

**DECISION MEMO
GOTCHEN LATE-SUCCESSIONAL RESERVE THINNING**

Title II Project: PS 603

USDA Forest Service
Mount Adams District,
Gifford Pinchot National Forest
Skamania County, Washington
Sections 22, 23, 24, 26, and 27, T.7N, R.10E

BACKGROUND

The Mt. Adams RD proposed a 47-acre density reduction project within Sections 22, 23, 26, and 27, T. 7N, R.10E, approximately four miles north of Trout Lake, Washington (Figure 1). This project is federally funded through Title II of the Secure Rural Schools and Community Self-Determination Act (P.L. 106-393, 2000). The project was awarded funding by the Gifford Pinchot National Forest (South) and Columbia Gorge National Scenic Area (Washington) Resource Advisory Committee (RAC) during 2006. The project proponent is David Meyers, (private citizen) in cooperation with the Gifford Pinchot National Forest.



Figure 1. Gotchen LSR Thinning project area location.

A single stand along Forest Road 8040, approximately 0.75 miles north of Trout Lake Big Tree is proposed for thinning. Due to the exclusion of fire, the historical condition of large diameter, single story

stands that were dominated by ponderosa pine and Douglas-fir trees have developed a uniform, dense understory layer in poor condition caused by disease, insect, and competition. Currently, the stand consists of a large component (80%) of grand fir trees that have experienced tree crown damage and/or mortality from inter-tree competition, defoliation from the western spruce budworm, and root disease.

PURPOSE OF AND NEED FOR ACTION _____

The purpose of the proposed action is to restore structural diversity and accelerate the development of late successional forest conditions (i.e., herb, shrub, two tree layers, and large crowned trees) within this 47-acre timber stand of the Gotchen Late-Successional Reserve (LSR). There is a need for action because, without intervention, stands in the LSR allocation will be delayed in the development of structural and species diversity, and in growing large trees (contributing to late successional function and resiliency).

Due to the exclusion of fire, the historical condition of large diameter, single story stands, dominated by ponderosa pine and Douglas-fir trees, have been modified, over years, into a multi-layered stand, with a homogenous distribution of vegetation that has become highly susceptible to outbreaks of the western spruce budworm. Currently, the stand proposed for treatment contains a large component of grand fir trees that have experienced crown damage and mortality from inter-tree competition, stress of defoliation from the western spruce budworm, and root disease. While some natural mortality contributes needed snags and down logs to late successional forest, the late-successional habitat within the stand and at the landscape level within the Gotchen LSR has been compromised as tree mortality has progressed. Portions of the stand and throughout portions of the Gotchen area, the dead and dying trees have reduced the canopy closure in several areas to below 40 percent canopy cover. Functioning, suitable spotted owl habitat requires a minimum canopy cover of 40 percent.

Over the last century, the majority of the old growth ponderosa pine and Douglas-fir trees that once dominated the LSR landscape, including this stand, were cut for their value as wood products. Today, relatively few of these large trees remain. These that remain are a very important component of ecological diversity that would be irreplaceable in the foreseeable future. The remaining “legacy trees” within the stand are showing signs of stress caused by inter-tree competition from the mostly grand fir understory.

These conditions, if not managed, will limit and delay the attainment of large, old-growth trees and viable, multi-storied canopy layers which are key characteristics of the desired future condition for the LSR as defined by the Gifford Pinchot National Forest Land and Resources Management Forest Plan. Variable density reduction treatments and underplanting of conifers in stands that are relatively uniform in stocking, species composition and tree size can enhance structural complexity and species heterogeneity over time.

MANAGEMENT DIRECTION _____

Management Direction for the Gotchen LSR Thinning planning area is provided by the Gifford Pinchot National Forest Land and Resource Management Plan (1990) as amended by the *Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl*. The project is located within the Visual Emphasis (VL) Management Area within the Gotchen LSR. The management objective of the lands within the Gotchen LSR is to protect and enhance conditions of late-successional and old-growth forest ecosystems, which serve as habitat for late-successional and old growth related species, including the northern spotted owl. Management of these areas is further guided by the recommendations from the 1997 *Gifford Pinchot National Forest Forestwide Late-Successional Reserve Assessment* (Chapter 5.4) which encourages the removal of dead

and dying trees not needed to meet LSR objectives and underplant the area with early successional conifer species (primarily ponderosa pine and Douglas-fir).

