FINAL DECISION DOCUMENTATION and DECISION RATIONALE

Roaring River

Environmental Assessment Number OR080-2003-06

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

Township 11 South, Range 1 East, Section 1, Willamette Meridian
Linn County, Oregon

I. Introduction

The Bureau of Land Management (BLM) has conducted an environmental analysis (Environmental Assessment Number OR080-03-06) for two projects. Project 1 is a proposal to commercially thin approximately 140 acres of 50 year old stands in the Matrix land use allocation. Project 2 is a proposal to girdle and/or fall approximately eight trees per acre within portions (37 acres) of the Riparian Reserve allocation to create stand diversity within those areas. All of these stands are located within the Crabtree Creek Watershed. A Finding of No Significant Impact (FONSI) was signed on March 18, 2003 and the EA and FONSI were made available for public review on March 19, 2003.

This decision authorizes the implementation of only those activities directly related to and included within the timber sale (Project 1). A separate decision will be issued concerning the Riparian Management proposal (Project 2).

II. Decision

I have decided to implement the timber management action (Project 1) described in Alternative 2 (EA pp. 4-8, A11-A14) with modifications described below, hereafter referred to as the "selected action". The selected action is shown in Exhibit A on page 3 of this Decision Rationale. My decision is based on site-specific analysis in the Environmental Assessment (EA # OR080-2003-06), the supporting project record, management recommendations contained in the *Crabtree Watershed Analysis*; as well as the management direction contained in the *Salem District Resource Management Plan (*RMP*)* dated May 1995.

A. Modifications

1. *Acres* – Based on final measurements, acres decreased from 140 acres estimated in the EA to 115 acres in the contract.

2. *Timber volume* - Final timber volume estimates for the sale have been determined through a field timber cruise. Volume increased from 1400 Thousand Board Feet (MBF) estimated in the EA to 2022 MBF in the contract. Retained trees densities are less than described in the EA in some areas due to mistletoe infestations. The marking guide prescribed cutting mistletoe hemlock wherever possible [Silvicultural Prescription (Silv. RX) p. 6].

   Over the sale area, the prescribed basal area of 160 square feet per acre would be maintained, and the retained trees per acre and canopy closure meet the requirements for spotted owl dispersal habitat.

B. Changes to the Environmental Consequences

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 for the following reasons:

- There are 25 fewer acres in the selected action than in the proposed action.
- Although more trees have been marked for removal in some areas, the stands remain spotted owl dispersal habitat. Effects are expected to remain similar to those described in the EA.
- Heavier marking in areas infested with dwarf mistletoe would result in variable spacing, increasing stand diversity.

The above modifications do not change the scope of the project analyzed in EA number OR-080-03-06, nor do these modifications affect the adequacy of the analysis contained in the EA.

C. Summary of the Decision

1. Harvest (commercial thinning) approximately 115 acres of 50 year old stands from the GFMA Land Use Allocation for an expected yield of 2022 MBF using a ground based yarding system. Stands would be thinned from below, leaving the largest, most dominant trees standing.

