DECISION NOTICE AND
FINDING OF NO SIGNIFICANT IMPACT

Clear Creek Roads Project

Decision Notice #1
Muddy River and Upper Lewis River Watersheds

USDA FOREST SERVICE
GIFFORD PINCHOT NATIONAL FOREST
MOUNT ST. HELENS NATIONAL VOLCANIC MONUMENT
SKAMANIA COUNTY, WASHINGTON
T. 7N, R. 6E, Sections 1, 2, 12-14, 23, 24; T. 7N R. 7E, Sections 5-7, 29; T. 8N, R. 6E, Sections 13, 24, 34-36; T. 8N, R. 7E, Sections 5, 8-10, 17-19, 32; T. 9N, R. 7E, Sections 21, 32

BACKGROUND

The creation of the USDA Forest Service's Pacific Northwest Region Aquatic Restoration Strategy (Strategy) in March 2005 resulted in a basin-wide approach to restoration activities. This Strategy uses a basin-scale restoration prioritization process to identify basins that area a "high" priority for restoration. Through this process, the Lower Columbia River Basin was identified as a high priority basin. The Gifford Pinchot National Forest (Forest) has several watersheds that contribute to the lower Columbia River basin, thus 3 priority watersheds were selected in conjunction with partners in an effort generate funding and mechanisms to address the Strategy. One of these top three watersheds is the upper Lewis River subbasin, which specifically includes the Muddy River watershed (USDA 2008).

In order to increase active restoration activities within the upper Lewis River subbasin, the Gifford Pinchot National Forest began development of the Clear Creek Roads Project in fiscal year 2007. The intent of this project was to execute the Gifford Pinchot National Forest Restoration Plan (USDA 2008) by analyzing and documenting the effects associated with road decommissions, road closure and stabilizations, and fish passage barrier culvert removals in the upper Lewis River subbasin. In an effort to improve efficiency for these types of project, one road outside of the Lewis River subbasin was included in the analysis to ensure all upcoming access management changes on the south-end of the Forest received the same level of analysis and scrutiny prior to implementation. This road will be included in a separate decision.

Roads originally recommended for inclusion in the Clear Creek Roads Project came from a variety of sources including:

- The Gifford Pinchot National Forest Roads Analysis (USDA 2002).
- Gifford Pinchot National Forest Restoration Plan (USDA 2008).
- Clark-Skamania Flyfishers (2006).
- Oregon Grotto (Chapter) of the National Speleological Society (2006).

A project-level roads analysis was completed as part of this project and is tiered to the Forest Roads Analysis, which was completed in 2002 as an update to the 1994 Access and Travel Management (ATM) Plan for Forest Roads. The Forest Roads Analysis provided road management recommendations based on three major factors regarding roads: access needs, aquatic ecosystem risks, and terrestrial ecosystem risks. In consideration of the ratings for each of the three factors and, in some cases, the current road management, each road was then assigned a recommendation for future road management and a relative priority for road maintenance or other activity to address potential environmental impacts. The recommendations ranged from keeping a road open and maintained for passenger cars to decommissioning the road (removing it from the road system). These recommendations were not decisions. Instead, they were intended to help identify opportunities and priorities for road management during site-specific roads analysis for individual projects.

This project-level analysis was completed in April 2007 by members of an interdisciplinary team to verify or change existing recommendations. This analysis was similar to the Forest Roads Analysis in that it included a review of access needs, aquatic ecosystem risks, and terrestrial ecosystem risks, but this project-level analysis differed in that it included analysis of some non-system roads, a more comprehensive review of internal databases, and actual site visits. Access needs were determined based on future needs for vegetation management (including input from internal departments such as silviculture, pre-sale, and the timber stand improvement (TSI)/stewardship coordinators), fire prevention and suppression, forest administration, recreation, and other public uses, and private easements and rights-of-way. Aquatic ecosystem risks were determined through field review based on water quality impacts of road surface erosion, stream-crossing culvert conditions, the potential for mass wasting related to road failure, stream channel processes and habitat conditions related to stream crossings and roads within Riparian Reserves, and fish passage barriers. Terrestrial ecosystem risks were based on the proximity to big game winter range, proximity of roads to special or unique habitats, and the proximity of roads to threatened and endangered or other protected wildlife species.

The final recommendations for this analysis can be found in Appendix 1 to the EA.

Purpose and Need

The purpose of this restoration project is both aquatic and terrestrial in nature. The aquatic purpose is to improve fish habitat for bull trout and to prepare for eventual re-establishment of anadromous fish in the Lewis River above Swift Reservoir dam. The terrestrial purpose is to improve wildlife habitat and reduce the introduction of noxious weeds and trash in the upper Lewis River subbasin. Additionally, this project will reduce the financial burden sustained by the Forest Service for system roads that have not been properly maintained due to lack of funding. Some or these roads pose tremendous risk to aquatic habitat and are now in need or major repair rather than simple annual maintenance.

