

MEMORANDUM

TO: Art McCoy

FROM: Randy Smith

SUBJECT: Preliminary Biological Assessment for the **Almaise** Timber Sale

DATE: December 31, 2003

Purpose

Western Lane District is proposing the Almaise timber sale in their 2005 Annual Operations Plan. This sale area contains potentially suitable habitat for northern spotted owls and marbled murrelets. The Almaise sale is within 1.5 miles of three northern spotted owl activity centers; Upper McVey Creek, McVey Creek, and Chicken Creek. This memo presents the relevant biological information needed to assess the potential effects of the Almaise timber sale on northern spotted owls and marbled murrelets.

Marbled Murrelets

The sale area is approximately 22 miles from the ocean. The nearest known occupied marbled murrelet site, Almaise, is on BLM land, adjacent to sale Area 2. Surveys for marbled murrelets were conducted to protocol in 2003 with two presence detections observed. Surveys will be continued in 2004, consistent with the survey protocol.

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of northern spotted owls, according to ODF policy (Holloway 2002), is to apply the U.S. Fish and Wildlife Service rescinded Incidental Take Guidelines (ITG) as outlined in "Procedures leading to Endangered Species Act compliance for the northern spotted owl" (U.S. Fish and Wildlife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 Almaise timber sale was surveyed to protocol for northern spotted owls in 2003, and will be surveyed again in 2004, 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 Almaise timber sale. The McVey Creek site is located on BLM land approximately 0.3 miles from the sale area. The Chicken Creek site is located on ODF land approximately 0.5 miles from the sale area.

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.

McVey Creek

A pair nested and fledged one young in 1996. The pair did not nest in 1997. In 1998, the pair nested and fledged two young. The pair did not nest in 1999. In 2000, the Upper McVey Creek male was paired with the historic female and they fledged two young. The pair nested in 2001 but failed to fledge any young. In 2002, the pair nested and fledged two young. The pair did not nest in 2003.

Chicken Creek

A pair was found at this site in 1997 but one may have been a sub-adult. No responses were detected in 1998. In 1999, the Greenleaf male was found once at this site. A non-territorial female was detected in 2000 and status was changed to historic. A pair was located at a new nest tree in 2001 and fledged two young. The male was from Liebre Creek and the female was from Nelson Creek. In 2002, barred owls were found in the core and no spotted owls were detected. There was no response in 2003 and the site has had 2 years of vacancy.

Habitat Information

The Almaise sale consists of 141 acres of 60 to 75 year old dense second growth Douglas-fir and hardwood stands that regenerated after major fires in 1910 and 1929. Average conifer DBH ranges from 12-16 inches throughout the sale area. Considerable numbers of snags and down wood are present within the sale area. The sale area is considered to be suitable habitat for northern spotted owls.

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 an assessment of aerial photographs (taken in 2000) and/or ground verification in 2003.

There are two sales on state lands within the Upper McVey, McVey and Chicken Creek home range circles that are pending commencement of harvest activities. The Beeches timber sale is an approved sale in the 2004 operations plan that will clearcut 75 acres of suitable habitat within 1.5 miles of the Upper McVey Creek spotted owl site. The Chicken Ridge #1 timber sale is an approved sale in the 2004 operations plan that will

partial cut 87 acres of suitable habitat within 1.5 miles of the Chicken Creek spotted owl site. Of these 87 sale acres, 26 are within the 0.7 mile Chicken Creek circle. Although currently suitable, these acres were not counted in the 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, McVey and Chicken Creek spotted owl activity centers, as recommended by the ITG (Table 1, Figure 1).

The Almaise timber sale will thin 119 acres and clearcut 5 acres for a total of 124 acres within the 1.5 mile circle for the Upper McVey Creek spotted owl site. This sale does not affect the 0.7 mile circle. A habitat analysis of the Upper McVey Creek spotted owl site indicates that there are currently 2,487 acres of suitable habitat within 1.5 miles of the activity center. If the sale area and acres in the approved Beeches sale within the 1.5 mile Upper McVey Creek site are excluded from the suitable habitat, 2,288 acres (51%) 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 Almaise timber sale will thin 46 acres and clearcut 16 acres for a total of 62 acres within the 0.7 mile circle for the McVey Creek spotted owl site. A habitat analysis of the McVey Creek spotted owl site indicates that there are currently 705 acres of suitable habitat within 0.7 miles of the activity center. If the sale area is excluded from the suitable habitat, 643 acres (66%) of suitable habitat are available within 0.7 miles of the activity center. There are 2,432 acres of suitable habitat within 1.5 miles of the activity center. The Almaise timber sale will thin 125 acres and clearcut 16 acres for a total of 141 acres within the 1.5 mile circle. If the sale area is excluded from the suitable habitat, 2,291 acres (51%) 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 Almaise timber sale will thin 20 acres and clearcut 2 acres for a total of 22 acres within the 0.7 mile circle for the Chicken Creek spotted owl site. A habitat analysis of the Chicken Creek spotted owl site indicates that there are currently 453 acres of suitable habitat within 0.7 miles of the activity center. If the sale area and acres in the approved Chicken Creek #1 sale within the 0.7 mile Chicken Creek circle are excluded from the suitable habitat, 405 acres (41%) of suitable habitat are available within 0.7 miles of the activity center. There are 2,238 acres of suitable habitat within 1.5 miles of the activity center. The Almaise timber sale will thin 125 acres and clearcut 16 acres for a total of 141 acres within the 1.5 mile circle. If the sale area and acres in the approved Chicken Creek #1 sale within the 1.5 mile Chicken Creek circle are excluded from the suitable habitat, 2,010 acres (45%) of suitable habitat are available within 1.5 miles of the activity center. Based on this preliminary habitat analysis, this site will not maintain enough unmodified suitable habitat within the 0.7 mile circle but will maintain enough suitable habitat within the 1.5 mile circle after harvest to be consistent with the ITG.

