

DECISION DOCUMENTATION and DECISION RATIONALE

Middle Fall Creek Thinning

Environmental Assessment (EA) Number OR080-04-03

USDI - Bureau of Land Management
Oregon State Office, Salem District, Marys Peak Resource AreaTownship 13 South, Range 7 West, Sections 26 and 35; Willamette Meridian
Benton County, Oregon**Introduction**

The Bureau of Land Management (BLM) has conducted an environmental analysis (Environmental Assessment Number OR080-04-03) to conduct commercial thinning harvest on 229 acres which include 106 acres of general forest management area and 123 acres of riparian reserves land use allocation.

My decision is based on site-specific analysis in the Environmental Assessment (EA # OR080-04-03), the supporting project record, management recommendations contained in the *South Fork Alsea 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 Alternative 2 of Middle Fall Creek Project described below, hereafter referred to as the “selected action”. The selected action is shown on the Alternative 2 Middle Fall Creek Thinning EA map attached to this Decision Rationale.

A. Summary of the Decision**1. Stand Treatment of Thinning**

- Density Management will occur on approximately 213 acres. One hundred-two acres of the harvest units are in Matrix land use allocation and the remaining portion (111 acres) is in Riparian Reserve land use allocation.
- Skyline yarding will occur on approximately on 188 acres and ground based yarding will occur on 25 acres (EA section 2.2.3).
- Approximately .41 miles of road construction (EA section 2.2.3) and approximately 1.14 miles of road renovation (EA section 2.2.2.1 Connected Actions Road Work) will occur prior to the timber sale.

2. Design Features and Mitigation Measures

- Connected actions and design features and mitigation measures described in the EA (pp. 5-11) will be incorporated into the timber sale contract.

To protect and enhance stand diversity and wildlife habitat components:

Matrix and Riparian Reserves:

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, tail-holds). (EA @ 2.2.3). These trees will be treated as follows:

Riparian Reserves:

- 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 removal.
- At least 2 green trees/acre within the Riparian Reserves 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.

Matrix

As stated in the RMP on page 21, “In areas of partial harvest, apply the same basic management actions/direction” (with relation to creation of CWD) “, but they can be modified to reflect the timing of stand development cycles where partial harvest is practiced.” In the matrix, the IDT determined that the creation of CWD would best be accomplished in the next entry, when average diameters would be larger than 20 inches and hence provide more effective habitat for organisms that utilize CWD to sustain some portion of their life cycle.

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:

- Contribute toward District timber management goals and local economic diversity.
- Manage timber stands on Matrix lands for a sustainable supply of timber and other forest commodities for future harvest and other management options.
- Manage the roads in the area to meet transportation needs and Aquatic Conservation Strategy (ACS) objectives.
- Increase the structural diversity of forest stands in portions of the Riparian Reserve to meet ACS habitat objectives.
- Manage recreation opportunities within the adjacent Alsea Falls Recreation Area by retaining existing hiking/biking trails, managing scenic and natural resources to enhance visitor recreation experiences and satisfy public land users.
- Reduced tree densities within stands in the project area in order to increase tree diameter growth.
- Increased late successional forest characteristics within Riparian Reserves, including terrestrial down wood and snags and the development of multilayered stands.
- 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). Additional needs to accomplish this would include:
 - Logging systems appropriate to the topography and to the silviculture prescription.
 - Access to the stands appropriate to logging the stand efficiently.
 - Roads which are hydrologically stable.

Alternative 1 was not selected for the following reasons:

The following design features would provide the recreation user a less diverse environment in an area that has been recently thinned and harvested than Alternative 2 “selected action”. These features are important due to the minimal amount of designated recreation opportunities the BLM is currently able to provide in the Marys Peak RA.

