

DECISION NOTICE  
And  
FINDING OF NO SIGNIFICANT IMPACT

**RETHIN**

USDA FOREST SERVICE  
MT. HOOD NATIONAL FOREST  
CLACKAMAS RIVER RANGER DISTRICT  
CLACKAMAS COUNTY, OREGON

An Environmental Assessment (EA) has been prepared for Rethin: a restoration thinning for stands ranging in age from 47 to 73 years old. This area is located in T.4 S., R.5 E.; T.4 S., R.6 E.; T.5 S., R.7 E.; T.6 S., R.6 E.; T.6 S., R.7 E.; T.6 S., R.8 E.; T.7 S., R.6 E.; T.7 S., R.7 E.; Willamette Meridian. (All section number references are to sections of the EA unless specified otherwise.)

The following five purposes of this project are derived from the Mt. Hood Forest Plan as amended:

- Enhance riparian reserves on 487 acres (s. 2.2.1)
- Enhance late-successional reserves on 86 acres (s. 2.2.2)
- Enhance diversity (s. 2.2.3)
- Increase health and growth that results in larger wind-firm trees (s. 2.2.4)
- Provide forest products consistent with the Northwest Forest Plan goal of maintaining the stability of local and regional economies. (s. 2.2.5)

**DECISION and RATIONALE**

**I have decided to implement the Proposed Action - Alternative B.** (s. 2.3). It will thin and harvest wood fiber on approximately 2,175 acres of stands. These stands have been thinned once already using a traditional uniform thinning. The trees have grown and are in need of another thinning, but this time, stands would be thinned to variable density with skips and gaps to achieve the purposes listed above.

The proposed action will reopen approximately 2.2 miles of old existing temporary roads. These roads will be obliterated again after use.

Best Management Practices (BMPs) and Design Criteria in section 2.3.9 of the EA are included with this alternative. No significant impacts were found that would require further mitigation.

**The selected alternative meets the purpose and need** discussed in the EA (s. 2.2):

**Enhance Riparian Reserves** – The thinning of stands in riparian reserves will accelerate the development of mature and late-successional stand conditions. There will be no-harvest buffers on each side of streams (s. 2.2.1, s. 2.3.2, s. 2.3.3, s. 2.3.4, s. 2.3.9, s. 4.1.4 & s. 4.3).

**Enhance Late-Successional Reserves** – The thinning of stands in late-successional reserves will accelerate the development of mature and late-successional stand conditions (s. 2.2.2, s. 2.3.5, s. 4.1.3, & s. 4.4).

**Enhance Diversity** – Thinning will introduce diversity in all units through variable spaced thinning. Diversity and variability will be introduced in several ways including varying the spacing of leave trees within units and between units, and creating small skips and gaps (s. 2.2.3, s. 2.3, s. 2.3.1, s. 2.3.6, & s. 4.2).

**Health and Growth** – The stands are dense and experiencing a slowing of growth due to overcrowding. Thinning will increase health and vigor and enhance growth that results in larger wind firm trees (s. 2.2.4, & s. 4.1).

**Forest Products** – The project will provide forest products consistent with the Northwest Forest Plan goal of maintaining the stability of local and regional economies now and in the future. It will provide approximately 11 million board feet of timber. It will also result in vigorously growing stands that would be capable of providing future forest products (s. 2.2.5, s. 2.2.5, s. 3.3, s. 4.1 & s. 4.11).

**It is my decision to select the Proposed Action over the other alternatives considered for the following reasons:**

- It fully accomplishes the purpose and need.
- The concern raised about roads has been resolved to my satisfaction (s. 2.4.2). There is a concern about the total quantity of roads on the landscape and the impacts that those roads are causing to forest resources. The proposed action uses roads to achieve project objectives including the opening of existing but closed temporary roads. There is a concern about the direct, indirect and cumulative effects of roads.

I have decided that the roads used for this project are appropriate because they provide efficient access to the units, facilitate low impact logging systems, and result in minimal resource impact (s. 2.3.7, s. 4.3.3, s. 4.3.7.1, s. 4.3.13 & s. 4.5.3.9).

The broader concern about the total quantity of roads on the Forest and the impacts that the entire road system is causing to forest resources is being addressed in separate analyses and restoration EAs.

- The concerns raised about decadence have been resolved to my satisfaction (s. 2.4.3). Some feel there is an excessive emphasis on the health of trees and would like greater attention paid to the value of dead and down trees; healthy ecosystems should have an abundance of large

decaying live trees, large snags and coarse woody debris all of which are lacking in plantations.

