



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
MEDFORD DISTRICT OFFICE
3040 Biddle Road
Medford, Oregon 97504
email address: or110mb@or.blm.gov

IN REPLY REFER TO:

1792(116)
New Berryman
Ditch Fish Screen
A6280(LL:jl)

DEC 19 2000

Dear Interested Public:

The *New Berryman Ditch Fish Screen Environmental Assessment (EA)* (enclosed) is being advertised in the Medford Mail Tribune for a 14 day public review period beginning on December 22, 2000. This EA analyzes an application from the Oregon Department of Fish and Wildlife (ODFW) to construct a rotary drum fish screen in the existing New Berryman irrigation ditch on BLM land.

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

This project was originally covered as a programmatic action under the August 15, 1997 Biological Opinion from the National Marine Fisheries Service (NMFS). This Biological Opinion is currently the subject of a lawsuit and has been withdrawn by NMFS under a court injunction. Due to the court injunction, BLM and NMFS will analyze this fish screen project individually, in order to determine if it will have any negative effects on coho salmon or its critical habitat. No decision will be made on this project until BLM and NMFS complete their analysis.

We welcome your comments on the content of this document. 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. This EA is published on the Medford District web site, www.or.blm.gov/Medford/, under "Planning Documents."

All comments should be made in writing and mailed to Lorie List, Ashland Resource Area, 3040 Biddle Road, Medford, OR 97504. Any questions should be directed to Lorie 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

New Berryman Ditch Fish Screen

EA No. OR-110-01-3

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

EA COVER SHEET

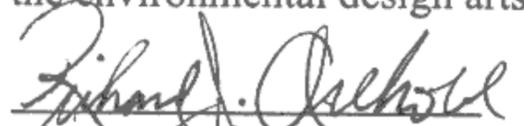
Project Name/Number: New Berryman Ditch Fish Screen,
EA No. OR 110-01-3

Location: Ashland Resource Area

Preparer: Lorie List, Environmental Coordinator

Specialist	Title	Resource Value
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Lorie List	Environmental Coordination	Format/Adequacy

This environmental assessment (EA) for the proposed Newberry Ditch Fish Screen was prepared utilizing a systematic interdisciplinary approach integrating the natural and social sciences and the environmental design arts with planning and decision making.


Richard J. Drehobl
Ashland Area Field Manager

12-18-00
Date

ASHLAND RESOURCE AREA
New Berryman Ditch Fish Screen

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CHAPTER 1: PURPOSE OF AND NEED FOR ACTION

PURPOSE AND NEED

The New Berryman irrigation ditch is fed by a push-up dam located on the Applegate River (38S-4W-22) in southwestern Oregon. The Applegate River supports populations of coho (*O. kisutch*) salmon, a species listed as threatened under the Endangered Species Act (ESA) and steelhead (*O. mykiss*), a candidate species for an ESA listing, and many other anadromous and resident fish populations. The beginning of irrigation season coincides with the time that juvenile anadromous fish are traveling downstream toward the Pacific Ocean. The entrance to the ditch is currently unscreened and these fish mistake the ditch for a side channel or are swept into it by high spring flows. An existing fish screen located further down the ditch was constructed in 1948 and no longer meets federal design criteria¹, or prevents fish from being lost down the canal.

