

Pre-Operations Report 2009 Sale

Operation Name: North Woods Creek Thin
County: Douglas County
Management Basin: Umpqua

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres
1	Partial Cut	16	14
2	Partial Cut	56	50
3	Partial Cut	52	44
3	Retention Cut	30	30
Total		154	138

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

Area 1 is a 16 acre stand that starts at the ridge with mild westerly slopes. There are no significant streams, but there is a draw with a heavier concentration of timber. Area 1 and 2 are split by a northerly ridge. Area 2 rolls off the top of the slope to the east. This area has no significant streams; there are some draws at the eastern boundary. Area 3 is a rectangular piece of property that is mid-slope, and has fingers of conifer in the draws that on the east-facing slope. The average slope is about 40% for Areas 1 and 2, and 30% for Area 3.

Soils in the sale area are primarily the Josephine-Speaker (117F) complex. This soil unit is moderately deep and well drained. Seedling mortality is a concern for this type. Also present is the Beekman-Vermisa (19G) complex along with small inclusions. Soils of this type are shallow to moderately deep, well drained or somewhat excessively drained. Fires of moderate intensity in this type may increase the risk of erosion and soil damage. Both of these soil types are susceptible to windthrow during periods of strong winds when the soil is saturated.

II. CURRENT STAND CONDITION:

*Overstory*¹: Areas 1 and 3 are predominantly madrone stands, with concentrations of conifer. These stands are very dense, with the site fully occupied. Area 2 is heavier toward conifer. The stands within the timber sale area are approaching the maximum stand density for Douglas-fir stands. The conifer is on the wetter portions of the stands

¹ 5062- (total BA=306) DF- 90, GC-17, IC-18, LO-6, MA-170, TO-2, WO-4
5063- (total BA=202) DF-127, BM-5, GC, IC-35, LO, PM-19, RA, TO
5047- (total BA=274) DF-70, GC-36, IC, MA-150, RA, TO, GF

on the northerly slopes and in draws. Area 2 is primarily conifer, with a significant amount of cedar in the overstory, and with some residual old-growth trees.

Understory: Area 1 and 3 are classified as understory development (UDS). There are some trees less than 15 feet tall in these stands and some vegetation, indicating that there is some light getting to the forest floor. Oceanspray, hazel, Oregon, Grape, and salal are present in the understory. Area 2 has sparse vegetation, though the above-mentioned vegetation is present in the stand.

Snags: Area 1 has some large cedar snags (.59/acre over 12” in class 1 and 2), but most (2.38/acre) of the hard snags over 12” are hardwoods. Area 2 has the greater component of snags in the sale area. There are 5 hard snags over 12 inches in area 2 and about 3 snags over 24” per acre. Area 3 has about 1 snag per 2 acres over 24”. All of the hard snags over 12” in area 3 are hardwood.

Down woody debris: All sale areas are deficient in sound down wood, but area 2 has 5453 total cubic feet per acre of down wood. Areas 1 and 3 have approximately 1,000 cubic feet per acre of down wood in all classes.

Current Stand Structure: See Table 3 below.

Insects and disease: This area does not have a high occurrence of forest pathogens of concern. Root rots including laminated root rot (*Phellinus weirii*) are not a significant problem. The climate is too dry for Swiss needlecast (*Phaeocryptopus gaeumanni*) to be a concern. There is some occurrence of the fir engraver (*Scolytus ventralis*) in true firs in this area. True firs are not a significant component of these stands and thinning them will reduce the susceptibility to fir engravers. Sugar pine, if planted, may become infected with white pine blister rust (*Cronartium ribicola*).

Table 2. Stand Inventory Information

Area	Prescription	Stand ID ¹	Species	Age 06	DBH	BA	TPA	SDI	Acres ²
1	Light Thinning	5062	All	86	12	306	374	95	16
		Target ³			12	160	178	40	16
2	Light Thinning	5063	All	76	14	202	183	61	56
		Target ³			14	140	135	40	56
3	Heavy Thinning	5047	All	86	11	274	388	88	52
		Target ³			14	80	75	25	52
3	Retention Cut	5047	All	86	11	274	388	88	30
		Target ³			18	40	25	20	30

1. The source of stand inventory information is SLI from the year 2003. Trees over 5.6 inches.
2. The acres listed above are the total gross acres based on GIS including roads, and streams buffers.
3. The Target identifies expected stand characteristics (DBH, BA, TPA and SDI) after harvesting has been completed.

