



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
NEDSBAR FOREST MANAGEMENT PROJECT
(DOI-BLM-OR-M060-2016-0004-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 Nedsbar Forest Management Project. The Medford District Bureau of Land Management (BLM), Ashland Resource Area, has completed the environmental analysis of the Nedsbar Forest Management proposal, which is documented in the *Nedsbar Forest Management Project Final Environmental Assessment* (DOI-BLM-OR-M060-2016-0004-EA) (EA). The Nedsbar Forest Management Project EA was issued for public review on July 2, 2016; the public comment period closed on August 8, 2016.

BACKGROUND

The Nedsbar Forest Management Project EA documented the analysis of BLM's proposal to implement forest management on 2,378 acres of BLM-administered land within the Little Applegate and Upper Applegate Watersheds. A small portion of the proposal (one helicopter landing and portion of a haul route) is located in the Bear Creek Watershed. Project activities analyzed under the EA include commercial timber harvest, non-commercial treatments for understory thinning and/or fuels reduction, and road management (road maintenance, road renovation, temporary and permanent road construction, and road decommissioning). The Nedsbar Forest Management Project is located on lands administered by the Medford District BLM lands in the Little Applegate and Upper Applegate fifth-field watersheds. The Public Land Survey System (PLSS) description of the Nedsbar Forest Management Project is T. 39 S., R. 01 W., Sections 17-22 and 28-30; T. 39 S., R. 02 W., Sections 19 and 25-36; T. 39 S., R. 03 W., Sections 10, 14-15, 23-28, and 33-36; Willamette Meridian, in Jackson County, Oregon.

PUBLIC INVOLVEMENT

Scoping began for this project beginning in spring of 2014 when the Nedsbar Forest Management Project appeared in Medford's Messenger (BLM's quarterly newspaper) under the Ashland Resource Area's Schedule of Proposed Actions. A scoping letter briefly describing the Proposed Action and inviting comments was mailed to adjacent landowners, interested individuals, organizations, and other agencies on May 14, 2014. During the public scoping process the BLM received sixteen written comment letters regarding the proposed project and numerous (45-50) interest response forms. The BLM interdisciplinary team of resource specialists reviewed public input received, and identified relevant issues to be addressed during the environmental analysis.

Public meetings and field trips were held throughout the planning process:

- July 22, 2014: BLM held an open house designed for sharing information about BLM's proposal and starting a dialogue with those interested in learning more about the project; about 70 members of the public attended.
- November 19, 2014: BLM hosted a public field trip to review portions of the Nedsbar Forest Management proposal; about 50 members of the public attended.
- June 14 and 22 of 2016: BLM hosted two public field trips during the EA comment period to continue a review of portions of the Nedsbar Forest Management proposal and discuss the range of alternatives considered including their similarities and differences.

On May 13, 2014, the BLM met with representatives of the Applegate Neighborhood Network (ANN), a group comprised of local residents and non-profit organizations. The intent of the meeting was to introduce the Nedsbar Forest Management project to the community. Following this initial meeting with ANN, a core group of dedicated community members started the process of developing a community alternative. The Nedsbar Community Alternative Working Group (CAWG) presented their action alternative to the BLM on February 13, 2015 and subsequently submitted unit selections, prescriptions, deferred units, and a map on March 6, 2015. The BLM collaborated with the CAWG throughout this process sharing data, field reviewing units and discussing differences and similarities of BLMs and the CAWG prescriptions/alternatives, and meeting to discuss metrics that could be used to compare and contrast alternatives in the upcoming EA.

The Nedsbar Forest Management Project EA was issued for public comment period on July 2, 2016 and made available for public review on the BLM's Medford District website. Notification of the availability of the EA for public comment was made through publication of a legal notice in the Medford Mail Tribune newspaper. The EA, or notice of availability, 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 August 8, 2016. Many written comments were received in response to the EA; these comments were reviewed and substantive comments have been addressed in Appendix A of this Decision Record, *Response to Comments*.

THE DECISION

As the Responsible Official, it is my decision to authorize the implementation of an alternative (the Selected Alternative) as described in this Decision Record and the Nedsbar Forest Management Project Final EA (pp. 2-6 to 2-40, and Appendix C). The Selected Alternative draws from both Alternative 4 and Alternative 5 outlined in the Final EA, public involvement, and information gathered during the planning process.

In summary, this Decision authorizes the following actions:

The implementation of commercial forest thinning/timber harvest on approximately 1,112 acres (Maps 1 to 3, Table 1) using a variety of silvicultural prescriptions (Final EA, p. 2-14 to 2-17) and harvest methods (ground-based, cable, and helicopter) as described in the Final EA (2-17 to 2-18).

The implementation of non-commercial treatments for thinning understories and/or fuels reduction on 1,027 acres (Maps 1 through 3 and Table 2) as described in the EA (EA, pp. 2-18 to 2-19).

Approximately 1.33 miles of temporary road construction and 0.42 miles of permanent road construction to facilitate access to timber harvest units. The temporary roads will be decommissioned after use as described in the EA (EA p. 2-19 to 2-20).

The use of twelve (12) helicopter landings (5 existing and 7 new construction); helicopter landings on BLM administered lands that are not rocky or part of an existing quarry will be decommissioned and decompacted and coarse wood, boulders, and slash placed to effectively prevent vehicular use of these areas following completion of timber harvest activities (EA p. 2-33).

The implementation of four designated skid trails outside of existing units (0.58 miles total) (Final EA, p. 2-42, Maps 1 to 3) will facilitate access to harvest units.

About 61 miles of existing roads will be used as haul routes and maintained, improved, or renovated as described in the Final EA (p. 2-20, 2-32 to 2-34, and Appendix C, Table C-6, pp. C-11 to C-13) to meet BLM standards.

My decision authorizes about 9.63 miles of existing roads for full decommissioning; an estimated 1.88 miles will be allowed to decommission naturally as described in the Final EA (2-20 to 2-22).

An estimated 7.34 miles will be placed in long-term closure status as described in the Final EA (2-20 to 2-21).

All Project Design Features (PDFs) and Best Management Practices (BMPs) as described in the EA (p. 2-29 through 2-40) are incorporated into this Decision.

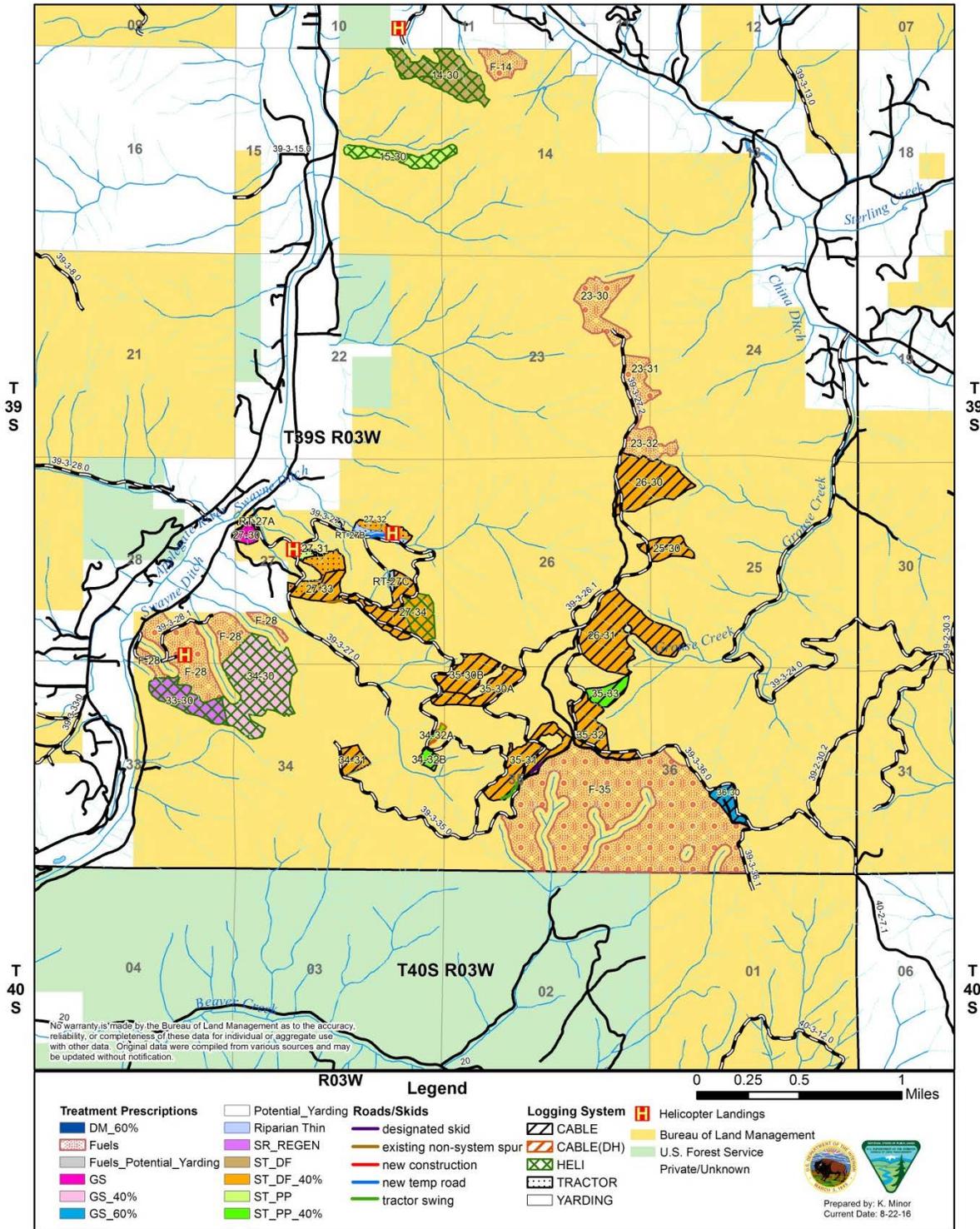
It is important to note that my decision to implement the Selected Alternative for the Nedsbar Forest Management Project does not permanently defer timber harvest for those units not chosen for implementation at this time. The 2016 Southwest Oregon Resource Management Plan for the Western Oregon Plan Revision designated lands to various land use allocations for this planning area and provides direction for future management.

Map 1. Nedsbar Forest Management Project – Selected Alternative

Nedsbar Forest Management Project



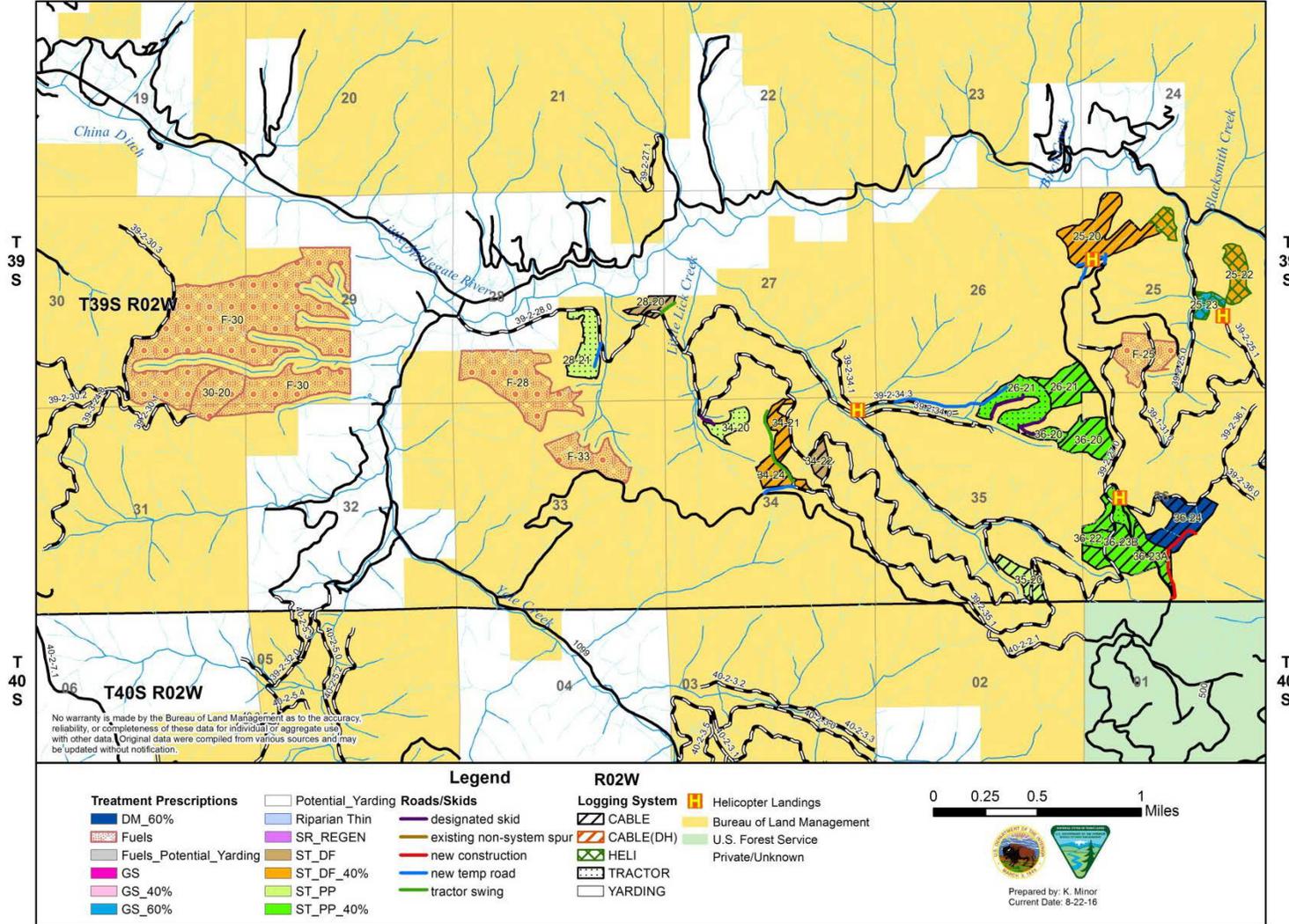
Map 1 of 3



Map 2. Nedsbar Forest Management Project – Selected Alternative

Nedsbar Forest Management Project

Map 2 of 3



Map 3. Nedsbar Forest Management Project – Selected Alternative

Nedsbar Forest Management Project



Map 3 of 3

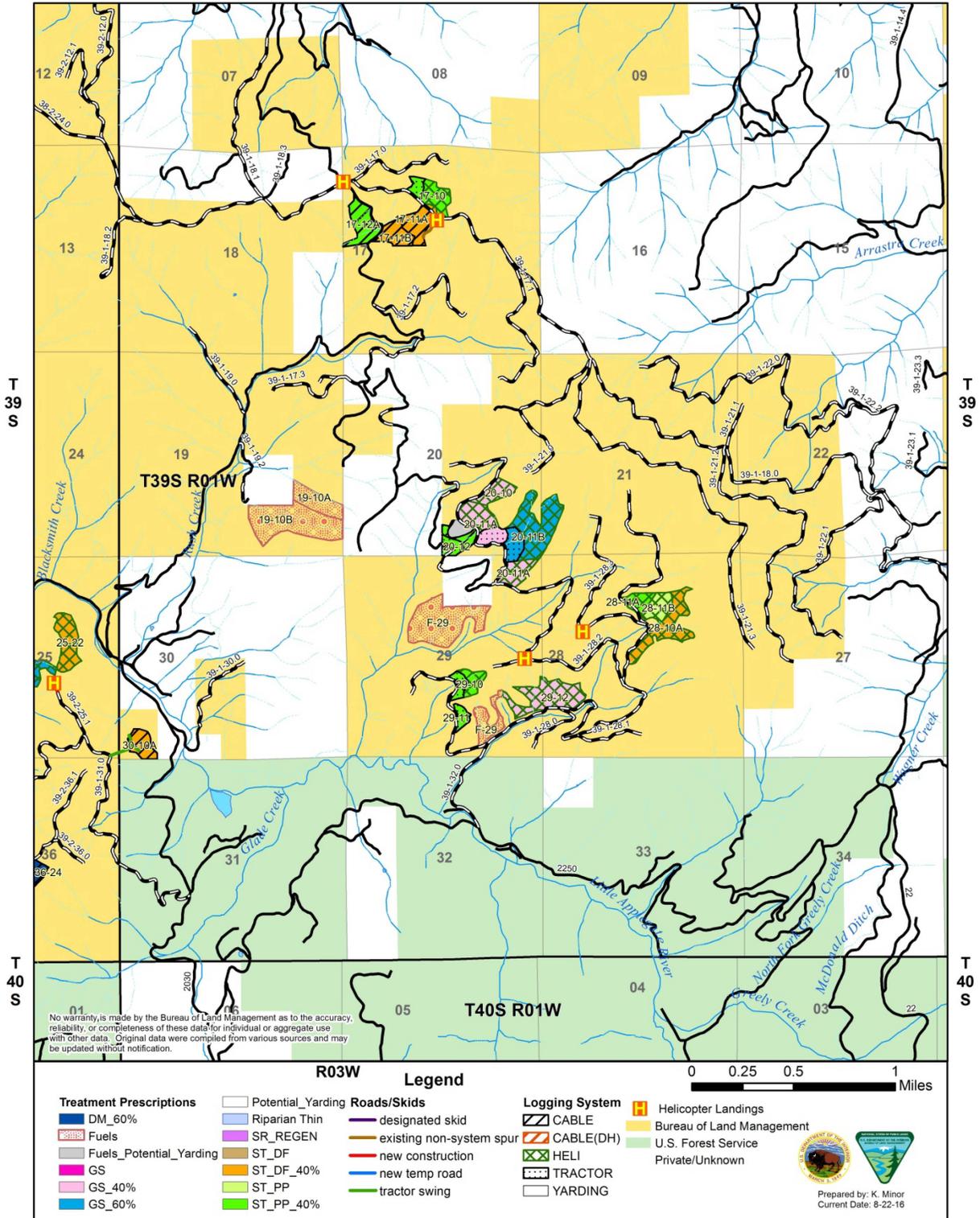


Table 1. Selected Alternative: Commercial Harvest Units.

