

# Deschutes & Ochoco National Forests Crooked River National Grassland

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## Roads Analysis Report for Eyerly Project Area

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PLANS, ANALYSES, ASSESSMENTS

**Deschutes National Forest**

1001 SW Emkay Drive  
Bend, OR 97702

(541) 383-5300

**Ochoco National Forest**

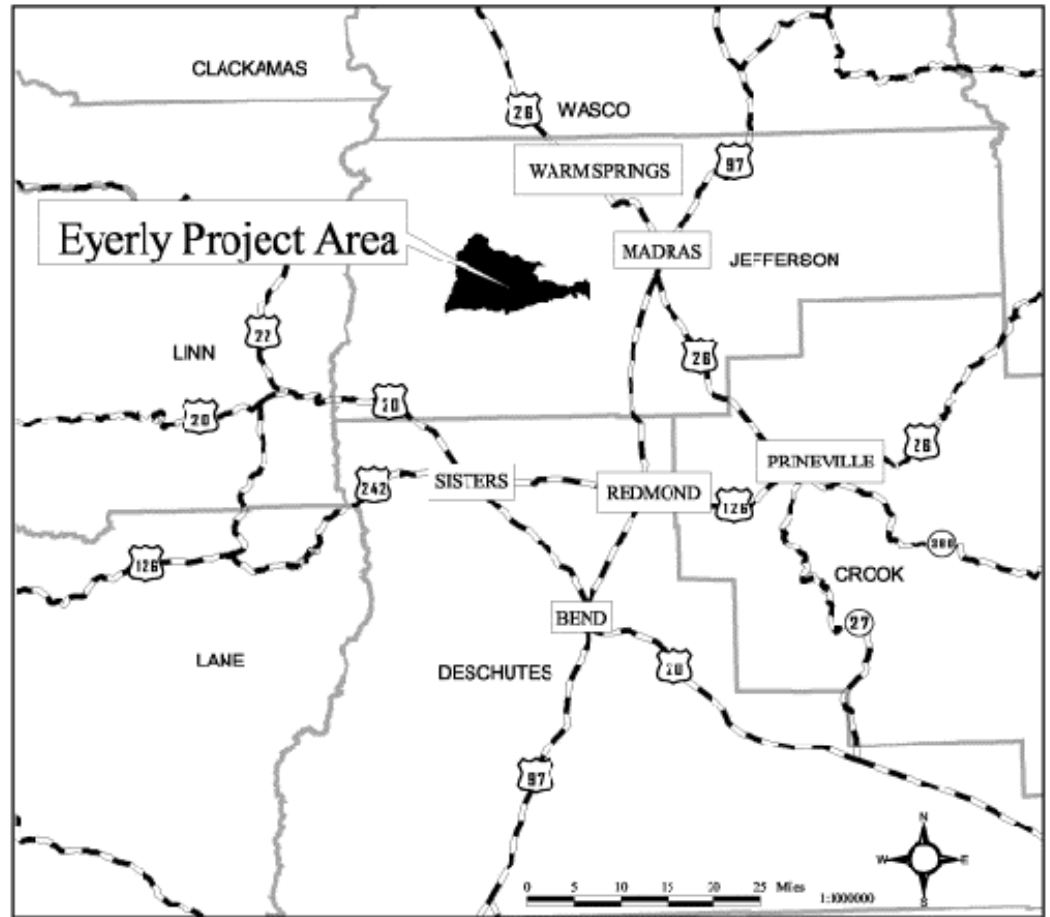
3160 N.E. 3rd Street  
Prineville, OR 97754

(541) 416-6500

**Crooked River National Grassland**

813 S.W. Hwy. 97  
Madras, OR 97741

(541) 475-9272



## Background

On January 12, 2001, the Forest Service issued a new National Forest System Road Policy. This policy revises regulations concerning the management, use, and maintenance of the National Forest Transportation System. Consistent with changes in public demands and use of National Forest System resources and the need to better manage funds available for road construction, reconstruction, maintenance, and decommissioning, the final rule removes emphasis on transportation development and adds a requirement for science-based transportation analysis. The final rule is intended to help ensure that additions to the National Forest System road network are those deemed essential for resource management and use; that construction, reconstruction, and maintenance of roads minimize adverse environmental impacts; and that unneeded roads are decommissioned and restoration of ecological processes are initiated.