- Recreation users would not be shielded from trail side forest disturbance as well as Alternative 2. Visual impact to hikers and bikers who use the trails would be more because of the exclusion in the buffering effect of the deferred recreation management area (see Map 2).
- Similarly, road 14-7-36 would not have a visual buffer and landings would not be restricted between milepost 1.56 and 1.69.
- Approximately 1,160 feet of existing trail (trail #3) would be obliterated by the construction of the P-4 spur. The exclusion of the recreation buffer on the remaining portion of trail 3 would not protect the trail users’ viewshed down slope by limiting the distance the thinning operation is in site.

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 *South Fork Alsea River Watershed Analysis* (Purpose and Need, EA p. 4).
- Over time, trees would thin themselves, but remaining trees would be of smaller diameter and have smaller crowns. Smaller diameter trees would not function on the ground and in streams as long or as well as larger diameter trees. Road drainage improvements would not occur and ditch lines that currently run directly into streams would continue to funnel road sediment into area streams. Existing road conditions would continue to deteriorate possibly leading to future fill failures (EA pp. 19, 22).
- The stand would have less vertical structure and poor height to diameter ratio (overcrowded trees tend to develop a condition of small diameter relative to height which makes them prone to wind throw) than the managed stand due to the past crowded stand conditions. The residual trees with reduced crowns size would not be as vigorous as the managed stand (EA p. 25).

Public Involvement/Consultation/Coordination

Scoping: In compliance with National Environmental Policy Act (NEPA), a scoping letter dated September 9, 2003 was sent to 24 potentially affected and/or interested individuals, groups, and agencies. No responses were received during the scoping period.

Comment Period and Comments: The EA was made available on the Internet and notices were mailed on August 20, 2004 to approximately 27 agencies, individuals and organizations. A printed copy of the EA was mailed to 5 organizations on August 17, 2004. A legal notice was placed in local newspaper soliciting public input on the action from August 20, 2004 to September 20, 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 Middle Fall 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 Middle Fall Creek project was sent for informal consultation with the U.S. Department of Commerce, National Marine Fisheries Service (NOAA Fish), NOAA reference number 2004/00844 from NOAA. A letter of concurrence with the determination of “not likely to adversely affect” to listed fish was issued on August 19, 2004 and received by the Salem District on August 25, 2004.

Conclusion


I have determined it is not necessary to change the Finding of No Significant Impact (FONSI - August 2004) for the Middle Fall Creek Thinning for these reasons:

- The Middle Fall 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 alternatives 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 Alternative 2 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 Corvallis Gazette prior to sale. This is planned for March 4, 2005. The current planned sale date is March 30, 2005. .

Contact Person: For additional information, contact 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 on the EA

Introduction

One letter was received commenting on the Middle Fall Creek Thinning Environmental Assessment. Although the letter communicated a number of issues and opinions on forest management in general, the response to comments below only discusses those specifically directed to the Environmental Analysis which was made available for public review from August 20 to September 20, 2004. Comments are in *italics*. The BLM response follows each comment.

Oregon Natural Resources Council (ONRC)

This letter was received by FAX on September 20, 2004, however was not signed.

1. *(page 3) The BLM has identified the lack of structure in the riparian reserves as a significant problem and projects 2 and 3 are well-designed to accomplish specific wildlife objectives.*
 - a) *Will these projects be funded by receipts from the implementation of project 1?*
 - b) *Five years after thinning will there be an adequate number of large diameter trees to retain as large green trees while creating snags large enough in diameter for cavity and nesting species?*

Response:

- a) Reference page 1 of the EA which describes the timing of implementation. It also states that "...Project 1 (Thinning) would be implemented within the scope of a timber sale and Projects 2 (CWD Creation) and Project 3 (Conifer Release) would be implemented if funding is provided." Revenues generated from the thinning would be deposited in the general treasury of the United States. Funds for implementation of projects 2 and 3 would be implemented using appropriated funds in future years.
- b) Definitely. As stated on page 26 of the EA "The growth rate of the leave trees would accelerate compared to untreated trees. The leave trees would maintain larger crowns than would ones in an un-thinned stand. Diameter growth would increase on leave trees when suppressed trees are removed and light is available in the lower crown." In the Silvicultural Prescription, which is incorporated by reference on page 24 of the EA it states that approximately 75 to 109 trees per acre would remain following harvest (Silvicultural Prescription, page 5). Even if the 1 to 2 trees per acre identified in the proposal for Project 2 are felled that there still would be approximately 73 to 107 trees per acre standing with an average diameter of 14 to 16 inches DBH. In the long term (45 years), the average stand diameter would increase to 24 to 26 inches DBH because of the thinning.

2. *(page 3) Some of these stands must be thinned, and may well be necessary to access stands that otherwise would not be feasible to yard and are large enough that non-commercial treatments would leave too much fuel or bark beetle food on the ground. However every road spur should go through a careful cost benefit analysis to determine if it is worth the cost to construct the new spur road.*

Response:

In accordance with (40 CFR 1508.9), EA's are prepared in order to "briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact." As documented in the FONSI dated, August 17, 2004, a finding was made by the Field Manager that "Based upon review of the EA and supporting documents, I have determined that the three projects are not major federal actions and would not significantly affect the quality of the human environment, individually or cumulatively with other actions in the general area. No environmental effects meet the definition of significance in context or intensity as defined in 40 CFR 1508.27. Therefore, an environmental impact statement is not needed."

In addition as stated in 40 CFR Part 1500.1 (b), "...Most important, NEPA documents must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail." And (c), "...NEPA's purpose is not to generate paperwork-even excellent paperwork-but foster excellent action. The NEPA process is intended to help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore and enhance the environment."

Also, since the alternatives were analyzed as a whole, and given the fact that the thinning will most likely be able to be offered and sold to a willing buyer, makes the entire project, including the road work, a positive net benefit to the government.

Irrespective of the above, we did perform some calculations with regards to your specific questions on the P-1, P-2 and P-4 Spurs.

The P-1 (approximately 1570 feet) and P-2 (approximately 300 feet) spurs access approximately 60 acres of forest land not otherwise reachable from existing roads (see map 3, p.13). This includes approximately 34 acres of matrix and 26 acres of riparian reserve land use allocations. The estimated road cost is approximately \$18,700.00 (\$1,000.00 per 100 feet). The estimated volume per acre to be removed will be approximately 17 MBF (thousand board feet) per acre for a total of approximately 1,020 MBF. Using recent bid prices we can expect to receive approximately \$220.00 per MBF for the trees to be removed for a total of \$205,700.00 to be deposited into the general treasury of the United States. This means a net benefit/cost of approximately 11/1 for thinning of the 60 acres accessed by the P-1 and P-2 spurs .

The P4 spur (approximately 1160 feet) accesses approximately 8 acres of forest land that includes approximately 4 acres of matrix and 4 acres of riparian reserve (see EA map 2, p.12). Utilizing the above figures, the estimated road cost is approximately \$11,600.00. The estimated volume per acre to be removed will be approximately 136 MBF. We can expect to receive approximately \$29,200.00 to be deposited into the general treasury of the United States. This means a net benefit/cost of nearly 3/1 for thinning of the 8 acres

accessed by the P4 spur. Please reference the decision rationale for the field manager's rationale for his decision regarding the P-4 spur (see p.3 of the Decision rationale).

We agree with and understand your concerns in the prudent use of taxpayer resources in the management of public lands, however feel that this project has been designed to be the most economical as possible and still meet standards required in the Salem District RMP.