Unit	Commercial Harvest Prescription	Acres	Township-Range-Section	Logging System
14-30	ST_DF	41.88	39S-03W-14	HELI
15-30	ST_PP	19.15	39S-03W-15	HELI
17-10	ST_PP_40%	15.15	39S-01W-17	HELI/TRACTOR
17-11A	ST_DF_40%	12.97	39S-01W-17	HELI/CABLE
17-11B	ST_DF_40%	10.17	39S-01W-17	CABLE
17-12A	ST_PP_40%	15.01	39S-01W-17	CABLE
20-10	GS_40%	9.36	39S-01W-20	HELI
20-11A	GS_40%	30.30	39S-01W-20	HELI/TRACTOR
20-11B	GS_60%	38.61	39S-01W-20	HELI/TRACTOR
20-12	ST_PP_40%	10.03	39S-01W-20	TRACTOR/CABLE
25-20	ST_DF_40%	54.81	39S-02W-25	HELI/CABLE
25-22	ST_DF_40%	15.52	39S-02W-25	HELI
25-23	GS_60%	6.43	39S-02W-25	HELI
25-30	ST_DF_40%	13.91	39S-03W-25	CABLE
26-21	ST_PP_40%	23.19	39S-02W-26	CABLE
26-21	ST_PP_40%	30.71	39S-02W-26	TRACTOR
26-30	ST_DF_40%	47.72	39S-03W-26	CABLE
26-31	ST_DF_40%	71.18	39S-03W-26	CABLE
27-30	GS	5.52	39S-03W-27	TRACTOR
27-31	ST_PP	2.82	39S-03W-27	TRACTOR
27-32	ST_DF_40%	7.25	39S-03W-27	TRACTOR
27-33	ST_DF_40%	27.05	39S-03W-27	TRACTOR/CABLE
27-34	ST_DF_40%	45.34	39S-03W-27	HELI/CABLE
28-10A	ST_DF_40%	20.89	39S-01W-28	HELI
28-11A	ST_PP_40%	6.75	39S-01W-28	HELI
28-11B	ST_PP	9.31	39S-01W-28	HELI
28-20	ST_DF	9.02	39S-02W-28	CABLE
28-21	ST_PP	23.43	39S-02W-28	TRACTOR
29-10	ST_PP_40%	11.15	39S-01W-29	HELI/TRACTOR
29-11	ST_PP_40%	4.35	39S-01W-29	TRACTOR
29-12	GS_40%	26.22	39S-01W-28	HELI
30-10A	ST_DF_40%	9.14	39S-01W-30	CABLE
33-30	SR_REGEN	26.47	39S-03W-33	HELI
34-20	ST_PP	10.40	39S-02W-34	TRACTOR
34-21	ST_DF_40%	13.53	39S-02W-34	CABLE
34-22	ST_DF	8.22	39S-02W-34	CABLE
34-24	ST_DF_40%	14.28	39S-02W-34	CABLE
34-30	GS_40%	75.53	39S-03W-34	HELI

Unit	Commercial Harvest Prescription	Acres	Township-Range-Section	Logging System
34-31	ST_DF_40%	9.27	39S-03W-34	CABLE
34-32A	ST_PP_40%	2.36	39S-03W-34	CABLE (DH)
34-32B	ST_PP_40%	4.45	39S-03W-34	CABLE
35-20	ST_PP	14.19	39S-02W-35	CABLE
35-30A	ST_DF_40%	19.63	39S-03W-35	CABLE
35-30B	ST_DF_40%	22.83	39S-03W-35	CABLE
35-31	ST_DF_40%	34.11	39S-03W-35	CABLE
35-32	ST_DF_40%	27.32	39S-03W-35	CABLE
35-33	ST_PP_40%	10.43	39S-03W-35	CABLE
36-20	ST_PP_40%	24.03	39S-02W-36	CABLE
36-20	ST_PP_40%	5.64	39S-02W-36	CABLE
36-22	ST_PP_40%	21.04	39S-02W-36	TRACTOR/CABLE
36-23A	ST_PP_40%	16.17	39S-02W-36	CABLE
36-23B	ST_PP_40%	29.11	39S-02W-36	CABLE
36-24	DM_60%	29.33	39S-02W-36	CABLE
36-30	GS_60%	10.77	39S-03W-36	CABLE
RT-27A	Riparian Thin	0.80	39S-03W-27	TRACTOR
RT-27B	Riparian Thin	6.00	39S-03W-27	TRACTOR
RT-27C	Riparian Thin	1.28	39S-03W-27	CABLE
	Total	1111.47		

Logging System	Acres
HELI	356.03
CABLE	595.96
CABLE (DH)	2.36
TRACTOR	157.05

Table 2. Selected Alternative: Non-Commercial Understory Thinning and/or Fuels Units.

Unit	Prescription	Acres	Township-Range-Section
FUELS/YARDING	Fuels_Potential_Yarding	4.68	39S-01W-20
F-29	Fuels	10.69	39S-01W-28
F-29	Fuels	38.28	39S-01W-29
F-25	Fuels	30.30	39S-02W-25
F-28	Fuels	71.66	39S-02W-28
30-20	Fuels	26.43	39S-02W-30
F-30	Fuels	244.30	39S-02W-30
F-30	Fuels	50.98	39S-02W-30
F-33	Fuels	30.18	39S-02W-33
F-14	Fuels	14.06	39S-03W-14
F-28	Fuels	50.81	39S-03W-28
F-28	Fuels	5.56	39S-03W-28
F-28	Fuels	18.01	39S-03W-28
F-28	Fuels	4.19	39S-03W-28
F-35	Fuels	306.46	39S-03W-35
23-30	Fuels	30.48	39S-03W-23
23-31	Fuels	18.38	39S-03W-23
23-32	Fuels	17.37	39S-03W-23
19-10A	Fuels	13.77	39S-01W-19
19-10B	Fuels	40.41	39S-01W-19
	Total	1027.01	

DECISION RATIONALE

My decision to authorize the implementation of the Selected Alternative, which blends components from both Alternatives 4 and 5 from the Nedsbar Forest Management Project Final EA, is based on consideration and evaluation of how well the purpose and need (Final EA, pp. 1-5 to 1-7) are met, evaluation of decision factors (Final EA, pp. 1-7 to 1-8), consideration of the environmental consequences of implementing or not implementing the Nedsbar Forest Management Project (as analyzed in the Final EA and documented in the FONSI), and review and consideration of public comments received in response to the Environmental Assessment.

RESPONSE TO PURPOSE AND NEED AND DECISION FACTORS

Adaptive Management Area (AMA) lands within the Nedsbar Forest Management Project Area are expected to produce timber in compliance with Oregon and California Railroad and Coos Bay Wagon Road Grant Lands Act of 1937 (O&C Act)(RMP, p. 17)(Final EA pp. 1-2 and 1-46). My Decision to authorize the Selected Alternative will contribute to the sustainable supply of timber from O&C lands through the management of forest stands as described in the Final EA.

1. Promote tree survival and growth to improve stand vigor, resiliency, and stability necessary to meet land use allocation objectives.

The Oregon and California Railroad and Coos Bay Wagon Road Grant Lands Act of 1937 (O&C Act) is an applicable law governing 99 percent of BLM-administered lands within the Nedsbar Planning Area (Final EA, p. 1-2). Sustainable forest production is a primary purpose of the O&C Act. The Medford District Resource Management Plan includes Timber Resource Objectives to provide for a sustainable supply of timber and other forest products (Final EA, p. 1-6)(RMP, p. 72) and adopted a set of silvicultural treatments for managing conifer forest stands on BLM-administered lands (Final EA, p. 1-5)(RMP Appendix E, pp. 179-196). Silvicultural prescriptions included in the Nedsbar Forest Management Project are designed to meet RMP direction for sustainable forest production and timber resources. Project Design Features (PDFs) are also included in the design of the Nedsbar Forest Management Project (Final EA, p. 2-29 to 2-40) to provide for multiple resource objectives outlined in the Medford District RMP.

I chose the Selected Alternative as it best meets the 1995 RMP direction for timber resources by managing approximately 1,112 acres for sustainable forest production while addressing some of the concerns identified by the community. While Alternative 5 would have treated 536 acres commercially, this represents only about 48 percent of the acres that will be managed for forest production under my decision to implement the Selected Alternative. Furthermore, timber harvest under Alternative 4 had already been reduced by at least 1,000 acres (Final EA pp. 2-3 o 2-5) to respond to the recovery and survival of the northern spotted owl. Further reduction in acreage proposed by the community under Alternative 5 was strongly influenced by the community's desire to preserve areas within the planning area as unmanaged (Final EA, Appendix E and DR Appendix A, *Response to Comments* p. A-18). This aspect of Alternative 5 is inconsistent with the 1995 RMP as the decision to manage these lands for timber production occurred in 1995 under BLMs Medford District RMP.

In working with the CAWG, I had hoped to increase the areas of agreement or common ground between the BLM and the community. However, comments received from the Applegate Neighborhood Network, authored by a key member of the CAWG, suggested that the community would only support Alternative 5 as designed by the community. Based on my obligation to implement the intent of the 1995 Medford District RMP, I cannot select the community's Alternative 5 as designed, as it represents an unwarranted departure from the Timber Resources Objectives of BLM's Resource Management Plan. Nor would it meet the Ashland Resource Area's contribution to the Medford District's 2016 Allowable Sale Quantity of 46 MMBF. However, based on some of the dialogue throughout the process, I felt there was more common ground shared with individuals in the community than represented by Alternative 5. Another important factor that I had to consider is that the CAWG includes representation from Applegate Valley residents and non-profit conservation groups; not all stakeholders are represented by this group. Therefore, my decision must also weigh input received from other stakeholders representing the broader southwest Oregon community, along with existing laws and RMP direction.

I did not select Alternative 1 as it would not meet the Purpose and Need to manage forests for sustainable forest production. Alternative 3 would have treated 789 acres representing about 71 percent of that included in my decision to implement the Selected Alternative. Alternative 3 was not selected for similar reasons as described for not selecting Alternative 5 as designed.

2. Protect and conserve federally listed and proposed species, and manage their habitats to achieve their recovery in compliance with the Endangered Species Act, approved recovery plans, the Medford District Resource Management Plan (USDI BLM 1995) and Bureau Special Status Species policies.

The Selected Alternative provides the best option for addressing the need to manage forests to improve conifer vigor and resiliency to drought and fire and provide for sustainable forest production, while managing for the recovery and survival of the northern spotted owl through conservation of high priority sites and high quality habitat.

The 1995 Medford District RMP requires the BLM to manage forests to provide for the protection, conservation, and recovery of listed species (RMP p. 50-51). The 2011 U.S. Fish and Wildlife's Revised Recovery Plan for the Northern Spotted Owl includes recovery actions to guide activities that would help to further the recovery of the northern spotted owl (NSO). BLM worked with the US Fish and Wildlife Service to incorporate Recovery Actions consistent with BLM laws, policies, and regulations.

The BLM's interdisciplinary (ID) Team incorporated Recovery Action (RA) 32 into the design of the project and to the extent practical, RA 10. RA 32 calls for maintaining high quality habitat stands characterized as having large diameter trees, high amounts of canopy cover, and decadence components such as broken topped live trees, mistletoe, cavities, large snags and fallen trees. The BLM has identified and deferred forest management in stands classified as RA 32 in the planning area (Final EA, p. 2-4 to 2-5). Recovery Action 10 recommends conserving high priority sites and high quality habitat to provide demographic support to the spotted owl population. Using known spotted owl sites and spotted owl survey results (including reproductive success), the BLM's biologists identified high priority sites warranting a more conservative approach to forest management within NSO home ranges. The ID Team further refined the project from its original configuration using the Relative Habitat Suitability Model and concepts of the RA 10 strategy to further reduce the potential for effects to spotted owls within high priority home ranges by avoiding adverse effects that would lead to an incidental take determination by the US Fish and Wildlife Service. Within home ranges of owl sites identified as low priority (poor reproductive success, insufficient habitat to support reproduction and survival) forest management focused on forest restoration strategies that would promote long-term benefits to the spotted owl. Additionally, there was no treatment of nesting habitat (McKelvey 1 habitat rating) within the home ranges of high priority sites or critical habitat.

3. Produce a sustained yield of products to support local and regional economic activity.

My decision to implement the Selected Alternative authorizes commercial forest management on 1,112 acres of O&C lands contributing an estimated 3 to 4 million board feet (MMBF) toward the District's assigned Allowable Sale Quantity (ASQ) of 46 MMBF in 2016 and about one (1) MMBF toward the District's 2017 ASQ.

I did not select Alternatives 3 or 5 (as designed) as they would have contributed to the District ASQ to a much lesser degree. Alternative 3 would have implemented about 789 acres of commercial forest management producing about 2 to 3 MMBF towards the District's assigned ASQ; about 1-2 MMBF less than anticipated under this Decision. Alternative 5 would have implemented 536 acres of commercial forest management, producing about one (1) MBF toward the District's assigned ASQ, the lowest of the three action alternatives. Although Alternative 4 (as designed) would have contributed a higher volume of timber towards the Medford District's ASQ, it was not selected as it did not best respond to the relevant issues identified in Chapter 1 of the Final EA (pp. 1-13 to 1-15). Alternative 1 was not selected as it would not have contributed to the Medford District's ASQ.

I believe that my decision to implement the Selected Alternative best meets the 1995 RMP objectives for timber resources to produce a sustainable supply of timber. My decision also represents a balanced approach to providing for timber products while addressing the conservation and recovery of the northern spotted owl, economic and ecological costs of road construction, and stakeholder interests.

4. Reduce the potential risk of wildfire that may result from the fuels (e.g., limbs, branches, twigs) produced during harvest activities, and other vegetation conditions contributing to fire hazard and risk.

My decision to authorize the Selected Alternative will treat the most acreage of the action alternatives (1,027 acres). While not all units have a primary purpose of fuels reduction, forest and vegetation management treatments within all units will reduce ladder and crown fuels (Final EA p. 3-33) while promoting the fire resilient pine species. Prescriptions also focus on retaining large healthy trees that are more fire resilient (EA pp 3-17, 3-33). While fuel loadings from timber harvest will increase temporarily following harvest activities (Final EA, p. 3-27), fuels are required to be handpiled by the timber sale purchaser within four (4) weeks of harvest and hand piles are burned the following fall and winter. Despite the temporary increase in surface fuels (one to two years), the reduction in crown fuels outweighs any increase in surface fire hazard (Final EA, p. 3-27). Once post-harvest fuels treatments are completed (usually within one year), activity fuels generated from timber harvest will be mitigated.

District monitoring of past fuels treatment units under the FIRMON program show that five years following handpile and burn fuels reduction treatments, post treatment fuels were lower than before the fuels reduction treatments (Final EA, p. 3-29). Evaluations will occur post-harvest and again about 5 years following completion of initial treatments to determine follow-up fuels reduction maintenance needs.

My decision also authorizes follow-up maintenance underburning as determined appropriate based on follow-up evaluations of fuels conditions (Final EA, p. 2-19) to maintain effectiveness of fuel reduction within units authorized for treatment under this Decision.

5. Maintain a transportation system within the Nedsbar Planning Area that serves the needs of users in an environmentally sound manner.

This decision meets RMP guidance to maintain a transportation system that serves the needs of users in an environmentally sound manner, and reduce minor collector and local road densities where high road densities exist.

