Assessment was completed and posted to the Medford District website (<http://www.blm.gov/or/districts/medford/plans/index.php>) and the Pilot's website (<http://www.blm.gov/or/districts/medford/forestrypilot/pilot-projects.php>) on August 1, 2013.

The Pilot Thompson Project REA documented the analysis of the BLM's proposal to treat 2,354 to 2,720 acres of Dry Forest vegetation using various commercial and non-commercial forest management methods, including proposed treatments within Riparian Reserves. A range of zero to 0.62 miles of new road construction was proposed to access harvest units. An estimated 45 to 47 miles of existing roads would be used as haul routes and improved as needed to meet BLM standards. Renovation of up to 3.37 miles and decommissioning of 2.55 miles of road was also proposed.

The ecological forestry project objectives would be achieved by implementing a series of forest prescriptions that define the size of material, the species, and the conditions that guide selection of trees to be removed or retained. Each prescription was tailored to a specific forest type based on plant associations. The prescriptions were designed to restore forests and landscapes to conditions that are both more resistant and resilient to disturbances and that provide the diversity needed to restore and maintain native biodiversity and essential ecosystem functions. Restoration of ecosystems at the stand and landscape scale were a primary focus, rather than singular goals, such as fuel and wildfire abatement, timber production, or wildlife habitat.

The project area includes BLM-administered lands located within the Thompson Creek and the Slagle Creek (Ferris Gulch portion) sub-watersheds of the Middle Applegate River Watershed. The Public Land Survey System (PLSS) description of the Pilot Thompson Project is T38S-R04W-Sections 19, 20, 27-31, 33, 34; T39S-R05W-Sections 12, 25; and T39S-R04W-Sections 3-6, 8, 9, 19, 30, 31 in Jackson County, Oregon, Willamette Meridian.

Based on the context and intensity of the impacts analyzed in the Pilot Thompson REA (Chapter 3), I have determined that my decision to implement the proposal, as described in the Decision Record for the Pilot Thompson Project, is not a major Federal action that would significantly affect the quality of the human environment, individually or cumulatively, with other actions in the general area. I considered the following criteria, suggested by CEQ (40 CFR 1508.27), for evaluating intensity or severity of the impact of the Pilot Thompson Project.

The Pilot Thompson Project will:

**1. *Not result in significant beneficial or adverse effects.***

The Pilot Thompson Project Revised EA documented the site-specific analysis of effects to the environment. Required Project Design Features (PDFs) are an integral part of this forest management project, ensuring that any potential for adverse effects on resources are avoided or minimized to the extent possible. Based on the analysis documented in the REA (Chapter 3) there will be no significant adverse or beneficial effects as a result of implementing the Pilot Thompson Project under any action alternative.

- Soil productivity would be protected by implementation of the following:
  - All skid trail locations would be approved by BLM. Maximum area per unit in skid trails would be 12 percent. Existing skid trails would be utilized when possible. Tractors would be equipped with integral arches to obtain one end log suspension during log skidding. Skid trail locations would avoid ground with slopes over 35 percent and areas with high water tables. The intent is to minimize areas affected by tractors and other mechanical equipment (disturbance, particle displacement, deflection, and compaction) and thus minimize soil productivity loss (REA, pp. 2-34, 3-45).
  - When operationally feasible, all units would be yarded in such a way that the coarse woody debris remaining after logging would be maintained at or greater than current levels in order to protect the surface soil and maintain productivity (REA, pp. 2-34 and 3-59).
  - Soil productivity would experience a slight (less than 15 percent), negative decrease short-term, but potential long-term positive effects would be realized by thinning and prescribed fire of density management units. There would be a slight to moderate (15-50 percent) increase in erosion rates as a result of the combination of harvesting timber and fuel reduction activities (i.e. slashing, prescribed burning) which would last approximately three to five years. A slight cumulative long-term increase in erosion rates would occur as a result of harvesting activities (REA, 3-56).
  - Under Alternative 3, soil productivity on an additional 106 acres of non-commercial treatments is expected to be the same as described under Alternative 2; soil disturbance from helicopter yarding is expected to be less than both cable and tractor yarding; and soil productivity is expected to increase in Riparian Reserve Thinning units where trees would be cut and left on-site (REA, p.3-59).
- Soil erosion and compaction from tractor, cable, and helicopter yarding, permanent road construction, temporary road construction, road renovation, and road maintenance would be minimized through the application of Best Management Practices (BMPs) to be implemented through required Project Design Features (PDFs) (REA, pp. 2-34 to 2-35, 2-37 to 2-39, 3-47, 3-50, 3-56, and 3-58 to 3-59).
  - All applicable BMPs for road construction, improvements, and renovation will be implemented. Under Alternative 2, soil disturbance due to road renovation and improvements would be minimal as actions would be confined to the existing road prism, which has already been disturbed, and implementation of Project Design Features would help to minimize soil erosion, prevent movement of soil particles from the road, and discourage future use of the road bed by OHVs. Although some soil disturbance would occur under Alternative 2, in the end, a small net decrease in total road miles would occur and implementation of associated Project Design Features would minimize the potential for impacts to soils from construction, renovation, and decommissioning to occur (REA, p.3-50).
  - Under both Alternatives 2 and 3, there would be a net increase in compacted area in the tractor harvest units, averaging about 12 percent, which would slightly decrease soil productivity long-term. Based on research and past monitoring of operational activities, it is assumed there would be a 5 percent loss of productivity on all lands that would be tractor harvested using designated

