

Decision Memo

Pine Creek Nutrient Enhancement Project

USDA Forest Service
Mount St. Helens National Volcanic Monument
Gifford Pinchot National Forest
Skamania County, Washington

S. 4, 5, 9, 15, 16, and 24,
T. 7N, R. 6E, W.M.

Background

The Gifford Pinchot National Forest is considering whether or not to authorize a Nutrient Enhancement Project, which would be located on private lands near the Mount St. Helens National Volcanic Monument, Pine Creek Watershed, Skamania County, Washington (Figure 1). This project is not located on national forest lands, however it is federally funded through Title II of the Secure Rural Schools and Community Self-Determination Act (P.L. 106-393, 2000). As such, this decision will be based on findings of compliance with Washington State Environmental Policy Act (SEPA) with respect to the Federal Endangered Species Act of 1973 (16 U.S.C. 1536), National Historic Preservation Act of 1966 (U.S.C. 470), and the Clean Water Act (PL 95-217).

This project proposal was awarded funding by the Gifford Pinchot National Forest (South) and Columbia Gorge National Scenic Area (Washington) Resource Advisory Committee (RAC) for implementation during FY 2007. The project proponent is Fish First in cooperation with the Washington Department of Fish and Wildlife, PacifiCorp, and the Gifford Pinchot National Forest. This project continues PacifiCorp's Aquatic Coordination Committee restoration efforts in the Upper Lewis River sub-basin that were begun in 2006.

Purpose of and Need for Action

The purpose of this project is to improve conditions for bull trout and eventually (in 2010) all species of introduced anadromous fish (Chinook, coho, steelhead). Nutrient enhancement helps to restore, at least temporarily, the nutrient cycle in stream ecosystems that are experiencing declines in productivity due to a variety of factors such as watershed disturbances, and loss of stream channel complexity. When done at the proper time of year, nutrient enhancement helps to stimulate primary and secondary productivity in streams, and leads to increased growth and condition of juvenile fish. After continuing this cycle for a number of years, the need for nutrient enhancement efforts are expected to decrease as salmon runs are reintroduced above Swift Reservoir, become self-sustaining and the ecosystem begins to function naturally.

The addition of carcasses into Pine Creek would enhance nutrient availability for aquatic biota. Increased nutrient availability instream will provide increased primary production —leading to increased secondary production of aquatic macroinvertebrates, which juvenile bull trout and other salmonids feed upon.

The addition of nutrients to the riparian areas will accelerate new or existing growth of vegetation similar to a level found in healthy watersheds. As the riparian vegetation matures, shade will reduce overall stream temperatures. This in turn will benefit bull trout and other fish species.

Project description

The Nutrient Enhancement Project involves the distribution of adult carcasses from various hatchery reared and collected salmonid species into the selected stream sections (Figure 1). The project would take place in November and December of 2006 or January 2007 depending upon availability of fish carcasses. The areas along Pine Creek that could be reached by vehicles would be seeded by hand, while inaccessible areas would be seeded by helicopter. The proposal is to seed at the rate of 0.4 kg/m², this equates to approximately four tons per mile, or about 1,000 fish per mile.

The project would take 7 to 21 days to complete. Much of the carcass distribution would be done by helicopter over 4 to 8 miles of stream over a 2 to 5 day period. The likely helicopter landing site would be at the Swift boat launch site located adjacent to Swift Forest Camp in the NWNE quarter, Section 24, T. 7N., R. 6E. The likely flight path for the helicopter would be up the Lewis River from the boat launch to the mouth of Pine Creek and then up Pine Creek. Hand distribution would occur after helicopter distribution and should be completed by the end of January. Access may be limited during the months of December and January due to snow, if this is the case, helicopter distribution may occur in areas that were initially identified for hand distribution.

No other actions are authorized by this decision.

Scoping

An interdisciplinary team was formed for this project led by a fisheries biologist. A wildlife biologist, archeologist and botanist also participated and provided project reports. The project will take place on lands owned by Pope and Talbot Timber Company. The Gifford Pinchot South RAC evaluated and proposed this project to the Gifford Pinchot National Forest Supervisor for approval. No other public scoping was conducted.

