

ENVIRONMENTAL ASSESSMENT

for the

MUNGERS CREEK ROAD CHIP SEAL
&
SWAMP CREEK ROAD RECONSTRUCTION
PROJECT

EA# OR-110-02-15

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

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EA COVER SHEET

RESOURCE AREA: Grants Pass

FY & EA #: OR-110-02-15

ACTION/TITLE: Mungers Creek Road Chip Seal and Swamp Creek Road Reconstruction Project

LOCATION: Grants Pass Resource Area, Medford District

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Grants Pass Resource Area
Environmental Assessment

Mungers Creek Road Chip Seal and Swamp Creek Road Reconstruction Project

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Chapter 1 Need for the Proposal

A. Introduction

This EA will assist in the decision making process by assessing the environmental and human affects resulting from implementing the proposed action. The EA will also assist in determining if an environmental impact statement (EIS) needs to be prepared or if a finding of no significant impact is appropriate.

This EA tiers to: (1) the Final EIS and Record of Decision dated June 1995 for the Medford District Resource Management Plan (RMP-ROD) dated October 1994; (2) the Final Supplemental EIS on Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl dated February 1994; (3) the ROD for Amendments to Forest Service and Bureau of Land Management (BLM) Planning Documents Within the Range of the Northern Spotted Owl and its attachment A entitled 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 dated April 13, 1994 (NFP-ROD) and (4) Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines dated January 2001.

B. Purpose and Need for the Proposal

Mungers Creek Road (Road #39-5-6.1) is a BLM road that provides access to the Mungers Creek sub-watershed. It also provides primary access to 9 - 10 residences, Josephine County lands and lands of several large forest land owners. The road is currently surfaced with aggregate. Winter runoff from the road carries sediment into Mungers Creek. Mungers Creek supports chinook salmon in the lower reaches (1 mile) and coho salmon (an ESA listed species) in the lower 2.5 miles, winter and summer steelhead trout in the lower 2.5 miles, and cutthroat trout for 4.5 miles. Swamp Creek supports cutthroat in its lower 0.2 mile. The purpose of the chip sealing of this section of road is to reduce sedimentation into Mungers Creek and to reduce impacts to the road surface from the daily residential use.

Swamp Creek Road A (Road #39-6-1.2) is an arterial branch of Mungers Creek Road. It accesses BLM land in Section 1 and provides residential access for one residence. The resident has a right-of-way for the use of both Swamp Creek and Mungers Creek roads. This road has not been maintained for many years is grown over and ditches are plugged with vegetation. Water flows down the road carrying sediment across Mungers Creek road and into Mungers Creek. Sediment discharge could affect salmonid habitat in Mungers and Swamp Creeks. The purpose of the reconstruction and surfacing of 0.34 miles of this road is to repair drainage facilities and reduce sedimentation into Mungers Creek.

The Medford District RMP (p. 87) directs upgrading existing roads which are determined to pose

a substantial risk to riparian conditions.

C. Objectives of the Proposed Actions

- a. Improve habitat for anadromous and resident salmonids by reducing sediment input.
- b. Improve road surface in order to reduce sediment runoff.
- c. Maintain access on existing BLM roads where access is needed to manage O&C, PD, and private lands.

Chapter 2 Proposed Action

A. Introduction

Roads designed and constructed in the past did not adequately consider drainage to prevent transport of sediments or spread of forest disease. The result of these poorly designed roads increased sediment which in turn moves through watersheds and into streams that are home to coho salmon and steelhead trout. Roads designed and built as natural or aggregate surface course (ASC) may facilitate spread of forest disease by vehicular transport of pathogens attached to soil and facilitate sediment transfer from winter storms.

Best Management Practices (BMPs) concerning road maintenance and instream improvements were established in the RMP (pg. 158-162). In addition the Transportation Management Plan for roads replacement and related road work request that specific design standards to be implemented when making road improvements.