- skid trails. The loss is accounted for in the (Medford District) non-declining timber harvest calculations (USDI 1994). Soil productivity would experience a slight (less than 15 percent), negative decrease short-term, but potential long-term positive effects would be realized by thinning and prescribed fire of density management units. There would be a slight to moderate (15-50 percent) increase in erosion rates as a result of the combination of harvesting timber and fuel reduction activities (i.e. slashing, prescribed burning) which would last approximately three to five years. A slight cumulative long-term increase in erosion rates would occur as a result of harvesting activities. There are no harsh or poor sites being treated, as such sites were screened through the Timber Productivity Capability Classification process and taken out of the timber harvest base (REA, p.3-56).
- Alternative 3 would not displace any soil due to road construction. Compared to Alternative 2, an additional 0.07 miles (totaling 3.37 miles) of road renovation is proposed under Alternative 3. An additional 1.7 miles (totaling 46.7 miles) of road would be used as haul routes and improved as necessary. The difference in miles of renovation and improvement would increase the amount of ground disturbed and the potential for soil displacement; however, on the larger scale of the project area, the amount of change is minimal. A reduction (71 acres) of proposed cable yarding would result in fewer acres of soil disturbance. In-unit soil disturbance from helicopter yarding is expected to be less than both cable and tractor yarding. Nine existing helipads would be used under Alternative 3. No new compaction is expected to occur from the use of helicopter landings (REA, p.3-59).
  - The amount of short term soil disturbance would be greater in Alternative 2 than Alternative 3, primarily due to the differences in road construction (REA, p. 3-59).
- Water quality and aquatic habitat would be maintained:
- No harvest would be allowed within Riparian Reserves of perennial channels. Where harvest occurs adjacent to other types of streams, no trees would be cut within 50 feet of either side of the channel (REA, p. 2-35). With minimal disturbance utilizing cable logging systems and an effective filter strip, sediment delivery attributable to harvest is unlikely within Riparian Reserves. Where full “no harvest” Riparian Reserve buffers will be maintained, sediment delivery to streams would be unlikely as well. Baseflows would remain unaffected as the magnitude of vegetation removal would not significantly reduce transpiration. Since harvest proposed within Riparian Reserves would occur adjacent to intermittent streams only, combined with a no-cut buffer and limited tree removal, stream temperatures would not be affected by the proposal and the project is in compliance with both the Applegate Sub-basin TMDL (ODEQ 2003b) and Water Quality Restoration Plan (USDA and USDI 2005) (REA, p. 3-69), and the Aquatic Conservation Strategy (REA pp. 3-89 to 3-92).
  - Under Alternative 2, none of the proposed new road construction would occur within Riparian Reserves; however, one new road located in units 6-1 and 6-2 is proposed on a relatively steep slope. This will necessitate full bench construction in places. This type of disturbance can elevate the potential for altering sub-surface flow and increases the probability of slope failure. Based on the area’s stable geology and lack of vegetative indicators of high groundwater, the likelihood of this occurring is low and, if it were to occur, sediment transport to stream channels is unlikely due to slope position and lack of connectivity to streams (REA, p. 3-69).
  - Sediment production resulting from road use and construction may increase in the short term. In many cases riparian vegetation vigor would improve over time, thus potentially decreasing stream temperatures (REA, p. 3-71).
  - Project Design Features and BMPs are designed to protect water quality and are integral in ensuring compliance with applicable State and Federal statutes, such as the Clean Water Act (CWA). BMPs required for this project are contained in the Medford District Resource Management Plans (USDI 1995), and include newly revised road BMPs that were incorporated as part of an RMP update (USDI 2011). The implementation of Project Design Features (PDFs) and

BMPs would result in minor increases of sediment routed to stream channels, largely the result of road use and haul. Not considering temporary road construction, which would be fully decommissioned following use, both action alternatives provide for a net reduction of 2.18 to 2.55 miles of system road within the analysis area. The elimination of these sources of both chronic and episodic sediment would result in a likely minor but long-term reduction of sediment delivery to channels within the analysis area (REA, pp. 3-70, 3-72).