Sale Prescription

The Almaise timber sale is composed of 125 acres of thinning to a SDI of 20% and 16 acres of clearcut harvest for a total of 141 acres in the sale plan. Areas 1 and 2 will be thinned leaving the largest Douglas-fir and all trees over 40 inches DBH. Area 3 will be clearcut and 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. All openings greater than 2 acres will be planted with shade tolerant conifer species. There will be no new road construction associated with this sale.

Assessment

The Upper McVey Creek spotted owl site is approximately 0.7 miles from the proposed Almaise timber sale. Approximately 124 acres of the sale are within 1.5 miles of the activity center. This sale does not affect the 0.7 mile circle. 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, 59% is managed by ODF and 21% is managed by other landowners. The preliminary 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 McVey Creek spotted owl site is 0.3 miles from the proposed Almaise timber sale. Approximately 62 acres of the sale are within 0.7 miles of the activity center and 141 acres of the sale are within 1.5 miles of the activity center. The McVey Creek owl activity center is on BLM land and is not located in a LSR. Federally managed land makes up 33% of the area within 1.5 miles of the spotted owl activity center, 47% is managed by ODF and 20% is managed by other landowners. The 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 Chicken Creek spotted owl site is 0.5 miles from the proposed Almaise timber sale. Approximately 22 acres of the sale are within 0.7 miles of the activity center and 141 acres of the sale are within 1.5 miles of the activity center. The Chicken Creek owl activity center is on ODF land. Federally managed land makes up 21% of the area within 1.5 miles of the spotted owl activity center, 34% is managed by ODF and 45% is managed by other landowners. The habitat analysis of this site indicates that the ITG will not be met within 0.7 mile circle but will be met within 1.5 miles of the activity center after harvest of the sale area.

Risk Assessment

The Almaise timber sale includes 141 acres of thinning and clearcut in dense second growth Douglas-fir and mixed conifer/hardwood stands consisting of Douglas-fir, hemlock, cedar, bigleaf maple and red alder. This activity will take place within 1.5 miles of the Upper McVey Creek and within 0.7 miles of the McVey Creek and Chicken Creek activity centers

I believe the Almaise sale as currently planned will have a low risk of negatively affecting the occupancy and productivity of the Upper McVey and McVey spotted owl pairs, and a moderate risk to the Chicken Creek spotted owl pair. 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;
- ◆ 124 acres of the sale area are within 1.5 miles of this activity center;
- ◆ Approximately 51% of the 1.5 mile circle will remain as unmodified suitable habitat after harvest of the sale, exceeding the ITG;
- ◆ Portions of the proposed sale prescription are a moderate to heavy thinning that will retain habitat elements important to northern spotted owls.

McVey:

- ◆ The sale is located 0.3 miles from the McVey Creek activity center;
- ◆ A prominent ridge separates the activity center from the proposed thin in Area 2;
- ◆ 62 acres of the sale are within 0.7 miles of the activity center and 141 acres are within 1.5 miles of the activity center;
- ◆ Looking at the proximity of the Almaise sale to the McVey Creek activity center, it is likely that this owl pair uses the area for foraging and/or roosting. Even after removal of the sale acres, approximately 66% of the 0.7 mile circle and 51% of 1.5 mile circle will remain as unmodified suitable habitat after harvest of the sale, exceeding the ITG;
- ◆ Portions of the proposed sale prescription are a moderate to heavy thinning that will retain habitat elements important to northern spotted owls.

Chicken Creek:

- ◆ The sale is located 0.5 miles from the Chicken Creek activity center;
- ◆ Approximately 22 acres of the sale are within 0.7 miles of the activity center and 141 acres are within 1.5 miles of the activity center;
- ◆ Less than 500 acres within the 0.7 mile circle will remain as unmodified suitable habitat after harvest of the sale, falling short of the ITG, while 45% of the 1.5 mile circle will remain as unmodified suitable habitat after harvest of the sale, exceeding the ITG;
- ◆ Portions of the proposed sale prescription are a moderate to heavy thinning that will retain habitat elements important to northern spotted owls.
- ◆ It may be unlikely that the Chicken Creek site would use the habitat in the Almaise sale. A wide strip of agricultural land stretches between the Chicken Creek site and the sale area. In addition, the territory of the McVey Creek site may likely preclude the Chicken Creek site using the sale habitat.

Recommendations:

Continue to survey for northern spotted owls, particularly in the Chicken Creek home range circle, to determine if a third year of vacancy in 2004 may warrant a status change to historic. Because 45% of the suitable habitat within the Chicken Creek home range circle is managed by private landowners whose planned activities are currently unknown, the availability of this habitat should be monitored during the planning of this sale.

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: Rosemary Mannix
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Table 1. Acres of suitable habitat on State and Federal ownership within the 0.7 and 1.5 mile circles of Upper McVey Creek, McVey Creek, and Chicken Creek northern spotted owl activity centers.

	Acres	Upper McVey Creek	McVey Creek		Chicken Creek	
		1.5	0.7	1.5	0.7	1.5
State and Federal Suitable habitat		2487	705	2432	453	2238
Sale area	141	124	62	141	22	141
Suitable habitat removed due to new road construction within circles		0	0	0	0	0
State acres in notification (Beeches & Chicken Creek #1)		75	0	0	26	87
Unmodified suitable habitat remaining		2288	643	2291	405	2010
% suitable post harvest		51	66	51	41	45