

# DECISION MEMO

## TROUT CREEK FISH HABITAT RESTORATION PROJECT

USDA Forest Service  
Lookout Mountain Ranger District, Ochoco National Forest  
Crook County, Oregon  
T12S, R18E, Sections 1-5, 8 & 16

### BACKGROUND

The Trout Creek Fish Habitat Restoration project area is located approximately 24 miles north of Prineville, Oregon, on the Ochoco National Forest. Streams in the project area provide spawning, rearing and holding habitat for Endangered Species Act (ESA) listed Middle Columbia River (MCR) steelhead trout and native redband trout as well as Columbia spotted frogs, which are on the U.S. Forest Service R6 Sensitive Species list. The Columbia spotted frog is also a Candidate Species for listing under the ESA. Designated critical habitat for MCR steelhead trout and listed Essential Fish Habitat (EFH) for salmon also exist in the project area.

Stream survey data indicate that most streams in the project area are deficient in pools, large wood and riparian shrubs. As a result, fish habitat generally lacks complexity, bank erosion is accelerated and water quality is impacted. All of the streams proposed for restoration work are currently listed on Oregon's 303(d) list for water temperature and sediment impairment. Four undersized culverts in the project area contribute to bank instability by increasing stream velocities and are also act as passage barriers to fish. Increased stream velocities have resulted in channel down-cutting and reduced floodplain access with the end result being increased bank erosion and loss of deep-rooted riparian vegetation on stream banks below these crossings. Because fish are unable to pass through these culverts, access to more desirable cold water habitat in the upper portions of these drainages is currently blocked.

Dispersed recreation activities are impacting streamside vegetation in riparian areas on Trout, Auger and Dick creeks, to the extent that large areas of bare soil are now exposed near the active channel. Dispersed camping and motor vehicle use in or near the stream channel have caused soil compaction and erosion, bank sloughing, loss of native riparian plant species and introduction of noxious weeds in sensitive riparian areas.

### DECISION TO BE IMPLEMENTED

I have decided to implement the following activities to improve stream channel complexity and function, improve riparian habitat adjacent to the stream and to provide fish passage at culvert barriers:

- Stream structures will be installed to increase the number of pools per mile on 1.1 miles of Trout Creek, 1.7 miles of Dick Creek, and 1.5 miles of Auger Creek. Stream structures will be constructed of large wood and/or boulders and designs will mimic naturally formed structures in the stream channels.
- Stream banks will be sloped back and reshaped to increase floodplain access in areas where channel incision has occurred.
- Four undersized culverts will be replaced in the project area. Specific sites include: Forest Road 2725 crossing on Dick Creek; Forest Road 2730 and 2735 road crossings on Auger Creek; and Forest Road 2730 crossing on Trout Creek.
- Access to user created vehicle fords on Auger and Dick creeks will be blocked with partially buried boulders, large wood or stream structures. Boulder and/or wood barriers will also be used to move dispersed camp sites away from stream channels. Soil treatments will consist of lightly ripping (8-

12-inches) the top layer of soil to reduce compaction and increase infiltration of moisture. Ripped soil areas will then be seeded with native grasses and forbs and mulch will be applied as needed.

- Native riparian shrubs will be planted along stream banks in the project area. Plantings will occur at or slightly above the bankfull elevation after stream structures and dispersed recreation site work is completed. Palatable shrubs may be caged until they are mature enough to withstand browsing impacts from livestock and wildlife.
- Two information sign boards will be installed along the 2725 road in the project area for education and information purposes.

The decision includes the following project design features:

- All instream work will be performed between July 1 and October 31 and will comply with instream work guidelines set forth by Oregon Department of Fish and Wildlife.
- Existing native riparian vegetation will be maintained to the extent possible.
- Where possible, water will be diverted from instream work locations to minimize turbidity.
- Field personnel implementing the project would be able to recognize the non-native invasive plants known to occur on the Ochoco National Forest.
- Weed infestations will be avoided to the extent possible.
- If weed infestation can't be avoided during implementation, equipment will be washed prior to use on other areas.
- Equipment used on the project will be inspected to ensure that they are weed-free.
- Rock or other material will come from sources that have been inspected and determined to be weed-free.
- Seed used for revegetation of disturbed soils will be certified "noxious weed free" by an approved seed-testing laboratory, such as the Oregon State University Seed Lab.

### **Consistency with Forest Policies**

These projects will contribute towards attainment of standards and guidelines and Riparian Management Objectives (RMOs) as expressed in the Ochoco National Forest Land and Resource Management Plan, Pacfish/Infish policies and the Trout Creek Watershed Analysis (1996). Specifically, this project will:

- 1) replace culverts to avoid disruption of natural hydrologic flow paths (Pacfish/Infish RF-2e);
- 2) reconstruct drainage features that do not meet operating and maintenance standards or that retard attainment of RMOs (Pacfish/Infish RF-3a);
- 3) improve existing culvert crossings to accommodate the 100-year flood when there is substantial risk to riparian conditions (Pacfish/Infish RF-4);
- 4) provide and maintain adequate fish passage at all road crossings on existing and potential fish-bearing streams (Pacfish/Infish RF-5).