- Skid trails would be water barred according to BLM standards. Main tractor skid trails would be blocked with an approved barricade and camouflaged with slash and other debris where they intersect haul roads. The intent is to minimize erosion and routing of overland flow to streams by decreasing disturbance (e.g. unauthorized use by OHVs (REA, p. 2-34).
  - Wherever trees are cut to be removed, directional felling away from Riparian Reserves, dry draws, and irrigation ditches would be practiced. Maximum operational suspension would be practiced to alleviate gouging and other disturbance on draw side slopes and headwalls. Trees would be felled to the lead in relation to the skid trails (REA, p. 2-34).
  - Tractor yarding would occur between May 15 to October 15 or on approval by the Authorized Officer. Some variations in these dates (early or later) would be permitted dependent upon weather and soil moisture conditions (less than 30 percent moisture at 3 inches depth). The intent is to minimize off-site erosion and sedimentation to local waterways. The authorized officer can approve operations outside of the above dates based on input from BLM's staff watershed specialist's (hydrologist, fisheries biologist, or soil scientist) (REA, p. 2-35).
  - Minimize yarding corridors within Riparian Reserves. Full suspension of logs is required across all stream channels (REA, p. 2-35).
  - Trees would be directionally felled away from the stream channel and end-lined from outside the Riparian Reserve. Where excess ground disturbance has been identified as a potential source of sediment, slash and other approved material would be scattered to maintain a minimum of 80 percent ground cover (REA, p. 2-35).
  - Logging slash would be piled outside the 50 feet no treatment buffer within Riparian Reserve Thinning units (REA, p. 2-35).
  - All road and landing construction and renovation would not occur during the winter months (October 15 to May 15) when the potential for soil erosion and water quality degradation exists (REA, p. 2-37).
- The effects of implementing vegetation treatments and transportation management activities under Alternative 3 would be the same as described for Alternative 2, except for the following differences: (1) trees marked for harvest that are 14 inches DBH and greater would be directionally felled toward the channel and left on-site for down wood recruitment, and (2) there are no new roads proposed, therefore, there would not be any short- or long-term increases in sediment attributable to road construction as described in Alternative 2. This alternative provides for a net reduction of 2.55 miles of system road within the analysis area, an increase of 0.37 miles from Alternative 2 (REA p. 3-71).
  - No measurable changes in the aquatic habitat conditions are anticipated to result from implementation of Alternative 2 or Alternative 3. Upland work, including timber harvest and follow up fuels treatments would have no effect on fine sediment levels, due to the filtering action of Riparian Reserve buffers, extensive PDFs designed to prevent overland sediment movement, and normal BMPs. Stream temperatures would not be affected, as no riparian vegetation adjacent to perennial streams that provides primary shade would be removed (REA p. 3-80). Sediment

increases due to the proposed activities that would be hydrologically connected to the stream network, which includes road renovation and the skid trail crossing, would be minor and undetectable relative to existing sediment levels and would not contribute measurable or detectable effects above already elevated background levels (REA, pp. 3-85 and 3-86).

- The frequency and magnitude of peak flow would not be altered.
  - Canopy cover for the analysis area was estimated based on an aerial photo survey using BLM aerial photos and is displayed in Table 3-12. The historic crown closure for this eco-region is listed as greater than 30 percent (WPN 1999, Appendix A). The crown cover across all the drainage areas is within established ranges and increases in peak flows are not expected to occur (REA 3-67).
  - Overall, both action alternatives do not reduce canopy cover below critical thresholds or result in increases in road density. These would be the primary catalysts that may trigger synergistic responses. The proposal does not appreciably decrease canopy cover within the TSZ; therefore, there are no expected increases in peak flow (REA, p. 3-71).
- The Pilot Thompson Project was evaluated for consistency with the Northwest Forest Plan Aquatic Conservation Strategy Objectives. There will be no significant effect to any of the nine indicators that will prevent attainment of these objectives (REA, pp. 3-89 to 3-92).
- While fuel levels would increase immediately following forest management activities by approximately 3-11 tons per acre (REA, p. 3-28), this increase in fuel loading will not create a significant increase in the risk of large-scale wildfires for the short-term. This is because:
  - Reduced fire ladders and canopy fuels from forest thinning, would reduce fire behavior such as flame length, rate of spread, and fire duration. With the reduction of flame length and fire duration, the chance of a crown fire initiating in treated stands would be greatly reduced. Also, mortality of the smaller diameter conifers would be reduced. Treatments should ensure that under most climate conditions, flame lengths would be less than three feet allowing for direct attack of a wildfire (REA, p. 3-28).
  - The temporary increase in surface fuels usually lasts less than one year (but can be up to two years) (REA, p. 3-28).
  - Constructed burn piles will be dispersed across treatment areas, and will be burned when soil and duff moisture are high (REA, p. 2-37).
  - Prescribed burns would be performed when moisture conditions are high enough and prescription windows are at a level so that no more than 50 percent of the mound depth/duff layer around pine trees is consumed during burning (REA, p. 2-40).
  - Due to the small amount of acres being treated and the rare occurrence of a wildfire in the project area, the probability of a fire occurring in a harvested unit is very remote (REA, p. 3-28).
  - Forest thinning prescriptions would result in a reduction in ladder fuels, an increase in the height to the base of tree crowns, and the reduction of crown bulk density (canopy fuels) (REA, p.3-29).
  - As a result of ongoing programs to implement defensible space around structures, driveways and roads for potential escape/evacuation routes, the risk of structure and human life loss during wildfire events continually decreases (REA, p. 3-27).
  - Prescriptions are developed for spring burning to consume smaller fuels (1/4 inches to 3 inches) and to retain the majority of large down woody debris due to the higher dead fuel moistures. Spring burning conditions keep fire intensity low, so impacts to the residual vegetation is minimal and the chance of escape is also minimized (REA, p. 3-33);
- Prescribed burning operations would follow all requirements of the Oregon Smoke Management Plan and the Department of Environmental Quality Air Quality and Visibility Protection Program (REA, p. 3-33).