3. (page 3) *The EA states the "3300 feet of road would be constructed predominantly on or near ridge top locations (EA p.5)", Yet if this is the case then:*

a) *why is it necessary to install "drain dips....where cross drainage is necessary"?*

Constructing roads "predominantly" on or near ridgetops limits the amount of water that runs down a road, but drain dips are installed on ridgetop roads having variances in grade, which depends on topography. Drain dips will dissipate water that does run down a road, if any, over a larger area, which in turn prevents the water from increasing in velocity and causing erosion and sedimentation.

b) *How many of these drain dips are necessary? and*

This depends on the grade of the road. Drain dips and water bar spacing vary with the grade, the steeper the grade, the closer the structure.

c) *How much flow will these roads intercept? and*

The drain dips intercept only surface flow on the road. Generally a ridge-top road will not intercept subsurface flow.

d) *How will these cross drains be designed so they will move water without interfering with natural hydrology?*

Cross drains will be designed to drain runoff before it concentrates on the road surface. They will be spaced based on published recommendations, which incorporate the road grade, soil/substrate, and traffic considerations. The steeper the grade, the closer the cross drains will be spaced. Unfortunately, some road construction is necessary to complete the resource management objectives of this project. All roads restrict soil infiltration and promote surface runoff to some degree. However, cross drains will serve to redirect this runoff back into vegetated areas, where the flow can then infiltrate into the soil.

4. (page 4) *While we do not necessarily feel it is important to defer harvest in a portion of the largest thinning area for a recreational management area called for in alternative 2, we do support dropping the four acre unit and the 1160 feet of road construction.*

Response:

Thank you for your input on this specific point. Please reference the decision rationale for the field manager's rationale for his decision.

5. *(page 4) The BLM should use variable density thinning prescriptions in all young stand thinning projects regardless of land allocation...Uniform spacing sets up the need for future thinning that the agency may not have sufficient funding, capacity, and public support to accomplish....(page 5) The matrix is not a tree farm.....as standard (thin from below, even spacing) commercial thinning techniques may release trees but do not provide diverse early or mid-seral forests, or set the stands on a significantly different set of successional pathways than they are currently on...(page 8)...There must be more variability in the prescriptions to have more variability in relative density and tree spacing following logging.*

As stated in the Purpose and Need on page 4 of the EA the treatment in the Matrix Land Use Allocation is to “Contribute toward District timber management goals and local economic diversity” and to “Manage timber stands on Matrix lands for a sustainable supply of timber and other forest commodities for future harvest and other management options” in addition to the other stated objectives.

It is common knowledge that to manage stands on a sustained yield basis and to maximize the amount of wood production on any given acre, that trees are thinned from below in a manner that maximizes the growth on the remaining stems on as many stems as possible. In Appendix D-3 of the RMP, it states that “Commercial thinnings would generally be designed to maintain good volume productivity of the stand. To accomplish this ... Depending on stand age, tree size, and the specific objectives of the thinning, stand density after thinning would range from approximately 70 to 110 trees per acre”. The Silvicultural Prescription, which is incorporated by reference on page 24 of the EA, states on page 5 that “The thinning treatment recommendations were reached by evaluating the stand examination data collected on the sale area and by the use of the Stand Projection Systems forest growth models. A range of treatment levels were considered. The above recommendations were evaluated to be the best treatments for these units... If un-thinned, the stand would remain overstocked resulting in a smaller average diameter trees at regeneration harvest time, which would be less valuable both for timber and wildlife needs...” The table on page 5 of the prescription discloses that the thinnings would retain in approximately 75 to 109 trees per acre after thinning.

With the exception of the variable spacing recommended for the riparian reserves (Reference pages 8 and 9 of the EA), the upland treatments would be in complete compliance with Matrix Objectives. We have many examples of other treatments where we prescribe variable density thinning to enhance wildlife and/or riparian habitat and would gladly show them to you if you wish. The comments in your letter indicate to us that perhaps you disagree with the land use allocation for this area. This has already been decided and then disclosed in the RMP (See p.21 of the RMP).

