# DECISION NOTICE And FINDING OF NO SIGNIFICANT IMPACT

# **UPPER CLACK THINNING**

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

An Environmental Assessment (EA) has been prepared for the Upper Clack Thinning. The proposed action involves thinning plantations. This area is located in T.6S., R.6E.; T.6S., R.7E.; T.7S., R.7E.; T.7S., R.7E.; T.7S., R.7E.; 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 252 acres (s. 2.2.1)
- Enhance late-successional reserves on 641 acres (s. 2.2.2)
- Enhance diversity on 1,094 acres (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). Acres and miles are approximate. The proposed action includes:

Thin and harvest wood fiber on 1,094 acres of plantations to achieve the purposes listed above.

Decommission 1 mile of system roads.

Close with berms 6.63 miles of system roads that are open or have ineffective closures.

Some temporary roads will be used for this project and then obliterated:

Reopen 1.51 miles of old existing temporary roads.

Construct 0.55 mile of temporary roads on old existing skid trails.

Construct 0.31 mile of new temporary roads.

Reopen 1.75 miles of old system roads that were decommissioned. These will be treated like temporary roads and obliterated 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 plantations 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 plantations 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** – The thinning of plantations 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 plantations 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 thinning of plantations 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.
- This decision is responsive to public input and the recommendations of the Clackamas Stewardship Partners.
- The concern raised about roads has been resolved to my satisfaction (s. 2.4.1). 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 construction of new temporary roads. There is a concern about the direct, indirect and cumulative effects of these new temporary 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. 2.3.7.2, s. 4.3.3, s. 4.3.12, s. 4.3.7.1, & s. 4.5.3.9). In order to address this issue I am deciding to decommission 1 mile of system roads in the project area.

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.

# **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.

- An alternative was submitted by the public that would not construct any new temporary roads. Approximately 78 acres would be switched to helicopter and 1/3 mile of temporary road would not be built. This alternative was considered but not developed in detail because the economic viability of adding 78 acres of helicopter logging is cost prohibitive given the value of the timber and the high cost of jet fuel. Helicopters use far more fuel than other logging systems. I did not move forward with this alternative because the impacts to resources for the proposed action were found to be minimal and because there is a high probability these additional helicopter units would receive no bids and therefore the important work of achieving the purpose and need would not be met in those units (s. 3.2.1).
- 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 for plantations is well below these levels. An alternative was considered to girdle and fell trees to achieve these goals (s. 3.2.2).

I also considered public comments that suggested ways to get more coarse woody debris in LSRs such as making skips larger (15-40% of each unit) and allowing natural mortality to create the desired levels of down wood in 5 to 20 years.

The economic viability of plantation thinning is already marginal. If the strategies of creating all of the down wood at once by girdling or creating large skips 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. The development of the proposed action considered the balance between providing down wood and accomplishing variable density thinning. It would provide some down wood now, but would thin plantations 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.

• An alternative was submitted by the public that all snags be protected. With the proposed action, snags would be protected unless they pose a safety hazard. The snags in the plantations are small planted trees that died and these would not likely be considered hazardous and they have relatively low value to wildlife compared to larger snags elsewhere. There is also a logistical problem: even if we identified all of the existing small snags and created a no-harvest buffer around them, by the time the logging happens a few years from now, many of those snags will have fallen on their own, and some new trees may have died in the mean time. I do not consider the protection of all of the relatively small snags in plantations to be viable option. Enough snags will be retained after harvest to meet the needs of snag dependent species (4.5.2.11).

# 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 - Formal consultation with U.S. Fish & Wildlife Service concerning the **northern spotted owl** has been completed for this project. The 2006 Biological Opinion written by U.S. Fish & Wildlife Service concluded that this project is not likely to jeopardize the continued existence of the northern spotted owl and is not likely to adversely modify spotted owl critical habitat. While there would be a short-term removal and degradation 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 Managed Owl Conservation Areas (MOCAs) 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 the effects determination for threatened fish and listed critical habitat would be "May Affect, Not Likely to Adversely Affect." 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 alternate 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 analysis. This project has adopted the concepts for riparian reserve delineation described in the watershed analysis (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 Analysis was developed with the data at hand at the time with limited field verification. While the recommendations of the Watershed Analysis 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 reserve plantations, 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 plantations 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 constructed temporary roads do not cross any streams, and are on stable, dry terrain. The location on gentle terrain, seasonal restrictions, the obliteration after logging, and erosion control efforts combine to reduce risk. Sediment, if any, would not occur in quantities great enough to result in harm to downstream fish or change water quality. 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 6). 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 (2008-060605-002). 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. The lines on draft maps indicate that the intent for this area is to exclude plantations from the Wilderness proposal. At this time there does not appear to be a conflict between Wilderness proposal and the proposed

plantation thinning. The Wilderness bill language does not require a buffer between the Wilderness and management actions.

- WILD AND SCENIC RIVERS There are several units (127 acres) in the Clackamas Wild and Scenic River corridor (s. 2.2.8). This corridor is also a State Scenic Waterway. The thinning of plantations 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 April 15, 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. 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 <u>http://www.fs.fed.us/r6/mthood</u> 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

Recommended By:

Responsible Official:

S ANDRES RUKO77

August 21, 2008

ISI GARY L. LARSEN

ANDREI RYKOFF District Ranger Date Published

GARY L. LARSEN Forest Supervisor