

5401
EA-04-19
Checkpoint 5

September 15, 2004

Concerned Citizen,

The Upper Willamette Resource Area of the Eugene District Bureau of Land Management has completed the Environmental Assessment (EA) and Finding of No Significant (FONSI) for the proposed Checkpoint 5 Trail Improvement project located in Section 22, T. 15 S., R. 2 W., Will. Mer. This primitive road is part of the designated Shotgun Off-Highway Vehicle (OHV) trail system and is 1.3 miles long.

You have expressed an interest in receiving copies of Environmental Assessments for district projects. Enclosed is a copy of the EA for your review and any comments. Public notice of this proposed action will be published in the Eugene Register Guard on September 15, 2004. The EA will also be available on the internet at <http://www.edo.or.blm.gov/planning/nepa>. The public comment period will end on September 29, 2004. Please submit comments to me at the district office, by mail or by e-mail at OR090mb@or.blm.gov by close of business (4:15 p.m.) on or prior to September 29, 2004. If you have any questions concerning this proposal, please feel free to call Christie Hardenbrook at 683-6110.

Comments, including names and street addresses of respondents, will be available for public review at the district office, 2890 Chad Drive, Eugene, Oregon during regular business hours (7:45 a.m. to 4:15 p.m.), Monday through Friday, except holidays, and may be published as part of the EA or other related documents. Individual respondents may request confidentiality. If you wish to withhold your name or street 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.

Sincerely,

Emily Rice, Field Manager
Upper Willamette Resource Area

Enclosure

**CHECKPOINT 5 TRAIL IMPROVEMENT
UPPER WILLAMETTE RESOURCE AREA
BLM EUGENE DISTRICT**

**ENVIRONMENTAL ASSESSMENT
OR090-04-19**

1.0 PURPOSE AND NEED

The Upper Willamette Resource Area proposes to improve the 15-2-22 road , also known as the Checkpoint 5 trail, located in T. 15 S., R 2 W., Section 22. This primitive road is part of the designated Shotgun Off-Highway-Vehicle (OHV) trail system and is 1.3 miles long.

Currently, there is a drainage problem on the trail stemming from a stream and several springs alongside the trail. Water is running down the trail, creating ruts and carrying sediment into a nearby stream. The purpose of this action is to improve the drainage of the trail and to continue to provide a recreational opportunity for OHV enthusiasts. The need for this action is established in the Eugene District Record of Decision and Resource Management Plan (RMP/ROD). This directs the BLM to, “minimize sediment delivery to streams from roads,” and to, “adjust dispersed and developed recreation practices that retard or prevent attainment of Aquatic Conservation Strategy (ACS) objectives” (pg. 25).

The objectives of this project are to:

- Minimize sediment delivery to streams from the trail
- Deepen and armor existing waterbars
- Install additional culverts and waterbars

1.2 CONFORMANCE

This environmental assessment (EA) is tiered to the Northwest Forest Plan ROD and the Eugene District RMP, as amended by the Record of Decision (ROD) for Amendments to the Survey & Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines (January 2001), the Record of Decision to Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines (April 2004) (Survey and Manage ROD), and the Record of Decision to Clarify Provisions Relating to the Aquatic Conservation Strategy (March 2004). These documents are available for review at the BLM Eugene District Office or on the internet at <http://www.or.blm.gov/nwfp.htm>. The Checkpoint 5 project file contains additional information compiled by the Interdisciplinary Team (ID Team) to analyze effects and is available for review at the Eugene District Office.

1.3 ISSUES

The interdisciplinary team identified the following issues for analysis in this document:

- 1) How would trail improvements and maintenance affect water quality?
- 2) How would trail improvements affect soil displacement and compaction?

2.0 ALTERNATIVES INCLUDING THE PROPOSED ACTION

This section describes alternatives identified by the interdisciplinary team. For this EA, the trail is referred to in segments: segments 1 and 2. Segment 1 is the section of trail north of stream 15. Segment 2 is the section of trail below stream 15. Please refer to Appendix A for maps of the project area.

2.1 Alternative 1: No Action

No improvements would be made to the trail except for the replacement of the four existing culverts in Segment 2, which were analyzed in EA-00-09.

