

MEMORANDUM

TO: Art McCoy
FROM: Randy Smith
SUBJECT: Preliminary Biological Assessment for the **Green Reach** Timber Sale
DATE: January 11, 2005

Purpose

Western Lane District is proposing the Green Reach timber sale in their 2006 Annual Operations Plan. This sale area contains potentially suitable habitat for northern spotted owls and marbled murrelets. Portions of the sale are within the 0.7 and 1.5 mile circles for the Upper Greenleaf northern spotted owl activity center. This memo presents the relevant biological information needed to assess the potential effects of the Green Reach timber sale on northern spotted owls and marbled murrelets.

Marbled Murrelets

The sale area is approximately 23 miles from the ocean. The nearest known occupied marbled murrelet site on ODF land is approximately 4.7 miles southwest of the sale area. Surveys for marbled murrelets were conducted to protocol in 2004 with one presence detection. Second year surveys will be completed in 2005.

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of northern spotted owls, according to ODF policy (Holloway 2002), is to apply the U.S. Fish and Wildlife Service rescinded Incidental Take Guidelines (ITG) as outlined in "Procedures leading to Endangered Species Act compliance for the northern spotted owl" (U.S. Fish and Wildlife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 Green Reach timber sale was surveyed to protocol for northern spotted owls in 2004 and will be surveyed again in 2005 consistent with the survey protocol (Anonymous 1991). As a result of these and previous surveys in the area, one northern spotted owl activity center has been located within 1.5 miles of the sale area. The Upper Greenleaf site is located on BLM land approximately 0.4 miles from the Green Reach timber sale area.

Site History

-Upper Greenleaf

The Upper Greenleaf site was established in 2001 as a non-territorial single male. There were no responses in 2002 and 2003. In 2004, the site was upgraded to pair status when the Rock Creek male (previously located 1.8 miles to the WNW) nested with an un-banded female and they fledged one juvenile. The activity center is located at the 2004 nest tree.

Habitat Information

The Green Reach sale consists of 144 acres of approximately 65-year-old second growth Douglas-fir, hemlock and hardwood stands that originated after fires in the early 1930's. Areas I and II are dominated by Douglas-fir stands that were thinned in the late 1970's and have an average DBH of 19 inches with 105 TPA. Areas III and IV contain considerable amounts of hemlock along with Douglas-fir and patches of hardwoods. These areas have an average DBH of 13 inches with Area III having approximately 170 TPA and Area IV having approximately 270 TPA. Large, residual Douglas-fir are scattered throughout Areas III and IV and will be retained post-harvest. The entire sale is considered 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 range of this site.

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 (Glenn and Anthony, 2000).

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 2003) and/or ground verification in 2004.

Landscape condition

The following discussion assesses the habitat situation within 1.5 miles of the Upper Greenleaf spotted owl activity center, as recommended by the ITG (Table 1, Figure 1).

The Green Reach timber sale will clear cut 41 acres within the 0.7 mile circle for the Upper Greenleaf spotted owl site. A habitat analysis of the Upper Greenleaf spotted owl site indicates that there are currently 770 acres of suitable habitat within 0.7 miles of the activity center. If the sale area and habitat lost due to road construction are excluded from the suitable habitat, 726 acres (74%) of suitable habitat are available within 0.7 miles of the activity center. There are 3241 acres of suitable habitat within 1.5 miles of the activity center. The Green Reach timber sale will clear cut 144 acres within the 1.5 mile circle. If the sale area habitat lost due to road construction are excluded from the suitable habitat, 3090 acres (69%) 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.

Sale Prescription

The Green Reach timber sale is a 144 acre modified clear cut sale in four areas. Areas I and II were thinned in the 1970's and 1980's and did not develop a conifer and hardwood understory. The prescription proposes to remove a majority of the existing conifers to open the canopy for development of an understory layer while leaving 20 TPA for overstory habitat development and

future snag and down wood recruitment. Areas III and IV contain relatively dense stands of smaller diameter Douglas-fir and hemlock and will receive a modified clear cut. Both areas contain a number of large diameter residual Douglas-fir trees that will be retained. At least 5 TPA will be left and at least 2 snags per acre will be left or created. For all areas, green trees, snags, and down wood will be left in the sale area consistent or exceeding the guidance in the Northwest Forest Management Plan. A mixture of Douglas-fir, hemlock and cedar will be planted after harvest. There will be approximately 7 acres of suitable habitat removed associated with this sale due to road construction within the Upper Greenleaf 1.5 mile circle.

Assessment

The Upper Greenleaf spotted owl site is approximately 0.4 miles from the proposed Green Reach timber sale. Approximately 41 acres of the sale are within 0.7 miles of the activity center and all 144 acres of the sale are within 1.5 miles of the activity center. The Upper Greenleaf owl activity center is on BLM land and is located in a LSR. Federally managed land makes up 64% of the area within 1.5 miles of the spotted owl activity center, 34% is managed by ODF and 2% is managed by other landowners. The preliminary habitat analysis of this site indicates that the ITG will be met within both the 0.7 and 1.5 miles of the activity center after harvest of the sale area.

Risk Assessment

The Green Reach timber sale includes 144 acres of modified clear cut second growth Douglas-fir and mixed conifer/hardwood stands consisting of Douglas-fir, western hemlock, bigleaf maple and red alder. This activity will take place within 0.7 and 1.5 miles of the Upper Greenleaf activity center.

I believe the Green Reach sale as currently planned will have a low risk of negatively affecting the occupancy and productivity of the Upper Greenleaf spotted owl site. This assessment is based on the following factors:

Upper Greenleaf:

- ◆ The sale is located 0.4 miles from the Upper Greenleaf activity center and is separated by a prominent ridge;
- ◆ 41 acres of the sale area are within 0.7 miles of the activity center and 144 acres are within 1.5 miles of the activity center;
- ◆ Approximately 74% of the 0.7 mile circle will remain as unmodified suitable habitat after harvest of the sale, exceeding the ITG;
- ◆ Approximately 69% of the 1.5 mile circle will remain as unmodified suitable habitat after harvest of the sale, exceeding the ITG.

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: Rick Rogers
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Table 1. Acres of suitable habitat on State and Federal lands within the 0.7 and 1.5 mile circles of the Upper Greenleaf northern spotted owl activity center.

	Acres	Upper Greenleaf	Upper Greenleaf
		0.7 miles	1.5 miles
Suitable habitat			
ODF		169	793
Federal		601	2448
TOTAL		770	3241
Sale Area	144	41	144
Suitable habitat removed for new road construction		3	4
Suitable acres minus sale acres and road construction		726	3090
% suitable post-harvest		74%	69%