



United States Department of the Interior  
BUREAU OF LAND MANAGEMENT  
MEDFORD DISTRICT OFFICE  
ASHLAND RESOURCE AREA  
3040 Biddle Road  
Medford, Oregon 97504



**DECISION RECORD**  
**For the**  
**HOWARD FOREST MANAGEMENT PROJECT**  
(DOI-BLM-OR-M060-2013-0007-EA)

## INTRODUCTION

This document describes my decision, and reasons for my decision, regarding the selection of a course of action to be implemented for the Howard Forest Management Project. The Environmental Assessment (EA) for the Howard Forest Management Project documented the environmental analysis conducted to estimate the site-specific effects on the human environment that may result from the implementation of the Howard proposal. The Howard EA was issued for public review on March 06, 2014. The EA public review period ended on April 05, 2014.

## BACKGROUND

The Howard Forest Management Project EA documented the analysis of the BLM's proposal to harvest trees on 638 acres of conifer forest stands on BLM-administered lands. The Howard Forest Management Project is located within the Upper Jenny Creek subwatershed of the Jenny Creek Watershed. The Public Land Survey System description for the Howard Project Area is: T. 38 S., R. 03 E., in sections 11-13, 23, and 26; T. 38 S., R. 04 E. in sections 7, 17, 19, and 29; T. 39 S., R. 03 E., in section 1; and T. 39 S., R. 04 E., in section 5; Willamette Meridian, Jackson County, Oregon (Maps 1 to 5).

## THE DECISION

As the Responsible Official, it is my decision to implement Alternative 2 as described in the Howard EA with one modification.

My decision authorizes the following actions:

- The implementation of timber harvest on approximately 612 acres (of the 638 acres analyzed in the EA under Alternative 2) of conifer forest stands using a variety of silvicultural prescriptions and harvest methods as described in the EA (pp. 2-1 to 2-4) (Table 1).
  - A new active Great Gray Owl (GGO) nest was located on the west side of Unit 11-1 triggering the implementation of a new GGO core site which overlaps with the unit; therefore, Unit 11-1 (26 acres) is no longer available for timber harvest and is not included in this decision.
- Post-harvest fuels reduction treatments will occur as described in the EA (pp. 2-4 and 2-5) and Table 1 to mitigate hazardous fuels generated from timber harvest (activity fuels).
- Timber harvesting activities and follow-up treatments will be implemented through a combination of commercial timber sale and service contracts.

- An estimated 17.2 miles of existing roads will be used as haul routes and maintained as described in the EA (pp. 2-6 and 2-7).
- At the road approach for Road 38-3E-13.05, a temporary culvert will be installed where the road crosses the roadside ditch. The road approach will be rocked, and the earthen berm will be removed for the timber harvest activities. At the completion of Project activity, the earth berm will be replaced, and the culvert removed (EA, p. 2-6).
- Road 38-4E-7.7 (an existing non-system road that continues through to US Forest Service lands) will be re-opened, rocked, and closed at the completion of Project activities (EA, p. 2-6).
- Additional road stabilization and/or drainage improvements will occur as described in Table 2-3 of the EA (pp.2-6 to 2-7).
- Construction of approximately 0.5 miles of temporary road to provide access to Units 1-1, 7-1, 13-4, 17-1, and 17-2 will occur (Table 2). Associated landings are incorporated into the temporary road design. Temporary roads will be fully decommissioned as described in the EA (pp. 2-7 and 2-8). Temporary road construction, use, and decommissioning activities will adhere to associated Project Design Features as described in the EA (pp. 2-17 and 2-18).
- Two of the temporary roads, located in T. 38 S., R. 4 E., Section 7 and T. 39 S., R. 4 E., Section 5, will include road approaches constructed off of County roads. Approaches will be rocked, used, and decommissioned as per County requirements (EA, pp. 2-7 and 2-8).
- Five roads (1.87 miles) will be decommissioned or placed in long-term closure as described in the EA (pp. 2-8 and 2-9) (Table 3).
- All Project Design Features, as described in the EA, will be carried forward into contracts as required contract specifications (pp. 2-15 to 2-23).

**Table 1. Howard Project Units by Prescription, NSO Habitat, Harvest Method and Assoc. Activities<sup>1</sup>**

Unit No.	Acres	Harvest Method	Silvicultural Prescription		Associated Treatments
			Harvest Prescription	NSO Habitat Type	
1-1	15	Tractor	Mixed Conifer selective thinning	NRF (M)	Activity Fuels
1-2	33	Tractor	Mixed Conifer density management	Dispersal (M)	Activity Fuels
1-3	4	Tractor	Mixed Conifer selective thinning	NRF (M)	Activity Fuels
1-4	7	Tractor	Mixed Conifer selective thinning	NRF (M)	Activity Fuels
7-1	44	Tractor	Mixed Conifer density management	Dispersal (M)	Activity Fuels
7-2	28	Tractor	Mixed Conifer density management	Dispersal (M)	Activity Fuels
13-1	15	Tractor	Mixed Conifer density management	Dispersal (M)	Activity Fuels
13-2	10	Tractor	Mixed Conifer density management	Dispersal (M)	Activity Fuels
13-3	11	Tractor	Mixed Conifer density management	Dispersal (M)	Activity Fuels
13-4	59	Tractor	Mixed Conifer selective thinning	NRF (M)	Activity Fuels
13-4	2	Tractor	Mixed Conifer selective thinning	NRF (M)	Activity Fuels
13-5	37	Tractor	Mixed Conifer selective thinning	NRF (M)	Activity Fuels
17-1	29	Tractor	Mixed Conifer density management	Dispersal (M)	Activity Fuels
17-2	9	Tractor	Mixed Conifer density management	Dispersal (M)	Activity Fuels
17-3	9	Tractor	Mixed Conifer density management	Dispersal (M)	Activity Fuels
17-4	32	Tractor	Mixed Conifer selective thinning	NRF (M)	Activity Fuels
19-1	5	Tractor	Mixed Conifer density management	Dispersal (M)	Activity Fuels
19-2	68	Tractor	Mixed Conifer selective thinning	NRF (M)	Activity Fuels
23-1	84	Tractor	Mixed Conifer density management	Dispersal (M)	Activity Fuels
26-1	27	Tractor	Mixed Conifer density management	Dispersal (M)	Activity Fuels
26-2	34	Tractor	Mixed Conifer density management	Dispersal (M)	Activity Fuels
29-1	2	Tractor	Mixed Conifer density management	Dispersal (M)	Activity Fuels
29-2	10	Tractor	Mixed Conifer density management	Dispersal (M)	Activity Fuels
29-3	16	Tractor	Mixed Conifer density management	Dispersal (M)	Activity Fuels
29-4	2	Tractor	Mixed Conifer density management	Dispersal (M)	Activity Fuels
29-5	20	Tractor	Mixed Conifer selective thinning	NRF (M)	Activity Fuels
<b>TOTAL</b>	<b>612</b>				

Abbreviations: M=Maintain  
NRF=Nesting, Roosting, Foraging

<sup>1</sup> Unit acres reported in this Decision Record are based on Geographic Information System (GIS) data and rounded to the nearest whole acre; unit acres may differ slightly from those reported in individual timber sale contracts/prospectuses due to difference in acres collected using Global Positioning Software (GPS) hardware and conversion of data electronic mapping software. Total acres may vary slightly from other tables displayed throughout the Howard analysis file due to methods used for rounding data outputs. The acreage differences that may be detected are within less than (+/-) 1% of the total project acreage and would not contribute to any differences in effects reported in the Howard EA.

**Table 2. Howard Forest Management Project Road Construction**

Location	Approximate Length (miles)	Surface	Control	Comments
T38S R3E Section 13 Spur	0.13	NAT	BLM	Temporary Road. Decommission after use. Dry season use only.
T38S R4E Section 7 Spur	0.16	NAT	BLM	Temporary Road. Decommission after use. Dry season use only.
T38S R4E S17 Spur West	0.06	NAT	BLM	Temporary Road. Decommission after use. Dry season use only.
T38S R4E S17 Spur East	0.08	NAT	BLM	Temporary Road. Decommission after use. Dry season use only.
T39S R4E S05 Spur	0.03	NAT	BLM	Temporary Road. Decommission after use. Dry season use only.
<b>Total Mileage</b>	<b>0.46 miles</b>			

Abbreviations:

Existing Surface: NAT=Natural

Control: BLM=Bureau of Land Management

**Table 3. Howard Forest Management Project Road Decommissioning and Long-Term Closures**

Road Number	Approximate Length (miles)	Surface	Control	Decommission/Closure Type <sup>2</sup>
38-3E-13.6	0.50	ABC	BLM	Decommission (Long-Term Closure): Place woody debris across road surface
Non-system Spur A T38 R03E Sec 13	0.12	NAT	BLM	Loosen compacted surface, place debris, and barricade, seed and mulch
Non-system Spur B T38 R03E Sec 13	0.15	NAT	BLM	Loosen compacted surface, place debris, and barricade, seed and mulch
39-3E-23.2	0.65	NAT	BLM	Fully Decommission: Mechanical
38-4E-29.02	0.45	NAT	BLM	Fully Decommission: Natural
<b>Total Mileage</b>	<b>1.87 miles</b>			

Abbreviations:

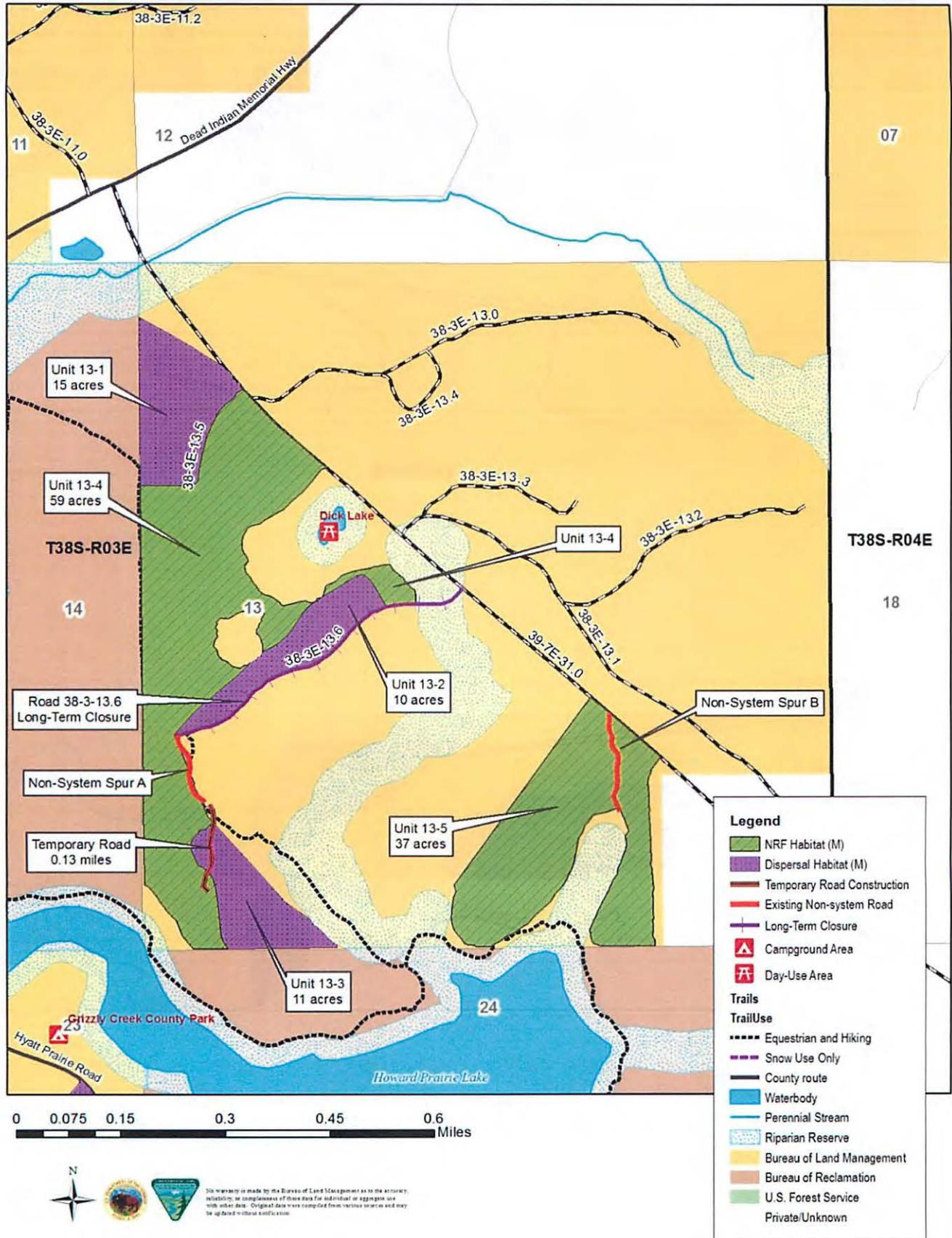
Existing Surface: NAT=Natural

Control: BLM=Bureau of Land Management

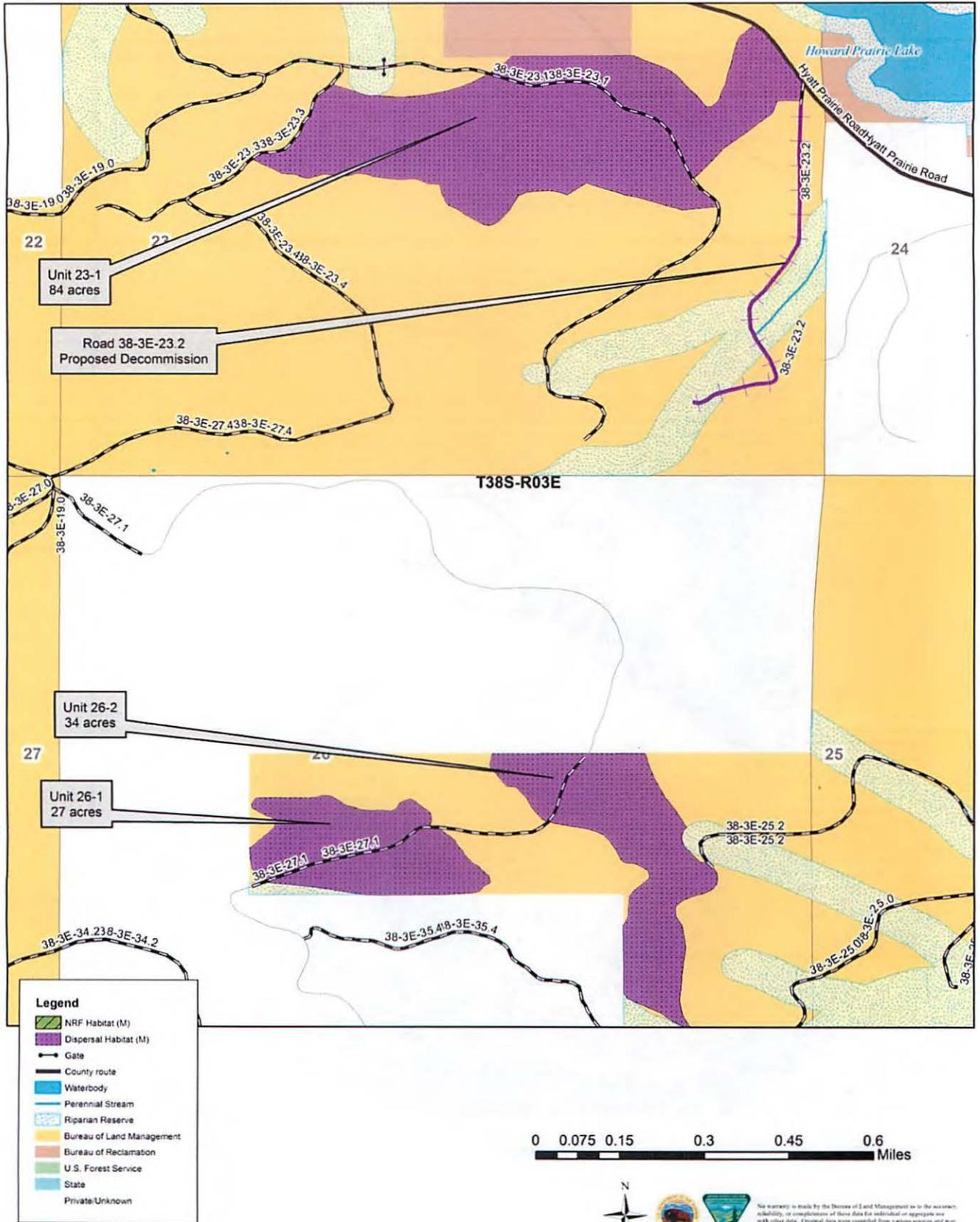
<sup>2</sup>**Decommission (long-term closure):** Closures based on resource protection needs and RMP directives. The road segment will be closed to vehicles on a long-term basis, but may be used again in the future. Prior to closure, the road will be left in an erosion-resistant condition by establishing cross drains, eliminating diversion potential at stream channels, and stabilizing or removing fills on unstable areas. Exposed soils will be treated to reduce sedimentation. The road will be closed with an earthen barrier or its equivalent. This category can include roads that have been or will be closed due to natural processes (abandonment) and may be opened and maintained for future use. Road segments placed in long-term closure will be moved from FAMS operating status to FAMS storage status.

**Full Decommissioning (permanent):** Roads determined through an interdisciplinary process to have no future need may be subsoiled (or tilled), seeded, mulched, and planted to re-establish vegetation. Cross drains, fills in stream channels, and unstable areas will be removed, if necessary, to restore natural hydrologic flow. The road will be closed with an earthen barrier or its equivalent. The road will not require future maintenance. This category includes roads that have been closed due to a natural process (abandonment) and where hydrologic flow has been naturally restored. Road segments placed in permanent closure will be moved from FAMS operating status to FAMS decommission status. (USDI 2010)

Map 1. Howard Forest Management Project

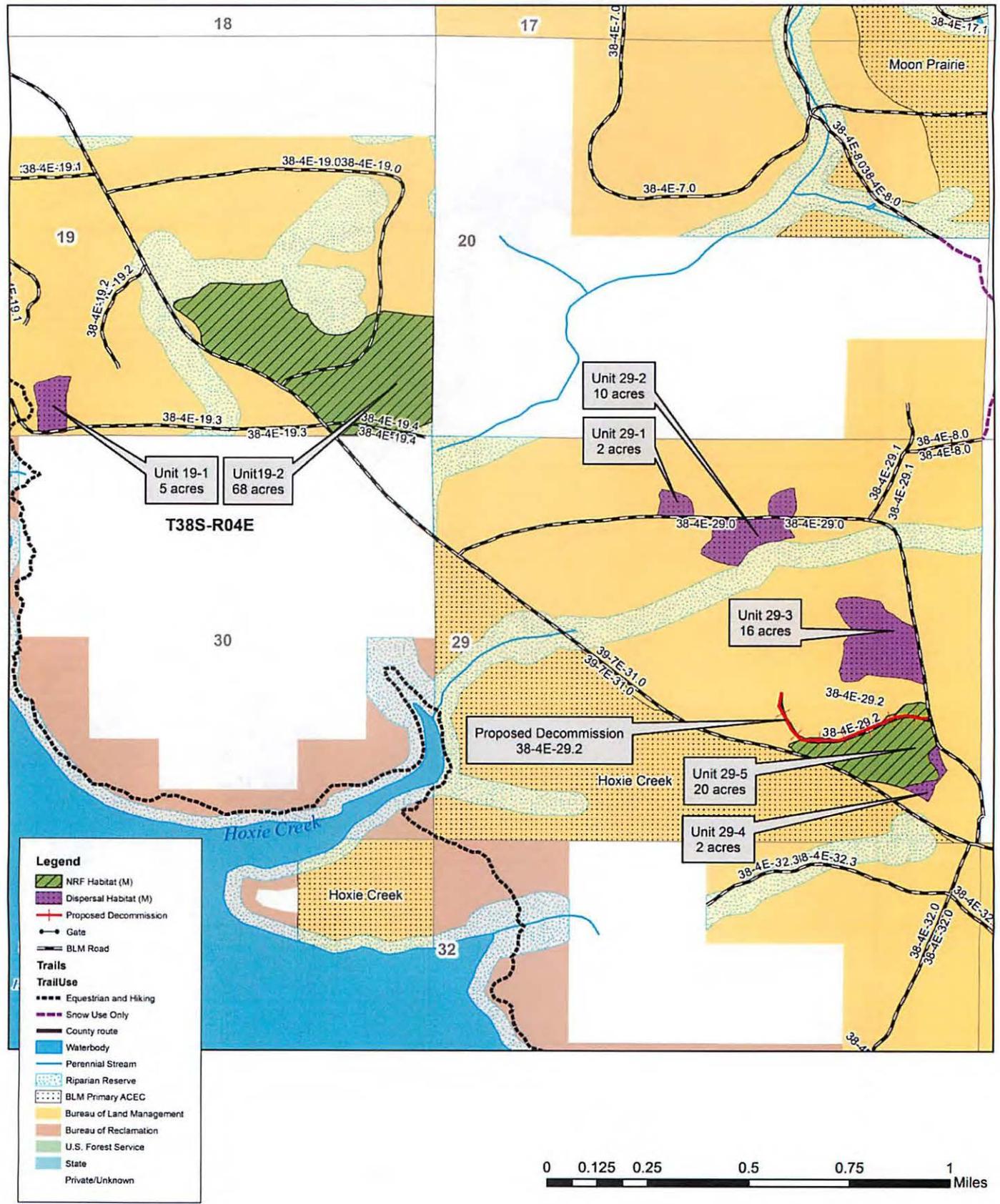


Map 2. Howard Forest Management Project

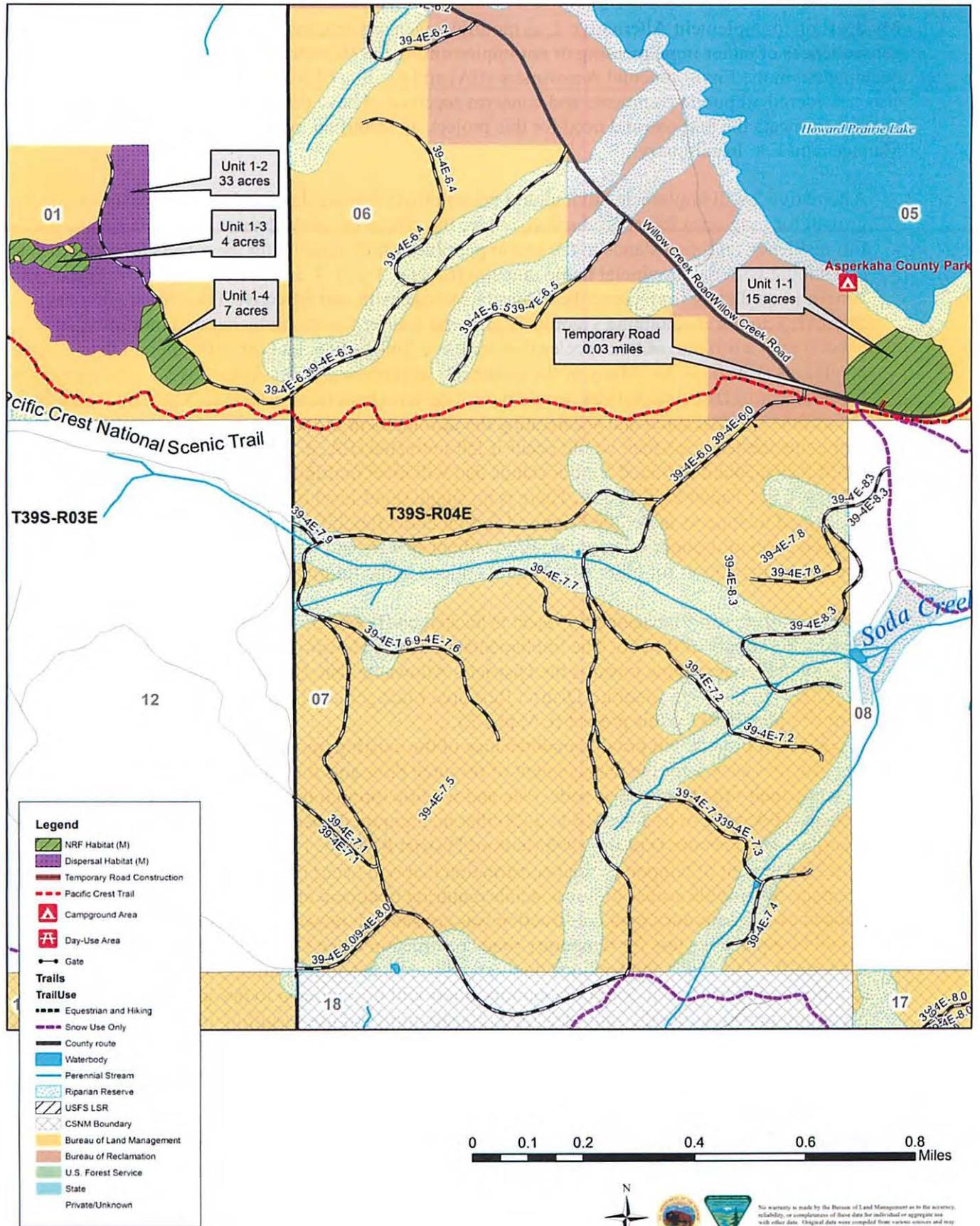




# Map 4. Howard Forest Management Project



Map 5. Howard Forest Management Project



## **DECISION RATIONALE**

My decision to implement Alternative 2, as modified, is based on consideration of the relative merits and consequences of either implementing or not implementing the Howard Forest Management Project, as documented in the Environmental Assessment (EA) and Finding of No Significant Impact (FONSI). I have also considered all public comments and concerns received. I have determined that my decision outlined above best meets the purpose and need for this project, as identified in Chapter 1 of the Howard Forest Management EA. In summary:

Alternative 2 will implement silvicultural prescriptions that are designed to improve tree vigor and growth for long-term forest production, reduce the effects of forest disease on forest stands, and increase fire resiliency on forest stands to the extent possible, while minimizing the effects to northern spotted owl habitat with the provincial home range(s) (EA, pp. 1-1, 1-3, and 2-1 through 2-4). Stands would benefit immediately from prescribed Density Management and Selective Thinning treatments by improving and/or maintaining vigorously growing conifer forests, reducing tree mortality, and encouraging a mixture of tree species that are more fire-resilient and drought-tolerant than current conditions (EA, p. 3-16). Many of the treatments as proposed under Alternative 2, especially those that would occur in Dispersal 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 (EA, p. 3-89). Alternative 2 allows for active forest management in mixed conifer stands that will meet multiple stand and landscape level objectives discussed in Chapter 2 of the EA. There is no single stand-level objective under the prescription. The prescribed treatments under the Proposed Action allow flexibility in managing stands in the long-term. The retention of drought-tolerant and fire-resilient species and reducing disease-prone species in the area (e.g. white fir) allows for more silvicultural options in the future (EA, p. 3-16).