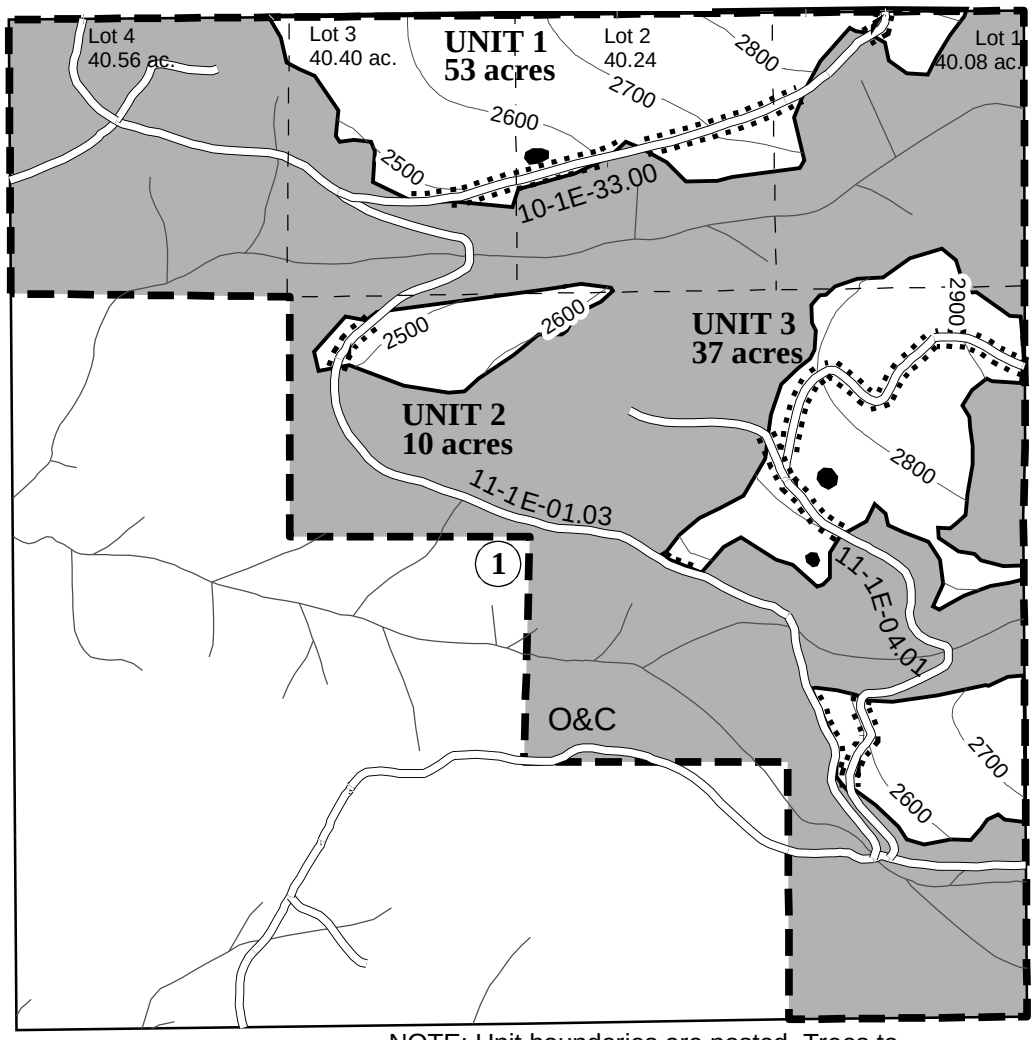
2. Yarding
   - All ground based yarding would take place on slopes less than 35 percent.
   - Tractor yarding would be limited to existing skid roads, where possible. New skid trails would be placed within the space between reserve trees.
   - When possible, harvester equipment would be restricted to one pass and to travel on top of logging slash.

United States Department of the Interior
BUREAU OF LAND MANAGEMENT
Salem District - Oregon

Roaring River
Tract No. 03-503
EXHIBIT A

TIMBER SALE CONTRACT MAP - CONTRACT NO. OR-080-TS03-503

T. 11 S., R. 1 E., Section 1, W.M., Linn County



N

NOTE: Unit boundaries are posted. Trees to be cut are painted blue.

Scale: 1" = 1000'
Contour interval: 100 ft.

Partial Cut Area	115.00 acres
Reserve Area	286.28 acres
Total Contract Area	401.28 acres

LEGEND

- Partial Cut Area
- Reserve Area
- Existing Road
- Green Tree Retention Area
- Fuel Reduction Area
- Stream
- Boundary - Unit Area
- Boundary - Contract Area

July 17, 2003

3. Road Access
   - No road construction would take place.
   - Road renovation would consist of regular road maintenance on 4 miles of paved road and 5 miles of aggregate (e.g. gravel) road. Road maintenance and renovation includes roadside brushing, blading the road surface, spot rocking and ditch and culvert maintenance (including replacing several small culverts that no longer function) to maintain roads to the standards described in the transportation management objectives and Best Management Practices in the RMP.