- Impacts to Endangered Species Act (ESA) listed threatened and endangered species are discussed in CEQ consideration number 9 below.
- Surveys were completed for great grey owls (GGO) within the project area. A new GGO reproductive site was located by BLM employees in the course of their work in unit 30-2. A protection buffer of approximately 100 acres has been designated for this site. Unit 30-2 will be reduced in area by the size of this buffer (REA, p. 3-104). The reduction of canopy closure from these treatments will not impact owl nesting opportunities, as the majority of existing nest sites in the analysis area will remain in place, post-harvest. Implementing the required PDFs (seasonal restrictions, retaining snags, cull material, and down woody debris retention) will be beneficial to this species prey base. Road construction and timber harvest are expected to have minimal effect on GGO, where present, and minimal effect on the potential for GGO to use this habitat for future breeding, foraging, and dispersing. These effects are not expected to be significant, as the majority of habitat used by GGO will remain intact, post-treatment. No significant cumulative effects are anticipated for GGO (REA, pp. 3-113 to 3-114).
- Special Status and/or Survey and Manage mollusk species would be protected through the combination of no treatment buffers and the protection of high-quality habitat (REA p. 3-113).
- There are no known golden or bald eagle nests in the project area. There are trees in the project area large enough to support nests for both species that would remain post-harvest. Nest locations located prior to or during Project implementation would be protected under the 1995 RMP and the National Bald Eagle Management Guidelines) (for bald eagles). Effects to bald eagles are expected to be minimal and will not trend them towards further listing. No cumulative effects are anticipated to either species (REA, p. 3-116 to 3-118).
- This project is not expected to affect long-term population viability of any bat species in the project area. Project Design Features and marking guidelines requiring the retention of snags, decadent wildlife trees, buffering of mines, Riparian Reserves, 100-acre spotted owl KSOAC cores, LSEAs, and other reserves, would continue to provide undisturbed habitat for these sensitive bat species. With implementation of this project, effects to bats are expected to be minimal. The proposed actions would not cause bat species occurring in the project area to trend towards further listing. No significant cumulative effects are anticipated to these species (REA, p. 3-116).
- There is very little habitat (talus) present in any of the treatment areas; these areas have been flagged on the ground or incorporated into “skips” in areas where management activities are proposed. Therefore, there are no anticipated impacts to the Siskiyou Mountain Salamander from the activities proposed under Alternative 2 or 3 (REA, pp. 3-116 and 3-118).
- Even though the proposed actions may potentially adversely disrupt local individuals of sensitive wildlife species and may cause the loss of habitat in some cases, this project is not expected to affect long-term population viability of any Bureau Sensitive or Survey and Manage wildlife species known to be in the area. Additionally, this project combined with other actions in the watershed would not contribute to the need to Federally list any Bureau Sensitive or Survey and Manage wildlife species, because of the small scope of the proposed action compared to the available habitat within the analysis area. Implementation of all potential treatments proposed under Alternatives 2, and 3 would treat only 7 percent or less of the analysis area (REA, pp. 3-117, 3-119, and 3-121).
- Effects to big game as a result of project implementation are expected to be minimal and no significant cumulative effects are anticipated to these species (REA, p. 3-117).
- Coarse woody debris (CWD) would be retained and protected from disturbance to the greatest extent possible during burning. In the NRF treatments, no broadcast burning would occur post-harvest to insure the CWD is maintained (REA, p. 3-110).
- There would be no effect on sites of Bureau Special Status or Survey and Manage plant species; no-treatment buffers would protect rare plant populations from timber harvest, road construction, silvicultural or fuels treatments, and post-harvest slash treatments (REA, p. 3-131).