The Howard Forest Management Project is located on BLM-administered lands allocated to produce a sustainable supply of timber. The implementation of the Howard Forest Management Project will contribute timber volume towards the District's Allowable Sale Quantity, thus meeting Timber Resource Objectives of the 1995 Medford District Resource Management Plan (RMP), one of the primary purposes identified for this project (EA, p. 1-3).

The Howard Project will provide maintenance of the existing transportation system in the Project Area that provides access for the management of resource programs including timber resources, while reducing their effects on water, soils, fish, and wildlife through the application of Project Design Features (EA, pp. 2-6 to 2-9, 2-15 to 2-23) that incorporate the Best Management Practices (BMPs) as described in Appendix D of the 1995 Medford District RMP (p. 151) and as modified by IM-OR-2011-074. The amount of temporary road construction that will occur (0.46 miles) is the minimum amount necessary to provide access to forest stands requiring treatment at this time. The use of designated skid trails to avoid temporary road construction was considered; however, it was determined that impacts would be equal to or less for temporary road construction when comparing skidding distances versus log truck traffic. The roads and landings they served were located to minimize additional tree removal within or outside of units (EA, p. 2-25). Temporary roads will be restricted to dry weather-use only, and will be decommissioned within the same season of construction and use, resulting in no net increase in road density in the Jenny Creek Key Watershed (EA, pp. 2-7, 2-18). In addition, approximately 1.22 miles of roads would be fully decommissioned under Alternative 2 further reducing road densities (EA, pp. 3-55 to 3-57).

The incorporation of Project Design Features (EA, pp. 2-15 to 2-23) insures that the transportation system is developed and maintained in an environmentally sound manner in accordance with the 1995 Medford District RMP (p.84).

The Howard Forest Management Project will treat and maintain all suitable northern spotted owl (NSO) habitat (EA, pp.3-89 through 3-93). Treatment will only occur on approximately five percent of the existing northern spotted owl nesting, roosting, and foraging (NRF) habitat within the Analysis Area, leaving more than 95% of existing suitable NRF habitat untreated (EA, p. 3-82). Minimizing the amount of NRF habitat treated and maintaining the habitat characteristics of the treated NRF is important in not only providing for the recovery of Federally listed species, but also to avoid the need to list candidate species that may use the habitat. The Project will treat and maintain 394 acres, or 26 percent of NSO dispersal habitat in the Analysis Area (EA, pp. 3-82, 3-89). Many of the treatments as proposed under Alternative 2, especially those that would occur in Dispersal 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 (EA, p. 3-89). Alternative 2 is outside of any critical habitat; therefore, no effects to critical habitat are anticipated as a result of the Howard Project (EA, p. 3-92).

I have personally read the comment letters sent in response to the EA and have considered them fully. The BLM has identified substantive comments/issues submitted during the EA public review period and prepared a response to these comments. Responses are intended to be explanatory in nature, and when applicable, to guide the reader towards analysis or information contained in the EA. The BLM's response to substantive comments is attached to this Decision Record (Appendix A, Response to Comments).

The harvest of trees with old-growth characteristics is a particularly emotional issue for some. The Howard Project notes the preference is to retain trees with old-growth characteristics except when needed to meet safety standards during logging operations or on the rare occasion where a larger white fir tree is infected with root disease, it would be removed to reduce the potential for the root disease to spread. The intent of retaining trees with old-growth characteristics is to retain and/or promote structural complexity within stands treated. Snags determined by OSHA health and safety guidelines to be a risk to people would be removed and would be left on-site as course woody material to further contribute towards key habitat elements for wildlife species. While the EA acknowledged these potential scenarios that could result in the harvesting of trees with old-growth characteristics, it is anticipated that these situations will seldom occur.

In conclusion, the Howard Forest Management Project, as described in the Decision above, best meets the purpose and need described for this project (EA, pp. 1-3 and 1-4), 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, policy, and the direction of the 1995 Medford District Resource Management Plan (see Plan Consistency below, and the Finding of No Significant Impact document for the Howard Forest Management Project).

## **MONITORING**

Implementation monitoring is accomplished through the BLM's contract administration process. Project Design Features included in the project description are carried forward into contracts as required contract specifications. BLM contract administrators and inspectors monitor the daily operations of contractors to ensure that contract specifications are implemented as designed. If work is not being implemented according to contract specifications, contractors are ordered to correct any deficiencies. Timber sale contract work could be shut down if infractions of the contract are severe. The contract violations would need to be corrected before the contractor would be able to continue work. If contract violations are blatant, restitution could be required.

## **CONSULTATION AND COORDINATION**

Pursuant to the Endangered Species Act (ESA), consultation with the US Fish and Wildlife Service (USFWS) has been completed for the activities proposed under the Howard Forest Management Project in the BLM's *Biological Assessment for The Lower Grave, Howard and Mining Projects*

(Grave\_Howard\_Mining FY13 Formal BA, USDI 2013). In their Biological Opinion (FWS Reference Number 01EOFW00-2013-F-0137), the USFWS determined that the proposed activities “may affect, but are Not Likely to Adversely Affect spotted owls” (USFWS 2013, p. 57, EA, p. 3-89).

The BA and BO used the Owl Estimation Methodology that was found to be invalid by the District Court for the District of Columbia on June 26, 2013 because it did not go through the rulemaking procedures of 5 U.S.C. § 553 (Swanson, et al. v. Salazar, et al., No. 10-1843-RJL). However, the Amended Order, dated July 25, 2013, stated that consultation completed prior to 70 days after the date of the Amended Order was permissible. As consultation for the Howard Forest Management Project was completed June 21, 2013, this consultation is still valid. No treatment units are located in 2012 designated critical habitat for the northern spotted owl (EA, p. 3-81).

The gray wolf is a federally listed species in Oregon west of highway 395 and 78. Until 2011, gray wolves were only known to occur in Oregon east of these highways. In September 2011, one radio collared male wolf (OR-7) disappeared from the Imnaha pack in Northeastern Oregon. Since 2011 ODFW has been tracking OR-7s dispersal, which included some time in Northern California, and ODFW has posted an area of activity map on their website. Since the Howard EA was completed, the USFWS and ODFW narrowed down the area of activity of OR-7 where a female wolf was detected and pups were confirmed. The Howard Project is outside this new area, so even with the new information, an additional assessment to the effects to wolves is not necessary. As with all projects, if new T&E species locations are discovered prior to or during project implementation, the projects would be stopped under E-4 contract stipulations. At that time, the BLM would assess the situation and apply seasonal restrictions, other mitigation, and complete additional NEPA and Section 7 consultation, if necessary (Snider 2014).

There is no Coho Critical Habitat or Essential Fish Habitat in the Aquatic Habitat and Fish Analysis Area for the Howard Forest Management Project (EA, p. 3-60). Therefore, no consultation was required for federally-listed aquatic species, specifically Southern Oregon Northern California Coastal (SONCC) Coho, their Critical Habitat, or Essential Fish Habitat.

A no effect determination was made by the BLM regarding federally-listed plant species. The Howard Forest Management Project is entirely outside the range of all Federally Threatened or Endangered plant species found on the Medford District (EA, pp. 3-98 and 3-100).

In accordance with the Protocol for Managing Cultural Resources on Lands Administered by the Bureau of Land Management (BLM) in Oregon, and the National Historic Preservation Act of 1966 (specifically section 106), as amended, a literature review and archaeological reconnaissance was conducted for the Howard Project Area. No new sites were located during the Cultural Resource Survey and no previously recorded sites are located within the Area of Potential Effect (APE). The project will not adversely impact any sites of cultural or historical significance (EA, p. 3-114).

Scoping notices were sent on February 12, 2013 to Federally Recognized Tribes, which included the Confederated Tribes of Siletz Indians of Oregon, the Confederated Tribes of the Rogue-Table Rock and Associated Tribes, the Cow Creek Band of Umpqua Tribe of Indians, the Klamath Tribes, the Quartz Valley Indian Reservation, the Shasta Indian Nation, and the Confederated Tribes of the Grand Ronde Community of Oregon.

Also notified were the following City, County, State and Federal groups: the Bureau of Land Management Klamath Falls Field Office, the Bureau of Reclamation, the Department of Environmental Quality, the Department of State Forestry, Jackson County Soil and Water Conservation District, Jackson County Commissioners and Courthouse, the Medford Water Commission, Oregon Department of Environmental Quality, Oregon Department of Fish and Wildlife, and the Rogue River-Siskiyou National Forest.

## **PUBLIC INVOLVEMENT**

A scoping letter briefly describing the Proposed Action and inviting comments was mailed to adjacent landowners, interested individuals, organizations, and other agencies on February 12, 2013. Comment letters received were reviewed by the interdisciplinary team of specialists and by the Responsible Official, the Ashland Resource Area Field Manager. Issues identified to be relevant to the analysis of the Proposed Action were incorporated into the list of relevant issues in Section G.1, *Relevant Issues* of the EA.

The Howard EA was completed on March 06, 2014 and made available for public review on the BLM's Medford District Website. The EA was also sent to those who responded to the scoping letter or requested to be kept informed about the project. The EA public review period ended on April 05, 2014. Written comments received in response to the Howard EA were reviewed and substantive comments have been addressed in Appendix A, *Response to Comments*.

## **PLAN CONFORMANCE**

### **Resource Management Plan**

The Howard Forest Management Project is designed to be in conformance with the 1995 Medford District *Record of Decision and Resource Management Plan* (ROD/RMP). The 1995 Medford District RMP 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* (USDA and USDI 1994).

The Howard Project contains Project Design Features that apply Best Management Practices (BMPs) in Appendix D of the 1995 Medford District RMP (as modified by IM-OR-2011-074). As designed, this project complies with Management Direction, Objectives, and Best Management Practices of the 1995 Medford District RMP.

### **Survey and Manage**

The Howard Project is consistent with the Medford District Resource Management Plan as amended by 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).

This project uses the species list and categories from the 2001 ROD. At the time this project was initiated, the BLM was involved in legal proceedings on the Record of Decision to Remove the Survey and Manage Mitigation Measure Standards and Guidelines from BLM Resource Management Plans with the Range of the Northern Spotted Owl. Due to uncertainties surrounding these proceedings, this project utilized the last valid ROD, specifically the *2001 ROD and Standards and Guidelines* (not including subsequent Annual Species Reviews).

### **Special Status Species**

The Howard Project is also 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. BLM Special Status Species include those species listed or proposed for listing under the Endangered Species Act (ESA), as well as those designated as Bureau Sensitive by the State Director. The objectives of the BLM Special Status policy are:

- To conserve and/or recover ESA-listed species and the ecosystems on which they depend so that ESA protections are no longer needed for these species; and

- To initiate proactive conservation<sup>3</sup> measures that reduce, or eliminate, threats to Bureau Sensitive species to minimize the likelihood of and need for listing of these species under the ESA (USDI 2008, section .02).

### **Revised Recovery Plan**

In June 2011, the USFWS (U.S. Fish and Wildlife Service) finalized the *Revised Recovery Plan for the Northern Spotted Owl*, which contains 33 Recovery Actions. Recovery Actions are recommendations to guide activities needed to accomplish the recovery objectives and ultimately lead to delisting of the species. Specifically, Recovery Action 32 (RA 32) in the Recovery Plan recommends “maintaining and restoring the older and more structurally complex multilayered conifer forests” (U.S. Fish and Wildlife Service 2011, III-67). The intent of RA 32 is to maintain substantially all of the older and more structurally complex multilayered conifer forests on federal lands in order not to further exacerbate the competitive interactions between spotted owls and barred owls. The Howard Forest Management Project does not include 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).

### **Statutes and Regulations**

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.

### **ADMINISTRATIVE REMEDIES**

This decision is a Forest Management Decision. Administrative remedies are available to persons who believe that they will be adversely affected by this decision. A protest may be filed within 15 days of the publication of a Notice of Decision or Notice of Sale in Medford’s *Mail Tribune* newspaper.

