ENVIRONMENTAL ASSESSMENT

EA Number: OR-104-02-07

BLM Office: Swiftwater RA, Roseburg District

Proposed Action Title: **Jack Creek Watershed Restoration Project**

Location of Proposed Action: Site A: Section 35; T.21S., R.6W.; W.M.
Site B: Section 2; T.22S., R.6W.; W.M.

Conformance with Applicable Land Use Plan:

This project would occur on private land therefore it does not need to be in conformance with the *Roseburg District Record of Decision and Resources Management Plan* (RMP). Although this action is on private land, CEQ regulations at 1508.18 (a) and (b)(4) states that this would be considered a federal action since the project would be "entirely or partly financed" by federal agencies.

This proposed action is subject to the following plan that was developed by the Umpqua Basin Watershed Council:

Name of Plan: Interim Watershed Action Plan
Date Approved: November 20, 1997

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 Umpqua Basin Watershed Council is in the process of identifying restoration projects that would be funded through federal monies and would improve watershed conditions. The Jack Creek project was identified by the Council as one worthy of funding. There are two failing stream crossing culverts on Jack Creek. These culverts are at the end of their useful life, are undersized for a fifty year flood event, and are partially blocked. These two sites have potential for road failure with input of sediment into the stream system. Site A is a block to anadromous fish.

Purpose of Action

The purpose of the action described in this EA is to replace the two stream crossing culverts on Jack Creek and improve watershed conditions.

Description of Proposed Action:

Remove the culverts (landowner responsibility) this summer (2002) and allow the streambed to overwinter. The crossings would be replaced with railroad flat cars the Summer of 2003.

Affected Environment

The FSEIS describes the affected environment for this province on 3&4-21. The *Roseburg District Proposed Resource Management Plan/Environmental Impact Statement* (PRMP/EIS, pp. 3-3 through 3-71) provides a detailed description of BLM administered lands on the Roseburg District that would similarly describe this private land. This area is on Woolley Enterprises, Inc. Trust lands. This area is managed as a Christmas tree farm, forestland and pasture bottomland.

Botany - All proposed activities would occur within the road prism of the roadway. There is extremely low potential for the occurrence of any Special Status plant species within the proposed activity area.

Fisheries - Jack Creek is a fish-bearing stream within the Putnam Valley subwatershed. According to the Oregon Department of Fish and Wildlife (ODFW) fish distribution surveys for Elk Creek Fifth-Field Watershed, Coho salmon (*Oncorhynchus kisutch*), Coastal Cutthroat trout (*Oncorhynchus clarki*), Oregon Coast Steelhead trout (*Oncorhynchus mykiss*),Oregon Coast Chinook salmon (*Oncorhynchus tshawytscha*), and Pacific Lamprey (*Lampetra tridentata*) are present in the watershed. The Oregon Coast Coho has been designated as a threatened species under ESA. These surveys generally show that streams within the watershed lack large wood, have elevated water temperatures, altered sediment inputs, increased peak flows, and decreased summer flows.

Hydrology - The proposed project is located within the Elk Creek fifth-field watershed in the Jack Creek drainage. Beneficial Uses of Water consists primarily of domestic water supply, irrigation and livestock watering, resident fish and aquatic life, and salmonid spawning and rearing.

Wildlife - This project has been reviewed for Federally Threatened and Endangered (T&E) species known to occur in the Roseburg District. There are no known NSO sites within 1.2 miles (home range) of the project. The proposed project falls within the 35 - 50 mile marbled murrelet Zone 2. There is suitable unsurveyed marbled murrelet habitat within 0.25 miles of the project. There are no known bald eagle nests which could be affected by disturbance above ambient noise levels within 0.25 miles of any of the project areas. The remaining T&E species do not occur in the project area.

Environmental Impacts of the Proposed Action

1. Critical Elements of the Human Environment

   "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:

Critical Elements	Potentially Affected		
	No		Yes
Air Quality	X		
ACEC	X		
Cultural Resources	X		
Environmental Justice	X		
Farmlands, Prime/Unique	X		
Floodplains	X		
Invasive and Nonnative Species			X
Nat. Amer. Rel. Concerns	X		
T & E Species		X	
Waste, Hazardous/Solid	X		
Water Quality, Drinking / Ground			X
Wetlands/Riparian Zones			X
Wild and Scenic Rivers	X		
Wilderness	X		

2. Description of Potential Impacts:

Analysis considers the direct impacts (effects caused by the action and occurring at the same place and time), indirect impacts (effects caused by the action but occurring later in time and farther removed in distance) and cumulative impacts (effects of the action when added to other past, present and reasonably foreseeable future actions) on the resource values.

Invasive and Nonnative Species - Construction would result in an indirect effect through the potential to spread noxious weed infestation into the proposed project area. 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.

T & E Species -

a. **Aquatic -** The direct impacts that would result from culvert replacement would be the opening of 2.4 miles of potential anadromous fish habitat above the upper culvert site (Site A). The area between the two sites would also provide 0.66 miles that would pass 100% of all juvenile and adult salmonids (Sam Dunnavant [ODFW], May 4, 2001). Indirect impacts to aquatic species and habitats are expected to be inconsequential. Ground disturbing activities would occur during the dry season which would minimize sediment delivery and the effects to the active stream channel. This project would be in compliance with the National Marine Fisheries Service (NMFS) Programmatic Biological Opinion dated August 8, 2001, Terms and Conditions and project design features (PDFs).

b. **Terrestrial -** No direct effects from this action are foreseen. No bald eagle habitat would be altered by the project. Columbian white-tailed deer are limited in distribution to the oak-savannah woodlands typical of the lowland landscape in the Umpqua Valley. None of the proposed project would remove or significantly alter habitat or cause disturbance to the deer. Indirect effects consists of potential disturbance to the marbled murrelet because the project occurs within 0.25 miles of unsurveyed suitable marbled murrelet habitat. Daily operating restrictions are required from April 1- August 5 due to the use of heavy equipment and possible blasting. No blasting would occur between April 1 to August 5 to avoid disturbance. Since no activity would occur within 0.25 miles of any known spotted owl site, operating restrictions would not be needed to mitigate disturbance activities.

Water Quality, Drinking / Ground - A direct impact would be a small but temporary increase in turbidity due to the introduction of sediment from construction activities. This impact would be short-term and minimized by allowing work only during low flow periods and adhering to Best Management Practices. An indirect impact would be a long-term reduction in the risk of sedimentation resulting from road fill failures. Overall, a long-term decrease in sediment delivery originating from the project area would be expected. No change in stream temperature, water pH, dissolved oxygen, or other chemical parameters is likely to occur as a result of the Proposed Action Alternative.

Wetlands/Riparian Zones - This action would result in a direct positive benefit to the riparian zone and watershed through enhanced passage and routing of stream flow and the associated debris and bedload, especially during storm events. A positive indirect effect would be the reduction of a source of sedimentation from potential road failures and reconnecting habitat for anadromous fish and other aquatic fauna.

Cumulative Impacts Analysis - Cumulative Impacts are assessed at the fifth-field scale.

The potential for an increase in the abundance of noxious or nonnative weeds on the disturbed site is not considered significant at the fifth-field scale. Any infestation would be noted during the annual post-project effectiveness monitoring and treatment prescribed to eradicate any noxious or nonnative plant species.

This action would result in removing a barrier to fish passage thereby opening up and reconnecting potential habitat for anadromous fish and other aquatic fauna in the Jack Creek drainage. Up to 2.4 miles of additional anadromous fish habitat could be possible. BLM has recently concluded watershed analysis for the Upper Umpqua Fifth-Field which is of similar size to this watershed. This analysis showed that approximately 30 miles of stream is blocked to adult and/or juvenile anadromous fish. If this same degree were true of the Elk Creek watershed then this project could result in nearly an eight percent increase in fish habitat at the watershed scale.

Description of Mitigation Measures and Residual Impacts:

The best management practices described in the *Oregon Aquatic Habitat Restoration and Enhancement Guide* would be followed for this project. This project would meet or exceed the best management practices of the guide.

The annual post-project effectiveness monitoring would specifically examine site for noxious and invasive nonnative species and prescribe eradication if present.

Agencies, Persons, and Permittees Consulted:

US Fish and Wildlife Service
National Marine Fisheries Service

Preparers

Isaac Barner	_____	Archeology
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Chip Clough	_____	Fisheries Biologist
Dan Dammann	_____	Hydrologist
Ron Wickline	_____	Botany

Completed 5/02/02

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		✔		KC	5/13/02
Areas of Critical Environmental Concern	Environmental Specialist	✔			JSL	5/08/02
Cultural Resources	Archeologist		✔		IB	5/14/02
Environmental Justice	Environmental Specialist		✔		JSL	5/08/02
Farm Lands (prime or unique)	Soil Scientist	✔			DCC	5/20/02
Flood Plains	Hydrologist		✔		DD	5/13/02
Invasive, Nonnative Species	Botanist			✔	RSW	5/09/02
Native American Religious Concerns	Environmental Specialist		✔		JSL	5/08/02
Threatened or Endangered Species (fish)	Fisheries Biologist			✔	ACC	5/09/02
Threatened or Endangered Species (plants)	Botanist	✔			RSW	5/09/02
Threatened or Endangered Species (wildlife)	Wildlife Biologist			✔	LB	5/09/02
Hazardous/Solid Wastes	Area Hazardous Materials Coordinator		✔		LB	5/09/02
Water Quality Drinking/Ground Water	Hydrologist			✔	DD	5/13/02
Wetlands/Riparian Zones	Hydrologist			✔	DD	5/13/02
Wild and Scenic Rivers	Recreation Planner	✔			RJM	5/08/02
Wilderness	Recreation Planner	✔			RJM	5/08/02

The following items are not considered a Critical Element but has been cited by regulation or executive order as an item warranting consideration in NEPA documents:

Healthy Lands Initiative - This project would not violate this initiative the Healthy Lands Initiative in that this project would be in compliance with the RMP which has been determined to be consistent with the standards and guidelines for healthy lands (43 CFR 4180.1) at the land use plan scale and associated time lines.

Adverse Energy - Executive Order 13212 provides that all decisions made by the Bureau of Land Management will take into consideration adverse impacts on the President's National Energy Policy. This project would not have a direct or indirect adverse impact on energy development, production, supply, and/or distribution and therefore would not adversely affect the President's National Energy Policy.