6. *(page 7)The NEPA analysis must disclose the current condition of the CHU (northern spotted owl critical habitat unit No. OR-48. The BLM must retain all options for species recovery and avoid taking actions that will limit options for recovery...there is no indication how this project promotes recovery...(page 8)(BLM must) ...disclose how much of the CHU is functioning as NRF habitat...(and) disclose monitoring data on owls in the CHU as a whole.*

The U.S. Fish and Wildlife Service is the regulatory agency responsible for understanding the current condition of OR-48, and they assess all Forest Service and BLM actions to determine if any action will result in an adverse modification of the CHU. Through Section 7 of the ESA, BLM completed a consultation with the Service involving all forest management actions on Forest Service and BLM lands in the northern Oregon Coast Range. The resulting Biological Opinion, issued by the Service on September 30, 2002 (reference number 1-7-2002-F-958) states that the collective forest management actions (including our proposed action) will not result in adverse modification of critical habitat.

The EA states, "The proposed action is considered a "may affect" to spotted owl critical habitat, because it would modify a very small percentage of the available dispersal habitat within critical habitat unit (OR-48). The short-term reduction in canopy closure may slightly diminish the quality of dispersal habitat for owls, but since the entire project area would average more than 40% canopy closure, the treated stands are anticipated to continue to function as dispersal habitat for spotted owls in the short-term and would likely achieve suitable habitat quality for spotted owls in the long-term at a faster rate than if left untreated."

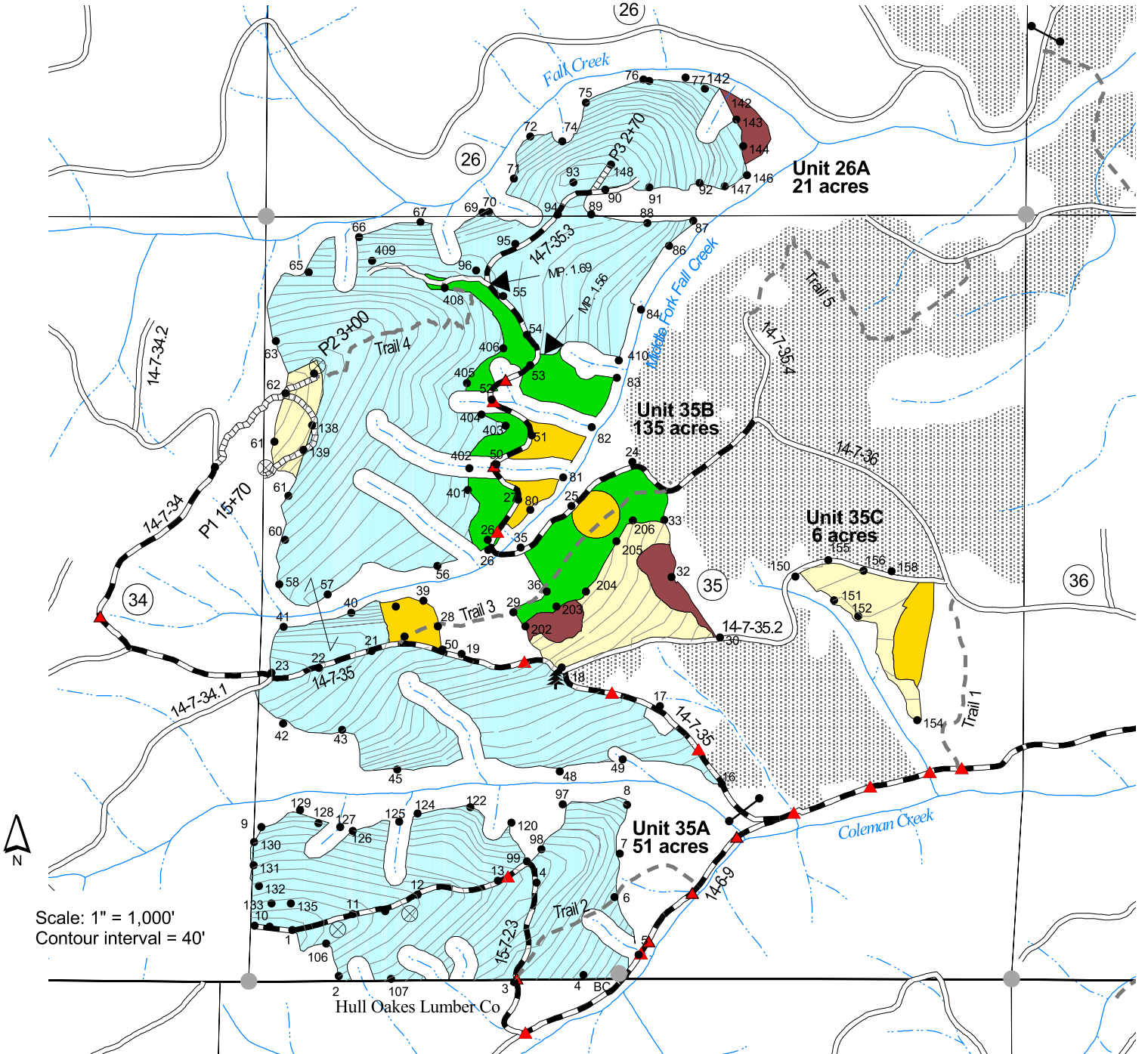
We don't believe that thinning young stands that are not yet suitable (NRF) habitat, and which have no known resident spotted owls in them will limit options for spotted owl recovery. Rather, we believe the proposed thinning prescription will indeed promote variability within the treated unit and between adjacent non-treated stands, and that this project will improve habitat structure and complexity which helps recover suitable habitat conditions within the critical habitat unit, and thereby, promotes recovery of the owl.