In August 1999, the Washington Office of the USDA Forest Service published Miscellaneous Report FS-643 titled *Roads Analysis: Informing Decisions about Managing the National Forest Transportation System*. The objective of roads analysis is to provide decision makers with critical information to develop road systems that are safe and responsive to public needs and desires, are affordable and efficiently managed, have minimal negative ecological effects on the land, and are in balance with available funding for needed management actions.

According to the Forest Service Road Management Policy, all NEPA decisions signed after January 12, 2002, that involve any of the items listed below, must be informed by a Roads Analysis.

1. Changes in access such as current use, traffic patterns, or road standards (FSM 7712.13c). This includes closing currently open roads, opening currently closed roads, adding/changing seasonal restriction periods, changing maintenance levels, etc.
2. When adding new roads to the transportation system (FSM 7712.12b). This includes both new construction and newly acquired roads.
3. Road construction, reconstruction, or decommissioning (FSM 7712.12b, FSM 7712.13c). In this context, the term "reconstruction" refers to either an improvement, where an activity results in an increase to the roads traffic service level, expands its capacity, or changes its original design function; or a realignment, which results in a new location of a portion of an existing road. As a result, most "reconstruction" work typically done under timber sale and public works contracts is more properly considered to be deferred maintenance work.

The Sisters District Ranger has determined that a project-level roads analysis is needed for the Eyerly Salvage project area because it includes road management activities that may fall within one or more of the categories listed above.

## Process

The Road Policy requires the use of a science-based road analysis process to identify road needs, issues, and opportunities and to actively engage the public and other state, federal, local, and tribal partners in the analysis. The document *Roads Analysis: Informing Decisions About Managing the National Forest Transportation System (USDA Forest Service, 1999, Misc. Report FS-643)* was developed and published in 1999 to provide guidance and direction in conducting the analysis. The process consists of the following six steps:

- Step 1. Setting up the analysis - Roads Analysis Plan
- Step 2. Describing the situation - Existing Conditions
- Step 3. Identifying the issues - Issues
- Step 4. Assessing benefits, problems, and risks - Analysis
- Step 5. Describing opportunities and setting priorities - Opportunities and Recommendations
- Step 6. Reporting - Transportation Analysis Document

The product of a roads analysis is a report for decision-makers and the public that documents the information and analyses used to help identify the optimum road system needed for safe and efficient travel and for the administration, utilization, and protection of National Forest System lands.

Roads analysis is **NOT** a decision-making process. Rather it is designed to provide an assessment of the existing forest road system from a landscape perspective. It highlights problem areas and opportunities in the road system so that Forest Service land managers can make well-informed management decisions regarding the transportation system on national forest lands.

## This Report

This report has been prepared according to the six-step process published in the report *Roads Analysis: Informing Decisions About Managing the National Forest Transportation System (USDA Forest Service, 1999, Misc. Report FS-643)*. This report documents the information and analysis procedure used for the Eyerly Roads Analysis. It corresponds to Eyerly (EIS) and Eyerly Restoration EA project boundary. It includes rating tables showing relative values of each road in the planning area for resource management and access needs, and compares the associated risks of each road on various environmental values. The report includes recommendations for future road management actions and lists opportunities for future actions that may impact the road system within the planning area. This report is a "living document" and reflects the conditions of the analysis area at the time of writing. The document can be updated as the need arises and conditions warrant.

## Scope and Scale of Analysis

Analysis of the Eyerly Project Area was conducted at the watershed scale level within the Deschutes National Forest, Bend, Oregon, National Forest System, Region 6. A Forest-Wide Roads Analysis was recently completed that covered all Arterial and Collector roads on the Forest. The Eyerly Roads Analysis concentrated on maintenance level 1 and 2 roads and reviewed the recommendations proposed in the Forest-Wide assessment.