The presence of roads has the potential to negatively impact aquatic and wildlife habitat depending on location and road surface condition. Hillslope runoff and sediment transport can be unnaturally increased to streams and rivers from roads, which impacts aquatic and riparian habitat and watershed health. Additionally, roads into sensitive riparian areas allow easy access for the public to erode soil, disturb riparian vegetation, deposit garbage at unsanctioned,

dispersed campsites, and degrade fish habitat. There is also a need to reduce road density in elk and deer winter range, and reduce unauthorized motorized use on user-created roads, which has resulted in the spread of noxious weeds and the accumulation of trash and resource damage at dispersed campsites. There is a need to prevent vehicular access into the riparian areas adjacent to the Muddy River and Clear Creek. Historical use of official forest roads (system) and non-maintained roads (user-created or non-system) has resulted in safety issues and resource damage.

This project would reduce sub-basin road densities, which were found to be high in the Muddy River Watershed Analysis. This project would decommission roads in four out of the 11 high priority sub-basins and in five lower priority sub-basins identified in the Muddy River Watershed Analysis.

DECISION

Based upon my review of the analysis and alternatives, I have decided to implement Alternative 2, the proposed action, from the Clear Creek Roads EA with two exceptions. This decision includes all of the roads described in the EA, except for Forest Service Road 8800717 which will be included in a separate decision document because it is located on the Mt. Adams Ranger District and FSR 9039350 which after further analysis does not need closure at this time.

This decision treats a total of about 20 miles of system road and 1.5 miles of user-created roads on the Gifford Pinchot National Forest in southwest Washington. Approximately 18.7 miles of road will be decommissioned in this decision, including 17.2 miles of system roads and 1.5 miles of non-system or user-created roads.

Road decommissioning will include treating the road surface to restore hydrologic connectivity and function by employing one or more of the following design features:

- Restore natural surface flow by removing all culverts, outsloping road surface, and creating cross drains;
- Decompaction of road surface to allow infiltration;
- Block vehicular access by constructing a berm to reduce road use and enable vegetation establishment; and,
- Seed, mulch, and fertilize to enable vegetation establishment and to minimize erosion and sediment transport to streams.

Additionally, the last 1.4 miles of FSR 9039620 will be closed year-round and a gate will be installed to restrict vehicular traffic. This gate is intended to reduce road use, which will reduce the harassment to wildlife, reduce the introduction of garbage into riparian areas, and reduce sediment delivery to streams from under-maintained roads.

Through this project, the access and maintenance of these roads will be changed to one of three levels of road management:

- Gated – Open to authorized vehicle travel only.
- Close & Stabilize – Closed to all vehicular travel, but could be reopened in the future.
- Decommission – Closed to all vehicular travel and not available for future use.

These roads, their locations, and the specific action for each road are listed in Table 1 below.

Table 1. Details of Proposed Action by Road Number

Road Number	Begin Mile Post	End Mile Post	Length (miles)	Action as part of this decision	Current Management[1]	Recommended Management[2]
Forest System Roads						
2500840	0.0	1.0	1.0	Decommission	CD	DE
2500846	0.0	0.2	0.2	Decommission	CD	DE
2500910	0.4	0.6	0.2	Decommission	OH	CS
2500970	0.0	0.5	0.5	Decommission	CD	CS
2559100	1.4	2.4	1.0	Decommission	SO	SO
2559103	0.0	0.7	0.7	Decommission	SO	DE
2573460	0.0	0.9	0.9	Decommission	OH	DE
2573464	0.0	0.3	0.3	Decommission	CN	CS
2575000	1.67	3.9	2.23	Decommission	OH	DE
2575050	0.0	0.5	0.5	Decommission	CN	DE
2575056	0.0	0.3	0.3	Decommission	CN	DE
2575200	0.0	0.9	0.9	Decommission	CN	DE
2586000	1.5	3.2	1.7	Decommission[3]	OH	SO
9039250	0.0	0.4	0.4	Decommission	CD	None
9039620	1.31	2.70	1.39	Close with year-round gate	CD	DE
9300150	0.0	3.6	3.6	Decommission	CD	DE
9300151	0.0	0.4	0.4	Decommission	CD	DE
9300153	0.0	0.2	0.2	Decommission	CD	CS
9300154	0.0	0.2	0.2	Decommission	CD	DE
9300157	0.0	0.1	0.1	Decommission	CD	DE
9325080	0.0	0.6	0.6	Decommission	OH	DE
9325000	1.88	3.2	1.32	Decommission	OH	OH
Unauthorized User-Created Roads						
9300cb	0.0	0.15	0.15	Decommission	N/A	N/A
9300g	0.0	0.5	0.5	Decommission	N/A	N/A
9300picinic	0.0	0.62	0.62	Decommission	N/A	N/A

[1] Management levels found in the 1994 Gifford Pinchot National Forest Access and Travel Management Plan; CD = Closed with Device, CN = Closing Naturally, DE = Decommissioned, OH = Maintained for High-Clearance Vehicles, and SO = Seasonally Open.