B. Issues Relevant to the Project Proposal

Issues were identified through the BLM core project planning team. The pertinent issues identified are:

1. Roads are needed for BLM administrative and public access and are important for fire prevention access and as a fire break.
2. Transportation Management Objective (TMO) recommendations for these roads is to keep them open for administrative and public access. These roads are also encumbered by reciprocal road use agreements.
3. Port-Orford Cedar occurs in the Mungers and Swamp Creek drainages. *Phytophthora lateralis* has not been recorded there.

C. Proposed Action and Alternatives

1. Alternative 1: No Action

In this EA document the “no-action” alternative is defined as not implementing any aspect of the proposed action alternative(s). Defined this way, the action no action alternative also serves as a baseline or reference point for evaluating the environmental effects of the action alternatives. Inclusion of this alternative is done without regard to whether or not it is consistent with the Medford District RMP.

The no action alternative is not a “static” alternative. Implicit in it is a continuation of the environmental conditions and trends that currently exist or are occurring within the project area. This would include trends such as impediments to fish migration, vegetation succession trends

and consequent wildlife habitat changes, road condition/deterioration, rates of erosion, continuation of current road densities, etc.

2. Alternative 2: Proposed Action

a) Mungers Creek Road (Road #39-5-6.1)

The proposed action is to surface 1.30 miles of Mungers Creek Road with a bituminous chip seal. The surface would be 18 to 20 feet wide. The road would be graded, base aggregated placed as needed, watered, compacted and two applications of CRS 2 (bituminous asphalt) and chip seal rock placed.

Potholes in the road would be ripped to a depth two inches below bottom of pothole and 1 foot on all sides. Additional crushed aggregate would be placed and compacted to match existing road surface elevations prior to placement of bituminous chip seal surface.

Two layers of chip seal would be applied. Each layer would be constructed with 22 to 24 tons per mile of CRS 2 Bituminous Asphalt and 225 tons of chip seal rock. Sand would be used as blotter material in areas where CRS 2 is applied too thick to preclude it from running into adjacent ditches. After curing, the chip sealed surface would be broomed to remove loose rock from the road surface.

a) Swamp Creek Road (Road #39-6-1.2)

The proposed action is to reconstruct 0.34 miles of the Swamp Creek Road (See Map 1 and Table 1). Excavators may be used to remove vegetation. Equipment will be restricted to operating within the existing road prism.

Table 1: Summary of Proposed Road Reconstruction and Surfacing					
ROAD Name	Watershed (5th/6th field)	Mile Post	Section	Existing road surface to be improved	Proposed action
Mungers Creek Road (#39-5-6.1)	Williams / Mungers	0.00 to 1.30	T39S, R5W NE 1/4 Sec. 6 T38S, R6W S1/2 Sec 36	Aggregate Surface Course Road with 3/8 in rock.	Overlay existing surface with two applications of CRS2 asphalt and chip seal rock.
Swamp Creek Road (#39-6-1.2)	Williams / Mungers / Swamp	0.00 to 0.34	T39S, R6W NE1/4NE1/4 Sec 1	Pit run rock and natural surface	Reconstruct road prism including ditch, remove vegetation, install 18"x36' cross drain culvert, surface 800 linear feet with 1½" minus crushed aggregate.

D. Project Design Features

PDFs are included for the purpose of reducing anticipated adverse environmental impacts which might stem from the implementation of the proposal.

1. Fisheries Resource Protection

The PDFs listed below were developed from the RMP's Best Management Practices (BMPs) (Appendix D-VII) and the terms and conditions outlined in the NMFS July 2001 programmatic biological opinion.

a) Waste stockpile and borrow sites will be located outside of the riparian reserves. Prior to use, sites will be reviewed and concurred with by fisheries / soils / water specialists.

b) Brush overhanging Swamp Creek will not be removed.

c) Vegetation on cut slopes will be retained unless it poses a safety hazard or restricts maintenance activities. Roadside vegetation will be cut rather than pulled out to reduce soil disturbance soil. Ditches will be bladed away from streams. Ditches within one site potential tree (150') of Swamp Creek that are reconstructed will be armored to minimize sediment delivery to the stream.