III. DESIRED FUTURE CONDITION/VISION:

Table 3. Stand Structure Information:

Area	Stand ID	Current	Post Harvest ¹	Desired Future	Acres ²
1	5062	UDS	UDS	CSC	16
2	5063	CSC	UDS	OFS	108
3	5047	UDS	REG	CSC	30

1. The stand is expected to develop into this condition in the five to ten years after this operation is completed.
2. Gross acres.

Vision:

The vision for Areas 1 and 2 is to lower the density of these stands to allow more light to the forest floor, eliminate ladder fuels, and grow the overstory into a larger stand of trees. Area 3 will have the hardwoods and mid-size conifers removed, leaving a more open stand for a conifer understory, and large overstory that will increase layering.

IV. PROPOSED MANAGEMENT PRESCRIPTION:

Desired Silvicultural Results: In Area 1 and 2 the commercial prescription will primarily be a basal area thinning from below to remove the suppressed, intermediate, and some of the codominant trees from these stands. Some of the healthy advanced understory will be reserved to promote layering. An upper diameter limit will be established to preserve the largest and healthiest trees in the stands. Density management will increase growth and development of the overstory and understory. Thinning these stands will increase the health and vigor of the residual conifer and hardwood trees as well as reduce the likelihood of insects, disease, wildfire, or other stand replacing events. Approximately 2-5% of the sale area will remain in unthinned patches at least 1 acre in size. These unthinned patches will occur randomly placed throughout the sale area as a result of leaving unmerchantable timber. Opportunities for creating small openings or patch cuts of 1-2 acres will be explored during sale layout. The largest and healthiest trees will be left throughout the sale, as well as any trees that have the Old Growth characteristics of rough bark, large limbs and deformed tops. The combination of partial cutting and group selection emulates the natural processes behind the development of LYR and OFS stands.

Area 3 is a good area operationally and silviculturally for patch cutting and hardwood conversion. In Area 3 hardwood trees or patches will be thinned to create growing space for conifers and to improve the health and vigor of the larger residual hardwoods. Approximately 30 acres of Area 3 will have 90% of the overstory removed to create growing space for conifers. Residual conifer trees will be left in the stand as a natural

seed source. Areas where conifer drop below 80 square feet in basal area will be replanted to Douglas-fir and cedar.

Snags: Snag creation will be required. An estimated 1 to 1.5 snags per acre will occur as a result of logging and natural mortality. The sale area will be assessed after logging to determine the amount of snags to create. It is likely that an additional 1 snag per 2 acres will be created by tree topping or girdling the top. All pre-existing snags that are not safety or fire hazards will be retained. Any snags that are felled will be retained for down woody debris.

Down woody debris: Approximately 100 cu. ft. per acre of class 1 debris will be added through normal logging operations including trees that are damaged and eventually blow down and cull log segments required to be left on the ground. Additionally any time a stand is opened up from management activities the possibility of isolated blow down or top breakage exists. No yarding of down woody debris will be permitted. In Area 3 down wood will be pushed into piles or windrows for site preparation. Some of these piles will be intentionally left unburned for down wood and wood rat habitat.

Insects and disease: The sale will focus on removing the trees that have the smaller, less developed crowns, poor vigor and thus are more susceptible to insects and disease.

Fuels Modification: Residual slash, tree tops and limbs, will be burned if unacceptable accumulations remain after harvest. The slash accumulations in a portion of Area 3 will be piled and burned as part of the site preparation for planting. Some piles will be left for habitat.

Regeneration: Regeneration from seed will occur naturally as a result of the thinning, especially in open areas. Portions of the sale will be planted to a species mix that approximates the naturally occurring mix of conifer trees (Douglas-fir and Cedar).

V. ESTIMATED TIMBER AND REVENUE OUTPUTS:

Table 4. Timber and Revenue

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	0%		X
Planned Quarter:		3	

	Conifer	Hardwood	Total
Net Volume (MBF)	616	150	766
Stumpage Value (\$/MBF)	\$250	\$30	
Estimated Gross Value	\$154,000	\$4,500	\$158,500
		Project Costs:	\$15,000
		Estimated Net Value:	\$143,500

VI. HARVESTING AND ACCESS CONSIDERATIONS:

Access: There are two road options to access Area 3, one through BLM and one entirely on ODF. The BLM road is on the upper portions of the slope and is preferred. Both roads are shown on the map, but only one will be built; they are both approximately 4,000 feet in length. In Area 1 about 700 feet of spur road will be built and closed after the sale. All access is through existing roads. The BLM controls these existing roads and an access permit will have to be secured.