Some suggest that because large snags and large coarse woody debris are not present in sufficient quantities in the stands proposed for thinning that we should:

- Do nothing and allow the inevitable natural mortality to create dead and down wood.
- or, instead of logging and removing trees, kill them or cut them and leave them in the stand.

I have considered these options and decided to select the proposed action. These options would result in small snags and small down logs. Decadence is discussed in s. 4.1.1.1, 4.1.2.2, 4.1.2.3, 4.1.3.1, 4.1.3.2, 4.1.5, 4.2.3, 4.5.2, and 4.6.10. The proposed action (s. 2.3) would leave some areas such as skips and riparian protection buffers unthinned to develop small snags and small down wood. It would also create some snags and down logs (s. 2.3.9.2&3). I am aware that thinning does remove the smaller trees in a stand: the ones that would otherwise die if no action were taken, however I have decided that the proposed action provides a better mix of benefits and outputs.

#### **Description of Other Alternatives and Reasons for Non Selection:**

- **Alternative A** is the no-action alternative (s. 3.1). It was not selected because it would not provide any of the benefits described in the purpose and need. If no action is taken in riparian reserves, stands would have reduced capability to produce the size and quantity of coarse woody debris sufficient to sustain desired physical complexity and stability of the riparian reserves and associated streams (s. 2.2.1, s. 4.1.4 & 4.3.2). If no action is taken in late-successional reserves, stands would be very slow in their acquisition of late-successional characteristics (s. 2.2.2, s. 4.1.3, s. 4.4.3, & s. 4.4.2.1). If no action is taken, stands would become overcrowded resulting in trees with reduced vigor, increased mortality and increased wind damage susceptibility (s. 2.2.4, & 4.1.2.2). Trees would stagnate and stay relatively small resulting in a period of low structural diversity (s. 2.2.3, & s. 4.2.3). If no action is taken, we would forgo the opportunity to provide any forest products consistent with the Northwest Forest Plan goal of maintaining the stability of local and regional economies (s. 2.2.5, & s. 4.11).
- **Other Alternatives Considered** (s. 3.2)

The EA discusses comments that were received suggesting the consideration of other alternatives or ways to modify this project. Details of the suggestions and responses are in the EA at s. 3.2 as well as Appendix A. I will briefly respond to some of them here.

- A comment was received suggesting that an alternative be considered that does not include a commercial timber sale. It would thin gradually over time by felling some trees and leaving them in the stand. Road obliteration and invasive plant removal would also be part of this alternative.

There is limited funding for this type of work. It would not achieve one of the purposes of this project which is to provide forest products consistent with the Northwest Forest Plan goal of

maintaining the stability of local and regional economies. This project was not designed as a traditional commercial timber sale; it is a restoration thinning.

- The Late-Successional Reserve Assessment contains a discussion of coarse woody debris. It recommends having 10 to 15 percent of the ground covered by down logs five years after harvest. The existing condition is well below these levels. An alternative was considered to girdle and fell trees to achieve these goals (s. 3.2.2).

The economic viability of thinning is already marginal. If the strategies of creating all of the down wood at once were adopted, the LSR thinning would likely become unviable and the units would be deleted, defeating the important long-term goals of thinning to create diversity and large live trees in LSRs. In the development of the proposed action, I considered the balance between providing down wood and accomplishing variable density thinning. It would provide some down wood now, but would thin stands to get larger trees and variable spacing. In the long term, the proposed action would result in having better conditions for LSRs including larger trees, some of which will eventually die and fall. The suggested options were considered but not developed in detail because they would result in very small down wood and smaller live trees compared to the proposed action.

The Regional Ecosystem Office has reviewed this project and found it to be consistent with LSR goals, standards and guidelines.

- A comment was received suggesting that the project be broken up into several EAs instead of one. I carefully considered the scope and size of this project early in the planning process. I decided that it was appropriate to include these thinning units in one EA. Preparing multiple EAs for these units would have been cost prohibitive with current budgets. Keeping them in one EA allows me to see a clearer picture of the cumulative effects (s. 3.2.3).
- A comment was received suggesting that we cease logging within one mile of the La Dee Flat OHV area. There is doubt that the OHV plan will work and that roads proposed for closure under the plan would be violated.

The two Rethin units in the proposed OHV area have been thinned before and it is not likely that a second thinning using the OHV design criteria in s. 2.9.3.6.8 would cause more unauthorized OHV use. I have decided that the proposed action is appropriate in an area being considered for OHV designation. The thinning of these units will likely occur before the implementation of the OHV plan.

The OHV environmental impact statement is still being developed. Given the early planning stage and the potential for changes based on public comments, it is premature to speculate in this document about the outcome of that plan. However, I have decided that it is appropriate to include the design criteria included in s. 2.9.3.6.8. As part of an adaptive management strategy, I will take further action if necessary. If monitoring shows user created OHV routes expanding into the units in spite of the measures described in s. 2.9.3.6.8, corrective actions would be taken such as bringing in additional debris from off-site.

- Comments were received asking for clarification on how recent thinning proposals and other projects were included in the cumulative effects analysis. Typically, the GIS files, raw data,

computer models and the particulars of the methodology are kept in the analysis file and the analysis is summarized in the EA. However, for this EA, I wanted to make a good faith effort to explain the methodology so that readers would see more clearly how the analysis takes into consideration the interaction of the proposed action with the many past, present and foreseeable future actions. Several sections of the EA are dedicated to explaining the methodology for each analysis: s. 4.3.7.1 for hydrology, s. 4.4.3.4 for owls, s. 4.5.2.12 for snags, s 4.5.3.13 for deer and elk, and s. 4.14.7 for recreation.

## **FINDING OF NO SIGNIFICANT IMPACT (40 CFR 1508.27)**

Based on the site-specific environmental analysis documented in the EA and the comments received from the public, I have determined that this is not a major Federal action that would significantly affect the quality of the human environment; therefore, an Environmental Impact Statement is not needed. This determination is based on the design of the selected alternative and the following factors:

- **THREATENED, ENDANGERED, AND SENSITIVE SPECIES** - Informal consultation with U.S. Fish & Wildlife Service concerning the **northern spotted owl** has been completed for this project. The 2009 Letter of Concurrence from the U.S. Fish & Wildlife Service concurs with the determination that the proposed projects *may affect, but are not likely to adversely affect* spotted owls. While there would be a short-term removal of dispersal habitat, in the long term, stands would develop mature forest characteristics sooner (s. 4.4). In May 2008, the U.S. Fish & Wildlife Service released a final recovery plan for the northern spotted owl that identifies criteria and actions needed to stop the owl's decline, reduce threats and return the species to a stable, well-distributed population. This project is consistent with the goals and criteria identified in the recovery plan: It does not occur in Critical Habitat also known as Managed Owl Conservation Areas and does not alter mature forests.

This project is covered by the **Fisheries** Programmatic Biological Assessment. A Project Certification indicates the project is consistent with the programmatic assessment and that it *may affect, but is not likely to adversely affect* threatened fish or listed critical habitat. It also indicates that Essential Fish Habitat established under the Magnuson-Stevens Fishery Conservation and Management Act Recently would not exceed the "May Affect" threshold. (s. 4.3.10 to 13).

There will be no significant adverse effects to sensitive species (s. 4.3.9, s. 4.3.13, 4.5.1 & 4.8). The project will not jeopardize the continued existence of any listed species nor will it cause a trend to federal listing or loss of viability for any proposed or sensitive species.

- **CONSISTENCY WITH MT. HOOD FOREST PLAN** – The selected alternative is consistent with direction found in the Mt. Hood National Forest Land and Resource Management Plan as amended (Forest Plan).
  - I find that the selected alternative is consistent with standards and guidelines specific to the relevant land allocation and it is consistent with the applicable Forest-wide standards and guidelines (s. 4.0). **Exceptions are noted below.**

