

MEMORANDUM

TO: Art McCoy

FROM: Randy Smith

SUBJECT: Preliminary Biological Assessment for the **Rhody Ridge** Timber Sale

DATE: February 10, 2006

Purpose

Western Lane District is proposing the Rhody Ridge timber sale in their 2007 Annual Operations Plan. This sale area contains potentially suitable habitat for northern spotted owls. The Rhody Ridge sale is within 1.5 miles of three northern spotted owl activity centers; Upper McVey Creek, North San Antone and Pat Creek. This memo presents the relevant biological information needed to assess the potential effects of the Rhody Ridge timber sale on northern spotted owls.

Marbled Murrelets

The sale area is approximately 22 miles from the ocean. There is no suitable marbled murrelet habitat within or adjacent to the sale. According to ODF policy, surveys are not required for this timber sale.

Northern Spotted Owls

Policy Direction

In the Western Lane District, the standard for protection of northern spotted owls, according to ODF policy (Holloway 2002), is to apply the U.S. Fish and Wildlife Service rescinded Incidental Take Guidelines (ITG) as outlined in "Procedures leading to Endangered Species Act compliance for the northern spotted owl" (U.S. Fish and Wildlife Service 1990). According to the ITG, the best available habitat is identified for a 70 acre core area; at least 500 acres of suitable habitat should be maintained within a 0.7 miles radius, and within the home range circle (in this case 1.5 miles), either 40% suitable habitat (1,808 acres) or 1,906 acres of suitable habitat should be maintained. 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 activity near the site, and other relevant factors.

Survey Information

The Rhody Ridge timber sale was surveyed to protocol for northern spotted owls in 2005, and will be surveyed again in 2006, consistent with the survey protocol endorsed by the USFWS (Anonymous 1991). As a result of these and previous surveys in the area, three northern spotted owl activity centers have been located within 1.5 miles of the sale area. The Upper McVey Creek site is located on ODF land approximately 0.7 miles from the Rhody Ridge timber sale. The North San Antone site is located on ODF land approximately 1.4 miles from the sale area. The Pat Creek site is located on ODF land approximately 0.7 miles from the sale area. There have been no observations of owls within the sale area during protocol surveys.

Site History

Upper McVey Creek

A pair was found in 1997 and did not nest. The pair nested in 1998 and fledged two young. They did not nest in 1999. In 2000, the historic female paired with a new male and fledged one young. The pair nested in 2001 and fledged two young. The pair nested but failed to produce young in 2002. In 2003, the historic pair did not nest. In 2004, the historic pair nested in a new

tree within the core and fledged one young. In 2005, the historic female nested with a new male and fledged one young.

North San Antone

In 2002 a pair was heard twice at night but not located during the day. There was one male night response in 2003. In 2004, there was a male night response and an owl of unknown sex was heard at night and located during the day which may have been the Pat Creek female based on a partial band observation. There were no responses in 2005.

Pat Creek

In 2001, the pair nested and fledged one young. In 2002, the historic male was found with a new female and no young were produced. The pair was found non-nesting a mile east of the previous activity center in 2003. In 2004, the male was found with a juvenile late in the season near the 2003 location. In 2005, the pair nested near the 2004 location and fledged one young. The Rhody Ridge timber sale is within 1.5 miles of the activity center that has been used since 2003. The activity center to the west used previously is further than 1.5 miles from the sale area.

Habitat Information

The Rhody Ridge sale consists of 78 acres of primarily 40-60 year old second growth Douglas-fir and hardwood stands that regenerated after clear cut harvests in the 1940's and 1950's. Portions of the sale are dense stands of 48-53 year old Douglas-fir and hardwood species averaging 250-280 TPA with average diameters between 10-12 inches DBH. I have visited this sale area and due to the high density, small stand diameter and poor habitat conditions for prey species, I do not consider these acres of the sale (approximately 58 acres) to currently be suitable habitat for spotted owls. Other portions within the sale are 63 year old mixed hardwood with Douglas-fir stands at lower densities. Average DBH is 13-15 inches and scattered larger diameter conifers are present. Considering the current density, stand diameter, stand structure and brush composition, I believe these acres (approximately 20 acres) would provide marginal foraging habitat for spotted owls. Moderate numbers of snags and down wood are present within this portion of the sale area.

Defining the Home Range

According to "Procedures leading to Endangered Species Act compliance for the northern spotted owl" (USFWS 1990), the median home range size (based on 95% minimum convex polygon) for spotted owl pairs in the Oregon Coast Range is 4,766 acres, or the approximate equivalent of the area encompassed by a circle with a radius of 1.5 miles. Although spotted owls generally do not have circular home ranges, in the absence of more specific information about the home ranges of this site, I will assume that a 1.5 mile radius circle around the nest or activity center approximates the home ranges of these sites.