Harvesting: Cable yarding in Areas 1 and 2. Most of the ground in Area 3 is less than 35%, allowing ground based equipment.

Table 5. Transportation Management Summary (Miles)

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construct				1.0
Improve				
Maintain				1.0
Close/Block				
Vacate				

VII. AQUATIC RESOURCES AND WATER QUALITY:

Area 1 is in the Wood Creek drainage and Areas 2 and 3 are in the Lawson Creek drainage. Areas 1 and 2 are in the upper portion of the slope, near the ridge, in an area where most drainages are dry draws. Area 3 is mid-slope, and true streams are more likely to be found in the lower eastern portions of the sale area. Most draws in these sale areas are dry, with little or no stream channel associated with the topography. There are some seasonal streams in these stands, but surveys will be conducted during the sale preparation process to determine if any of them are perennial. According to GIS records, "streams" in Area 1 and 2 are unknown fish-bearing, and "streams" in Area 3 are "verified" non-fish. Any identified streams will be posted according to the Southwest Oregon Forest Management Plan riparian management area rules. To the extent that harvesting will be occurring in the "inner" and "outer" RMA zones, live tree and snag retention will exceed the requirement standards in the SWO FMP.

VIII. WILDLIFE AND T&E SPECIES CONSIDERATIONS:

Northern Spotted Owl: The SOA Wildlife Biologist has determined that the sale area is suitable for Northern Spotted Owls due to the age and size of the trees. Surveys for NSO's have taken place over several years and will continue in 2008. As a result of these surveys, 1 northern spotted owl site (Woods Creek South) has been identified within 1.3 miles of this sale.

A preliminary Biological Assessment was prepared in 2007 when this sale was a 2008 AOP alternate sale named Woods Creek North. Since the sale prescription and name has changed, the sale will require a new BA to be prepared by the ODF SOA Biologist to assure that the appropriate measures are taken to provide sufficient habitat on the landscape consistent with ODF's policy on Northern Spotted Owls. Seasonal restrictions may be necessary to prevent disturbance during the nesting season.

Marbled Murrelet: This sale is outside the known inland range of the marbled murrelet and will not require surveys.

Threatened and Endangered Fish: There are no known fish-bearing streams in the sale area. All seasonal streams will be posted according to the Southwest Oregon Forest Management Plan riparian management area rules. For additional protection measures to prevent sediment from entering perennial streams see Section VI – Harvesting and Access Considerations, Section VII – Aquatic Resources and Water Quality, and Section IX – Slope Stability and Geotechnical Issues.

Threatened and Endangered Plants: The sale area was checked against District knowledge for any listed plant location as well as the Oregon Natural Heritage Program (ONHP) database of known listed plant locations.

IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:

A hazard assessment of slope stability is conducted by a Geotechnical Specialist if there are any issues with structures downstream of the sale. This sale does not have any structures nearby.

X. RECREATION RESOURCES:

There are no developed trails or facilities in close proximity to the sale.

XI. CULTURAL RESOURCES:

The sale area was checked against a cultural resources database and maps. The sale area is not likely to have cultural resources. During sale preparation, the sale area will be reviewed for cultural artifacts.