When timber is offered for sale, a Notice of Sale will be published in the Medford Mail Tribune. Publication of the first notice of sale establishes the effective date of the decision for those portions of this Decision Record to be implemented through a timber sale. The protest of the timber sale must be made within 15 days of the publication of the Notice of Sale.

In accordance with the BLM Forest Management Regulations 43 CFR §5003.2 (a & c), the effective date of this decision, as it pertains to actions which are *not* part of an advertised timber sale is the date of publication of a Notice of Decision in The Medford Mail Tribune. Any protest must be made within 15 days of the publication of Notice of Decision in the Mail Tribune. Any contest of this decision should state specifically which portion or element of the decision is being protested and cite the applicable regulations.

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.

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<sup>3</sup> Conservation: as applied to Bureau Sensitive species, is the use of programs, plans, and management practices to reduce or eliminate threats affecting the status of the species, or improve the condition of the species’ habitat on BLM-administered lands (USDI 2008, Glossary p. 2).

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 Notice of Sale, the 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 Ashland Resource Area will issue a protest decision.



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John Gerritsma  
Field Manager, Ashland Resource Area  
Medford District, Bureau of Land Management

8-5-14

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Date

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## Appendix A, Response to Comments

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Written comments received in response to the Howard Forest Management Project Environmental Assessment (EA) were reviewed by the interdisciplinary team and the responsible official. Substantive comments were identified and the BLM has responded to substantive comments listed below.

Substantive comments are those that:

- Provide new information pertaining to the Proposed Action or an alternative;
- Identify a new relevant issue or expand on an existing issue;
- Identify a different way (alternative) to meet the purpose and need;
- Identify a specific flaw in the analysis;
- Ask a specific relevant question that can be meaningfully answered or referenced;
- Identify an additional source of credible research, which if utilized, could result in different effects.

Non-substantive comments are those that:

- Primarily focus on personal values or opinions;
- Simply provide or identify a preference for an alternative considered;
- Restate existing management direction laws or policies that were utilized in the design and analysis of the project (or provide a personal interpretation of such);
- Provide comment that is considered outside of the scope of the analysis (not consistent or in compliance with current laws and policies, is not relevant to the specific project proposal, or is outside of the Responsible Official's decision space);
- Lack of sufficient specificity to support a change in the analysis or permit a meaningful response, or are composed of general or vague statements not supported by real data or research.

The following section contains substantive comments received and the BLM's response to comments. Some comments listed below may have been received from more than one commenter. To avoid duplication, comment statements with similar content were summarized into a single comment statement. The comments and responses are intended to be explanatory in nature and, where applicable, to guide the reader towards analysis or information contained in the Environmental Assessment (EA).

### PURPOSE AND NEED

**Comment 1: While the Howard Forest Management Project aims to provide sustainability with regard to timber products, it falls short of that aim, based on the treatments proposed and without the inclusion of some form of regeneration harvest in the proposal.**

**Response:** The Howard Forest Management Project is designed to provide for long-term forest (timber) production while minimizing the effects to existing northern spotted owl habitat within the provincial home ranges of spotted owl sites (EA, pp. 1-3 and 1-4). The silvicultural treatments proposed (commercial thinning and selective thinning prescriptions) are designed to direct future stand growth, initiate new forest development, reduce the impacts of insect and diseases, and increase fire resiliency on forest stands to the extent possible. These outcomes are in line with improving conifer forest vigor and growth needed to ensure sustainable production. Regeneration harvest does not need to be included in a proposal to reach the aim of forest health, particularly when minimizing the effects on northern spotted

owl is a goal. Timber produced from this area would be sold in support of the District's Allowable Sale Quantity declared in the 1995 RMP (pp. 17, 72, and 73).

Additionally, an increased level of intensity of forest thinning was considered but eliminated from further analysis (EA, pp. 2-24 and 2-25), the intent of which would have been to reduce relative densities across the forest landscape and to strengthen tree vigor. The rationale for elimination was stated as follows:

By lowering stand relative densities to an optimal growth and yield forest production level, this prescription would have also reduced crown closure to a lower percentage than needed to maintain spotted owl habitat within the home range radius of spotted owl sites. Therefore, an increased level of thinning was eliminated from detailed consideration in forest stands, as it would not have met the project objectives as identified in Chapter 1 (EA, pp. 2-24 and 2-25).

Based on this rationale, inclusion of a regeneration prescription would not meet the Project objectives as regeneration harvest would reduce the canopy even more than the considered (but eliminated) prescription that increased the level of intensity of forest thinning, and for this reason, was not included in the Project design.

## **FINDINGS AND RECOMMENDATIONS CONTAINED IN THE WATERSHED ANALYSIS**

**Comment 2: The Jenny Creek Watershed Analysis addresses the following concerns, which must be considered when the BLM makes a final decision on Project actions, per the Medford RMP:**

- **The Jenny Creek Watershed is far from achieving [the] desired future condition. Of the estimated 76.5 miles of perennial streams in the watershed, only one-half mile of upper Shoat Springs Creek is in proper functioning condition (WA, p. 93).**

**Response:** This comment was specifically addressed in the EA (p. 3-60), which states, "This was true at the time the assessment was written, because very few stream miles had been assessed at that time. In the years since the WA was written, inventories have been ongoing and many more reaches have since been rated as PFC. However, it is true that the perennial stream reaches in the Howard Forest Management Project Analysis Area are not in Proper Functioning Condition." The EA disclosed the findings of stream surveys on page 3-64 of the EA.

- **The WA recommends road density reduction targeting subwatersheds and drainage areas with particularly high road density, especially in areas of fragile (sensitive) soils as highest priority for road decommissioning (WA, p. 87).**

**Response:** The Project design included the decommissioning of an estimated 1.9 miles of road within the aforementioned upper portion of the Jenny Creek Watershed (EA, pp. 2-8 and 2-9). There are no fragile soils in the Project Area (RMP, Map 6).

Additionally, this particular reference from the Jenny Creek WA (p. 87) is in reference to recommendations provided regarding the Jenny Creek sucker and Redband trout populations in the Jenny Creek Watershed. The EA addresses this concern and the two fish species in *Section G: Consistency with Aquatic Conservation Strategy*:

Tier 1 Key Watersheds contribute directly to conservation of at-risk anadromous salmonids, bull trout, and resident fish species. They also have a high potential of being restored as part of a

watershed restoration program. The Jenny Creek Watershed is a Tier 1 Key Watershed, designated for the presence of two endemic fish species, the Jenny Creek sucker and the Redband trout. These species are not present in the upper watershed, where the Analysis Area drainages are located (EA, p. 3-74).

- **Forest pathogens probably contribute more to diversity in forest structure and the landscape pattern of the watershed than fire (WA, p. 28).**

**Response:** Page 28 of the WA states:

Forest pathogens probably contribute more to diversity in forest structure and the landscape pattern of the watershed than fire. The most significant pathogen is *Phellinus weirii* (laminated root rot)...The most practical approach to reforest infected areas may be to plant resistant native species. Resistant trees include ponderosa pine and incense cedar. Sugar, white and lodgepole pines are considered to be *tolerant* [emphasis added] of the disease (WA, p. 28).

The EA (p. 3-9) acknowledges the role of pathogens in stand structure: “Forest pathogens shape stand structure and forest development patterns by creating openings of various sizes.” Additionally, “The present day landscape pattern of the vegetation on federal lands within the Howard Planning Area is a result of topography, fires, wind events, timber harvesting, and forest pathogens” (EA, p. 3-4).

The Selective Thinning and Density Management prescriptions detailed in the EA (pp. 2-2 and 2-3) are designed to meet specific objectives (EA, p. 2-1), and with regard to root disease pockets, the EA says,

Where root disease pockets are encountered, select resistant species for leave, where possible, and remove symptomatic trees. Target white fir trees for removal first; secondly, focus on leaving resistant species, followed by uninfected or the least infected trees. Incense cedar, sugar pine, and ponderosa pine are the most resistant species, followed by uninfected or the least infected trees (EA, pp. 2-2 and 2-3).

The Project is not designed to remove forest pathogens from the landscape. The prescriptions are designed to retain those species that are resistant to pathogens located on the landscape, and to accelerate the development of heterogeneous stand structure, increase species diversity, and reduce hazardous ladder fuels. The treatments would create an environment for shade-intolerant species (e.g. ponderosa pine and sugar pine) to survive, thus increasing species diversity within the conifer-dominated stands. Maintaining drought-tolerant species ensures the resiliency of forested stands during a period of climatic uncertainty (EA, p. 3-16).

**Comment 3: Within the Jenny Creek Watershed Analysis, there are identified categories that require further data: Functioning Riparian Condition; Macroinvertebrates; Redband Trout; Special Status Species and their Habitat; Vegetative Data; Hourly Temperatures at Howard Prairie Dam; Snowpack Volumes; Transient Snow Zones; Evapotranspiration Values for Conifers in the Watershed; Discharge Values; Peak Discharges; Baseline Data for Pre-Dam Discharges; Up-to-Date Stream Survey Information; and Evaporation and Seepage Losses and Howard Prairie, Hyatt, Keene Creek Dams and from Earthen Canals (WA, pp. 123-125). Additional data gaps are identified on pages 47, 121, and 122 of the Watershed Analysis. The EA must address these gaps.**

**Response:** The environmental assessment has three defined functions: (1) it briefly provides sufficient evidence and analysis for determining whether to prepare an EIS; (2) it aids in an agency’s compliance with NEPA when no EIS is necessary (i.e., it helps to identify better alternatives and mitigation measures); and (3) facilitates preparation of an EIS when one is necessary (40 CFR §1508.9(a)). The

BLM is not required to fill in data gaps identified within the WA in an EA. The EA is not intended to be a tool to update the WA. However, some of the suggested data needs have been addressed in the Howard Forest Management Project EA as part of determining the current existing condition of the affected environment and considered in the analysis process. The categories and related data needed to complete a thorough environmental analysis are addressed below. Comment responses are by category, as follows, with the related WA data need and page reference included.

**Functioning Riparian Condition: A survey is needed to assess proper functioning condition throughout the watershed (WA, p. 123).**

**Response:** Perennial reaches on the Analysis Area streams on BLM-administered lands were evaluated by stream surveyors in 2002 and 2006. The two reaches in Grizzly Creek were rated as Not Functioning (NF), while other stream reaches were all rated as Functioning at Risk (FAR) by surveyors during Proper Functioning Condition (PFC) surveys (EA, p. 3-64).

**Macroinvertebrates: A limited survey of mollusks in the Jenny Creek Watershed revealed the presence of eight endemic species. A more thorough survey is needed to determine total distribution and abundance of these species. This survey should also address whether ongoing management practices, such as grazing, are impacting any of the populations (WA, p. 123).**

**Response:** Protocol surveys for terrestrial mollusks have been conducted in the Project Area. Voucher specimens collected during surveys have been identified. Of the four target species, Chase sideband was the only species located. A single known site is outside of any proposed treatment areas (EA p.3-85).

Impacts to Survey and Manage mollusks species were addressed in the EA (pp. 3-85 and 3-95). Minimal impacts are anticipated due to the dispersed nature of proposed treatments in relation to the amount of available habitat; very few of the key habitat attributes associated with this mollusk species (e.g. rocky areas and talus deposits [EA, p. 3-85]) are found within the Project units; and riparian areas and water sources are buffered (EA, p. 3-95). This species is also associated with coarse woody material, which “would be maintained at or greater than current levels” (EA, p. 2-14).

**Redband Trout: Baseline information for the age and size composition of the redband trout population is lacking. Fish from various stream reaches within the Jenny Creek Watershed need to be sampled to establish data for comparison against future monitoring (WA, pp. 123-124).**

**Response:** Proposed project elements would occur above and upstream of the reservoir (EA, p. 3-58). Redband trout are endemic to the lower portions of the Jenny Creek Watershed (below Howard Prairie Reservoir), and while listed as a Special Status Species, the listing does not designate aquatic habitat for this species (EA, p. 3-63). Additionally, while the Jenny Creek Watershed is a Tier 1 Key Watershed designated for the presence of two endemic fish species (the Jenny Creek sucker and the Redband trout), “These species are not present in the upper watershed, where the Analysis Area drainages are located” (EA, p. 3-74).

**Special Status Species and their Habitat (Wildlife): Basic inventory and monitoring data for special status species and their habitat, other than the northern spotted owl. Inventory/monitoring data would be used as a foundation for providing appropriate management as required by BLM policy and the SEIS ROD. Based on the data, management plans would be prepared if deemed necessary (WA, p. 124).**

**Response:** BLM policy regarding management of Special Status Species on the Medford District is contained in BLM Manual 6840, and the Howard Forest Management Project is consistent with that

direction (EA, pp. 1-5, 1-6, and 3-79). All Sensitive Species were considered and evaluated for this project, and only those that could be impacted by Proposed Actions were discussed in more detail (EA, p. 3-79, Table 3-17). “If habitat is present, but no activities are planned for that habitat (or the Project would not impact the population or habitat), no further analysis is needed. If a Threatened or Endangered or Special Status Species is known or suspected to be present and habitat is proposed to be disturbed, then the species will be included in analysis” (EA, p. 3-77).

