

## DECISION DOCUMENTATION and DECISION RATIONALE

### **Canyon Creek Thinning**

Environmental Assessment (EA) Number OR080-2003-11

USDI - Bureau of Land Management  
Oregon State Office, Salem District, Marys Peak Resource Area

Township 7 South, Range 6 West, Section 28; Willamette Meridian  
Polk County, Oregon

### **Introduction**

The Bureau of Land Management (BLM) has conducted an environmental analysis (Environmental Assessment Number OR080-2003-11) to conduct density management harvest on 77 acres which include 54 acres of adaptive management area and 23 acres of riparian reserves land use allocation.

My decision is based on site-specific analysis in the Environmental Assessment (EA # OR080-03-11), the supporting project record, management recommendations contained in the Mill Creek, Rickreall Creek, Rowell Creek, Luckiamute River Watershed Analysis as well as the management direction contained in the *Salem District Resource Management Plan* (RMP) dated May 1995.

### **Decision**

I have decided to implement the Proposed Action of Canyon Creek Thinning with modifications described below, hereafter referred to as the “selected action”. The selected action is shown on the revised Canyon Creek Thinning EA map attached to this Decision Rationale.

#### **A. Summary of the Decision**

##### ***1. Stand Treatment or Thinning***

- Density Management will occur on approximately 77 acres, down from 80 acres analyzed in the EA. Fifty four acres of the harvest unit (Unit 28A) is in adaptive management area land use allocation and the remaining portion (23 acres) is in riparian reserves land use allocation. This a 10 acre reduction in adaptive management area acreage and a 7 acre increase in riparian reserves acreage.
- Acreage changes described above were due to identification of an additional stream within the harvest unit. Stream protection zone which is adjacent to this stream was removed from the area on which density management will occur. The addition of this stream also caused an increase in riparian reserve acreage.

- Skyline yarding will occur on approximately on 37 acres, down from 40 acres analyzed in the EA. Ground based yarding will occur on 40 acres which is equal to the amount analyzed in the EA.
- Approximately .52 miles of road renovation (EA section 2.1.1 Connected Actions Road Work) will occur prior the timber sale. This work will be done by Boise Cascade Corp. in conjunction with harvest of their adjacent timber.

## **2. Design Features and Mitigation Measures**

- Connected actions and design features and mitigation measures described in the EA (pp. 10-13) will be incorporated into the timber sale contract or into agreement with Boise Cascade for the road renovation work with the following modifications.

### ***To protect and enhance stand diversity and wildlife habitat components:***

All open grown “wolf trees”, existing snags and coarse woody debris would be reserved, except within road rights of way, yarding corridors or for safety reasons. All coarse woody debris would be protected to the greatest extent possible from disturbance during operations. In a few cases green trees intended to be part of the residual stands will have to be felled to facilitate access and operability(yarding corridors, hang-ups, tailholds). These trees will be treated as follows:

- Trees that are 20 inches DBH or greater will be retained on site.
- Trees that are less than 20 inches DBH will be available for harvest.
- At least 2 green trees/acre intended to be part of the residual stand would be felled/topped for CWD creation following harvest operations. Trees to be utilized for snag/down log creation would be stand average or larger DBH. Incidentally felled trees or topped trees (intermediate supports) that are left by harvest operations would be counted toward this target.

## **3. Compliance with Direction**

- The selected action is in compliance with the management goals, objectives, and direction (e.g. standards and guidelines) of the following documents, which direct and provide the legal framework for management of BLM lands within the Salem District: 1/ *Salem District Record of Decision and Resource Management Plan*, May 1995 (RMP), as amended; 2/ *Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl and Standards and Guidelines for Management of Habitat for Late-Successional and Old Growth Forest Related Species Within the Range of the Northern Spotted Owl*, April 1994 (NWFP); 3/ *Record of Decision to Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines in Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl*, March 2004 (SSSP). All of these documents may be reviewed at the Marys Peak Resource Area office.