With the Selected Alternative, there will be 1.33 miles of temporary road construction and 0.42 miles of permanent road construction to facilitate access to harvest operations in an economically sound manner (Final EA pp. 3-143). Project Design Features incorporating Best Management Practices, including seasonal restrictions, would ensure that road management will result in compliance with the Clean Water Act (Final EA, pp. 3-75). The decommissioning of 9.63 miles of roads (1.88 miles natural decommissioning and an additional 7.75 miles as funding becomes available) and placing an additional 7.34 miles of road into long-term closure status would reduce open road density and road-related sediment production reducing potential impacts to water quality and aquatic habitat as well as disturbance to wildlife and restoring soil productivity (EA, pp. 3-53 and 3-74). An estimated 2.6 miles of permanent and temporary roads are not included in my decision for the following reasons:

- I chose not to construct over one mile of road in T. 39 S., R. 2 W., Sections 27 and 26, as the current value of timber accessed by that road would at best, break even with road construction and logging costs. While the ecological effects from one mile of road construction could be

minimized with the application of required project design features, they would not be eliminated altogether. High road density for this sub-basin would be increased slightly although permanently (Final EA, p. 3-75). Because the value of treating these stands does not appear to outweigh the economic and ecological costs of road construction, I chose to defer the construction of this road and associated timber harvest at this time.

- Permanently rerouting of 0.22 mile of road in T. 39 S., R. 3 W., in Sections 23 and 26 and along the ridgeline separating Little and Upper Applegate Watersheds, is no longer needed as forest stands accessed by the end of that road were changed to non-commercial fuels reduction only. This is due to the low amount of commercial sized material needing thinned at this time, which does not support a commercial operation. The existing road location is adequate for access to conduct non-commercial thinning operations.
- I chose not to construct the temporary road in T. 39 S., R. 3 W., Section 24 and T. 39 S., R. 2 W., in Section 19 and off of Grouse Creek road 39-3-24, as the location of survey and manage mollusk species prevented the widening of the approach off of Grouse Creek road preventing log truck access without using a turn-around approximately 1 to 2 miles up Grouse Creek to both enter and exit units accessed by this temporary road. A more operationally feasible access option is needed, therefore, I did not include the construction of this road in this decision.
- I chose not to construct road traversing T. 39 S., R. 1 W., Sections 19, 20 and 29, as the treatment need in the commercial-sized material was not great enough to warrant commercial treatment at this time, therefore, the road is not needed.
- I chose not to construct the temporary road located in T. 39 S., R. 3 W., in Sections 10 and 15 as the cost of cable yarding and road construction would have exceeded the cost of helicopter yarding (Final EA, p. 3-143).

Alternatives 3 and 5 (as designed) would have provided for the management of existing roads, road decommissioning, and long-term closures. However, eliminating road construction as an option (as well as other alternative design considerations) contributed to a reduction in forest management acreage (Final EA, p. 2-41) and timber outputs (Final EA, p. 2-47).

RESPONSE TO OTHER INFORMATION

This section addresses my rationale for authorizing the implementation of the Selected Alternative, in regard to other issues addressed throughout project development and analysis that are not otherwise addressed above under response to Purpose and Need and Decision Factors. This is not intended to address all concerns identified throughout project development and public involvement, but those issues that strongly influenced project design and this decision. Other concerns that were identified and considered are addressed in the Final EA (pp. 1-13 to 1-15) and Final EA Appendix B.

Water Quality and Hydrology

There would be no effect to stream temperatures as a result of the Nedsbar Forest Management Project because the project is designed to avoid the removal of shade producing vegetation along perennial stream Riparian Reserves and the minor amount of canopy removal in the Riparian Reserves of intermittent streams would not affect stream temperatures because these streams only run water in response to winter and spring storms and are dry during the warmest summer months (Final EA, p. 3-73).

There is potential for new road construction to increase short-term sediment delivery and turbidity. My decision has reduced the amount of new permanent road construction to 0.42 mile, which is located along ridge and upper slopes and not hydrologically connected to aquatic habitat (Final EA, p. 3-91). The remainder of road construction (1.33 miles) will be temporary. While

there is potential for sediment delivery for the short-term, decommissioning following completion of operations will eliminate the potential for these roads to be long-term sources of sediment to streams. Additionally, the required project design features (Final EA, p. 2-32 to 2-33) to limit construction of new roads and landings and the maintenance of existing roads to the dry season will greatly reduce the potential for short-term sediment delivery to streams. This project also includes required project design features for haul including no use of natural surfaced roads during wet weather conditions that could lead to road damage or sediment delivery and requirement to ensure roads used during the shoulder and winter seasons are adequately surfaced, and no hauling during heavy rain events (Final EA, p. 2-34).

Actions included in the Selected Alternative would not result appreciable increase in areas with less than 30 percent canopy cover. Therefore, there is no increased risk for enhanced peak flow as a result of the Nedsbar Forest Management Project (Final EA, p. 3-76).

BLM is recognized by Oregon Department of Environmental Quality as the Designated Management Agency for implementing the Clean Water Act on BLM lands (Final EA p. 3-70) and the Applegate Subbasin Total Maximum Daily Load (TMDL) approved by U.S. Environmental Protection Agency approved BLM actions compliant with the 1995 Medford District Resource Management Plan provided Best Management Practices and Project Design Features are followed to avoid exceedance of TMDLs. Best Management Practices and Project Design Features are required and will be followed as part of the implementation of the Selected Alternative. A detailed description of required Project Design Features are included in the Final EA (Final EA, pp. 2-29 to 2-40), and as described throughout the Final EA in association with resource analysis. Based on analysis documented in the EA and the FONSI (pp. 4 to 5), I find the Nedsbar Forest Management Project to be compliant with the Applegate Subbasin Total Maximum Daily Load (TMDL) and *Water Quality Restoration Plan for Federal Lands in the Applegate Subbasin* and will not violate the Clean Water Act.

Fish (also see Consultation) and Aquatic Habitat

With my decision to implement the Selected Alternative, aquatic habitats and the species they support will be maintained as a result of project design and required Project Design Features (Final EA p. 2-29 to 2-40), which will ensure water quality within project area streams and other water features are maintained.

Implementation of the Nedbar Forest Management Project was determined to have “no effect” to Coho Critical Habitat or Essential Fish Habitat in the Analysis Area (Final EA p. 3-83).

The Final EA reported a potential for Alternative 4 to add up to 4.11 cubic yards of sediment to streams from road construction and haul in the short-term, and slight risk for long-term sediment inputs from new permanent road construction (Final EA, p. 3-98 to 3-99). The potential sediment (about 2.1 cubic yards) from haul is not anticipated to be detectable beyond sediment from sources given the small magnitude of sediment anticipated and the large spatial and temporal scale of the contribution (Final EA, p. 3-93). Since my decision eliminates about 1.08 mile of new permanent road construction and changes 0.58 miles of permanent road to temporary road construction in the Lick Gulch drainage, the effects to sedimentation of implementing the Selected Alternative are reduced from those effects reported in the Final EA. Decommissioning temporary roads following completion of operations will eliminate the potential for these roads to contribute to long-term sources of sediment to streams.

Alternatives 3 and 5 (as designed) would have less risk for sediment to streams due to their design to not include new road construction. However, these alternatives were not selected for other reasons outlined in the Decision Rationale of this Decision.

Soils

This decision requires the application of project design features (Final EA, p. 2-29 to 2-40) incorporating Best Management Practices (BMPs) as described in the Medford District Resource Management Plan (USDI 1995, p. 166) (and modified by Resource Management Plan Maintenance dated July 12, 2012) to avoid or minimize soil erosion and minimize loss of soil productivity.

Soil erosion from construction and decommissioning is expected to be avoided or minimized through the application of PDFs (Final EA p. 3-53)

Approximately 1.33 miles of road construction included in this decision are temporary and these roads will be fully decommissioned upon completion of harvest activities. While effects to soil productivity from temporary road construction are not expected to be recovered in the short-term, the soil resources for all temporary roads have been identified as having a high potential for restoration (EA pp. 3-49 to 3-52) and full recovery would be expected in the long-term (10+ years) (EA p. 3-54). Approximately 0.42 miles of road are authorized for permanent road construction, removing 1.68 acres (0.009 percent of the planning area) from production over the long-term. Seven (7) new helicopter landings would be constructed and decommissioned/de-compacted following use (Final EA, p. 2-33). The remaining 5 helicopter landings are existing features/infrastructure that would remain on the landscape. An additional 1.88 miles of road would be naturally decommissioned. These roads are in various stages of natural recovery and revegetation from years of non-use and removing these roads from the system will allow for continued recovery of soil productivity for approximately 7-8 acres (0.04 percent) of lands within the Planning Area.

Human Dimensions

Recreation: The community expressed their concerns for impacts to recreation throughout the Project Area, but in particular to trail users on the Sterling Mine Ditch Trail and Area of Environmental Concern (ACEC). My decision to implement the Selected Alternative has no direct effects to the Sterling Mine Ditch Trail (Final EA p. 3-135). While trail users may be affected by noise disturbance from helicopters, logging trucks, and other timber harvesting equipment, and increased road congestion from logging trucks, timber sale operations would not take place on the entire area simultaneously and disruptions would occur intermittently due to seasonal operating restrictions and would last for only the life of the contracts (about 3 years). Furthermore, the roughly 8 percent of the units within the planning area that are within observation range of the Sterling Mine Ditch Trail are anywhere from 1000 feet to 2 miles away from the trail and separated by the Little Applegate Road and River (Final EA, p. 3-136).

Visual Resource Management (VRM): The BLM's Recreation Planner used the contrast rating system to analyze the potential for visual impacts from the Nedsbar Forest Management Project Activities. My decision to authorize the Selected Alternative will meet the management guidelines for VRM III and IV and would result in low levels of change that would largely retain the existing character of the landscape. The landscape is covered by a variety of vegetation types, human development, colors and textures and the project would repeat the basic elements of form, line, color, texture, and scale found in the pre-dominant natural features of the characteristic

landscape. While portions of the project will be visible from existing roads, thinning operations will not result in large scale canopy gaps or openings. (Final EA p. 3-140 to 3-141).

Lands with Wilderness Characteristics and citizen proposed unroaded areas: The Nedsbar Forest Management Project is not located within any areas determined through inventory to meet criteria for Lands with Wilderness Characteristics (Final EA, p. 3-141).

The CAWG identified several areas described by the local community as unroaded including: Boaz, Buncom, Quartz/Lick, Trillium Mountain, and Bald Mountain. While BLM recognized these areas are important to the CAWG and the community members they represent, and reported project activities within these areas (Final EA, pp. 2-46 to 2-47), these areas do not meet the size criteria as defined in the Section 2(c) of the Wilderness Act to possess wilderness characteristics (Final EA, p. 3-141 to 3-142). The BLM is directed by the 1995 Resource Management Plan to manage these areas for sustainable forest and timber production and provide a transportation system that meets the needs of users in an environmentally sound manner (Final EA, pp. 1-5 to 1-7).

Laws & Policy

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, the Archaeological Resources Protection Act of 1979, and the Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 (Final EA pp. 1-8 to 1-9).

Furthermore, based on the environmental analysis documented in the Nedsbar Forest Management Project Environmental Assessment, a Finding of No Significant Impact (FONSI) was completed for this project. There will be no significant impacts resulting from the implementation of this decision (FONSI pp. 1-11).

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. The 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.

To ensure consistency with silvicultural prescriptions designed to treat and maintain northern spotted owl roosting, foraging, and dispersal habitat, BLM's silviculturist and wildlife biologists have used a combination of post-marking reconnaissance, stand data from stand exams, marking tallies, and canopy cover plots (using moosehorn instruments) to validate canopy cover requirements for maintaining spotted owl habitat. Post-treatment monitoring will occur using a combination of reconnaissance and measurements to assess canopy cover and other habitat characteristics (such as moosehorn surveys, tree tallies, or post-harvest stand exams) according to the Medford District's quality control strategy.

CONSULTATION AND COORDINATION

The federally threatened northern spotted owl is the only threatened and endangered wildlife species within or near the Nedsbar Project Area. Formal consultation was initiated with U.S. Fish and Wildlife (USFWS) Service in April 2016 (Nedsbar BA 2016). The USFWS released a Biological Opinion (BO)(Reference Number 01EOFW00-2016-F-0283). The USFWS has determined that Nedsbar Forest Management Project activities are not likely to jeopardize the northern spotted owl and the Service does not anticipate the project will adversely modify critical habitat at the subunit or range wide scale (USDI FWS 2016, p. 61)

Implementation of the Nedbar Forest Management Project was determined to have “no effect” to Coho Critical Habitat or Essential Fish Habitat in the Analysis Area (Final EA p. 3-83).

The BLM has a programmatic consultation for T&E plants that generically covers the activities proposed in this EA. The Biological Assessment and Letter of Concurrence (#01EOFW00-2014-I-0013) prescribe measures, called Project Design Criteria, to ensure that management actions will not likely adversely affect populations or habitat. One of the project design criteria for Gentner’s fritillary for large-scale forest management projects is to conduct two years of surveys if the project is within the range of the species, contains suitable habitat, and the action would negatively impact the population. The BLM has completed surveys to protocol and five Gentner’s fritillary sites were detected. The BLM will protect these sites through applying no treatment buffers. (Final EA p. 4-2 and Final EA Appendix B).

In accordance with the 2015 State Protocol Between the Oregon-Washington State Director of the Bureau of Land Management (BLM) and the Oregon State Historic Preservation Officer (SHPO)and the National Historic Preservation Act of 1966 (specifically, section 106), as amended, a literature review and archaeological reconnaissance was conducted for the Nedsbar Project Area. Sites identified within the Project Areas of Potential Effect (APE) have been flagged for avoidance. The Nedsbar Project was reviewed for the potential for adverse effects to recorded cultural resources. Site specific protection measures (flag and avoid) have been applied to protect cultural sites located within the Nedsbar APE (2015 Protocol VI.C.9) and would not be affected by the undertaking (Final EA Appendix B).

Letters describing the preliminary Proposed Action initiating consultation with the local federally recognized Native American Tribes were sent on May 15, 2014. Further consultation in the form of letters, phone calls, and emails did not identify any concerns with the proposed activities.

PLAN CONFORMANCE

The BLM signed a Record of Decision approving the Southwestern Oregon Resource Management Plan (2016 ROD/RMP) on August 5, 2016.

Revision of an RMP necessarily involves a transition from the application of the old RMP to the application of the new RMP. The planning and analysis of future projects such as timber sales requires several years of preparation before the BLM can design a site-specific project and reach a decision. Allowing for a transition from the old RMP to the new RMP avoids disrupting the management of BLM-administered lands and allows the BLM to utilize work already begun on the planning and analysis of projects.

The 2016 ROD/RMP (pp. 7, 10) allows the BLM to implement projects consistent with the management direction of either the 1995 RMP or the approved RMP, at the discretion of the decision maker, if—

- The BLM had not signed a project-specific decision prior to the effective date of the ROD;

- The BLM began preparation of NEPA documentation prior to the effective date of the ROD; and
- The BLM signs a project-specific decision on the project within two years of the effective date of the ROD.

The Medford District, Ashland Resource Area began preparation of NEPA documentation for the Nedsbar Forest Management Project prior to the effective date of the 2016 ROD/RMP, as the District initiated planning and NEPA documentation for this project on May 14, 2014. This project was designed to conform to and be consistent with the Medford District's 1995 Record of Decision and Resource Management Plan (1995 ROD/RMP).

This project meets the criteria described in the 2016 ROD/RMP that allows the BLM to implement projects that conform and are consistent with the 1995 ROD/RMP, with the exception of five categories of prohibited carry-over actions (2016 ROD, pp. 10-11). The Nedsbar Project does not include any actions that are excepted and therefore precluded from the 2-year transition period under the 2016 ROD/RMP.

1. Regeneration harvest (construction of roads or landings does not constitute regeneration harvest) within the Late-Successional Reserve allocated by this ROD that is inconsistent with the management direction for the Late-Successional Reserve contained within the approved RMP.

No regeneration harvest is proposed within the LSR under the Nedsbar Forest Management Project.

2. Issuance of right-of-way grants within the Late-Successional Reserve allocated by this ROD that are inconsistent with the management direction for the Late-Successional Reserve contained within the approved RMP.

No right-of-way grants are proposed under the Nedsbar Project.

3. Commercial thinning within the inner zone of the Riparian Reserve allocated by this ROD that is inconsistent with the management direction for the Riparian Reserve contained within the approved RMP.

No commercial thinning is proposed in the inner zone of Riparian Reserves under the Nedsbar Project.