More detailed discussion regarding Special Status terrestrial wildlife species is found on EA pages 3-86, and 3-93 through 3-97. Surveys were conducted for those species where established survey protocols exist, and included Survey & Manage great gray owls and mollusk species. Other Special Status Species where surveys are not conducted due to a lack of existing protocol (the development of which is outside the scope of this analysis) are protected via PDFs that protect known and incidental sites, and habitat (meadows, riparian reserves, snags, etc.).

**Vegetation Data: Vegetative Data specific to wildlife habitat function is lacking. Wildlife habitat data now has to be interpreted from forest inventory data which was collected primarily on commercial forestlands for commercial timber harvest purposes. On non-commercial forestlands, there is no existing vegetation database. The data would be used for wildlife habitat relationship evaluation and prioritizing project areas (WA, p. 124).**

**Response:** The EA is not meant to function as a Watershed Analysis update. Information regarding wildlife habitat necessary for analysis of the proposed action is accounted for in the current condition of the landscape.

The Project Area was surveyed for suitable northern spotted owl habitat, and proposed units were categorized as being Capable, Dispersal, or Nesting, Roosting, and Foraging (NRF) habitat. Highly suitable habitat, or Recovery Action 32 habitat (RA-32), is a subset of NRF habitat. Stands proposed for harvest in the Howard Forest Management Project were evaluated using interagency draft methodology, and those stands (121 acres) were eliminated from further consideration for treatment (EA, pp. 2-23, 3-82 and 3-83).

Outside of the habitat surveys conducted for the NSO, there is no guidance or established protocol to conduct surveys for habitat types on the Medford District BLM. However, habitats associated with specific species known or suspected to be present in the Project Area (where disturbance would be expected) are protected via project design features incorporated into the Project proposal (EA, pp. 2-20 through 2-21). See the “Affected Environment” section in the Terrestrial Wildlife portion of the EA, pages 3-77 through 3-88, for a discussion of both species and their associated habitats.

**Hydrological Climatic Data Needs: Hourly temperatures at Howard Prairie Dam; snowpack volumes, actual snow water equivalents and transient snow zones; and actual or derived evapotranspiration values for conifers dominant in the watershed. All are necessary “to complete a more accurate hydrologic analysis in the future” (WA, p. 124).**

**Response:** The parameters referenced are not useful in analyzing project effects at the drainage scale. Hourly temperatures, snowpack volumes and snow water equivalents are highly variable both spatially and temporally. The analysis area is located within the snow zone, which is above the transient snow zone for Jenny Creek (3,000-4,000 feet) (EA, p. 3-42). In the short term, forest thinning generally decreases evapotranspiration rates. This may result in localized increases in groundwater levels and in some instances streamflow. Where this occurs, positive impacts would result. Since canopy cover would be maintained at a minimum 30 percent and treatments are scattered across the drainages, this proposal is not expected to appreciably alter evapotranspiration or streamflow. The EA contains relevant site-specific

information needed to complete an accurate hydrologic analysis for the Project Area; see the Affected Environment discussion for Water Resources (EA, pp. 3-41 through 3-51).

**Hydrological Data Needs: Discharge values from the Lower Crossing station of Jenny Creek (necessary for completing actual water balances and determining water yields from the watershed; Peak discharges and frequencies of such discharges (useful for determining disturbances of fisheries habitat, land use impacts, sediment loading and flushing calculations, and general monitoring); Baseline information or pre-dam discharge data of what discharges are possible if there was no interception of flow; An up-to-date stream survey of all active intermittent streams and perennially-flowing streams; and evaporative and seepage losses at Howard Prairie, Hyatt, Keene Creek Dams, and from earthen canals (WA, pp. 124-125).**

**Response:** The Watershed Analysis (WA) is useful in characterizing conditions and trends at the watershed scale. Jenny Creek is a 5<sup>th</sup> field watershed, and is approximately 134,300 acres in size. Although it contains useful information influential in project planning, it has limited information necessary to conduct hydrologic analyses at smaller scales.

As noted in the EA, all drainages within the Water Resources Analysis Area flow into the Howard Prairie Reservoir (EA, pp. 3-42 and 3-43), and is stored largely for irrigation purposes. Stream discharge values below the dam are influenced by dam operations, including the lower crossing on Jenny Creek. The BLM has no influence on reservoir operations affecting flows below Howard Prairie Dam, so any baseline information concerning pre-dam conditions is not relevant to this analysis. Furthermore, as analyzed in the EA, the parameters used to assess potential changes in magnitude and timing of flows into Howard Prairie Reservoir are expected to remain unchanged (EA, p. 3-54).

Regarding the need for up-to-date stream surveys the EA states:

The Jenny Creek Watershed Analysis (USDI 1995b) provides general water resources background information for the Analysis Area. Stream surveys and associated GIS mapping were completed for all Federal lands within the Analysis Area, and mapping of streams and roads on private lands was accomplished using aerial photo interpretation. Riparian Reserve locations and widths were determined site-specifically using the guidelines in the Northwest Forest Plan, and incorporated on-the-ground verification of stream types, wetlands, fisheries data, and site potential based on soils (EA, p. 41).

Additionally,

Perennial reaches on the Analysis Area streams on BLM-administered lands were evaluated by stream surveyors in 2002 and 2006. Surveyors documented high (>20%) levels of sediment, and actively eroding banks in perennial reaches of the Analysis Area streams (stream reach number 3089, 2441, and 5000 in Willow Creek; 3413 and 3415 in Swinning Creek; 3393 and 5058 in Grizzly Creek; 3559 and 3589 in Hoxie Creek; and 3643 in an unnamed frontal tributary). (EA, p. 3-64)

**Additional data gaps are identified on pages 121 and 122 of the WA.**

**Response:** To reiterate, the data/analysis/research needs are suggestions made by specialists during the Watershed Analysis development, and are suggestions for future WA updates (WA, p. 121). The data gaps identified on pages 121 and 122 pertain to Silviculture and Ecology. Information needed to complete a thorough analysis are addressed in the EA, and are noted below:

Relative Density Indices (RDIs) are addressed in the EA on pages 3-6, 3-7, 3-9, 3-11, and 3-13 through 3-15.

White fir mortality is discussed on page 3-9 of the EA, in the context of tree growth and vigor within the Project Area.

Bark beetles are discussed throughout the *Tree Growth and Vigor* and *Forest Pathogens* sections (EA, pp. 3-6 through 3-10).

Coarse woody debris (CWD) is addressed throughout the EA. With regard to this data gap need, see the Coarse Woody Material discussion on EA pages 3-10 and 3-11 for the existing Affected Environment.

Fire regimes and history and the ways in which fire affects the landscape of the Project Area is discussed throughout the *Fire and Fuels* section (EA, pp. 3-16 through 3-27).

## **FIRE RESILIENCY**

**Comment 4: While the EA states that thinning from below would increase average tree diameters and acknowledges that larger diameter trees are more tolerant of surface fires (EA, p. 3-24), Table 3-5 (EA, p. 3-15) indicates that in the majority of units, density management will decrease both average tree diameter and forest canopy cover in the short- and long-terms, which will directly contribute to fire hazard in treatment areas.**

**Response:** The stand data provided in Table 3-5 (Dispersal Stand [Unit 7-1] With and Without Density Management) is not absolute. Rather, it is an estimate based on sampling. It is intended to provide a general description and measure of stand density, composition, and structure for one single unit in the Howard Forest Management Project (Unit 7-1). It illustrates the effects of a “No Treatment” and a Density Management treatment that would thin across all diameter classes (not be confused with a treatment that would solely “thin from below”), and favors the retention of larger diameter trees that are more tolerant of surface fire.

The illustration reveals an overall increase of Quadratic Mean Diameter (QMD) from the current stand condition of a single unit, Unit 7-1, if stand density is reduced.

Table 3-5 does not account for the shift in species composition that would occur. Additionally, the implementation of thinning under the Proposed Action would promote increased fire-resilient forest stands by thinning from below, removing suppressed, diseased, and/or over-crowded intermediate and co-dominant trees, while generally retaining the larger co-dominant and dominant trees within treated stands. 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 canopy fuels. These are all considered to be important factors in reducing the potential for initiating and sustaining a crown fire in these stands (EA, p. 3-24). While there would be a temporary increase in surface fuels (usually one year, but can be up to two years), the reduction in crown fuels outweighs any increase in surface fire hazard (EA, p. 3-23).

**Comment 5: Many of the Riparian Reserves within the Project Area appear to be in similar conditions as the uplands that are proposed for treatments, e.g. densely overgrown and in need of thinning to enhance fire resiliency. If the BLM is proposing to restore the condition of the uplands, then consideration should also be given to the restoration of Riparian Reserves.**

**Response:** According to the 1994 Northwest Forest Plan, the main purpose of the Riparian Reserves is to protect the health of the aquatic system and its dependent species, and provide incidental benefits to

upland species (p. 7). Accordingly, Northwest Forest Plan standards and guidelines for Riparian Reserves prohibit timber harvest in riparian reserves except 1) when a catastrophic event results in degraded riparian conditions; 2) salvage trees only when watershed analysis determines present and future CWD needs are met and ACS objectives are met; 3) to implement silvicultural practices to control stocking, re-establish and manage stands, and acquire vegetation characteristics needed for ACS objective attainment (NWFP ROD, pp. C-31, C-32).

The current condition of the Riparian Reserves in the Project Area is described in the EA (pp. 3-71 through 3-73), with the current vegetation type serving as the measurable criteria by which analysis was conducted. The seral stage of vegetation surrounding the reserves can provide insight to how well the reserves are functioning with regard to providing shade and as a source of large wood inputs (EA, p. 3-72).

In general, riparian corridors in most of the Jenny Creek Watershed are relatively intact, given that there has been very little agricultural or urban development in the Watershed; the major disturbances are historical logging practices, streamside grazing, and large water impoundments (EA, p. 3-71). The analysis suggested that Riparian Reserves capable of providing ample shade are prevalent in all but two drainages. Of those two drainages, one was identified as having a high number of riparian reserves located in meadows. The other drainage has a high percentage of pole- and sapling-sized vegetation in the riparian area resulting in a concern for insufficient shade and a lack of source inputs for large wood for this single drainage (EA, p. 3-73). Neither of those two drainages would benefit from commercial harvesting at this time. Additionally, the need for commercial thinning to enhance the fire resiliency was not identified as a concern for any of the Riparian Reserves in the Analysis Area.

## CUMULATIVE IMPACTS

**Comment 6: The BLM must provide a thorough cumulative impact analysis of the proposed logging in combination with other federal projects (specifically, the Cottonwood Forest Management Project) and private logging activities. The BLM must complete an EIS based on these cumulative effects.**

**Response:** 43 CFR § 46.115 states that when considering cumulative effects analysis, the agency must analyze the effects in accordance with relevant guidance issued by the Council on Environmental Quality (CEQ). As the CEQ points out in guidance issued on June 24, 2005, the “environmental analysis required under NEPA is forward-looking,” and review of past actions is required only “to the extent that this review informs agency decision-making regarding the proposed action” (EA, p. 3-2).

Cumulative actions must be considered in a single EIS if, when considered with other proposed actions, they will have significant cumulative impacts. For the Howard Forest Management Project, aerial photograph analysis and GIS databases were utilized in helping to determine past actions on both federal and private lands. Additionally, the EA includes descriptions of Past, Ongoing, and Reasonably Foreseeable Actions (EA, pp. 3-1 through 3-3) to be considered, where appropriate, for analysis by resources, depending on their associated Analysis Area. Cumulative effects analyses were conducted for the Howard Forest Management Project using these Actions, and the results were disclosed in the EA across multiple resources. “The analysis of the effects of other present and reasonably foreseeable actions relevant to the effects of the proposed action is necessary. How each resource analysis uses information concerning other ongoing or reasonably foreseeable activities is, however, dependent on the geographic scale of concern and attributes considered during each resource analysis” (EA, p. 3-2).

Analysis Areas vary by resource, and include those areas that could potentially be affected by the Proposed Actions. In some cases, the Analysis Area is confined to the areas where actions are proposed

(potential units, new road construction, etc., also described as the Project Area), and in other cases, the Analysis Area extends beyond the Project Area (EA, p. 3-1). Resource specialists determine the scale at which they will conduct their analysis. The affected environment for each resource is described to the level of detail needed to determine the significance of impacts to the environment if implementation of the Proposed Action occurs.

Specific to this Project and this comment, the Cottonwood Forest Management Project was addressed in the Aquatic and Fish portion of the Howard Forest Management Project EA.

With regard to the Cottonwood Timber Sale, the Aquatic Habitat & Fish analysis states:

The Cottonwood Timber Sale, analyzed under the August 2011 Revised Environmental Assessment for the Cottonwood Forest Management Project (DOI-BLM-OR-M060-2011-0003-EA), is currently being actively harvested. Harvest-related activities proposed in the Cottonwood sale would not occur in the Howard Analysis Area, but would occur within the Keene Creek sub-watershed of the Jenny Creek Watershed. Activities would all occur upstream of a large impoundment located on Keene Creek (a Jenny Creek tributary), which diverts water out of the Jenny Creek Watershed and into the Bear Creek Watershed. As such, no potential effects to water quality or aquatic habitat resulting from the Cottonwood timber sale would have any likelihood of being transmitted downstream of the diversion reservoir, and hence, the project would not contribute to cumulative effects in the greater Jenny Creek Watershed (EA, p. 61).

Cumulative Effects analysis is found in the EA on the following pages: 3-16 (*Silviculture*); 3-26 (*Fire and Fuels*); 3-40 and 3-41(*Soil Resources*); 3-57 and 3-60 (*Water Resources*); 3-61, 3-66, 3-67, 3-68, 3-71, 3-73 (*Aquatic Habitat & Fish*); 3-92, 3-93, 3-95, 3-96 (*Terrestrial Wildlife*); 3-100 (*Botany*); 3-103 and 3-104 (*Noxious Weeds and Introduced Plants*); 3-112 (*Rangeland Resources*); and 3-114 (*Cultural Resources*).

No significant cumulative effects were identified and therefore no EIS is required.

## **NEOTROPICAL AND LAND BIRDS**

**Comment 7: The EA has not appropriately analyzed or disclosed the potential impacts of conifer thinning operations and brush removal on neotropical bird populations (which is documented in literature submitted to the BLM), nor does it address seasonal restrictions as a means to protect these species during active nesting.**

**Response:** The EA addresses Bird Species of Conservation Concern (BCC) and Game Birds Below Desired Condition (GBBDC), two lists prepared by the U.S. Fish and Wildlife Service to assist the BLM in meeting Federal responsibilities under the Migratory Bird Treaty Act and Executive Order 13186. The EA identified five species that are known or likely present in the Howard Forest Management Project Terrestrial Wildlife Analysis Area (EA pp. 3-87 and 3-88; Table 3-21).

Analysis was conducted and disclosed on page 3-96 of the EA:

Some migratory bird individuals other than USFWS species of concern may be disturbed or displaced during project activities. Some nests may be destroyed from timber harvest occurring during active nesting periods. However, there would be no perceptible shift in species composition the following breeding season because of the small-scale habitat modifications in relation to the Wildlife Analysis Area. Adequate undisturbed areas adjacent to the Project Area would maintain habitat for displaced individuals. Overall, populations in the region would be

unaffected due to this small amount of loss that would not be measurable at the regional scale. Analyzing bird populations at this scale, as appropriate, is supported by Partners in Flight (California Partners in Flight 2002).

The five USFWS Species of Concern (band-tailed pigeon, mourning dove, olive-sided flycatcher, rufous hummingbird and purple finch) known or suspected to occur in the Wildlife Analysis Area *prefer open to semi-open forests, stand edges, woodlands, brush, and agriculture land to nest and forage*[emphasis added]. Indirect effects from habitat changes in Alternative 2 will be beneficial to these species until the forest matures into a mid- to late-successional seral stage (EA, p. 3-96).

Although there are no regulatory requirements for seasonal restrictions specific to migratory birds, the Project design includes seasonal restrictions for other resources (e.g. soil resources, northern spotted owls, eagles, great gray owls) that may offset disturbance activities in portions of the Project Area during active nesting season for migratory birds.

## NORTHERN SPOTTED OWLS

**Comment 8: The “long-term beneficial effects to spotted owls” due to the “development of late-successional structural complexity” (EA, p. 3-89) contradicts the anticipation in the 1995 Medford RMP to convert such stands into early successional fiber plantations.**

**Response:** All of the proposed treatment units for the Howard Project Area are located on Matrix lands in the South General Forest Management Area (SGFMA). The general prescription for forest stands in SGFMA would be one of structural retention and would include strategies that are designed to mimic natural ecological processes, and meet species and landscape diversity objectives (RMP, pp. 191 and 192). So, while the RMP does state to provide for early-successional habitat as an objective for Matrix lands, this does not apply to all Matrix lands, particularly in SGFMA where structural retention is emphasized.

The following objectives are also stated in the SGFMA portion of the RMP:

- Achievement of management objectives, including sustainability of both commodity production and wildlife habitat, requires that management emphasis be placed on treatments and harvests that restore stand condition and ecosystem productivity (RMP, p. 192).
- Manage for minimal loss (including loss from wildfire) and long-term recovery of intact forest habitat over 150 years of age and toward an increase in the amount of spotted owl reproductive habitat (RMP, p. 192).
- Manage forests of the land use allocation so that over time landscapes would trend toward a forest composed of stands containing a variety of structures, stands containing trees of varying age and size, and stands with an assortment of canopy configurations. As stands age, within stand conditions should trend toward those characteristic of older forest types (RMP, p. 192).

In addition, the RMP contains guidance regarding habitat structure and the NSO on Matrix lands:

- Protect and conserve Federal listed and proposed species, and manage their habitats to achieve their recovery in compliance with the Endangered Species Act, approved recovery plans, and Bureau special status species policies (RMP, pp. 50 and 51).
- Manage for the conservation of Federal candidate and Bureau-sensitive species and their habitats to as not to contribute to the need to list and to contribute to the recovery of the species (RMP, p. 51).

- Provide a renewable supply of large live trees and snags well distributed across the Matrix lands in a manner that provides habitat for cavity using birds, bats, and other species; provides structure and habitat diversity; provides future sources of large down logs; and provides for other ecological functions. Retained live trees and snags will reflect the species mix of the original stand. Emphasize retention of the larger trees and snags available to provide the unique structure and functions associated with these large old trees (RMP, p. 73).
- Provide a renewable supply of large down logs well distributed across the Matrix lands in a manner that meets the needs of species and provides for ecological functions (RMP, p. 72).
- Retain 100 acres of the best northern spotted owl habitat as close as possible to a nest site or owl activity center for all known northern spotted owl activity centers (RMP, p. 72).

The Howard Forest Management Project is consistent with the direction contained in the 1995 RMP. The prescriptions were designed in accordance to the direction contained in the RMP.

**Comment 9: The EA (EA, p. 3-46) states that “forest types within the Southern Cascades ecoregion historically had 40-50% canopy cover. Canopy cover for the Southern Cascade Slope ecoregion was historically less than 30%.” Conforming all treatments to a canopy cover of either 40% or 60% undermines the intent and nature of restoration forestry in this particular region.**

**Response:** Historic canopy cover is used to analyze the degree to which hydrologic processes are affected by vegetation canopy reduction (EA, p. 3-46); it is not intended to provide canopy cover targets to forest managers. The Howard Project was designed to “provide for long-term forest (timber) production in the Howard Project Area while minimizing the effects to existing northern spotted owl habitat within the provincial home ranges of spotted owls” (EA, pp. 1-3 and 1-4, 2-1). The silvicultural prescriptions, which include the retention of either a minimum 40% or 60% canopy cover, were designed to meet this goal (EA, p. 2-1). The silvicultural objectives of this project are as follows: 1) to increase resistance/resilience of forests stands to wildfire, drought, insects, disease, etc.; 2) to restore more characteristic stand structure and species composition for mixed conifer forest types (encourage regeneration and survival of pine species); 3) to maintain and promote structural complexity (i.e., increase growing space and decrease competition for large and/or legacy pine, cedar and Douglas-fir trees); 4) to maintain critical components of nesting, roosting, and foraging (NRF) spotted owl habitat; and 5) to maintain components of dispersal owl habitat (EA, p. 2-1). Restoring forests to historic conditions is not an objective of this project.

**Comment 10: Fuel reduction logging is not benign, and owls and their prey depend on complex forest structure that is degraded by harvest activities (See Heiken 2010, *Fuel Reduction Logging is Not Benign*).**

**Response:** The article submitted highlights several concerns that will be addressed by subtopic.

**Logging for fuel reduction will degrade, not enhance, spotted owl habitat values.**

The Howard Project is not proposing harvest for the purpose of fuels reduction. This Project is designed to improve tree vigor and growth, reduce the impacts of forest disease, and promote stand diversity and the maintenance of fire-resilient species such as pines and incense cedar. Treatments proposed are also designed to maintain critical components of both NRF and Dispersal habitat types for the northern spotted owl, with the goal of minimizing effects on suitable habitat, particularly in the provincial home range (EA, p. 2-1). Activity fuels created during project implementation would be treated to minimize fire hazard. The EA Terrestrial Wildlife analysis concluded:

The long-term (>10 year) effects of the proposed action are anticipated to increase the health and vigor of the residual stands, post-treatment, and would likely result in more structurally complex

and structurally diverse forest stands. Thinning dense stands may be necessary in order to achieve old-growth forest characteristics in the absence of natural disturbance events (Tappeiner et al. 1997). Thinning younger forest stands may provide growing conditions that more closely approximate those historically found in developing old growth stands (Hayes et al. 1997). 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 area. (EA, p. 3-93)

### **Logging removes important habitat features including snags and dead wood.**

This concern is addressed in Comments 8, 12, 13, and 17 of this document.

### **Logging has complex effects on fire hazard and can in fact make forests more susceptible to damage by wildfire.**

The silvicultural prescriptions were designed to meet multiple objectives, including “to increase resistance/resilience of forest stands to wildfire, drought, insects, disease, etc.” and “to restore more characteristic stand structure and species composition for mixed conifer forest types encourage regeneration and survival of pine species” (EA, p. 2-1).

The EA acknowledges:

Larger-diameter trees are more tolerant of surface fires, resulting in less tree mortality in the event of a surface fire... While the silvicultural prescriptions and objectives vary by prescription type, they are all designed to retain healthy large trees (see Chapter 2). The maintenance of pine species on dry Douglas-fir and pine sites contributes to the fire-resiliency of forest stands. The larger the ponderosa pine, the greater its resilience to fire due to bark thickness (Agee 1993; Agee 1996). Its bark is one of the key defense mechanisms against mortality from low-intensity fire. Thus, removal of larger non-pine species in this context actually improves the ecological role of fire and subsequent fire-resiliency of the stand by reducing competition for moisture and growing spaces. The fire-resilience of the Analysis Area as a whole would be improved due to the overall reduction in fire hazard within treatment units and previous fuels reduction treatments that have occurred on BLM-administered lands within the Analysis Area (EA, p. 3-24).

While there would be a temporary increase in surface fuels (usually one year, but can be up to two years), the reduction in crown fuels outweighs any increase in surface fire hazard (EA, 3-23).

Additionally, the EA addresses the topics of changes in micro-climates and the effects of canopy reduction on fuel moistures on pages 3-24 and 3-25.

In sum, the Fuels Specialist, Wildlife Biologist, and Silviculturalist concluded that the proposed silvicultural prescription would minimize the short-term negative effects to existing NSO habitat, result in NSO habitat improvement long-term and decrease the fire hazard in the Project Area within two years after implementation.

## **SOILS AND TRACTOR YARDING**

**Comment 11: Commenters expressed concern regarding the potential for the Howard Forest Management Project to increase the risk of sedimentation, peak flows, and soil compaction due to ground-based disturbance from tractor yarding.**

**Response:** The risk for increased sedimentation, peak flows, and soil compaction as a result of Project implementation (specifically, tractor yarding) was addressed in the EA as follows:

- The commercial timber harvest activities would disturb, on average, about 15% of the ground in the harvest units. As a result of implementing designated skid trails, tractor logging all 638 acres would result in approximately 12% or less of the total area being compacted. Designating skid trails would minimize the area that would be disturbed during tractor logging operations (EA, p. 3-38).
- The potential for sediment in harvest units to reach stream channels is low due to erosion-prevention BMPs. Waterbars or tractor skid trails would prevent water from concentrating on bare compacted ground, and would move it to adjacent vegetated or slash-covered slopes (EA, pp. 3-56 and 3-57).
- Because canopy cover would not be reduced below 40%, harvest treatments would not change the overall percent of historic canopy closure on forest lands in the Water Resources Analysis Area. No noticeable increase in the magnitude or frequency of peak streamflows would be expected as a result of canopy cover reductions (EA, p. 3-54).
- Because harvest and yarding operations would not decrease stream shade, reduce future wood inputs, increase peak flows, negatively modify base flows, or input sediment into aquatic habitats, there would be no direct effect to the aquatic environment (EA, p. 3-66).
- The Aquatic Conservation Strategy compliance analysis determined that peak flows and summer low flows would not be affected by the Howard Forest Management Project (EA, p. 3-75).
- Peak streamflows are not expected to be affected by soil compaction because there would not be any connectivity from the yarding activities to stream channels, and PDFs and BMPs would prevent surface flow from reaching stream channels (EA, p. 3-54).

In conclusion, the EA addressed the specific concerns related to tractor yarding disturbance and there are minimal effects anticipated to occur with Project implementation.

## **BUREAU SENSITIVE BAT SPECIES**

**Comment 12: The EA states that Project activity “may potentially adversely disrupt local bat populations in the short-term, and may cause the loss of habitat in some cases” (EA p. 395). Yet, the EA does not attempt to quantify or analyze these impacts.**

**Response:** The BLM must take a “hard look” at the effects of the proposed action on the species, or on the proxy of habitat, and must make a convincing case either that no significant impact will result or that preparation of an EIS is warranted (*Klamath-Siskiyou Wildlands Center, et al.*, 182 IBLA 293, 303 (2012)).