## Reason for the Decision

Considering the content of the EA and supporting project record, the management direction contained in the RMP and Survey and Manage ROD, and public comment, I have decided to implement the selected action as described above. My rationale for this decision follows:

The selected action, addresses the identified purpose and need for action in that it would:

- Enhance late-successional forest characteristics in relatively uniform dense conifer stands by density management.
- Increase amount of terrestrial large down wood.
- Increase diameter growth to achieve future potential coarse woody debris and in-stream large wood sources.
- Test new management approaches to achieve ecological and economic health and social objectives.
- Provide a stable timber supply
- Provide maintenance on surface and drainage structures on roads needed for current and future access.
- Close and/ or decommission roads where access is not needed within the next 10 years and where they are contributing to resource damage.
- Reduce tree densities within stands in the project area in order to increase tree diameter growth;
- Increase late successional forest characteristics, including terrestrial down wood.
- Provide a timber sale that could be successfully offered to purchasers, to meet timber harvest target objectives for this year (contributing to a stable timber supply).
- Provide roads that are hydrologically stable.

The No Action alternative was not selected for the following reasons:

- The No Action alternative was not selected as it would not achieve the management opportunities that were identified within the *Mill Creek, Rickreall Creek, Rowell Creek, Luckiamute River Watershed Analysis* (Purpose and Need, EA p. 7).
- Road crossing improvements and the restoration of the stream channel at the 7-6-28 road would not take place, thereby impeding the attainment of ACS objectives. Specifically, the physical integrity of the aquatic system, including the stream banks and bottom configuration would not be restored. In addition, high sediment loads would persist from the existing fill material in the stream channel, degrading water quality (EA p.17).
- Future recruitment of quality large woody debris would not be enhanced (EA p.19).
- The canopy would remain closed allowing little light to penetrate to the ground and therefore, based on analysis from the stand modeling tool Organon, very little understory would develop within the next 30 years and beyond without density management (EA p.19).

## **Public Involvement/ Consultation/Coordination**

**Scoping:** In compliance with National Environmental Policy Act (NEPA), a scoping letter dated April 14, 2003 was sent to 55 potentially affected and/or interested individuals, groups, and agencies. A summary of the responses received was included in EA Appendix 1 – Scoping Letter Comments.

**Comment Period and Comments:** The EA was made available on the Internet and notices were mailed on December 15, 2003 to approximately 53 agencies, individuals and organizations. A printed copy of the EA was mailed to one organization on December 15, 2003. A legal notice was placed in local newspapers soliciting public input on the action from December 17, 2003 to January 16, 2004.

One letter was received from an organization during the EA comment period. The BLM response to substantive comments can be found in Appendix A of this Decision Rationale.

**Consultation/Coordination:** The Canyon Creek proposal was submitted for Formal Consultation with U.S. Fish and Wildlife Service (USFWS) on July 24, 2002. Consultation with the USFWS resulted in a May Affect, Not Likely to Adversely Affect Determination for northern spotted owl. The selected action will follow all applicable terms and conditions from the Biological Opinion dated September 30, 2002 [BO# 1-7-02-F-958].

The Canyon Creek project was sent for informal consultation with the U.S. Department of Commerce, National Marine Fisheries Service (NOAA Fish), NOAA reference number 2004/00033 from NOAA. A letter of concurrence with the determination of “may affect, not likely to adversely affect” to listed fish was issued on February 17, 2004 and received by the Salem District on February 20, 2004.

## Conclusion

I have determined it is not necessary to change to the Finding of No Significant Impact (FONSI - December 2003) for the Canyon Creek Thinning for these reasons:

- The Canyon Creek Thinning EA, along with additional information contained in this document, fully covers the project. There are no significant new circumstances or facts relevant to environmental concerns and bearing on the modification to the proposed action or its impacts, which were not addressed in the EA.
- The action is within the scope of the alternative identified in the original EA, and the environmental impacts are within those described in the original EA and are less than or the same as those anticipated for the proposed action in that assessment.

**Protests:** In accordance with Forest Management Regulations at 43 CFR 5003.2, the decision for this timber sale will not become effective or be open to formal protest until the Notice of Sale is published “in a newspaper of general circulation in the area where the lands affected by the decision are located”. Protests of this sale must be filed within 15 days of the first publication of the notice. For this project, the Notice of Sale will be published in the Dallas Itemizer prior to sale. No specific sale date is planned, however the likely sale date will occur between September and December, 2004.

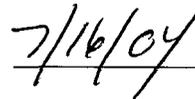
**Contact Person:** For additional information, contact Phil Sjoding (503) 315-5980 or Randy Gould (503) 375-5682, Marys Peak Resource Area, Salem BLM, 1717 Fabry SE, Salem, Oregon 97306.

Approved by:



Field Manager  
Marys Peak Resource Area

Date





# Appendix A: Response to Substantive Public Comments and Summary of Other Public Comments on the EA

## Introduction

One letter was received in response to the Canyon Creek Thinning EA. The comment is in *italics*. The BLM response follows each comment.