Summary of Resource Conditions

Botany. Since there will be no ground-disturbing activities, the project Botanist has determined that implementation of the proposed project will have *no effect* on Threatened, Endangered, or Sensitive plant species.

Wildlife. Bald eagles (*Haliaeetus leucocephalus*) are federally listed as a Threatened species and are year-round residents along the Lewis River, including the area around Swift Reservoir. There are two nests on

the south shore of the reservoir and three winter roost sites have been documented along the Lewis River between the mouth of the Muddy River and the mouth of Miller Creek.

The use of a helicopter to distribute the salmon carcasses would create noise disturbance within an area that was identified as a primary winter foraging area, but there would be no noise disturbance within a 0.25 mile of the roost sites. The portion of the likely flight path that follows the Lewis River and the lower reaches of Pine Creek would be about 0.75 miles away from a winter roost site.

The disturbance would occur within a relatively small area when the amount of the available habitat along the entire Lewis River is considered. Bald eagles that are disturbed by the activity would have the ability to move and utilize other parts of the river. In addition, the activity would occur within a relatively short time frame (2 – 5 days), meaning eagles would not be displaced by the activity for very long. After the activity is completed, the eagles would likely feed on some of the carcasses and they would benefit from this short-term increase in available carrion.

Although the project would create noise disturbance within winter use areas, the effects to the eagles' foraging and roosting behavior would not be significant. The project Wildlife Biologist has determined that this action ***may affect but is not likely to adversely affect bald eagles.***

Fisheries. This project Fisheries Biologist has determined that this action ***may affect, but is not likely to adversely affect*** federally Threatened bull trout (*Salvelinus confluentus*). This project is short-term in nature, but has the potential to demonstrate benefits to fish by providing marine-derived nutrients to the aquatic ecosystem. This project will have ***no effect*** to Chinook salmon, coho salmon or Lower Columbia River steelhead or other listed salmon species because they are below an anadromous barrier.

Pine Creek is within the Upper Lewis River sub-basin, which has been designated as essential fish habitat (EFH) for coho salmon (*O. kisutch*) and Chinook salmon (*O. tshawytscha*), even though it occurs upstream of Merwin Dam, an anadromous barrier to fish located downstream of the project area. Because EFH is present, this document serves as consultation pursuant to section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act and implementing regulations at 50 CFR Part 600 (pp. 45 – 47). In this consultation, National Marine Fisheries Service (NMFS) concluded that the programmatic actions (proposed project may adversely impact designated EFH). Specific Reasonable and Prudent Measures of the Endangered Species Act consultation, Terms and Conditions identified therein, would address the negative effects resulting from the proposed actions. Because of this, and because of the limited scale and temporary nature of the research project, the project Fisheries Biologist has determined that there will be ***no effect*** to EFH.

Historic Resources. Since there will be no ground-disturbing activities, the project Archaeologist has determined that implementation of the proposed project will have ***no effect*** on culturally or historically important sites within the project area.

Water Quality. Washington Department of Fish and Wildlife guidelines from their draft nutrient supplementation paper "Protocols and guidelines for distributing salmonids carcasses, salmon carcass analogs, and delayed release fertilizers to enhance stream productivity in Washington State" allow up to 1.9 kg/m² of carcasses. This action will seed at the rate of 0.4 kg/m², this equates to approximately four tons per mile, or about 1,000 fish per mile. Therefore, this action will not exceed the standards set by Washington Department of Fish and Wildlife and Washington Department of Ecology.

Required Mitigation and Project Design Criteria

As a part of this decision, project activities will comply with provisions described in the Memorandum of Agreement with the Washington State Department of Ecology (MOA), and the Memorandum of Understanding with the Washington State Department of Fish and Wildlife (MOU). Applicable Washington Department of Fish and Wildlife guidelines will be considered. Additional measures as outlined in *Endangered Species Act Section 7 Formal Consultation Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for USDA Forest Service Programmatic Activities, Gifford Pinchot National Forest Columbia River Gorge National Scenic Area, Washington* (2004) will also be applied to this project.