- **Aquatic Conservation Strategy** - I find that the selected alternative is consistent with riparian reserve standards and guidelines. It will contribute to maintaining or restoring aquatic conditions and is consistent with the Aquatic Conservation Strategy objectives (s. 4.3.8.2 & Biological Evaluation).
  - I have considered the relevant information from the watershed analyses. This project has adopted the concepts for riparian reserve delineation described in the watershed analyses (s. 2.2.9). Widths will be 180 feet for non-fish-bearing streams and 360 feet for fish-bearing streams. Certain unstable landforms will also be included as riparian reserves. The Watershed Analyses were developed with the data at hand at the time with limited field verification. While the recommendations of the Watershed Analyses have been followed, field verification of stream location, fish presence and unstable landforms have been conducted in the vicinity of proposed actions, therefore the maps in the EA differ slightly from the Watershed Analysis maps (Maps are in Appendix E). This is not considered a “change” but a refinement based on better site-specific information. I have decided that the refinement of riparian reserves is appropriate and meets the objectives of the Aquatic Conservation Strategy.
  - I find that the mitigation measures and project design criteria (s. 2.3.2 & s. 2.3.9), such as stream protection buffers and operating restrictions on ground based machinery, will minimize impacts and maintain the function of key watershed indicators that make up elements of the Aquatic Conservation Strategy. These key indicators for water quality, habitat, flow, channel condition, and watershed condition, will be maintained or enhanced.
  - I find that the thinning, as designed, will enhance riparian reserves (s. 2.3.2). If no action is taken in these riparian reserves, stands would have reduced capability to produce the size and quantity of coarse woody debris sufficient to sustain physical complexity and stability of the riparian reserves and associated streams. Thinning has been designed to enhance diversity and to accelerate the development of mature and late-successional stand conditions (s 4.3).
- I find that the selected alternative is consistent with **late-successional reserve** (LSR) objectives. The Regional Ecosystem Office (REO) reviewed this project and found it to be consistent with LSR standards and guidelines (s. 2.2.5, s. 3.2.5, s. 4.4.4, & s. 4.4.5).
- I have considered the impacts to Forest Management Indicator Species s. 4.5.0.1. Management Indicator Species for this portion of the Mt. Hood National Forest include northern spotted owl, pileated woodpecker, pine marten, deer, elk, salmonid smolts and legal trout. The proposed action is not in Pileated Woodpecker/Pine Marten (B5) habitat management areas. I find that the selected alternative is consistent with the standards and guidelines pertaining to Management Indicator Species.
- I find that the selected alternative is consistent with the National Forest Management Act regulations for **vegetative management**. There will be no regulated timber harvest

on lands classified as unsuitable for timber production (36 CFR 219.14) and vegetation manipulation is in compliance with 36 CFR 219.27(b).

**Exceptions** - The Forest Plan describes the process for documenting an exception to “Should” standards and guidelines (p. Four-45). “Action is required; however, case by case exceptions are acceptable if identified during interdisciplinary project planning environmental analyses.”

I approve the following exceptions:

- The project is consistent with Forest Plan objectives for long-term **soil productivity**. However, additional soil impact will occur on areas where there is existing soil disturbance. Most units that were logged with ground-based equipment in the original clear cut harvest would remain above 15% detrimental soil condition. I am approving an exception for Forest Plan standards and guidelines FW-22, FW-28 and FW-30. I considered using helicopters to log these units but found the benefits to be insignificant and the additional cost to be unwarranted. Units that are above 15% will have obliteration of temporary roads and landings that are used by the contractor. Rehabilitation has been considered for old skid trails but the soil scientist and silviculturist do not recommend restoration of old skid trails at this time because of the risk of damaging tree roots and because productivity has not been impaired. The no-action alternative would have areas that remain above 15% with no opportunity for restoration.

The objective of maintaining long-term site productivity will still be met. Even though there was no standard for long-term soil productivity when the original clearcuts were logged, the stands continue to grow well and are projected to continue to grow well after the proposed thinning (s. 4.6.9.3, s. 4.6.13).

- The project is consistent with Forest Plan objectives for **earthflow** stability. However, additional soil impact will occur on areas where there is existing soil disturbance. The analysis shows that many units on earthflows already exceed 8% detrimental soil condition and they will remain above 8% after project implementation. I am approving exceptions for Forest Plan standards and guidelines B8-36, B8-40, FW-18 and FW-20 (s. 4.6.13). Ground-based yarding will be used on most earthflow stands where ground-based systems were used in the original logging. I considered using helicopters to log these units but found the benefits to be insignificant and the additional cost to be unwarranted. The no-action alternative would have areas that remain above 8% with no opportunity for restoration. The objective of earthflow stability will still be met because thinning will result in healthy and vigorous stands with strong well-developed roots (s. 4.3.7.1 & s. 4.6.3.4). Temporary roads and landings in earthflow units that are used by the contractor will be obliterated. Rehabilitation has been considered for skid trails but the soil scientist and silviculturist do not recommend restoration of skid trails at this time because of the risk of damaging tree roots.
- **WATER QUALITY AND FISHERIES** - The analysis shows that thinning and roads used for this project pose minimal risk. The proposed action meets Riparian Reserve standards and guidelines and state water quality standards and the Clean Water Act. All of these

objectives, standards and laws were established to ensure there would be no significant reduction to water quality or fish habitats. Thinning in Riparian Reserves is designed to benefit riparian resources by accelerating the development of mature and late-successional stand conditions (s. 4.1.4, & s. 4.3.8.3).