2.2 Alternative 2: Reroute trail

Segment 1:

This alternative proposes to construct a native surface reroute around the portion of the trail experiencing the drainage problems (see map). The old portion of the trail would be blocked and decommissioned. Approximately 0.15 miles in length, the reroute would begin and tie back into the existing trail. It is estimated that during construction of the reroute, 10-15 trees (up to 15" diameter) would need to be cut from the new trail bed. These trees would be left near the trail as down wood and/or used to block the decommissioned portion. Two new culverts would also be added as part of the reroute.

On other portions of the existing trail, existing waterbars would be armored and drain dips would also be added where needed. One drain dip site would need additional signs alerting motorcyclists to possible hazard. Pit run would be added to turnout areas (see map).

Segment 2:

Four existing log culverts would be replaced and three additional culverts would be installed. These sites may have a total of 10 trees, up to that 15" diameter, that may need to be cut down. These trees would be left for downed wood. Prior to construction, and the winter season, the fills at these existing log culverts would be removed. A temporary closure of this portion of the trail would be necessary until construction and new culvert installation is completed.

2.3 Alternative 3: Rock trail

Segment 1:

This alternative proposed to rock the existing trail instead of constructing a reroute. Course rock, overlaid with finer rock would be added to the existing trail around the springs and stream crossings. Water would be diverted into ditches, which would run into two newly installed culverts.

Segment 2:

Work on the other portions of the trail would be the same as Alternative 2.

2.4 Alternative Considered but Eliminated

A fourth alternative was considered, which was to propose a seasonal (approximately November-June) closure of the portion of the trail experiencing drainage problems. However, this alternative does not meet the purpose and need of the project, specifically, the purpose of continually providing recreation opportunities for OHV enthusiasts. This alternative would effectively close the trail for much of the recreational season.

2.5 Design Features for Alternative 2

1. The relocated trail would be constructed about 8 – 12 feet wide. The width would vary depending on the obstructions along the trail. The minimum width would be that required to allow a full size 4X4 to use the trail.
2. The trail grades can vary to allow normal 4X4 traffic.
3. The new trails location and constructed feature would not prevent use or create hazards to other trail users, such as the motor cyclists or mountain bikers.
4. The new trail would start and end on the existing trail. The old existing trail segment parallel this new location would be tilled, covered in slash and permanently closed to all users.

2.6 Design Features for Alternative 3

1. The existing trail that the proposed re-route would replace, listed above, would be modified to improve water quality and sedimentation problems through this segment. Modifications would use various methods to allow the water to flow across the trail without the vehicle driving directly through the water and limiting sedimentation flowing into the stream. The intent of this alternative would be to work with the contractor to prevent the vehicles from driving directly in the water and minimize sedimentation from getting into the water from the trail surface.
2. One alternative would be to cut a ditch line through the berm on the lower side of the trail to allow the stream and spring to flow across in the ditch and not down the trail. The stream would flow through large open course rock to the lower side of the trail. The vehicles would cross above the stream channel on a trail surface separated from the course rock by filter fabric and a geo-grid. This layer of materials would keep smaller rocks and dirt from filling between the course rock. The trail surfacing over these features would be predominantly crushed rock to minimize the amount of sediment coming into the stream flow from above.
3. Another alternative would be to create a ditch line adjacent to the trail. The stream and spring would flow next to the trail down to a lower natural stream crossing that would be modified as that in design element #2 above. The vehicles would again travel on a bed of course rocks with a segregated trail surface separated by filter cloth and geo-mesh. Although a ditchline would need to be constructed, the stream flow would go into a natural stream bed at another location. Some form of a physical barrier would be used to prevent the vehicles from driving into the ditch line

2.7 Design Features for All Alternatives

1. Some of the existing water bars, drain dips and lead off ditches will be improved to restore proper function and extend the useful life of the structures. This may include the removal of built up sedimentation at the site. The elevated portions may be armored with rocks or logs to prevent water from breaching over the structure through created ruts. The lower portion of the structures that allow the water and sediment to drain away may be hardened with rock to facilitate future clean out of built up sedimentation. This will also prevent ruts from forming and trapping sedimentation.
2. Tree dropped during culvert removal or creation of new trail will be left on site as downed wood or used on site to assist in road and trail closures.