All applicable state and federal requirements associated with the Clean Water Act (CWA) will be met through planning, application, and monitoring of project design criteria or elements in conformance with the CWA and Federal guidance and management direction.

Decision

I have decided to approve the Pine Creek Nutrient Enhancement Project, including mitigation measures described above. This action may be repeated annually, as needed until 2011. This action falls within a set of actions that may be categorically excluded from documentation in an environmental impact statement or an environmental assessment under FSH 1909.15, Sec. 31.2, para. 6: “Timber stand and/or wildlife habitat improvement activities which do not include the use of herbicides or do not require more than one mile of low standard road construction (Service level D, FSH 7709.56).”

I have determined that there are no extraordinary circumstances and that this action would not result in effects that have the potential to significantly affect the environment. I considered the potential effects to federally listed fish and wildlife species, botanical and cultural resources, and water quality. The resource specialists’ findings are documented in the project file.

Findings

This project is covered programmatically under the National Marine Fisheries Service (NMFS) July 26, 2004 *Endangered Species Act Section 7 Formal Consultation Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for USDA Forest Service Programmatic Activities, Gifford Pinchot National Forest Columbia River Gorge National Scenic Area, Washington*. I find that this action would improve aquatic habitat. Essential habitat will be protected. I find the action will be conducted in accordance with the Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1966 (16 U.S.C. 1855).

The U.S. Fish and Wildlife Service concurred with the determination of may affect, but is not likely to adversely affect bald eagles. Therefore, on the basis of this concurrence and on the basis of the Biological Opinion cited above, I find that this action is consistent with the Endangered Species act of 1973 (16 U.S.C. 1536).

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I find that all applicable state and federal requirements associated with the Clean Water Act (CWA) will be met through planning and application of Federal guidance and management direction. Activities will comply with provisions described in the Memorandum of Agreement with the Washington State Department of Ecology (WDOE), and the Memorandum of Understanding with the Washington State Department of Fish and Wildlife. The project may require an individual Clean Water Act permit from the WDOE, which will be the responsibility of the project proponent.

I find that this project is consistent with the National Historic Preservation Act. The nature of the action is such that there will be no effect to culturally or historically significant sites.

I have determined that this project and its expected effects are consistent with the project proposal that was submitted by Fish First through the Secure Rural Schools and Community Self-Determination Act and recommended for funding by the South RAC. My decision to approve and fund this project stands.

Implementation Date

This project may be implemented immediately.

Administrative Review or Appeal Opportunities

This decision is not subject to administrative appeal.

Contact

For additional information concerning this decision or the Forest Service appeal process, contact Cynthia Henschell, South Zone Planning Team Leader (phone: (509) 395-3411 or email: chenschell@fs.fed.us).

Recommended by:

<u>/s/ Tom Mulder</u>	<u>9/22/2006</u>
Tom Mulder	Date
Monument Manager	

Approved by:

<u>/s/ Lynn Budrditt</u>	<u>9/26/2006</u>
for Claire Lavendel	Date
Forest Supervisor	