- Because the BLM has surveyed harvest units, landings, and areas proposed for road construction for Special Status and S&M vascular and nonvascular plants and for Sensitive and S&M fungi in the highest likely habitat and in 180-plus year old stands, and will protect any sites discovered, project activities proposed under Alternatives 2 and 3 would not result in any cumulative impact to these species (REA, p.3-134).
- In the short term (approximately 1-5 years), proposed timber harvest activities within the project area could result in a moderate probability of introducing or spreading noxious weeds. However, the rate at which weeds could potentially spread as a result of these activities cannot be predicted due to the indistinguishable causal effect of other activities and factors listed in Table 3-29 of the REA (pp. 3-128 to 3-129). Implementing PDFs and continuing weed treatments would mitigate the risk of overall spread, as well as likely improve habitat in the watershed by eliminating small infestations and decreasing larger ones (REA, p. 3-133).
- The types of prescriptions proposed in each of the project units would not change the overall character of the landscape for the average recreationist, and therefore, would not impact the desirability of the area for dispersed recreation in the long-term. It is expected that any decline in recreational visitation would be short-term and that these levels would return to the pre-project levels (REA, p.136).
- The effects on the visual resources within the project area (VRM Class III and Class IV zones) are expected to be within the range as described under VRM guidelines, that activities may attract attention but would not dominate the view of the casual observer. The action alternatives in the Pilot Thompson Project would result in a low level of change visually to the characteristic landscape. These changes would not dominate the view of the casual observer. It is determined that both Alternative 2 and Alternative 3 would meet Visual Resource Management objectives for all BLM managed lands within the Pilot Thompson project area (REA, p. 140).
- Pilot Thompson Project treatments will reduce carbon stores temporarily, but will result in net increases over time (REA, p. 3-147). The total carbon dioxide emitted during the 20 year analysis periods is considered negligible in the context of total U.S. carbon dioxide emissions of 6 billion metric tons (DOE 2009) for both Alternatives 2 and 3 (REA, p. 3-148).

## ***2. Not result in significant impacts on public health or safety.***

No aspects of the Pilot Thompson Project have been identified as having the potential to significantly and adversely impact public health or safety.

Prescribed burning operations will follow all requirements of the Oregon Smoke Management Plan and the Department of Environmental Quality Air Quality and Visibility Protection Program, ensuring that smoke related impacts to public health and safety are mitigated. By implementing actions to minimize smoke effects and by complying with DEQ regulations, smoke associated with the proposed action will not reduce air quality of the Medford/Ashland area (REA, p. 3-31 to 3-32 and 3-151 to 3-152).

## ***3. Have no significant, adverse effects on unique characteristics of the geographic area.***

No wilderness areas, wilderness study areas, prime farmlands, wild and scenic rivers (or rivers suitable for wild and scenic designation), caves, parks, refuge lands, or areas of critical environmental concern exist in the Pilot Thompson project area.

## ***4. Not have highly controversial environmental effects.***

“Highly controversial,” in the context of 40 CFR 1508.27(b) (4), refers to substantial disagreement within the scientific community about the environmental effects of a proposed action. It does not refer to expressions of opposition or expressions of preference among alternatives or differences of opinion concerning how public lands should be managed.

The effects for the Pilot Thompson Project are within the scope of the 1995 Medford District Resource Management Plan and are similar in nature to many other forest management projects that have been implemented across the Medford District. The anticipated effects of harvesting timber, post-harvest fuels reduction, road work, including new road construction, renovation, and decommissioning, documented in Chapter 3 of the Pilot Thompson REA are well-known, and no highly controversial effects have been identified.

The environmental effects findings presented in the REA concern the implementation of the forest action proposed for the Pilot Thompson Project. Many comments were received stating opinions of how restoration could be done differently, how various different sizes of trees could be marked, or how more aggressive or less aggressive timber harvest could be implemented. The Purpose and Need of the Pilot Thompson Project is to continue to demonstrate the approach outlined by Drs. Franklin and Johnson, not to demonstrate a variety of forest management strategies.

**5. *Not have highly uncertain and potentially significant environmental effects or unique or unknown environmental risks.***

The analysis does not show that this action will involve any unique or unknown risks. The silvicultural prescriptions and harvesting methods are similar methods used on a regular basis for managing forest stands on BLM-administered lands. The anticipated effects of implementing the Pilot Thompson Project are well supported with referenced literature throughout the REA, and are similar in nature to the effects estimated and observed for other timber sales implemented on the Medford District BLM.

**6. *Not establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects.***

The decision to implement the Pilot Thompson Project will not set any precedents for future actions with significant effects. The project will inform discussion about forest planning just as the many projects that have come before will also be used to inform future planning efforts.

The Pilot Thompson Project was designed to meet objectives and will implement actions approved for forest management under the 1995 Medford District Resource Management Plan, and is therefore not precedent setting (see CEQ consideration number 10).

**7. *Not result in significant cumulative environmental effects.***

Cumulative environmental effects are “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions” (See definition of “cumulative impact” in 40 CFR § 1508.7).

Analysis was performed at multiple scales, and included the consideration of past actions (as reflected in current conditions), current actions, and foreseeable future actions on both private and federal lands. Details of these actions are included in Chapter 3 of the REA (REA, pp. 3-1 to 3-3, *Consideration of Past, Ongoing, and Reasonably Foreseeable Actions in Effects Analysis*), and analysis was performed and documented by resource specialist. No significant cumulative impacts were identified.