4. Projects within the District-Designated Reserve – Lands Managed for their Wilderness Characteristics allocated by this ROD that are inconsistent with the management direction for the District-Designated Reserve – Lands Managed for their Wilderness Characteristics contained within the approved RMP.

There is no District-Designated Reserve – Lands Managed for their Wilderness Characteristics in the Nedsbar Project Area.

5. Timber harvest that would cause the incidental take of northern spotted owl territorial pairs or resident singles and does not have a signed Biological Opinion and Incidental Take Statement that predates the effective date of the Biological Opinion for the approved RMP.

The Biological Opinion for the Nedsbar Project has determined that there will be no incidental take of northern spotted owls (USFWS 2016, p. 63).

Projects proposed and analyzed in the Nedsbar Forest Management Final EA were designed to conform to the following:

- Final-Medford District Proposed Resource Management Plan/Environmental Impact Statement (PRMP/EIS) (USDI 1994) and Medford District Record of Decision and Resource Management Plan (RMP/ROD) (USDI 1995);
- Final Supplemental Environmental Impact Statement (Northwest Forest Plan FSEIS) and Record of Decision (ROD) for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl (USDA and USDI 1994a, USDA and USDI 1994b);
- Final SEIS for Amendment to the Survey & Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines (USDA and USDI 2000), and the ROD and Standards and Guidelines for Amendment to the Survey & Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines (USDA and USDI 2001);
- Medford District Integrated Weed Management Plan Environmental Assessment (USDI 1998) and tiered to the Northwest Area Noxious Weed Control Program (EIS, USDI 1985).
- This project utilizes the December 2003 Survey and Manage species list. This list incorporates species changes and removals made as a result of the 2001, 2002, and 2003 Annual Species Reviews (ASRs) with the exception of the red tree vole. For the red tree vole, the Ninth Circuit Court of Appeals vacated the category changes and removal of the red tree vole in the mesic zone, and returned the red tree vole to its status as existed in the 2001 ROD Standards and Guidelines, which make the species Category C throughout its range.

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 the Medford's *Mail Tribune* and Grants Pass' *Daily Courier* newspaper.

When timber is offered for sale, a Notice of Sale will be published in the Medford *Mail Tribune* and Grants Pass *Daily Courier*. 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 and 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 Medford's *Mail Tribune*. Any protest must be made within 15 days of the publication of Notice of Decision in Medford's *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.

43 CFR § 5003.3 subsection (c) states: "Protests received more than 15 days after the publication of the notice of decision or the notice of sale are not timely filed and shall not be considered." Upon timely filing of a protest, the Authorized Officer shall reconsider the project decision to be implemented in light of the statement of reasons for the protest and other pertinent information available to her. The Authorized Officer shall, at the conclusion of the review, serve the protest decision in writing to the protesting party(ies). Upon denial of a protest, the Authorized Officer may proceed with the implementation of the decision as permitted by regulations at 5003.3(f).

If no protest is received by the close of business (4:30 p.m.) within 15 days after publication of the Notice of Decision or 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.


Kristi J. Mastrofini
Field Manager, Ashland Resource Area
Medford District, Bureau of Land Management

8/30/16
Date

Appendix A – Response to Comments

Written comments received in response to the Nedsbar 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 EA.

Fuel Reduction and Forest Health

Comment 1. The EA does not address concerns for increased shrub and understory growth (shrub response) in timber harvest units increasing susceptibility to wildfire.

Response: The effects of timber harvest on increasing hazardous fuels, including shrub and understory growth response were analyzed in the Nedsbar Forest Management Project EA. Monitoring shows that five years following handpile and burn treatments, fuel loading remained lower than pre-treatment. Looking to eight years following treatments fuels may increase and brush and conifer response will vary from one treated stand to the next (Final EA, p. 3-32) based on site conditions and silvicultural prescriptions designed to increase species and structural diversity. Areas planned for fuels treatment may be reexamined by fuels and resource specialists, planned treatments may be changed to better meet the objectives outlined in the Final EA. Proposed changes will be limited to treatments and their anticipated effects analyzed under this EA (Final EA, p. 3-27).

Underburning is proposed in timber sale units to treat residual slash and reduce fire hazard (Final EA, p. 2-19). In proposed timber sale units, underburning would be used to remove at least 60 percent of slash less than 3 inches in diameter and a lesser amount of larger fuel size classes. Underburning would be implemented in the spring or fall. Timber sale units are analyzed for possible underburning based on the anticipated amount of residual slash, resource objectives, strategic and logistical concerns (e.g., aspect, ridges, roads, proximity to other fuels treatments, values at risk, etc.). BLM fire and fuels management personnel would conduct post-treatment evaluations to determine the need for burning.

Treatment units would be monitored in the future to determine treatment effectiveness and the need for additional treatments. This is typically started within 5 years after treatment and further monitoring is scheduled based on those findings.

Comment 2. The BLM has not adequately analyzed impacts to changes in microclimate following fuels management and potential for increased fire intensity.

Response: Changes in microclimate have been analyzed in the Nedsbar Final EA. The Final EA recognizes that forest management can result in altered microclimates; however, the degree to which microclimate change influences fire behavior is dependent on stand conditions after treatment, mitigation to offset the effects of microclimate change, and the degree of openness (Final EA p. 3-36). The EA analyzed potential changes in fuel moistures from reduced canopy shading. The difference in fuel moistures in stands with less than 50 percent canopy shading or greater than 50 percent canopy shading are one (1) percent during hot dry summer conditions (ambient air temperatures of 90 to 109 degrees F and relative humidity of 15 to 19 percent). This minor difference in fuel moisture percentages would have minimal impacts to fire behavior. Post-harvest treatment of activity fuels would generally occur within about one year of harvest reducing surface fuels generated from harvest (EA, p. 3-28). Post treatment evaluations would also determine the need for follow-up maintenance burning to further reduce fine fuels on site (EA, p 2-18 to 2-19). The moisture content of live fuels (when present) can also have a dampening effect on fire behavior compared to dead fuels (EA p. 3-36). Forest thinning reduces crown and ladder fuels and with post-harvest fuels treatments, the effects of changes in microclimates on fire behavior would be mitigated under the Nedsbar Forest Management Project EA (3-26 to 3-36).

Comment 3. The NEPA document must address the fact that there is very little scientific support that thinning reduces fire hazard.

Response: The BLM has defined the agency's purpose and need in the Final EA (p. 1-5 through 1-7):

- Manage forest stands to promote tree survival and growth and to improve stand vigor, resiliency, and stability necessary to meet land use allocation objectives (USDI BLM 1995, pp. 62 and 72);
- Protect and conserve federally listed and proposed species, and manage their habitats to contribute toward their recovery in compliance with the Endangered Species Act (ESA), approved recovery plans, and Bureau Special Status Species policies (USDI BLM 1995, pp. 17-18, 50-51);
- Produce a sustained yield of products to support local and regional economic activity (USDI BLM 1995, pp. 38, 72, 73, and 81);
- Reduce the risk of wildfire that may result from the fuels (e.g., limbs, branches, twigs) produced during harvest activities (USDI BLM 1995, p. 91) and other vegetation conditions contributing to fire hazard and risk; and

- Maintain a transportation system within the Planning Area that serves resource management needs in an environmentally sound manner (USDI BLM 1995, pp. 84-86).

Not all treatments are designed to reduce fire hazard. Forest thinning proposed under the Nedsbar Forest Management Project is intended to meet the first three bullets of the Purpose and Need as stated above and does not aim specifically to address fire hazard. However, regardless of treatment objective, forest thinning that reduces ladder and crown fuels can reduce fire behavior in forest stands by reducing crown fire potential fuel loading available to burn (Final EA, p. 3-28). Forest thinning accompanied by removal of post-harvest activity fuels is effective in reducing fire hazard (Final EA, p. 3-26). Post-harvest fuels reduction work will occur to treat activity fuels generated from timber harvest. Handpiling is required to be completed by the timber purchaser generally within 4 weeks following harvest and pile burning is completed within about one year of harvest. These treatments may be followed by prescribed maintenance underburning based on post-treatment evaluations and need for additional treatments (Final EA, p. 2-19).

Comment 4. The EA is misleading when it assumes that less departure from reference conditions represents greater fire resiliency and fire-regime condition-class may not be an accurate way to predict fire hazard in SW Oregon, because it assumes incorrectly that “time-since-fire” is an accurate indicator of fire hazard.

Response: The BLM did not use fire regime condition class to predict fire hazard. As discussed on p. 3-24 (Final EA), the BLM defines fire hazard as vegetation type, arrangement, and volume, which indicate resistance to control of the fire. The EA does describe fire regime condition class (pp. 3-23 and 3-24) which indicates a departure from historical fire regimes and vegetative structure alterations. However, the BLM does not base the need for treatments under the Nedsbar Forest Management Project solely on fire regime condition classes. As stated above the type, arrangement, and condition of vegetation is used to determine fire hazard. The use of fire regime conditions class in fire planning efforts is directed by BLM Fire Planning Handbook H-9211-1, and recently used in published science (Huago et al. 2015), as a way to assess restoration needs and is a part of the current condition assessed during fire planning.

Departure from reference conditions was not used to develop alternatives and is not the only metric used to assess and compare fire resiliency. The departure of current vegetation conditions from reference conditions was reported for the Nedsbar Planning Area along with acres treated by alternative in each “Treatment Priority” class based on the natural range of variation. This is just one metric used to compare alternatives regarding fire resiliency. The Nedsbar Forest Management Project Final Environmental Assessment also describes the effects of thinning on forest stand fire resiliency based on prescription objectives. Prescriptions designed to promote reduction of ladder fuels, increased height to the base of tree crowns, reduction of crown fuels, reduced stand densities, large trees and fire resilient pine species, would improve the fire resiliency of forest stands (Final EA, p. 3-33 to 3-34).

Comment 5. EA does not adequately address human health impacts from the burning of polyethylene (plastic, PE) sheets or the findings of Garcia 2003.

Response: Impacts to human health from the burning of PE sheets related to prescribed burning was considered but eliminated from detailed analysis (Appendix B, p. B-8). The use of polyethylene plastic sheeting would follow guidance from DEQ and Oregon Department of Forestry Smoke Management Plan (Final EA, p. 3-36). OAR 629-048-0210 “(a) Only polyethylene may be used. All other plastics are prohibited; (b) the size of each polyethylene cover must not exceed 100 square feet. For small piles, covering only an area necessary to achieve rapid ignition and combustion, instead of the entire pile, is

encouraged; (c) the thickness of the polyethylene cover must not exceed 4 mil.” On hand pile units the 4 mil polyethylene sheeting typically covers 90% of the surface of the pile, with a maximum of 100 square feet of coverage. Burning would occur after coordination with ODF on the smoke management forecast and instructions to minimize the likelihood of public health effects and visibility impairment (Final EA Appendix B, p. B-8 to B-9). The literature suggests that the emissions to the atmosphere contributed by the sheet of PE covering are chemically similar to the emissions from the underlying pile of silvicultural debris (Final EA Appendix B, p. B-8). For many of these emissions, such as CO, CO₂ and particulate matter, the amount emitted from the woody debris will of course overwhelm the contribution from the PE. The available literature does not support a contention that burning PE sheeting would produce unique chemicals or classes of chemicals that are not also found in emissions from burning wood debris (Worbel and Reinhardt 2003). The Garcia 2003 study was conducted in a preheated furnace and does not mimic the conditions of burning silvicultural debris with PE sheeting from ambient to approximately 1000°C.

Comment 6. EA does not incorporate credible science submitted to the agency before the publication of the EA.

Response: The BLM appropriately considered the literature submitted during scoping (Final EA, pp. R-16 through R-21). The BLM’s interdisciplinary team and the Ashland Field Manager reviewed and considered the information provided during scoping in Chapter 1 (*Relevant Issues*), Appendix A (*Scoping Summary*), Appendix B (*Issues Considered but Eliminated from Detailed Analysis*), Chapter 2 (*Alternatives Analyzed in Detail and Actions, Alternatives Considered but Eliminated from Detailed Analysis*), Chapter 3 (*Environmental Consequences*). The BLM referenced and incorporated

Comment 7. Impact of beetle infestations in treated stands was not adequately analyzed in the EA.

Response: Insects and Disease, including bark beetles, were analyzed in the EA (pp. 3-5, 3-6, 3-11 to 3-13, 3-15 to 3-20, 3-26, and 3-118).

The EA describes the current condition in the Planning Area regarding insect and disease activity. “Douglas-fir beetles and flat-headed fir borers are invading Douglas-fir and low to mid elevations the Analysis Area can causing small pockets of mortality. Western pine beetle (*Dendroctonus brevicomis*) is invading ponderosa pine in the Analysis Area...Bark beetles are initially attracted to trees under stress” (Final EA, p. 3-6). One community member suggested that a high level of beetle infestations in adjacent watersheds is the result of forest thinning. There is no scientific evidence that suggests that thinning increases mortality from bark beetles. The drainages referenced by this commenter are located outside of the Nedsbar Forest Management Project Analysis Area. BLM has been in contact with South west Oregon Insect and Disease Service Center about insect activity in adjacent drainages and has visited the high mortality areas. The flatheaded fir borer (*Melanophila drummondi*) is determined to be the cause of high levels of mortality in the adjacent subdrainages outside of the Nedsbar Analysis Area in the Thompson Creek and Ferris Gulch drainages. There are high levels of mortality in stands that have never been thinned as well. These beetles are attracted to live Douglas-fir especially during severe drought periods when the trees are under of high levels of drought stress. Mortality from flatheaded fir borers have been observed in the Nedsbar Analysis Area in small pockets as described above. The anecdotal observation that mortality is only occurring in thinned stands and may be causing the high level of mortality is unfounded.

The Nedbar Forest Management Project EA reports that BLM suggests that higher levels of insect and disease activity are expected as stand density increases (Final EA, p. 3-11). Forest thinning to reduce forest stand stocking levels to improve tree vigor and growth can mitigate tree susceptibility bark beetle

damage (Final EA, p. 3-6). The BLM and Nedsbar Forest Management Project EA do not claim that mortality bark beetle infestations would be eliminated altogether; only that thinning can increase residual tree vigor to help make them less prone to successful bark beetle attack (Final EA, pp. 3-6 and 3-17).

Silvicultural Prescriptions

Comment 8: Canopy cover limitations imposed are contrary to achieving forest health objectives.

Response: The BLM has defined the agency's purpose and need in the Final EA (pp. 1-5 through 1-7). The purpose and need includes both objectives to promote tree survival, vigor, and growth while protecting and conserving federally listed and proposed species (including the northern spotted owl) to contribute toward their recovery in compliance with the Endangered Species Act (ESA), approved recovery plans, and Bureau Special Status Species policies (USDI BLM 1995, pp. 17-18, 50-51).

It is recognized in the Nedsbar Forest Management Project Final EA that canopy cover limitations imposed for the purpose of NSO habitat can be contrary to achieving forest health objectives. Canopy cover is not useful in measuring the desired outcome of a stand from a silvicultural perspective but for measuring the desired outcome of how NSO may use the habitat. Forestry metrics such as Relative Density Index (RDI) are more useful tools for planning the desired outcome from a silvicultural perspective (Final EA, pp. 3-4, 3-8, and 3-9). In cases where canopy cover restrictions are at $\geq 60\%$, the corresponding RDI is often higher than desired from a forest health perspective. When Relative Density (Curtis 1982) indices are above 0.55, the stand enters the zone of occurrence of suppression mortality. Without stand treatments that reduce trees per acre, RDIs that remain above the 0.55 RDI threshold leaves stands more vulnerable to drought, insect, and disease mortality (Final EA, pp. 3-9 to 3-16).

One of the primary objectives from a forest health perspective is species diversity in terms of resilience to disturbances such as fire, insect and disease, and drought. Drought-tolerant tree species such as pine and oak are important components of a forest stand, especially in areas with low precipitation, such as the Nedsbar Project Area. Pine and oak species are shade-intolerant species which require high levels of light and low levels of competition. In terms of managing for the promotion and retention of these shade-intolerant species, competition from more shade-tolerant species should be reduced. Growing space should be created surrounding healthy pine and oak species to encourage regeneration. Often when canopy cover limitations are imposed not all forest health objectives can be met, because creating openings around shade-intolerant species or removing clumps of insect/disease affected trees could bring down the average canopy cover. In this circumstance a choice has to be made between thinning to a silviculturally desirable RDI but not creating openings, or creating openings and not thinning to the desired RDI. When canopy cover limitations are $\geq 60\%$, the ability to thin to a silviculturally desired RDI and/or create openings are both hindered (Final EA, pp. 3-5 to 3-6). The Nedsbar Project contains multiple objectives. Recovery of NSO is a primary objective and forest health is another primary objective. Refer to the Need for the Nedsbar Project in Chapter 1 (Final EA, pp. 1-5 to 1-6). Not all objectives can be met on every acre.