XII. SCENIC RESOURCES:

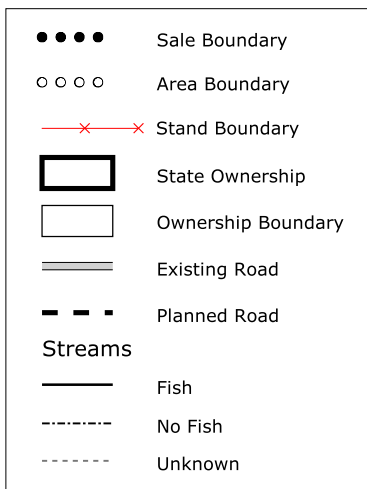
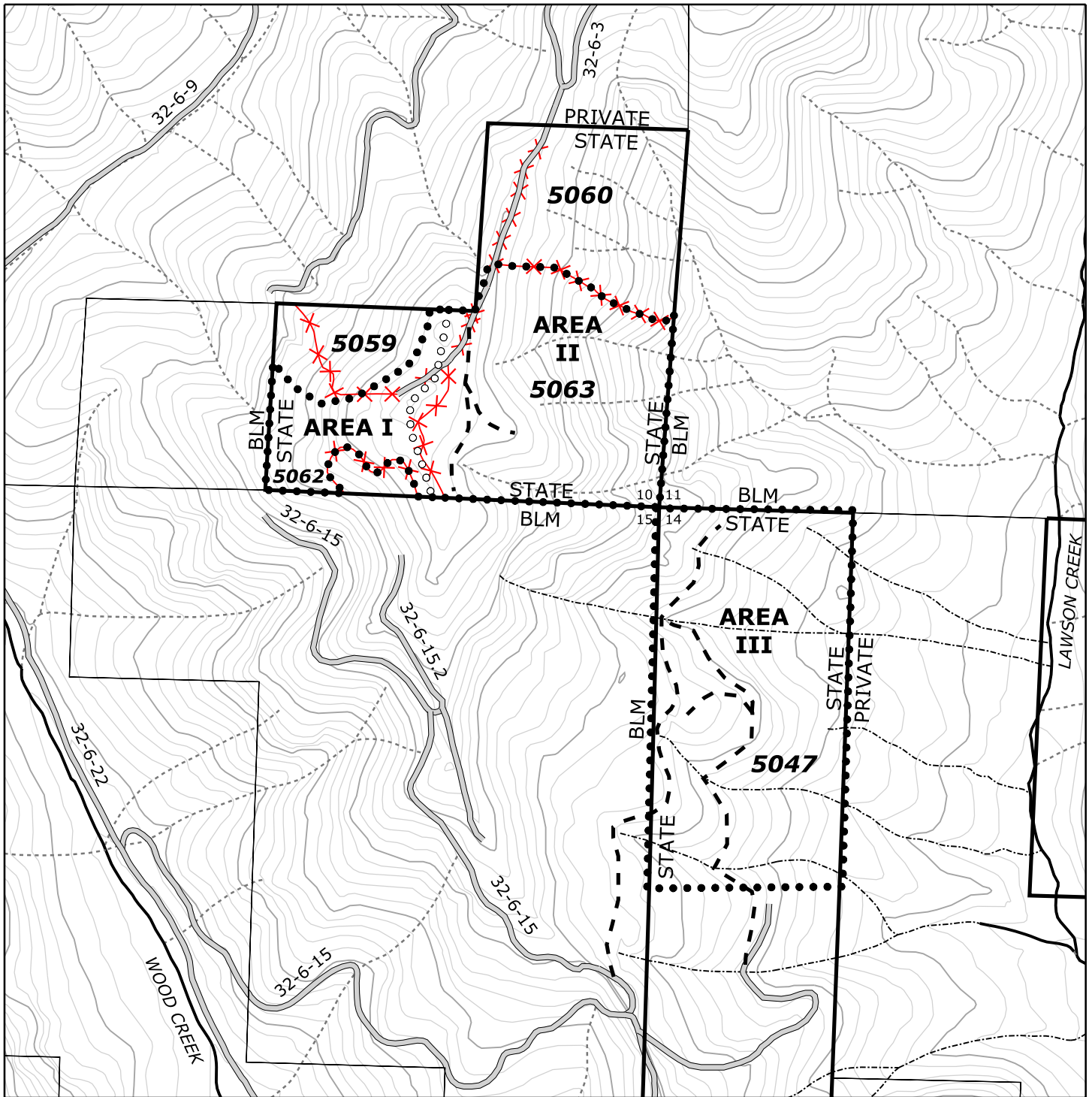
The Visual Classification is rated as Level III – Low Sensitivity.

XIII. OTHER RESOURCE CONSIDERATIONS:

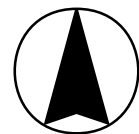
There are no other resource considerations within or adjacent to the sale area.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

The sale has small seasonal streams that receive “focused” or “special stewardship”. The stream types will be verified on the ground during the sale layout process. Small perennial streams receive special stewardship or specific stream buffer protection in the stream bank zone. The inner and outer RMA zones of the perennial streams receive focused stewardship. Small seasonal streams receive focused stewardship in the inner and outer RMA zones where a specified basal area retention is required.