4. Fuels Treatment
   There are two fuels treatments proposed for the selected action. All landing piles and miscellaneous piles would be covered and burned. Activity created fuels adjacent to BLM road 11-3E-1.3, 11-1E-33 and 11-4E-4.1, would be removed within twenty-five feet of the road edge to provide a fuel reduction corridor. This would reduce the threat of wildfire from roadside ignition sources.

   Machine piling, covering and burning of landing piles and any miscellaneous debris pile would remove the largest concentrations of fuels along the road system in the sale area. Removal of landing piles would also remove potential fire control problems in case of a low intensity wildfire.

5. Blocking skid roads: After operations, main skid roads would be blocked in order to minimize additional soil disturbance and damage to other forest resources from off road vehicle (ORV) use. There are no gates to limit ORV access from Neal Creek road system to the project area.

6. Design Features and Mitigation Measures: All design features and mitigation measures described in the EA (pp. A11-A14) are incorporated into the timber sale contract.

7. Compliance with Direction: The selected action is consistent with applicable land use plans, policies, and programs. Programmatic documents covering this proposal are *the Record of Decision for Amendments to the Survey and Manage, Protection Buffer, and Other Mitigation Measures Standards and Guidelines (ROD, January 2001); Salem District Resource Management Plan (May 1995); Record of Decision (ROD) for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl (April 1994); and the Western Oregon Program-Management of Competing Vegetation Record of Decision (August 1992).* All of these documents may be reviewed at the Cascades Resource Area office.

III. Alternatives Considered

Alternatives Dropped From Detailed Analysis: The proposed action changed during the environmental analysis. The following units were dropped from this project due to resource conflicts.

- Section 1: Of the areas surveyed, approximately 220 acres were dropped from further consideration. Some of these acres were stands within the Riparian Reserve allocation but had adequate structural diversity so treatments were not needed. Other areas had slopes greater than 35 % and were not accessible by the current road network. These acres were dropped to avoid new road construction. Finally, another area was dropped because further field reconnaissance determined that the stands were not ready for thinning.
- Section 3: Of the areas surveyed, approximately 448 acres were dropped from further consideration. This is due to the presence of mollusks. In addition, the proposed thinning treatments would not be silviculturally beneficial to the stands at this time because the overstory trees have established dominance and are growing at the rate that is expected in this stage of the stand's development.

In addition, two action alternatives were evaluated and later dropped from detailed analysis.

1. **Riparian Reserve Thinning:** Thinning portions of Riparian Reserves was considered then dropped for the following reasons: **a/** Cable Yarding would require road construction, which for these stands was not economically efficient; **b/** Ground based yarding was considered and dropped because many of the slopes within the Riparian Reserves were more than 35%, and soil types precluded ground based yarding within Riparian Reserves; **c/** Yarding trees within the Riparian Reserves with a drumline to a skid road outside of the Riparian Reserve was considered and dropped due to soils concerns.
2. **No Ground Based Yarding:** As a result of the scoping letters, an alternative with no ground based yarding was evaluated and then dropped for the following reasons: **a/** Cable yarding on slopes that are too flat would result in not getting enough lift on the logs to get one end suspension, resulting in more dragging of logs. Dragging logs would result in more soil gouging and possible soil displacement. **b/** For this area, ground based yarding is the most economical yarding system. The probability that purchasers would bid on this sale with a cable yarding system is low.

Alternatives Considered in Detail:
The EA analyzed the effects of the proposed action and the no action alternatives. Complete descriptions of the "action" and "no action" alternatives are contained in the EA, on pages 4-8, A11-A14.

IV. Reasons for the Decision

Considering public comment, the content of the EA and supporting project record, the management recommendations contained in the *Crabtree Creek Watershed Analysis*, and the management direction contained in the RMP and *Survey and Manage* ROD, 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 to BLM timber management objectives by providing timber and other forest products, while protecting water quality and other resource values (RMP p. 1); and
- Develop stand characteristics to maintain future forest management options and to maintain terrestrial habitats to support a diversity of forest species on Matrix lands (RMP p. 1).

In addition, the selected action:

- Offers an economically viable sale,
- Improves the existing transportation system, and
- Received positive public comment.