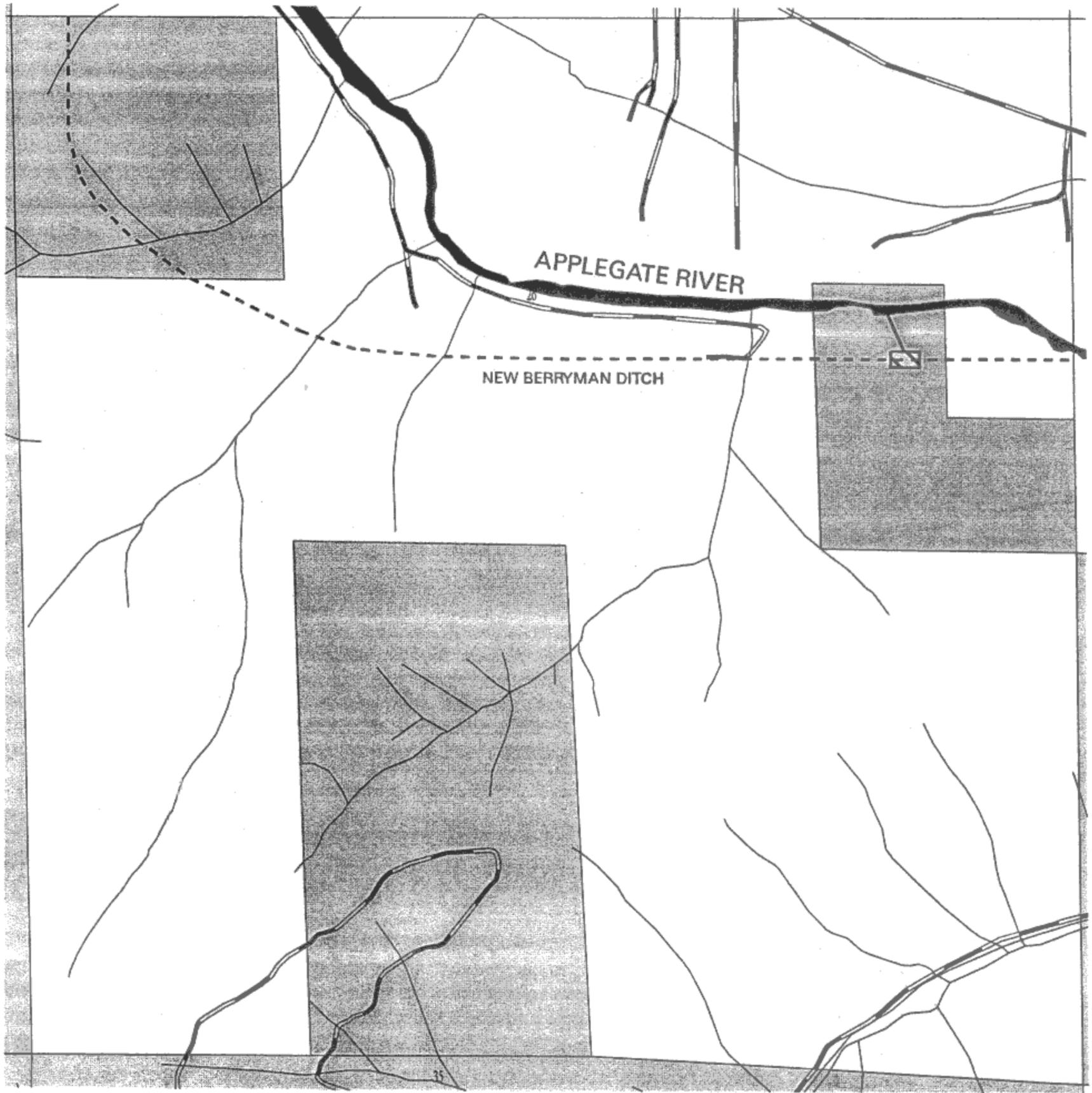
The Oregon Department of Fish and Wildlife (ODF&W) has submitted an application to construct a rotary drum fish screen in the existing New Berryman irrigation ditch on BLM land. The proposed structure would be located in the NW1/4SE1/4NE1/4, Section 26, T. 38 S., R. 4 W., Willamette Meridian. The proposed structure would upgrade and replace the existing fish screen located on the same ditch at a point further downstream. In addition to the fish screen structure, installation of a ten inch plastic return pipe would allow fish to return to the Applegate River (see map on following page).