Comment 9. BLM would not retain 16-25 large trees per unit [across all silvicultural prescriptions]; Alternatives 3 and 4 silvicultural prescriptions do not provide for large tree retention standards required in the 1995 RMP and 1994 ROD.

Response: Refer to Silvicultural Prescriptions (Final EA, pp. 2-13 to 2-17) for different prescription types. Prescriptions under the Nedsbar Project include selective thinning, density management, group selection, structural retention regeneration harvest, riparian thinning, small diameter thinning and

understory reduction. The 1995 Medford District RMP (p. 193) requires that the structural retention prescription (regeneration harvest) maintain 16-25 trees per acres ≥ 20 diameter breast height (dbh). Only one unit is proposed for structural retention regeneration harvest. The prescription for Unit 33-30 is designed to maintain 18 to 20 trees per acre to meet the 1995 RMP guidance for green tree retention as well as snag and coarse woody material recruitment.

Comment 10. The EA does not adequately assess increased blowdown risk for each unit in the proposed logging alternatives.

Response: It has been documented that post-logging blowdown or wind throw can be an undesirable side effect of thinning, especially during the first 3-5 years following treatment (Cremer et al. 1982). Two of the main factors that predispose stands to wind throw include high height to diameter ratios (large/long canopies) and the topographic position (ridge, mid slope, valley bottom) (Stephen 2000). The residual stands spatial arrangement of stems and where they sit on the landscape as well as the crown condition of leave trees can both be incorporated into a prescription and logging operation implementation to decrease the probability of a damaging wind event that could potentially lengthen the time for canopy cover to recover to the desired condition. Smith et al (1997) recommends that retaining the largest and most well developed trees because of their “thrifter crowns and stronger stems” can lower the potential for blowdown/windthrow.

The Final EA considered blowdown risk associated with implementing the Nedsbar Forest Management Project but eliminated it from detailed study (Final EA, p. B-10) because in general, the prescriptions designed for the Nedsbar project focus removals on subordinate crown classes and intermediate-sized trees, promoting the growth and structural development of the remaining stand (see prescription descriptions Final EA, pp. 2-13 to 2-17). It should also be noted that untreated stands are subject to blowdown as well. Lastly, wind events of sufficient magnitude that could significantly modify the post treatment stands are inherently random in nature and occur chaotically across the landscape. Thus the effect mentioned is not certain, but there is a level of risk depending on many biotic and abiotic influences.

Comment 11. The RMP generally requires retention of at least a 60% overstory canopy to avoid downgrading the NSO rating of the stand that is nesting habitat. The 40% thinning standard is what would be appropriate for regeneration harvest or thinning young stands <80 years.

Response: The 1995 RMP does not state a requirement of $\geq 60\%$ overstory canopy to avoid downgrading the NSO rating of a stand that is nesting habitat in the Southern General Forest Management Area (SGFMA). Refer to the prescription descriptions in the Final EA pp. 2-13 to 2-17 for a comparison of the silvicultural treatments, including Selective Thinning and Structural Retention Regeneration Harvest. Below are definitions of prescription types from the 1995 RMP (pp. 111, 112, 116):

Selection Cutting: A method of uneven-aged management involving the harvesting of single trees from stands (single-tree selection) or in groups (group selection) without harvesting the entire stand at any one time.

Uneven-aged Management: A combination of actions that simultaneously maintains continuous tall forest cover, recurring regeneration of desirable species, and the orderly growth and development of trees through a range of diameter or age classes. Cutting methods that develop and maintain uneven-aged stands are single-tree selection and group selection.

Regeneration Harvest: Timber harvest conducted with the partial objective of opening a forest stand to the point where favored tree species will be reestablished.

Comment 12. Alternatives 3 and 4 do not comply with the RMP guidelines for thinning in stands over 80 years with “limited selection harvest”. The Nedsbar EA is flawed in its use of the words “selective thinning”. Alternatives 3 and 4 would require a RMP amendment and an EIS because they significantly change anticipated outputs from the RMP. The RMP calls for improved or maintained spotted owl habitat with “limited selection harvest”.

Response: The RMP describes selection cutting as “A method of uneven-aged management involving the harvesting of single trees from stands (single-tree selection) or in groups (group selection) without harvesting the entire stand at any one time” (p. 112). These prescriptions are consistent with the RMP.

The Medford RMP guidance (RMP, p. 194) states that after reaching 120 years of age (in SGFMA) stands would be programmed for regeneration harvest, however, the guidance does not restrict or impose a limit on the age thresholds that could be commercially thinned. Therefore, commercial thinning beyond 80 years in SGFMA is an acceptable silvicultural prescription in order to meet the RMP management objectives and goals that provide both timber and ecological needs (includes NSO habitat requirements) as long as prescriptions do not preclude entry for future thinning or regeneration harvest.

The Medford RMP guidance (RMP, p. 195) for AMAs states that silvicultural activities in the Applegate AMA would emphasize the development and testing of forest management practices including partial cutting...Activities designed to improve and maintain forest condition (health) are expected to be prevalent.

The BLM has identified the need to treat overstocked stands and maintain large pine tree species that are being overcrowded due to the absence of disturbances, such as fire. The project silviculturist analyzed the need and effect of existing overstocked stands. The prescription for Selective Thinning and Group Selection is found in the Final EA pp. 2-14 to 2-15.

Selective thinning in stands over 80 years of age would meet the objectives of SGFMA (RMP, p. 192) to “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.” The concerns of whether to harvest large trees, whether to allow commercial timber harvest of these lands, or whether to use timber harvest in general, to achieve landscape management objectives were already decided upon in the RMP.

The BLM must prepare an EIS for major Federal actions with a significant effect on the quality of the human environment. The BLM has determined that there are no significant impacts to the quality of the human environment, and therefore preparation of an EIS is not required (Finding of No Significant Impact (FONSI), p. 11).

Comment 13. The EA fails to disclose quantitative information concerning a breakdown of the size and number of trees to be logged in each unit, the number of large snags/acre pre-logging and post-logging snag densities, or the intensity of commercial logging (e.g., cable yarding) on hardwoods, large diameter snags, and snag habitat.

Response: The EA 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. 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 necessarily become available until after the analysis is completed, and the stands are marked and cruised and even then are often only estimated based on the statistics of the timber sale cruise. Those forest management units analyzed in the EA that may be part of a future timber sale or stewardship contract may not be available until far after a project decision is issued. 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 Nedsbar 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 stand characteristics such as basal area, canopy cover, species mix, and other structural components as described for the various prescriptions. The analysis of effects to each resource is estimated based on the stand characteristic that would change or be retained as a result of implementing each prescription type. For example, those prescriptions 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) are incorporated into the Project Design and consequently, in the analysis and discussion of effects. An exact count of the number of trees harvested or structural characteristics retained is not needed to assess the effects to various resources, including various wildlife and their habitats. Unique stand features such as snags, coarse woody debris (CWD), large hardwoods... would be retained to maintain desired structural components for wildlife (Final EA p. 2-14 and 2-16).

BLM does not target snags for removal, but we have to meet OSHA requirements; if snags are a safety issue, they will be removed and left at the landing (Appendix D; D-2). Per Appendix D, Nedsbar Marking Guidelines: Retain all snag stages 1-5 and CWD of various size and decay classes, unless determined by OSHA health and safety guidelines to present a risk to people. Snags felled for safety within units will be left as CWD to further contribute towards key habitat Avoid cut marking trees that may damage snags from the process of timber falling.

The Final EA included a detailed discussion of the silvicultural prescriptions proposed for the Nedsbar Forest Management Project (Final EA, pp. 2-13 to 2-17). The marking guidelines (Nedsbar Final EA Appendix D) included general guidance applicable to all treatment types (e.g., retain trees with old-growth characteristics; protect large hardwoods, avoid cutting of trees with bird nests, wildlife cavities, or wide forks with flat nesting spots; harvest lower vigor trees) as well as a detailed summary of each of the

treatment types including selective thinning, group selection, density management, structural retention regeneration harvest, riparian thinning, small diameter thinning and understory reduction. Tables D-1 through D-4 and D-6 through D-9 of Appendix D listed each unit by unit number, prescription type, and number of acres. Adequate information concerning the proposed forest management by unit was included in the EA.

Each prescription type is tailored to meeting long-term sustainable forest and timber production consistent with the identified purpose and need for the project. The Silvicultural Objectives and Prescriptions section provides clear descriptions of proposed treatments using both basal area as well as a wide variety of descriptors such as crown ratio, canopy cover, tree removal and retention requirements, and tree spacing (Final EA, pp. 2-13 to 2-17, pp.3-12 to 3-13, Appendix D, Appendix G). Furthermore, prescriptions are further detailed using illustrations (Final EA, p. 3-14 and Appendix G).

The BLM conducted three public field trips to areas where field trip participants viewed and discussed units that were marked based on basal area and canopy closure guidelines, structural retention objectives, and species composition objectives described by prescription type. Additionally, BLM conducted multiple field trips with the Community Alternative Working Group (CWAG) to discuss treatments and implementation. BLM provided ample information and opportunities for the public to learn about the silvicultural prescriptions and view their implementation in the field. At the request of the CWAG, the BLM estimated the number of trees 20 inches dbh and greater by alternative for the purpose of comparing alternatives. However, as stated above, actual number of trees is not useful for assessing the effects to stand conditions; other stand level characteristics are more useful for the purpose of effects analysis.

As stated, the Nedsbar Forest Management Project does not target hardwoods, snags, or coarse woody material for removal, although concerns for safety and operations can effect these stand components. Mitigations for hardwoods and snags are described in the Prescriptions and Project Design Features, including these Final EA statements:

- p. 2-14 “Unique stand features such as snags, coarse woody debris (CWD), large hardwoods, and trees exhibiting older characteristics would be retained to maintain desired structural components for wildlife.”
- p. 2-36 “Most non-hazardous snags would be retained in all harvest units. If it is necessary to fall snags for safety or operational reasons, they would be retained on site as coarse woody debris (CWD).” and “All hardwoods would be retained unless they pose a safety hazard during logging operations.”
- p. 2-36 “Retain snags and large down wood (over 16 inches diameter) on site for fisher and NSO prey species.”

Comment 14. An EA-level analysis is inadequate because there is a significant impact on maintaining species and other values associated with dead wood.

Response: The BLM has determined that there are no significant impacts to the quality of the human environment, and therefore preparation of an EIS is not required. The BLM must prepare an EIS for major Federal actions with a significant effect on the quality of the human environment. 42 U.S.C. 4332(2)(C). A determination of significance under NEPA requires a consideration of both context and intensity, using the ten factors described in the CEQ regulations. A “rule of reason” determines whether and to what extent available information requires the preparation of an EIS. Where the preparation of an EIS would serve no purpose, an agency is not required to prepare one.

Comment 15. The rationale for greatly reducing tree densities with up to 60% basal area reductions in many units is inadequate.

Response: Refer to the purposed and need of the Nedsbar Project (Final EA, pp. 1-5 and 1-6):

There is a need to promote tree survival and growth and to improve the vigor, resiliency, and stability of forest stands in the Nedsbar Planning Area (USDI BLM 1995, pp. 62 and 72).

Forest stands selected for treatment in the Nedsbar Planning Area are overstocked and are experiencing declining growth rates due to high levels of density-related competition. As trees compete for limited water, nutrients, and growing space they become stressed and more susceptible to mortality from insects, forest pathogens, and drought.

The 1995 Medford District RMP adopted a set of silvicultural treatments for managing conifer forests on BLM-administered lands (USDI BLM 1995, Appendix E, pp. 179-196). The Nedsbar Forest Management Project proposes forest thinning and limited regeneration harvest prescriptions designed to direct future stand growth, reduce stand densities to natural carrying capacities, create favorable conditions to improve individual tree health (vigor) for desirable species and to promote the growth and establishment of tree species that are well adapted or most resilient to environmental conditions and natural disturbance regimes (USDI BLM 1995, pp. 62 and 186).

Forest thinning treatments are needed to accelerate the development of forest stand conditions that meet long-term management objectives for NSO habitat and shift stand trajectories to encourage key habitat components for the future. Desired future conditions for NSO habitat include encouraging tree growth, promoting species diversity; increasing heterogeneity; enhancing and creating horizontal and vertical structure, and reducing the risk of habitat loss from wildfire, disease and insects (USDI FWS 2011, p. III-33 to III-34).

A summary of silvicultural prescriptions by forest stand type (e.g., Douglas-fir, ponderosa pine, mixed-conifer, white oak, etc.) and treatment objective (thinning, regeneration, and disease control) for the action alternative is included in Chapter 2, Section C.2.a.

The reductions in basal areas are based on achieving a desired objective for each forest stand treated. Forestry metrics such as Relative Density Index (RDI) are useful tools for planning the desired outcome from a silvicultural perspective (Final EA, pp. 3-4 and 3-8 to 3-9), but the prescriptions need to be in line with canopy cover percentages assigned during the RA-10 process for NSO habitat considerations.

Stand types and tree densities vary within the project area. There is no set percentage of basal area reduction at the project level because different variables such as existing NSO habitat, basal area, RDI, canopy cover, and species differ between each unit. The table included in the Environmental Consequences portion of the Forest Condition (Final EA, p. 3-13) provides 4 examples of different prescriptions in the project area. Two Selective Thinning examples are provided, one reduces the existing basal area by 60% the other reduces basal area by 31%. These are 2 examples of the same prescription type which differ by half, this displays some of the variability between stands as mentioned above. Within the table there is also an example of a Structural Retention prescription, this example reduces the existing basal area by 46%. The Density Management prescription example reduces the existing basal area by 21%. More examples of prescriptions are given in the Appendix G (SVS tables). This appendix displayed the differences in prescriptions between the different alternatives for specific units. Alternative 4 reduces existing basal area by 27% in the Selective Thinning prescription in unit 35-31, by 27% in the Selective Thinning prescription in unit 20-12, by 44% in the Selective Thinning prescription in unit 29-10, and by

12% in the Density Management prescription in unit 36-24. One of the eight examples of prescriptions provided within the EA reduced basal area by 60%. This is not the majority.

Stands were modeled in a growth and yield modeling system called ORGANON edition 9.1 (Hann 2013; Final EA, p. 3-9 to 3-10). Developed at Oregon State University, College of Forestry, the model predicts forest growth outputs based on scientific formulas programmed into it. This model was used to better capture the difference of effects of forest treatments vs. no forest treatments. The Southwest Oregon variant was used to model stands in the Project Area. Output data reflect modeling assumptions (i.e., growth curves, regeneration dynamics, and spatial variability, and variability within the common stand exam plots.

Recreation and Viewshed

Comment 16. The EA did not adequately address impacts to the historic non-motorized SMDT and Jack-Ash recreation trails, including the user experience, or recreation trail viewsheds affected by Nedsbar forest management activities. Additionally, KOPs identified and analyzed in the EA are inadequate.

Response: The Sterling Mine Ditch Trail (SMDT) is the only developed trail that is adjacent to the units in the Nedsbar Forest Management project area (Final EA, pp. 3-135 to 3-136). Users of the SMDT could be affected by the noise of operations, or from the increased traffic along Little Applegate Road, but the effects will be seasonal and of short duration. Additional signs and notices will be posted in the areas along Little Applegate Road to alert users of additional traffic in the project area.

Phase I of the proposed Jack Ash trail does use the existing road on Anderson Creek, and users would experience increased traffic from logging trucks during the operating period. The increased traffic would be limited to a seasonal increase, and would be for a short duration (Final EA, pp. 3-135 to 3-137).

Phase II of the proposed Jack Ash trail is adjacent to units of the Nedsbar Forest Management Plan in sections 17, 20, 21, and 28 of Township 39S Range 01W. Specific Project Design Features would be implemented to minimize disturbance to the proposed Phase II route layout (i.e., directional felling, skidding across trail, etc.).

The disruption of the recreation areas adjacent to the project area will be for short duration, seasonal, and intermittent. These factors will last the life of the sale contract only, making for a short term disturbance to recreation use in the area.

Effects to viewsheds are addressed on pp. 3-137 to 3-142 (Final EA). All of the Visual Resource Management (VRM) classes within the Nedsbar Forest Management Project are either VRM Class III or IV. VRM Class III specifies that the existing landscape should be partially retained and that there can be a moderate level of change to the predominant landscape. Management activities can attract the attention, but should not dominate the view, of the casual observer. Factors that should be considered in selecting KOPs are: angle of observation, number of viewers, length of time the project is in view, relative project size, season of use, and light conditions (USDI BLM n.d.; Bureau of Land Management Visual Resource Contrast Rating Manual 8431). The two Key Observation Points (KOPs) along the SMDT were chosen because of the angle of observation from the trail resource. While the photographs may not include every unit located adjacent to the SMDT, the photographs were taken to show the representative landscape, vegetation types, distance, and the trail in the foreground.

