

**I-90 Corridor Thin
Decision Notice
And
Finding Of No Significant Impact (FONSI)**

**USDA Forest Service
Mt. Baker-Snoqualmie National Forest
Snoqualmie Ranger District
King County, Washington
T. 22 N., R. 9 E., Sections 1 and 12 and T. 22 N., R. 10 E.,
Sections 6, 7, 9-11, 14, and 15, Willamette Meridian**

The Snoqualmie Ranger District, Mt. Baker-Snoqualmie National Forest has completed the Environmental Assessment (EA) for the I-90 Corridor Thin project. Minor changes were made to the pre-decisional EA provided for public comment. These changes include: 1) adding a paragraph providing details of the 30-day pre-decisional comment period to the Scoping, Public Involvement section in Chapter 1; 2) correcting language in the first wildlife best management practice in Chapter 2, on page 24; and; 3) adding language to the wildlife cumulative effects section in Chapter 3. The EA is available at the North Bend office of the Snoqualmie Ranger District Office. The North Bend office is located at 902 SE North Bend Way, Building #1, North Bend, WA 98045. The EA is also available on the Internet at <http://www.fs.fed.us/r6/mbs/projects/>.

Decision

After reviewing the I-90 Corridor Thin EA, the Wildlife, Fish, and Botany Biological Evaluations, specialist reports, applicable Forest Plan direction, and public comments for the proposed I-90 Corridor Thin, it is my decision to implement **Alternative 2**. This Alternative is hereafter called the “Selected Alternative.”

This alternative is described in Chapter 2 of the EA, and compared with the other analyzed alternatives in Table 2 of the EA. Figure 1, in Appendix D below, is a map of the Selected Alternative. Decision Notice Appendix A contains the Management Requirements and Mitigation Measures that are integral parts of the Selected Alternative. This decision will implement forest thinning treatments on approximately 338 acres, generating an estimated 6.7 million board feet (MMBF) of commercial timber in the Matrix land allocations (Management Area (MA) 27 - Scenic Forest, MA 2B - Scenic Viewshed and MA 14 - Deer and Elk Winter Range). This decision will also construct about 1.4 miles of temporary road to be obliterated following use, reconstruct 0.2 mile of road¹, and perform maintenance and maintenance

¹ About 0.2 mile of Forest Road 5500-110 may require reconstruction at its fords of Harris and Rock Creek. These crossings are currently drivable, but winter high water events may require minor reconstruction or cleanout of the low water crossings of these streams to make fords passable by logging equipment and trucks.

upgrades on 11.17 miles of existing Forest road. Road 5500-110 will remain closed to public motorized access.

Specifically this decision will implement:

- Commercial thinning of an estimated 338 matrix acres in 14 units ranging in size from approximately 6 to 86 acres, to decrease stand competition and retain growth within the residual forest stands. This activity will retain approximately 110-165 trees per acre in Units 1-14 (EA Table 8, p. 33). This will retain an average 60 percent canopy cover (EA, p. 35).
- Skyline, helicopter, and ground-based (processor or forwarder) logging systems will be used to commercially thin the units. Approximately 138 acres (41%) will be thinned by skyline harvest systems, 101 acres (30%) by helicopter, and 99 acres (29%) by ground-based systems.

My decision also includes:

- Construction of about 1.4 miles of temporary road to or within Units 1, 2, 6, and 13. All temporary roads will be obliterated once thinning is completed.
- About 0.2 miles of Forest Road 5500-110 may require reconstruction at its fords of Harris and Rock Creek. These crossings are currently drivable, but winter high water events may require minor reconstruction or cleanout of the low water crossings of these streams to make fords passable by logging equipment and trucks.
- Spot brushing, blading, ditch cleaning, culvert basin maintenance, and culvert replacement upgrades as needed on the portions of Roads 55, 5500-101, 5500-110, 9030, 9031, and 9034 located within or used to access I-90 Corridor Thin (EA Table 4).
- Implementation of the best management practices, constraints, and mitigation measures listed in Appendix A of this Decision Notice, and on pages 21-26 of the EA.
- Implementation of the monitoring plan in Appendix B of this Decision Notice and on page 26 of the EA.

Rationale for the Decision

I selected Alternative 2 because it best meets the purpose and need (objectives) for the project as described on pages 2 and 3 of the EA and best responds to key issues.

In particular, the Selected Alternative:

- Thins 338 acres of 70-year-old stands to maintain or promote increased growth and vigor of forest stands while providing commercial wood fiber consistent with the Forest Plan, as amended. This will also improve stand resiliency to shifts in climate or other disturbances such as wind (EA pp. 2, 33-37, 79-80, and 111).
- Will result in a stand structure and species mix that best meets the desired future conditions of suitable commercial lands as identified in the Forest Plan, as amended (EA, pp. 2 and 33).
- Will provide approximately 6.7 MMBF of commercial timber. This will help the Mt. Baker-Snoqualmie National Forest meet its annual scheduled target of commercial wood fiber for lumber and other wood-based products (EA, pp. 3, 19, 27, and 79-80).
- Is economically viable. The selected alternative will be a viable timber sale. The estimated timber value outweighs estimated costs. The estimated value of the project after costs is \$367,249 (EA pp. 13 and 79-80).

- Will enhance forage availability in deer and elk winter range (Unit 12). The thinning prescription is expected to establish an herb and forb layer for big game foraging that will persist for a number of years. Reducing the canopy closure to approximately 60% is expected to permit ambient light conditions that will stimulate germination and growth of early-successional vegetation. It will also stimulate growth and enhance habitat diversity in dense second-growth stands that are currently largely unsuitable habitat for threatened and endangered, sensitive, rare, uncommon, and management indicator species (EA pp. 66-67).
- Will contribute to a beneficial effect for marbled murrelet and spotted owl. Old-growth habitat is considered the limiting factor for spotted owl and marbled murrelet occurrence in the Washington Cascades. The thin will accelerate the growth of large trees which may help establish habitat conditions to foster recovery of old-growth dependent species (EA pp. 64-66).