The two Bureau Sensitive bat species (pallid and fringed myotis) likely to be present in the Howard Project Area utilize manmade structures, snags and rock outcroppings for roosting and hibernacula sites (EA, p. 3-95). The EA acknowledged disruption to these species, and concluded there would be minimal negative effect because adequate snags and decadent wildlife trees would be retained, and Riparian Reserves, 100-acre spotted owl KSOAC cores, NSO Nest Patches, and other reserves, would continue to provide undisturbed habitat for these sensitive bat species (pp. 3-95 and 3-96). The Project specifically incorporates design features to minimize the potential for adverse impacts. Specifically, the proposal would:

Retain and protect where possible (if not jeopardizing public or worker safety) large, broken-top trees and snags to minimize impacts to cavity-dependent species. Retain all trees damaged during

felling operations that were not originally marked for treatment will be retained for future snag and cavity recruitment (EA, p. 2-20).

The other types of roosting and hibernacula sites (manmade structures and rock outcroppings) would not be impacted with Project implementation, and as such, were not addressed in analysis.

While project-specific surveys are not conducted for these species due to a lack of established survey protocol (which is outside the scope of this Project and its associated analysis), it should be noted that the BLM (including the Medford District) is a part of a larger-scale collaboration with partners that include the Forest Service, Department of Defense, National Fish and Wildlife Foundation, Oregon Department of Fish and Wildlife and Bat Conservation International's North American Bat Conservation Fund, Portland State University, and Humboldt State University on The Bat Grid ([www.batcon.org](http://www.batcon.org)), which is a comprehensive inventory and monitoring program. Surveys are conducted using a grid-based sampling frame of sample units that covers the Northwest, with efforts guided by a random selection of sampling units, with the intent being to collect "basic, conclusive and repeatable species data at a landscape scale so that the information can be applied to analyses of long-term trends of species distribution. Baseline data on the identification, presence and distribution of bat species are essential for developing conservation plans."

Should trends in bat species be detected via larger, more comprehensive scientific surveys, management of bat species at a local level would be adjusted accordingly. Until that time, the BLM's direction, per Manual 6840, is to not trend species towards further listing (EA, p. 3-86). The Wildlife Biologist determined that incorporating PDFs into the Project design would be sufficient in promoting conservation and protecting these species to ensure that no further listing would be necessary, thus making this project in compliance with Manual 6840. The BLM is not stating that there would be no impact, but that impacts would be minimal (EA, pp. 3-95 and 3-96); again, this is in compliance with direction contained in Manual 6840.

## LARGE TREE LOGGING

**Comment 13: Because of the paucity of mature and late-successional habitat in the Howard Forest Management Project landscape, the removal of larger trees exhibiting late-successional structure will greatly increase the ecological impacts and social controversy of the project, and will not contribute to the objectives pertaining to forest health. The crowns of large trees help to moderate peak flow events via canopy cover, and are the only source of future large down wood, which helps to filter and moderate water flows throughout the year.**

**Response:** With regard to the paucity of mature and late-successional habitat on the landscape in the Howard Forest Management Area, Table 3-1 (EA, p. 3-4) illustrates the condition classes. While the comment does not clearly state how "mature" and "late-successional" are defined, in the scope of the Silvicultural analysis, the EA discloses that, across 4,445 forested acres on BLM-administered lands, 942 acres (21%) are considered to be in the mid, or 11-21 inch diameter at breast height (DBH), condition class, while 2,999 acres (68%) are classified as being in the Mature (21+ inch DBH) condition class. These two condition classes comprise 89% (3,941 acres) of the total forested BLM-administered acres in the Howard Silvicultural Analysis Area.

With regard to the retention of trees with old-growth characteristics, the EA states:

Strive to maintain or create diverse vertical and horizontal stand structure by leaving trees of all crown classes with crown ratios of  $\geq 30\%$ . Strive for stand diversity in regard to diameter classes,

species composition, tree heights (crown classes), trees per acre, and the vigor of individual trees. Some diseased, forked-top trees, and dying and dead trees should remain. (EA, p. 2-3)

The preference is to retain trees with the old-growth characteristics described below:

- Larger and older than the second-growth trees in the current stand, an indication that the tree may be one of the seed trees of the present-day stand. These trees have a bottle-brush shape (non-symmetrical crown). (These characteristics apply to all conifer species.)
- Large-diameter limbs indicating that the tree was once open-grown and had a large crown. Limbs (live or dead) are usually heavy and gnarled, are covered with mosses and lichens, and are close to the ground. (These characteristics apply to all conifer species.)
- Douglas-fir with thick bark, deep fissures and a chocolate brown color. (Second-growth trees have more gray color in the bark.) Ponderosa pines with thick bark, plate-like and yellow orange in color.

The intent of retaining trees with the aforementioned characteristics is to retain and/or promote structural complexity within stands treated. Situations where trees with the above-mentioned characteristics may be harvested include where the tree compromises operational safety and/or to meet stated management guidelines in root disease pockets. (EA, p. 2-3)

The design and development of the Howard Forest Management Project is consistent with the goals and timber-resource management objectives in the 1995 Medford District ROD/RMP for managing Matrix lands designated for timber management and production (EA, pp. 1-3 and 1-4). The Howard Forest Management Project is designed to ensure sustainable forest production, provide timber products from Matrix lands, and maintain the transportation system in the Project Area.

Regarding forest health objectives, the silvicultural prescription was developed to ensure sustainable forest production by managing for improved forest vigor and growth with a goal of minimizing the effects to northern spotted owl habitat within the provincial home range(s) (EA, pp. 1-3 and 1-4). The objectives for the silvicultural prescription are 1) to increase resistance/resilience of forests stands to wildfire, drought, insects, disease, etc.; 2) to restore more characteristic stand structure and species composition for mixed conifer forest types (encourage regeneration and survival of pine species); 3) to maintain and promote structural complexity (e.g., increase growing space and decrease competition for large and/or legacy pine, cedar and Douglas-fir trees); 4) to maintain critical components of nesting, roosting, and foraging (NRF) spotted owl habitat; and 5) to maintain components of dispersal owl habitat (EA, p 2-1).

The potential for an effect on peak flows as a result of a reduction in canopy cover was addressed in the EA on page 3-54:

Because canopy in Alternative 2 would not be reduced below 40%, proposed commercial harvest and associated activity fuels treatments would not change the overall percent of historic canopy closure on forest lands in the Analysis Area. No noticeable increase in the magnitude or frequency of peak streamflows would be expected as a result of canopy cover reductions proposed under Alternative 2.

Snag and coarse wood recruitment via retention of larger trees was addressed on page 3-10 in the EA:

All stand prescriptions will have the intermediate (thinning) silviculture method applied to them. Information Bulletin No. OR-97-064 for the implementation of coarse woody debris standards

and guidelines (1996) states that, "prescriptions should account for current habitat conditions and the timing and development of subsequent snags and coarse woody material (CWM) until the next stand once again begins to contribute CWM." All forest stand treatments will have no fewer than 30 live trees (largest diameter trees available) per acre remaining after harvest and are not prescribed for final harvest in this project. Many of these trees will be available to supply future CWM or snags to the sites.

Existing coarse wood and snags would be protected according to page 2-3 of the EA:

Within harvest units, retain all snags (standing dead) and coarse woody material (CWM) of various size and decay classes, unless determined by OSHA health and safety guidelines to present a risk to people. Snags fallen for safety reasons within these units will be left as CWM to further contribute towards key habitat elements.

Additionally, trees damaged during felling operations not marked for treatment would be retained for future snag and cavity recruitment (EA, p. 2-20).

The design of the Howard Forest Management Project, as analyzed in the EA, incorporates Project Design Features meant to retain the larger, dominant and co-dominant green trees on the landscape to ensure the future recruitment of snags and down wood, and to protect existing snags and on-the-ground large woody debris. Implementation of the proposed action alternative would meet both the objectives of the project and ensure a future supply of large trees, CWM and snags in the Project Area.

**Comment 14: The BLM should implement a diameter limit to protect larger, fire-resilient trees, which are in severe deficit in the Jenny Creek Watershed.**

**Response:** Implementing a diameter limit was considered but eliminated from detailed analysis as it was determined that it would arbitrarily limit the use of the silvicultural prescriptions to meet the prescribed objectives. An arbitrary diameter limit would sacrifice the effectiveness of prescriptions in achieving these silvicultural objectives. Howard Forest Management Project silvicultural prescriptions are designed to primarily focus on the harvest of smaller-diameter trees to retain larger, healthier trees within a stand, although some larger trees may be removed to meet desired stand densities and species composition. (EA, p. 2-24).

**Comment 15: The BLM needs to estimate the number of mature trees (stated as "20-30 inches DBH") and the number of "old-growth" trees (stated as those trees larger than 30 inches DBH) that would be harvested within each Project unit. The BLM is required to disclose this data for comment and analysis prior to issuing the Decision Record.**

**Response:** The environmental assessment has three defined functions. (1) It briefly provides sufficient evidence and analysis for determining whether to prepare an EIS; (2) it aids in an agency's compliance with NEPA when no EIS is necessary, i.e., it helps to identify better alternatives and mitigation measures; and (3) it facilitates preparation of an EIS when one is necessary (40 CFR §1508.9(a)). The BLM has disclosed in the EA the relevant and applicable information available to the agency.

Information regarding the number and location of trees that would be marked for harvest does not become available until after the analysis is completed, and the stands are marked and cruised. Furthermore, there are no requirements that mandate the BLM to disclose the precise number of trees to be harvested of any diameter. Public disclosure and Agency consideration of the exact number of trees to be harvested is not necessary for a reasoned choice among alternatives for a project where the objectives are to manage a landscape, not individual trees. The EA contained the information on the current stand condition, and

explained how the proposed treatments would affect the stands relative to the goals set out in the RMP and the stated Purpose and Need of the Project.

Within the Howard Forest Management Project Area, proposed silvicultural treatments were designed to promote forest health, species diversity and maintain the function of existing NSO habitat. "Treatment units would be marked to retain specific percent canopy cover by prescription" (EA, p. 2-1). Those prescriptions are designed to maintain both NRF and Dispersal habitats, with 60% and 40% canopy cover retention standards (post-treatment) and other habitat characteristics (i.e., standing dead and down wood, and diverse understory adequate to support prey) being incorporated into the Project Design and consequently, in the analysis and discussion of effects.

**Comment 16: The EA states that trees with old-growth characteristics may be harvested "where the tree compromises operational safety and/or to meet stated management guidelines in root disease pockets" (EA, p. 2-3), but the removal of these trees is not analyzed or disclosed to the public or the decision maker.**

**Response:** The BLM has disclosed in the EA the relevant and applicable information available to the agency. Information regarding the number and location of trees that would be marked for harvest does not become available until after the analysis is completed, and the stands are marked and cruised. Consequently, knowing the location of those trees that may "compromise operational safety and/or to meet stated management guidelines" is not known until the Decision Maker signs a Decision Record and project implementation is underway. Snags determined by OSHA health and safety guidelines to be a risk to people would be removed. Any snags fallen for safety reasons would be left onsite as coarse woody material to further contribute towards key habitat elements for wildlife species (EA, p.2-3).

Where root disease pockets are encountered, resistant species would be selected for leave, where possible, and symptomatic trees would be removed. White fir trees would be targeted for removal first; secondly, there would be a focus on leaving resistant species, followed by uninfected or the least infected trees. While it is the preference to retain trees with old-growth characteristics as described in the EA, we acknowledge that there may be a need in some areas to remove trees to reduce the potential for root diseases to spread. White fir trees are the most susceptible to the specific root diseases present in the Silvicultural Analysis Area, and are readily infected and killed. The white fir trees remaining post-treatment will likely contact inoculum and die at an early age, thereby perpetuating the cycle of mortality and keeping the source inoculum alive. While the root diseases centers in the Silvicultural Analysis Area are small (<0.5 acre), there is a potential for trees with old-growth characteristics to be present (EA, pp. 3-9 and 3-10).

## SNAG RECRUITMENT

**Comment 17: Harvest of trees within the units will reduce the number of trees available for future snag recruitment in these areas. This is a long-term effect that was not addressed in the EA.**

**Response:** The Howard Forest Management Project was designed to be consistent with the Medford District RMP and the Northwest Forest Plan's requirements regarding future sources of large down logs (RMP 1995, pp. 47 and 48; USDI 1994, p. C-41). The EA specifically addressed this issue on p. 3-10:

All stand prescriptions will have the intermediate (thinning) silviculture method applied to them. Information Bulletin No. OR-97-064 for the implementation of coarse woody debris standards and guidelines (1996) states that, "prescriptions should account for current habitat conditions and the timing and development of subsequent snags and coarse woody material (CWM) until the next stand once again begins to contribute CWM." All forest stand treatments will have no fewer

than 30 live trees (largest diameter trees available) per acre remaining after harvest and are not prescribed for final harvest in this project. Many of these trees will be available to supply future CWM or snags to the sites (EA, p. 3-10).

The stand inventory results were also disclosed in the EA, wherein the average numbers of trees per acre (TPA) for both standing dead and standing damaged trees are disclosed across multiple size classes (EA, p. 3-11).