The management goal for the Visual Emphasis Management Area is to “provide a visually natural or near-natural landscape as viewed from the designated travel route or use area” (USDA 1990, p. IV-98). The desired future condition provides for activities though they may not be evident or are visually subordinate to the natural landscape. Vegetation is diverse and includes a wide variety of tree species, and sizes, living and dead. “Stands exhibiting old growth characteristics may be common” (USDA 1990, p. IV-98). The designated travel route is Forest Road 8040, which bisects the thinning unit. Timber harvest may occur within this management area as long as it complies with the Visual Quality Objectives (VQO). In this case, the VQO prescription is Retention. Thinning is permitted within this prescription as long as standards and guidelines can be met, including the following:

1. Ground disturbance should be rehabilitated within one year to natural appearance.
2. Stumps, resulting from any activity, should where they are visible (within 100 feet of the travelway), be flush-cut or otherwise concealed.
5. Harvest units may not dominate the natural form, line, and texture.
7. Retain diversity in undergrowth.
8. Maintain diversity of species and / or age classes.
9. Revegetation for visual quality and erosion control should be completed within one year after construction (USDA 1990, IV-79).

The proposed project is located within the White Salmon River Watershed which is identified as a Key Watershed, though the actual project area is within the non-key portion (Figure 2).

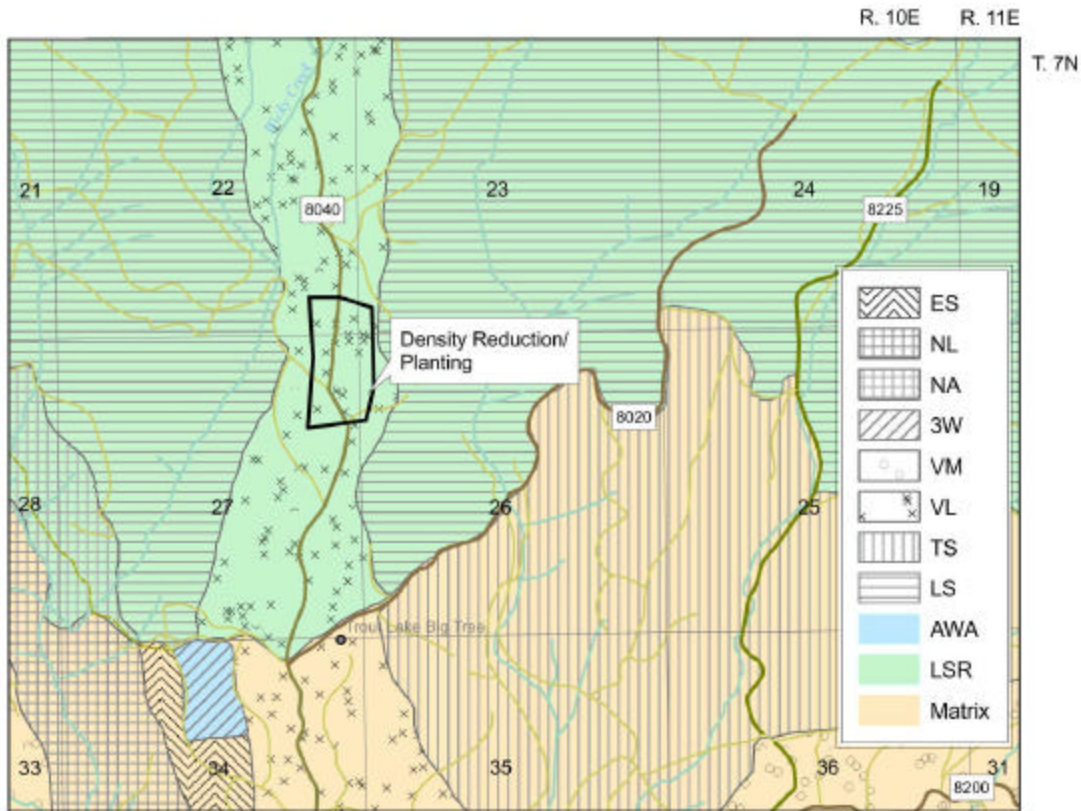


Figure 2. GPNF Forest Plan allocations in the vicinity of the Gotchen LSR Thinning project.

PROPOSED ACTION

The proposed action would commercially thin 47 acres utilizing a variable density thinning prescription that would reduce the tree densities, create openings, and retain leave islands. A ground-based log yarding system will be used to remove the logs. Approximately 250 feet of temporary road would be constructed to facilitate the log removal activities.

The project will be implemented under the authority of Section 323 of Public Law 108-7, the Consolidated Appropriations Resolution, 2003 (16 U.S.C. 2104 note), which is also known as “stewardship end-result contract authority.” The general purpose of this authority is to achieve land management goals for the National Forest System Lands while meeting local and rural community needs. Funds received from the sale of the logs will be retained and applied, as funding allows, to accomplish the following stewardship restoration projects (listed in priority):

1. Underplanting conifers;
2. Decommissioning roads: FR 4107507 (1.1 miles), FR 4104573 (1.9 miles), FR 4211539 (3.7 miles), FR 4211541 (1.8 miles), FR 4207 (1.2 miles)

Title II funds (\$28,000) will be applied to accomplish the following resource projects (listed in priority):

1. Noxious weed treatments and
2. Falling and piling of surplus snags.

The remainder of these funds, if any, would be applied to the stewardship projects.

PROJECT DESIGN FEATURES

To comply with standards and guidelines, best management practices, or on the basis of site-specific analysis the following specific design features have been incorporated into the project proposal and project contract specifications, as appropriate.

1. Variable density thinning prescription will involve 10% (approximately 5 acres) of the area left in an unthinned block, 10% (approximately 5 acres) of the area will be in created gaps (½ acre – 2 acres/gap), 10% (approximately 5 acres) of the area will be heavily thinned to a Curtis RD26 (approximately 45 to 50 trees/acre), and the remainder of the area (approximately 32 acres) will be thinned to a Curtis RD32 (approximately 60 trees/acre). Gaps and heavily thinned areas will be placed in areas of the stand where existing root rot centers and the western spruce budworm have severely understocked the stand. The unthinned patch will be left in the healthiest, fully stocked portions of the stand.
2. Green cut tree diameter limit within the unit boundary for harvest trees, temporary roads, skid trail corridors, and/or landings will be 21” dbh or less.
3. Ponderosa pine, western white pine, and western larch will not be cut or harvested.
4. Gaps will retain all Douglas-fir trees in addition to ponderosa pine, western white pine, and western larch trees.
5. Large, old-growth ponderosa pine trees will be “daylighted” by removing all trees (except ponderosa pine and trees >21”dbh) within 20 foot radius of pine.
6. Approximately 2% ground cover per acre (8 to 12 logs) will be retained. Logs: >15” dbh or largest size class available. The objective is to retain 50% hard and 50% soft down logs, if available.
7. Approximately 10 snags per acre will be retained. Snags: >12” dbh, >20 feet in height. Select from the largest size class available. Objective is to retain 50% hard and 50% soft snags, if available.
8. Large, remnant legacy features (snags [>21” dbh] and large down logs) would be preserved whenever possible.
9. Retain all hollow trees (if identifiable) for wildlife roosting/denning/nesting habitat.
10. Plant (western hemlock [80%] and Douglas fir [20%]) within portions of the stand where the residual tree canopy exceeds 40 percent. Plant ponderosa pine (30%), western white pine (10%), western larch (10%), and Douglas fir (50%) in the more open portions of the stand.
11. Grapple pile activity slash and excess (surplus) snags and down logs not needed for resource needs. This project will be funded through Title II.
12. To control known populations of weeds within the planning area, on adjoining and/or access roads, weeds will be removed by hand pulling or by other methods determined to be appropriate, before project implementation and for two years subsequent to the project work to control new infestations of noxious weeds. These activities will be funded through Title II.

13. In compliance with current Pacific Northwest Region Insect and Disease Management policy, all freshly cut live grand fir stumps surfaces (12" diameter or greater) will be treated with a light coating of granular Sodium Tetraborate Decahydrate or Disodium Octaborate Tetrahydrate to deter the spread of *annosus* root rot.
14. Areas where rutting exceeds six inches in depth for a length of ten feet or more will be prohibited from ground-based equipment passes to prevent detrimental rutting of the soil.
15. Temporary roads and landings will be subsoiled to a depth of 18 inches (minimum). To prevent re-compacting of the treated roadways and landings, no ground-based equipment will be operated on subsoiled portions of roads and landings after subsoiling is completed. Crossdrains or water bars will be installed every 150 feet or more frequently where slopes exceed 5%. Available logging slash will be placed across the subsoiled skid trail/landing surface. (Acceptable grass seed mix; a qualified specialist will specify type of weed free mulch; and application rates). Subsequent vehicular access to these areas will be prevented.
16. To help prevent the introduction and spread of new species of noxious weeds into the planning area, the contractor will be required to ensure that all logging equipment (harvesters, skidders, excavators) moved onto National Forest land is free of soil, seeds, vegetative matter, or other debris that could hold or contain seeds. All equipment that will be cleaned prior to entry onto National Forest lands, and ensured free of soil, seeds, vegetative matter, or other debris that could hold or contain seeds.
17. The 8040 road (lower 1/3 mile) will be surface bladed and brushed prior to log haul. No reconstruction is needed.

EFFECTS ANALYSIS SUMMARIES

Aquatics and Fisheries

There are no aquatic features within the project area. Wicky Creek is about 0.2 miles from the western project boundary. The project Fisheries Biologist has determined that there will be no effect to aquatic resources from this action.

Wildlife

The project **may affect but is not likely to affect** spotted owls. However, since the project would remove spotted owl habitat within a Critical Habitat Unit (WA-42), it was determined that the project **is likely to adversely affect** spotted owl Critical Habitat. During formal consultation, the U.S. Fish and Wildlife Service found that the habitat conditions within the critical habitat unit would continue to function as intended, and that there would not be an appreciable reduction in the capability of the critical habitat to provide the intended conservation and recovery role for the species. In addition, direct, indirect, and cumulative effects resulting from the action would not diminish the value or function of the critical habitat within the subprovince or province to maintain a stable, self-sustaining, and interconnected population of spotted owls.

There would be **no effects or impacts** to any other federally listed species or Regional Forester's listed Sensitive species. The Forest Plan standards for cavity excavators would be met or exceeded, and there would be no impacts to other Management Indicator Species.

Botany

The only federally listed plant species on the Mount Adams District is water Howellia (*Howellia aquatilis*). There is no habitat present in the project area, therefore there will be **no effect** to this species from the proposed action.

The determination of **no impact** stands for all Sensitive vascular plants and bryophyte species for which potentially suitable habitat in the project area was noted as part of the Pre-Field Review above. None of these species were found in the area.

Thinning will not occur within or near riparian habitats. Thirteen Sensitive fungi species and one lichen species (*Chaenotheca subroscida*) fall into the “**may impact individuals, but will not lead to a trend toward federal listing**” determination. Some of these species are considered “survey impractical”; others do not have habitat within the project area. For analysis purposes, it is assumed that those species considered “survey impractical” are present in the project area. Because the project scope and area is small, there will be very limited impact upon suitable habitat. As a result, the project was determined to have the potential to impact individuals and habitat, but project actions are not likely to contribute to a trend towards federal listing, or cause a loss of population or species viability for these Sensitive species.

The project area is dominated by upland grand fir forest habitat. There are no riparian influences in the stand. This habitat may be suitable for the Survey and Manage species *Cypripedium montanum*. The project area was surveyed for this species June 20, August 1, 16 and 17, 2002. No Survey and Manage species were found.

Heritage

There are no impacts to resources of cultural or historical significance within the project area.

PUBLIC INVOLVEMENT

A proposal to thin approximately 47 acres within this area was sent to 44 members of the public, other agencies, the Yakama Indian Nation for comment during the scoping period that was initiated on August 21, 2005. The proposal was listed in the Schedule of Proposed Actions for the Gifford Pinchot National Forest as of October, 2005.

Though this action may be categorically excluded, pursuant to the September 16, 2005, order issued by the U. S. District Court for the Eastern District of California in Case No. CIV F-03-6386JKS (*Earth Island, et al. v Ruthenbeck*) the proposal was issued for a formal 30-day public comment period beginning on November 21, 2006. Substantive comments were received from two sources. No significant issues were raised through public or internal scoping, therefore no alternatives to the proposed action were developed. The original project proposal was modified by dropping the following associated actions:

- Hazard tree removal along forest roads 8225 and 8040.

Instead, the following associated actions will be implemented, as funding allows:

1. Monies received from the sale of the timber will be retained and applied to accomplish the following stewardship projects:
 - Underplanting conifers within the unit.
 - Decommissioning roads- FR 4107507 (1.1 miles), FR 4104573 (1.9 miles), FR 4211539 (3.7 miles), FR 4211541 (1.8 miles), FR 4207 (1.2 miles)

A summary of public comments and Forest Service responses is provided as Appendix A to this decision.

CATEGORICAL EXCLUSION

Based on a preliminary assessment and the results of public scoping, this proposal falls within a category of actions listed in the Forest Service NEPA Handbook (FSH) that are excluded from documentation in an environmental assessment or environmental impact statement and there are no extraordinary circumstances that would preclude use of the category. (FSH 1909.15, Chapter 30, Section 31.2, Category 13: “Harvest of live trees not to exceed 70 acres, requiring no more than ½ mile of temporary road construction”).

DECISION

I have considered the purpose and need, the project design criteria, the effects analysis, and public comments and I have decided to approve the Gotchen LSR Thinning project, including the specific actions and the Project Design Features described above.

Categorical exclusion is appropriate to this proposed action because there no significant issues were identified that would result in the development of alternatives to the proposed action. Additionally, there are no extraordinary circumstances potentially having effects which may significantly affect the human environment. Specifically, I considered and determined that the potential for adverse effects on the following resource conditions do not preclude the proposed action from implementation.

Federally listed threatened or endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or Forest Service sensitive species: This project may affect, but is not likely to adversely affect northern spotted owls. The US Fish and Wildlife Service concurred with this determination (letter dated May 24, 2007). This project would have no effect on other listed wildlife, fish, or plant species or designated critical habitat. I find that the nature of the action (thinning) is such that there is no potential for significant adverse effect to federally listed wildlife, fish, or plant species or designated critical habitat, or on species or critical habitat proposed for listing.

Floodplains, wetlands, or municipal watersheds: This project is not located within a floodplain or a municipal watershed. There are no wetlands in the vicinity of the project area. Through these actions I find that there is no potential for significant effects to wetlands.

Congressionally designated areas, inventoried roadless areas, research natural areas: There are no such areas in or affected by the Gotchen LSR Thinning project. I find that there is no potential for significant effects to these areas.

American Indian and Alaska Native religious or cultural sites: There are no known religious or cultural sites within the project area. Scoping was conducted with the Yakima Nation. No comments were received. I find that there would be no effect to culturally significant areas from actions associated with the Gotchen LSR Thinning project.

Archaeological sites, or historic properties or areas: There are no known sites within the project area.

I have determined that this project and its expected effects are consistent with the project proposal that was approved through Title II of the Secure Rural Schools and Community Self-Determination Act and recommended for partial funding by the Gifford Pinchot South Resource Advisory Committee (RAC).

The objectives to reduce the stand density by thinning, accelerate late-successional habitat development (faster growing trees), and begin a multiple layered stand by planting shade tolerant species (western hemlock, western red cedar) after treatment ,and to create employment opportunities within Skamania County would be met. My decision to approve and fund this project stands.

FINDING OF CONSISTENCY WITH NATIONAL FOREST MANAGEMENT ACT _____

I find that this decision is consistent with the National Forest Management Act. The project was designed in conformance with forest plan standards and guidelines for the *Gifford Pinchot National Forest Land and Resource Management Plan* as amended by the Northwest Forest Plan. I find that there will be no irreversible or irretrievable commitment of resources from implementation of this project.

This decision is based on the following additional factors to assure consistency with the National Forest Management Act of 1976:

This action is best suited to the goals in the LRMP. The applicable goals with respect to the LRMP are acknowledged in the Management Direction section of this decision (pp. 2 and 3).I find that this decision is responsive to those goals and is best suited to meet those goals.

Lands can be adequately restocked within five years after final harvest when trees are cut to achieve timber production.

Restocking is not applicable; the area treated will remain fully stocked after treatment as described in the silvicultural prescription. All treatments are commercial or pre-commercial thinning.