## Objectives of the Analysis

The main objectives of this analysis are to:

- Maintain a safe and efficient transportation system that meets the needs of forest users;
- Facilitate implementation of the Deschutes National Forest Land and Resource Management Plan;
- Allow for economical and efficient management within likely budget levels;
- Meet current and future resource management objectives;
- Address associated ecological impacts across the planning area.
- Provide management recommendations for present and future motorized access within the Eyerly Salvage Planning Area.
- Identify the need for transportation system changes within the Eyerly Salvage planning area by comparing the current road system to the desired condition;
- Balance the need for access with the need of other resources by examining important ecological, social, and economic issues related to roads;

- Describe transportation management opportunities and strategies that will better address future access needs, budgets, and environmental concerns.

## Interdisciplinary Team Members and Participants

The Interdisciplinary Team for this roads analysis consists of:

Ray Horgen	Road Manager	Dana Butler/	Hydrology
Rick Dewey	Botanist	Cari McCown	
Rob Schantz	Silviculturist	Brad Houslet	Fisheries Biologist
Kris Hennings	Wildlife	Don Zettel	Cultural Resources
Peter Sussmann	Geology	Paul Engrstrom	Recreation
Doug Shank	Soils	Ronnie Yimsut	Visual/Scenic Res.
Kirk Metzger	Fuels Specialist	Kathy Baker-Katz	GIS
Alan Heath	Range/Logging Systems	Todd Chaponot	Writer Editor

## Information Needs

The information needed to complete this analysis is currently available and includes numerous GIS layers, information contained in the Metolius Watershed Analysis, the Forest-Wide Roads Analysis for the Ochoco and Deschutes National Forests and the Crooked River National Grassland (Jan. 2003), and an inventory of both classified and unclassified roads in the project area. In addition, members of the Interdisciplinary team have become familiar with the project area through the performance of field surveys and participation in other planning efforts in the area.

As road management projects are proposed and analyzed, additional site-specific information will be gathered where it is needed to make reasoned choices before proceeding. Since the roads analysis process was designed to be an iterative process, adjustments in recommendations will be made as new or more complete information becomes available.

## Public Involvement

It was decided early on in the process to contact individuals, agencies, and organizations that may be interested in participating in this Roads Analysis process. The project team performed an initial survey of roads within the Eyerly Project Area, and a Communication Plan was developed. As part of this effort a letter describing how the Roads Analysis Process was involved in the Eyerly Project scoping was sent to members of the public on the Sisters District mailing list. A press release, outlining the project scoping and analysis of project roads was issued by the Deschutes Public Information Office. In addition, individual contacts were made with Native American tribes, environmental organizations, forest products industries, and the Jefferson County Public Works office, to name a few.

## Analysis Plan

This roads analysis was completed by following the steps in the Roads Analysis Guide. The interdisciplinary team has:

1. reviewed the example questions contained in the guide and determined which questions are pertinent to this project area,
2. developed resource related issues that have been answered during the analysis,
3. developed ranking criteria to assess the social and ecological benefits and risks associated with existing roads,
4. assessed individual road segments to identify what roads are needed and where existing roads are causing unacceptable levels of resource damage,
5. developed a recommendation list for how existing roads should be managed, and
6. completed this report to document the analysis

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PLANS, ANALYSES, ASSESSMENTS

The Eyerly project area covers 66.8 square miles of land and is accessed by 161.3 miles of roads. Within this area there are 146.23 miles of road under Forest Service jurisdiction; 14.83 miles of road

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under Jefferson County jurisdiction; and 0.23 miles of private road. Most of the Forest road system is on the northeast side of Green Ridge; however, there are some short segments adjacent to the Metolius River and Lake Billy Chinook on the east side of the analysis area. The existing Forest road system includes 87.3 miles of open road and 58.9 miles of closed or inactivated roads. Reference Appendix C, Map C-2: Existing Open Road System.

A large portion of the Eyerly project area (6,707 acres) lies within the Metolius Breaks roadless area. This roadless area occupies the steep sloped areas on the northeast side of the project above the Metolius River and Lake Billy Chinook, and includes two small areas on the west side of the project above the Metolius River. Forest system road 1190850 (0.37 miles) is the only road within the roadless area.