- **CUMULATIVE EFFECTS** - The analysis considered not only the direct and indirect effects of the projects but also their contribution to cumulative effects. Past, present and foreseeable future projects have been included in the analysis (s. 4.0.1 to 4.0.4). The analysis considered the proposed actions with BMPs and design criteria. The EA elaborates on cumulative impacts related to resources such as water quality, soils and wildlife. No significant cumulative or secondary effects were identified.
- **CULTURAL RESOURCES** - Field surveys have been conducted. The heritage resource report concludes that there will be no effect to any properties on or eligible to the National Register of Historic Places 2008-060605-006. Documentation has been forwarded to the State Historic Preservation Office (s. 4.13).
- **WILDERNESS LEGISLATION** – Currently Congress is considering a Wilderness bill. It may create a Wilderness directly adjacent to this project. At this time there does not appear to be a conflict between Wilderness proposal and the proposed thinning. The Wilderness bill language does not require a buffer between the Wilderness and management actions.
- **WILD AND SCENIC RIVERS** – One unit (18 acres) is in the Clackamas Wild and Scenic River corridor (s. 2.2.8). This corridor is also a State Scenic Waterway. The thinning is consistent with the standards and guidelines for this river and would protect the river's outstandingly remarkable values (s. 4.14.4).
- **OTHER** –The effects are not likely to be highly controversial and do not involve highly uncertain, unique, or unknown risks. This action will not set a precedent because other similar actions have occurred in the past. The project was not found to threaten a violation of any Federal, State, or local law. The project complies with Executive Order 12898 regarding environmental justice (s. 4.16). No disproportionately high adverse human or environmental effects on minorities and/or low-income populations were identified during the analysis and public information process. No significant irreversible or irretrievable commitments of resources were found (s. 4.17). The project will not affect public health or safety (s. 4.10). Adverse and beneficial impacts have been assessed and found to be not significant. No significant effects to consumers, civil rights, minority groups, women, prime farmland, rangeland, forestland, wetlands, or floodplains were identified.

**Comments:**

The legal notice for the 30-day comment period for this project was published in the Oregonian on October 2, 2008. I have considered the substantive comments that were received. The responses to the comments are contained in Appendix A of the EA.

**Appeal Rights:**

This decision is subject to appeal pursuant to Forest Service regulations at 36 CFR 215. Any individual or organization that submitted comments or expressed interest during the comment period may appeal. Any appeal of this decision must be in writing and fully consistent with the content requirements described in 36 CFR 215.14. The Appeal Deciding Officer is the Regional Forester. An appeal should be addressed to the Regional Forester at any of the following addresses. Postal: Regional Forester, Appeal Deciding Officer, USDA Forest Service, 333 SW 1st Avenue, Portland, OR 97204; For hand delivery, office hours are 8-4:30 M-F; fax: 503-808-2255. Email: [appeals-pacificnorthwest-regional-office@fs.fed.us](mailto:appeals-pacificnorthwest-regional-office@fs.fed.us). Electronic appeals must be submitted as part of the actual e-mail message, or as an attachment in Microsoft Word (.doc), rich text format (.rtf), or portable document format (.pdf) only. E-mails submitted to email addresses other than the one listed above, or in formats other than those listed, or containing viruses, will be rejected. It is the responsibility of the appellant to confirm receipt of appeals submitted by electronic mail.

The Appeal, including attachments, must be postmarked or received by the Appeal Deciding Officer within 45 days of the date legal notice of this decision was published in the Oregonian. For further information regarding these appeal procedures, contact the Forest Environmental Coordinator Mike Redmond at 503-668-1776.

**Project Implementation:**

Implementation of this decision may occur on, but not before, 5 business days from the close of the 45-day appeal filing period described above. If an appeal is filed, implementation may not occur for 15 business days following the date of appeal disposition (36 CFR 215.10).

The EA can be downloaded from the Forest web site at <http://www.fs.fed.us/r6/mthood> in the Projects & Plans section.

For further information contact Jim Rice, Estacada Ranger Station, 595 NW Industrial Way, Estacada, OR 97023. Phone: (503) 630-6861 Email: [jrrice@fs.fed.us](mailto:jrrice@fs.fed.us)

Recommended By:

Responsible Official:

*/S/ Andrei Rykoff*

March 9, 2009

*/S/ Gary L. Larsen*

**ANDREI RYKOFF**  
**District Ranger**

Date Published

**GARY L. LARSEN**  
**Forest Supervisor**