1792A
Teeter Creek
EA-06-02

March 22, 2006

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 Teeter Creek Aquatic and Riparian Habitat Restoration project located in T. 20 and 21 S., R. 1 and 2 W., W.M.

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 March 22, 2006. The EA will be available on the internet at http://www.edo.or.blm.gov/planning/nepa if current internet access problems related to ongoing litigation are resolved. The public comment period will end on April 21, 2006. 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 April 21, 2006. If you have any questions concerning this proposal, feel free to call Chuck Vostal at 683-6454.

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

Teeter Creek Aquatic and Riparian Habitat Restoration

Upper Willamette Resource Area
BLM Eugene District
Environmental Assessment
OR090-06-02

1. INTRODUCTION

PURPOSE AND NEED FOR THE ACTION

The purpose of this action is to restore and enhance the spatial and temporal connectivity and the physical integrity of the aquatic ecosystem by eliminating human-caused barriers and enhancing habitat complexity within the Teeter Creek Drainage. In addition, this project would improve habitat conditions within the Riparian Reserve for populations of Special Status Species and native plant species. The location of the project area is T. 20 and 21 S., R. 1 and 2 W., W.M.

The need for action is based on the current degraded condition of the subject roads and their negative impact on the aquatic and riparian habitat and aquatic-dependent species. Project area roads have insufficient stream crossings, inadequate road drainage, and failing, rotted and/or plugged culverts. Due to these conditions, most tributaries are now flowing down the old road and have lost their natural connectivity to the mainstem Teeter Creek. This has also resulted in road related erosion and sedimentation to fish bearing habitat. In addition, non-native and invasive plant species have become established and have the potential to spread throughout the project area.

CONFORMANCE WITH LAND USE PLAN

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), 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 Teeter Creek Aquatic and Riparian Restoration 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.

2. PROPOSED ACTION AND ALTERNATIVE

This section describes the alternatives identified by the interdisciplinary team, and provides a comparison between them. Site Map and Vicinity Map for this project proposal are located in Appendix A.

Alternative 1: No Action

Under this alternative, no road decommissioning or aquatic and riparian restoration would occur within the project area.

Alternative 2: PROPOSED ACTION

The Weyerhaeuser Company and the Upper Willamette Resource Area, Eugene District would conduct aquatic and riparian habitat restoration and road decommissioning within the Teeter Creek Drainage, Row River 5th Field Watershed, Upper Willamette River Subbasin. The project would involve:

A) Road Decommissioning

The majority of Road No. 21-2-2.1 and a portion of Weyerhaeuser Road No.1000 would be fully decommissioned resulting in the closure of approximately 4 miles of road. Approximately 22 road-stream crossings and relief culverts would be removed and recycled. Approximately 17 stream channels would be restored to their original channel. Restored stream banks and channel bottoms would conform to adjacent natural conditions of each stream. Drain dips (large waterbar/drainage features) would be constructed where relief culverts would be removed and in other designated areas throughout the project area. Subsoiling of the road bed would occur in selected areas. To reduce erosion and sedimentation, disturbed areas would be mulched and planted with native species. Barricades would be constructed at either end of the project area to eliminate vehicle access to the restored area.

B) Instream Restoration.

Placement of large wood and boulder structures would be positioned within mainstem Teeter Creek. On-site materials (trees and boulders) would be used. Some tree pulling would occur, and would function as instream structure and/or riparian coarse woody debris. Throughout the project area, tree falling or pulling would be restricted to no more than 15 trees with diameters less than 24 inches.

C) Riparian Restoration

Native riparian vegetation would be re-established where possible throughout the project area. In large infested areas, noxious and invasive plant species would be removed by manual and mechanized processes, and replanted with native tree and shrub species.

D) Pond Creation

Approximately 8 small ponds would be created at constructed drain dips or at existing wetland areas associated with the road. Ponds would be a minimum of 3 feet in depth, and where possible, trees (<15" diameter) from the adjacent riparian area would be placed into constructed ponds as basking structures for pond turtles and other aquatic and terrestrial species.

3. Design Features

A) No motorized equipment would occur within or adjacent to the project area from March 1 to July 15 in order to prevent disturbance to spotted owls. This restriction may be waived if a biologist determines that an activity would not adversely affect spotted owls. All instream work shall follow stream-specific Oregon Department of Fish and Wildlife (ODFW) guidelines for in-water work period.

B) A Spill Contamination Kit (SCK) would be on-site during any equipment operations, and would be equipped as specified under the Spill prevention, Control, and Countermeasure Plan (SPCC).

C) Individual trees felled during project activities shall be left on site as down woody material. No more than15 trees that are greater than 15" dbh and less than 24" dbh shall be felled outside of the spotted owl Unmapped LSR.

D) Cedars would be planted only on the north side of the creek. Conifers and other vegetation would be planted at newly restored stream crossings. Large conifers would be positioned in restored stream channels.

E) Disturbed and exposed soils would be seeded and mulched with native materials.

F) Waste material from removal of culverts would be hauled to a stable site outside the stream influence zone.

G) Drain dips would be a minimum of 20 feet wide and excavated at a minimum of 3 feet below the existing road grade line. They would be outsloped and skewed at 20 degree down grade onto natural ground.

H) Pond creation would maintain a similar design as drain dips except the structure would not be skewed or outsloped but would maintain a berm and spillway feature that would drain towards the mainstem or wetland areas.

I) To the extent possible, blackberry, scotch broom and other noxious weeds would be treated by manual and mechanized processes prior to and during the project.

J) All equipment would be cleaned prior to coming on-site.

4. AFFECTED ENVIRONMENT

Project Area Description

Teeter Creek Road (No. 21-2-2.1) and Weyerhaeuser 1000 road were constructed during the 1950's to access BLM and Weyerhaeuser lands for logging activities. They are bottomland roads that were built extremely close to mainstem Teeter Creek. These roads cross approximately 17 streams, several having no culverts associated with them. Cross drain culverts are limited. The roads have been abandoned for the past decade, and therefore have not been maintained. The majority of the road-stream crossings have failed with many of the stream channels now flowing down the old road bed thus modifying the natural drainage patterns and increasing road and hillslope erosion and downstream sedimentation (Figure 1). There are three low water crossings located along the 21-2-2.1 road. At two of the low water crossings, during moderate to high flow events mainstem Teeter Creek over flows its banks and flows down 21-2-2.1 road.

Figure 1. Significant stream flow on road 21-2-2.1.

Figure 2. Old road functioning as seasonal channel.

Soils

Road 21-2-2.1 is compacted and surfaced with aggregate along much of its length. On at least one section with a steep grade, this road is lacking a sufficient number of relief culverts. During storm events, runoff flows down the road for several hundreds of feet and is diverted to cross drain or stream crossing culverts. Soils along the road vary from cobbly loam with moderate permeability, to silty clay loam with moderately slow permeability with a seasonal high water table. These soils were derived from basaltic lava flows and tuff. At several locations adjacent to the road, old rotational landslides were identified from the jackstrawed timber, wetlands on bench topography, and even some tension cracks on the roadbed.

During winter storm events, road ditchlines and shallow wheel ruts from past vehicle use direct surface runoff into the adjacent Teeter Creek, its tributaries, or small nearby wetlands. Because permeability of the soils and the road surface is moderately low, runoff tends to be rapid. Erosion at several culverts was evident, and in one case most of the fill had been removed during high flows. A section of road near the western low water crossing was also washed out where Teeter Creek jumped its bank and turned that portion of road into a seasonal side channel (Figure 2).

Hydrology

The project area is located on the north side of Teeter Creek which drains to Dorena Reservoir. Water bodies in the vicinity of this project that are on the 2002 Department of Environmental Quality 303(d) Water Quality Limited List include Dorena Reservoir for mercury, and Row River for elevated summer temperatures.

Along the section of road analyzed for closure, 22 culverts were discovered. Of those, 17 are stream crossings. Several sites were also identified as stream crossings currently without culvert structures.

Near the westerly low water crossing of Road 21-2-2.1 with Teeter Creek, stream flow is diverted down the road about 200 feet during winter storm events (Figure 1). That segment of the road now very much resembles a stream channel and has boulders, cobbles, and fine sand along it's course. At the other end, near a severely eroded culvert, the flow diverts back into the natural channel.

Fisheries

Teeter Creek is a large tributary of the Dorena Reservoir system that provides spawning and rearing habitat for native rainbow and cutthroat trout and numerous non-salmonid species such as sculpin spp., dace spp., redside shiners and others. No recent fish distribution surveys have been conducted in Teeter Creek, however, based on past habitat surveys, the mainstem and several tributaries are considered fish bearing within the project area. There are no listed fish species (Endangered Species Act) located in the watershed.

Due to the extensive amount of habitat degradation in the drainage, it is estimated that approximately 4 miles of spawning and rearing habitat has been negatively impacted. Many of the project area tributaries are currently barriers to aquatic-dependent species with some resident trout populations being isolated in upper reaches.

Wildlife

There is a known Northern spotted owl activity center, an associated Unmapped Late Successional Reserve and suitable nesting habitat adjacent to the proposed project. There is also dispersal habitat for this species adjacent to the proposed project area.

There is no habitat for bald eagles (Threatened), great gray owls (Survey and Manage) or Crater Lake Tightcoil (Survey and Manage) within or adjacent to the project area. There is no suitable habitat within the project area for red tree voles (Survey and Manage) as described in the current protocol (Version 2.1). These species will not be analyzed in this document.

The streams within and adjacent to the project area provide suitable habitat for the following Special Status Species (SSS): Northwestern pond turtles, foothill yellow-legged frogs, harlequin ducks, Cascade torrent salamanders and Haddock's rhyacophilan caddisfly.

Botany

Teeter Creek in the project area varies in character from a single defined channel to a braided channel across a wide floodplain. The character of the creek determines the riparian vegetation. Where the creek is a single channel, the riparian vegetation is mostly alders and cedar immediately along the banks, with Douglas fir and hemlock further up the sides of the creek's

ravine. Where the creek is wide and meandering, the vegetation also includes red-twig dogwood, osoberry, salmonberry, willows and rushes.

The project area is mostly restricted to the old road bed with little area outside the road disturbed. The old road bed is heavily compacted which has limited the vegetation to mostly grasses, alder seedlings and weeds.

Special Status Species: The riparian area provides suitable habitat for: Tall Bugbane (Cimicifuga elata, Bureau sensitive). Trees along the creek are potential habitat for a number of Special Status bryophyte and lichen species.

Weeds: Large infested areas of blackberry and scotch broom occur in the project, and are out-competing native plant species and encroaching on sensitive riparian areas.

5. DIRECT, INDIRECT, AND CUMULATIVE EFFECTS

This environmental assessment incorporates the analysis of current condition and environmental 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),* 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 alternative considered.

Alternative 1: No Action

Soils

Road related sediment could continue to be delivered to Teeter Creek and it's tributaries during seasonal storm events. Erosion at failing stream crossings, unmaintained ditchlines, and portions of the road system with very little aggregate surfacing or few relief culverts, would continue to be the primary source of sediment. If Off Highway Vehicle use were to escalate in the area, further soil displacement along this unmaintained road could occur. Postponing the closure of this stream adjacent road could result in increased soil displacement from storm related erosion, lack of maintenance, or vehicle use.

Hydrology/Water Quality

Water quality would continue to be impacted by road related sedimentation at failing culverts, eroding ditches, sections of steep road grades with inadequate relief drainage, and on exposed soils with little or no rock aggregate surfacing. Sediment may be routed to streams either from chronic erosion, or from potential mass wasting if unmaintained culverts and ditches failed.

In the long term, restoration of water quality from road related sediment would be postponed in the Teeter Creek Drainage, and also at the watershed scale.

Fisheries

Project area tributaries would remain as barriers to upstream and downstream migration of fish and other aquatic-dependent species. Both road segments would continue to affect stream geomorphology with continued erosion and re-routing of channels down existing roads during moderate and high flow events. Spawning and rearing for trout would continue to be negatively impacted by the chronic erosion and sedimentation occurring throughout the project area.

Wildlife

Water quality and habitat for aquatic species would continue to be negatively affected by erosion and sedimentation. The amount of aquatic habitat available would remain at current levels.

Alternative 2: Proposed Action

Hydrology/Soils
Removing culverts, constructing drainage dips and lead off ditches would stabilize the road so that sediment delivery to streams would be reduced in the future. Until vegetation becomes established on exposed soils, some erosion and sediment transport to nearby streams could be expected. Removal of invasive weeds may result in soil disturbance with some potential for increased turbidity during seasonal storm events until vegetation encroaches.

Construction of small ponds for wildlife habitat at various locations along the road is expected to be successful in retaining water, due to slow permeability of soils at those locations, and would act as settling ponds to any suspended sediment during storm events. Water draining from the ponds at overflow locations should be relatively sediment-free.

This action, combined with other restoration work in the watershed (both on Federal and private lands) would contribute to a reduction in road related sediment production and possibly reduce the potential for landslides. By restricting vehicle access to this road, vegetation is expected to grow into the road prism and provide additional resistance of these soils to erosion.