2. Port-Orford Cedar protection

The project is located within the range of Port-Orford cedar (POC) and the species occurs in the drainage where the project is located. Port-Orford Cedar root disease has not been recorded in the drainage. To reduce the potential for importing the disease into the drainage, all construction and road work equipment will be required to be thoroughly washed prior to entering the project area. Ingress and egress to the project area for project work will be restricted to the Cedar Flat road from the Williams area.

3. Stream and Water Quality protection

As a part of reconstruction work, add energy dissipaters at the outlets of cross drains, new and existing, wherever needed to reduce erosive concentrated flow on downhill road slopes.

4. Fire Suppression and Access

The Oregon State Forestry Department will be notified of the dates of project construction so it can be factored into their fire suppression planning and fire response should that be necessary. Local residents that use these roads for access to their residences would receive prior notification of the project dates.

5. Noxious weeds

The roads to be surfaced / repaired will be surveyed for roadside noxious weeds. If noxious weeds are found in the project area a treatment plan will be developed and subsequent monitoring and treatment as necessary will occur after the implementation of the project.

6. Road Closures and Traffic Safety

The roads will be kept open for use through out surfacing and road reconstruction. Traffic control measures (e.g., signs, pilot cars) would be implemented as needed for public safety and passing through the work area as needed.

Chapter 3 Environmental Consequences

A. Introduction

Only substantive site specific environmental changes that would result from implementing the proposed action are discussed in this chapter. If an ecological component is not discussed, it should be assumed that the resource specialists have considered affects to that component and found the proposed action would have minimal or no effects. Similarly, unless addressed specifically, the following were found not to be affected by the proposed action: air quality; areas of critical environmental concern (ACEC); cultural or historical resources; Native American religious sites; prime or unique farmlands; flood plains; endangered, threatened or sensitive plant, animal or fish species; water quality; wetlands/riparian zones; wild and scenic rivers; and wilderness areas.

B. Beneficial and Adverse Effects of the Alternatives

1. Resource : Soils / Water Quality

a. Affected Environment

The project area is located in the Mungers Creek portion of the West Fork Williams Creek sixth field watershed. Annual precipitation averages about 50 inches in the project area, mainly in the form of rainfall. Swamp Creek is a small tributary to Mungers Creek. None of these streams are listed as water quality limited (303(d)). However the main stem of Williams Creek is water quality limited due to warm summer temperatures.

Soils at the project site (ref. SCS Soil Survey of Josephine County, Oregon) are all developed from colluvium of metasedimentary or metavolcanic origin. The soils are Josephine gravelly loam, Pollard loam, and Speaker-Josephine gravelly loams. All are on slopes of 20 to 55% with Pollard having the least slope (20 to 35%). And all have moderately fine subsoils of gravelly loam, clay loam, or clay (lower part of Pollard). These soils can be a source of fine sediment if exposed to runoff without protective cover.

b. Environmental Consequences

1) Alternative 1: No Action

a) Short term and long term

The Mungers Creek and Swamp Creek roads presently are a source of fine sediment to Mungers Creek and Swamp Creek. This would continue under the no action alternative. As vehicle traffic would continue on both roads, fine soil particles would be separated from the mass of the road base and storm runoff would carry the fine particles down the drainage pattern into the stream.

1) Alternative 2: Proposed Action

a) Short and long term effects

Any sediment delivery to the stream associated with the proposed actions would be short term and extremely localized. There would be no direct spreading of PL as a result of this proposal. This would result in a substantial reduction in stream sediment delivery and spreading of PL to non infected areas.

b) Cumulative effects

The cumulative effects would be beneficial as a result of this road project. At the 5th field watershed level there would be a minimal reduction in fine sediment delivered to the Williams Creek system. At the 6th field level there would be a slight reduction in fine sediment to the West Fork of Williams Creek system.