This decision does not change existing open classified road access on the Road 55, 9030, 9031, and 9034 systems.

A detailed description of the Selected Alternative (Alternative 2) is found in Chapter 2 of the EA, with a Comparison of the Alternatives by Elements shown in Table 5. Figure 2 in the EA and Figure 1 (Appendix D) of this Decision Notice display a map of the Selected Alternative.

Other Alternatives Considered

One other alternative was considered in detail—Alternative A (No Action). Three other alternatives were also considered but not developed fully. These alternatives and the reasons they were eliminated from detailed consideration are described in the EA on pp. 16-18.

I did not select Alternative A (No Action) because it failed to achieve the project's Purpose and Need, or Forest Plan goals and objectives (Chapter 1 of the EA). Specifically, Alternative A would not decrease stocking to promote stand growth and development for desired vegetation characteristics, or provide commercial wood fiber products.

The Interdisciplinary (ID) Team and public comments did not identify other issues that would have led to development of an additional action alternative that would meet the project objectives (Chapter 1 and Appendix A of the EA).

Best Management Practices, Constraints, Mitigation Measures and Monitoring

My decision also includes the design features and mitigation measures specific to this project to avoid adverse effects on recreation, soils, streams, wildlife, cultural resources, air quality, adjacent special-use permits activities, and for limiting the spread of noxious weeds. In addition, this decision includes monitoring of design features to evaluate implementation of the thinning treatments described in the silvicultural prescription (EA Appendix D) and their effectiveness of achieving intended stocking levels, canopy cover, and species composition and growth rates. Descriptions of project elements and mitigation measures are provided in the EA on pp. 21-26, and in Appendix A of this Decision Notice. Monitoring plans are included in page 26 of the EA and Appendix B of this Decision Notice.

Forest Plan Consistency

I have reviewed the EA for the project including the environmental effects and Forest Plan Consistency sections for each affected resource (EA Chapter 3). I find my decision to adopt Alternative 2 to be consistent with the Mt. Baker-Snoqualmie Forest Plan, including all plan amendments, in effect on the date of this decision (see EA p. 6 for major amendments). The action will not alter the multiple-use goals and objectives for long-term land and resource management.

My conclusion is based on a review of the Project Record that shows a thorough review of relevant scientific information, a consideration of responsible opposing views, and the acknowledgment of incomplete or available information, scientific uncertainty, and risk. For example, the November 2007 Wildlife Report discusses that there is disagreement among biologist on the affects from noise in proximity to northern spotted owl and the March 2008 Timber Resource Report discusses how research has shown increased spacing results in increased crown volume and surface area, and can also improve a stand's resistance to wind.

Watershed Analysis: The South Fork Snoqualmie River watershed is not a Key Watershed. The South Fork Snoqualmie River Watershed Analysis was completed in 1995 (EA, p. 11).

Riparian Reserves (EA pp. 7 and 14): My decision will be consistent with Riparian Reserves standards and guidelines and Aquatic Conservation Strategy objectives. The Selected Alternative does not thin within Riparian Reserves. Activities that will occur within Riparian Reserves include two temporary road stream crossings to access Units 1 and 2, potential road reconstruction at Harris and Rock Creek Fords on Road 5500-110 to access Unit 12, and any culvert replacement upgrades needed on Roads 55, 9030 and 9031. Channel morphology, sediment regimes, woody material, and water quality will be maintained as per Aquatic Conservation Strategy objectives. Temporary road construction will be minimal within Riparian Reserves. Temporary roads will be obliterated after use. Culverts proposed for replacement will accommodate at least the 100-year flood, including associated bed load and debris. By proper road maintenance, culvert sizing, and limiting operations during wet seasons or events, sediment delivery to streams from roads will be minimal (EA pp. 16, 19, 23-24, 51-52, and 81-84).

Matrix – Management Area (MA) 2B, Scenic Viewshed and MA 27, Scenic Forest (SF) (EA pp. 7 and 14): The I-90 Corridor Thin Project will be consistent with MA 2B and MA 27, SF standards and guidelines. A full range of silvicultural practices are allowed within these management areas as long as recreational experiences and Visual Quality Objectives (VQOs) are met. There will be no long-term effects to facilities, trails, trailheads or dispersed recreation. Short-term access effects on recreationists will be minimized by not allowing thinning and haul activities on weekends, holidays, or Fridays after 12:00 noon to avoid peak recreation use periods within the I-90 Corridor. The project will meet visual quality objectives. None of the units would be immediately visible in the foreground from I-90. Canopy closure on thinned units will be 60-70%. Stands will appear intact and meet the “Partial Retention” VQO when viewed as middleground landscape from I-90 or from secondary view areas such as Roads 55, 9030, and 9031 (EA pp. 36-37 and 72-75).

Matrix – MA 14, Deer and Elk Winter Range (EA pp. 7 and 14): The selected alternative is consistent with timber management planning objectives for MA 14. The thinning prescription is

expected to establish an herb and forb layer to persist for a number of years. The reduced tree canopy is expected to permit ambient light conditions to stimulate germination and growth of early-successional vegetation. Hiding cover is not a critical issue for winter range since the road leading to Unit 12, the only unit located within MA 14, will remain closed to public motorized access during and following completion of thinning operations (EA, pp. 65 and 67).

How My Decision Addresses the Issues

Issue 1: Improve timber growth and commodity production for Matrix allocation where allowable.

The Selected Alternative will commercially thin 338 acres of 70-year-old stands to maintain or promote increased growth and vigor of forest stands while providing commercial wood fiber consistent with the Forest Plan. It will also result in a stand structure and species mix that best meets the desired future conditions of suitable commercial forest lands (EA pp. 19, 27, and 33-37).

Issue 2: Economic Viability

The Selected Alternative will be economically viable. The timber value will exceed logging costs by \$367,249 (EA pp. 79-80).