[2] Recommended management levels found in 2002 Gifford Pinchot Roads Analysis; CS = Closed and stabilized, DE = Decommission, OH = Open to high-clearance vehicles, SO = Seasonally open, None = No recommendation given.

[3] FSR 2586000 would be decommissioned, but a footbed would be left in place for walk-in access.

Changes to the Proposed Action in Response to Significant Issues

- During scoping, it was determined that Forest Service Road 2586 has been historically used as a walk-in hunting area. Instead of decommissioning this road completely and making it inaccessible, the decision is to leave a footbed on the road for walk-in access.
- Forest Service recreational staff recommended leaving a parking spot at the top of user-created 9300g instead of eliminating all access on this road because it is a popular recreational location for dispersed camping. This parking spot will reduce safety hazards associated with vehicles parked on a road with heavy traffic (Forest Service Road 9300).
- The original proposal was to completely decommission Forest Service Road 2500910 which would have included 0.6 miles. It was proposed for decommissioning because of safety; it is a steep road in poor condition and there is no safe way to turn around. The decision instead is to only decommission the last 0.2 miles where the turn-around is a safety issue and resource damage is occurring. Changing the proposed action in this way still allows for stream access and dispersed camping.
- In the original proposal, the currently existing gate at the beginning of Forest Service Road 9039620 would have been closed year-round, rather than the shorter seasonal-restriction that is currently in place to reduce harassment of deer and elk during the winter months. Since the first mile of this road provides numerous recreational camping opportunities, the proposed action was changed to closing only the last 1.4 miles of the road to allow for more access.
- Also, Forest Service Road 9325000 was originally proposed for closure starting at milepost 1.4 and was changed to milepost 1.9 to provide a recreational viewpoint yet still address resource concerns.
- In addition to the above changes, the road decommissions are intended to specifically limit vehicular access, thus decommission designs will intentionally leave walk-in accessibility for human and/or animal use.

A list of design features and mitigation measures included as part of this decision are listed in Appendix A.

