

## **Decision Memo**

### **East Fork Lewis River Nutrient Enhancement Project**

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

S. 14, 15, 16, 17, 18, 19, 23, 30, 31, and 32  
T. 4N, R. 5E, W.M.

#### **Background**

The Gifford Pinchot National Forest is considering whether or not to authorize a Nutrient Enhancement Project, which would be located on the Mount St. Helens National Volcanic Monument, East Fork Lewis River Watershed, Skamania County, Washington. The affected area would be along approximately five miles of the East Fork Lewis River from above Sunset Falls to the confluence with Green Fork, and Copper Creek from the Forest Boundary to Summit Creek.

#### **Purpose of and Need for Action**

The purpose of this project is to improve conditions for steelhead trout in the East Fork Lewis River and Copper Creek. 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. Other activities in the East Fork Lewis in combination with this project, such as instream habitat structures and closure of dispersed camping sites will help to restore steelhead runs. After continuing this cycle for a number of years, the need for nutrient enhancement efforts are expected to decrease as steelhead runs become self-sustaining and the ecosystem begins to function naturally.

The addition of carcasses into the East Fork Lewis River and Copper 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 steelhead 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 steelhead 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 October, November and December of 2006 or January 2007 depending upon availability of fish carcasses. The project would likely continue on an annual basis for the next five years and would take 7 to 30 days to complete each year. The areas accessible by vehicle would be seeded by hand. There is no ground or vegetation disturbance associated with this project. The proposal is to seed at the rate of 0.4 kg/m<sup>2</sup>, this equates to approximately four tons per mile, or about 1,000 fish per mile.

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, also participated and provided project reports. No other resource input is required since there is no ground disturbance associated with this action. No other public scoping was conducted.

## Summary of Resource Conditions

**Wildlife.** The project would result in no new destruction to vegetation or cause any new ground disturbance. The project would not cause any noise disturbance above ambient levels. For these reasons, the project would have *no effect* to any federally listed Threatened or Endangered species, and would have no impact to any Forest Service Sensitive species, Survey and Manage species, or Management Indicator Species. Aquatic salamanders such as Cope's giant salamander and Cascade torrent salamander would likely benefit by increased production of aquatic insects.

**Fisheries.** This project Fisheries Biologist has determined that this action *may affect, but is not likely to adversely affect* federally Threatened Lower Columbia River steelhead trout (*Oncorhynchus mykiss*) and Essential Fish Habitat. Lower Columbia River Chinook salmon (*Oncorhynchus tshawytscha*) and coho salmon (*Oncorhynchus kisutch*) are not present in the East Fork above Sunset Falls or Copper Creek, (Gifford Pinchot National Forest Boundary) and bull trout are not present in the East Fork Lewis River or Copper Creek, therefore the project would result in *no effect* to Columbia River bull trout (*Salvelinus confluentus*), Chinook and coho salmon. The project Fisheries Biologist reviewed the project and has determined that it is consistent with the Southwest Washington Programmatic Biological Opinion and that an individual project level Biological Assessment is not required.

**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/m<sup>2</sup> of carcasses. This action will seed at the rate of 0.4 kg/m<sup>2</sup>, 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**

The project would require project design criteria and/or mitigation measures including BMP's that protect aquatic resources.

Project design criteria for Aquatic and Riparian Habitat Improvement Projects that are appropriate for this project are as follows:

- 1). Ensure that a professional fisheries biologist is involved in the design of all instream projects. Fish passage projects should be designed by, and on-site construction supervised by, an experienced professional fisheries biologist, hydrologist and/or engineer.
- 2). Minimize the number and length of access points through riparian areas.
- 3). Apply appropriate project specific Water Quality Best Management Practices (USDA 1988) and be consistent with Washington State Hydraulic Codes, as appropriate.

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.

## **Decision**

I have decided to approve the East Fork Lewis River 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

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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 project Wildlife Biologist has determined that there would be no effect to federally listed wildlife species. I find that this action is consistent with the Endangered Species act of 1973 (16 U.S.C. 1536).

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.