The KOP located on Eastside Road was chosen because it affords a large scale view of the project area that could be seen from the casual observer while travelling to BLM lands adjacent to Boaz Mountain, or perhaps to one of the local wineries along the road. The speed of travel along Eastside Road made it a suitable choice for a KOP, as observers would be travelling at slower speeds than that of Applegate Road.

All of the units located adjacent to the KOP points will either be 40% or 60% canopy cover retention units. There will be a weak degree of change to the color and texture of the characteristic landscape, with occasional color changes based on seasonal botanical growth and senescence, but the change will not dominate the attention of the casual observer. The forest management strategy for these units is to thin the overall density of selected stands, so there will not be a predominant change to the pattern or characteristic of the landscape.

The portion of the proposed Jack-Ash Trail that would be in the vicinity of the Nedsbar Forest Management project will utilize existing roads (Anderson Creek and Little Applegate), and as such will have sufficient foreground screening to limit observation points to the project. With only one unit adjacent to the Anderson Creek Road, future users of the proposed trail will have limited exposure to operations in the area. There will be additional traffic for a short duration during harvest periods, but the effects will be short term. The remainder of the proposed route on the south side of Anderson Butte already receives dispersed use in the form of driving for pleasure, target practice, and hunting; future users of the proposed trail would experience noise and activity already present in the proposed trail area.

Comment 17. The NEPA analysis was insufficient in addressing the impacts of forest management on the developing recreation economy in the Applegate Valley.

Response: Forest management on public and private land has been occurring in the Applegate Valley for more than 100 years. Over the last 100 years, recreation and tourism in the Applegate Valley has continued to increase and diversify, regardless of forest management activities conducted on private or public lands, therefore it is not anticipated that the Nedsbar Forest Management Project would adversely impact the recreation economy in the Applegate Valley (see Appendix B, p. B-11).

Water Quality and Fish

Comment 18: Concern for impacts to waters of Yale Creek.

Response: The EA describes how much harvest, road construction, haul crossings, haul route mileages, and estimates sediment input into each of the Analysis Area HUC 7s by alternative, including the Yale Creek HUC (listed as HUC #330 (Yale Creek) in Tables 3-23, 3-24, 3-25, 3-26). No project elements as proposed in the Nedsbar Project would have any hydrological connectivity with watercourses in Yale Creek, and therefore no effects to water quality would occur as a result of Nedsbar.

Comment 19. The EA did not adequately analyze the impacts to sediment pollution from road construction.

Response: The conclusion that road construction could exacerbate sediment input to streams is acknowledged and supported in the Final EA under the heading Road Construction on pp. 3-91 to 3-92, and p. 3-99, which identifies two small intermittent streams in the Lick Gulch Drainage (listed HUC # 218 (Lick Gulch) in the EA Tables) which would be impacted by the new road construction, and which could potentially receive up to an additional cubic yard of sediment each directly resulting from construction activities. The 1995 ROD/RMP includes many BMPs for new road construction (see pp. 77,

84, 86, 155, and 157-165,) but except for in Key Watersheds, did not specify limitations on construction. No new road construction is proposed within Key Watersheds. Furthermore, within the Lick Gulch Drainage, the proposed new road construction would total 1.8 miles (includes both permanent and temporary) but would be fully offset by the obliteration of approximately 1.6 miles of the 39-2-28.0 road which occurred in 2011, and the planned natural decommission of 0.3 miles of the 39-2-34.3 road as described in the Final EA for the Nedsbar Project, representing no net increase in roads.

Comment 20. What riparian conditions lead to the proposal to thin? The effects of Riparian Thinning are not adequately addressed in the EA. Do Alternatives 3 and 4 meet Aquatic Conservation Strategy objective (ACS) 6?

Response: The prescriptions were designed to meet ACS objectives, specifically to "...maintain and restore the health of riparian vegetation" by reducing stocking densities in the Riparian Reserves, reducing fire hazard and/or increasing growth rates of remaining conifers (Final EA, pp. 3-104 to 3-105).

Alternatives 3 and 4 meet ACS 6. Riparian thinning, as proposed within approximately 16.5 acres of Riparian Reserves in the Nedsbar project, would retain 50' no-touch buffers adjacent to stream channels, would retain a minimum of 50 to 60 percent canopy cover in the outer portion of the Riparian Reserve (the portion where thinning could be applied), and would be thinned from below retaining the large trees on site (no trees greater than 20" dbh would be cut).

ACS objective 6, which the commenters cite specifically states:

ACSO 6. Maintain and restore instream flows sufficient to create and sustain riparian, aquatic, and wetland habitats and to retain patterns of sediment, nutrient, and wood routing. The timing, magnitude, duration, and spatial distribution of peak, high, and low flows must be protected.

This objective is relevant to activities which could affect stream flows but does not indicate that the BLM must retain a 120' no-touch buffer, nor does it mandate leaving "adequate wood"; no project elements proposed under Nedsbar would impact this ACS objective (see Appendix H, page H-4). As for reducing wood inputs to streams, see Appendix H page H-4, which states "Thinning prescriptions proposed in the outer portions of 16.5 acres of Riparian Reserve would reduce stocking densities slightly, but would retain the large trees. Site level effects to future coarse woody inputs would be reduced slightly, though because only small trees are proposed for removal, the large trees would still remain to eventually contribute ample amounts of coarse wood. This indicator would remain unaffected at larger spatial scales."

Also, see Final EA p. 3-105 which states: "Future wood recruitment potential would be reduced, but only very slightly. The primary wood delivery mechanisms to streams are either large scale stochastic events such as landslides and debris torrents, or via direct falling of trees into adjacent aquatic habitat. In the Analysis Area, landslides and debris torrents are very rare; the vast majority of wood contributed to channels comes from direct falling of trees into the channel. Harvesting of trees outside of the 50' full retention buffer would reduce the number of stems per acre, and thus would likely correspond with a slight reduction in future wood input potential. This slight reduction would not measurably impact fish habitat. All but one of the proposed riparian thinning units would occur in small headwater channels well upstream of fish distribution. These small channels would be unlikely to ever contribute large wood to downstream habitats. Proposed riparian thin unit #19 is adjacent to the fish bearing reach of Grouse Creek. Roughly 600 feet lineal feet of the unit would be within less than one site potential tree height of the channel. The potential for future wood delivery to this 600' of stream could be reduced slightly, but

existing instream wood is currently present at this site, and on site large trees would still remain to provide future wood inputs.”

Comment 21. The EA did not adequately disclose adverse effects from riparian thinning prescriptions.

Response: See above comment response. The analysis did determine that increased stream temperatures and decreased future wood input were the primary concerns resulting from riparian thinning, and the EA addressed the potential adverse effects from riparian thinning in both the hydro and fisheries sections (Final EA pp. 3-74, 3-103 to 3-105, Table 3-30, and Appendix H, p. H-4). Refer to the silvicultural treatment description for Riparian Thinning (Final EA, p. 2-16 and 2-17).

All of the riparian thin units are described in context of how they could potentially be impacted by the treatments themselves, including site specific information such as stream orientation, distance from roads, and presence/absence of large trees (Final EA, p. 3-103). Properly Functioning Condition (PFC) assessments referenced by the commenters above are typically conducted at long reach scales, much longer than the portion of the stream which would flow through any of the given units, therefore rendering the data useless for describing the particular reach in question.

Comment 22. The EA doesn't adequately address erosion and sedimentation and does not disclose the estimated annual amount of sediment pollution produced by existing roads in the project area.

Response: The Nedsbar Forest Management Project EA has estimated the effects of new road construction and haul would have on sediment production. See Final EA p. 3-80, which identifies sediment from roads as a primary factor leading to habitat degradation, pp. 3-84 to 3-87 (Final EA), which describes sediment levels in the analysis area drainages, pp. 3-87 to 3-95 (Final EA), which describe how certain activities related to the Nedsbar Project may potentially increase erosion rates and sediment transport to streams for each of the alternatives.

While BLM's fish biologist did estimate the sediment produced as a result of road construction and log hauling, the annual amount of sediment "pollution" from all existing roads is impossible to quantify; there are too many unknown variables that influence both erosion rates on road surfaces, and transport rates of eroded sediments to water courses. Furthermore, it would be so highly variable from year to year as to be meaningless, and is irrelevant to helping a decision maker make a decision on this project. What is relevant is how much sediment is in streams (i.e., the current condition) and how is it affecting fish habitat, and how would each of the project elements within the each alternative affect this indicator. The EA addresses sediment in this manner.

Comment 23. Concern that logging will be allowed in swales or unchanneled valleys upslope of riparian reserve buffers.

Response: Logging is not prohibited in swales. It is important to note however that the Riparian Reserve buffer extends from the top of the creek up into the lower 155' of the swale, and hence there is a long vegetative buffer between any swale which may be logged through and the actual stream channel. Project Design Features are required and include water barring and covering skid trails with slash to reduce the potential for runoff to occur, and no hand piling in draw bottoms, directional felling away from dry draws, and skyline and tractor yarding would be avoided up and down dry draws (Final EA, pp. 2-29 to 2-34). Furthermore, "Riparian buffers are known to be effective at filtering off-site sediment movement, such as may occur following ground disturbance in harvest units (Rashin et al. 2006). Rashin et al. found that sediment delivery to streams is unlikely when erosion features (i.e., yarding corridors) are greater than 10

meters from the channels. In the Nedsbar Forest Management Project, most harvest units would be buffered from stream channels by full width Riparian Reserve, with the exception of 26 acres of proposed riparian thinning, which would occur upslope of existing roads and would retain intact buffers of 50 feet (15 meters) or more between the roads and channels. No yarding corridors would cross any stream channels, and therefore, fine sediment delivery to streams from harvest is unlikely to occur as a result of harvest and yarding. In sum, no connectivity, and therefore no causal mechanism, would exist for commercial timber harvest to input sediment through the riparian buffers and into stream channels.” (Final EA, p. 3-89).

Comment 24. The EA failed to describe the ongoing and future sediment effects to water quality and coho salmon habitat of failing to identify funding for 7.75 miles of roads identified for decommissioning (EA 2-20, 21; Table 2-4).

Response: BLM adequately analyzed ongoing and future sediment effects to water quality related to the 7.75 miles of roads identified for decommissioning associated with the Nedsbar Forest Management Project (see responses to Comment 18 and Comment 21). This will enable BLM to decommission additional roads when funding is obtained.

Comment 25. The EA fails to discuss the sediment and water quality consequences of “natural decommissioning”.

Response: The Final EA does discuss the anticipated effects to water quality from decommissioning, including passive decommissioning:

*Four riparian roads would be allowed to continue to passively decommission, and would be re-designated in the database from currently listed as closed to decommissioned, including one riparian road in Lick Gulch, totaling about 0.3 miles, in conjunction with construction of a new road outside of the Riparian Reserve. The other roads include approximately 0.5 miles of riparian road in Rush Creek, 0.9 miles in Owl Gulch, a Little Applegate frontal, and 0.2 miles which parallel an intermittent tributary in Neds Gulch. All of these roads are stable, natural surfaced, do not include any drainage infrastructure, and are already overgrown by vegetation, and are well on their way to being hydrologically recovered. No ground disturbance would be associated with passive decommission, **so it would not impart a negative effect to water quality.** As stated, these roads are already more or less recovered, and the Proposed Action would be to re-designate them in the database from currently listed as closed to decommissioned. (Final EA, p. 3- 92).*

Comment 26. The EA does not provide an accurate disclosure and analysis of the effects of roadbuilding within riparian reserves, or the effect of logging and removing wood from within riparian reserves.

Response: The BLM has provided an accurate disclosure of the effects of actions in Riparian Reserves under the Nedsbar Forest Management Project. The EA discloses in detail the effects of road building on stream sedimentation; see for example p. 3-91 (Final EA): One proposed permanent road would cross an intermittent stream in the Lick Gulch drainage and would require cut and fill slopes along portions of its length ... resulting in increased disturbance area and increased likelihood of the road surface interfering with sub-surface hydrological processes. Additionally, there would likely be direct contributions of sediment into the intermittent channel at the crossing location. From previous work conducted on the resource area involving culvert removals/replacements, up to one cubic yard or less of sediment input is

likely to result from this type of work. One (other) proposed permanent road would cross another small intermittent tributary in Lick Gulch and would not require cut and fill slopes. This new road would require a culvert, which could potentially result in up to a cubic yard of sediment to the intermittent tributary. Due to their permanency, these roads would have potential to contribute chronic inputs of sediment into the small intermittent tributary during storm events.

Due to relatively high levels of coarse wood in its channels, it's likely that the coarser grain sediment inputs resulting from the culvert installations would be captured and stored in Lick Gulch and would not be conveyed to downstream fish bearing habitats. However, finer grain chronic inputs could episodically be pulsed into the intermittent streams during storm events. Both of the proposed new permanent roads in Lick Gulch would be behind barricades, which would preclude vehicle traffic on them after logging operations were over. This would reduce surface erosion rates, and therefore chronic inputs of fine sediment would be anticipated to be very small from either of these two roads.

Also see p. 3-99 (Final EA) which states:Short-term there would be a high probability of inputs of fine sediment to channels in the Analysis Area, which would contribute the greatest amount of sediment to any given reach of aquatic habitat. Long-term, chronic erosion stemming from the surfaces of the permanent new roads would potentially contribute small amounts of sediment during storm events into two small intermittent streams in Lick Gulch drainage. Lick Gulch has high existing road densities (see Section 3.E.) and high sediment loading already, and as much of the new construction, and in particular the hydrologically connected construction, would take place in Lick Gulch, this situation would be exacerbated. Direct contributions resulting from activities as proposed in Alternative 4 are estimated to total up to 4.1 cubic yards (Table 3-27), more than half of which would directly result from new road construction.

The Final EA also discloses the effects of road building within Riparian Reserves, for example, p. 3-103 states "New road construction through Riparian Reserves would have the greatest negative effect to the Riparian Reserves, as all vegetation along the road right-of-way would be removed." Also, see under the Riparian Reserves Section, sub-title Roads and Skids, on pp. 3-103 and 3-104 (Final EA), which accurately discloses how much Riparian Reserve vegetation would be impacted by the new roads, and how this would affect both shade and future wood inputs.

Furthermore, BLM explicitly recognizes that small wood can be important in small streams. See p. 3-86 (Final EA): "Despite logging, four reaches in Lick Gulch have high or moderate numbers of "key pieces" of wood. Other reaches store large amounts of small wood. In Lick Gulch and tributaries, the size of the wood is probably not as important since Lick Gulch itself is quite small (approximately 4 ft. wetted summer width) and its tributaries are even smaller."

Comment 27. The BLM must consult with the NMFS about this project.

Response: The BLM has complied with the Federal Endangered Species Act (ESA). The BLM, as a Federal agency, is required by section 7(a)(2) of the ESA to ensure that the BLM's discretionary actions do not jeopardize the existence of a listed species, and do not destroy or adversely modify designated critical habitat. When a BLM action may affect a listed species or designated critical habitat, the BLM must consult with the USFWS and/or the NMFS. If the BLM determines that the proposed action will have no effect on a listed species or designated critical habitat, no consultation with USFWS or NMFS is required.

Section 3.F.3.b – Designated Habitat, p. 3-84 of the Final EA explains: CCH [Coho Critical Habitat] and

EFH [Essential Fish Habitat] are present in the mainstem of the Applegate River throughout the Analysis Area upstream to Applegate Dam, and in the lower 1.4 miles of the Little Applegate River. The Analysis Area includes 8.0 miles of habitat designated as both CCH and EFH, for both coho and Chinook salmon. No project elements proposed in the Nedsbar Forest Management Project would occur directly in, over, or adjacent to designated habitats (Final EA, p. 3-84). Consultation with the NMFS was not warranted for this project, because no project elements are proposed adjacent to designated habitat, and potential effects to aquatic habitat are anticipated to be small in magnitude and occur well upstream of listed habitat. Implementation of this project was determined to have “no effect” to CCH or EFH in the Analysis Area.

Comment 28. The EA fails to demonstrate that road construction meets ACS objectives.

Response: The new road construction was determined to have site level impacts to ACS Objectives #2, #3, #4, #5, #8, and #9. See Appendix H. Objectives would not be compromised at the drainage and watershed scales. The Northwest Forest Plan (p. B-9) states: “The Aquatic Conservation Strategy must strive to maintain and restore ecosystem health at watershed and landscape scales to protect habitat for fish and other riparian-dependent species and resources and restore currently degraded habitats.” Further, the NFP recognizes that some roads will be constructed within RRs by providing Standards and Guidelines (NFP, pp. C-32 to C-33; 1995 RMP, pp.86-87).