In the long-term, the restoration work on this old road would result in a self-maintaining system with a reduction in road related sediment production and lower risk of slope failure. As a result, there should be improved water quality in Teeter Creek and also at the watershed level.

Fisheries
Instream restoration work would deliver small amounts of sediment and higher turbidity levels into Teeter Creek during the excavation phase, and, also after fall rains until vegetation is established on the exposed streambanks. Resident fish and other aquatic species within and near the project area would be displaced and experience higher suspended sediment loads. With the implementation of project design features (Section 3.0); these effects are anticipated to be short-term and localized.

Over the long-term, this project is expected to restore the physical integrity of the aquatic system, restore the spatial and temporal connectivity within the drainage, and restore water quality to support health riparian and aquatic ecosystems. The project would remove numerous barriers that would provide for the movement of fish and other-aquatic-dependent species for a number of life history needs and would increase the genetic diversity within Teeter Creek.

The placement of large wood and boulder structure would immediately increase in the stream and on the floodplain. As a result, the project area would receive large “key” structures that would trap small debris and gravels, reduce stream velocities, provide channel stability, and increase the stream channel complexity. Over the long-term, the prevalence and quality of pools are expected to increase. Channel habitat diversity, spawning and rearing habitat, cover, and overall productivity for the aquatic organisms are expected to increase.

Wildlife
No suitable spotted owl (ESA, Threatened) habitat would be modified by the proposed project, although some individual trees would be removed from dispersal habitat. A seasonal restriction would eliminate disturbance during the critical nest period. The project would result in a “may affect, but is not likely to adversely affect” determination.

Although project activities would result in a short-term pulse of sediment into aquatic habitat for SSS species, negative effects to individuals is unlikely due to the limited area of instream work. Over the long-term, project activities would stabilize and improve habitat for these species by reducing current sedimentation levels. Northwestern pond turtles and other SSS species would benefit from the creation of eight ponds within the project area.

Botany
Soil compaction in the old road has limited forest succession, greatly slowing the return of this area to a typical riparian plan community. Without treatment, the road would remain visible for many years. With treatment (ripping) and planting, the road would re-vegetate, returning to riparian forest more quickly.

Treating the area, would do some damage to existing plants and create bare ground, creating an opportunity for weeds to come in, but also an opportunity to seed and plant.

Untreated weeds would spread into the disturbed ground. On the old road, weeds could continue to spread, these weeds could dominate the site, reducing the plant diversity, slowing succession to a forested stream bank and altering the nutrient inputs to the creek. Alder leaves contribute nitrogen to the creek and soil. Treating weeds before and during treatment would reduce the spread of weeds. A long-term program of control would be needed to prevent weeds from taking over the site and being spread along the stream.

Surveys of suitable habitat for Special Status vascular plants, lichens and bryophytes would be completed prior to the start of the project. Appropriate mitigations would be made for any species found in the project area.

6. OTHER ENVIRONMENTAL EFFECTS

Unaffected Resources
The following either are not present or would not be affected by any of the alternatives: American Indian right, Areas of Critical Environmental Concerns, prime or unique farm lands, solid or hazardous wastes, Wild and Scenic Rivers, Wilderness, cultural resources, hazardous materials, and Visual Resource Management objectives.

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 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.

7. MONITORING
The project area restoration would be monitored annually for the first 5 years. Aquatic and riparian habitat and fish population conditions would be documented and a photographic record maintained to show changes in the system over time. An annual assessment would be made to assure that the anticipated project results are being achieved.

8. CONSULTATION AND COORDINATION

8.1 LIST OF PREPARERS

The Proposed Action and Alternative 1 were developed and analyzed by the following interdisciplinary team of BLM specialists:

Chuck Vostal	Fisheries (Project Lead)
Kris Ward	Hydrology
Paula Larson	Wildlife and Threatened and Endangered Species
Cheshire Mayrsohn	Botany
Christie Hardenbrook	Planner