Also refer to criteria number one above for determination of presence of significant adverse or beneficial effects that could contribute to significant cumulative effects. None were identified.

**8. *Have no significant effects on scientific, cultural, or historical resources, including those listed in or eligible for listing in the National Register of Historic Places.***

In accordance with the protocol for managing cultural resources on lands administered by the Bureau of Land Management (BLM) and the National Historic Preservation Act of 1966 (specifically section 106), as amended, a literature review and archaeological reconnaissance was conducted for the Heppsie Project Area. To date, over 10 previously recorded archaeological sites are located within the project boundaries, all historic in nature and associated with mining operations (REA, p. 3-150). Vegetation treatment and timber harvesting analyzed under

the REA would be guided by Project Design Features (PDFs) (Chapter 2, Section C.4) to avoid direct and minimize indirect effects to cultural resources (REA, p. 3-151).

**9. *Have no adverse effects on species listed or proposed to be listed as Federally Endangered or Threatened Species, or have adverse effects on designated critical habitat for these species.***

A Biological Assessment (BA), completed by the BLM, concluded that the potential effects from the Pilot Thompson Project *may affect, are likely to adversely affect (LAA)* the northern spotted owl. Pursuant to the Endangered Species Act (ESA), formal consultation was completed with the US Fish and Wildlife Service. The Service concluded in its Biological Opinion (#01EOFW00-2013-F-0091) that the proposed activity was found to be *likely to adversely affect* northern spotted owls, but *not likely to jeopardize* the continued existence of the spotted owl. No “take” of northern spotted owls is anticipated. The District’s proposed action is not likely to jeopardize the continued existence of the spotted owl (Biological Opinion #01EOFW00-2013-F-0091, p. 67; REA, pp. 3-106 to 3-113).

- Implementation of Project Design Features that would retain and/or place large down wood while also retaining snags in the treatment units will provide cover for prey species, and will help minimize harvest impacts to prey habitat (REA, p. 3-110).
- Since all projects would follow mandatory PDFs that restrict activities to outside of the breeding season and beyond recommended disturbance distance thresholds, as established by the US Fish and Wildlife Service, no harm to nesting owls, or their young, is expected from project related noise or activities (REA, p. 3-110).
- While some prey species may be adversely affected from fuels treatments, a proportion of the prey is primarily arboreal in habit, and would remain largely unaffected by these treatments. Coarse woody debris (CWD) would be retained and protected from disturbance to the greatest extent possible during burning. In the NRF treatments, no broadcast burning would occur post-harvest to insure the CWD is maintained. Approximately 10 percent of the hand-piles created from hazardous fuels reduction treatments would be left unburned across the treatment areas to provide refugia for small mammals and other species (REA, p. 3-110).
- Many of the treatments as proposed under Alternative 2, especially those that would occur in dispersal quality habitat, would have long-term beneficial effects to NSOs by increasing growth rates of the residual stand and accelerating the development of late-successional structural complexity within the treated areas than would occur if left untreated (REA, p. 3-112).
- **Conservation Measures** implemented that will reduce impacts to spotted owls or key habitat areas are (REA, pp. 3-112 to 3-113):
  - Spotted owl habitat assessments were used to reduce impacts to NRF and eliminate treatments in RA-32 habitat
  - Protection and buffering of Special Status Species sites found during protocol surveys
  - Protection of sensitive plants that occur in the treatment areas
  - Placement of riparian area buffers
  - Protection and buffering of all known mining adit locations
  - Project design that incorporated historic owl survey data assessments
  - None of the projects occur within known NSO nest patches
- In summary, Alternatives 2 and 3 would have minimal impacts to the NSOs found within the planning area given that (REA, pp. 3-112 to 3-113, 3-118):
  - No treatments would occur within any known NSO nest patches (only within the nest patch of a generated site).

- The majority of the physical structure of the habitat in the treatment areas would still be present after implementation;
  - Treatments would increase growth rates of the residual stand and accelerate the development of late-successional structural complexity within the treated areas in the long-term;
  - Treatments would reduce competition and increase the vigor of the residual trees left in the stand, while simultaneously reducing ladder fuels and decreasing the fire hazard rating of the stand;
  - LSEAs would provide a large amount of contiguous dense, closed-canopy, mature and late-successional forest habitat;
  - Negative impacts to NSO prey are anticipated to only occur in the short term (less than 5 years) and would be spatially separated and well distributed across the analysis area; and
  - Seasonal restrictions will reduce the likelihood of noise disturbance to nesting owls and would avoid adverse disturbance during road construction, road decommissioning, and road maintenance.
- The amount of downgrade of NRF habitat at the watershed level would not preclude spotted owls or other late-successional forest species from dispersing within or through the watersheds. Additionally, even when the Pilot Thompson Project is combined with current and foreseeable actions, it is unlikely the actions proposed in this project would appreciably reduce or diminish the chances of survival or recovery of the northern spotted owl. This is because of the small percentage of suitable habitat affected at the provincial and the regional population levels. The level of harvest associated with this project would not preclude owls occupying historic home ranges and continuing to reproduce in the project area and watersheds, including the LSEAs. Barred owls have been documented in the project area. It is anticipated that the protection of RA-32 habitat and the delineation of LSEAs would provide refugia from the intrusion of barred owls (REA, p. 3-120).