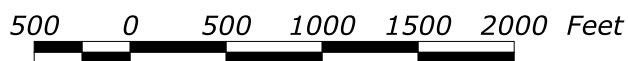
North Woods Cr. Thin



S.W.O. District - 2009
Annual Operations Plan

T. 32 S., R. 6 W., Sec. 10 & 14; W.M.
Douglas County, Oregon

ACRES (est. gross)	
AREA I	: 16 acres
AREA II	: 56 acres
AREA III	: 82 acres
TOTAL	: 154 acres



Contour Interval : 40 feet

MEMORANDUM

TO: Chris Rudd
FROM: Randy Smith
SUBJECT: Preliminary Biological Assessment for the **North Woods Creek Thin** Timber Sale
DATE: February 12, 2007

Executive Summary

North Woods Creek Thin is a proposed sale in the 2008 Annual Operations Plan of the Southwest Oregon District and is located within the home range of the Woods Creek South northern spotted owl site.

After harvest of the sale, 61% suitable habitat will remain post harvest within the 0.7 mile circle and 66% within the 1.3 mile circle for the Woods Creek South NSO site. Habitat will exceed the ITG. This sale is outside of the known inland range of the marbled murrelet (>50 miles from the ocean). As currently proposed, the North Woods Creek Thin timber sale is expected to have a low risk of negatively affecting the occupancy and productivity of the Woods Creek South northern spotted owl site.

Introduction

Purpose

The Southwest Oregon District is proposing the North Woods Creek Thin timber sale in their 2008 Annual Operations Plan. This sale area contains suitable habitat for northern spotted owls. Portions of the sale are within the 0.7 and 1.3 mile circle for the Woods Creek South northern spotted owl activity center. This memo presents the relevant biological information needed to assess the potential effects of the North Woods Creek Thin timber sale on northern spotted owls.

Policy Direction

Northern Spotted Owls

ODF is implementing a draft pilot project in Southwest Oregon to investigate alternative strategies for managing northern spotted owls (ODF 2007). The North Woods Creek Thin sale is part of this pilot project. Under this pilot project the following standards are being applied:

- a minimum of 500 acres of suitable habitat is maintained within 0.7 mile radius circle
- a minimum of 40 percent suitable habitat is maintained within a 1.3 mile radius home range circle
- Prescriptions designed to be consistent with the description of optimal foraging habitat, described under "Assumptions: Defining Suitable Spotted Owl Habitat" below, are considered to maintain stands as suitable foraging habitat.

Additional factors to be considered and documented in this biological assessment include proximity of the operation to a site, the prescription proposed, the size of the operation, the history of management activity near the site, and other relevant factors.

ODF is continuing to work with USFWS on this pilot project and will be monitoring to evaluate success at meeting objectives.

Background

Survey History and Site Information

Woods Creek South

Potential spotted owl habitat surrounding the timber sale was surveyed according to protocol endorsed by the USFWS (Anonymous, 1991). This site has been monitored by BLM, OCFWRU and ODF contract crews since it was established in 1979. A pair was located at this site in 1979 and was monitored off and on through 1987 but has been monitored every year since 1988. Successful nesting was documented in 1996 (2 fledged), 1998 (1 fledged), 2004 (2 fledged) and 2005 (2 fledged) and nesting attempts occurred in 2000 - 2003. Spotted owls occupying this site also have been detected at the Lawson Creek site to the north (Kingfisher, 2006). This activity center (AC) is approximately 0.4 miles from the North Woods Creek Thin timber sale. A portion of each of the sale areas are within the 0.7 mile circle and the entire sale is within the 1.3 mile circle for Woods Creek South site. Owls from this site have been located within the proposed North Woods Creek Thin timber sale areas 2 and 3 in 1998 and 2000.

Sale Area Information

According to Stand Level Inventory (SLI) information from 2003, the North Woods Creek Thin sale consists of 154 gross acres in 3 sale areas. Stands in sale areas 1 and 3 are currently classified as understory (UDS) and the desired future condition is closed single canopy (CSC). Area 2 is currently classified as CSC and has a desired future condition of older forest structure (OFS). The sale is comprised of 75-85 year-old Douglas-fir with large amounts of madrone, chinquapin, incense cedar and various oak species. The average stand diameter throughout the sale areas is 12-14 inches. Areas 1 and 3 are primarily fully stocked madrone stands with concentrations of Douglas-fir. Area 2 contains higher concentrations of Douglas-fir and incense cedar in the overstory with hemlock, big-leaf maple and alder in the riparian areas. The Douglas-fir in areas 1 and 3 has an average DBH of 11-12 inches with 375 TPA. Area 2 Douglas-fir has a DBH of 14 inches with 183 TPA. The brush layer consists of oceanspray, hazel, Oregon grape and salal. SLI reports some older conifer snags greater than 24 inches in areas 1 and 2 but the majority of snags throughout the sale are hardwood (2.5-5 snags per acre over 12 inches DBH). Sale areas 1 and 3 have approximately 1,000 cubic feet per acre of existing down wood and area 2 has 5,400 cubic feet per in all decay classes. The entire sale is considered suitable habitat for northern spotted owls.