**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](mailto:chenschell@fs.fed.us)).

*/s/ Tom Mulder*

Tom Mulder  
Monument Manager

10/20/2006

Date

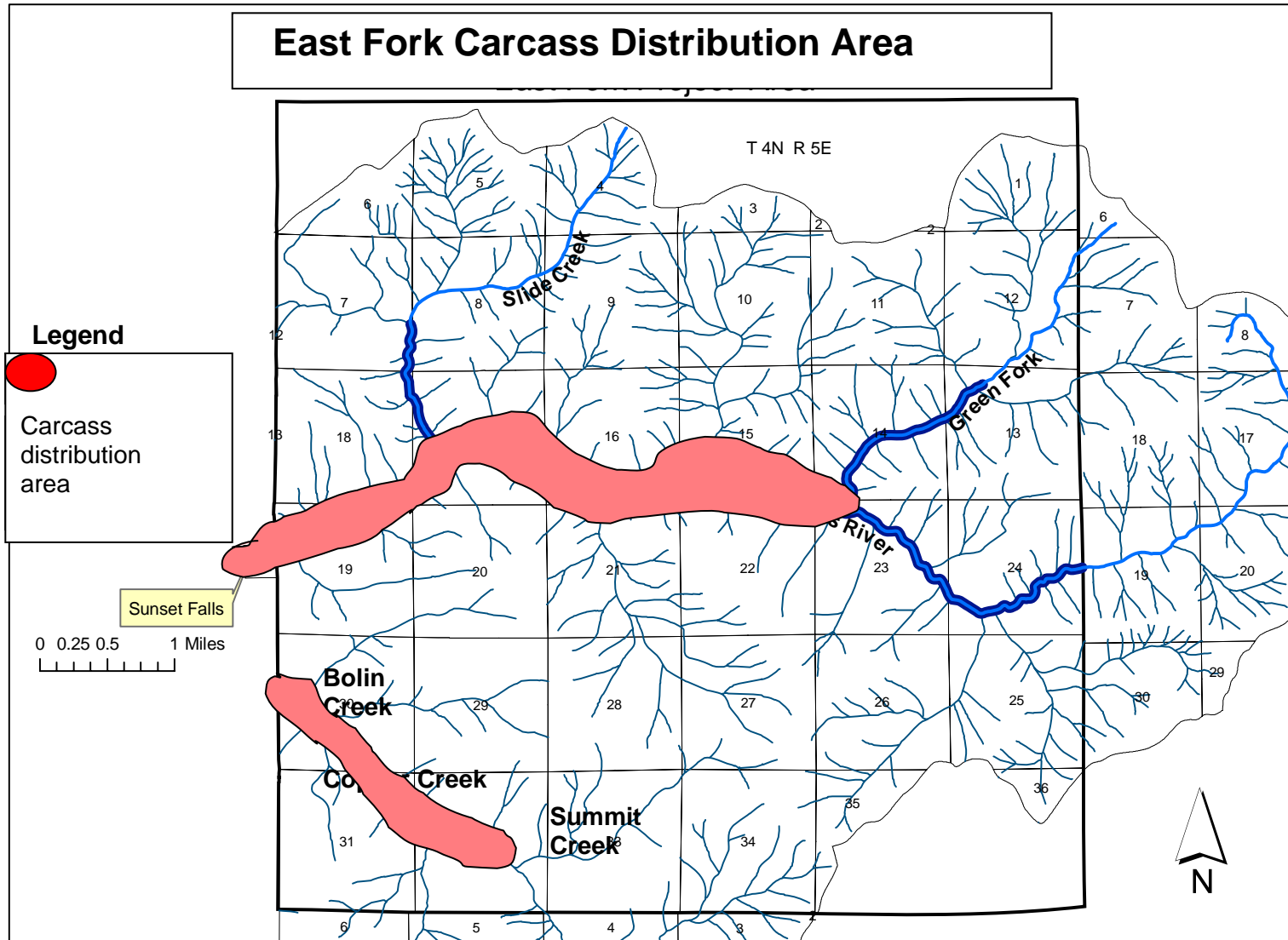


Figure 1. East Fork and Copper Creek Carcass Distribution Area