The Pacific fisher (*Martes pennanti*) was petitioned for listing as endangered or threatened under the Endangered Species Act on December 12, 2000. In 2003 the USFWS released their notice of 90-day petition finding and initiation of status review (68 Federal Register, No. 132, 41169-41174) and in 2004 published their Notice of 12-month petition finding, concluding that listing fishers as threatened was warranted, but was precluded by higher priority listing actions (Federal Register Vol. 69, No. 68, April 8, 2004, 18769-18792). The species remains a USFWS candidate species (USDI, USFWS 2004, 71 Fed. Reg. 53777, Sept. 12, 2006).

- Implementation of the Pilot Thompson Project includes PDFs that will minimize impacts to fishers, including the retention of key structural elements such as mature and decadent trees, snags, CWD, mistletoe, and large hardwoods for denning. While two (2) percent of NRF habitat within the analysis area is proposed for treatments, areas such as Riparian Reserves, NSO RA-32 habitat, 100-acre KSOAC owl cores, LSEAs, and other designated reserves will continue to provide undisturbed habitat for fishers. Because of the retention of these habitat features in the analysis area, effects to fishers from implementation of this project are expected to be minimal and will not trend this species towards further listing. The proposed road decommissioning and the preservation of functional elements of NRF habitat in conjunction with the anticipated benefits to forest health from proposed treatments have the potential to contribute to the persistence and recovery of the fisher population in this area. No significant cumulative effects are anticipated to this species (REA, pp. 3-114 to 3-116).

Bureau Special Status Plants, Lichens, and Fungi (SSP) include species that are listed as threatened or endangered under the Endangered Species Act (ESA), proposed or candidates for listing, State listed, and Bureau designated Sensitive species. Per BLM Manual 6840 (Section .06), Bureau Sensitive Species will be managed consistent with species and habitat management objectives in land use and implementation plans to promote their conservation and to minimize the likelihood and need for listing under the ESA. Project implementation will adhere to the requirements set forth in Section 6840.2.C (REA, p. 3-121).

All of the proposed treatment areas have been surveyed for Bureau Special Status and Survey and Manage vascular and nonvascular (lichens and bryophytes) plants. Surveys are conducted to conform to the *FY 2009-2013*

*Programmatic Assessment for Activities that May Affect the Listed Endangered Plant Species Gentner's Fritillaria, Cook's Lomatium, McDonald's Rockcress, and Large-Flowered Woolly Meadowfoam, and are valid for 10 years (REA, p. 3-122).*

- Fifteen occurrences of seven Bureau Special Status and S&M plant species are present within units proposed for treatment under the Pilot Thompson Project (*Fritillaria spp.* leaves are not counted here). There are no known *Fritillaria gentneri* populations within the project area. The specific identification of the two *Fritillaria spp.* leaves found in non-commercial fuel reduction units in T39S-R5W-Section 25 is unknown at this time, so they will be protected as if they are *Fritillaria gentneri* per the Programmatic BA/BO (USDI 2008c). For these reasons, there will be no effect on *Fritillaria gentneri* (REA, p. 3-131).
- It is expected that the protection measures described in Table 3-30 of the REA will protect Special Status plants and populations by not trending them towards listing, and will assure local persistence of Survey and Manage species and their habitat. There will be no effect on Bureau Special Status or Survey and Manage plant species as a result of implementing either Alternative 2 or Alternative 3 (REA, pp. 3-131, 3-133).

Both Alternative 2 and Alternative 3 have been determined to have “*No Effect*” Southern Oregon Northern California Coasts (SONCC) coho salmon, coho critical habitat (CCH), or essential fish habitat (EFH). This determination was made based on analysis to fish and aquatic habitat in the REA. There is no expectation that actions described in the REA would affect survival or production of fish, nor would they meaningfully impact aquatic habitats in fish bearing channels and hence implementation of the action alternative would not affect fish populations or fish habitat (including listed SONC coho salmon, CCH, and EFH) in the analysis area streams or in the Middle Applegate River Watershed (REA, p.3-86 and Appendix B).

