# DECISION NOTICE And FINDING OF NO SIGNIFICANT IMPACT

# SOUTH FORK THINNING

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

An Environmental Assessment (EA) has been prepared for the South Fork Thinning. The proposed action involves thinning plantations. This area is located in T.5 S., R.4 E.; T.5 S., R.5 E.; Willamette Meridian.

The purpose of this project is to:

- Provide forest products consistent with the Northwest Forest Plan goal of maintaining the stability of local and regional economies now and in the future;
- Increase health and vigor and enhance growth that results in larger wind firm trees;
- Enhance diversity;
- Enhance riparian reserves and accelerate the development of mature and latesuccessional stand conditions. (EA s. 2.2)

# **DECISION and RATIONALE**

#### I have decided to implement Alternative D (s. 3.2 & 3.4) by implementing the following:

Thin and harvest wood fiber in plantations from approximately 497 acres (423 acres of matrix land and 74 acres of the dry upland portion of riparian reserves) (EA s. 3.4). Thinning will leave approximately 80 to 140 trees per acre.

Approximately 178 acres of second-growth plantations within the matrix will be fertilized aerially with 200 pounds of nitrogen per acre. Fertilization is proposed in units 1, 3, 4, 5 and 7. Fertilization is contingent upon funding availability. If funding is not immediately available, the thinning of plantations will procede. Fertilization would not occur in riparian reserves.

No new temporary roads will be constructed. Approximately 2000 feet of existing old temporary roads will be reopened. These roads will be obliterated and revegetated after completion of the project. Several roads that are closed with berms or other devices will be temporarily opened to allow access and will be closed again upon completion (approximately 2 miles). Several minor repairs (deep-patch repairs within the road prism) are needed to facilitate log haul on road 45.

Best Management Practices (BMPs) and Design Criteria in section 3.6 of the EA are included with this alternative. No significant impacts were found that would require further mitigation.

# Alternative D meets the purpose and need discussed in the EA (s. 2.2):

**Forest Products** – Alternative D 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 4.3 million board feet of timber. It will also result in vigorously growing stands that would be capable of providing future forest products. (s. 4.11)

**Health and Growth** – Alternative D will thin 423 acres of matrix lands that 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. 4.3)

**Enhance Diversity** – Alternative D will introduce diversity in all units through variable spaced thinning. Diversity and variability will be introduced in several ways: 1) Leave tree spacing will vary within units and between units, 2) Leave trees will include minor species and hardwoods, 3) Small gaps and skips would be created, 4) Leave trees will include some trees with the elements of wood decay, 5) Leave trees will include some live trees where their crowns touch certain key snags, 6) Some snags and all existing large down logs will be retained, 7) Leave tree spacing will be wider in riparian reserves, and 8) No-harvest buffers will be included along streams. (EA s. 3.2.1, s. 4.3, & s. 4.4.3)

**Enhance Riparian Reserves** – Alternative D will thin 74 acres of riparian reserves. Approximately 80 variably spaced trees per acre will be retained in riparian reserves to accelerate the development of mature and late-successional stand conditions. Riparian reserve widths are 180 feet for non-fish-bearing streams and 360 feet for fish-bearing streams. There will be no-harvest buffers of approximately 30 to 50 feet wide on each side of streams. (s. 3.3.3, s. 4.2.6 & s. 4.3.3)

# It is my decision to select Alternative D over the other alternatives considered for the following reasons:

- It fully accomplishes the purpose and need.
- It resolves Key Issue #1 raised by the public because it does not build new roads.

# Key Issue #1: Water Quality and Fisheries - Roads

Based on the comments received, water quality and fish habitats are concerns for many people. Issue statement: Temporary road construction may pose a risk to water quality and fish by contributing sediment to streams.

# Description of Other Alternatives and Reasons for Non Selection:

• Alternative A is the no-action alternative. It was not selected because it would not provide any of the benefits described in the purpose and need and it would not provide any forest products consistent with the Northwest Forest Plan goal of maintaining the stability of local and regional economies. If no action is taken, stands would become overcrowded resulting in trees with reduced vigor, increased mortality and increased wind damage susceptibility. Trees would stagnate and stay relatively small resulting in a period of low structural diversity. 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 (EA s. 4.3 & 4.2).