The project area is situated on a portion of the lower east flank of the Old Cascade Range. Elevations within the project area range from about 4500 feet along the western boundary to about 3850 feet to the north and east along the Metolius River, the shores of Lake Billy Chinook, and the lower portion of the Fly Creek drainage. The terrain is dissected by a series of intermittent and permanent streams flowing to the northeast and east. Intervening ridges vary in shape from broad and gently sloping to narrow and steeply descending.

Most Forest roads in this area are currently open year-around to both motorized vehicles and non-motorized uses. Present uses include, but are not limited to, sightseeing, driving for pleasure, mushroom picking, biking, cross country skiing, hunting, off-highway vehicle use (ATVs, motorcycles, 4WD, snowmobiles), special use access, and Forest Service resource management. Because roads are not maintained during the winter, winter use is primarily limited to snowmobiles and skiers.

## Existing Road System

Arterial Road 11, collector Road 1170 and County Road 64 provide the primary access into the analysis area. The 11 and 1170 roads are Highway Safety Act roads suitable for mixed traffic including passenger vehicles. Road 11 connects to U.S. Highway 20 near Sisters, and road 1170 connects to Jefferson County road 64. County road 64 provides access to the community of Three Rivers, private lands, recreation residences, resorts, and the many recreational opportunities at Lake Billy Chinook. Collector roads 1490, 1140 and 1180 provide secondary access from the community of Camp Sherman to the project area.

National Forest System Roads (NFSR's) provide access to National Forest lands and are classified as arterial, collector, and local. An arterial road provides service to large land areas and connects with other arterials or public highways. A collector road serves smaller land areas than arterials and connects arterials to local roads. A local road is generally a single purpose facility and connects terminal facilities with collectors and/or arterials.

Forest roads are managed through implementation of road management objectives, which identify maintenance levels for each road. Maintenance levels define the level of service provided by, and

maintenance required for, a specific road.

- Maintenance level 1 roads are inactivated and managed in a stored or closed category for more than one year, primarily for resource protection and safety reasons.
- Maintenance level 2 roads are suitable for high clearance vehicles and are not maintained for passenger car use.
- Maintenance level 3, 4 and 5 roads are suitable for use by low clearance vehicles (passenger cars); those in level 4 and 5 provide a higher degree of user safety, comfort and convenience.

**Table 2-1: Miles of Forest Service Roads by Operational Maintenance Level**

MAINTENANCE LEVEL	ARTERIAL	COLLECTOR	LOCAL	TOTAL
1 - Basic Custodial Care (Closed Roads)	0.0	3.6	55.35	58.95
2 - Maintained for High Clearance Vehicles	0.0	34.8	46.52	81.32
3 - Maintained Suitable for Passenger Cars, Low User Comfort, Aggregate Surface	0.0	4.37	1.59	5.96
4 - Maintained For Passenger Cars, Moderate Degree of User Comfort	0.0	0.0	0.0	0.0
5 - High Standard Paved Passenger Car Road, High degree of User Comfort	0.0	0.0	0.0	0.0
<b>TOTALS</b>				<b>146.2</b>

Road maintenance levels are placed into two categories, to accommodate planning and implementation strategies: operational; and objective.

- The operational maintenance level is the maintenance level to which the road is currently being maintained.
- The objective maintenance level is the desired level of maintenance with consideration for future needs, budget constraints, and environmental concerns. Table 1 below displays the current operational maintenance levels for the Forest Service roads in the Eyerly project area.

### Highway Safety Act Roads

National Forest System Roads assigned to operational maintenance levels 3, 4, and 5 are managed in accordance with the requirements of the Highway Safety Act of 1966. The Forest Service maintains a Memorandum of Understanding with the Federal Highway Administration requiring that certain safety standards from the



Highway Safety Act be met on all roads "open to public travel", as defined in the MOU. Maintenance level 3-5 roads are given this designation because they are generally available and maintained for low-clearance passenger car use. These roads may be closed on a seasonal basis, closed during extreme weather conditions, or for emergencies, but are otherwise open for general public use. There are 6 miles of Highway Safety Act roads within the Eyerly project area.