CONFORMANCE WITH EXISTING LAND USE PLANS

The proposed activities are in conformance with and tiered to the *Medford District Record of Decision and Resource Management Plan (RMP) (USDI 1995^b)*. This Resource Management Plan incorporates the earlier *PLAN MAINTENANCE DOCUMENTATION to Delay the Effective Date for Surveying 7 “Survey and Manage” and Protection Buffer Species for the Bureau of Land Management Districts and Field Offices in Oregon and California within the range of the Northern Spotted Owl (USDI and USDA 2000)*. They are also tiered to 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)* and the *Draft SEIS for amendment to the Survey and Manage, Protection Buffer, and other Mitigating Measures Standards and Guidelines (USDI and USDA 1999)*. These documents are available at the Medford BLM office and the Medford BLM web site at <<http://www.or.blm.gov/Medford/>>. The proposed action also complements recommendations in the Middle Applegate W.A. (1995) and the Applegate River W.A. (1995).

¹See Appendix A

T.38 S. - R.4 W. SECTION 26



LEGEND

-  BLM LANDS
-  PRIVATE LANDS
-  EXISTING ROAD
-  STREAM
-  APPLEGATE RIVER
-  NEW BERRYMAN DITCH
-  FISH SCREEN BOX AND FISH RETURN PIPE



SCALE - One inch = 835 feet

1:10000

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).

This environmental assessment (EA) is being prepared to determine if the proposed action 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 (NEPA) 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 proposed activity.

DECISIONS TO BE MADE ON THIS ANALYSIS

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 impacts addressed in previous NEPA analysis. (If the impacts are not significant, then a Finding of No Significant Impact (FONSI) can be issued and a decision can be implemented. If any impacts are determined to be significant to the human environment, an Environmental Impact Statement must be prepared before the manager makes a decision.)
- Whether to implement the proposed action alternative or defer to the no action alternative.

RELEVANT ISSUES

During the scoping process, the Interdisciplinary Team (ID Team) identified potential impacts to resources that may occur under the proposed action alternative. These issues (listed below) become the focus of the analysis.

Aquatic Systems: Hydrology, Water Quality and Fish

Installation of the fish structure and return pipe could temporarily increase sediment into the Applegate River.

Cultural Resources

Installation of the 10 inch return pipe could disturb cultural resources in the area.

Special Status Plants

Installation of the 10 inch return pipe could disturb special status fungi and vascular plants.

Noxious Weeds

Ground disturbance could encourage noxious weed invasion.

Special Status Wildlife

Installation of the 10 inch return pipe could disturb special status mollusks in the area.

CHAPTER 2

Alternatives

INTRODUCTION

This chapter describes the no action and proposed action alternatives.

NO ACTION ALTERNATIVE

Under the No Action Alternative, the BLM would deny the Oregon Department of Fish and Wildlife's (ODFW) application to construct a rotary drum fish screen and to install the fish return pipe. The existing screen would continue to serve as the only protection for fish diverted into the irrigation ditch.

PROPOSED ACTION ALTERNATIVE

This alternative would allow ODFW to construct a rotary drum fish screen in the existing New Berryman irrigation ditch on BLM land. The proposed structure would be located in the NW1/4SE1/4NE1/4, Section 26, T. 38 S., R. 4 W., Willamette Meridian. The proposed structure would upgrade and replace an existing but smaller fish screen which is located on the same ditch at a point further downstream. Removing the existing fish screen would not involve any ground disturbance. The new structure would be approximately 45 feet long by 22 feet wide. In addition to the fish screen structure, approximately 100 feet of 10 inch plastic return pipe would be buried. This buried pipe would provide fish with a passage back to the Applegate River.

PROJECT DESIGN FEATURES

This proposed action alternative includes project design features (PDFs). PDFs are incorporated into the project design for the purpose of mitigating, reducing, or eliminating potentially adverse environmental impacts. They are directly related to the relevant issues identified in Chapter One. Chapters Three (Affected Environment) and Four (Environmental Consequences) incorporate these PDFs into the analysis of alternatives.

