

ENVIRONMENTAL ASSESSMENT

EA Number: OR-104-01-04

BLM Office: Swiftwater RA, Roseburg District

Proposed Action Title: Swiftwater FY 2001 ERFO Projects

Location of Proposed Action:

Yellow Creek culvert replacements	T24S, R6W; Section 5
Miller Creek slump repair	T25S, R2W; Section 22
Rock Creek cut slope repair	T25S, R2W; Section 30

Conformance with Applicable Land Use Plan:

This proposed action is subject to the following land use plan:

Name of Plan: Roseburg District Record of Decision (ROD) and Resource Management Plan (RMP)

Date Approved: June 2, 1995.

This plan has been reviewed to determine if the proposed action conforms with the land use plan terms and conditions as required by 43 CFR 1610.5.

Need for Proposed Action:

The Roseburg BLM District controls an extensive road system (Roseburg District Proposed Resource Management Plan/Environmental Impact Statement (PRMP/EIS, pp. 3-3). Winter storms can damage parts of the road system and minor maintenance and repairs normally bring damaged areas back to proper function. However, the winter storms of 1999-2000 caused severe damage to four road locations such that routine actions can not restore them to their proper function. Steep slopes and saturated soils, compounded by lack of culverts or culvert failures at some of the sites, resulted in mass soil movement. Slide material was deposited on the road prism and/or the road itself settled. The damaged roads could lead to increased sediment delivery into streams, impacting fish, fish habitat, and other riparian aquatic life. Federal funding through Emergency Repair of Federally Owned (ERFO) roads has been applied for to repair this damage.

The BLM has a need to implement the *Roseburg District Record of Decision and Resources Management Plan* (RMP). The RMP describes Management Actions/Directions (pgs. 72-74) and Best Management Practices (pgs. 137-138) for the management of the District transportation system.

Description of Proposed Action:

1. Replace two failing culverts on the Yellow Creek road system (BLM Rd. # 24-7-13.0) and size for 100-year flood events.
2. Repair settling road subgrade at the Miller Creek site (BLM Rd. # 25-2-16.0).
3. Repair road cut bank failure at the Rock Creek site (BLM Rd. # 26-3-1.0).

The RMP's Best Management Practices (pg. 137-138) describe road maintenance practices for the protection of water quality. This action would include the use of standard engineering practices such as: a) replacing damaged stream crossing culverts that pose risk to riparian conditions; b) reconstructing the subgrade and running surface of the road (if needed blasting would occur), and stabilizing major failures by buttressing, reestablishing, reinforcing, and/or armoring the fill and cut slopes; c) reestablishing ditchlines to control surface runoff; and d) removal of slide material.

Affected Environment

The PRMP/EIS describes the Affected Environment for roads (pg. 3-6). Repairing or rebuilding damaged roads would occur within the existing road right-of-way limits; however, the Miller Creek repair would require the road to be moved outside the right-of-way by 10 to 30' from its' existing location. The Miller Creek and Rock Creek sites are located within BLM road right-of-ways on private land (see attached map for project locations).

The Yellow Creek culvert replacements are within 0.25 miles of a known northern spotted owl (NSO) nest site. They are also adjacent to and within unsurveyed, suitable marbled murrelet habitat within the 35-50 mile zone. There are no known bald eagle nests within 0.25 miles of the project. The Miller Creek site is more than 0.25 miles and less than 1.0 mile from a known NSO site. It is outside marbled murrelet habitat and there are no known bald eagle nests within 0.25 miles of the project. The Rock Creek site is more than 0.25 miles from a known NSO nest site or suitable habitat. It is outside marbled murrelet habitat and there are no known bald eagle nests within 0.25 miles of the project.

Environmental Impacts of the Proposed Action:

"Critical Elements of the Human Environment" is a list of elements specified in BLM Handbook H-1790-1 that must be considered in all EA's. These are elements of the human environment subject to requirements specified in statute, regulation, or executive order. These elements have been analyzed for potential effects and are as follows:

<u>Critical Elements</u>	<u>Potentially Affected</u>	
	<u>No</u>	<u>Yes</u>
Air Quality	X	
ACECs	X	
Cultural Resources	X	
Environmental Justice	X	
Farmlands, Prime/Unique	X	
Floodplains	X	
Invasive, Nonnative Species		X
Nat. Amer. Rel. Concerns	X	
T & E Species (plants & animals)		X
Waste, Hazardous/Solid	X	
Water Quality (Surface/Ground)	X	
Wetlands/Riparian Zones		X
Wild and Scenic Rivers	X	
Wilderness	X	

Description of Potential Impacts:

The following impacts were identified during project design as having a possibility of occurrence and needing specific mitigating measures:

1. Introduction of noxious weeds from move-in of construction equipment.

Any culvert replacement or road repair project has the potential to promote the spread of noxious weeds by providing bare soil conditions. Exposed soil is highly preferred by noxious weeds and invasive nonnative species. Noxious and invasive weed seeds are often introduced from seeds carried into the area by construction equipment.

2. T&E Animal Species

The proposed projects would not remove suitable habitat for the spotted owl or marbled murrelet. Critical habitat for the spotted owl and marbled murrelet would not be affected. Project activities have the potential to cause disturbance to the spotted owl, marbled murrelet and bald eagle due to the use of heavy equipment and possibly blasting. Disturbance intensity for culvert replacement and major road repair would be moderately above ambient noise levels for greater than one week or significantly above ambient noise levels for any length of time.

3. Short-term sedimentation of streams from in-stream work.

Soil displacement and exposing of soil surfaces due to road repair or reconstruction activities has a potential to provide additional sedimentation to streams. This increase would be short-term, however, it may result in decreased production and survival of fish in the immediate area.

Description of Mitigation Measures and Residual Impacts:

The following mitigating measures would be implemented as part of the proposed action. The impacts of these actions are very limited in scope because work would be carried out largely within the existing road right-of-way. Any residual impacts beyond short-term (i.e., during and first season beyond actual site disturbance) is considered minor and unquantifiable.

Invasive, Nonnative Species

Prior to initial move-in, construction equipment would be steam cleaned or pressure washed to remove soil and vegetative material from the equipment to avoid the spread of noxious weeds (RMP, pg. 74; *Northwest Area Noxious Weed Control Program Environmental Impact Statement*, 1985 and Supplement 1987). Reasonable cleaning of construction equipment would likely remove a large amount of the noxious weed seed from the machinery. The consequences of incorporating these mitigation measures would be to lessen the probability of spreading noxious weed seeds into the project area. It is assumed that cleaning the equipment would not remove 100% of the noxious weed seed, but the mitigation measures would be consistent with Bureau Manual policy, would have a high probability of preventing, controlling, or reducing the spread of noxious weeds, and would prove to be a prudent step to take in reducing the need for costly weed eradication in the future.

T&E Animal Species

1. Northern Spotted Owl - Projects occurring within 0.25 miles of any known nest site from would be restricted from operations between March 1 - June 30, unless protocol surveys determine the site to be not occupied, non-nesting or failed in the nesting attempt. No blasting would occur within 1 mile of all occupied and unsurveyed suitable habitat between March 1 - June 30.
2. Marbled Murrelet - Projects within the 35-50 mile zone within 0.25 miles of occupied or unsurveyed murrelet habitat could operate only between two hours after sunrise and two hours before sunset from April 1 - August 5. No blasting would occur within 1 mile of all occupied and unsurveyed, suitable habitat between April 1 and September 15.

Sedimentation of streams

Culvert replacement projects recently completed in the South Fork of Smith River have gone through two wet seasons. No rilling or slumping and sloughing of fill material have occurred to date. Current coverage of vegetation ranges from 95 to greater than 99 percent. Sediment into the streams from the fill slopes has been completely arrested (D. Cressy, personal observation). The design features of the culverts and fills of the South Fork projects are essentially the same as being proposed for this action because of similar environmental conditions and similar management actions. Based on this experience, it is expected that erosion and sedimentation would be small and temporary. Vegetation would rapidly re-establish. The following mitigating measures would be included as part of the proposed action to eliminate or reduce potential sedimentation:

1. An erosion control plan would developed by the contractor describing erosion control measures (e.g. straw bales, silt fences, etc.) that would be taken to prevent sediment from entering the stream. Such plans would be reviewed and approved by the Contracting Officer's Representative (COR).
2. Seeding with native grass seed, if available, and placement of mulch would be accomplished post construction to minimize erosion.
3. Disturbance outside of the project right-of-way limits would not be permitted unless within staked construction limits.
4. Excess or unusable excavated material would be hauled and disposed at disposal sites and would be sloped to drain, and seeded and mulched.
5. For culvert installation, the existing stream flow would be temporarily bypassed around the project site by means of pumping, or by use of conduits to reduce a source of sedimentation due to construction activity.

Agencies, Persons, and Permittees Consulted:

US Fish and Wildlife Service
National Marine Fisheries Service
State Historic Preservation Office
Seneca Jones Timber Co. (R/W)
Lone Rock Timber Co. (R/W)
Roseboro Timber Co. (R/W)
Roseburg Resources Co. (R/W)

Preparers:

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Jim Luse	EA Preparation	_____
Melanie Roan	Wildlife Biologist	_____
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CRITICAL ELEMENTS OF THE HUMAN ENVIRONMENT

The following elements of the human environment are subject to requirements specified in statute, regulation, or executive order. These resources or values are either not present or would not be affected by the proposed actions or alternatives, unless otherwise described in this EA. This negative declaration is documented below by individuals who assisted in the preparation of this analysis.

Element	Responsible Position	Not Present	Not Affected	In Text	Initials	Date
Air Quality	Fuels Management Specialist	U			KC	1-18-01
Areas of Critical Environmental Concern	Environmental Specialist	U			JSL	1-16-01
Cultural Resources	Archeologist	U			INB	1-17-01
Environmental Justice	Environmental Specialist		U		JSL	1-16-01
Farm Lands (prime or unique)	Soil Scientist		U		DCC	1-16-01
Flood Plains	Hydrologist		U		SK	1-16-01
Invasive, Nonnative Species	Botanist			U	RF	1-17-01
Native American Religious Concerns	Environmental Specialist		U		JSL	1-16-01
Threatened or Endangered Species (fish)	Fisheries Biologist		U		AH	1-16-01
Threatened or Endangered Species (plants)	Botanist	U			RF	1-17-01
Threatened or Endangered Species (wildlife)	Wildlife Biologist			U	MR	2-20-01
Hazardous/Solid Wastes	District Hazardous Materials Coordinator		U		GWC	1-16-01
Water Quality Drinking/Ground Water	Hydrologist		U		SK	1-16-01
Wetlands/Riparian Zones	Hydrologist		U		SK	1-16-01
Wild and Scenic Rivers	Recreation Planner		U		DE	1-17-01
Wilderness	Recreation Planner	U			DE	1-17-01

References Cited

- U.S. Department of Agriculture, Forest Service, and U.S. Department of the Interior, Bureau of Land Management. Feb. 1994. Final supplemental environmental impact statement on management of habitat for late-successional and old growth forest related species within the range of the northern spotted owl (FSEIS).
- U.S. Department of Agriculture, Forest Service, and U.S. Department of the Interior, Bureau of Land Management. April 13, 1994. Record of decision for amendments to Forest Service and Bureau of Land Management planning documents within the range of the northern spotted owl (ROD) and standards and guidelines for management of habitat for late-successional and old growth related species within the range of the northern spotted owl (S&G).
- U.S. Department of Commerce, National Marine Fisheries Service. March 18, 1997. Biological opinion and conference opinion - implementation of land management plans (USFS) and resource management plans (BLM).
- U.S. Department of the Interior, Bureau of Land Management. Dec. 2, 1992. Integrated weed management (BLM Manual 9015).
- U.S. Department of the Interior, Bureau of Land Management. National environmental policy handbook (BLM Handbook H-1790-1).
- U.S. Department of the Interior, Bureau of Land Management. 1985. Northwest area noxious weed control program environmental impact statement; and Supplement, 1987.
- U.S. Department of the Interior, Bureau of Land Management. October 1994. Roseburg District: Final - Roseburg District Proposed Resources Management Plan / Environmental Impact Statement (PRMP/EIS).
- U.S. Department of the Interior, Bureau of Land Management. June 2, 1995. Roseburg District: record of decision and resources management plan (RMP).