For watershed and habitat restoration projects, the following Forest Plan guidelines are:

- Design and implement watershed restoration projects in a manner that promotes the long-term ecological integrity of ecosystems, conserves the genetic integrity of native species, and contributes to attainment of Riparian Management Objectives (WR-1).

For fisheries and wildlife restoration, the Forest Plan guidelines are:

- Design and implement fish and wildlife habitat restoration and enhancement actions in a manner that contributes to attainment of the Riparian Management Objectives (FW-1).

Riparian Management Objectives for stream channel conditions provide the criteria against which attainment or progress toward attainment of the riparian goals is measured. It is not expected that the objectives would be met instantaneously, but rather would be achieved over time.

## **REASONS FOR CATEGORICALLY EXCLUDING THIS PROPOSED ACTION**

This action falls into a category of actions that may be excluded from documentation in an environmental assessment (EA) or environmental impact statement (EIS). Categories are described in Chapter 30, Forest Service Handbook 1909.15, Environmental Policy and Procedures; subsection 31.2 Categories of Actions for Which a Project or Case File and Decision Memo are required. Category 7 describes modification or maintenance of stream habitat using native materials or normal practices.

In determining the appropriateness of using the categorical exclusion, a determination of the potential impacts to the resource conditions identified in FSH 1909.15 Section 30.3(2) must be made<sup>1</sup>. The following is the list of the potential effects to the resource conditions from the project activities.

### Wetlands, Floodplains, Municipal Watersheds

There are no anticipated effects to extraordinary circumstances on wetlands or floodplains. Stream restoration work will be designed and implemented in accordance with National Marine Fisheries Service April 28, 2007 Biological Opinion for Fish Habitat Restoration projects in Oregon and Washington when implemented prior to December 31, 2012. Project work occurring after calendar year 2012 will be subject to revisions or modifications in subsequent Biological Opinions for stream restoration work.

There will be no effect to municipal watersheds because there are no municipal watersheds within or near the project area.

### Congressionally designated areas such as Wilderness, Inventoried Roadless areas, Research Natural Areas

There are no congressionally designated or proposed, Wilderness, Inventoried Roadless (RARE II or Forest Plan) or research natural areas (Plan FEIS, p. 3-20) within or adjacent to this project area.

### Native American religious or cultural sites

During project review, 5 cultural sites were identified within the project area. All sites will be avoided during project implementation, and the project meets Stipulation III(B)2, Historic Properties Avoided, under the terms of the 2004 Programmatic Agreement (see Project Review for Heritage Resources dated July 14, 2008 in the project file). If additional cultural sites are encountered during project implementation, project activities at the site will be discontinued and the Cultural Resources specialist will be consulted.

### Federally Listed and Forest Service Sensitive species

The project is consistent with the 2006-2009 Joint Aquatic and Terrestrial Programmatic Biological Assessment (BA); therefore, further consultation with the US Fish and Wildlife Service and the USDC National Oceanic and Atmospheric Administration Fisheries is not necessary.

According to the 2006-2009 BA (page 110), instream restoration work and riparian improvement planting projects can cause short-term effects to spawning/rearing habitat conditions due to an increase in fine sediment delivery and trampling. The BA goes on to state that consistency with the Project Design Criteria (PDC) identified in the BA will minimize impacts to spawning/rearing habitat so that the impacts will be insignificant. This project is consistent with all applicable PDC. Based on the 2006-2009 BA, the project "May Effect but is not Likely to Adversely Effect" MCR steelhead, their critical habitat, and essential fish habitat.

Aquatic habitat in the project area will be subject to temporary disturbances related to work in or near the stream; however, in the long term, productivity of the aquatic habitat in the project area is expected to

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<sup>1</sup> As defined by the Interim Direction "Clarification of Extraordinary Circumstances for Categories of Actions Excluded from Documentation" appearing in the Federal Register Vol. 67, No. 164, August 23, 2002.

improve. Also, the spatial distribution of MCR steelhead trout is expected to improve after culvert replacements are completed and access to additional upstream habitat becomes available. For more information, refer to the BA/BE for the Trout Creek Fish Habitat Restoration Projects in the project file at the Lookout Mountain Ranger District.

A “may impact individuals or habitat” determination was reached for redband trout and the Columbia spotted frog because there is potential for injury or direct mortality to individual fish or frogs during structure installations. A “no impact” determination was reached for mid-Columbia River spring Chinook salmon, Malheur mottled sculpin, bull trout, and West Slope cutthroat trout because they are not known to occur in the project area.