The silvicultural prescription also addresses snags and CWM:

Within harvest units, retain all snags (standing dead) and coarse woody material (CWM) of various size and decay classes, unless determined by OSHA health and safety guidelines to present a risk to people. Snags fallen for safety reasons within these units will be left as CWM to further contribute towards key habitat elements. Hardwood species and Pacific yew would also be reserved for stand diversity, structure, and wildlife habitat, unless determined to be a safety hazard by OSHA health and safety guidelines (EA, p. 2-3).

Trees with bird nests, wildlife cavities, wide forks with flat nesting spots, or loose bark (which function as bat roosts) would generally not be removed. Additionally, clumps of trees adjacent to snags or wildlife trees may be retained for stand diversity. When available, leave some broken, forked top, and deformed trees that are greater than 20 inches DBH. Trees of this size with mistletoe infections on the tree bole, specifically those that currently provide a structure or platform for wildlife nests would count toward these guidelines. These trees would provide additional structural features for habitat and serve as future CWM recruitment (EA, pp. 2-3 and 2-4).

The silvicultural prescription and PDFs on pages 2-16 and 2-20 in the EA ensure the recruitment of future snags and CWM.

**Comment 18: Table 3-4 illustrates that logging in nesting, roosting and foraging habitat (NRF) will result in a 10% increase in quadratic mean diameter (QMD), at the cost of a long-term >50% reduction in snag recruitment. Table 3-5 illustrates that logging within dispersal habitat does not improve QMD, but does result in a long-term >50% reduction in snag recruitment. These findings contradict the assertion on page 3-88 that “without treatment, the current stand conditions would likely develop into less complex stand structures and species composition than that of late-successional stands.” It appears that logging will actually retard progress toward late-successional forest conditions, and the EA does not adequately analyze the ecological effects or potential significance of these trade-offs.**

**Response:** The conclusion that Tables 3-4 and 3-5 illustrate that logging will actually retard progress toward late-successional forest conditions is inaccurate. The assertion that long-term >50% reduction in snag recruitment will occur based on information in the Tables is also not accurate.

Reducing stand densities does not mean that there will be a long-term >50% reduction in snag recruitment. For example, Table 3-4 displays the difference between no action and a treatment that maintains on average 60% canopy cover. No action exhibits tree loss through competition mortality in competition with trees removed and utilized through timber harvesting under a science-based silvicultural prescription. The direct correlation between competition mortality and RDI [Relative Density Index] is evident when comparing a NRF stand with and without treatment implementation. The decreasing trend of trees per acre over a 50-year time period is a direct effect of competition mortality that naturally occurs as stands develop and forest management treatments are not applied. However, without stand treatments

that reduce trees per acre, RDIs remain above the 0.55 RDI threshold and leaves stands more vulnerable to disease and insects. The model shows that, within a 50-year time period, stands in which treatments are not applied will maintain a higher RDI. Reducing stand density is critical in meeting the stated purpose and need of the Howard Forest Management Project (EA, p. 3-13).

Table 3-4 clearly shows that the current QMD is currently estimated to be 18.3 inches. The QMD values are higher for all years illustrated (2023 through 2063) with implementation in Alternative 2 than those displayed for Alternative 1, the No Action Alternative.

The stand data provided in Table 3-4 (NRF Stand [Unit 17-4] With and Without Selective Thinning) is not absolute. Rather, it is an estimate based on sampling. It is intended to provide a general description and measure of stand density, composition, and structure for one single unit in the Howard Forest Management Project (Unit 17-4). It illustrates the effects of a “No Treatment” and a Selective Thinning treatment that would thin across all diameter classes (not be confused with a treatment that would solely “thin from below”), and favors retention of larger diameter trees that are more fire resilient (i.e. more tolerant of surface fire).

The illustration reveals an overall increase of Quadratic Mean Diameter (QMD) from the current stand condition of Unit 17-4 if stand density is reduced.

While the QMD for Unit 17-1 (Table 3-5) would not be increased with treatment, stand density would be reduced below the imminent mortality threshold of 0.55 RDI (EA, p. 3-15).

As explained in Comment 17 the silvicultural prescription and PDFs ensure long-term snag recruitment.

## **TIMBER PRODUCTION CAPABILITY CLASSIFICATION**

**Comment 19: The EA makes no reference to the reforestation problems documented by Minore (1978), or to the Timber Production Capability Classification (TPCC) of the Project Area. The BLM must disclose the methodology for logging on TPCC lands, and how this interfaces with the agency’s interpretation of the 1937 O&C Act and its guidance regarding annual sustained yield capacity. Additionally, will lands subject to additional road construction be managed to ensure sustainable timber production?**

**Response:** Commenters generally mention “reforestation problems” described by Minore (1978) in the Jenny Creek Watershed Analysis (WA) (1995). The WA states that: “Pocket gophers in combination with the frost problem create extreme reforestation problems. Minore (1978) found that average seedling survival under a tree canopy was 88.8 percent versus 36.4 percent in clearcut areas” (p. 17).

The Timber Productivity Capability Classification (TPCC) mapping revealed that the Project Area may have reforestation problems where environmental, physical, and biological factors have the potential to reduce the survival and/or growth of commercial tree seedlings. The reforestation problem that may be encountered include low available soil moisture, rodents or small animals that will limit survival or growth of seedlings, and frost pockets which are caused by restricted drainage of cold air. The TPCC handbook operational guide (p. M10) recommends that silvicultural prescriptions will be made on a unit-by-unit basis relative to the site characteristics and management objectives to achieve reforestation within the given time period. As a result of the reforestation concerns identified in the TPCC this project is not proposing any clearcut harvesting or seedling planting. Therefore, the reforestation problem that is mentioned in Minore (1978) is not relevant to this proposed project or analysis.

The RMP includes Best Management Practices (BMPs) to address, during Project Planning and Design, a myriad of objectives, including the following Planning Objective: “To include soil productivity, water quality, and hydrologic considerations in project planning” (RMP, Appendix D, p. 152). With regard to TPCC, the Planning BMP states, “Use timber production classification (TPCC) inventory to identify areas classified as fragile due to slope gradient, mass movement potential, surface erosion potential, and high ground water levels (RMP, Appendix D, p. 152). Additionally, “Use the planning process to identify, evaluate, and map potential problems (e.g. slump prone areas, saturated areas and slide areas) that were not addressed in the watershed analysis” (RMP, Appendix D, p. 152).

Per the TPCC handbook (USDI 1988, section 06.1: Timber Production Capability Classification), “The initial phase of the intensive inventory makes an in-place, basic classification of lands within the Sustained Yield Area. It is not intended to make decisions on other conflicting resources uses. The task is to determine which lands are suited or not suited for sustained yield timber production.”

The TPCC handbook 5251-1 depicts the use of a flow chart in how lands are classified (USDI 1988, p. 2). But generally, there are either Forestlands, or Non-forestlands: within Forestlands, the next divisions are Fragile and Non-Fragile. There are no fragile soils within the Howard Forest Management Project Area (RMP, Map 6).

Lands subject to the temporary road construction proposed in this project would be taken out of vegetation production for a short period of time but would become productive again upon completion of the project and the roads are decommissioned (EA, pp. 3-35 and 3-36).

## **OFF-HIGHWAY VEHICLES (OHVs)**

**Comment 20: As acknowledged in the EA (p. 3-66), the potential for unauthorized OHV use on skid trails following BLM activities “is high in two of the analysis drainages in particular [#0103 and #0109].” Therefore, it is likely that BLM harvest and road construction activities will contribute to additional OHV-caused damage in the Project Area, as well as exacerbate the existing OHV-caused damage. An EIS is required to address the cumulative, synergistic and significant impacts of ongoing OHV impacts that would be facilitated by new road construction and harvest activity.**

**Response:** The paragraph on p. 3-66 of the EA continues on to say that, while there will be an increase in surface erosion (from OHV use),

“this is unlikely to affect aquatic habitat because the tractor units are flat, and would retain full-width Riparian Reserve buffers between streams, making it unlikely that sediment would move off-site and be transported through the Riparian Reserves to channels. Connectivity between the skid trails and aquatic habitat would not exist, and therefore, OHV-use as an indirect effect of harvest would have no casual mechanism to indirectly impact fish or aquatic habitat, and as such, would not add a cumulative effect.”

These findings do not support a conclusion of significant impacts; therefore, no EIS is required. The EA has adequately addressed potential OHV-caused damage (or the likelihood of) from new road construction and harvest activity (EA, pp. 3-37, 3-38, 3-47, 3-53, 3-55, 3-56 3-64, 3-66, 3-105, 3-106, and 3-107). The potential for future unauthorized use of improved roadbeds, temporary roads, and skid trails is accounted for in Project design with the incorporation of the PDFs to discourage such use (EA, pp. 2-16 to 2-18). Unauthorized use is also addressed with regard to proposed road decommissioning and long-term closures on pages 2-8 and 2-9 of the EA.

## ROAD CONSTRUCTION AND DECOMMISSIONING

**Comment 21: Per the Jenny Creek Watershed Analysis, road density is acknowledged to be high throughout this Key Watershed, and is having significant negative terrestrial and aquatic impacts. The BLM needs to develop and consider an alternative that discloses how much Project activity could occur in the absence of new road construction, particularly because the EA states, “it is estimated that approximately 14,930 acres of the 16,391-acre Analysis Area have had some type of timber harvest in the past, all of which has been ground-based” (EA, p. 3-33). It is likely that the BLM can meet timber management objectives utilizing the existing road network.**

**Response:** An alternative that would have analyzed for no new road construction was addressed in the “*Actions and Alternatives Considered But Eliminated From Detailed Analysis*” portion of Chapter 2 of the EA. The rationale for elimination is as follows:

The RMP directs that all silvicultural systems (forest thinning strategies) applied to achieve forest stand objectives would be economically practical (USDI 1995, p. 180; USDI 1994, p. 2-62). The economic feasibility of forest management actions is affected by the ease of access from the forest road system. An alternative that would eliminate all new road construction would have made it uneconomical to manage some units within the Project Area. While road construction was not completely eliminated, new temporary road construction was limited to approximately 0.5 mile (EA, p. 2-24).

Additionally, the use of designated skid trails to avoid temporary road construction was also addressed in the “*Actions and Alternatives Considered But Eliminated From Detailed Analysis*” portion of Chapter 2 of the EA. The rationale for elimination is as follows:

The construction of temporary roads reduced the length of skidding distance from the outer edges of the units to the landing area by 850 feet for Unit 7-2; 700 feet for Unit 13-4; 325 feet for Unit 17-1; and 425 feet for Unit 17-2, thus improving the production rates and economic efficiency of the sale design. Because the impacts would be equal to less for temporary road construction, when comparing skidding versus log truck traffic, it was decided to replace these longer skidding distances with temporary roads. The roads and landings they served were located to minimize additional tree removal within or outside of units (EA, p. 2-25).

Construction of the temporary roads meets the Project Needs, as stated in the EA (pp. 1-3 and 1-4). Additionally, temporary roads would be decommissioned after use, and would result in no long-term net increase in road density within the Jenny Creek Watershed (EA, pp. 2-7, 3-55, 3-68, and 3-71).

**Comment 22: The impacts of temporary road construction are long-term with regard to tree removal and soil compaction, impacts that can be avoided by focusing forest management on stands that are accessible from existing roads.**

**Response:** There are five temporary roads proposed for construction, totaling a length of 0.46 miles. All of these roads are proposed in areas where a footprint (area of disturbance) currently exists on the landscape and were located to minimize additional tree removal within or outside of Project units (EA, p. 2-25).

Four of those temporary roads would overlay existing, historic skid trails, and while the width of disturbance would increase, the EA does note that the soils would return to their former productive states in the long-term (EA, p. 3-36).

With regard to the fifth road (located in T. 38 S. R. 3 E. Section 13), the EA notes that it is located on soils that have already been disturbed (i.e. it's an existing non-system road/trail that receives use from motorized and non-motorized traffic), and would be expected to return to their former productive state in the long-term (10+ year) once it has been scarified (not ripped due to the presence of rock fragments) (EA, pp. 3-35 and 3-36).

**Comment 23: The BLM should carefully consider future management needs and added costs of fully decommissioning roads across BLM-administered lands, only to rebuild them again in the future when needed again.**

**Response:** Roads proposed for “full decommissioning” were determined through an interdisciplinary process to have no future need (EA, p. 2-9, footnote).

One of the roads (Road 38-4E-29.02) is already overgrown and is considered to be nonexistent. Fully decommissioning would entail removing it from the BLM transportation database, and the current trend of natural re-vegetation of the roadbed would continue (EA, p. 2-9).

The second road (Road 38-3E-23.2) was determined to be unnecessary for future use as there is an upslope, parallel road that is better maintained, and provides adequate access to forested stands in the area. It was also proposed for full decommissioning due to being partially located in a Riparian Reserve, and has at times been a catalyst for illegal motorized use, which has resulted in road and resource damage (EA, p. 3-55).

In summary, the BLM did carefully consider the future management needs in the area. These roads were determined to be unnecessary for future land management use, and therefore are good candidates for being fully decommissioned.