- Alternative B It would use similar logging systems to those used in the original clear cut harvest (EA s. 3.2.5). It would meet the purpose and need and would build no new roads. I have chosen Alternative D over Alternative B because the risk of erosion and soil impacts would be greater because of the use ground-based systems on steep slopes. The original harvest created skid trails and harvested on slopes that exceed what is currently considered prudent (up to 45% slope) (EA s. 4.2).
- Alternative C. It would build 2800 feet of new temporary roads (EA s. 3.3). It would meet the purpose and need. Alternative C would avoid the issues with ground-based logging on steep slopes discussed for Alternative B by designing logging systems that better meet today's standards for soil protection. While the risk of sedimentation from building temporary roads on gentle slopes with no stream crossings is very minimal with Alternative C (EA s. 4.2), I have chosen Alternative D over Alternative C to reduce that risk even farther.

# • Other Alternatives Considered (EA s. 3.5)

- An alternative was submitted by the public that would eliminate the timber sale aspect of this project and reformat it into a restoration only EA that would decommission roads. It was not developed because it would not meet the objectives outlined in the purpose and need.
- An alternative was submitted by the public that would thin dense stands by cutting trees and leaving them on the ground and chipping the limbs. It was not developed because it would not meet the objective of providing forest products consistent with the Northwest Forest Plan goal of maintaining the stability of local and regional economies now and in the future. Since there is no source of funding for this type of operation it would be similar to the no-action alternative.
- An alternative was considered that would fertilize all of the harvest units to enhance growth. It was not fully developed because of the logistics and operational safety of aerially fertilizing steep slopes while avoiding intermixed riparian areas.
- An alternative was considered that would delete helicopter logging because it would be expensive and may cause the timber sale to fail to receive bids. This alternative was not fully developed because the stands are in need of thinning. If the proposed timber sale does not receive bids, options would be considered to enhance the projects viability.

# 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 Biological Opinion written by U.S. Fish & Wildlife Service and dated March 30, 2005 concluded that this project is not likely to jeopardize the continued existence of the northern spotted owl or result in the destruction or adverse modification of designated critical habitat. Alternative D would have an effects determination of "May Affect, Not Likely to Adversely Affect" because of the effect on dispersal habitat.
  - While there would be a short-term degradation of dispersal habitat, in the long term, stands would develop mature forest characteristics sooner.
  - I have considered the new information that has been recently published about northern spotted owls. The Biological Opinion also considered this information. The new information has been fully considered and would not lead to a change in the effects determination and no additional analysis is needed for this project.

Consultation with NOAA Fisheries is not required for this project because there would be no effect to threatened or endangered fish or Essential Fish Habitat established under the Magnuson-Stevens Fishery Conservation and Management Act. Recently, NOAA Fisheries listed critical habitat for several fish species, none of which occurs in the project area. (EA s. 4.2.8).

There will be no significant adverse effects to sensitive species (EA s. 4.2.10, 4.5.9, 4.8, & 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 Alternative D is consistent with direction found in the Mt. Hood National Forest Land and Resource Management Plan as amended (Forest Plan).
  - It is consistent with standards and guidelines specific to the relevant land allocation and it is consistent with the applicable Forest-wide standards and guidelines. **Exceptions are noted below.** (EA s. 2.2.3 & 4.0).
  - Aquatic Conservation Strategy I have considered the relevant information from the watershed analysis (summarized in Appendix E). I have also considered the existing condition of riparian reserves, including the important physical and biological components of the fifth-field watersheds and the effects to riparian resources. I find

that Alternative D is consistent with the recommendations of the watershed analysis, is consistent with riparian reserve standards and guidelines, and will contribute to maintaining or restoring the fifth-field watershed over the long term (EA s. 4.2.11 & EA Appendix E).

- It is consistent with **late-successional reserve** (LSR) objectives. The project is not in an LSR or any 100-acre LSRs (EA s. 2.2.5 & 3.2.5).
- I have reviewed the **survey and manage** reports and have considered the recommendations of resource specialists and concur with their findings. This project is consistent with the 2001 Record of Decision for survey and manage standards and guidelines as amended or modified as of March 21, 2004.
- It 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), (EA s. 4.6.1 & EA Appendix E).