Aquatic Systems: Hydrology, Water Quality and Fish

Construction activities will be conducted when the irrigation ditch is dry (November - March). This will minimize the amount of sediment flowing into the Applegate River.

Noxious Weeds

Areas disturbed by the project will be seeded with native grasses to minimize the spread of invasive, non-native species.

Project Standards

The fish structure will meet the federal design criteria established by the National Marine Fisheries Service.

CHAPTER 3

Affected Environment

INTRODUCTION

This chapter describes the present condition of the environment within the proposed project area that would be affected by the alternatives. This information provides a general baseline for determining the effects of the alternatives and is organized around the relevant issues identified during the scoping process. No attempt has been made to describe every detail of every resource within the proposed project area. Enough detail has been given to determine if any of the alternatives would cause significant impacts to the human environment as defined in 40 CFR 1508.27.

The following “critical elements” of the human environment are subject to requirements specified in statutes, regulations or executive order (for example, the Clean Water Act of 1977):

- Air Quality
- Areas of Critical Environmental Concern
- Cultural Resources
- Environmental Justice
- Farmlands, Prime/Unique
- Floodplains
- Invasive, Nonnative Species
- Native American Religious Concerns
- Threatened & Endangered Species
- Wastes, Hazardous/Solid
- Water Quality
- Wetlands/Riparian Zones
- Wild & Scenic Rivers
- Wilderness

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 DESCRIPTION OF THE PROPOSED PROJECT AREA

The proposed structure would be located in the NW1/4SE1/4NE1/4, Section 26, T. 38 S., R. 4 W., Willamette Meridian. The New Berryman ditch diverts water for irrigation from the mainstem of the Applegate River. The Applegate River is listed by the Oregon State Department of Environmental Quality (DEQ) on the 303(d) list for modified temperature and flow.

AQUATIC SYSTEMS

Fisheries

The Applegate River is known to support populations of anadromous fish including chinook (*Onchorhynchus tshawytscha*) and coho (*O. kisutch*) salmon, steelhead (*O. mykiss*) and cutthroat (*O. clarki*) trout as well as lamprey (*Lampetra* spp.). Resident fish include sculpin (*Cottus* spp.), suckers (*Catostomus* spp.), rainbow (*O. mykiss*) and cutthroat (*O. clarki*) trout. Coho in the Rogue drainage (including the Applegate) are listed as threatened under the ESA while Rogue steelhead are a candidate species. The Applegate is used by anadromous fish for spawning, juvenile rearing and migration.

The New Berryman irrigation ditch diverts water directly from the Applegate River's active channel (38S-4W-22). A push-up dam in the mainstem of the Applegate River, impounds water that feeds the ditch from April 1 through October each year. The beginning of the irrigation season coincides with smolt out-migrations and during this life stage, anadromous fish are traveling downstream toward the Pacific Ocean. The intake of the ditch is currently unscreened and out-migrating fish (smolts) mistake the ditch for a side channel or may be swept into the ditch by high spring flows. Young-of-year fish may also travel down the ditch in search of refuge habitat. Ditch travel results in certain mortality as no outlet to the ditch exists.

Riparian Area

The riparian overstory in the project area is composed primarily of Douglas fir, madrone and white alder. Grass, poison oak and non-native Himalayan blackberry constitute the understory and ground cover. This area is undeveloped.

SPECIAL STATUS PLANTS

Surveys for special status vascular and non-vascular plants did not identify any species of concern in the area impacted by the proposed project.

SPECIAL STATUS WILDLIFE

Surveys for special status wildlife did not identify any species of concern in the area that would be impacted by the proposed project.

CULTURAL RESOURCES

Surveys in the area did not identify any cultural resources that would be impacted by the proposed project.

CHAPTER 4

Environmental Consequences

INTRODUCTION

This chapter forms the scientific and analytic basis for comparison of alternatives. Discussions include the environmental impacts of the alternatives and any adverse environmental effects that cannot be avoided should the action alternative be implemented. The impact analysis addresses direct, indirect, and cumulative impacts on all affected resources of the human environment.