Roads, Off-Highway Vehicles, and Lands with Wilderness Characteristics

Comment 29: The EA did not adequately address reductions in unroaded areas caused by road construction in the Dakubatede Primitive Backcountry Area and failed to map unroaded areas consistent with O&C Act of 2015.

Response: The Dakubatede Primitive Backcountry Area is proposed legislation. The BLM addressed this concern in Appendix B, *Issues Considered but Eliminated from Detailed Analysis* (Final EA, p. B-1). The BLM cannot manage lands based on proposed legislation, nor has the agency been directed to do so.

Between the summer of 2012 and 2013, the Medford District BLM completed the Lands with Wilderness Characteristics (LWC) Inventory (see Section 3.J. of the Final EA [pp. 3-142 to 3-143]). The BLM documented existing conditions as opposed to potential future conditions, as per our policy and guidelines. The BLM conducted the inventory process using the criteria from Section 2(c) of the Wilderness Act to determine the presence of wilderness characteristics, such as: sufficient size, naturalness, outstanding opportunities for either solitude or primitive and unconfined recreation, and supplemental values such as ecological, geological, or other features of scientific, educational, scenic or historical value. Size criteria affect the eligibility of lands to be considered LWC, such as: roadless areas with over 5,000 acres of contiguous BLM lands or roadless areas of less than 5,000 acres of contiguous lands with special stipulations.

Based upon field data collected, and all other inventory standards used, the BLM concluded inventoried areas in the Applegate Valley that would meet these criteria for LWC include the Dakubatede, Wellington, and Burton Nine Mile inventoried areas. Dakubatede is the closest LWC inventoried area to the Nedsbar Planning Area; there are no activities associated with Nedsbar Forest Project proposed within the Dakubatede LWC inventoried area.

The *Western Oregon Proposed Resource Management Plan/Final Environmental Impact Statement* (PRMP/FEIS) (USDI BLM 2016) determined that for the Dakubatede and Wellington inventoried areas, “the total acres of contiguous inventoried lands with wilderness characteristics remaining outside the Harvest Land Base or incompatible Recreation Management Areas would drop below 5,000 acres and

would no longer meet the minimum requirements to be considered for allocation to the District-Designated Reserve – Lands Managed for their Wilderness Characteristics.” (PRMP/FEIS, p. 468). The Burton Nine Mile inventoried area (6,103 acres) was allocated to a District-Designated Reserve – Lands Managed for their Wilderness Characteristics under the *Southwestern Oregon Record of Decision and Resource Management Plan* (ROD/RMP) (USDI 2016).

The CAWG identified several unroaded areas important to the local community including: Boaz, Buncom, Quartz/Lick, Trillium Mountain, and Bald Mountain. These areas do not meet the size criteria as defined in the Section 2(c) of the Wilderness Act to possess wilderness characteristics. However, due to public interest in the values these areas provide to community members, the BLM did provide an analysis of number of acres treated and miles of road construction as a means of comparing the effects of each alternative on community values. Harvest treatments in CAWG identified unroaded areas range from 214 acres under Alternative 5 to 1,086 acres under Alternative 4. Fuels treatments in CAWG identified unroaded areas range from 710 acres under Alternative 3 to 803 acres under Alternative 5 (Final EA, Table 2-10, p. 2-46).

Comment 30. The EA did not adequately analyze the maintenance costs of new permanent road construction.

Response: Most of the permanent roads were planned with the intent of being storm proofed and closed after project completion, then allowed to grow over until needed again. With that thought in mind, proposed roads would be outsloped and have rolling dips and/or water bars installed whenever possible. Ditches and culverts would be avoided to reduce the maintenance needs and only used on steep grades. Roads that are put in long term storage are properly drained and placed in a condition to reduce effects of the road on the landscape, and as such are not expected to incur annual maintenance costs. At the time a road is needed for future project, the cost of reopening and reclosing a road are incorporated into that future project.

Comment 31. EA fails to adequately address ORV (Off-road vehicle) impacts (e.g., forest harvesting activities may lead to an increase in ORV use).

Response: The EA recognized that there is potential for road construction or opening of existing roads to lead to development of new OHV routes. The OHV activity in the project area is relative low compared to areas north of the planning area (Final EA, p. 3-137). Project Design Features are required to minimize new OHV activity; PDFs include route decommissioning, signage, and staff monitoring. Routes temporarily opened for timber operations would subsequently be closed again using earthen berms and other barricading devices (Final EA, pp. 2-31 to 2-33).

Noise

Comment 32. The Nedsbar Project EA does not adequately address or analyze the impacts of noise disturbance associated with tractor logging, helicopter logging, or log truck traffic.

Response: The EA analyzes impacts of helicopter noise and traffic in Table 2-10 (Final EA, p. 2-48). The BLM analysis is based on the assumption that the greatest amount of noise from helicopter yarding would occur at the landings; there are 5 and 9 structures within 0.5 mile of a landing in Alternatives 3 and 4, respectively. Additionally, log truck and truck traffic is considered in Table 2-10 as well based on the number of log truck loads by road system.

Late Successional Stands

Comment 33. The EA does not adequately present the size and location of existing late-successional stands in the Little Applegate Watershed and provide evidence that the Nedsbar project will not excessively enter previously un-entered late-successional stands and move close to the 15 percent threshold.

Response: Within the Nedsbar Planning Area there is no correlation between late-successional stands and previously un-entered stands. It should not be assumed that a late-seral stand has had no management intervention. Late-successional forest is defined as forest seral stages which include mature and old-growth age classes. Four major structural attributes of old-growth Douglas-fir forests are: live old-growth trees, standing dead trees (snags), fallen trees or logs on the forest floor, and logs in streams. Additional important elements typically include multiple canopy layers, smaller understory trees, canopy gaps, and patchy understory. Structural characteristics of late-successional and old-growth forests vary with vegetation type, disturbance regime, and developmental stage (Final EA, p. B-10).

The Northwest Forest Plan (NFP) Record of Decision (ROD), pages C-44 and C-45 directs the retention of late-successional patches across the landscape where little late-successional forest persists.

This standard and guideline will be applied in fifth field watersheds (20 to 200 square miles) in which federal forestlands are currently comprised of 15 percent or less late-successional forest. (The assessment of 15 percent will include all federal land allocations in a watershed). Within such an area, protect all remaining late-successional forest stands. Protection of these stands could be modified in the future when other portions of a watershed have recovered to the point where they could replace the ecological roles of these stands.

In Adaptive Management Areas, less than 15 percent of federal forest land in fifth field watershed in late-successional forest should be considered as a threshold for analysis rather than a strict standard and guideline. A proposal to modify such stands should only be implemented following an analysis that considers the ecological function of the remaining later successional forest and its location on the landscape.

Using a classification system based on tree diameter and cover by biophysical setting (BpS) as described in Haugo et al. (2015), the BLM evaluated the mature and late-successional forests on federal lands in both the Upper and Little Applegate 5th field watersheds and determined that the 83 percent of the federal lands within the Upper Applegate and 81 percent within the Little Applegate meet the late-successional criteria, well above the 15 percent minimum (Final EA, pp. B-9 to B-10).

The majority of the treatments for the Nedsbar Project will not change the vegetation class. In most cases the average diameter will increase post-treatment by removing the smaller diameter, suppressed trees. Regeneration harvest will create early-seral conditions and group selection creates small openings for small scale early-seral conditions.

Comment 34. The EA does not adequately examine what is the low threshold of late-successional stands beyond which wildlife habitat for late-successional guilds is no longer sustainable.

Response: The analysis conducted and documented in the Nedsbar Forest Management Project Final EA was done in accordance with BLM Manual 6840 - Special Status Species Management policy. It is not necessary to address every late-successional species. Northern spotted owls, fishers, Siskiyou mountains salamanders, and some resident and neotropical bird species are associated with late-successional habitat

and were addressed in the EA because they met the requirements listed above. The Final EA examines the effects to late-successional habitat as they relate to these species on pp. 3-116 to 3-135. Additionally, on p. 3-131 and 3-134 of the Final EA, the analysis describes that even when the proposed actions are combined with future foreseeable projects, habitat removal would not preclude spotted owls or other late-successional forest species from nesting or dispersing within the Wildlife Analysis Area.

Comment 35. The EA does not adequately analyze the continuing loss of late seral forests and the losses' impacts on ESA species, forest/fire resilience, aquatic habitat, water quality, and the areas natural beauty.

Response: The EA does analyze the late seral forest condition for late successional species through the analysis of the northern spotted owls and fishers within the analysis areas (Final EA, pp. 3-106 through 3-111). The Final EA addresses the current condition of spotted owls and their habitat within the Wildlife Analysis area, which is a result of changes in habitat conditions from past management actions and fires within the analysis area. The effects of the Nedsbar project, past actions, and future foreseeable actions to late successional species are addressed in the cumulative effects sections for the northern spotted owl and fisher. The EA states in the cumulative effects section for northern spotted owls “Additionally, at the wildlife analysis level, approximately 11,557 (97 percent) to 11,903 acres (99 percent) of the existing NRF habitat would be maintained throughout the Analysis Area in all action alternatives. These areas would continue to provide suitable spotted owl NRF habitat, provide habitat for late-successional forest habitat dependent species, and would help maintain future connectivity throughout the watersheds and between KSOACs” (Final EA, p. 3-131). Effects to bird species that are dependent on late successional forests are also described on p. 3-123 of the Final EA. This analysis is sufficient for the decision maker to make an informed decision regarding effects to late-successional habitat dependent species.

The EA describes how water quality and aquatic habitat may be impacted by individual project elements proposed under each of the alternatives, and what consequences this may have for aquatic species on pp. 3-87 through 3-99 (Final EA). This analysis is sufficient for the decision maker to make an informed decision regarding effects to water quality, aquatic habitat, and aquatic species.

The EA describes how the Visual Resources within the project area may be impacted under the alternatives, how the determination and analysis was conducted, and what consequences this may have for visual resources on pp. 3-137 to 3-142 (Final EA). This analysis is sufficient for the decision maker to make an informed decision regarding effects to visual resources and viewsheds.

Northern Spotted Owl

Comment 36. The BLM should implement an 80% canopy cover for NSO dispersal to ensure sustainable populations based on Sovern et al.'s (2014) recommendations.

Response: The BLM wildlife specialist has reviewed Sovern et al. (2014) and does not find that this is study from Washington relevant to the proposed action or Southwest Oregon spotted owl habitat needs. The Final EA (p. 3-108), BA (p. 4), and BO (pp. 8 and 9) all describe dispersal only habitat as having at least 40 percent or greater canopy cover and an average diameter at breast height (DBH) of 11 inches or greater. Additionally, as described in the BA (p. 19) and BO (p. 31), effects to NSO dispersal and habitat are best assessed at the landscape scale. The Final EA demonstrates on p. 3-132, that within the Wildlife Analysis Area (Landscape assessment), dispersal habitat would only be reduced in Alternative 3 and only by 2.5% within the Analysis Area. The Nedsbar project would not preclude NSOs from dispersing within the Analysis Area. As described in the BA on p. 29, forest landscapes traversed by dispersing owls

typically include a fragmented mosaic of roads, clear-cuts, and non-forested areas, and a variety of forest age classes ranging from fragmented forests on cutover areas to old-growth forests (Forsman et al. 2002).

Comment 37. The EA does not adequately report the baseline condition of NSO habitat in relation to commercial thinning prescriptions on the Medford District between 2008 and 2014.

Response: The Final EA specifically addressed the changes in habitat from the O'Lickety, Lick Stew, Bald Lick, and Wagner Anderson Projects (Final EA, pp. 3-107 to 3-108) and describes the habitat baseline is used to determine the affected environment and compare effects from each alternative. The habitat baseline includes all past management actions that have created the current habitat conditions. Additionally, on page 3-131 to 3-133 (Final EA), the EA analyzes the cumulative effects for each action alternative to northern spotted owls. The cumulative effects are based on the current conditions, which include changes in habitat from past management activities such as the O'Lickety, Lick Stew, Bald Lick, and Wagner Anderson Projects.

Comment 38. Different effects could result from the use of canopy closure rather than canopy cover as a parameter when assessing northern spotted owl habitat needs.

Response: Over the past several years, the Medford BLM has also conducted literature reviews to determine the relevance of canopy cover vs. canopy closure for northern spotted owls. The BLM also agrees the terms canopy cover and closure have been used inter-changeably in literature and among resource specialists despite technically being considered different measurements (Jennings et al. 1999). However, using the best available science, the Rogue Basin Level 1 Team and the Medford District has relied on canopy cover to describe spotted owl habitat in ESA Section 7 Consultation for more than 15 years. Additionally, the Service uses canopy cover in the revised critical habitat rule (USDI FWS 2012), to describe desirable forest management canopy retention levels and the BLM's 2016 Proposed RMP also uses canopy cover as a measurement for northern spotted owl habitat.

There is little dispute in the literature that canopy cover/closure is one indicator in estimating likelihood use of a stand by NSO. While further exploration into different factors that affect the likelihood of use of forest stands by NSO are warranted, review of the available literature does not show a clear ecologically-based rationale for choosing "cover" over "closure" (or vice versa). However, the available data do provide strong support that higher levels of canopy are associated with spotted owl use.

BLM will continue to use cover because it is more consistent with past analysis and ground-based estimates of cover are more comparable to estimates from above the canopy (remotely sensed). Additionally, other forest variables such as basal area, trees per/acre, vertical layering, standing snags per acre, and amount of down wood, will continue to be measured because they are also important to determine the habitat function.

The use of canopy closure as a measurement, as suggested by the commenter, rather than cover in the Nedsbar Forest Management Project is beyond the scope of this Medford BLM project because as mentioned above, canopy cover is used as one measurement of northern spotted owl habitat in regional documents, such as the 2012 Revised Critical Habitat Rule and the 2016 Western Oregon Proposed RMP. Additionally, effects to northern spotted owls and spotted owl habitat conditions, including changes to canopy cover (Final EA, Chapter 3, Section G), were adequately analyzed and disclosed to a level necessary to discern both project and cumulative effects, and to provide the decision maker with adequate information necessary to make an informed decision.

Comment 39. The EA does not adequately address connectivity and species movement.

Response: The connectivity corridor referenced in the Applegate AMA Ecosystem Health Assessment was described in very general terms and not specifically mapped, however could be interpreted to be much larger in scale than the Nedsbar Analysis Area (reference to “Siskiyou Backbone” or Siskiyou Crest dividing the Klamath and Applegate River Watersheds). However, connectivity was addressed at the project Analysis Area scale. Considering the cumulative effects of the Nedsbar alternatives along with other reasonably foreseeable and ongoing activities, at least approximately 11,557 (96.6% of existing habitat) up to 11,935 acres (99% of existing habitat) of the existing NRF habitat would be retained throughout the analysis area in all alternatives. This represents a reduction in NRF habitat of less than one (1) to 3.4 percent among the alternatives from current habitat conditions (Final EA, p. 3-132). “These areas would continue to provide suitable spotted owl NRF habitat, provide habitat for late-successional forest habitat dependent species, and would help maintain future connectivity throughout the watersheds and between KSOACs” (Final EA, pp. 3-131 to 3-132). The EA also analyzes connectivity in the form of dispersal function for northern spotted owls and fisher. Effects to connectivity for late-successional species were adequately analyzed and disclosed to a level necessary to discern both project and cumulative effects, and to provide the decision maker with adequate information necessary to make an informed decision.

Comment 40. Removing and downgrading northern spotted owl (NSO) habitat is not consistent with the 1995 RMP or new research about spotted owl demographics.

Response: The EA follows direction in the 1995 RMP, which does not restrict removing or downgrading NSO habitat. The Northwest Forest Plan (also incorporated in the 1995 RMP) does require that 16 to 25 trees per acre, 20 inches diameter breast height and larger, are maintained when regeneration harvest occurs in northern spotted owl habitat (NFP Standards and Guidelines, p. C-42). This requirement has been met within the one unit proposed for regeneration harvest (Final EA, p. 2-16 and Final EA Appendix D, p. D-9). Also refer to the response to Comment 9 above.

The EA addresses the NSO conservation and recovery under the section “Development of the Project” (Final EA, p. 2-4). The project followed recommendations in the 2011 Revised Recovery Plan to conserve NSOs. The BLM included the current information regarding northern spotted owl demographics on page 3-111 of the Final EA. This information was also used to plan a project that would not adversely affect demographics of NSOs in the project area. This project used the principles in Recovery Action 10 to reduce adverse effects to NSO sites and because of this work, the USFWS determined the proposed action would not result in incidental take of northern spotted owls (BO, p. 63).