### **Oregon Natural Resources Council (ONRC), Jeremy Hall**

This letter was received by FAX on January 13, 2004.

1. *One-acre patch cuts are too large and the prescriptions do not retain enough trees in these gaps. Are there any trees over 24" in diameter? .....BLM would be better served doing a variable density thinning that included some openings.*

**Response:** Variable density thinning prescriptions have been implemented on several sites on the Salem District and other west-side BLM Districts (Western Oregon Density Management Study), and are being carefully monitored by researchers. In the case of Canyon Creek, trees are relatively tall and thin, and so may be more likely to break following a wider thinning. Because it is relatively young stand, a second entry is expected that will afford a potentially better opportunity to introduce variability.

The one-acre gaps are at the upper limit generally prescribed within variable density thinning. In the project planning meetings there was discussion of including smaller gaps (.25 and .5 acre). However, it was felt that the smaller openings could be introduced in a later entry. The larger openings are intended to allow survival and growth of shade-intolerant Douglas-fir (Brandeis, Newton and Cole, 2001) as well shade tolerant species that will be planted following harvest. The one-acre patch size is intended to provide sufficient light to understory Douglas-fir, given the average 82' height of surrounding trees (Oliver and Larson, 1996).

Another intent of the patch cuts was to target those areas where higher density has resulted in weaker trees with small crowns, as these are less favorable for future growth and structure. There are few trees over 24" diameter in the stand, and only one occurs within a planned patch cut. This tree will be reserved from harvest in accordance with design feature 2.1.2.3.

The design of the silvicultural prescription is consistent with the goals of the Northern *Oregon Coast Range Adaptive Management Area* and the recommendations in the Late Successional Reserve Assessment prepared for the AMA in 1998.

2. *However, typical commercial thinning does not encourage the patchy distribution of overstory trees and the variety of understory microclimates so typical of late-seral forests.*

**Response:** Two factors contributed to the decision to prescribe a residual basal-area thinning in Canyon Creek: 1) trees with high height-diameter ratios (tall, thin boles) supported a conservative approach to thinning due to tree instability and 2) diameter varies considerably in the stand, and so applying a basal-area thinning will create a degree of spacing variability.

### 3. Upland/Riparian prescriptions

*Is removing trees down to 152 tpa enough to release the trees in the upland portion of the unit? .....Given the amount of private land adjacent to the stand is it possible that BLM is planning a light thinning.*

**Response:** Yes, height to diameter ratios of the trees indicate a potential susceptibility of windthrow, and harvest on adjacent private lands could increase that risk. However, the stand presently contains an average of 284 tpa, so thinning to 152 tpa will provide significant release. Modeling predicts a residual stand relative density at 41, considered a light to moderate thinning.

*Similarly, leaving as many as 160 tpa in the riparian reserves doesn't seem to be much of a release, although the BLM is planning on using variable density thinning prescriptions.*