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 Coast Range. Spotted owls are known to nest in stands as young as 60-80-years-old on state forest lands in the Western Lane District that have suitable nesting structures (38% of known nests on ODF lands in the District are located in stands in this age class) and to forage in even younger stands.

For the purposes of this discussion, suitable spotted owl habitat is considered to be stands at least 55 years old, younger stands that have known owl use, or stands that appear to be suitable habitat from inventory data, an assessment of aerial photographs (taken in 2004) and/or ground verification in 2005. As discussed above, I consider 20 acres of the sale to be suitable habitat, and 58 acres to be non-suitable habitat for northern spotted owls.

There are three sales on state lands within the Upper McVey Creek, McVey and Pat Creek home range circles that are in ODF-approved sale plans. The Beeches timber sale is an approved sale in the 2004 operations plan that is planned to clear cut 79 acres of suitable habitat within 1.5 miles of the Upper McVey Creek spotted owl site and will clear cut 97 acres within 1.5 miles of the Pat Creek spotted owl site. The Barber timber sale is an approved sale in the 2004 operations plan that is planned to clear cut 4 acres of suitable habitat within 1.5 miles of the North San Antone spotted owl site and clear cut 29 acres within 1.5 miles of the Pat Creek spotted owl site. The Almaise timber sale is an approved sale in the 2005 operations plan that will partial cut and clear cut 147 acres within 1.5 miles of the Upper McVey spotted owl site. Since the preliminary BAs for the Beeches and Barber sales were completed, northern spotted owl activity centers have moved, affecting the assessment of these sales. Due to the proximity of spotted owl activity centers, it is unlikely that the Beeches and Barber sales will proceed in the foreseeable future. However, because these sales are in approved sale plans, acres in these three sales were not included as available suitable habitat for this analysis.

Landscape condition

The following discussion assesses the habitat situation within 0.7 and 1.5 miles of the Upper McVey Creek, North San Antone and Pat Creek spotted owl activity centers, as recommended by the ITG (Table 1, Figure 1).

The Rhody Ridge timber sale will not remove suitable habitat within the 0.7 mile circle for the Upper McVey spotted owl site but portions of the sale in non-suitable habitat are within the 0.7 mile circle. A habitat analysis of the Upper McVey spotted owl site indicates that there are currently 567 acres of suitable habitat within 0.7 miles of the activity center. No suitable habitat will be removed so 567 acres (58%) of suitable habitat are available within 0.7 miles of the activity center. There are 3,091 acres of suitable habitat within 1.5 miles of the activity center. The Rhody Ridge timber sale will clear cut 20 acres of suitable habitat within the 1.5 mile circle. If the suitable habitat within the sale area and acres in the approved Beeches and Almaise sales within the 1.5 mile Upper McVey site are excluded from the suitable habitat, 2,845 acres (63%) of suitable habitat are available within 1.5 miles of the activity center. Based on this preliminary habitat analysis, this site will maintain enough unmodified suitable habitat within the 0.7 mile and 1.5 mile circle after harvest to be consistent with the ITG.

The Rhody Ridge timber sale will clear cut 3 acres of suitable habitat within the 1.5 mile circle for the North San Antone spotted owl site. This sale does not affect the 0.7 mile circle. A habitat analysis of the North San Antone spotted owl site indicates that there are currently 1,958 acres of suitable habitat within 1.5 miles of the activity center. If the suitable habitat within the sale area and acres in the approved Barber sale within the 1.5 mile Upper McVey Creek site are excluded from the suitable habitat, 1,951 acres (43%) of suitable habitat are available within 1.5 miles of the activity center. Based on this preliminary habitat analysis, this site will maintain enough unmodified suitable habitat within the 1.5 mile circle after harvest to be consistent with the ITG.

The Rhody Ridge timber sale will clear cut 20 acres of suitable habitat within the 1.5 mile circle for the Pat Creek spotted owl site. This sale does not affect the 0.7 mile circle. A habitat analysis of the Pat Creek spotted owl site indicates that there are currently 2,144 acres of suitable habitat within 1.5 miles of the activity center. If the suitable habitat within the sale area and acres in the approved Beeches and Barber sales within the 1.5 mile Pat Creek site are excluded from the suitable habitat, 1,998 acres (44%) of suitable habitat are available within 1.5 miles of the activity center. Based on this preliminary habitat analysis, this site will maintain enough unmodified suitable habitat within the 1.5 mile circle after harvest to be consistent with the ITG.

Sale Prescription

The Rhody Ridge timber sale is composed of 78 acres of clear cut in suitable (20 acres) and non-suitable habitat (58 acres) to convert brushy mixed hardwood/conifer stands into conifer dominated stands. The sale area will be planted with a mixture of conifer species. Green trees, snags, and down wood will be left in the sale area consistent with the guidance in the Northwest Forest Management Plan. There will be no new road construction through suitable habitat associated with this sale.