The Nedsbar Forest Management Project is consistent with 1995 RMP direction for management of northern spotted owl habitat and has considered and addressed current information on northern spotted owl demographics study. The BLM is compliant with Section 7 of the Endangered Species Act through the completion of the consultation process and by engaging the US Fish and Wildlife Service early in the planning process (EA p. 2-3 and BO p. 5-6).

Comment 41. The EA does not adequately address the conservation of NSO nor does it adequately address the potential for effects to their prey such as flying squirrels and red tree voles.

Response: The EA addresses the NSO conservation under the objectives (Final EA, p. 1-6) and project development process (Final EA, p. 2-4). The project followed recommendations in the 2011 Revised Recovery plan to conserve NSOs. The EA addressed effects to spotted owls and their prey under all alternatives (Final EA, pp. 3-112, 3-116 to 3-120, 3-123 to 3-125, 3-126 to 3-128 and 3-129 to 3-130, and Appendix F). Effects to prey were adequately analyzed and disclosed to a level necessary to discern both project and cumulative effects, and to provide the decision maker with adequate information necessary to make an informed decision. Additionally, the Nedsbar Biological Assessment and Biological Opinion addressed effects to NSO prey species. The Service concluded the “Nedsbar proposed action is not likely to jeopardize the continued existence of the spotted owl.” (BO, p. 61).

Comment 42. The EA does not adequately analyze the effects of forest management activities on barred owls and their encroachment on northern spotted owl habitat.

Response: The Final EA addressed the current known condition of barred owls within the project area on pages 3-111 to 3-112. The EA also discloses new information regarding the NSO demography and the barred owl threat to NSO (Final EA, p. 3-111 to 3-112). Design of the Nedsbar Forest Management Project has incorporated Recovery Action 32 (Final EA, p. 2-4 to 2-5, and 3-120) of the Revised Recovery Plan for the Northern Spotted Owl (USDI FWS 2011), which provides further conservation of spotted owls through conservation of older, structurally more complex forests, increased demographic support and ameliorating barred owl effects. The BLM has also deferred treatment on over 400 acres, including all high quality nesting, roosting, foraging (NRF) habitat (McKelvey 1) from treatment under the Nedsbar Forest Management Project through application of Recovery Action 10 of the Revised Recovery Plan for the Northern Spotted Owl (Final EA p. 2-4). The development of the Nedsbar Forest Management Project and the associated analysis documented in the Nedsbar Forest Management Project Final EA has adequately addressed and analyzed the competitive threats from barred owls. The Fish and Wildlife Service concluded, “[t]he likelihood that inter-species competition will be exacerbated is likely minimal because the effects of the proposed action will not occur in forest stands that meet the criteria of high quality habitat.” (BO p. 51).

Fisher

Comment 43. The EA does not adequately quantify impacts to fishers from forest management activities which would contribute to the need to list the fisher as an endangered species.

Response: The Final EA documents the analysis of effects to fisher conducted by BLM’s wildlife biologist. While there would be six (6) to 250 acres of fisher habitat removal among the action alternatives, an estimated 14,235 to 14,998 acres (90 to 94 percent) of the existing 15,904 acres of fisher habitat in the analysis area would remain untreated (Final EA p.3-122). Forest management among the action alternatives conducted to treat and maintain habitat on 750 to 1,149 acres includes Project Design Features that would minimize impacts to fishers. These include the retention of key structural elements such as mature and decadent trees, snags, CWD, mistletoe, and hardwoods for denning and resting sites. Based on the analysis conducted and documented in the Final EA, the action alternatives would not contribute to the need to federally list the fisher as threatened or endangered because no known denning

sites would be lost and suitable denning and resting habitat within the Analysis Area would be retained in untreated units” (Final EA, pp. 3-135).

Bureau Sensitive Species

Comment 44. The BLM would not meet Bureau Sensitive Species requirements unless it retains 20 acres of occupied Siskiyou Mountain salamander (SMS) habitat in units 27-34 and unit 35-30.

Response: These SMS habitat areas would be managed within the guidelines of the conservation strategy. The Final EA (p. 2-37) discusses Project Design Features for units 27-34. The conservation strategy provides protection in a priority site network for the SMS. Outside of these priority sites, management activities can still take place provided measures are taken to reduce impacts to occupied sites. The following PDFs were designed to reduce impacts to the SMS in this location (Final EA, p. 2-37):

“Known locations of Siskiyou Mountains salamander (PLST) occur in Unit 27-34 in a 5 acre patch of talus habitat. This unit would be treated through helicopter logging. To the extent feasible, protect the talus habitat from ground disturbing activities that have the potential to disrupt the well-developed moss and lichen layer growing on the talus. No post-harvest underburning would occur within this PLST location. No activities would take place during the wet season when PLST are active (November 1st through May 15th).

- *Canopy cover will be retained at a minimum of 40 percent within Unit 27-34 where the PLST site has been flagged and delineated through GPS by BLM wildlife personnel.*
- *No tractor yarding would occur within talus locations.*
- *Trees would be directionally felled outward and away from talus locations where possible.*
- *No more than 15 percent of talus habitat areas within units proposed for cable logging would be compacted from cable yarding with one-end suspension or fuels activity treatments.”*

Comment 45. The EA did not adequately analyze the one site tree buffer as it relates to the Siskiyou salamander.

Response: See Comment 43 above for specific PDFs for SMS. The EA addressed the buffers in the Affected Environment, Final EA p. 3-114, *“Ground-truthing of the high-priority site polygons within the Nedsbar Project Area revealed significant differences between modeled habitat areas and the on-the-ground physical habitat. Each site was ground-truthed to more accurately match the on the ground habitat (talus). These areas have been flagged on the ground in areas where management activities are proposed. As described within the Conservation Strategy, management discretion of high-priority salamander sites is expected. Although specific sites were selected and delineated as high-priority salamander management areas, the Strategy allowed for flexibility to fine tune these recommendations during project planning. Project design features developed for SMS are described in Chapter 2.”* Additionally, effects to the Siskiyou mountains salamander were addressed on pp. 3-122 to 3-123, 3-129, 3-131, and 3-135 (Final EA). The Final EA states on page 3-135 *“Additionally, this project combined with other actions in the watershed would not contribute to the need to federally list the SMS, because of the small scope of the proposed action and because of the implementation of the Siskiyou Mountains Salamander Conservation Strategy.”* Effects to SMS were adequately analyzed and disclosed to a level

necessary to discern both project and cumulative effects, and to provide the decision maker with adequate information necessary to make an informed decision.

Mistletoe

Comment 46. The EA does not adequately address current scientific literature regarding mistletoe.

Response: Page 2-50 of the Final EA states “*The benefits of dwarf mistletoe as wildlife habitat and a food source are well known (Mathiasen 1996). Not only does the presence of mistletoe contribute to stand diversity through the creation of gaps, structural irregularity, and the accumulation of snags and down wood, it also serves as habitat for a variety of mammals, birds and arthropods. In particular, in the Siskiyou Mountains, large witch’s brooms serve as nest platforms for spotted owls, fishers and raptors. There is evidence that groups of mistletoe-infected trees are the most likely areas for spotted owls to nest in the white fir and Douglas-fir forests of the Siskiyou Mountains (Marshall et al. 2003; Mallams and Goheen 2010).*” The ecological benefits and use of mistletoe by wildlife are discussed in the Final EA (pp. 3-109 and 3-112). Mistletoe is within the Analysis Area (Final EA, p. 3-6). The limited removal of select trees with mistletoe will not substantially change the availability of mistletoe structures for use by wildlife species in these areas.

Additionally, the EA states “The proposed forest management project does not attempt to eradicate dwarf mistletoe from the landscape; rather, it attempts to minimize it in specific areas so that the forest health objectives and management direction pertaining to all land use allocations as defined by the 1995 Medford District Resource Management Plan can be attained.” (Final EA, p. 2-50). The EA also states on page 2-51, that “Management efforts are focused towards minimizing the impacts of Douglas-fir dwarf mistletoe by maximizing tree species diversity and by reducing canopy layering.” The above listed literature supplies adequate scientific information regarding the value of mistletoe and witches brooms to wildlife and does provide the decision maker with adequate information necessary to make an informed decision.

Survey and Manage Species and Other Wildlife

Comment 47. The EA did not adequately analyze the impact of logging and road building on the great grey owl.

Response: Great gray owls are a Survey and Manage species and were addressed appropriately in the Survey and Manage compliance form in Appendix I. As indicated in the Survey and Manage compliance form, nest core areas were delineated around three nest sites: Lick Gulch, Rush Creek, and Grouse Creek. Mitigations for great gray owls are also described in the project development (Final EA, p. 2-2) and Project Design Features (Final EA, p. 2-37). Specifically, the project provides a 100-acre management area and a 0.25 mile protection zone, and forest treatments within 100 acre management zones are limited to protection or improvement of nesting habitat. Seasonal operating restrictions will be in place from March 1st through July 31st within ¼ mile of know nest sites.

Botanical Resources

Comment 48. The BLM did not adequately address impacts to unusual plant communities such as the *Rubus nivalis* (snow bramble) in Unit 35-32.

Response: BLM is required to manage for federally listed and BLM Special Status Species per BLM Manual 6840, which provides policy and guidance for the conservation of BLM Special Status Species and ecosystems upon which they depend on BLM-administered lands (Final EA, p. 1-8). Only federally listed or Bureau Sensitive species known or suspected to be present within the project area, addressed in the issues, and impacted by the action alternatives are addressed in this EA (Final EA, p. 3-107). *R. nivalis*'s range is the west coast extending into Canada at higher elevations. The species is uncommon, but not rare, and does not require special attention under BLM policy; therefore, it is not analyzed in the EA.

Climate Change

Comment 49. The BLM did not adequately address climate change or how climate change will affect forests in our bioregion.

Response: Climate change was analyzed briefly in Environmental Consequences on pages 3-4, 3-23, 3-73, 3-77, and in Appendix B: *Issues Considered but Eliminated from Detailed Analysis* (Final EA). The Medford District BLM has conducted analysis on past projects to determine the effects of individual forest management projects on carbon storage and carbon dioxide emissions (Final EA Appendix B, p. B-1 to B-2). These individual BLM proposed actions showed changes in greenhouse gas levels far too small to provide much meaningful information. Therefore, this issue was considered but eliminated from further detailed analysis because the Medford BLM has determined no further analysis of greenhouse gas emissions and carbon storage are warranted at the individual project level to make a determination of potential for significant effects (Final EA, Appendix B, p. B-2). The analysis completed for other similar forest management projects showed that emissions were negligible in the context of total U.S. carbon dioxide emission, and proposed actions would reduce carbon stores temporarily but would result in net increases over time.

The commenter referenced the Council on Environmental Quality's August 1, 2016, memorandum *Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews*. This memorandum gives agencies the ability to "exercise judgement when considering to apply this guidance to the extent practicable to an on-going NEPA process." The commenter also referred to the Pacific Northwest Research Station's **Science Findings** *Adaptation: Planning for Climate Change and the Effects on Federal Lands*. Lastly, the commenter referred the BLM to the Climate Change Resource Center website. These references don't provide any new information that would change the analysis at the project level, therefore additional analysis will not be conducted.

Cumulative Effects

Comment 50. The EA does not fully consider cumulative effects.

Response: The potential for cumulative effects of the activities proposed in the Nedsbar Forest Management Project are discussed in each resource section where environmental consequences are addressed.

Section 3.A.2 - Consideration of Past, Ongoing, and Reasonably Foreseeable Actions in Effects Analysis, pp. 3-1 and 3-2 of the Final EA explains: The current condition of the lands in the Planning Area is the result of a multitude of natural processes and human actions that have taken place over many decades. A catalogue and analysis, comparison, or description of all individual past actions and their effects which have contributed to the current environmental conditions would be practically impossible to compile and unduly costly to obtain.

Instead of incurring these exorbitant costs in terms of time and money, it is possible to implement simpler, more accurate, and less costly ways to obtain the information concerning the effects of past actions, which is necessary for an analysis of the “impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions.” (See the definition of “cumulative impact” in 40 CFR § 1508.7.) For the Nedsbar Forest Management Project, aerial photograph analysis and GIS databases were utilized in helping to determine past actions on both federal and private lands.

When considering cumulative effects analysis, the agency must analyze the effects in accordance with relevant guidance issued by the Council on Environmental Quality (CEQ). 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.” The CEQ stated in this guidance that “[g]enerally, agencies can conduct an adequate cumulative effects analysis by focusing on the current aggregate effects of past actions without delving into the historical details of individual past actions.” The CEQ guidance specifies that the “CEQ regulations do not require the consideration of the individual effects of all past actions to determine the present effects of past actions.” The importance of “past actions” is to set the context for understanding the incremental effects of each of the alternatives.

Effects analyses completed for resources potentially affected by the Nedsbar Forest Management Project describe indicators of importance along with the spatial (Analysis Area) and temporal scale of importance for determining the effects of multiple actions (past, current and reasonably foreseeable) on affected resources. As discussed above, the current condition assessed for each affected resource inherently includes the effects of past actions.

The analysis of the effects of other present and reasonably foreseeable actions relevant to the effects of the Nedsbar Forest Management Project 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.

Comment 51. BLM road construction has exceeded cumulative impacts analyzed in the 1995 RMP. New road construction cannot be implemented with this EA.

Response: The 1995 RMP refers to practices such as new road building and assumes average annual acres for the first decade. Table R-1 *Summary of Land Use Allocations and Management Actions/Direction* (ROD pp. 9-12) denotes that 30 miles (or 160 acres) of new road construction are estimated in the first decade. This table provides an average and neither the specifications of this table nor the detailed management direction in no way limit the amount of miles or acres of road construction analyzed in the RMP. The Nedsbar Forest Management Project EA completed a thorough analysis to determine the potential for adverse cumulative effects to resources from road construction (Final EA, Chapter 3).

Comment 52. The EA does not adequately analyze the cumulative impact associated with recent forest management projects (including the O’Lickety, Lick Stew, Bald Lick, and Wagner Anderson Projects) in the Little Applegate watershed.

Response: The Nedsbar Forest Management Project EA analysis did account for changes in habitat from the O’Lickety, Lick Stew, Bald Lick, and Wagner Anderson Projects (Final EA, p. 3-107 to 3-108). The EA describes the habitat baseline used to determine the affected environment and compare effects from each alternative. The habitat baseline includes all past management actions that have created the current habitat conditions (Final EA, pp. 3-107 to 3-108). The EA describes on page 3-108 that changes in habitat from the O’Lickety, Lick Stew, Bald Lick, and Wagner Anderson Projects were included in the habitat baseline updates. This information was also included in the Nedsbar BA (p. 18) and demonstrated to the USFWS that we updated the spotted owl baseline with the changes to habitat discovered during our post-harvest monitoring. Furthermore, blowdown in some of the O’Lickety, Lick Stew, Bald Lick, and Wagner Anderson project units were assessed in the field and it was determined that no additional habitat updates were needed beyond what was already updated from the post-harvest habitat evaluations. The Final EA analyzes the cumulative effects for each action alternative to northern spotted owls (Final EA, pp. 3-131 to 3-133), and the cumulative effects are based on the current conditions, which include changes in habitat from past management activities including the O’Lickety, Lick Stew, Bald Lick, and Wagner Anderson Projects. The cumulative effects to northern spotted owls were adequately analyzed and disclosed to a level necessary to discern both project and cumulative effects, and to provide the decision maker with adequate information necessary to make an informed decision.

Comment 53. The EA does not adequately address the cumulative effects the actions of those of private property.

Response: The Nedsbar Forest Management Project Final EA includes a thorough analysis of the potential for cumulative effects, both adverse and beneficial. “Effects analyses completed for resources potentially affected by the Nedsbar Forest Management Project describe indicators of importance along with the spatial (Analysis Area) and temporal scale of importance for determining the effects of multiple actions (past, current and reasonably foreseeable) on affected resources.” (Final EA p. 3-2). The current condition assessed for each affected resource inherently includes the effects of past actions (Final EA, p. 3-2). The effects from other present and reasonably foreseeable actions relevant to the effects of the Nedsbar Forest Management project including timber harvest on private lands is also assessed (Final EA, p. 3-2). The resource analysis then determines the incremental impact of the alternatives when added to other past, present, and reasonably foreseeable future actions. (Final EA, Chapter 3). Also, see Comment 49 above.

NEPA Analysis/EA

Comment 54. Comment was received that the Purpose and Need was too narrow.

Response: The BLM has properly defined the agency’s purpose and need in the EA (Final EA, pp. 1-5 to 1-7). The National Environmental Policy Act (NEPA) document must briefly specify the underlying purpose and need to which the agency is responding. Agencies have considerable discretion to define the purpose and need of a project. That said, the purpose and need may not be so narrow that only one alternative becomes a foreordained outcome, and may not be so broad that an infinite number of possibilities could accomplish the goals of the project.