This decision is not based on the greatest dollar return or the greatest output of timber (although these factors shall be considered). This decision was based on a variety of reasons stated in the Purpose and Need section of this decision, p. 2. It was not primarily chosen for its expected economic benefit.

Potential effects on residual trees and adjacent stands have been considered. The effects on residual trees and adjacent stands were considered in development of the LRMP. The decision, including adherence to applicable LRMP Standards and Guidelines and the Project Design Criteria , is designed to provide the desired effects of management practices on the resource values. This decision is consistent with the LRMP and provides the desired effect on residual trees and adjacent stands.

This action was selected to avoid permanent impairment of site productivity and to ensure conservation of soil and water resources. This decision avoids impairment of site productivity. The nature of the decision and use of Best Management Practices, Project Design Criteria, and the Mitigation Measures will protect soil and water resources.

This action was selected to provide the desired effects on water quality and quantity, wildlife and fish habitat, regeneration of desired tree species, forage production, recreation users, aesthetic values, and other resource yields. The decision, including adherence to applicable LRMP Standards and Guidelines, Best Management Practices, Project Design Criteria, and the Mitigation Measures is designed to provide the desired effects of management practices on the resource values. This decision is consistent with the LRMP and provides the desired effect on the above resources.

This action is practical in terms of transportation and harvesting requirements and total costs of preparation, logging, and administration. The project area has adequate access; no new permanent roads are necessary to implement this decision. The treatment in this decision is appropriate to accomplish project objectives, and is economically practical. The benefit-to-cost ratio is positive, considering the cost

of harvest operations, design criteria, and mitigation. The return is sufficient to cover the cost of contract preparation and sale administration.

I find that this action is consistent with the *Record of Decision (ROD) for Invasive Plant Program - Preventing and Managing Invasive Plants within the Pacific Northwest Region (PNW)*. Specific mitigation is included by this decision to prevent or control the spread of noxious weeds within the project area and along roads.

Aquatic Conservation Strategy.

On March 30, 2007, District Court, Western District of Washington adopted in part the Magistrate Judge's adverse report and recommendation in *Pacific Coast Federation of Fisheries's Associations v. National Marine Fisheries Service*, No. 04-1299-RSM (W.D. Wa.) [Amendment of Aquatic Conservation Strategy (ACS), Northwest Forest Plan]. This ruling set aside the amendment of the ACS that was adopted in March 2004. The effect of which is to ensure that projects are designed so that they do not retard or prevent attainment of Aquatic Conservation Strategy Objectives (ASCOs) at the project scale, as per the 1994 Record of Decision (USDA 1994, p. B-9 through B-11). The ASCOs are addressed in the analysis of this project as follows:

1. *Maintain and restore the distribution, diversity, and complexity of watershed and landscape scale features to ensure protection of the aquatic systems to which species, populations and communities are uniquely adapted.* Project design criteria have been developed to ensure that watershed and landscape scale features are not diminished by this action. This project is intended to restore habitat conditions at a small scale. These conditions once existed across the broader landscape.
2. *Maintain and restore temporal connectivity within and between watersheds...* This action will not affect Riparian Reserves and therefore will not disrupt migration corridors or affect refugia.
3. *Maintain and restore the physical integrity of the aquatic system, including shorelines, banks, and bottom conditions.* There are no stream channels or aquatic features within the project area.
4. *Maintain and restore water quality necessary to support healthy riparian, aquatic, and wetland ecosystems...* The nearest aquatic feature is 0.2 miles from the project area. Design Criteria 14 and 15 are specified to maintain water quality.
5. *Maintain and restore the sediment regime under which ecosystems evolved.* The Design Criteria cited in ASCO 4 are primarily designed to address the potential for sediment delivery to streams from this action.
6. *Maintain and restore in-stream flows ...* Due to the distance to aquatic features, the limited area subject to treatment, and the thinning prescription, this action would have no effect to in-stream flows.
7. *Maintain and restore the timing, variability, and duration of floodplain inundation and water table elevation in meadows and wetlands.* There are no floodplains, wetlands, or meadows in the vicinity of the project or that would be affected by project activities.
8. *Maintain and restore the species composition and structural diversity of plant communities in riparian areas and wetlands...* Species composition and structural diversity within riparian areas and wetlands will not be affected by this action.