No federally listed endangered terrestrial species occur in the project area. The Canada lynx, a federally listed threatened species, has been recorded in and near the Ochoco National Forest. These sightings are assumed to be of transient animals moving through the area, and the species is not thought to reside or persist on the Forest. Lynx habitat maps created in accordance with the 2000 Lynx Conservation Assessment and Strategy have determined that primary habitat does not exist on the Forest in sufficient quantities to support lynx. Informal consultation with the US Fish and Wildlife Service determined that implementation of the Ochoco Forest Plan using the current mapping “may affect but is not likely to adversely affect” lynx.

The Wildlife BE revealed there would be “no impact” to the northern bald eagle because the project is not near known nesting or roosting areas and because the project will not affect foraging activities. For the wolverine, a determination of “no impact” was reached because the project is unlikely to change the level of human use in the area and because the project may improve forage conditions for wolverine prey; the project is not expected to affect the likelihood of the area being used by wolverines. Peregrine falcons have been seen within 3 miles of the project area; the project is not likely to alter prey base or habitat for the peregrine falcon, and is expected to have “no impact.” The project area contains habitat for the gray flycatcher upland and away from the riparian areas where activities will take place; the project is expected to have “no impact” on gray flycatchers because proposed activities are not within suitable nesting habitat. No other listed or sensitive terrestrial species occur in or have habitat in the project area. For more information, refer to the Biological Evaluation dated December 16, 2007, in the project file located at the Lookout Mountain Ranger District.

The hydrology report indicates this project is consistent with the Forest Plan as amended by INFISH; the Clean Water Act; Executive Order 11988, Floodplain Management; Executive Order 11990, Protection of Wetlands; and Executive Order 12088, Federal Compliance with Pollution Control Standards.

Of the 28 sensitive plants documented or suspected on the Ochoco National Forest, ten have potential habitat within the project areas (see the 9/15/2008 Botany Report in the project file). Because of the potential for habitat in the project area, the determination “may impact individual plants or habitat” was reached for: *Botrychium ascendens*, *Botrychium crenulatum*, *Botrychium minganense*, *Botrychium montanum*, *Botrychium paradoxum*, *Botrychium pinnatum*, *Carex backii*; *Carex interior*; *Dermatocarpon luridum*; and *Scouleria marginata*. This project will not contribute to a trend toward federal listing of these plant populations.

Noxious weed populations exist in the immediate area where project activity will occur. Project design criteria, as described in this document and in the noxious weed report (9/10/08, located in the project file), will maintain a low risk of spreading noxious weeds. In addition, post-project monitoring of noxious weed infestations in the project area will be conducted.

**SCOPING AND PUBLIC INVOLVEMENT**

This proposed stream and riparian restoration project has been listed in the Schedule of Projects for the Deschutes and Ochoco National Forests and Prineville District BLM. On September 17, 2007, the proposal was provided to the public and other agencies for comment during scoping. Twenty individuals, organizations, and agencies were contacted (see project file for complete list of contacts). The proposed project was also presented at an April 28, 2008, multi-agency coordination meeting. No comment letters were received during the scoping period.

**FINDINGS REQUIRED BY OTHER LAWS**

The project area lies within land designated for management as a Riparian Management Area (MA-F15) and this project is consistent with management direction for these areas. This project will help restore vegetation and shade along streams and decrease sediment transport to the stream. This project will not lead to more than a 10 percent cumulative increase in stream turbidity even though it may cause a short-term increase in sediment delivery (3-4 weeks) upon initiation of flow after project completion. This decision is consistent with the Ochoco National Forest Land and Resource Management Plan, as amended (1989). The project is designed to improve riparian conditions, including stream channel integrity and the sediment regime under which the riparian ecosystem developed. This project is consistent with applicable standards and guidelines from the Inland Native Fish Strategy (WR-1, WR-2, FW-1, and FW-2).

This project will not violate the Clean Water Act. Trout, Auger, Bull and Dick creeks are currently on the 303(d) List for stream temperature impairment. Project activities will help stabilize the stream to reduce bank erosion and promote vegetative for shade over the water surface. The construction phase of this project will produce a short-term (during and immediately after) increase in sediment during a time of low stream flow. Over the next one or two seasons, disturbed areas will re-vegetate and fine sediment delivery to the stream will be reduced.

**IMPLEMENTATION DATE**

This project can be implemented immediately. However, implementation must follow the Oregon Guidelines for Timing of In-Water work and conditions set by the Oregon Department of Fish and Wildlife to protect fish and wildlife resources.

**ADMINISTRATIVE REVIEW OR APPEAL OPPORTUNITIES**

This decision is not subject to appeal pursuant to 36 CFR 215.

**CONTACT PERSON**

For further information contact Barbara Franano at the Lookout Mountain Ranger District, 3160 NE Third Street, Prineville, OR 97754 or via telephone at (541) 416-6500.

*/s/ William R. Queen*

9/24/08

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WILLIAM R. QUEEN  
District Ranger

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Date