Assessment

The Upper McVey Creek spotted owl site is approximately 0.7 miles from the proposed Rhody Ridge timber sale. Approximately 2 acres of the sale are within 0.7 miles and 78 acres are within 1.5 miles of the activity center. The Upper McVey Creek owl activity center is on ODF land. Federally managed land makes up 20% of the area within 1.5 miles of the spotted owl activity center, 60% is managed by ODF and 20% is managed by other landowners. The preliminary habitat analysis of this site indicates that the ITG will be met within 0.7 and 1.5 miles of the activity center after harvest of the sale area.

The North San Antone spotted owl site is 1.4 miles from the proposed Rhody Ridge timber sale. Approximately 3 acres of the sale are within 1.5 miles of the activity center. The North San Antone owl activity center is on ODF land. Federally managed land makes up 23% of the area within 1.5 miles of the spotted owl activity center, 43% is managed by ODF and 34% is managed by other landowners. The habitat analysis of this site indicates that the ITG will be met within 1.5 miles of the activity center after harvest of the sale area.

The Pat Creek spotted owl site is 0.7 miles from the proposed Rhody Ridge timber sale. Approximately 78 acres of the sale are within 1.5 miles of the activity center. The Pat Creek owl activity center is on ODF land. Federally managed land makes up 12% of the area within 1.5 miles of the spotted owl activity center, 58% is managed by ODF and 30% is managed by other landowners. The habitat analysis of this site indicates that the ITG will be met within 1.5 miles of the activity center after harvest of the sale area.

Risk Assessment

The Rhody Ridge timber sale includes 78 acres of clear cut in dense second growth Douglas-fir and mixed hardwood/conifer stands consisting of Douglas-fir, hemlock, cedar, bigleaf maple and red alder. Approximately 20 acres of the sale are currently suitable habitat and 58 acres are non-suitable habitat for northern spotted owls. This activity will take place within 0.7 miles of the Upper McVey Creek and within 1.5 miles of the Upper McVey, North San Antone and Pat Creek activity centers

I believe the Rhody Ridge sale as currently planned will have a low risk of negatively affecting the occupancy and productivity of the Upper McVey Creek, North San Antone and Pat Creek spotted owl pairs. This assessment is based on the following factors:

Upper McVey Creek:

- ◆ The sale is located 0.7 miles from the Upper McVey Creek activity center;
- ◆ Approximately 58% of the 0.7 mile circle and 63% of the 1.5 mile circle will remain as unmodified suitable habitat after harvest of the sale, exceeding the ITG;
- ◆ The amount and quality of habitat on state land immediately surrounding the activity center is of good quality;

North San Antone:

- ◆ The sale is located 1.4 miles from the North San Antone activity center;
- ◆ Only 3 acres of the sale are along the outer edge of the circle;

- ◆ Approximately 43% of the 1.5 mile circle will remain as unmodified suitable habitat after harvest of the sale, exceeding the ITG;
- ◆ The amount and quality of habitat on state land immediately surrounding the activity center is of good quality;
- ◆ It may be unlikely that the North San Antone pair would use the habitat in the Rhody Ridge sale. The proximity of territories of the Upper McVey Creek and Pat Creek owls may preclude the North San Antone pair using the sale area.

Pat Creek:

- ◆ The sale is located just over 0.7 miles from the Pat Creek activity center;
- ◆ Approximately 44% of the 1.5 mile circle will remain as unmodified suitable habitat after harvest of the sale, exceeding the ITG;
- ◆ The amount and quality of habitat on state land immediately surrounding the activity center is of good quality;
- ◆ Approximately 126 acres of suitable habitat not included in this analysis associated with the Beeches and Barber sales in approved sale plans will likely not be harvested due to the proximity of owl activity centers in the vicinity of these sales.
- ◆ Past surveys have shown this pair to also successfully use an activity center approximately 1 mile to the West of the current AC.

Literature Cited

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

Holloway, R. "State Forests Program Spotted Owl Strategies." ODF Internal Memorandum to Area Directors, District Foresters, Assistant District Foresters. September, 2002.

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: Tom Mickel
Rick Rogers
Marcia Humes
Rob Nall

Table 1. Acres of suitable habitat on State and Federal ownership within the 0.7 and 1.5 mile circles of Upper McVey Creek, North San Antone and Pat Creek northern spotted owl activity centers. Suitable habitat determined through 2004 air-photo analysis and a 2005 field assessment.

	Total Sale Acres	Upper McVey Creek		North San Antone	Pat Creek
		0.7	1.5	1.5	1.5
State and Federal Suitable habitat		567	3091	1958	2144
Suitable habitat within sale area to be removed	78	0	20	3	20
Suitable habitat removed due to new road construction within circles		0	0	0	0
State acres in notification (Beeches, Barber and Almaise)		0	226	4	126
Unmodified suitable habitat remaining		567	2845	1951	1998
% suitable post harvest		58%	63%	43%	44%