### Primary/Secondary Road System

In 1997, the Sisters District completed the identification of a Primary and Secondary road system using the "Access Decision Guide and Process" developed for the Deschutes National Forest. This system represents a strategy for managing the transportation system into the future, for balancing both public and resource management needs.

- Primary roads are typically the Highway Safety Act roads, where public use is encouraged and routine maintenance is a priority.
- Secondary roads are those roads necessary for resource management, provide important inter-forest linkages, but may not receive routine maintenance.
- Roads not selected as Primary or Secondary fall into a category called "Other". The Other category includes currently inactivated roads and open roads that need site specific NEPA analysis to determine whether they should be inactivated, decommissioned, or placed into the Secondary status.

**Table 2-2: Primary and Secondary Road System**

ACCESS AND TRAVEL MANAGEMENT DESIGNATION	MILES
<b>Primary</b> (High standard through-routes maintained for standard passenger cars)	6.0
<b>Secondary</b> (key inter-forest connections maintained for high clearance vehicles)	47.2
<b>Other</b> (Candidates for review under area watershed analysis for reduction of maintenance standards or decommissioning).	93.0

Roads in either the Secondary or Other category may be proposed for inactivation or decommissioning. However, it is expected that candidates for closure and decommissioning would come predominantly from the Other category. This transportation planning effort has been incorporated into the Road Analysis process for this project. Table 2-2 displays the Primary/Secondary road system for the Eyerly planning area.

### Unclassified Roads

Non-system or Unclassified roads were not planned, constructed, maintained, or intended for long-term highway vehicle use and are not part of the forest transportation system. These roads were built

for temporary access and short-term use associated with fire suppression, timber harvest, accessing dispersed recreation sites, as well as travel-ways resulting from off-road vehicle use. These roads typically have not been mapped or recorded in the forest transportation database, but management direction in the new Transportation Policy of 2001 requires that we begin to inventory and track these type of roads in the future.

Decommissioned roads have no long-term needs, are not planned to be used again and have been removed from the road system. This project area has no known decommissioned roads. Decommissioned roads are tracked to assure there is no long-term needs, and that no work remains for protection of other resources.

## Road Density

The overall road density within the entire project area (open and closed) is 2.42 miles per square mile (mi./sq. mi.). This includes County roads, roads on private land, and classified roads on National Forest land. On Warm Springs Indian Reservation land there may be a number of roads that are not identified in any known inventory. However, many of these roads are inaccessible to the public. Unclassified roads on National Forest land, and their equivalent on private land, are not included in these figures. On private land, the overall road density is 0.003 mi./sq. mi. On National Forest land, the overall road density is 2.19 mi./sq. mi. The road density within the National Forest portion of the project area varies from virtually nothing in the Metolius Breaks road-less area, to a relatively dense road distribution up on Green Ridge. The Prairie Farm sub-watershed has the highest system density at 6.58 mi./sq. mi. Specific road density data is contained in Appendices B-3 through B-8. Road densities are grouped by project area or fire area. Data is then grouped into densities for each subwatershed and Forest Plan management area.

## Current Road Conditions

The aggregate surfacing on arterial road 11, and collector roads 1150, 1158, 1170, 1180 and 1190 is thin and worn down to the sub-grade in many areas. This condition increases erosion and the loss of sub-grade materials, causes oversize rock to be exposed, reduces safety, and prevents the proper grading of the traveled way. Furthermore, roadside vegetation is encroaching on the traveled way at many locations, reducing sight distance and safety, and obstructing drainage. These roads are in need of resurfacing or reconstruction to stabilize the road surfaces and provide a safer and more efficient access for people and materials traveling in the Green Ridge area or to Lake Billy Chinook. In addition, the native surface portion of road 1190, from road 1190700 to road 1150, has many rocks and boulders protruding from the surface and also needs to be reconstructed and surfaced with crushed aggregate to prevent surface erosion and high sediment delivery into the Bean Creek and Metolius River drainage areas, and improve water quality and safety.