Public Involvement

On August 28, 2007 the Forest Service mailed scoping letters to Tribes and to persons on District mailing lists, requesting comments on the proposed I-90 Corridor Thin project. The Forest Service received three written responses to the government-to-government and public involvement scoping effort (refer to Appendix A of the I-90 Corridor Thin EA for consideration of comments received).

Copies of the pre-decisional EA were mailed to those who participated in the public and government-to-government scoping process or who had requested a copy of the EA, including individuals, groups, and Tribal councils. On July 10, 2008, a legal notice of the availability of the EA was published in the Seattle-Post Intelligencer, initiating the 30-day pre-decisional comment period. Two letters were received within the established comment period, one from Mountain-to-Sounds Greenway Trust and the other from Conservation Northwest. Mountains-to-Sounds Greenway Trust supported the Selected Alternative. Substantive comments received from Conservation Northwest and where and how they are addressed in the EA are available in Appendix C of this Decision Notice (EA p. 12).

Tribal Consultation

On August 28, 2007, letters describing the proposed action and requesting comments and concerns were sent to the Tribal Chairpersons and other identified contacts of the Snoqualmie, Tulalip, Yakama, and Duwamish Tribes. These Tribes were also sent copies of the EA on July 8, 2008. No Tribal comments were received to either mailing (EA p. 12).

Finding of No Significant Impact (FONSI)

I have evaluated the effects of the project relative to the definition of significance established by the Council on Environmental Quality (CEQ) Regulations in 40 CFR 1508.27. I have reviewed and considered the 2008 I-90 Corridor Thin Environmental Assessment, which is incorporated by reference

herein. Based on the above, I have determined that the Selected Alternative (Alternative 2) will not have a significant effect on the human environment. For this reason, no environmental impact statement (EIS) will be prepared. My rationale for the FONSI follows, organized by subsection of the 40 CFR 1508.27 definition of significance.

1. Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial [40 CFR 1508.27(b) (1)].

The proposed project context (society as a whole, affected region, affected interests, and locality) was reviewed, and the intensity (severity) of the negative impacts as a result of implementing I-90 Corridor Thin is minor. The only short-term impacts for a long-term benefit are short-term (3-7 years) increases in fuel loading, temporary reduced air quality during harvest, hauling and slash treatment, minor short-term increases in sediment input that would not result in measurable or observable changes in sediment load in the South Fork Snoqualmie River, short-term (during thinning operations) noise impacts on some wildlife species, and minor short-term recreation impacts during thinning operations (EA pp. 38, 40, 49-51, 61-66, and 72-76).

The project will provide long-term improvements in the health and resiliency of the forest vegetation within the project area by:

- Reducing stand stocking to maintain or promote increased growth and vigor of forest stands while providing commercial wood fiber consistent with the Forest Plan.
- Reducing stocking levels in densely stocked stands to promote increases in live crown ratios, larger trees in a shorter period of time and to maintain species diversity on the landscape.

With implementation of management requirements and mitigation measures, the Selected Alternative will result in reduced impacts from noxious weeds.

The project will provide benefits to the transportation system by:

- Spot rocking and road maintenance of the existing road surfaces, which will lengthen the life of the existing roads within the project area.
- Replacing culverts that have reached their life span.
- Brushing roads providing safer road visibility for travelers.

The project will also provide long-term wildlife habitat benefits by:

- Enhancing forage availability in deer and elk winter range (Unit 12). The thinning prescription is expected to establish an herb and forb layer for big game foraging the will persist for a number of years.
- Stimulating growth and enhancing habitat diversity in dense second-growth stands that are currently largely unsuitable habitat for threatened and endangered, sensitive, rare, uncommon, and Forest management indicator species.

- Accelerating the growth of large trees, which may help establish habitat conditions to foster recovery of old-growth dependent species.

2. *The degree to which the proposed action affects public health or safety [40 CFR 1508.27(b) (2)].*

Public health will be protected by providing safer roads for public travel, by meeting smoke emission requirements of the “Smoke Management Plan” administered by the Washington State Department of Natural Resources, and by minimizing travel impacts on forest travelers using the roads within the project area by not allowing thinning and haul activities on weekends, holidays, or Fridays after 12:00 noon to avoid peak recreation use periods within the I-90 Corridor (EA, pp. 40, 41, and 72-73).

3. *Unique characteristics of the geographic area such as the proximity to historical or cultural resources, parklands, prime farmlands, wetlands, wild and scenic rivers or ecologically critical areas [40 CFR 1508.27(b) (3)].*

A cultural resource inventory and report was completed and submitted to the State Historic Preservation Officer (SHPO) for review and response. The project will have “no effect” to known historic properties associated with American Indian or Euro-American heritage resources listed or eligible for listing on the National Register of Historic Places. SHPO concurred with this finding (EA pp. 76 and 77).

4. *The degree to which the effects on the quality of the human environment are likely to be highly controversial [40 CFR 1508.27(b) (4)].*

The degree to which the effects on the quality of the human environment are likely to be highly controversial is considered low. Common issues of controversy over effects on past Mt. Baker-Snoqualmie National Forest vegetation management projects include impacts on the large tree component and associated wildlife habitat, impacts on peak flows, and road management actions that change public access or have negative impacts on water quality and aquatic habitat.

This project is designed to maintain and promote stand vigor and diversity and enhance wildlife habitat across the area. No existing large tree component stands will be harvested, and all proposed thinning is designed to facilitate development of future large tree structural conditions (EA pp. 33-36 and 63-66).

There will no measurable or observable impact to the flow regime, including the timing, frequency, intensity, or duration of peak flow events (EA p. 49). In addition, road upgrades and temporary road reclamation activities will reduce risk of sediment delivery to streams (EA p. 52).