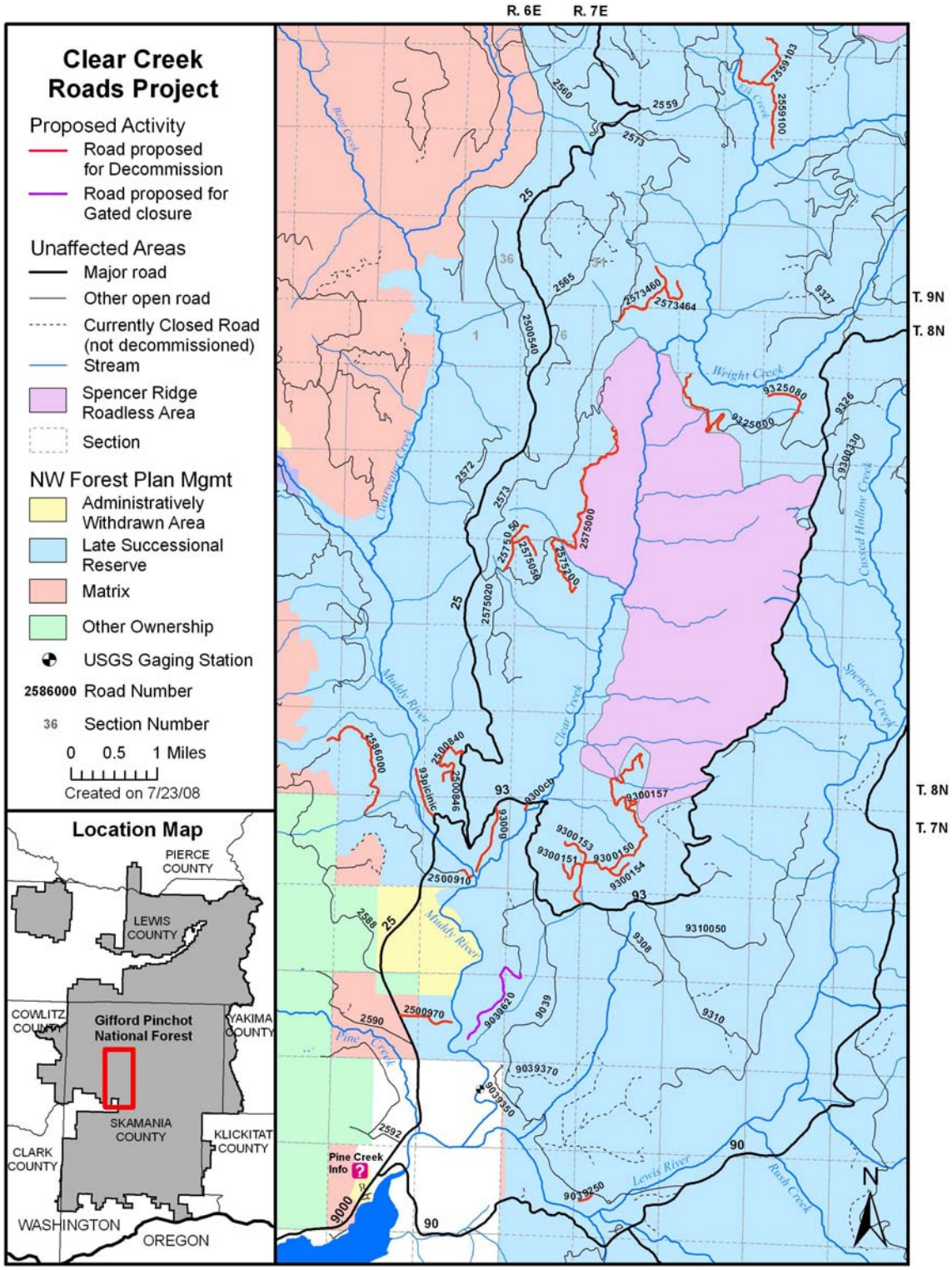

Figure 1. Location and Extent of Actions Included in the Decision.

Other Alternatives Considered

In addition to the proposed action, I considered a no action alternative.

Alternative 1: No Action
Under the No Action alternative, current management plans would continue to guide management of the project area. No system or user-created roads would be closed or decommissioned. Surface flow would not be restored because no culverts would be removed, road surfaces would not be outsloped, nor would cross drains be created. Road surfaces would remain compacted. No berms would be put in place to reduce road use and roads would not be seeded, mulched or fertilized to enable vegetation establishment and to minimize erosion and sediment transport to streams. Water quality concerns would continue from existing sediment delivery from roads in the project area and wildlife harassment would continue due to vehicular disturbance in the project area.

I did not select this alternative because it would not address resource damage associated with roads adjacent to riparian areas. It would not meet the purpose and need of improving fish habitat for bull trout or improve wildlife habitat and reduce the introduction of noxious weeds and trash in the upper Lewis River subbasin watershed. It would not reduce the number of Forest System roads that have not been properly maintained due to lack of funding and their maintenance needs would continue to escalate.

Additionally, it would not reduce the number of roads that lead into sensitive riparian areas such as the Muddy River and Clear Creek. It would not restore user-created roads and safety issues and resource damage would continue. And, finally, it would not reduce sub-basin road densities, which were found to be high in the Muddy River Watershed Analysis.

Alternatives Considered but Eliminated from Detailed Study

Allowing for More Recreational Access/ Dispersed Camping

Based on the significant issues identified, the team considered analyzing an alternative that allowed for more recreational access and had less impact on dispersed camping. The team discussed individual roads that could receive a different treatment and determined that only a few roads or portions of roads were identified that could be altered in the proposed action to allow for more recreational access and still meet the purpose and need for resource protection. The specific changes to the proposed action included:

- Leaving ½ mile of Forest Service Road 9300150 open for dispersed camping;
- Leaving ¼ mile of user-created road 9300picnic open for a camping/ parking area.
- Several other options that were eventually included in the proposed action (see the section on “Changes to the Proposed Action in Response to Significant Issue #1” above).

After much consideration, the responsible officials felt that many concessions were incorporated into the proposed action that allowed for more dispersed camping and recreational access and that leaving portions of Forest Service Road 9300150 and user-created road 9300picnic would not meet the intent of the restoration project.

Decommissioning Forest Road 9327
During the scoping period, one individual suggested decommissioning Forest Road 9327 and all adjoining spur roads. This road was not carried forward either in the proposed action or as a separate alternative because of its location; it is in a different subwatershed and was not surveyed with the rest of the roads included in the proposed action. This road may be included in future road decommissioning efforts. There is one road included that is also in another subwatershed (Forest Service Road 8800-717); however, that is a road that had existing survey data complete and is in immediate need of closure so an early decision was made to include it in this analysis.

PUBLIC INVOLVEMENT

The proposal was listed in the Schedule of Proposed Actions on July 1, 2007. The proposal was provided to the public and other agencies for comment during scoping starting on June 13, 2007. In addition, as part of the public involvement process, the agency circulated a news release on June 15, 2007. Ten letters or emails were received during the scoping period. Using the comments from the public and other agencies, the interdisciplinary team developed a list of issues to address. A story was also published about the project in *The Columbian* on June 25, 2007 entitled, "Fund shortage may cause closure of forest roads" by Erik Robinson.

A legal notice was published in the *Columbian* newspaper, notifying all interested publics of the availability of the preliminary EA and the start of the 30-day comment period. A letter with this information was sent to the Forest mailing list The Forest received 4 comment letters or emails in response. Responses to each of the comments is included as part of Appendix 2 of the EA.