Prescription

The commercial prescription will primarily be a basal area thinning from below to remove the suppressed, intermediate and some of the co-dominant trees from these stands. Some of the healthy advanced understory, including hardwoods, will be reserved to promote layering. An upper diameter limit will be established to preserve the largest and healthiest trees in the stands. Thinning these stands will increase the health and vigor of the residual conifer and hardwood trees as well as reduce the likelihood of insects, disease, wildfire, or other stand replacing events. Approximately 5% of the sale area will remain in unthinned patches at least 1 acre in size. These unthinned patches will be randomly placed throughout the sale area. Opportunities to create ¼ to 1 acre patch cuts mimicking natural disturbance processes of older forest stands will be explored in area 3. An estimated 1 to 1.5 snags per acre will occur as a result of logging and natural mortality and, in addition, approximately 1 snag per 2 acres will be created by topping or girdling. Existing down wood will be retained and approximately 100 cubic feet/acre of class 1 wood will be added through normal harvest operations. Regeneration from seed will occur naturally as a result of the thinning, especially in group selection areas.

Area 1 is a 16 acre light thinning from below of the intermediate size classes of conifer and a majority of the hardwoods. The target will be to retain a mixed species stand with a conifer basal area (BA) of 160 distributed across stand diameters, a stand density index (SDI) of 40 and 175 trees per acre (TPA). A goal of the light thinning in this area is to retain suitable NSO habitat with a minimum canopy closure of 50-60% while reducing fuel loading lowering the risk of a stand replacement fire.

Existing down wood and large snags primarily composed of cedar and hardwoods that are not safety hazards will be retained.

Area 2 is a 56 acre light thinning from below of Douglas-fir and some of the hardwoods. The post harvest target for the area is a mixed species stand with a BA distributed across stand diameters of 140-160, a SDI of 40 and 135 TPA. The goal of this light thinning will also be to retain suitable NSO habitat with a minimum 50-60% canopy closure as well as retention of existing snags and the current high volume of down wood.

Area 3 is an 82 acre heavy thinning from below to remove a majority of the hardwoods and some mid-sized conifers leaving a more open stand for conifer/hardwood understory development. The target for this area is retention of a mixed species stand with BA of 80, 75 TPA and a SDI of 25. Opportunities for small ¼ to one acre group selection patch cuts will be explored in this area. The patch cuts will help to reduce moisture stress and competition among some of the conifer species and provide an opportunity to leave extra down wood on the landscape.

Assumptions

Defining the Home Range

We do not have specific information about the home range of the northern spotted owl site affecting this thinning sale. According to "Procedures leading to Endangered Species Act compliance for the northern spotted owl" (U.S. Fish and Wildlife Service 1990), the median home range size for spotted owl pairs in the Klamath Province is 3,340 acres, or the equivalent of the area encompassed by a circle with a radius of 1.3 miles. Although spotted owls generally do not have circular home ranges, in the absence of more specific information about the home range of this site, I will assume that a 1.3 mile radius circle around the nest or activity center approximates the home range of this site. All stands for this analysis were digitized and circle radii/acreages were calculated using ArcView software.

Defining Suitable Habitat

Although spotted owl habitat has generally been described as old growth, spotted owls are known to use a variety of forest types in this part of the Oregon Klamath province. The home ranges of spotted owls in this region contain large percentages of stands in intermediate stages of stand development (Anthony and Wagner 1999). Spotted owls are known to nest in stands as young as 60-80 years old that have suitable structures on state forest lands in the Southwest Oregon District (approximately 40% of known nests on ODF lands in the District are in this age class) and to forage in even younger stands.

A complicating factor in identifying suitable spotted owl habitat on this District is the land ownership pattern. The area around the Woods Creek South spotted owl site includes lands managed by federal, state, private industrial and private non-industrial landowners. Because specific stand data on private and federal ownership was not available for our use, this assessment of habitat suitability within the Woods Creek South home range circle is based on aerial photos. Determination of habitat status within the owl circles was done by considering 2005 series air photos, 2006 field assessments, and owl use data.