**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. The analysis shows that 6 units will remain above 15% after project implementation (Units 3, 5, 7, 8, 9 and 10). 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 additional cost to be unwarranted. Units that are above 15% will have obliteration of temporary roads and landings that are used by the contractor. The two units that have the highest existing detrimental soil condition (9 and 10) would have lower post harvest detrimental soil condition due to rehabilitation of temporary roads and landings. 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 with Alternative D. Surface erosion and runoff from old skid trails is not occurring. 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. Recent stand exams show that plantations that have detrimental soil conditions above 15% have very similar growth rates compared to nearby similar plantations that are below 15% (EA s. 4.6).

• The project is consistent with Forest Plan objectives for **snags and down logs**. The standard and guideline for snags is FW-215 and the standards and guidelines for down logs are FW-219 through FW-229. Similar direction for down logs is duplicated in FW-167 and in FW-031 through FW-036. I am approving an exception for these Forest Plan standards and guidelines.

Design criteria have been incorporated into the EA to help retain snags (EA s. 3.6) but it is likely that some snags would have to be felled for safety reasons. There are few if any medium or large snags in the units because they were felled at the time of the original clear cut. Some small suppressed planted trees have died but they are not large enough to provide much snag habitat and they do not last long. None of the alternatives, including no-action, would achieve the snag standard in plantations in the short term. The DecAID advisor is a planning tool for snags and down logs that was considered in the development of design criteria and evaluation of effects (EA s. 3.6 & 4.5.10). Design Criteria #2 results in leaving live trees with the elements of wood decay which would provide habitat in the interim until trees grow large enough to produce snags of the desired size, (greater than 22 inches diameter). When these trees with elements of wood decay die they would provide small to medium size snags that would benefit some snag dependent species. Alternative D will accelerate the growth and size of plantation trees and would eventually provide large snags much sooner than would be expected with the no-action alternative. The objective of providing long-term snag habitat will be met (EA p. 4.5.10).

In terms of down logs, the project will retain all existing down logs but they are not necessarily at the desired level for quantity, size or decomposition class. Design criteria #3 results in leaving some additional down wood. Alternative D will accelerate the growth and size of trees and would eventually provide large down logs much sooner than would be expected with the no-action alternative. The DecAID advisor was considered in the development of design criteria and evaluation of effects for down logs (EA s. 3.6 & 4.5.10). The objective of providing long-term down log habitat will be met.

There is potential for an enhancement project that would create additional small snags and down logs in the units, if funding becomes available.

• The project will not close any system **roads** that are currently open. Temporary roads that are constructed with this project will be obliterated upon project completion (EA s. 4.5.13) and open road density will remain unchanged. The open road density standard for this area is 2.5 miles per square mile. The east ½ of the area is currently at 1.9 miles per square mile while the west ½ is at 3.5. FW-210 indicates that exceptions are appropriate in some areas. I have chosen not to close any open system roads with this project. Many miles of system roads have been closed in recent years on the Clackamas River Ranger District including approximately 100 miles of roads closed in the adjacent Fish Creek drainage. Roads in the project area are used by several owners for forest management, recreational driving, hunting and fire suppression and to access the telecommunications towers at Goat Mountain. I am approving an exception for Forest Plan standard and guideline FW-208. Open road density will continue to be above the standard and guideline level for all alternatives including no action.

- WATER QUALITY AND FISHERIES The analysis shows that the temporary roads used for this project pose minimal risk because they 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 (EA s. 4.2).
- 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 (EA s. 4.0.2). 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 (2003-06-06-05-0001). Documentation has been forwarded to the State Historic Preservation Office (EA s. 4.13).
- 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 (EA s. 4.14). 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 (EA s. 4.16). There will be no effect to Wild and Scenic Rivers and State Scenic Waterways, wetlands, wilderness areas, research natural areas or any other areas with unique characteristics. The area is not affected by recent wilderness proposals. The project will not affect public health or safety (EA 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 on the South Fork project was published in the Oregonian on October 27, 2005. 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 substantive comments 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 Linda Goodman, Regional Forester. An appeal should be addressed to the Regional Forester at any of the following addresses. Postal: ATTN.: 1570 APPEALS, P.O. Box 3623, Portland, OR 97208-3623; Street location for hand delivery: 333 SW 1<sup>st</sup> Ave, Portland, OR (office hours: 8-4:30 M-F); fax: 503-808-2255. Appeals can also be filed electronically at: 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 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:

181 Andrei Rykoff

ANDREI RYKOFF District Ranger

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Date Published

ISI Gary L. Larsen

GARY L. LARSEN Forest Supervisor