FINDING OF NO SIGNIFICANT IMPACT

After considering the environmental effects described in the EA, I have determined that these actions will not have a significant effect on the quality of the human environment considering the context and intensity of impacts (40 CFR 1508.27). Thus, an environmental impact statement will not be prepared. Significantly as used in NEPA requires considerations of both context and intensity. I base my finding on the following:

1. Beneficial and Adverse Impacts: Adverse and beneficial impacts have been assessed and found to be not significant. The analysis considered not only the direct and indirect effects of the projects but also their contribution to cumulative effects (EA, Hydrology/Soils, pages 18-27; Fisheries, pages 28-33; Wildlife, pages 33-43; Social Impacts/Recreation, page 44; and Botanical Species/Noxious Weeds, pages 45-47). Adverse effects from the proposed action have been reduced or eliminated through project design and mitigation measures (EA, pages 11-16). My finding of no significant environmental effects is not biased by the beneficial effects of the action. Past, present and foreseeable future actions have been included in the analysis. No significant cumulative or secondary effects were identified.

2. Degree to which the action affects pubic health or safety: The project will not have a significant effect on public health or safety. No public health and safety issues were raised

during scoping. There is no history of public safety concerns with road closure or road decommissioning projects on the Forest.

3. Unique characteristics of the geographic area: I find there will be no significant effects on unique characteristics or ecologically critical areas, including historic or cultural resources, park lands, prime farmlands, rangelands, wetlands, or wild and scenic rivers. There are no park lands, farmlands, or rangelands within the planning area. The proposed project has been designed to avoid impacts to two identified cultural sites. With the successful implementation of mitigation measures, there would be no immediate direct or indirect effects on heritage resources (EA, page 48).

4. The degree to which the effects on the quality of the human environment are likely to be controversial: The effects on the quality of the human environment are not likely to be highly controversial. The analysis completed and comments received did not identify any significant controversy or disagreement concerning effects of the decision on the quality of the human environment.

5. The degree to which the possible effects are highly uncertain or involve unique or unknown risks: The effects of this project are not highly uncertain, and do not involve unique, or unknown risks. The restoration actions included with the decision are routine restoration projects that have been implemented by the Forest Service over time.

6. The degree to which the action may establish a precedent for future actions with significant effects: I find that implementing the restoration actions are one of several similar actions undertaken on National Forest System lands and the decision is not likely to establish a precedent for future actions with significant effects, or represent a decision in principle about a future consideration.

7. Whether the action is related to other actions with signficant impacts: A cumulative effects section was documented for each resource which evaluated the effects of this project in combination with the effects of other projects that overlapped in space and time. I find that the cumulative impacts are not significant. Cumulative impacts are addressed by issue in the Environmental Consequences secion of the EA (EA, Hydrology/Soils, pages 20, 23-27; Fisheres, page 31; Wildlife, pages 36, 38-41, 43; Social Impacts/Recreation, page 45; Botany, page 45, 46).

8. The degree to which the action may adversely affect or cause loss or desctruction of sites or objects associated with the National Register of Historic Places: I find that the action will have no significant adverse effect on districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places. None of the actions associated with the decision will cause loss or destruction of significant scientific, cultural or historical resources (EA, page 48; Heritage Resource Report). Consultation with the Washington State Historic Preservation Officer has been conducted and has concurred that no historic properties will be affected (EA, page 48).

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat listed under ESA: I find the action will not adversely affect any endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species act of 1973.

   The effects determination for northern spotted owl is m*ay affect and and not likely to adversely affect* due short-term negative effects can occur with noise generated by the use of heavy equipment in suitable nesting habitat; however, closing roads to motorized vehicles is generally beneficial to spotted owls (EA, page 36). The effects of this project are covered under the *Programmatic Biological Assessment for Forest Management for the Gifford Pinchot National Forest* (August 2001) and the associated US Fish & Wildlife Service Biological Opinion, dated September 28, 2001, which has been renewed each year. Additional consultation with USFWS is not required (EA, page 48).

   The actions associated with this decision may affect Essential Fish Habitat for Chinook and coho as defined by the Magnuson-Stevens Fishery Conservation and Management Act, and are likely to adversely affect bull trout because of short-term sediment releases during project activities; however, the restoration activities will have long-term beneficial effects to fisheries resources (EA, pages 29, 30). The restoration activities are covered under the USFWS *Biological Opinion and letter of Concurrence USDA Forest Service, USDI Bureau of Land Management and the Coquille Indian Tribe for Programmatic Aquatic Restoration Activities in Oregon and Washington That Affect ESA-listed Fish, Wildlife, and Plant Species and their Critical Habitats* (EA, page 48).

   The only Federally-listed botanical species potentially found on the Gifford Pinchot National Forest is the threatened species *Howellia aquatilis* (water howellia). No suitable pond habitat for the species was encountered in the project area (EA, page 45).

10. Whether the action threatens a violation of Federal, State or local law or requirements: I find that the action will not violate Federal, State, or local laws or requirements for the protection of the environment. Applicable laws and regulations were considered in the EA.