As part of the development of the draft pilot project for northern spotted owls in Southwest Oregon, USFWS provided the following information stand characteristics that are associated with spotted owl "optimal foraging habitat":

- Multiple species are present
- Conifer basal area of 160 – 250 sq. ft./acre
- Minimum canopy closure of 50 – 60%
- At least 4 conifer trees per acre that are ≥ 24 " DBH

- Snags and downed wood approximating Late Successional Reserve Assessment targets:
 - 3 – 5 snags/acre
 - 10 tons downed wood/acre that is ≥ 20 " diameter (large end)
 - 5 tons downed wood/acre that is ≥ 9 " diameter (large end)

For the purposes of the draft pilot project and this assessment, prescriptions designed to be consistent with these characteristics will be assumed to maintain the suitability of spotted owl habitat, and not to downgrade the suitability of spotted owl habitat. Prescriptions may temporarily degrade spotted owl habitat, but it is not expected that this would happen to the extent that owls would cease to use the habitat. Sale prescriptions will be evaluated in their own context based on many factors. Degrading several of these factors at once may downgrade habitat, but factors such as canopy closure have greater magnitude than the others.

Impact Assessment and Discussion

Landscape Analysis

The following discussion assesses the habitat situation within 0.7 and 1.3 miles of the Woods Creek South spotted owl activity center, as recommended by the ITG (Table 1, Figure 1).

The North Woods Creek Thin timber sale will partial cut 76 acres from the three sale areas within the 0.7 mile circle for the Woods Creek South spotted owl site. Based on the light thinning prescription in areas 1 and 2, 15 of the 76 acres within the 0.7 mile circle will be assumed to remain suitable post harvest leaving 61 acres of habitat (in sale area 3) removed within the circle. A habitat analysis of the Woods Creek South spotted owl site indicates that there are approximately 657 acres of suitable habitat within 0.7 miles of the activity center. If the 61 acres of sale area 3 is excluded from the suitable habitat, 596 acres (61%) of suitable habitat are available within 0.7 miles of the activity center. The North Woods Creek Thin timber sale will partial cut 154 acres within the 1.3 mile circle for the Woods Creek South spotted owl site. Based on the light thinning prescription in areas 1 and 2, 72 of the 154 acres within the 1.3 mile circle will be assumed to remain suitable post harvest leaving 82 acres of habitat (in sale area 3) removed within the circle. A habitat analysis of the Woods Creek South spotted owl site indicates that there are approximately 2356 acres of suitable habitat within 1.3 miles of the activity center. If the 82 acres of sale area 3 is excluded from the suitable habitat, 2274 acres (66%) of suitable habitat are available within 1.3 miles of the activity center. Based on this preliminary habitat analysis, this site will maintain enough unmodified suitable habitat within both the 0.7 and 1.3 mile circles after harvest to be consistent with the ITG.

Effects of the Prescription

The effects of thinning on spotted owl habitat are not well understood. Spotted owls are known to use stands that have been thinned for foraging and for nesting (Anthony et al. 2000; Tappeiner et al. 1999), and this research indicates that in the long term, thinning is a tool that can develop spotted owl habitat (Tappeiner et al. 1999). However, the short-term effects of thinning are less clear. In a case study of a thinning near an owl core area in Clatsop County, spotted owls displaced their foraging activity for at least a couple of years after the harvest (Anthony, et al. 2000). Other anecdotal evidence on state forest lands in this District indicates that on at least one occasion, spotted owls have used recently thinned stands for nesting within two years of harvest.

The prescription for areas 1 and 2 will retain sufficient habitat elements immediately post harvest to be consistent with the definition for optimal foraging habitat, and thus are assumed to maintain these areas as suitable foraging habitat. Both areas will be comprised of a mixed species stand, will retain or exceed minimums for snags and down wood, conifer BA with retention of large conifers, and canopy closure. Although the habitat may be temporarily degraded from thinning operations, it will likely remain as foraging habitat immediately post harvest and will develop more rapidly into increasingly suitable NRF habitat in the future.

Following completion of the heavy thinning operation in Area 3, I do not anticipate the sale area will be suitable northern spotted owl habitat for many years. I believe that the lack of canopy closure, sparse understory vegetation, and a reduced conifer basal area will not provide suitable habitat for owls or prey species for some time after harvest operations have been completed.