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Alternative 2

MIDDLE FORK FALL CREEK EA MAP

T. 14 S., R. 7 W., Sections 26 and 35, W. M. - SALEM DISTRICT - OREGON



Scale: 1" = 1,000'
Contour interval = 40'

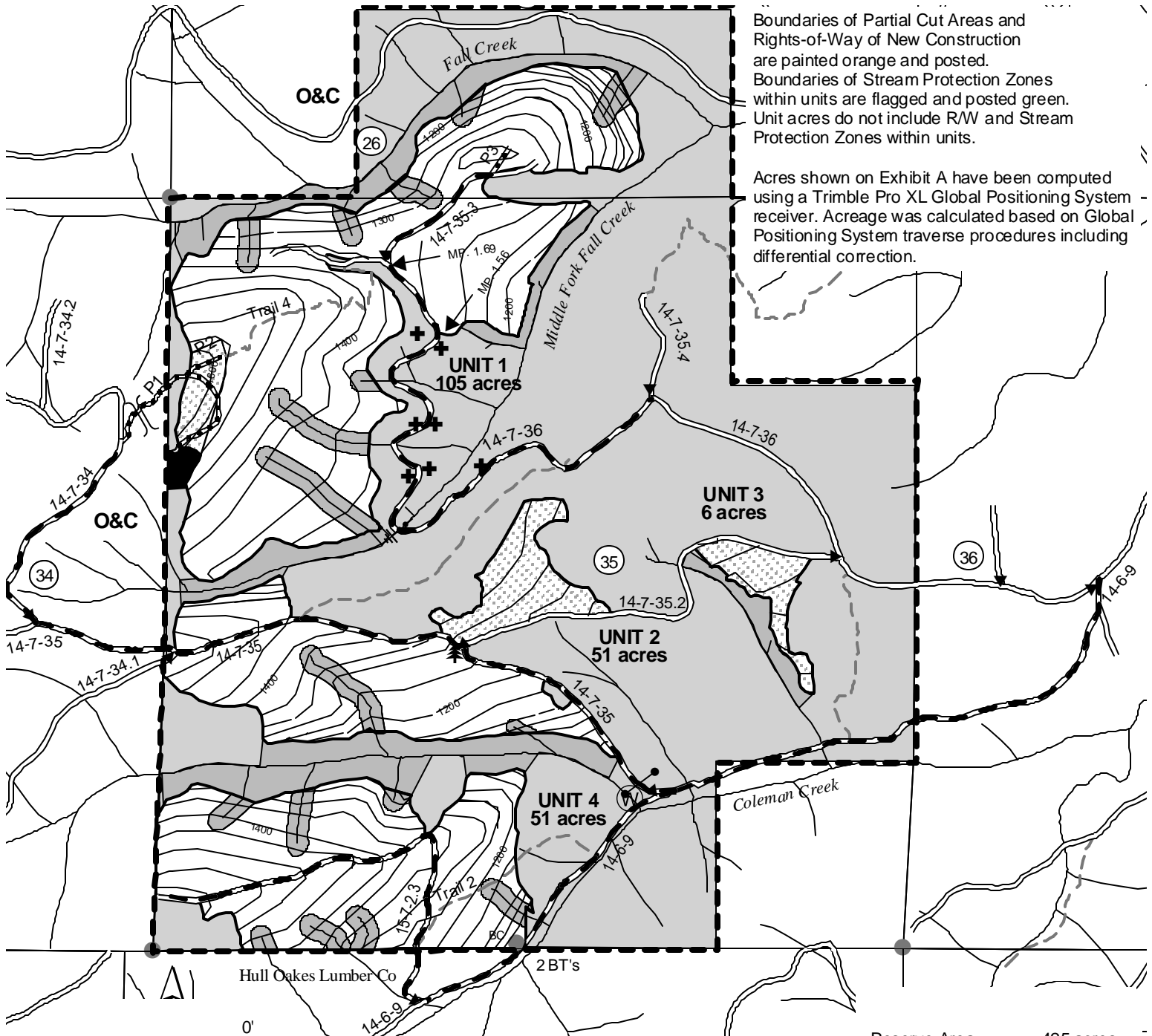
LEGEND

- | | | |
|---------------------------------------|---|---|
| ●● Gate | — Existing Road | ○ EA Unit Boundaries |
| 🌲 Superior Tree | ▤ New Construction | 🟡 Density Management - Ground based yarding |
| ⊗ Landing | — Road to be Renovated | 🟢 Density Management - Skyline yarding |
| ● Stations | — New Construction on Existing Bike Trail | 🟣 Density Management - Special yarding |
| ● Corner Found | --- Existing bike trail | 🟠 Deferred - Botanical Protection Area |
| --- Washout (culvert to be installed) | — Contour | 🟤 Deferred - Logging Feasibility |
| ▲ Culvert to be installed | --- Streams (non fish bearing) | 🟡 Deferred - Adequate Stocking |
| | — Streams (fishbearing) | 🟢 Deferred - Recreation Management Area |
| | ▤ Previous Commercial Thinning | |

United States Department of the Interior
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TIMBER SALE CONTRACT MAP - CONTRACT NO. OR080-TS05-302

T. 14 S., R. 7 W., Sections 26 and 35, W. M. - SALEM DISTRICT - OREGON



Boundaries of Partial Cut Areas and Rights-of-Way of New Construction are painted orange and posted. Boundaries of Stream Protection Zones within units are flagged and posted green. Unit acres do not include R/W and Stream Protection Zones within units.

Acres shown on Exhibit A have been computed using a Trimble Pro XL Global Positioning System receiver. Acreage was calculated based on Global Positioning System traverse procedures including differential correction.



- Existing Gate
- 🌲 Superior Tree
- Corner Found
- Streams
- () Barrier to be constructed following harvest operation
- ⊕ Approximate location in which trees are marked for cutting in the reserve area with red paint (Special Mark)

LEGEND

- Washout
- (W) Water Source
- == Existing Road
- Road to be Constructed
- Road to be Renovated
- Existing Bike Trail
- Boundary - Contract Area
- Boundary - Cutting Area

- Partial Cut Area - Ground Based Yarding
- Partial Cut Area - Skyline Yarding
- Skyline Yarding Allowed in Reserve
- Stream Protection Zone
- Reserve Area

Reserve Area	425 acres
Total Contract Area	640 acres