FINDINGS REQUIRED BY OTHER LAWS AND REGULATIONS

Requirements of the Gifford Pinchot Land and Resource Management Plan, as Amended: The proposed action is consistent with Management Area goals, desired future conditions, and standards and guidelines identified in the *Gifford Pinchot National Forest Land and Resource Management Plan*, as amended (Forest Plan) (EA, pages 3, 4).

There will be no significant adverse effects to Forest Service, Region 6 **sensitive species**. The decision will have no effect on aquatic sensitive species because none are found within the project area (EA, 30). Of the terrestrial species with potential habitat presence in the project area there may be short term effects from sedimentation during implementation, but the project will benefit the majority of the species in the long run (EA, pages 33-43). No botanical sensitive species are in the project area and would therefore not be impacted by the project (EA, pages

45). There are a number of "survey impractical" lichens and fungi for which presence has been assumed. For these species, a determination of may impact individuals and habitat, but is not likely to contribute to a trend towards federal listing, or cause a loss of populations or species viability (EA, page 45).

I have considered the effects to **management indicator species** (MIS) as disclosed in the EA (EA, 38, 39). MIS on the Gifford Pinchot National Forest include pileated woodpecker and other cavity excavating and late-successional species, elk, deer, wood duck, and goldeneye duck.

The project is consistent with the **Aquatic Conservation Strategy** (ACS) objectives, and the **Clean Water Act**. The nine ACS objectives are detailed and can be found on pages 31-33 of the EA. I find that the project "meets" or "does not prevent attainment" of the ACS objectives.

ADMINISTRATIVE REVIEW OR APPEAL OPPORTUNITIES

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

Forest Supervisor
ATTN: Reviewing Officer 1570 Appeals
Gifford Pinchot National Forest
10600 N.E. 51st Circle
Vancouver, WA 98682

FAX (360) 891-5045
email: appeals-pacificnorthwest-giffordpinchot@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 a legal notice of decision 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

For additional information concerning this decision or the Forest Service appeal process, contact Erin Black, South Zone Team Planner, during normal office hours (weekdays, 8:00 a.m. to 4:30 p.m.) at the Mount Adams Ranger District office (Address: Hwy 141, Trout Lake, WA 98650; Phone: voice (509) 395-3411; Fax: (509) 395-3424; e-mail: ekblack@fs.fed.us.

/s/ Tom Mulder — July 24, 2008

TOM MULDER — **Date**
Monument Manager
Mount St. Helens National Volcanic Monument

Appendix A. Design Criteria and Mitigation Measures

Road Decommissioning

A. General Design Criteria

1. Close roads by one of three methods: growing roadside vegetation, placing an earthen mound or other natural material at or near the road entrance, or installing a guardrail. Closure type will be determined case by case.
2. The walkable path would be left along the decommissioned road bed of Forest Service Road 2586 to allow easy access for forest users into this part of the Forest.
3. The decommissioning of the user-created road 9300g would begin approximately 25 feet off Forest Service Road 9300 to provide a small road-side parking area to reduce the safety hazards of parking vehicles on the shoulder of FR93.
4. For work on FSR 2575200, equipment can only be operated from the south side of the drainage and all fill material would be pulled to the south.
5. No ripping or scarification of the road surface would occur within 50 meters of all identified heritage resource sites. (Consultation with a Forest Service archeologist may be necessary to avoid heritage sites).

B. Aquatic Design Criteria/Mitigation

1. Work completed within stream channels will be limited to low flow periods and specific work windows for this area that are defined as follows:
   - Instream work on fish bearing streams will be limited to the work window designated for this area by Washington Department of Fish and Wildlife (WDFW), which is between July 1 and July 31.
   - Instream work on perennial non-fish bearing streams is only subject to the July 1-July 31 work window if they are located within ¼ mile of fish.
   - Instream work is permitted in intermittent channels between June 1 and October 1 preferably during minimal runoff periods. This work window may be waived for the month of October only, if low flow conditions exist due to a minimal fall precipitation. Conditions typically meriting a waiver are daily precipitation levels remaining below the average daily maximum precipitation for the June through September period (1.05 inches as measured at the Carson National Fish Hatchery).
2. Involve an experienced USFS fish biologist or hydrologist in the design and implementation of each project that is likely to adversely affect fish.
3. The project will comply with Washington State law (WAC 220-110-070) and project actions would follow all provisions and requirements of the Clean Water Act for maintenance of water quality standards as described by the Washington Department of Ecology and the provisions of the USDA Forest Service Memorandum of Understanding with the Washington State Department of Fish and Wildlife (2005) to minimize effects to fish and other aquatic organisms.
4. A Pollution and Erosion Control Plan (PECP) would be developed and pre-approved prior to implementation of this project, which would include methods and measures to minimize erosion and sedimentation associated with the project, as well as a Spill Prevention Control and Containment Plan (SPCCP). The objective of this measure is to reduce the potential for damage to the stream and flood plain as a result of a hazardous material spill. The PECP would include all the elements as stated in the June 14th, 2007 USFWS Biological Opinion and letter of Concurrence USDA Forest Service, USDI