9. *Maintain and restore habitat to support well-distributed populations of native plant, invertebrate, and vertebrate riparian-dependent species.* Thinning will not occur within or near riparian habitats. Thirteen Sensitive fungi species and one lichen species (*Chaenotheca subroscida*) fall into the “ May Impact...” determination. These species are considered “survey impractical” and therefore it is unknown whether they are present in the project area. For analysis purposes, it is assumed that these species are present in the project area. Because the project scope and area is small, there will be very limited impact upon suitable habitat.

FINDINGS REQUIRED BY LAW

I find that this action is consistent with the Endangered Species Act of 1973. For Threatened and Endangered terrestrial species, this action *may affect, and is not likely to adversely affect* northern spotted owls and it *may affect is likely to adversely affect* spotted owl critical habitat.. The US Fish and Wildlife Service has issued a Biological Opinion (dated May 24, 2007). For Threatened and Endangered aquatic species, designated critical habitat, or Essential Fish Habitat, it is determined that there would be *no effect* from this project. This project *may impact individuals or habitat/not likely contribute to a trend towards Federal listing or loss of viability to individual or species* for 14 plant species that are listed on the R6 Regional Forester’s Sensitive species list (“survey impractical”). No consultation is required.

I find that all applicable state and federal requirements associated with the Clean Water Act (CWA) will be met through planning, application, and monitoring of BMP’s in conformance with provisions of the CWA, Federal guidance and management direction.

There are no impacts to resources of cultural or historical significance therefore I find that this action is consistent with the National Historic Preservation Act.

I find that this action does not violate other Federal, State, or local laws designed for the protection of the environment.

ADMINISTRATIVE REVIEW OR APPEAL OPPORTUNITIES

This decision is subject to administrative review (appeal) pursuant to 36 CFR Part 215 (revised, June 2004). The written appeal must be filed (regular mail, fax, email, hand-delivery, or express delivery) with the Appeal Deciding Officer at:

Pacific Northwest Region
Appeal Deciding Officer
PO Box 3623, 333 SW First Avenue
Portland, Oregon 97208-3623

email: appeals-pacificnorthwest@fs.fed.us.

The office business hours for those submitting hand-delivered appeals are: 8:00 AM to 4:30 PM Monday through Friday, excluding federal holidays. Electronic appeals must be submitted in a format such as an email message, plain text (.txt), rich text format (.rtf), Word (.doc), or portable document format (.pdf). 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. 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.

Appeals, including attachments, must be filed within 45 days from the publication date of this notice in the *Columbian*, the newspaper of record. Attachments received after the 45 day appeal period will not be considered. The publication date in the *Columbian* 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.

IMPLEMENTATION DATE _____

If no appeals are filed within the 45-day time period, implementation of the decision may occur on, but not before, 5 business days from the close of the appeal filing period. When appeals are filed, implementation may occur on, but not before, the 15th business day following the date of the last appeal disposition.

CONTACT INFORMATION _____

For additional information concerning this decision or the Forest Service appeal process, contact:

Bruce Holmson
Gotchen LSR Thinning Project Leader
Mt. Adams Ranger District
2455 Hwy 141
Trout Lake, WA 98650
bholmson@fs.fed.us
509-395-3390

Recommended:

___/s/ Nancy Ryke_____

NANCY RYKE
District Ranger

Date

Approved:

___/s/ Lynn Burditt for_____

CLAIRE LAVENDEL
Forest Supervisor

Date

REFERENCES

- Camp, W.H., 1942. A Survey of the American Species of *Vaccinitum* subgenus *Euvaccinium*. *Brittonia* 4(2): P 205
- Crane, M. F.; Habeck, James R.; Fischer, William C. 1983. Early postfire revegetation in a western Montana Douglas-fir forest. Res. Pap. INT-319. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station. 29 p.
- Curtis, Robert O., 1982. A Simple Index of Stand Density for Douglas-fir. *Forest Science*, Vol. 28, no. 1, pp. 92-94.
- Donnelly, Steve. 1993. Spring burning by habitat type in relation to artificial restoration. McCall, ID: U.S. Department of Agriculture, Forest Service, Intermountain Region, Payette National Forest. 19 p.
- Doyle, Kathleen M.; Knight, Dennis H.; Taylor, Dale L.; [and others]. 1998. Seventeen years of forest succession following the Waterfalls Canyon Fire in Grand Teton National Park, Wyoming. *International Journal of Wildland Fire*. 8(1): 45-55.
- Martin, Patricia A. E. 1979. Productivity and taxonomy of the *Vaccinium globulare*, *V. membranaceum* complex in western Montana. Missoula, MT: University of Montana. 136 p. Thesis.
- Mellen, Kim, Bruce G. Marcot, Janet L. Ohmann, Karen Waddell, Susan A. Livingston, Elizabeth A. Willhite, Bruce B. Hostetler, Catherine Ogden, and Tina Dreisbach. 2006. DecAID, the decayed wood advisor for managing snags, partially dead trees, and down wood for biodiversity in forests of Washington and Oregon. Version 2.0. USDA Forest Service, Pacific Northwest Region and Pacific Northwest Research Station; USDI Fish and Wildlife Service, Oregon State Office; Portland, Oregon.
- Miller, Melanie. 1976. Shrub sprouting response to fire in a Douglas-fir/western larch ecosystem. Missoula, MT: University of Montana. 124 p. Thesis.
- Miller, Melanie. 1977. Response of blue huckleberry to prescribed fires in a western Montana larch-fir forest. Gen. Tech. Rep. INT-188. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station. 33 p.
- Minore, Don. 1975. Observations of the Rhizomes and Roots of *Vaccinium membranaceum*. USDA.
- Minore, Don; Dubrasich, Michael E. 1978. Big huckleberry abundance as related to environment and associated vegetation near Mount Adams, Washington. Research Note PNW-322. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Forest and Range Experiment Station. 8 p.
- Minore, Don, and Alan W. Smart. 1978. Frost Tolerance in Seedlings of *Vaccinium membranaceum*, *Vaccinium globulare*, and *Vaccinium deliciosum*. *Northwest Sci.* 52(3):179
- Minore, et. al. 1979. Huckleberry Ecology and Management Research in the Pacific Northwest. USDA
- Neiland, Bonita J., 1958. Forest and Adjacent Burn in the Tillamook Burn Area of Northwestern Oregon. *Ecology* 39(4): p. 660
- Norton, Helen H.; Boyd, Robert; Hunn, Eugene. 1999. The Klikitat Trail of south-central Washington: A reconstruction of seasonally used resource sites. In: Boyd, Robert, ed. *Indians, fire, and the land in the Pacific Northwest*. Corvallis, OR: Oregon State University: 65-93.
- Oswald, E. T.; Brown, B. N. 1993. Vegetation development on skid trails and burned sites in southeastern British Columbia. *Forestry Chronicle*. 69(1): 75-80.
- Reichert, Chris. 1989. Silviculture in grizzly bear habitat. In: *Silviculture for all resources: Proceedings of*

- the national silviculture workshop; 1987 May 11-14; Sacramento, CA. Washington, DC: U.S. Department of Agriculture, Forest Service: 48-60.
- Steele, Robert W.; Stark, Nellie. 1977. Understory burning in larch/Douglas-fir forests as a management tool. *Western Wildlands*. 4(1): 25-29.
- Steele, Robert; Geier-Hayes, Kathleen. 1991. Monitoring the effects of postfire grass seeding on the Lowman Burn. Unpublished first year progress report. 4 p. On file with: U.S. Department of Agriculture, Forest Service, Intermountain Research Station, Fire Sciences Laboratory, Missoula, MT.
- Stickney, Peter F. 1986. First decade plant succession following the Sundance Forest Fire, northern Idaho. Gen. Tech. Rep. INT-197. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station. 26 p.
- USDA Forest Service, USDI Bureau of Land Management. 1999. Draft Supplemental Environmental Impact Statement for Amendment to the Survey and Manage, Protection Buffer, and Other Mitigating Measures Standards and Guidelines. 491p.
- USDA-Forest Service and USDI-Bureau of Land Management. 1994. Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl and Standard and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl. Pacific Northwest Region. Portland, OR.
- USDA-Forest Service. 1990. Land and Resource Management Plan Gifford Pinchot National Forest. Vancouver, WA.
- USDA-Forest Service. 2000. Gifford Pinchot National Forest Rock Creek Watershed Analysis. Mt. Adams RD. Gifford Pinchot National Forest. Trout Lake, WA.