Proposed Nutrient Enhancement Project in the Pine Creek Watershed

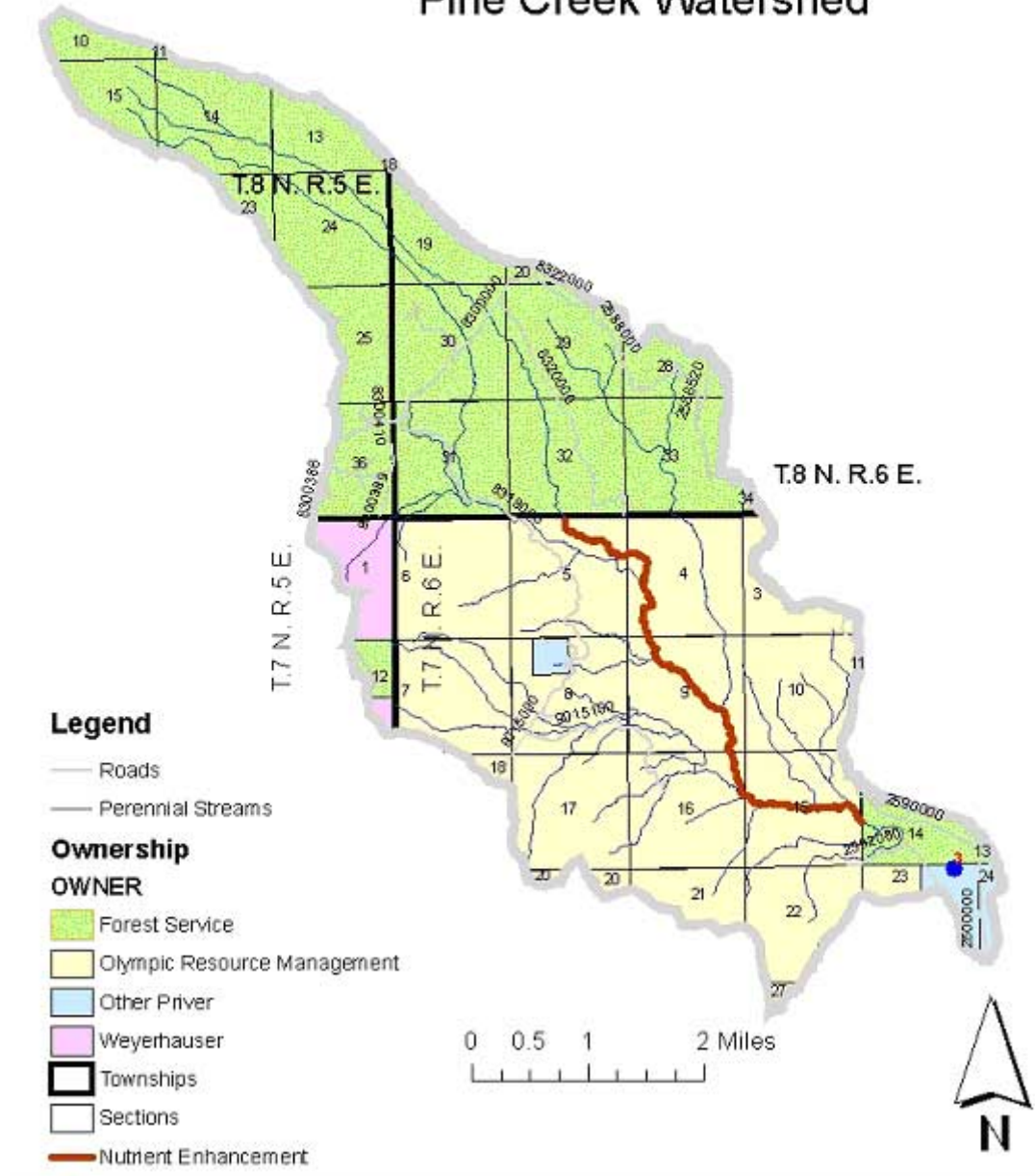


Figure 1. Pine Creek Nutrient Enhancement project area.

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ATTACHEMENT A
Internal Scoping – Pine Creek Nutrient Enhancement

SZ Planning Team Leader /s/ Cynthia Henschell Date: 9/14/2006

Archaeologist: /s/ Cheryl Mack Date: 9/12/2006

NA: No effect: Comments/mitigation attached:

Botanist: /s/ Andrea Ruchty (report on file) Date: 8/18/2006

NA: No effect: Comments/mitigation attached:

Engineer: _____ Date: _____

NA: No effect: Comments/mitigation attached:

Fisheries Biologist: /s/ Adam Haspiel (BE on file) Date: 8/18/2006

NA: No effect: Comments/mitigation attached: (included in DM)

Hydrologist: (water quality analyzed by Fisheries Biologist) Date: _____

NA: No effect: Comments/mitigation attached:

Recreation Specialist: _____ Date: _____

NA: No effect: Comments/mitigation attached:

Soil Scientist: _____ Date: _____

NA: No effect: Comments/mitigation attached:

Wildlife Biologist: /s/ Mitch Wainwright (BE on file) Date: 8/16/2006

NA: No effect: Comments/mitigation attached: (included in DM)

Silviculture Specialist: _____ Date: _____

NA: No effect: Comments/mitigation attached: