



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
MEDFORD DISTRICT OFFICE
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IN REPLY REFER TO:

1792(116)
JTTW Restoration EA
A6758(WHY:jl)

APR 22 2002

Dear Interested Public:

The *Environmental Assessment* (EA) for the Jobs In The Woods Restoration Project is being advertised in the Medford Mail Tribune for a 20 day public review period beginning April **24**, 2002. This EA analyzes a proposed action to 1) Replace six (6) undersized culverts (not designed to withstand a 100 year flood event) and 2) Decommission road 37-4-4.3 (0.3 miles). This project would implement the transportation management objectives recommended by watershed analysis.

The primary purpose of a public review is to provide the public with an opportunity to comment on the BLM's determination that there are no significant impacts associated with the proposed action and, therefore, an environmental impact statement is not necessary.

We welcome your comments on the content of the EA. We are particularly interested in comments that address one or more of the following: (1) new information that would affect the analysis, (2) possible improvements in the analysis; and (3) suggestions for improving or clarifying the proposed management direction. Specific comments are the most useful. Comments, including names and addresses, will be available for public review. Individual respondents may request confidentiality. If you wish to withhold your name and/or address from public review or from disclosure under the Freedom of Information Act, you must state this prominently at the beginning of your written comment. Such requests will be honored to the extent allowed by law. All submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, will be made available for public inspection in their entirety.

All comments should be made in writing and mailed to Bill Yocum, Ashland Resource Area, 3040 Biddle Road, Medford, Oregon 97504. Any questions should be directed to Bill at (541)618-2384.

Sincerely,

Richard J. Drehobl
Field Manager
Ashland Resource Area

Enclosure (as stated)

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MEDFORD DISTRICT
ASHLAND RESOURCE AREA

ENVIRONMENTAL ASSESSMENT

FOR

Jobs In The Woods Restoration Project
OR-110-02-11

Spring, 2002

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
ASHLAND RESOURCE AREA

EA COVER SHEET

Project Name/Number: Job In The Woods Restoration Project, OR-110-02-011

Location: Ashland Resource Area

| List of Preparers | Title | Responsibility |
|--------------------------|--|----------------------------------|
| John Samuelson | Forest Engineer | Team Lead, Engineering and Roads |
| Brad Tong | Botanist | T&E Plants and Invasive Weeds |
| George Arnold | Wildlife Biologist | T&E Animals, Wildlife |
| Jennifer Smith | Fisheries Biologist | Fisheries, Riparian |
| Dave Squyres | Hydrologist | Watershed, Riparian |
| Mark Prchal | Soil Scientist | Soils |
| Bill Yocum | Planning and Environmental Coordinator | NEPA |

CHAPTER I: NEED FOR THE PROPOSAL AND PROJECT ALTERNATIVES

A. NEED FOR THE PROPOSAL

With the increase of population in southern Oregon and the increase of species listed with the Endangered Species Act the conditions of our forested landscapes are an important feature for watershed health and our quality of life. The roads in our uplands are a critical component dealing with impacts of watershed health.

This project helps to restore watershed health by replacing six (6) undersized culverts (not designed to withstand a 100 year flood event) and to decommission 0.3 miles of existing road which is not needed for future use. Project area map is located in the EA file and can be viewed by appointment with Bill Yocum at (541)618-2384.

B. CONFORMANCE WITH EXISTING LAND USE PLANS

The proposed activities are in conformance with and tiered to the *Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines* (USDI, USDA 2001) and the RMP. These Resource Management Plans incorporate the *Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl and the Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl* (NWFP) (USDA and USDI 1994). These documents are available at the Medford BLM office.

C. RELATIONSHIP TO STATUTES, REGULATIONS, AND OTHER PLANS

The proposed action and alternatives are in conformance with the direction given for the management of public lands in the Medford District by the Oregon and California Lands Act of 1937 (O&C Act) and the Federal Land Policy and Management Act of 1976 (FLPMA).

D. DECISIONS TO BE MADE ON THIS ANALYSIS

This EA is being prepared to determine if the proposed action and any of the alternatives would have a significant effect on the human environment thus requiring the preparation of an environmental impact statement (EIS) as prescribed in the National Environmental Policy Act of 1969. It is also being used to inform interested parties of the anticipated impacts and provide them with an opportunity to comment on the various alternatives.

The Ashland Resource Area Field Manager must decide:

- Whether or not the impacts of the proposed action are significant to the human environment beyond those analyzed in other tiered documents as listed above. If the impacts are determined to be insignificant, a Finding of No Significant Impact (FONSI) can be issued and a decision implemented. If any impacts are determined to be significant to the human environment, then an EIS must be prepared before the Manager makes a decision.

- Whether to implement any of the action alternatives or defer to the no action alternative.

E. ISSUES OF CONCERN

The following issues were identified throughout the scoping process. Not every issue is analyzed in detail by this EA. All of the issues were reviewed by the ID Team.

- The spread of noxious weeds and other invasive non-native species.
- Impacts to Threatened and Endangered Species.

F. PROPOSED ACTION ALTERNATIVE

1) - Replace six (6) undersized culverts (not designed to withstand a 100 year flood event).

| Pipe Arch Culverts | | |
|-----------------------|---------------------|----------------------|
| General Location | Legal Description | Planned Upgrade Size |
| Ninemile Creek | T37S R4W Section 24 | 157" X 101" |
| Ninemile Creek | T37S R4W Section 24 | 95"X67" |
| Lightning Gulch | T37S R3W Section 19 | 128" X 83" |
| Benson Gulch | T39S R3W Section 30 | 103" X 71" |
| Deer Creek | T37S R2E Section 24 | 157" X 101" |
| Lincoln Creek Culvert | T40S R3E Section 12 | 103" X 71" |

2) - Decommission road 37-4-4.3 (0.3 miles).

G. PROJECT DESIGN FEATURES

Project Design Features are included for the purpose of mitigating or reducing anticipated adverse environmental impacts which might stem from the implementation of the proposed action alternative.

- In order to minimize the spread of weeds, all machinery capable of ground disturbance would be pressure washed prior to arriving at the contract area and prior to moving between job sites.

- To preclude the establishment of invasive, nonnative plant species, areas of newly disturbed mineral soil would be sown with native plant seed.

1) - Culvert Installation/Replacement

- a. Instream work period would be from July 1 - September 15.
- b. At all stream crossings the approach would be as near a right angle to the stream as possible to minimize disturbance to streambanks and riparian habitat.

- c. Road crossings on all fish-bearing streams would be designed to maintain natural streambed substrate and site gradient where feasible, while minimizing long-term maintenance needs; the specific design would also be based on expected longevity and economics.
- d. Stream crossing culverts that are replaced would be sized to accommodate 100-year flood events. The width of a crossing structure would be at least as wide as the mean bankfull width at the crossing site. Deviation to this general rule would be discussed by the ID Team on a case-by-case basis.
- e. Streams would be diverted around the work area in a manner (e.g. a pipe or lined ditch) that would minimize stream sedimentation. The contractor would be required to submit a plan for water diversion before instream work begins. Fish screens would be used on all diversions. The diverted stream would not be returned to the channel through the project area until all instream work had been completed. The resource area fish biologist would be consulted before deviating from this practice. If it is impractical to dewater a stream channel, the work would be scheduled toward the end of the instream work period.
- f. The use of settling ponds, straw bales, geotextile fabric or coconut fiber logs/bales immediately downstream of the work area would be used to reduce movement of sediment downstream from the project site.
- g. To restore streambed habitat complexity inside new crossing structures, lining the bottom of the crossing structure with 1-3 foot diameter boulders may be used. (The streambed is usually uniform following preparation of a new site or when replacing an existing pipe. Boulders that are placed in replacement pipes must be large (high) enough so that they are not buried by streambed substrate that may have been deposited immediately upstream of the inlet of the original pipe.) A prediction model would be used to determine the size of boulder needed to ensure stability at the estimated 100 year peak flow.
- h. Projects would be designed to ensure upstream movement of other aquatic species.
- i. Fill material over stream crossing structures would be stabilized as soon as possible after construction has been completed, normally before October 15. Exposed soils would be seeded and mulched. Work would be temporarily suspended if rain saturates soils to the extent that there is potential for environmental damage, including movement of sediment from the road to the stream.
- j. Location of waste stockpile and borrow sites would not be located within riparian reserves.
- k. The contractor would be notified that he is responsible for meeting all state and federal requirements for maintaining water quality. Standard contract stipulations would include the following:
 - Heavy equipment would be inspected and cleaned before moving onto the project site in order to remove oil and grease, noxious weeds and excessive soil.

- Hydraulic fluid and fuel lines on heavy mechanized equipment must be in proper working condition in order to minimize leakage into streams.
- Waste diesel, oil, hydraulic fluid and other hazardous materials and contaminated soil near the stream would be removed from the site and disposed of in accordance with DEQ regulations. Areas that have been saturated with toxic materials would be excavated to a depth of 12 inches beyond the contaminated material or as required by DEQ.
- Equipment refueling would be conducted within a confined area outside riparian reserves.
- Use spill containment booms or other equipment as required by DEQ.
- Equipment containing toxic fluids would not be stored in a stream channel anytime.

Road Decommissioning - includes ripping the roadway, removing culverts (including a large stream culvert), constructing waterbars, seeding with native seed, and barricading.

- a. Road decommissioning would usually occur between May 15 and October 15.
- b. Stream crossings would be reestablished to the natural stream gradient. This would be accomplished by removing the culvert and the road fill within the stream crossing areas. Stream side slopes would be reestablished to natural contours. Excavated material would be removed from stream crossing areas and placed at stable locations.

H. NO ACTION ALTERNATIVE

Under the “no action” alternative, no watershed restoration would be implemented: there would be no culvert replacements.

CHAPTER II: ENVIRONMENTAL CONSEQUENCES

CRITICAL ELEMENTS

The following elements of the human environment are subject to requirements specified in statute, regulation, or executive order and must be considered in all EA's.

Table 12: Critical Elements

| Critical Element | Affected | | Critical Element | Affected | |
|-----------------------------|----------|----|-------------------------|----------|------|
| | Yes | No | | Yes | No |
| Air Quality | | ✓ | T & E Species | | ✓ * |
| ACECs | | ✓ | Wastes, Hazardous/Solid | | ✓ |
| Cultural Resources | | ✓ | Water Quality | | ✓ ** |
| Farmlands, Prime/Unique | | ✓ | Wetlands/Riparian Zones | | ✓ ** |
| Floodplains | | ✓ | Wild & Scenic Rivers | | ✓ |
| Nat. Amer. Rel. Concerns | | ✓ | Wilderness | | ✓ |
| Invasive, Nonnative Species | | ✓* | Environmental Justice | | ✓ |

*These affected critical elements could be impacted by the implementing the proposed action. Impacts are being avoided by project design.

**These affected critical elements would be impacted by implementing the proposed action. The impacts are being reduced by designing the proposed action with Best Management Practices, Management Action/Direction, Standard and Guidelines as outlined in the Environmental Impact Statements (EIS)/Record of Decisions (*RMP*) (*USDI BLM 1995*)(*USDA FS; USDI BLM 1994*) tiered in Chapter 1. The impacts are not affected beyond those already analyzed by the above mentioned documents.

Only substantive site specific environmental changes that would result from implementing the proposed action or alternatives are discussed in this document. If an ecological component is not discussed, it should be assumed that the resource specialists have considered effects to that component and found the proposed action or alternatives would have minimal or no effects. General or "typical" effects from projects similar in nature to the proposed action alternative are also described in the documents to which this plan is tiered.

EFFECTS OF PROPOSED ACTION ALTERNATIVE

1. Wildlife Resources

Wildlife (Terrestrial)

Some vegetation immediately adjacent to the culverts to be replaced will be removed during culvert removal and reinstallation. Because only a small amount of vegetation will be affected, and because much of the vegetation will reestablish after the culverts are in place, the impact to terrestrial wildlife habitat will be minor.

Those animals present in the immediate vicinity of the operations will be subject to short-term disturbance, but this also will be a minor impact.

Blocking/decommissioning the described road will have a long-term benefit to wildlife due to the decrease in vehicular traffic.

Threatened/Endangered Species

Suitable habitat for proposed or listed threatened/endangered species will not be affected by the proposed projects. One of the proposed projects, the Lightning Gulch culvert replacement, is within 0.25 mile of a known northern spotted owl activity center. A seasonal restriction is warranted to minimize disturbance during the crucial nesting period. Work should not begin on this culvert until after June 30.

2. Cultural Resources

A cultural survey was performed and the area has been cleared for operations.

3. Special Status and Threatened/Endangered Botanical Species

All proposed actions occur within the road prism. This greatly altered environment does not provide suitable habitat for BLM Special Status botanical species, including those listed or proposed under the Endangered Species Act of 1973. This project would have no effect on these species or their habitats.

4. Invasive, Nonnative Species

The proposed project will expose newly disturbed mineral soil. This will provide an environment that favors the invasive, nonnative plant species. Because of the presence of the noxious weed, *Centaurea solstitialis* (yellow starthistle) at many of the project sites, spread of this weed (and potentially others) is a concern. Effects from this project will be mitigated by project design features.

5. Soil, Water, and Aquatic Organisms

Proposed Action

Fish are present in all streams proposed for culvert replacement. Special status fish species in these systems include coho (*O. kisutch*), steelhead (*O. mykiss*), Oregon coastal cutthroat (*O. clarki*), redband trout (*O. mykiss ssp.*) and Jenny Creek suckers (*Catostomus rimiculus*). In addition, the Rogue and Applegate River basins support populations of chinook salmon

(*O. tshawytscha*), pacific lamprey (*Lampetra spp.*), sculpin (*Cottus spp.*), and various warmwater species. Coho are listed as “Threatened” under the Endangered Species Act (as amended, 1973). Klamath Mountain Province (KMP) steelhead (*O. mykiss*) were a candidate species for listing under the ESA however, in April 2001, the National Marine Fisheries Service (NMFS) ruled that the listing was not warranted. The status of coastal cutthroat trout (*O. clarki*) is under review by U.S. Fish and Wildlife Service. Table 1 identifies special status fish species present at each culvert location and special status species downstream of scheduled activities.

Table 1. Special status fish species listed or proposed for listing in areas where culvert replacement activities will occur.

| Reason for improvements | Stream | Watershed | Special status fish species at proposed project site | Special status fish species present downstream |
|--|-----------------------|--------------------|--|--|
| Culvert upgrade and fish passage improvement | Ninemile Creek (1.57) | Applegate River | coho salmon, cutthroat trout | coho salmon, cutthroat trout |
| | Ninemile Creek (1.98) | Applegate River | | coho salmon |
| | Benson Gulch | Applegate River | cutthroat trout | coho salmon |
| | Deer Creek | Little Butte Creek | cutthroat trout | coho salmon |
| | Lincoln Creek | Jenny Creek | redband trout | redband trout |
| Culvert upgrade | Lightning Gulch | Applegate River | cutthroat trout | coho salmon |

Of the six streams listed above, three are currently considered to be “water quality limited” (“303(d) listed”) by the Oregon Department of Environmental Quality (DEQ). Lightning Gulch, Benson Gulch, and Lincoln Creek are considered water quality limited due to high water temperatures. It is not anticipated that the proposed actions will negatively affect stream water temperatures in any of the streams.

Deer Creek is considered water quality limited for sediment. Replacing culverts will contribute fine sediments to the stream during culvert removal and construction. These sediment inputs will occur during the summer months (July 1 through September 15), which will reduce the negative impacts to fish as much as possible because salmonid fry will have emerged from the redds. Project design features will further reduce the amount of sediment contributed to streams during these projects. In the longterm, the risk of sediment impacts from future road blow-outs will be substantially reduced, providing a long-term benefit to the stream ecosystem and fish. Bedload transport will be restored, which will enable fish to access previously inaccessible habitat. Survival of fish populations in each stream will

probably be enhanced.

Some of the culverts proposed for repair are currently blocking fish passage all or part of the year. For example, the Ninemile Creek culvert is being replaced because the jump at the downstream end of the culvert blocked fish migration. A flat-bottom culvert will be installed with rip rap placed in the culvert bottom to simulate a natural stream bottom.

Upgrading culverts will have positive impacts on the soil and water resource by reducing actual and potential erosion, potential road failure, and the resulting stream sedimentation. Upgrading the existing drainage structures to withstand a 100 year flood event, allows for more efficient transport of streamflow and the associated sediment, bedload, and debris. This will minimize the risk of drainage structure failure. Undersized culverts can become plugged by coarse debris, and/or washed out by excessive streamflow which would damage roads and deliver high amounts of sediment to the streams. When culverts cannot contain a flood event, the stream may erode the road bed and streambank and consequently contributes large quantities of fine sediments into the stream. Fine sediments can clog spawning gravels, suffocate fish eggs or newly-hatched fry, eliminate winter habitat, and reduce the quality of aquatic insect habitat.

Replacing culverts may create a short term pulse of sediment in the stream. However, sedimentation would either decrease (improve) after this initial flush of sediment is dispersed, or be maintained at its existing level, depending on existing road and stream conditions. Overall, there should be a long-term decrease (improvement) in stream sedimentation rates in the areas where the proposed actions take place.

Roads collect surface water runoff and intercept subsurface water. This water is quickly transported from the roads to streams. A road-altered stream network may cause peak flows to increase in magnitude and change the timing of runoff entering the streams. This is more pronounced in areas with high road densities and where roads are in close proximity to streams. Improperly designed and maintained roads are usually the main cause of stream sedimentation.

The proposed action would result the decommissioning of 0.3 miles within the Riparian Reserve. This will result in a decrease in road densities and a decreased source of sedimentation. Decommissioning roads within Riparian Reserves may briefly increase fine sediment input to the system. These actions however, are expected to reduce road-caused sedimentation over the longterm and allow riparian vegetation to recolonize the road surfaces. As trees grow up in the road bed, their roots loosen the compacted soil, restoring groundwater flow, thus improving the humid character of the riparian area. These trees also contribute organic material to the streams, provide shade, and increase potential large wood for eventual instream complexity.

No Action Alternative

Under this alternative there would be no upgrading of culverts or road decommissioning within the Riparian Reserve. Undersized, rusting and sagging culverts would continue to be at risk of failing during high flow events which could deliver high amounts of sediment to the streams. No improvement of the affected watersheds would occur at this time.

**CHAPTER III:
AGENCIES CONSULTED AND PUBLIC PARTICIPATION**

A. LEGAL CONSULTATION

- National Marine Fisheries Service
- US Fish and Wildlife Service

B. PROFESSIONAL CONSULTATION

- Federal Highway Administration
- Medford BLM Road Maintenance

C. PUBLIC PARTICIPATION

1. Publicity

Public notice of the availability of this EA was provided through advertisement in the Medford Mail Tribune and the BLM Medford District's central registration and recording system.

2. Notification

A copy of the EA was mailed to the following organizations:

- Applegate River Watershed Council
- Association of O&C Counties
- Audubon Society
- Friends of the Greensprings
- Headwaters
- Klamath Siskiyou Wildlands Center
- Little Butte Creek Watershed Council
- Oregon Department of Fish and Wildlife
- Oregon Department of Forestry
- Oregon Natural Resource Council
- Sierra Club, Rogue Group
- The Confederated Tribes
- The Pacific Rivers Council

3. Availability

A copy of this EA is available upon request from the Ashland Resource Area, Bureau of Land Management, 3040 Biddle Rd., Medford, OR 97540, (541)618-2200. The EA has also been placed in the public reading room at the Bureau of Land Management office (above address) and a copy sent to the Southern Oregon

University Library and Jackson County Branch (Applegate & Rush) Libraries.