The Selected Alternative will not change existing road access for the public. Road improvements, such as spot rocking, brushing, and culvert replacement will increase the lifespan of the road system while protecting the resources and reducing the risk for road prism failures. The road work will contribute toward the cumulative management of the Mt. Baker-Snoqualmie National Forest road system, which in turn will contribute towards a better alignment of road maintenance levels with projected Forest road maintenance budgets (EA pp. 41-44).

5. *The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks [40 CFR 1508.27(b) (5)].*

This decision will not have effects that are highly uncertain or involve unknown risks. Activities included in this decision have been implemented numerous times in the Forest on similar terrain and forest conditions. This type of project has become a routine project for the Mt. Baker-Snoqualmie National Forest. While any action carries some degree of risk, the Selected Alternative was designed and the analysis summarized in the EA was carefully completed to minimize unique or unknown risks. In addition, the Mt. Baker-Snoqualmie National Forest implementation procedures for timber sales, including sale preparation, administration (standard timber sale contract), and prescribed burn plans will ensure that the effects will be similar to those predicted in the EA. The effects on the

human environment of implementing the I-90 Corridor Thin Project are not expected to be highly uncertain or involve unique or unknown risks (Chapter 3 of the EA).

Best management practices, constraints, and mitigation measures have been developed to ensure adverse effects to the human environment are reduced or eliminated (DN Appendix A and EA pp. 21-26), and monitoring has been included to evaluate the implementation and effectiveness of key project design features (DN Appendix B and EA p. 26).

6. *The degree to which the action may establish precedent for future actions with significant effects or represents a decision in principle about a future consideration [40 CFR 1508.27(b) (6)].*

This action is unlikely to establish a precedent for future actions with significant effects or to represent a decision in principle about a future consideration. There are no foreseeable timber sale plans for the project area. There is the possibility of meeting Forest Plan objectives for timber management with future regeneration harvest within the I-90 Corridor Thin units, which are all allocated to the Matrix Forest Plan land allocation. In any case, this project does not establish binding precedent.

7. *Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts [40 CFR 1508.27(b) (7)].*

For an action to contribute to cumulative effects there has to be some kind of additive or interactive effect. The cumulative effects of the alternatives and the past, present, and foreseeable future actions are disclosed in Chapter 3 of the EA, in conjunction with Appendix C of the EA. The EA discloses there will be no significant cumulative impacts by implementing the I-90 Corridor Thin Project, including foreseeable future actions (Chapter 3, Environmental Effects, under each resource section, and Appendix C of the EA).

8. *The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources [40 CFR 1508.27(b)(8)].*

Cultural surveys of the project area were conducted with review by the Forest Archeologist; nine resources were recorded. The project will have “no effect” to known historic properties associated with American Indian or Euro-American heritage resources listed or eligible for listing on the National Register of Historic Places (EA pp. 76-77).

9. *The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973 [40 CFR 1508.27(b) (9)].*

The I-90 Corridor Thin units are in close proximity to the unit boundaries analyzed in the 1991 South Fork Thin Recreation Enhancement EA. The South Fork Thin was found to be outside of spotted owl critical habitat, and consistent with the Interagency Scientific Committee Report on the northern spotted owl. Consultation with the U. S. Fish and Wildlife Service was conducted and completed August 9, 2001. The bald eagle was delisted in 2007 and is managed and administered under the Forest Service sensitive species program. The USFWS concurred that the project will not likely adversely affect or jeopardize the continue existence of Threatened and Endangered species. I-90 Corridor Thin will result in “no effect” to grizzly bear, “may effect but would not adversely affect” northern spotted owl, marbled murrelet, and gray wolf. The project will “not adversely impact” on northern spotted owl or marbled murrelet critical habitat. It will have “no adverse impacts” on Canada lynx. Habitat for this species does not exist in the project area or within the South Fork Snoqualmie River watershed (EA pp. 63-64).

Chinook salmon, steelhead, and bull trout are currently listed as threatened in Puget Sound under the Endangered Species Act. The Selected Alternative will have “no effect” on these species. It will also have “no effect” to designated Chinook or bull trout critical habitat. The National Marine Fisheries Service has not designated critical habitat for steelhead, but regardless there will be “no effect” because there is no potential steelhead habitat for at least 20 miles downstream. This project will also have “no effect” on essential fish habitats for Chinook, coho, and pink salmon (EA pp. 53 and 54).

For other fish species with special status (Forest Service Sensitive and MBS management indicator species), there will be “no impact” to Puget Sound Strait of Georgia coho salmon, Puget Sound coastal cutthroat trout, Baker River (Skagit) sockeye salmon, Salish sucker, pink salmon, sea-run cutthroat, or chum salmon. The impact determination for resident rainbow and cutthroat trout is “will not result in a trend towards a Federal listing as threatened or endangered” (EA p. 54).

The Biological Assessment prepared for consultation with the United States Fish and Wildlife Service and the Biological Evaluation assessing impacts to the Regional Forester’s Sensitive Species can be found in the Project Record at the Snoqualmie Ranger District office.

10. *Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment [40 CFR 1508.27(b) (10)].*

The project is designed to meet all applicable Federal, State, and local laws (Chapter 3 of the EA, Forest Plan Consistency (pp. 36 to 86)).

National Forest Management Act Consistency Findings

The Mt. Baker-Snoqualmie National Forest Plan, as amended was developed and approved (1990) using the provisions of the planning rule in effect prior to November 9, 2000 (the 1982 planning rule). The Forest Service now has a new planning rule (36 CFR 219, published in the Federal Register on April 21, 2008) referred to as the 2008 planning rule. The 2008 rules specifically states at 36 CFR 219.14(b)(4) that, for plans developed under the 1982 rule, the 1982 planning rule is without effect. There remain no obligations from that regulation, except those that are specifically in the plan. The only requirement specifically provided in the 2008 rule related to projects is at 36 CFR 219.8(e), requiring that projects and activities must be consistent with the applicable plan components. As required by 36 CFR 219.8(e), I have found that this project is consistent with Mt. Baker-Snoqualmie Forest Plan, as amended. For my consistency findings, refer to the “Forest Plan Consistency” section above.