The "no action" alternative was not selected because it does not meet the purpose and need described above

V. Public Involvement/ Consultation/Coordination

Scoping: In compliance with NEPA, the project first appeared in the April 2002 edition of the quarterly *Salem District Project Update*, and in editions since then, which were mailed to over 1,070 addresses. A scoping letter dated January 2, 2003 was sent to 27 potentially affected and/or interested individuals, groups, and agencies.

Comment Period and Comments: The EA was made available on the Internet and notices mailed to approximately 30 agencies, individuals and organizations on March 19, 2003. A legal notice was placed in local newspapers soliciting public input on the action from March 19 to April 18, 2003. Two letters were received (Project Record documents 58 and 59) during the public comment period. These letters included several positive comments about the project and the environmental analysis. Our response to substantive comments can be found in Appendix A of this Decision Rationale.

Consultation/Coordination: The Roaring River proposal was submitted for Formal Consultation with U.S. Fish and Wildlife Service (USFWS) on September 3, 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 February 27, 2003 [BO# 1-7-03-0008].

The Roaring River project was determined to have no effect to listed fish, therefore, consultation with U.S. Department of Commerce, National Marine Fisheries Service (NOAA Fish) is not required.

VI. Conclusion

I have determined that change to the Finding of No Significant Impact (March 2003) for the Roaring River Timber Sale is not necessary for these reasons: The Roaring River 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 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 *Albany Democrat Herald* on or around July 30, 2003. The planned sale date is August 27, 2003.

Contact Person: For additional information, contact Carolyn Sands (503) 315-5973 or Bob Hershey (503) 315-5931, Cascades Resource Area, Salem BLM, 1717 Fabry SE, Salem, Oregon 97306.

Approved by: Belle Smith for
Brad Keller, Acting Field Manager
Cascades Resource Area

July 29, 2003
Date

VII. Appendix A: Response to Substantive Comments

1. **Rather than leaving trees evenly spaced, create some skips and gaps by thinning some areas more heavily and some not at all within the project area**.

   Heavier thinning would take place in mistletoe patches (Decision Rationale p. 2, while no thinning would take place in reserve areas adjacent to harvest units (Exhibit 1), creating the "skips and gaps" in tree spacing.

2. a/ **How far is the fish hatchery from the project site?** b/ **Why isn't the hatchery listed as a beneficial use in Table 4? "Salmon rearing and Spawning is listed but in Crabtree Creek. The text states that the hatchery is located on the Roaring River.** c/ **Which fish species would be expected to found in the project site (based on habitat)?**.

   a/ *The Roaring River fish hatchery is approximately 3 miles downstream from the project site.*
   b/ *Table 4 refers to spawning and rearing more than 1 mile from the project area, which covers the Fish hatchery. It was confusing to state that spawning and hearing occurred in Crabtree creek and not list the Roaring River Fish hatchery.*
   c/ *"Sampling for fish presence/absence was conducted with an electroshocker on all streams (unnamed tributaries to Roaring River) in T 11S, R 1E, section 1 on May 21, 2001. No fish were found in any of the streams, although habitat quality appeared high for cutthroat trout. Absence of fish was consistent with the findings of other surveys conducted in the area in 1996 and 1997" (EA p. 20).*

3. **Fire and Fuels: a/ The Affected environment for this topic on p. 15 should have described the fire hazard and risk at the present time using Fuel Model 8. b/ The author should have explained the habitat significance of "decay class 4 and 5 logs greater than 20"**.

   a/ EA p. 30 and 31 state that "The present fuel loadings have a low to moderate hazard of wildfire depending on the weather and drought status for any given fire season"; "that the outputs from the two fuel types show that a wildfire under the modeled weather conditions could be handled with hand crews and equipment (dozers and engines)"; and that "even though the consequences (hazard) of a wildfire in a timber-harvested unit are more than from wildfire consequences in an untreated stand, the area involved is not significant." The point was that there was a slightly greater fire hazard after treatment than the existing condition. Fire risk is something far more in our control and the effects of fire risk are described on EA p. 31.

   b/ Although there some wildlife value to logs greater than 20" present on the site, there is very little structure left in decay class 4 and 5 logs. This makes them less usable to wildlife than logs that are less decomposed (decay class 1-3).