AQUATIC SYSTEMS

No Action Alternative

Under the No Action Alternative, migratory and residential fish would continue to swim or be swept into the ditch. Coho salmon, a species listed under the Endangered Species Act as threatened, would continue to be at risk from this diversion. Mortality rates for all fish entering the ditch would continue to be high.

Proposed Action Alternative

Screens on irrigation ditches are critically important. A screen on an irrigation ditch off Little Butte Creek saved 3,184 coho smolts and 916 coho fry in spring 2000 (ODFW, 2000). Similarly, the proposed screen on Newberryman ditch would decrease mortality on coho and steelhead production by returning fish from the ditch to the Applegate mainstem. Chinook, lamprey and resident fish would likewise have a decrease in mortality.

The proposed screen location is far enough removed from, and high enough above the active river channel to prevent floods from moving it. The ditch will be dry while construction is done and in-stream work is not required, therefore in-stream work periods are not applicable. Ground disturbance would be minimal and no trees would be removed from the site. Digging the pathway for the return pipe would result in minimal sediment delivery to the Applegate. Most disturbed sediment will be replaced to cover the bypass pipe. Any remaining sediment that enters the river will have no long-term negative impacts.

The Applegate River is listed by D.E.Q. on the 303(d) list for modified temperature and flow. This project will not impact temperature or flow. This project conforms to the Aquatic Conservation Strategy objectives of the Northwest Forest Plan (1995).

CHAPTER 5

AGENCIES CONSULTED AND PUBLIC NOTIFICATION

FEDERAL AGENCIES

National Marine Fisheries Service (NMFS)

This project was originally covered as a programmatic action under the August 15, 1997 Biological Opinion from NMFS. This Biological Opinion is currently the subject of a lawsuit and has been withdrawn by NMFS under a court injunction.

When a project is consulted on as a "programmatic action," it means that a group of similar actions, or "program," was consulted upon at once. In other words, all fish restoration projects, of which this is one, were consulted on together. Due to the court injunction, BLM and NMFS will analyze this fish screen project individually, in order to determine if it will have any negative effects on coho salmon or its critical habitat. No decision will be made on this project until BLM and NMFS complete their analysis.

PUBLIC INVOLVEMENT

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.

Notification

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

- Applegate Branch Library
- Applegate River Watershed Council
- Association of O&C Counties
- Audubon Society
- The Confederated Tribes
- Headwaters
- Jackson County Commissioners
- Klamath Siskiyou Wildlands Center
- Oregon Department of Fish and Wildlife
- Oregon Department of Forestry
- Oregon Natural Resources Council
- Rogue River National Forest
- Ruch Branch Library
- Star Ranger Station
- The Pacific Rivers Council
- Sierra Club, Rogue Group
- Southern Oregon University Library

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) 770- 2200. The EA has also been placed in the public reading room at the Bureau of Land Management office (above address) and published on the Medford BLM website at www.or.blm.gov/Medford/.

APPENDIX A

Federal Design Criteria for Fish Screens

The current screen does not meet the federal design criteria established by the National Marine Fisheries Service for the following reasons:

- A. The wetted screen surface area is insufficient. Approximately 2.5 square feet of wetted surface per cubic foot per second (cfs) is needed.
- B. The approach velocity criteria is not being met. A .4 feet per second approach velocity and/or a sweeping velocity that is greater than the approach velocity is needed.
- C. The fish bypass pipe must be a minimum of 6" to 10" in diameter. The current screen has a 4" diameter fish bypass pipe.
- D. The fish return pipe cannot have more than a 10' freefall from the end to the streambed and must have a suitable plunge pool at the return flow location. The current screen does not have a suitable plunge pool and does not extend all the way to the stream.
- E. The screen hole size must not be more than 3/32". The current screen has approximately 3/16" mesh.
- F. Flow to the fish return pipe must be unobstructed. The debris load on the current screen will not allow this at all times.