Bureau of Land Management and the Coquille Indian Tribe for Programmatic Aquatic Restoration Activities in Oregon and Washington That Affect ESA-listed Fish, Wildlife, and Plant Species and their Critical Habitats. The PECP will specifically include appropriate operational measures for handling hazardous materials, as well as the following requirements:

- Each piece of machinery to be checked for gas/oil/hydraulic fluid leaks before entering the worksite.
- Each piece of heavy machinery will carry a spill-containment kit to limit the effects of any accidental spill.
- A Hazardous Material kit will be on site, and would contain materials to control/contain a spill of fuel, oils, and/or hydraulic fluid. In addition, at a minimum, each piece of heavy machinery should have oil-sorbent pads or pillows on hand to handle small spills quickly.
- All service work on heavy machinery and refueling will be done on an established system road at a site approved by the Forest Service.
- Refuel power equipment or use absorbent pads for immobile equipment at least 150 feet from water bodies to prevent direct delivery of contaminants into streams, or as far as possible from streams where local site conditions do not allow a 150-foot setback.

5. Design fill-removal activities to minimize sediment entering stream channels. The objective is to restore stream processes and floodplain access by removing all fill material on the valley floor. Excavate slopes to approximate the natural hillslope or to 1.5:1, where practical; do not encroach on natural slopes. Disturbed streambanks and decompacted sections of road would be re-vegetated where a moderate to high potential for surface erosion exists. Treat these areas with native seed and mulched with weed-free material to minimize erosion. Erosion control measures would at a minimum include a heavy application of mulch immediately after work is completed. Seeding may also occur and may be delayed until September when cooler, moister weather conditions would aid growth following seed germination. Seeding would be accomplished by the end of September. Because it can impede the establishment of natural vegetation and deplete soil of nitrogen, use straw as a last resort. Where feasible, restore the natural flood plain. Minimize disturbance of existing vegetation in ditches and at stream crossings adjacent to the road prism. Maximize activities during dry conditions (late summer and early fall).
6. Place material excavated from stream crossings and unstable side-cast road fills on stable areas at least 100 feet away from stream channels or active flood plains. Suitable areas—to be determined by an engineer or other qualified personnel—include roadbeds adjacent to cutbanks, or on previously designated waste areas (if locally available). Remove any alder or conifer from the cut bank before placing excavated material, to enhance soil-to-soil contact and long-term soil stability. Contour waste piles to approximate 1.5:1 to 2:1 slopes and allow them to revegetate naturally. Seed piles with a mixture of native, certified weed-free species where a moderate to high potential exists for surface erosion, or where noxious weed infestation is likely.
7. In accordance with the June 14th Biological Opinion listed above, all reasonable and prudent measures to avoid or minimize incidental take of listed fish species (in this case,

Columbia River bull trout) would be undertaken (i.e. all conservation measures and design criteria for this activity type would be followed.

8. Sites will be designed to minimize the potential to headcut below the natural stream gradient.
9. If the channel contains water at the beginning of implementation, the construction area would be isolated, dewatered, and any fish would be removed using the appropriate fish capture/handling/release guidelines listed in the Biological Opinion if fish are present at the beginning of implementation – Upon project completion, stream would be slowly re-watered to prevent loss of surface water downstream and downstream turbidity increases.
10. For stream-crossings that provide fish passage, restored stream crossings will meet the USFS Region 6 Guidance for Fish-Passage Structure Design:
    - Post-project channel characteristics would meet or exceed state requirements and guidance for fish passage.
    - All designs should provide passage for all species and life stages present at that location, unless there is a biological reason to separate or exclude populations.
    - Restored stream-crossings channel width should not constrict the stream or accelerate velocity at 2-year high flow (bank full width). Active channel width or bed width are also used in describing this dimension. Use the most appropriate measure that ensures that the stream is not constricted by the structure.
    - The natural stream gradient and substrate material would be simulated through the crossing.
    - Road sections to be decommissioned that are currently located on unstable soil and known landslides would receive road recontouring or outsloping to minimize post-treatment fillslope failures and sediment production into streams. Landslides are known to exist on extensive portions of Forest Service Roads 2559100, 2559103, 9300150, and on small portions of Forest Service Road 2586.
11. Where work necessitates the operation of heavy equipment within the bankfull width of stream crossings, the timing and extent of this work would be conducted to minimize negative impacts to fish by employing the following practices:
    - Instream work on fish bearing streams will be limited to work windows designated by WDFW (July 1 and July 31).
    - Accumulations of soil or debris shall be removed from drive mechanisms and undercarriage of all heavy equipment prior to its working within the bankfull width.
    - Every effort would be made to avoid crossing streams with heavy equipment or operating such equipment within streams.
    - Site disturbance would be kept to the smallest footprint practical.
12. Waterbars will be placed periodically, e.g. every 75-300 feet depending on road bed slope, along decommissioned road surfaces in between culvert removal locations to disperse any road runoff or subsurface drainage that enters the road bed from the road cut slopes.
13. Design water bars to facilitate proper drainage of surface water and to prevent ponding. Place water bars in areas where drainage will not destabilize road fills. This practice will minimize the erosive effects of water concentrated by road drainage features, disperse runoff from or through the road, minimize the sediment generated from the road, and minimize the possibility of roadbed and cut or fill slope failure and the subsequent delivery of sediment to streams.