2. Resource: Fisheries

a. Affected Environment

Mungers Creek is located in the Williams Creek Watershed (HUC-5) and is a perennial fish-bearing stream supporting chinook salmon, coho salmon, steelhead trout, cutthroat trout, sculpin and Pacific lamprey. Swamp Creek, a tributary to Mungers Creek, is perennial and contains cutthroat trout. Mungers Creek supports chinook salmon for 1.0 mile, coho for 2.5 miles, summer and winter steelhead trout for 2.5 miles, and cutthroat trout for 4.5 miles. Swamp Creek supports cutthroat trout for 0.2 mile.

Southern Oregon/Northern California (SONC) coho salmon are federally listed as threatened under the Endangered Species Act (ESA) and Pacific lamprey are a Bureau tracking species in Oregon.

b. Environmental Consequences

1) Alternative 1: No Action

a) Short term and long term

The Mungers Creek and Swamp Creek roads presently deliver sediment to Mungers Creek and Swamp Creek. The downstream effect is presumed to be a reduction in survival and production of salmonids. Sediment delivery suffocates eggs in the gravels and causes direct mortality. Additionally, sediment delivery produces indirect mortality to juvenile fish. Adult fish will also have migration and spawning impaired. Under the no action alternative these impacts would continue as the road condition declines and sediment delivery continues.

2) Alternative 2: Proposed Action

a) Short and long term effects

The proposed action includes road activities in the Mungers and Swamp Creek drainages. The road along Mungers Creek would be graded and chip sealed. The Swamp Creek road would be reconstructed which includes ditching, removing vegetation, installing a cross drain and adding rock.

Road work on Mungers Creek Road would be outside of the riparian reserve for Mungers Creek. The road work will cross Swamp Creek approximately 0.25 mile upstream of Mungers Creek and at the upper most extent of cutthroat use of Swamp Creek. Shade will not be reduced because vegetation will not be removed. Grading on the Swamp Creek crossing could cause sediment delivery to the stream in the first storm event following the road work. However, sediment delivery should be minimized through PDFs and BMPs (for example, blading away from the stream).

The road work on Swamp Creek Road would be outside of riparian reserves. Road work on Swamp Creek Road would most likely deliver only a minimal addition of sediment to either Mungers Creek or Swamp Creek in the first storm event following the road work. Shade removal will not occur on Mungers Creek or Swamp Creek as a result of the Swamp Creek Road improvements.

Any sediment delivery to the stream associated with the proposed actions would cause highly localized, negligible, short term impacts at the project level (seventh field scale). There would be no discernable effect at the sixth or fifth field levels. The short term minimal increase of sediment delivery produced from these proposed actions is not expected to adversely affect the survival or production of salmonids. Due to the timing, duration, and small amounts of sediment inputs anticipated, any changes should be indistinguishable from background levels. There will be no long term adverse impacts to salmonid habitat or production as a result of the proposed actions. It is anticipated the net long term beneficial impacts from stabilizing road erosion and decreasing runoff rates will maintain downstream salmonid production and survival and, in the long term, contribute to an improvement as compared to the no action alternative. The reduction in sediment delivery will aid egg and juvenile fish survival because the risk of egg suffocation will be lower. The risk of direct or latent mortality to juvenile fish from sediment delivery is less than may be occurring under the no action alternative. These effects are inclusive for direct and indirect adverse and beneficial effects to fish.

b) Cumulative effects

Roads on federal and non-federal lands contribute sediment input to streams. Sediment loads in streams within the Williams Creek HUC-5 watershed have consequently reached levels outside of the natural range for sediment loads. It is expected that private roads will continue to contribute to elevated sediment loads. The current project is part of a larger long term effort to remedy road conditions on federal lands within the Williams Creek HUC-5 with the broad goal of improving

aquatic conditions by reducing road sourced sediment delivery. The cumulative beneficial effects of this road work on BLM roads will be the maintenance of salmonid production, survival and habitat at the HUC-5 and HUC-6 levels.

c) Endangered Species Act and Magnuson-Stevens Act Considerations

ESA - Because of the potential short term impact from an initial increase of sediment from road reconstruction, the proposed action constitutes a “May Affect, Not Likely to Adversely Affect” (NLAA) action for the federal ESA listed coho salmon. The proposed action is consistent with the requirements (applicable terms and conditions) of the National Marine Fisheries Service’s August 8, 2001 Biological Opinion for the Programmatic Actions regarding Coho Salmon Endangered Species Act consultation. The anticipated effects (an NLAA action) are within the range of impacts anticipated and addressed by this BO.