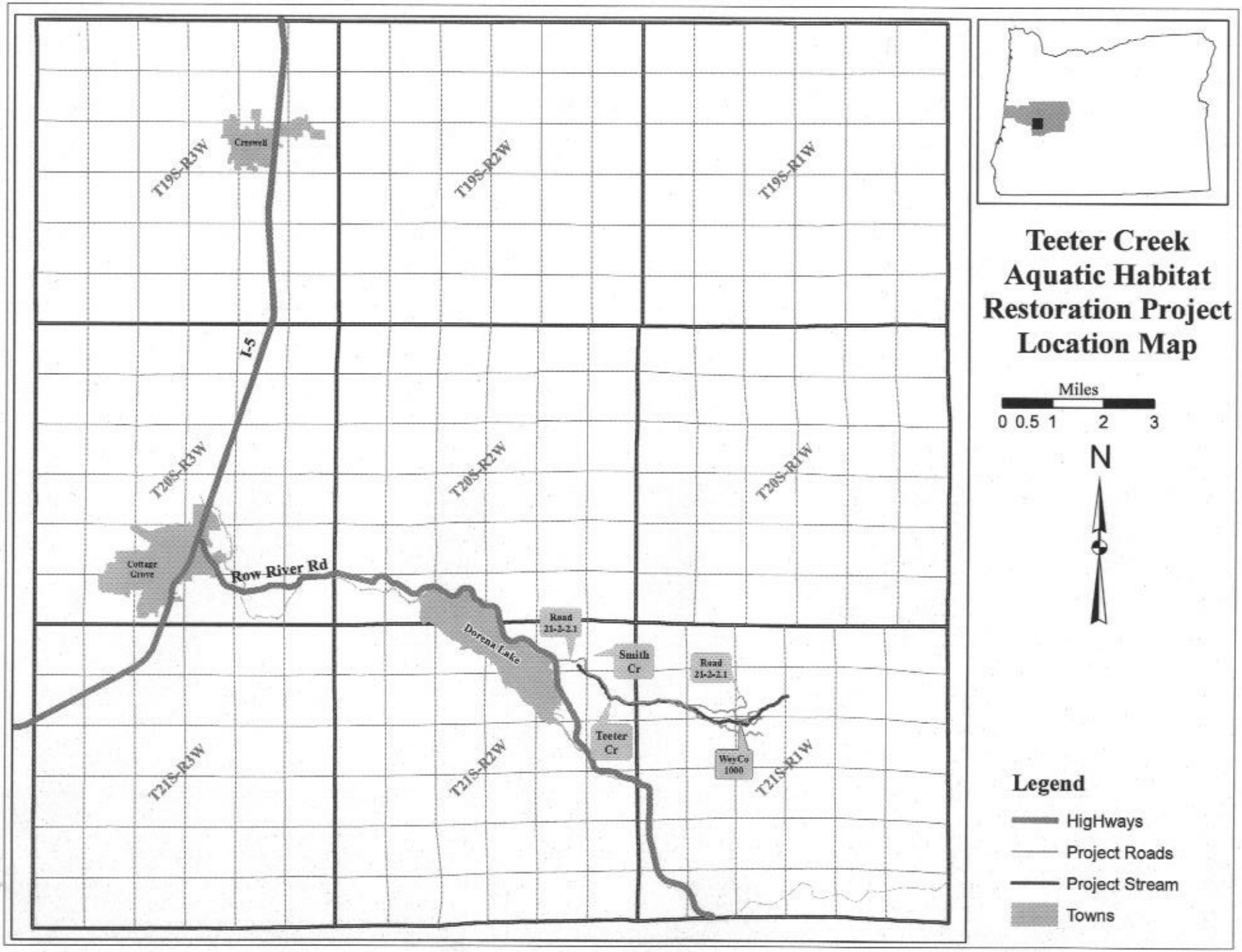
8.2 CONSULTATION

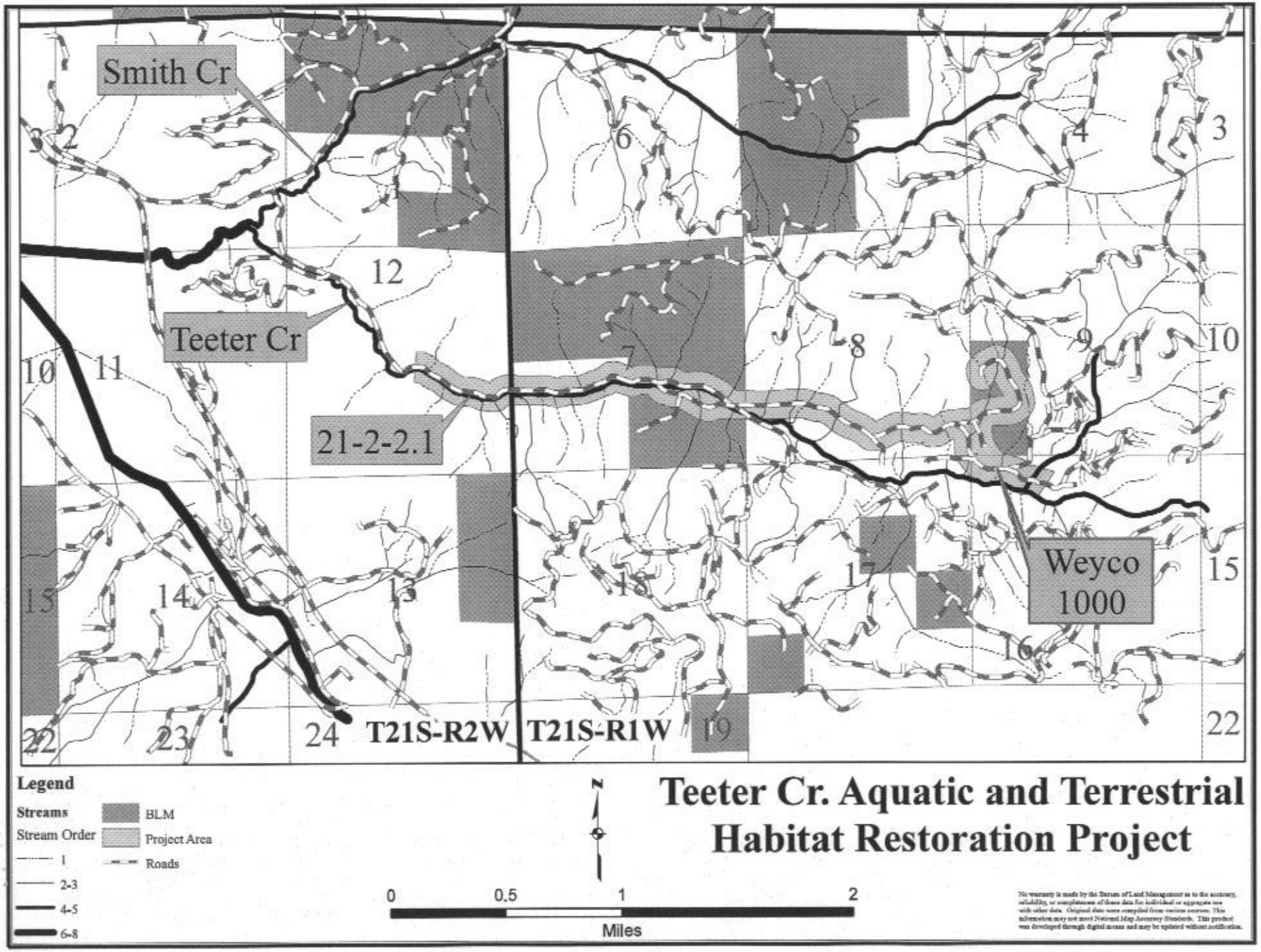
Consultation with U. S. Fish & Wildlife Service would result in a “May affect but is not likely to adversely affect” determination for the Northern Spotted Owl. This action is covered under: Biological Assessment of Activities with the Potential to Disturb Northern Spotted Owls or Bald Eagle Willamette Planning Province – FY 2006-2007.

No bald eagle habitat would be modified or affected by disturbance and there would be no effect to the species or its habitat due to the proposed project.

APPENDIX A

1) BLM Vicinity Map
2) BLM Site Map


T19S-R3W
Creswell
T19S-R2W
T19S-R1W
I-5
T20S-R3W
T20S-R2W
T20S-R1W
Cottage Grove
Row River Rd
Dorena Lake
Road 21-2-2.1
Smith Cr
Road 21-2-2.1
Teeter Cr
WeyCo 1000
T21S-R3W
T21S-R2W
T21S-R1W
Teeter Creek Aquatic Habitat Restoration Project Location Map
Miles
0 0.5 1 2 3
N
Legend
HigHways
Project Roads
Project Stream
Towns



Teeter Cr. Aquatic and Terrestrial Habitat Restoration Project

UNITED STATES DEPARTMENT OF INTERIOR
BUREAU OF LAND MANAGEMENT
EUGENE DISTRICT OFFICE
Finding of No Significant Impact
For Teeter Creek Aquatic and Riparian Habitat Restoration
Environmental Assessment No. OR-090-06-02

Determination:

On the basis of the information contained in the Environmental Assessment (OR-090-EA-06-02), 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, 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