Findings Required By Other Laws and Regulations

My decision is consistent with all applicable laws and regulations (Chapter 1 pp. 9 to 11, Chapter 3 in each resource section, and other effects (pp. 28 to 86 of the EA). It also meets Forest Plan direction and applicable standards and guidelines (Chapter 1 pp. 6 to 9 and Chapter 3 Forest Plan Consistency in each resource section).

Administrative Appeal

This decision is subject to administrative appeal pursuant to 36 CFR Part 215, only by those individuals and organizations who provided timely comments or otherwise expressed interest during the 30-day comment period on the EA (Mountain-to-Sounds Greenway Trust, and Conservation Northwest). The appeal must meet the requirements at 36 CFR 215.14.

The appeal must be filed with the Appeal Deciding Officer, Regional Forester, Pacific Northwest Region. Appeals filed by regular mail or express delivery must be sent to:

Appeal Deciding Officer, Attn: 1570 Appeals, P.O. Box 3623, Portland, Oregon, 97208-3623.

They may be faxed to (503) 808-2255, sent electronically to appeals-pacificnorthwest-regional-office@fs.fed.us, or hand delivered to the following address between 7:45 AM and 4:30 PM, Monday through Friday except legal holidays:

Appeal Deciding Officer, Attn: 1570 Appeals, 333 S.W. First Avenue, Portland, Oregon, 97204.

Appeals, including attachments, must be filed within 45 days after the publication date of this notice in the Seattle Post-Intelligencer (newspaper of record), Seattle, Washington. The publication date in the newspaper of record is the exclusive means for calculating the time to file an appeal. Those wishing to appeal this decision should not rely upon dates or timeframe information provided by any other source.

Electronic appeals must be submitted in a rich text format (.rtf), or Microsoft Word (.doc) format, or as an e-mail message. E-mailed appeals must include the project name in the subject line. In cases where no identifiable name is attached to an electronic message, a verification of identity will be required. A scanned signature is one way to provide verification.

It is the responsibility of each individual and organization to ensure their appeal is received in a timely manner. For electronically mailed appeals, the sender should normally receive an automated electronic acknowledgement from the agency as confirmation of receipt. If the sender does not receive such an automated acknowledgement, it is the sender's responsibility to ensure timely receipt by other means.

Project Implementation

Implementation of project activities is expected to begin in the summer of 2009.

Implementation of this project decision cannot begin until the 15th business days after the disposition of any appeal, depending on the nature of that resolution. If no appeal is filed, implementation of the decision may begin on, but not before, the 5th business day after the close of the appeal period.

The Forest is exploring the option of implementing the I-90 Corridor Thin timber sale through stewardship contracting in order also to conduct other restoration activities in the subwatershed such as road decommissioning.

Contacts

For further information, contact Jim Franzel, District Ranger; or Doug Schrenk, I.D. Team Leader, at the Snoqualmie Ranger District, 902 SE North Bend Way, North Bend, WA 98045; or by telephone at (425) 888-1421.

Y. ROBERT IWAMOTO

Forest Supervisor

Date

Attachments

Appendix A: Project Elements and Mitigation Measures

Appendix B: Monitoring

Appendix C: Public Comment and Responses from 30-Day Comment Period

Appendix D: I-90 Corridor Thin Selected Alternative Map

Appendix A: Project Elements and Mitigation Measures

The following are standard best management practices (BMPs), management constraints, and mitigation measures, included as part of Alternative 2. These BMPs, constraints, and mitigation measures were incorporated from resource specialist reports located in the project record. Estimated mitigation effectiveness, or the basis for effectiveness, is described with each mitigation measure.

Botany

- If any previously undiscovered threatened, endangered, sensitive, or other rare vascular plants, bryophytes, lichens, or fungi are discovered, before or during project implementation, halt work until a USFS botanist is consulted and necessary mitigation measures are enacted. (USDA Forest Service 1990b p. 4-127)
- Treat known weed infestations before ground disturbance begins. (USDA Forest Service 1999 and USDA Forest Service 2005a)
- For actions conducted or authorized by written permit by the Forest Service that will operate outside the limits of the road prism, require the cleaning of all heavy equipment prior to entering National Forest System lands. (USDA 2005a)
- Suppliers must provide annual documentation to the sale administrator indicating that the following products have been examined by a qualified inspector and deemed free of State listed noxious weeds (USDA Forest Service 1999 and USDA Forest Service 2005a):
 - Straw or other mulch
 - Gravel, rock, or other fill
 - Seeds (according to AOSA standards)
 - If weeds are present in the project area, all equipment and gear must be cleaned before leaving the project area to avoid spreading the infestation further (USDA Forest Service 1999).
- If weeds are present in the project area, work from relatively weed-free areas into the infested area rather than visa-versa (BMP, USDA Forest Service 1999).
- Revegetate all areas of bare soil exposed by project activities, if there is a risk of noxious weed invasion. Native plant materials are the first choice in revegetation where timely natural regeneration of the native plant community is not likely to occur. Follow revegetation criteria and specifications for this project (refer to Botany Report). (USDA Forest Service 1999, USDA Forest Service 2005a, and USDA USDI 1994)

Cultural

If a previously unidentified resource is discovered during project implementation, or if an identified resource is affected in an unanticipated way, the Forest Heritage Specialist shall be notified and the Forest will fulfill its responsibilities in accordance with the Programmatic Agreement between the Advisory Council on Historic Preservation (ACHP), Washington State Historic Preservation Office (SHPO), and United States Department of Agriculture–Region 6 Forest Service. (1997 Programmatic Agreement)

Recreation

- Post signs warning motorists of timber sale activities, restrict thinning, and haul operations in the area of Tinkham Campground (Units 13 and 14) from Friday (noon) through Sunday and holidays during

the campground operating season to reduce noise impacts.