- Activities proposed in Riparian Reserves (RR) include thinning, road decommissioning, a skid trail, and log haul (REA, p.3-88).
  - Thinning would improve the condition of the Riparian Reserves by thinning mid-seral aged stands creating structural and species diversity. The riparian silvicultural prescription would not affect stream temperatures as the treatment areas are within intermittent stream reserves only.
  - Road decommissioning would improve a small stretch of Riparian Reserve in the Hinkle Gulch and Tallowbox Creek drainages by ripping the existing road segments, seeding and mulching. This proposed decommissioning would slightly improve Riparian Reserves at the site level by decreasing road densities. Over the long term, trees would grow in the road prism, eventually providing shade and large wood.
  - Prior to harvest, bump logs would be placed in the channel to minimize disturbance. Following harvest any berms or ruts would be leveled to match the existing topography and slash and other debris scattered so that 80 percent ground cover is achieved. After the unit is treated, the bump logs would be removed and any loose soil removed from within the channel.
  - The proposed haul routes for the Pilot Thompson Project would occur on existing roads and mainly outside Riparian Reserves. PDFs would limit use to dry season haul and also requires dust abatement to minimize local impacts. Log haul would not change the existing condition of the RRs.
- Upland work, including timber harvest and follow up fuels treatments would have no effect on fine sediment levels, due to the filtering action of Riparian Reserve buffers, extensive PDFs designed to prevent overland sediment movement, and normal BMPs. Stream temperatures would not be affected, as no riparian vegetation adjacent to perennial streams would be removed (REA, p. 3-85).
- Sediment increases due to the proposed activities that would be hydrologically connected to the stream network, which includes road renovation and the skid trail crossing, would be minor and undetectable relative to existing sediment levels and would not contribute measurable or detectable effects above already elevated background levels

- New road construction and road renovation is not anticipated to contribute sediment to aquatic habitat or alter hydrologic functions, as none of the new construction is hydrologically connected to the stream system (REA, pp. 3-81 and 3-82).
- Roads proposed for decommissioning under both Alternative 2 and Alternative 3 would have no hydrological connectivity with streams. Therefore, while the resulting reduction in road densities in the Key Watershed would represent a positive trend to the gross indicator of watershed health, benefits to aquatic habitat would be negligible and immeasurable (REA, p. 3-82).

**10. Not Violate a Federal, State, Local, or Tribal law, regulation or policy imposed for the protection of the environment.**

The Pilot Thompson Project is designed to be in conformance with the *1995 Medford District Record of Decision and Resource Management Plan (RMP)*. The 1995 Medford District Resource Management Plan incorporated the *Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl and the Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl (Northwest Forest Plan) (USDA and USDI 1994)*. With implementation of required Project Design Features, the proposed action would not threaten a violation of any federal, state, or local environmental protection laws. Project Design Features are an integral part of the Proposed Action. They are developed to avoid or reduce the potential for adverse impacts to resources. The Project Design Features (PDFs) also incorporated Best Management Practices (BMPs) to reduce nonpoint source pollution to the maximum extent practicable. BMPs are considered the primary mechanisms to achieve Oregon Water Quality standards (REA, 2-33).

The Pilot Thompson Project is consistent with the 2001 *Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines (2001 ROD)*, as incorporated into the Medford District Resource Management Plan (REA, p. 1-8).

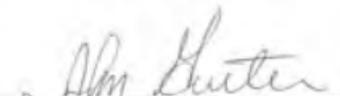
The Pilot Thompson Project defers proposed treatment in RA 32 stands identified by interagency survey guidance (USDA and USDI 2010) and is consistent with consultation completed with the U.S. Fish and Wildlife Service (USFWS), (USFWS 2011b and USFWS 2012b), therefore, the project is consistent with the *Revised Recovery Plan for the Northern Spotted Owl (USFWS 2011)*.

The Pilot Thompson Project is consistent with BLM Manual 6840 (USDI 2008), the purpose of which is to provide policy and guidance for the conservation of BLM special status species and the ecosystems upon which they depend on BLM-administered lands (REA, p. 1-10).

This decision is also in conformance with the direction given for the management of public lands in the Medford District by the Oregon and California Lands Act of 1937 (O&C Act), Federal Land Policy and Management Act of 1976 (FLPMA), the National Environmental Policy Act of 1969 (NEPA), the Endangered Species Act (ESA) of 1973, the Clean Water Act of 1987, Safe Drinking Water Act of 1974 (as amended 1986 and 1996), Clean Air Act of 1990, the National Historic Preservation Act of 1966 as amended, and the Archaeological Resources Protection Act of 1979 (REA, p.1-10).

## FINDING

I have determined the Pilot Thompson Project does not constitute a major Federal action having a significant effect on the human environment; an environmental impact statement is not necessary and will not be prepared. This conclusion is based on my consideration of the Council on Environmental Quality's criteria for significance (40 CFR § 1508.27), with regard to context and intensity of the impacts described in the REA, my understanding of the project, review of project analysis, and review of public comments. The analysis of effects documented in the REA has been completed within the context of multiple spatial and temporal scales and within the context of the 1995 Medford District Resource Management Plan and the Northwest Forest Plan and associated Environmental Impact Statements. The anticipated effects are within the scope, type, and magnitude of effects anticipated and analyzed in those plans.



John Gerritsma

Field Manager, Ashland Resource Area

Medford District, Bureau of Land Management



Date