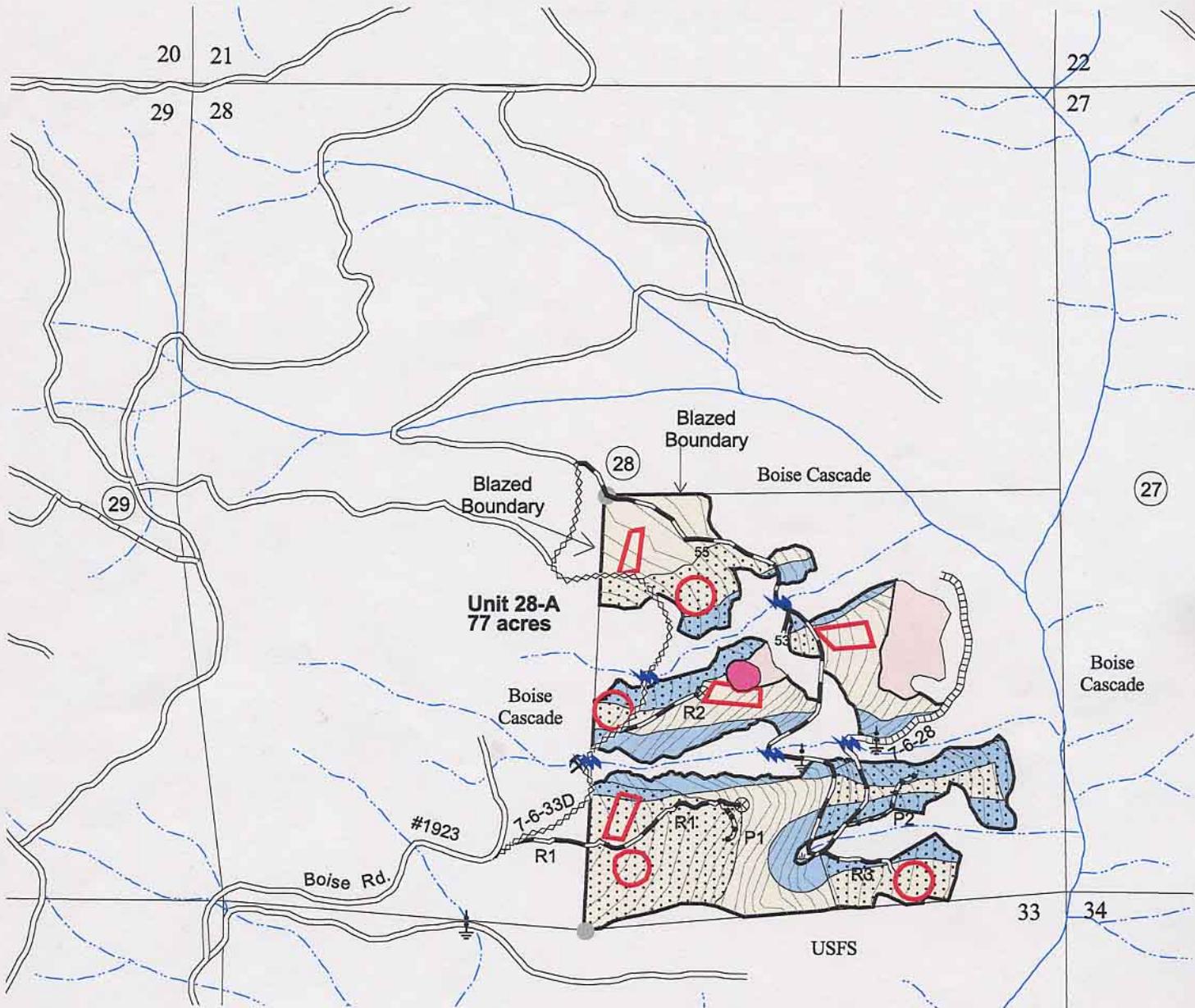
**Response:** The thinning prescription in the riparian reserve is to 120 ft<sup>2</sup> basal area, with a range of 80-160 ft<sup>2</sup> basal area, and this equates to about 101 tpa, with a range of 60-160 tpa. The 160 tpa cited in your comments is actually the upper limit. Trees there have been marked for thinning by BLM employees and will result in variable density.

### 4. BLM did not adequately address the issue of snag retention in the EA.

**Response:** Snag retention is addressed in 2.1.2.3 (EA p.13), “All open grown “wolf trees” existing snags and coarse woody debris would be reserved except.....”. With the inclusion of this design feature all reasonable measures will be taken to protect snags and CWD.

CANYON CREEK THINNING EA MAP

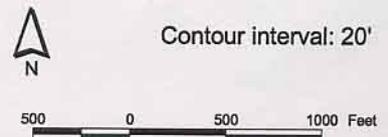
T. 7 S., R. 6 W., Section 28, W. M. - SALEM DISTRICT - OREGON



LEGEND

- |  |                              |  |   |  |                                       |
|--|------------------------------|--|---|--|---------------------------------------|
|  | Wet Area                     |  | Partial cut area - ground based yarding |  | Density Management - Riparian Reserve |
|  | Borrow pit                   |  | Partial cut area - skyline yarding      |  | Drop - logging feasibility            |
|  | Washed out                   |  | EA unit 28-A boundary                   |  | Fungus Protection Area                |
|  | Stream crossing (no culvert) |  | Fishbearing Streams                     |  | Patch cut                             |
|  | Existing Road                |  | Non-Fishbearing Streams                 |  | Corner found                          |
|  | Road to be decommissioned    |  | Density Management - AMA                |  |                                       |
|  | Road to be constructed       |  |   |  |                                       |
|  | Road to be reconstructed     |  |   |  |                                       |
|  | Road to be renovated         |  |   |  |                                       |

	Riparian Acres	Upland Acres	Total Acres
Unit 28-A	23	54	77



Note: Unit acres do not include existing or new roads.