Mitigation Effectiveness: Warning motorists that they may encounter logging trucks or other harvest activities within the project area heightens driver awareness and reduces the risk of accidents. This highly effective practice is routinely used to warn motorists of the hazards of trucks on narrow Forest Service Roads. Hauling on low public use days is highly effective at limiting encounters between motorists and logging truck.

- Restrict thinning, flight, and haul operations in the area of the McClellan Butte, Ira Spring, Talapus Lake, and Pratt Lake Trailheads and trails from Friday (noon) through Sunday and on holidays to reduce access impacts and provide for the safety of the public.
Mitigation Effectiveness: Limiting harvest and hauling to low public use days is a routine practice used throughout the Forest. It is highly effective at reducing the risk of accidents by limiting the encounters of motorist and logging truck traffic.
- Close McClellan Butte Trailhead and abandoned portion of old trail between Units 13 and 14 during temporary road construction into Unit 13, and during felling, and flying operations needed to thin Units 13 and 14, to provide for the safety of the public.
Mitigation Effectiveness: Closures are a common practice used on the Forest and have proven to be highly effective at providing public safety and reducing the risk of accidents.
- Restrict thinning, flight, and haul operations from Friday (noon) through Sunday and on holidays along Roads 55, 9030, and 9031 to provide for the safety of the public.
Mitigation Effectiveness: Same as described for recreation mitigation measures above.
- Decommission and revegetate all temporary roads and landings upon completion of project activities to advance the restoration of unroaded characteristics in Units 6 and 8 and seen area from the secondary viewsheds of Roads 9030, 9031, and 55. (USDA Forest Service 1990, pp. 4-174 and 175)
- Complete slash disposal activities in a manner as to reduce visible slash accumulations along the secondary viewsheds of Roads 9030, 9031, and 55. (USDA Forest Service 1990, pp. 4-173 and 4-278)

Soils

To avoid detrimental compaction, proposed ground based harvest portions of Units 1, 2, 6-11, and 13 must be harvested during periods of dry soil conditions. This period usually occurs in the months of July-September. (Standard timber sale contract provision)

Hydrology/Fisheries

- Work in or near streams that may potentially deliver sediment to those streams should be performed during the Washington Department of Fish and Wildlife In-Water Window. (Forest Biological Assessment (BA) standard management practice for fish)
- The culverts of all roads utilized in the analysis area² for any actions associated with this proposed project shall be adequately sized and positioned so that both downstream and upstream passage is possible for all resident species present in the area. In all cases, culverts will be adequately sized to be able to pass at least 100-year flows and their associated bedload and debris to minimize the probability of flood damage to stream habitat downstream of the crossings. (Forest BA standard management practice for fish)

² The analysis area for this project, unless other wise defined is the second-growth stands and transportation system between I-90 exits 42 and 47.

- When replacing culverts associated with wetlands, the new structure shall be placed at an elevation to not drain the wetland habitat upstream, even if fish passage is not improved. (Forest BA standard management practice for fish)
- If wet weather conditions during project operations generate and transport sediment to a stream channel or other water body, particularly if fish-bearing, operations shall cease until weather conditions improve. Additional actions may be taken that will eliminate the sedimentation (such as adding more rock to the haul route and adding straw bales to the ditches). (Forest BA standard management practice for fish)
- Erosion control methods shall be used to prevent silt-laden water from entering the stream. The management practices that are outlined in the USFS National Best Management Practices–Non-Point Source Management (USFS 2005, and FSH 2509.25) will be followed. These may include where needed, but are not limited to: straw bales, silt fencing, filter fabric, and/or immediate mulching of exposed areas. All erosion control steps must be ready prior to initiation of construction, and the Erosion Control Plan must be approved by the Forest Contracting Officer or Sale Administrator upon consultation with a USFS fish biologist, hydrologist, or their representative. (Forest BA standard management practice for fish)
- All de-vegetated or otherwise disturbed ground larger than 100 square feet in area shall be reclaimed if possible, including seeding and retention measures to prevent sediment from reaching streams until soil is secured by established vegetation. (Forest BA standard management practice for fish)
- Any maintenance or refueling of motorized machinery will occur outside of Riparian Reserves (or potentially at a site within Riparian Reserves that has been approved by the Forest Contracting Officer or Sale Administrator upon consultation with a Forest fish biologist, hydrologist, or their representative). (Forest BA standard practice for fish)
- Prior to starting work each day, check any motorized machinery for leaks (fuel, oil, hydraulic fluid, etc.), and make all necessary repairs outside of Riparian Reserves. Before resuming work, clean up spill site. (Forest BA standard management practice for fish)
- There shall be a written spill mitigation plan prepared, that must be approved by the Forest Contracting Officer or Sale Administrator upon consultation with a Forest fish biologist, hydrologist, or their representative prior to initiation of operations when motorized equipment is present. (Forest BA standard management practice for fish)
- Except for the placement of culverts described in the EA, there will be no work within any other active channels unless a proposal for such work is submitted to and approved by the Forest Contracting Officer or Sale Administrator upon consultation with a Forest fish biologist or hydrologist. (Forest BA standard management practice for fish)
- Prior to project completion, the sale area will be checked by a Forest fish biologist, hydrologist or their representative for any sale area improvement (SAI) needs, such as additional re-vegetation, soil stabilization treatment, including placement of sediment-control structures to stabilize road cuts and fills and control water. Any remaining needed work will be documented and a plan of remedial action promptly written and addressed. (Forest BA standard management practice for fish)
- The overall soil productivity objective is to maintain soil disturbance below 20 percent, as mandated by the Forest Plan and to prevent and mitigate potential adverse erosion. The sale administrator will monitor the project to assure these objectives are achieved, and a report of those findings will be made available to resource specialists. (USDA Forest Service 1990b, p. 4-117)