Table 2.1 - Comparison of Alternatives

ELEMENTS	ALT. 1 NO ACTION	ALT. 2 REROUTE	ALT. 3 ROCKED TRAIL
Reroute construction around springs and streams and the cutting of 10 – 15 trees		X	
Adding pit run to turn out areas		X	X
Replacing 4 culverts on lower portion of trail – fill removed and trail temporarily closed until after construction – 10 trees	*X	X	X
Armoring existing waterbars and adding drain dips		X	X
5 new culverts added		X	X
Existing trail rocked and water diverted into ditches			X

**WAS ANALYZED UNDER A DIFFERENT EA (EA-00-09)*

3.0 AFFECTED ENVIRONMENT

Located in the Crooked Creek drainage, this native-surfaced trail winds through an overstory of second growth Douglas-fir and an understory dominated by salal with scattered vine maple and Oregon grape. It provides OHV enthusiasts with year-round recreational opportunities. Approximately 1.3 miles in length, its challenges (narrow widths and steeply graded portions) make it one of the more popular OHV trails in the Eugene District. OHV groups such as the Cascade Off-roaders and the Emerald Trail Riders Association use it extensively.

Most of the existing trail is located on fine textured silty clay loam, silty clay, and in one area, true clay. The permeability of these soils is moderately low and as a result runoff tends to be rapid, especially during storm events. In some locations erosion is accelerated due to steeper grades of the trail. One of the “through cuts” contains a deep soil unit up to 60 inches thick. It has eroded more in recent years from increased recreation use resulting in sediment deposition at the turnout downhill (see map) where the grade flattens. West of this area (uphill) the other “through cut” has more rock inclusions. This native rock has somewhat reduced sediment run-off from the small perennial streams that currently flow down the vehicle tread marks.

On segment 2, one log culvert is currently failing at both the inlet and outlet and presents a safety and sedimentation hazard. The other 3 log culverts are as old and possibly rotted. There are three other streams that flow to the trail that probably have no culverts directing flow under the running surface. Drainage from those streams is most likely seeping through the subgrade of the trail.

The proposed project area is within dispersal habitat for Northern spotted owl. There is no suitable habitat, activity center, Unmapped Late Successional Reserve or Critical Habitat for spotted owls within or adjacent to the proposed project area. There is no suitable habitat for any other Threatened or Endangered species within or adjacent to the proposed project area.

The perennially wet areas along the proposed trail re-route are suitable habitat for Crater Lake tightcoil (*Pristiloma arcticum crateris*), a BLM Sensitive species. Suitable habitat for this species would be surveyed and appropriate management would be applied to any individuals that are detected, so this species will not be analyzed in this assessment.

Surveys for Special Status Plants were done as part of the Upper Cash timber Sale during summer 2003. No special status plants were found. Surveys for Special Status non-vascular plants and fungi were done as part of surveys for Survey and manage non-vascular species during the winter 2003. None were found. At the time *Tetraplodon mniodes* and *Tripterocladium leucocladulum*, Special Status mosses were not on the list of species searched. A search was done for these species July 2004. They were not found. The proposed re-route was also surveyed in more detail at that time.

As mentioned above, the trail is located in the Crooked Creek drainage. Crooked Creek is a third order stream that flows east to southeast into Shotgun Creek at approximately River Mile 2.5. Native cutthroat trout are the most abundant and widely distributed salmonid species within this drainage. Their distribution ranges from mainstem to headwater habitats. Some other species likely to occur in the lower and mid-portion of this drainage include rainbow trout, summer steelhead, and non-salmonid species such as sculpin and minnow species and other.

No fish species exist within or adjacent to the project area. There are no listed fish species or critical habitat under the Endangered Species Act (ESA) within the Crooked Creek drainage.

4.0 ENVIRONMENTAL CONSEQUENCES

This environmental assessment incorporates the analysis of effects, including cumulative effects, in the Eugene District Proposed RMP/EIS, November, 1994 (Chapter 4), as amended by the Record of Decision (ROD) for Amendments to the Survey & Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines (January 2001), the Record of Decision to Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines (April 2004) (Survey and Manage ROD), and the Record of Decision to Clarify Provisions Relating to the Aquatic Conservation Strategy (March 2004). The following analysis of effects supplements those analyzed in the above EISs, and provides site-specific information and analysis particular to the alternatives and issues considered here.

4.1 Alternative 1: No Action

4.1.1 Issue 1: How would trail improvements and maintenance affect water quality?

In segment 1, no trail improvements would be constructed, and road related sediment would continue to flow into adjacent stream channels along the route. As on-going use of the trail occurs with no maintenance, remnant waterbars would continue to break down. Storm runoff would flow down the trail to low areas or nearby streams since there are no ditches with lead off features or ditch relief culverts along the trail.