Discussion

The Woods Creek South spotted owl site is 0.4 miles from the proposed North Woods Creek Thin timber sale. Approximately 76 acres of the sale are within the 0.7 mile circle. Of these acres, 61 will likely be non-suitable immediately post harvest. Approximately 154 acres are within the 1.3 mile circle. Of these acres, 82 will likely be non-suitable immediately post harvest. The Woods Creek South spotted owl activity center is on BLM ownership and is not located within a Late Successional Reserve (LSR). Federally managed land makes up 26% of the area within 1.3 miles of the spotted owl activity center, 12% is managed by ODF and 62% is managed by other landowners. There is a patch of approximately 200 acres of high quality habitat around the activity center on federal lands which likely serves as a core use area. This area is likely becoming increasingly important as more of the private lands to the south and west of the AC is being operated upon and becoming more fragmented. Fragmentation may become a larger issue and potentially increase the risk to this owl site if future harvest on privately owned lands near the AC continues to occur. The remaining habitat on state and other lands near the spotted owl activity center is of lower quality but still appears to be able to provide ample foraging and roosting opportunities for spotted owls.

The habitat analysis of this site indicates that the ITG will be met within 0.7 and 1.3 miles of the activity center after harvest of the sale area.

Conclusions and Risk Assessment

Biological Risk

As currently proposed, the North Woods Creek Thin sale is expected to have a low risk of negatively affecting the occupancy and productivity of the Woods Creek South spotted owl site. Although the sale is located relatively near to the spotted owl activity center, I believe the following factors minimize potential negative impacts:

- ◆ Habitat quality immediately surrounding the activity center is high along with good connectivity to habitat North and East of the activity center;
- ◆ The proposed sale prescription is a thinning that will retain habitat elements and enhance future development of habitat important to northern spotted owls.
- ◆ Approximately 61% of the 0.7 mile circle and 66% of the 1.3 mile circle will remain as unmodified suitable habitat after harvest of the sale, exceeding the ITG;

Compliance with Policy

After completion of harvest operations associated with the North Woods Creek Thin timber sale, the remaining suitable habitat within the Woods Creek South owl circle will exceed the standards identified in the U.S. Fish and Wildlife Service rescinded Incidental Take Guidelines.

Consultation

Tod Lum, District Wildlife Biologist with the Oregon Department of Fish and Wildlife, had no additional comments on this BA and agreed with the conclusions and risk assessment.

Literature Cited

Anonymous. 1991. Protocol for surveying proposed management activities that may impact northern spotted owls. Revised – March 17, 1992. 15 pp.

Anthony, R.G., F.F. Wagner 1999. Reanalysis of northern spotted owl habitat use on the Miller Mountain study area. Report to the Bureau of Land Management, Medford District, October 1999. 71 pp.

Anthony, R.G., M.C. Hansen, K. Swindle, & A. Ellingson. 2000. Effects of forest stand manipulations on spotted owl home range and use patterns: a case study. Final draft report to the Oregon Department of Forestry, November 2000. 16 pp.

Glenn, E., and R. G. Anthony. 2000. Home Range and Habitat Use of Northern Spotted Owls on State Forest Lands in the Oregon Coast Range. Unpublished Final Report, Oregon Cooperative Fish and Wildlife Research Unit, Corvallis, OR. 114 pp.

Kingfisher Ecological, Inc. 2006. Northern Spotted Owl Surveys Oregon State Lands 2006 for Oregon Department of Forestry. 135 pp.

Oregon Department of Forestry. 2007. Draft Northern Spotted Owl Pilot Project for Southwest Oregon. State Forests Program Bulletin. February 2007. 2 pp.

Tappeiner, J., T. Nierenberg, J. Bailey, and N. Poage. 1999. Characterizing northern spotted owl home habitat on state forest lands in the Oregon Coast Range. Report to Oregon Department of Forestry. 85 pp.

U.S. Fish & Wildlife Service. 1990. Procedures leading to endangered species compliance for the northern spotted owl. U.S. Fish and Wildlife Service, Region 1, July 1990. 15 pp.

cc: Dan Thorpe
 Rob Nall
 Marcia Humes
 Greg Kreimeyer
 Tod Lum, ODFW Roseburg

Table 1. Acres of suitable habitat within 0.7 and 1.3 mile circles of the Woods Creek South northern spotted owl activity center. Suitable habitat determined through 2005 air-photo analysis and 2006 field assessment.

	Acres	Woods Creek South	Woods Creek South
		0.7 mi	1.3 mi
Suitable Habitat:			
State		84	238
Federal		335	786
Private		238	1332
Total		657	2356
Sale acres in circle removed as habitat	154	61	82
Unmodified suitable habitat remaining		596	2274
% suitable post harvest		61%	66%