Wildlife

- To minimize potential noise impacts to the northern spotted owl and marbled murrelet, project activities in or adjacent to Units 4-6 and 12-14 will be allowed only between July 16 through March 1. Work between August 6 through September 15 is only permitted two hours after sunrise and must cease two hours before sunset. (2003 Forest Programmatic Biological Assessment)
- Leave 240 linear feet of logs per acres greater than or equal to 20 inches in diameter. (USDA USDI 1994, p. C-40)
- Coarse woody debris already on the ground should be retained and protected to the extent possible from disturbances during treatment. (USDA USDI 1994, p. C-40)
- As a minimum, snags are to be retained in Units at levels sufficient to support cavity nesting bird species at 40 percent of potential population levels. (USDA USDI 1994, p. C-42)
- Reconstruction work on Road 5500-110 shall not be permitted between December 1 and April 15 in identified deer and elk winter range, (USDA Forest Service 1990, p. 4-233)

Fire, Fuels, and Air Quality

- Adhere to standard Washington State Industrial Fire Precaution Level requirements. (Standard timber sale contract requirement)
- To reduce the risk of human cause starts from thinning slash, slash will be pulled and piled for burning two chains on both sides of main roads and temporary roads. For project efficiency treat slash adjacent to temporary roads before they are obliterated.
Mitigation Effectiveness: This practice has been completed on past commercial and non-commercial sales on the forest. It will be highly effective at reducing fire hazard because it will bring the road edges back to there pre-thinning fuel model (FM) (closed timber litter, FM-8. Piling and burning along temporary roads will be highly effective at creating fuel breaks within the interior of the Units.
- Land piles will be burned or otherwise disposed of.
Mitigation Effectiveness: This will be highly effective at reducing the risk for human starts in heavy fuels concentrated near the road system caused by thinning operations.
- Pile burning needs to comply with standard Washington Smoke Management regulations. Piles will be constructed to provide for efficient burning to reduce smoke emissions. Piles will be burned in the spring or fall during weather patterns that provide good mixing and dispersion of smoke and particulates. (1993 Smoke Management Plan)

Lands and Facilities

- During thinning, yarding, and hauling activities, place signs at appropriate locations on Roads 55, 9030, 9031, and 9034 to warn recreationists and other forest users of project activities.
Mitigation Effectiveness: Warning motorists that they may encounter logging trucks or other harvest activities within the project area heightens driver awareness and reduces the risk of accidents. This practice is highly effective and routinely used to warn motorists of the hazards of trucks on narrow Forest Service Roads.
- If closure of Road 9030 during helicopter yarding of thinned trees from Units 4 and 5 is necessary, the Timber Sale Administrator will be required to contact Marenakos, Inc. [and notify them in advance? of what—helicopter use? Road use? Unclear.]. Contact should occur during the winter prior to proposed activities. (Standard Forest management practice)
- To avoid safety issues between Washington State Department of Transportation (WSDOT) and project activities proposed at the WSDOT stockpile site, yarding and haul activities will be allowed

between June 1 and November 1. After November 1, there is high potential that WSDOT will be utilizing the stockpile site extensively for I-90 winter work. WSDOT will be contacted the winter prior to activities in Unit 8 to coordinate use of the stockpile site.

Mitigation Effectiveness: This will be highly effective because it will eliminate potential stockpile yard use conflicts and encounters between logging and sanding trucks on Road 9034.

- A contractor's lock will be added to the gate at the entrance to the WSDOT stockpile on Road 9034. The gate must be closed and locked at night and weekends.

Mitigation Effectiveness: This is a common Forest practice and has proven to be highly effective at providing contractor reliable access behind closed gates and high assurance that the gate will be closed and locked at night and weekends.

- There are buried phone and fiber optic lines located in and/or adjacent to Road 55. Prior to any major road work on Road 55, Century Tel. Level III Communications, LLC; and the utility locator service at 1-800-424-5555 must be contacted.

Mitigation Effectiveness: This is a common practice used on the Forest for road maintenance and reconstruction. Locating lines prior to commencement of work has been highly effective at preventing damage during construction activities.

- Prior to starting activities in Units 10 and 11, Level III Communications L.L.C., and utility locator service will need to be contacted to locate the ground level vault for conduit access that is located on the north side of Road 55 adjacent to these Units.

Mitigation Effectiveness: Same as previous measure.

- Above ground cable warning signs need to be protected. A statement to this effect should be added to the sale area map. (Standard contract requirement to protect improvements)

- Unit 12 will be accessed by Road 5500-110. This road serves as access to the Bonneville Power Administration (BPA) Rocky Reach-Maple Valley Powerline Corridor. To allow emergency access to BPA towers past Unit 12 after normal work hours or on weekends, the landing needs to be left open for BPA line trucks to pass through the Unit.

Mitigation Effectiveness: Access will be provided as needed during work hours. Assuring the road is open after hours and on weekends will be highly effective at providing emergency access to BPA.

Appendix B: Monitoring

Post-harvest monitoring is planned to evaluate the implementation of the thinning treatments described in the silvicultural prescription (EA Appendix D) such as species composition, canopy closure and growth rates. The monitoring should occur within 5 years of harvest completion.

Canopy Closure: Short and Long-Term (within 3-5 years)

Objective: Assess canopy closure within thinned Units.

Measure- Systematically locate 1 plot per ten acres. Measure at plot centers using densiometer. GPS the plot location.

Growth of Residual Stands: Short and Long-term (within 3-5 years)

Objective: Assess effectiveness of intended stocking level reduction with growth measurements; compare to stocking tables.

Measure- Systematically locate 1 plot per ten acres across all Units treated and measure radial growth rate per decade on trees over 7 inches DBH within 1/40th acre plots. GPS the plot location

Appendix C: Public Comment and Responses from 30-Day Comment Period

Conservation Northwest (Jen Watkins)

Comment #1: While we commend the language and practice towards variable density thinning, we have several suggestions. We noticed that no skips are mentioned within the prescription, except for the leave areas within the Riparian Reserves. We suggest adding some ¼ to 1/3 acre skips in the large units for snag recruitment, understory diversity, refugia, and to create more complex stands to meet the first objective of this project.