Recreational vehicles would continue to drive through perennial streams (Stream 16 and 17 [see map]) currently draining down the trail in that area. Improving the water quality, with regard to sediment, of Streams 16 and 17 by rerouting the flow or vehicle traffic would be deferred to a later time.

In segment 2, the three perennial streams that have no constructed culverts would continue to seep into the fill of the existing trail. These are low gradient streams, with small volumes of flow and the risk of mass wasting is probably low considering they have drained this way for many years.

4.1.2 Issue 2: How would trail improvements effect soil displacement and compaction?

No drain dips or waterbars would be installed along the trail, therefore erosion would continue at the current and possibly increased rates if OHV use escalates. Drain dips and waterbars established in 2002 have been worn down and provide very little drainage. With no action, it is expected that those remnant drainage features would be rendered non-functional and water would drain down the road, creating gullies. The existing route is already compacted and this would not change under this alternative.

Sediments would continue to be transported downhill by erosion and vehicles from a saturated “through-cut” to the turnout on the trail. In the last five years, it is estimated that approximately 3 - 5 cubic yards of soil per year moved downhill and buried the pit-run rock placed at that location.

4.2 Alternative 2: Reroute

4.2.1 Issue 1: How would trail improvements and maintenance affect water quality?

Installing stream crossing culverts on the 3 streams (in segment 2) that currently have no drainage features would enhance water quality by providing drainage under the fill material of the trail. The culverts would protect against subsidence of saturated fills and possible slumping. Adding drain dips, water bars or relief drainage culverts near stream crossings would divert road related runoff away from streams and improve water quality.

Creating new channels for the Streams 16 and 17 (segment 1) to flow downhill without direct interaction with recreation vehicles would improve water quality by reducing sedimentation. Seepage from the spring would be directed to flow into Stream 17. The channel for Stream 17 would mimic natural conditions by flowing perpendicular to (across) the decommissioned section of trail rather than being diverted by it. A culvert would be installed on the new trail segment to handle this stream flow from upslope, thereby keeping vehicles from driving through it. Since Stream 16 is located in a “through cut,” it is not feasible to divert it to a side slope near the inception point. By creating a channel to direct flow to the nearest point down slope and underneath the trail, water quality of that stream would be improved. Most of the flow would be in a protected and closed section of the current trail and no vehicles would be driving through it anymore.

4.2.2 Issue 2: How would trail improvements effect soil displacement and compaction?

Adding a drain dip and armoring an existing waterbar in the vicinity of the heavy clay “through cut” on the trail (in segment 1) would intercept soil movement and reduce the likelihood of it accumulating on the turn out down below this area. These features would require routine maintenance to keep them fully functional. Improving and adding other drain dips and waterbars along the entire route would also reduce soil movement and require maintenance.

Adding pit run rock to two turnouts would harden those surfaces and promote soil stability in these areas where vehicles routinely stop. Closing the segment of road near the spring, and Streams 16 and 17 by tillage, blocking, and wood additions would promote soil stability and reclamation of the perennial stream channel banks. Although this section of trail does have exposed rock in the subsoil, tillage may help

reduce some of the existing compaction. Full restoration of soils there is unlikely since the organic soil layers have long since been removed.

The construction of the new trail segment would result in the removal of topsoil and compaction of the subsoils. Removal of the topsoil is an irreversible commitment of the soil resource. The new trail would be on gentle slopes (generally less than 35%) and soil movement should be less than what currently exists on steeper terrain. Some soil displacement may occur, particularly if the trail is not maintained to reduce ruts and gulleys.

4.3 Alternative 3: Rock Trail

4.3.1 Issue 1: How would trail improvements and maintenance affect water quality?

Trail improvements along most of the route would have the same impacts as described in Alternative 2.

The new channels for the Spring, Streams 16 and 17 would be constructed as in Alternative 2. The flow from the Spring would be channelized to flow into Stream 17. The difference is that a culvert would be installed in the existing trail where Stream 17 intersects it in order to direct that flow down the side slope. As in Alternative 2, Stream 16 would also be reconstructed to divert its flow to the nearest point where it can be lead off to the side slope and a culvert would be installed. After the excavation is finished, then the running surface for recreation vehicles would be rocked in order to prevent vehicles from either driving through the new channels or damaging the new stream crossing culverts. As a result, water quality would be improved by reducing sedimentation adjacent to these streams. Since this section of the trail currently has native rock fragments exposed in the subsoil, surfacing with pit run rock should be successful.