4. **Hydrology and Water Quality: On page A-10, the fact that actions on private alone are likely to push WAR values higher does not trivialize decisions on BLM land with respect to WAR**.

   The only intent of the text in this section was to support the no effect call to Threatened/ Endangered Fish (see EA p. A-8) as it related to this project.

5. **Soils: It is relevant to state that after this project is complete trees will once again be allowed to revegetate the skid roads, reducing soil compaction.**

   EA page 25 states: "It is generally thought that recovery would be complete within approximately eighty years, with the greatest amount of recovery occurring within the first decades of the recovery period. Based on these statistics, the area is expected to recover approximately 40-50 percent by the time the stands are ready for regeneration harvest (in approximately 40 years)". This recovery is based on trees being allowed to revegetate the skid roads, reducing soil compaction.

6. **Vegetation: The EA should explain how and why the occurrence of invasives will be short lived due to revegetation (p. 27)**.

   Any act, whether natural or man caused, that results in soil disturbance, has the potential to become suitable habitat for noxious weeds. Not all areas that are disturbed will become infested with noxious weeds and in fact man, if not most, will not. All of the noxious weeds identified in the proposed project area are common roadside species. These species are so common along roads in western Oregon that it would be unusual to not find them during a botanical survey. If categorized, these species would fall in the category of pioneer species. Pioneer species are typically short-lived annuals and biannual species that inhabit an area where disturbance has removed the long lived perennial species (e.g. road corridors). Due to the fact that these species are dependent on high light for their survival and due to the design of the planned activity, a thinning, it is unlikely that the noxious weed species identified in the proposed project area will find substantial suitable habitat created as a result of the thinning. As the shade tolerant understory tree, shrubs and other native species flourish due to the reduction of overstory trees, and as the remaining overstory trees canopy closes together, the noxious weeds that do find suitable habitat within the project area are not expected to survive due to insufficient light.

   The mitigation measures for noxious weeds within the proposed Roaring River Thinning T.S. are to allow natural succession to occur. Natural succession will, in time, relegate the noxious weeds that do find suitable habitat within the forest due to the planned thinning back to their current location within the road corridors.

7. **Mistletoe is a natural part of this forest ecosystem**. **Why should mistletoe "infected trees" trees be targeted for removal**?

   This is a 50 year old mixed stand composed of western red cedar, western hemlock and Douglas-fir. The hemlock is heavily infected with dwarf mistletoe. In GFMA land use allocations we are obligated to insure the site remains productive for continual production of timber. Even though mistletoe is a natural part of the ecosystem, in areas of heavy infestations it will significantly slow down the growth of individual trees. By targeting these trees for removal we can reduce the impacts on growth by allowing non infected trees to utilize the available growing space. This will result in increased productivity of the site for timber production.

8. **How close are the "adjacent non-thinned areas" that will provide refugia for species adversely affected by the thinning operation? Are they appropriate habitat? Can less mobile species get there? Bats may forage over open water, but how will the Riparian Reserves provide protection if they lack snags**?

   Approximately 440 acres within section 1 have a forest cover that ranges from 40 to 300 years old. Of that amount 115 acres of 50 year old forest will be thinned. Most of the un-thinned areas are directly adjacent to the areas proposed to be thinned. The un-thinned forested areas are contiguous and provide similar habitat to the areas to be thinned.

   Bat surveys were not conducted nor are were they required. It is assumed that they may be present if suitable habitat conditions are present. Suitable snags within the immediate area are not required for bats to be present. Bats may forage in one area at night and travel miles to roost during the day. We are required to evaluate the habitat present and to protect mines, bridges, building and caves if they are present, none are present.

9. **The Fisheries and Aquatic Habitat section was conclusory**.

   The project was designed to have to no effect on Threatened and Endangered fish species by avoiding road construction and retaining canopy closure in riparian reserves. These mitigation measures also reduce the risk to other fish species. No fish were found within the streams in the project area. Therefore the amount of detail in the EA was less than if there had been risk of effects to fish.