Forest Service Response: The target stand conditions will be a mix of vigorous conifer and hardwood species from the co-dominant and dominant size classes, where the spacing between leave trees will be irregular, creating a clumpy appearance. The thinning units are currently very uniform stands little structural diversity, no gaps in the canopy, and limited herbaceous vegetation (EA page 19).

Stand scale variability will also be provided by the areas excluded from thinning within units (see Figure 1 in Appendix D), by not thinning within Riparian Reserves (approximately 40-50% of the project planning area), and on adjacent National Forest System lands that have land allocations prohibiting timber harvest (MA 15 – Mt. Goat Habitat, MA 27DR – Dispersed Recreation, and the Alpine Lake Wilderness (the first two are immediately adjacent to unit 8, the largest unit) (EA pp. 7, 14-16, 33, and EA Appendix D).

Comment #2: Also if the objectives as stated in the EA are to move the stand towards old-growth characteristics faster then the diameter limit should certainly be lowered from 30 inches. Why is the diameter limit set so high, when on Page 109 of the EA it appears that the OMD of any unit within the project area is never higher than 18.2 inches.

Forest Service Response: The 30 inch diameter limit was set to make sure any large trees within the unit boundary are not cut (old-growth trees border the edge of Unit 6). The I-90 Corridor Thin will be a “thinning from below”, meaning that trees to be removed will generally be the smallest merchantable suppressed or intermediate, less vigorous individuals lacking crown development.

The target stand condition will be a mix of vigorous conifer and hardwood species from the co-dominant and dominant size classes, where the spacing between leave trees is irregular, creating a clumpy appearance (EA Appendix D, pp. 108-109).

Comment #3: Although the lands are within the Matrix land allocation, the focus of the sale should be for restoration as stated in the first project objective with a side benefit of commercial values. A prescription that introduces both site specific and landscape variability should be utilized. The environmental analysis for this should answer how this project fits into the goals for the landscape at a watershed scale in introducing variability and connecting habitat structures. The environmental analysis should also provide clear stand data to propose a before and after stand structure, with a desired stand structure goal.

Forest Service Response: Stands within the western hemlock zone in the South Fork Snoqualmie River watershed do not resemble those that existed prior to logging that occurred in the 1900's. Pre-European settlement stand conditions in the western hemlock zone were the result of a disturbance regime of large-scale stand replacing fires that occurred on the western slopes of the Cascades. Currently, young stands within the hemlock vegetation zone are forested with 10-70 year old conifers that lack a diversified stand structure, openings within the interior upland areas, or a species composition that resembles historic species distributions. From a landscape perspective, this structural class occupies a higher percentage of area than would be expected historically.

Given the desire to develop large tree characteristics within the viewshed corridor, to protect and enhance late-successional and old-growth forest ecosystems, there are limited opportunities for silvicultural treatment in mature stands. The "desired vegetation condition" focuses on several specific stand characteristics (density and species mix) that will facilitate development of large trees. The landscape objective will be to return single story stand structures to a structure more typical of the historic conditions distributed broadly across the landscape.

The I-90 Corridor Thin Project prescription will be implemented to move the stands within the units toward the above "desired vegetation condition". The silvicultural prescription on EA page 107 outlines the criteria and exceptions related to moving these stands toward this "desired condition" (EA Appendix D, p. 107).

Comment #4: If the road closures in the South Fork Snoqualmie ATM are to be used as partial mitigation as suggested on p. 83 of the EA to meet long-term watershed goals, then we also request a copy of the document and funding plans for implementation as well:

Forest Service Response: The South Fork Snoqualmie ATM project is not intended to be mitigation for the I-90 Corridor Thin Project. The project if implemented on its own will result in additional sediment regime restoration within the South Fork Snoqualmie River watershed (EA p. 83).

Comment #5: If temporary roads construction is permitted we suggest the use of gravelling the temporary roads during the wet season, and add a contract clause that requires contractor to remove gravel.

Forest Service Response: Timber Sale contract clauses will be incorporated into the contract to ensure resource protection measures are taken with construction and use of temporary roads during the wet season. As necessary to attain stabilization of roadbed and fill slopes of temporary roads, the purchaser will be required to employ such measures as out-sloping, drainage dips, and water-spreading ditches.

These clauses will require the Timber Sale Purchaser to adjust the kinds and intensity of erosion control work done (such as gravelling the temporary road, if needed) to ground and weather conditions and the need for controlling runoff. Erosion control work will be kept current immediately preceding expected seasonal periods of precipitation or runoff (Timber Sale Contract Clauses BT 6.6 and BT 6.63).

Comment #6: We did not see within the EA detail on the length of time that temporary roads would be open beyond a statement that states these will be closed following thinning. An actual life in terms of years needs to be stated prior to treatment to truly evaluate the impact of the temporary road mileage.

Forest Service Response: If implemented, thinning for the I-90 Corridor Thin Project will likely begin in the summer or fall of 2009 and will continue for three to five operating seasons. It is assumed that sometime within this time frame the purchaser will request permission to construct the temporary roads accessing Units 1, 2, 6, 8, and 13. After a temporary road has served the Purchaser's purpose, the Purchaser will be required to give notice to the Forest Service and remove all stream crossing structures, eliminate ditches, out-slope the roadbed, remove ruts and berms, effectively block the road to vehicular traffic, and build cross ditches and water bars, as staked or otherwise marked on the ground by the Forest Service. When stream crossings are removed, associated fills will also be removed to the extent necessary to permit normal maximum flow of water.

Where logging or temporary road construction is in progress but not completed, the Purchaser will, before operations cease annually, be required to remove all temporary culverts and construct temporary cross drains, drainage ditches, dips, berms, culverts, or other facilities needed to control erosion (EA p. 4 and Timber Sale Contract Clauses BT 6.63 and BT 6.66).

-END-

[See separate Map document.]