EFH - Essential Fish Habitat (EFH) for coho and chinook salmon is present in Mungers Creek, per the Magnuson-Stevens Act. The proposed project could have the potential to produce adverse effects due to sediment delivery to Mungers Creek. The proposed action will not occur within the riparian reserve adjacent to EFH habitat in Mungers Creek, however. While sediment delivery mechanisms exist, actual delivery is expected to be negligible due to PDFs and BMPs. It has therefore been determined that the proposed action will not adversely affect EFH for coho and chinook salmon.

d) Aquatic Conservation Strategy

The proposed road work is consistent with and will promote the Aquatic Conservation Strategy (ACS). The proposed action will specifically promote the ACS objective #5 as it will reduce road sourced sediment transport to Mungers and Swamp Creeks and move the streams towards more natural sediment regimes.

3. Resource: Wildlife

a. Affected Environment

The proposed action is located in the East IV/Williams Late-successional reserve, in the Williams creek watershed. The project proposal consist of chip sealing portions of two aggregate surface roads in the Munger’s creek drainage. The roads pass through a mix of rural landscape consisting of mix of pasture and second growth mixed conifer. Swamp creek is currently discharging sediment from the road surface down to Mungers creek. Both Mungers creek and Swamp creek are free from *Phytophthora lateralis* (PL), a fatal root disease affecting Port-Orford cedar and Pacific yew.

b. Environmental Consequences

1) Alternative 1: No Action

Under the No action alternative the aggregate surface on Mungers Creek Road would continue to deteriorate and the road will continue to contribute sediment into Mungers creek. This has a potentially adverse impact on the aquatic environment and a number of aquatic species including the tailed frog (*Ascaphus truei*), a bureau tracking and State of Oregon listed animal (vulnerable). This stream requires clear streams for reproduction.

2) Alternative 2: Proposed Action

Under the action alternative the Swamp Creek road would be reconstructed which would reduce the associated sedimentation problems to the benefit of local streams and associated aquatic life. There would be no identified impacts to terrestrial wildlife from chip sealing Mungers Creek Road but it would result in a reduction in sediment to the benefit of the aquatic system in Mungers Creek.

4. Resource: Botany

a. Affected Environment

Since the project will be confined to the road prism there is no habitat for *Fritillaria gentneri* (a federally listed vascular plant species) or any other survey and manage or bureau special status plant species.

5. Resource: Vegetation / Port-Orford Cedar

a. Affected environment

The Mungers Creek drainage is an area currently free of *Phytophthora lateralis* (Port-Orford cedar root disease). The PL pathogen is know to spread through the soil, particularly during winter months where rainfall produces moisture which can result in vehicular transport of the disease.

b. Environmental Consequences

1) Alternative 1: No action

Road use by residents and others could result it the introduction of PL if infected soil is inadvertently brought into the drainage.

2) Alternative 2: Proposed Action

There should be no change in the probability of introduction as a result of the proposed action. Vehicles and equipment used in project work will be washed prior to entry into the project area and ingress and egress routes for project work will be restricted. This will serve to keep the potential for introduction of PL to the site at levels comparable to the no action alternative.

Chapter 3

Agencies and Persons Consulted

A. Public Involvement

Public involvement will include a formal 15 day EA public review and comment period will be held.

These projects have been proposed for inclusion in 2002 under Title II of the Secure Rural Schools and Community Self-determination Act of 2002. They have been reviewed and endorsed by the Resource Advisory Committee (RAC) and the Josephine County Commissioners.

B. Availability of Document and Comment Procedures

As noted, this EA will be available for public review and comment for a fifteen (15) day period. Notification regarding its availability will be done through newspaper notices and mailings to neighbors and parties known to have an interest in these types of BLM projects. Copies of the EA document will be available in the BLM Medford District Office and on the Medford District's web site.