14. Install water bars on both sides of excavated stream banks to prevent the existing road ditch flow to access the newly established stream banks and to route surface water away from newly excavated slopes.
15. Excavation of culvert removals will proceed in a manner designed to keep the culvert inlet in place for as long as possible and to keep existing embankment from eroding during embankment and culvert removal. This measure will minimize downstream sedimentation and restored channels to their natural grade, condition, and alignment as soon as possible.
16. Fish bearing stream crossings would be dewatered or isolated from flowing waters prior to removal of the culvert, to prevent generation of excessive sediment and minimize turbidity.
17. Large wood and/or appropriately sized rock, where available on-site, may be placed within the reestablished streambed to mimic the natural streambed characteristics and/or prevent erosion of the new streambed and banks. Brush and downed log cutting and/or removal necessary to access the work areas will be disposed of by scattering over the cut and fill slopes adjacent to the culvert removal work areas.
18. Control of invasive weeds would occur where deemed necessary, prior to and after earth disturbing activities.
19. Decompact surfaces of decommissioned roads to allow water to percolate through the soil and accelerate the recovery of woody vegetation. Although subsoiling is the preferred method, use ripping if subsoiling is not feasible or economical.
20. Riparian vegetation such as willow, alder, and cedar trees would be planted at crossings where bankfull width is 20 feet or wider to provide shade and future sources of large woody debris. Planting may be delayed until the following spring, to aid survival of the young trees.

C. Wildlife

1. Prohibit use of heavy equipment and other noise generating activity on Road 2575 and Road 2575-200 from April 1 to August 1.
2. Prohibit use of heavy equipment and other noise generating activity on Roads 2559-100 and 103, and Road 8800-717 from March 1 to June 30.
3. Seed decommissioned roadbeds and other disturbed areas with native seed to increase forage for wildlife and to reduce the potential for noxious weeds to spread.

Road Closure

A. Aquatic Design Criteria/Mitigations

1. Close roads by one of three methods: growing roadside vegetation, placing an earthen mound or other natural material at or near the road entrance, or installing a guardrail or gate. Closure type will be determined case by case.
2. Stabilize closed roads by reopening culvert inlets where necessary, repairing water bars, or building additional water bars. Build drain dips immediately above stream crossings, to ensure water is kept within stream channels when culvert inlets are obstructed. Harden drain dips with rock to minimize sedimentation of streams when culverts fail.
3. Design and place water bars based on specifications for decommissioned roads.

4. Excavate failing side-cast fill material at stream crossings and at other areas where material could enter streams. Focus on areas where downhill slopes adjacent to roads are greater than 60% and road fills are within 200 feet slope-distance of streams.

B. Wildlife Design Criteria/Mitigations

1. Prohibit use of heavy equipment and other noise generating activity on Road 9039-620 from April 1 to June 30 to protect deer and elk winter range.

Prevention Measures Common to All Activities

1. To prevent the introduction of noxious weeds into the project area, all heavy equipment, or other off- road equipment used in the project is to be cleaned to remove soil, seeds, vegetative matter or other debris that could contain seeds. Cleaning should be done before entering National Forest System lands, and when equipment moves from or between project sites or areas known to be infested into other areas, infested or otherwise. Cleaning of the equipment may include pressure washing. An inspection would be required to ensure that equipment is clean before work can begin.
2. Use weed-free straw and mulch for all projects, conducted or authorized by the Forest Service, on National Forest System lands. If State-certified straw and/or mulch is not available, individual Forests should require sources certified to be weed free using the North American Weed Fee Forage Program standards or a similar certification process. Mulch species shall preferably be from native seed sources or annual rye or cereal grain fields. Local contacts for weed free straw can be found in the project file.
3. Inspect active gravel, fill, sand stockpiles, quarry sites, and borrow material for invasive plants before use and transport. Treat or require treatment of infested sources before any use of pit material. Use only gravel, fill, sand, and rock that are judged to be weed free by District or Forest weed specialists.
4. Native plant materials are the first choice in revegetation for restoration and rehabilitation where timely natural regeneration of the native plant community is not likely to occur. Non-native, non-invasive plant species may be used in any of the following situations: 1) when needed in emergency conditions to protect basic resource values (e.g., soil stability, water quality and to help prevent the establishment of invasive species), 2) as an interim, non-persistent measure designed to aid in the re-establishment of native plants, 3) if native plant materials are not available, or 4) in permanently altered plant communities. Under no circumstances will non-native invasive plant species be used for revegetation. When seed is used it should be either certified noxious weed free or from Forest Service native seed supplies.