4.3.2 Issue 2: How would trail improvements effect soil displacement and compaction?

Most impacts would be the same as Alternative 2 with the exception that new trail construction would not occur. There would not be any new compaction. By placing rock on the existing trail near the Spring, and Streams 16 and 17, soil movement would be greatly reduced there.

4.4 Other Environmental Effects Common to All Alternatives

4.4.1 Unaffected Resources

The following are either not present or would not be affected by any of the alternatives: Cultural Resources, Areas of Critical Environmental Concerns, prime or unique farm lands, solid or hazardous wastes, Wild and Scenic Rivers, or Wilderness.

4.4.2 Threatened and Endangered Species

Felling a maximum of 25 trees that are greater than 15 inches dbh within this spotted owl dispersal habitat would have limited negative effect on this habitat. Although some individual trees would be lost, this habitat would remain functional dispersal habitat. The project would not be expected to have adverse effects on Northern spotted owls.

4.4.3 American Indian Rights

No impacts on American Indian social, economic, or subsistence rights are anticipated. No impacts are anticipated on the American Indian Religious Freedom Act. Management action information was sent to the Confederated Tribes of the Grand Ronde, and Confederated Tribes of the Siletz.

4.4.4 Environmental Justice

To comply with Executive Order 12898 of February 11, 1994, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, the Bureau of Land Management, Eugene District, will ensure that the public, including minority communities and low income communities, have adequate access to public information relating to human health or environmental planning, regulations, and enforcement as required by law. The District has not identified any environmental effects, including human health, economic and social effects of Federal actions, including effects on minority populations, low-income populations, and Native American tribes, in this analysis.

5.0 LIST OF AGENCIES AND PERSONS CONSULTED

This environmental assessment is being mailed to the following members of the public or organizations that have requested to be on the mailing list:

John Bianco	Roseburg Forest Products Co.
Oregon DEQ	Peter Saraceno
Jim Goodpasture	Sierra Club - Many Rivers Group
Pam Hewitt	Swanson Group
Charles & Reida Kimmel	Craig Tupper
Lane County Land Management	Jan Wroncy
Carol Logan, Kalapooya Sacred Circle Alliance	Kris and John Ward
Oregon Dept of Fish & Wildlife	Robert P Davison
Oregon Dept of Forestry	Tom Stave, U of O Library
Oregon Natural Resources Council	John Muir Project
The Pacific Rivers Council	James Johnston
John Poynter	Molly Widmer
Leroy Pruitt	David Simone
Neal Miller	Bart Pratt
Ralph Kleinschmidt	Rich Wright
Mike Sheets	

A summary was sent to those receiving the "Eugene BLM Planning and Project Focus, January & March 2004 (approximately 250 mailings; a complete listing is available at the Eugene District Office).

7.0 LIST OF PREPARERS

THE INTERDISCIPLINARY TEAM

Name	Title	Resource/Discipline
Paula Larson	Wildlife Biologist	Wildlife
Cheshire Mayrsohn	Botanist	Botany
David Mattson	Engineer	Engineering
Chuck Vostal	Fisheries Biologist	Fisheries
Kris Ward	Hydrologist	Hydrology
Liz Aleman	Recreation Planner	Recreation
Christie Hardenbrook	Environmental Specialist	Team lead/NEPA

**UNITED STATES DEPARTMENT OF INTERIOR
BUREAU OF LAND MANAGEMENT
EUGENE DISTRICT OFFICE
Finding of No Significant Impact**

Determination:

On the basis of the information contained in the Environmental Assessment, and all other information available to me, it is my determination that implementation of the proposed action or alternatives will not have significant environmental impacts not already addressed in the Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl (April 1994) and the Eugene District Record of Decision and Resource Management Plan (June 1995), as amended by the Record of Decision for Amendments to the Survey & Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines, January 2001, the Record of Decision to Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines (March 2004), and the Record of Decision to Clarify Provisions Relating to the Aquatic Conservation Strategy (March 2004), with which this EA is in conformance, and does not, in and of itself, constitute a major federal action having a significant effect on the human environment. Therefore, an environmental impact statement or a supplement to the existing environmental impact statement is not necessary and will not be prepared.

Field Manager, Upper Willamette Resource Area

Date

Appendix A: Checkpoint 5 Map

