

Tributary to Boulder Creek Culvert Replacement

Roseburg District Aquatic Restoration Environmental Assessment (EA # OR 103-08-09)

South River Field Office, Roseburg District

Decision:

It is my decision to authorize replacement of a large culvert where an unnamed tributary to Boulder Creek passes beneath BLM Road No. 31-7-19.0. The site location is in an easement located on lands owned by Roseburg Resources Company in the NW¼SW¼ of Section 20, T. 30 S. R. 8 W., Willamette Meridian (W.M.).

During the winter of 2009, high streamflow in the unnamed tributary to Boulder Creek coupled with structural fatigue overwhelmed the existing culvert, resulting in the separation of two sections. Fill beneath the lower section of the culvert was washed out, causing the culvert section and road fill above it to collapse into the stream. Since the initial failure, continued sloughing has reduced the running surface of the road to approximately half its original width. This poses a safety risk and threatens to close the road to vehicular traffic. The active erosion is also contributing sediment to the stream channel below the road.

Access is available from both sides of the crossing so construction of a by-pass road will not be necessary. The work area will be limited to the existing road prism. Excavated material not used in construction will be hauled to and disposed of at an approved disposal site on BLM-administered lands in Section 13, T. 30 S., R. 9 W., W.M.

The new crossing will consist of a metal pipe arch culvert embedded approximately two feet in the streambed. The culvert will be sized larger than bankfull width, determined to be between nine and 11 feet. The culvert will be 11-feet 5-inches wide and 5-feet 7-inches high in cross section, and capable of passing a calculated 100-year flood event of over 400 cu. ft./sec. It will allow passage of resident fish and other aquatic fauna to migrate upstream and downstream of the crossing.

Culvert design incorporates requirements of *the Oregon Road/Stream Crossing Restoration Guide* published by the Oregon Department of Forestry in 1999. Installation of the culvert will incorporate Best Management Practices from the *Roseburg District Record of Decision/Resource Management Plan* (ROD/RMP, Appendix D, pp. 134-136).

The following Project Design Features will be implemented:

- In-stream work will be restricted to the period between July 15th and September 15th, during low summer flows.
- Stream flow will be diverted around the work area until all instream work is completed.

- Exposed fill material over the stream crossing will be stabilized with straw mulch after project completion to prevent erosion run off.
- Prior to work commencement, fish shall be removed from the vicinity of the project area.
- All construction equipment will be pressure washed or steam cleaned prior to mobilization into the project area to minimize the risk of introducing soil from outside the project area that may be contaminated with noxious weed seed or other propagative materials.
- Construction will be subject to seasonal restrictions that prohibit construction activities from March 1st to July 15th to reduce effects to northern spotted owls from noise, human intrusion, or mechanical movement associated with culvert removal/replacement to a “discountable” or “insignificant” level. These seasonal restrictions on replacement of the culvert may be waived earlier if surveys determine that northern spotted owls are not present within the 35-yard disruption distance, or if present that they are not nesting or have failed in nesting attempts.
- The project site is in Marbled Murrelet Management Zone 2, outside of the Restriction Corridor. Prior to August 6th, construction work shall be subject to daily operational restrictions that prohibit the commencement of construction activities until two hours after sunrise and cessation of operation two hours before sunset because of the proximity to suitable marbled murrelet nesting habitat. This will minimize the risk for disturbance/disruption to marbled murrelets if they are nesting downstream of the project site.
- If any objects of cultural value (e.g. historic or prehistoric ruins and/or artifacts) are found during the implementation of the project, operations would be suspended until the site has been evaluated to determine the appropriate mitigation action.

Rationale for the Decision:

Replacement of this culvert is consistent with the objectives for the replacement of stream crossings described in the Roseburg District Aquatic Restoration EA (pp. 11-12) which include “Replacing stream crossings that are undersized for peak flows or blocking/limiting passage of aquatic species with properly sized stream crossings” and “modifying stream crossings that block or limit the passage of aquatic species.”

The project area is within the Middle Fork Coquille River Watershed in the Roseburg District, a geographic area covered by the Roseburg District Aquatic Restoration EA. Resource conditions within the project area are sufficiently similar to those described in the EA that the anticipated outcomes of stream crossing replacement will be consistent with those described in the EA (pp. 29-32, 45).

Projects of this nature have been previously reviewed by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service through the process of conferencing and consulting on individual projects and those of a programmatic nature. There are no aspects of this project that are beyond the scope of those previously reviewed by these two agencies.

The culvert replacement will not result in any undue environmental degradation, and is consistent with Aquatic Conservation Strategy objectives (ROD/RMP, pp. 20-21). Specifically, it will aid in maintenance and restoration of: in-stream flows; spatial and temporal connectivity in the watershed; natural sediment regime; and aquatic habitat. It is also consistent with the management objective “To preclude stream crossings from being a direct source of sediment to streams thus minimizing water quality degradation and provide unobstructed movement for aquatic fauna.” (ROD/RMP, p. 134)

The site is in excess of six miles above the confluence of Twelvemile Creek with the Middle Fork Coquille River. A short distance downstream of this confluence is Bradford Falls, a natural barrier to anadromous fish passage. Consequently, the project would not have any effect on **Oregon Coast coho salmon**, Critical Habitat for Oregon Coast coho salmon, or Essential Fish Habitat for coho and chinook salmon.

Kincaid’s lupine, a Federally-threatened plant species, is not present.

Protocol surveys in 2010 identified two **northern spotted owl** activity centers located approximately one-half mile to the northwest and one and one-quarter miles to the south of the culvert replacement project. Northern spotted owl nesting habitat is present within 35 yards of the project site, the disruption threshold for heavy equipment use. Surveys to determine the presence of northern spotted owls have not been conducted for 2011.

The project will not remove or modify any suitable habitat for northern spotted owls and seasonal restrictions described in the Project Design Features would reduce effects from noise, human intrusion, or mechanical movement associated with culvert removal/replacement to a “discountable” or “insignificant” level.

The project area is located in **Marbled Murrelet** Management Zone 2. A review of the stand showed that marbled nesting murrelet habitat is present within 100 yards of the project area. While the murrelet habitat will not be removed, surveys have not been conducted and the presence or absence of marbled murrelets in proximity to the project site is unknown. Daily operating restrictions described in the Project Design Features will be implemented, therefore, effects from noise, human intrusion, or mechanical movement associated with the culvert removal/replacement would be considered “discountable” or “insignificant”.

Surveys for cultural and historical resources were conducted in February 2011 with negative results.

Public Involvement & Response to Comment:

An interdisciplinary team began analysis for the Roseburg District Aquatic Restoration EA in the autumn of 2008, and the public was notified of initiation of the environmental assessment in the Winter 2008 Roseburg District Quarterly Planning Update.

A thirty-day period for public review and comment was provided upon completion of the environmental assessment (August 4, 2009 through September 3, 2009), consistent with BLM policy/practice to provide the public a review opportunity prior to issuance of any decision(s). Notification was made to state and Federal resource management and regulatory agencies. Local tribal and county government, trade groups and other interested parties were also notified. No comments on the environmental assessment were received.

Monitoring:

Monitoring will be done in accordance with the ROD/RMP, Appendix I (pp. 84, & 195-198), with emphasis on assessing the effects of the restoration activities on the following resources: Water and Soils; and Fish Habitat.

Administrative Remedies:

This decision is appealable under regulations contained in 43 CFR § 4.410. Any appeals of the decision must be filed with the authorized officer within thirty (30) days of publication of publication of the decision notice in *The News-Review*, Roseburg, OR on March 15, 2011.

Steven Lydick
Field Manager
South River Field Office

Date