- Maintenance level 2 roads comprise 81.3 miles of the project area: The surface types on these roads, include 50.2 miles of native material, 19.6 miles of improved native material (pit run, select borrow or cinders) and 11.5 miles of crushed aggregate or gravel. These roads provide high clearance vehicle access throughout the project area.
- Maintenance level 1 roads comprise 58.9 miles of the project area: The surface types on these roads include, 56.7 miles of native material, and 2.2 miles of improved native material (pit run, select borrow or cinders). They are kept in a storage or closed condition and reopened when need. Many of these inactivated roads were breached and reopened during the Eyerly fire suppression activities. It is expected that some of these breached roads not needed for planning and salvage operations, will be re-closed through suppression rehab work.

Many of the local forest system roads in the project area also need some maintenance, but it is relatively minor. This work typically involves grading and the addition of a few drain-dips to improve surface drainage and reduce erosion. Brushing and limbing will be accomplished where needed to improve sight distance and safety.

### **Fire Effects and Restoration**

The Eyerly fire burn area lies east of Green Ridge and is characterized by broad flat ridges dissected by steep walled drainages. During fire suppression activities, almost all of the Forest system roads in the project area, including many closed roads, were heavily used. Many of the existing drain-dips and water bars on these roads were removed or beat out to facilitate suppression efforts. After the fire was controlled, a Forest Service crew immediately began surveying road damage and drainage needs. They found much of the road drainage system damaged and inadequate for the anticipated increase in runoff. Many culverts and road fills were at risk to plugging and blowout which would adversely impact water quality in the Metolius Arm of Lake Billy Chinook, Spring Creek, Street Creek, and Lower Fly Creek. Rehabilitation treatments and improvements were prescribed to reduce erosion and improve water quality. Through Suppression Rehabilitation and Burned Area Emergency Rehabilitation (BAER) programs, a large portion of the roadwork was completed. Work completed during the fall and winter of 2002 include the installation of 600 drain-dips and water-bars, the repair or replacement of damaged culverts, ditch cleaning or reconstruction, reconstruction of road 1170600 to Gunsight Pass, large pipe-arch installation on road 6400660 Street Creek, and some grading and shaping. Other projects planned are discussed in the "Eyerly Fire Rehab Implementation Plan".

### **FERC Capital Improvement and Maintenance**

Portland General Electric Company (PGE) and the Confederated Tribes of the Warm Springs Reservation (CTWS) are jointly pursuing a license from the Federal Energy Regulatory Commission (FERC No.

2030) for the continued operation of the Pelton Round Butte Hydroelectric Project. As part of the re-licensing for the project, PGE, CTWS and the Forest Service have discussed the share of road construction and maintenance costs that are Project-related. Visitors to the Lake Billy Chinook area from the Willamette Valley and Central Oregon are using Forest roads 11 and 1170 for access to Perry South and Monty campgrounds and other recreation sites on the reservoir. This use has increased over the years along with the increased use at Lake Billy Chinook. Traffic counters placed on these roads indicate that approximately 11% of the traffic on Road 11 and 95% of the traffic on Road 1170 is Project-related. Therefore, the Forest Service is submitting mandatory conditions to be placed into the new FERC license that will require the licensee to pay for the project related share of the capital improvement and maintenance needs on these roads for the 40-50 year life of the license (Cost-Share agreement). For additional information see the "Preliminary, Conditions, Prescriptions and Recommendations" document filed with the FERC on November 12, 2002.

## **Maintenance Costs**

Road costs and revenues are affected by the size of the road system. A source of revenue associated with roads are timber sales that include road maintenance, and to a lesser degree, recreation fees and special-use permits. Costs include recurrent road maintenance and resource restoration or protection as it relates to increased motorized use in roaded areas. At present, costs exceed revenues; this is due primarily to the dramatic reduction in timber harvest and the decline of the Forest Service road maintenance budget over the last 15 years. High use roads that need a higher level of maintenance, for safety and resource protection, consume most of the maintenance budget. Low use local roads do not receive scheduled routine maintenance and represent a small percentage of the total cost of system maintenance. Maintenance is only performed on these roads to limit unacceptable environmental damage. It is not anticipated that increases in funding are going to be available anytime in the foreseeable future. Options for managing the road systems are limited to either reducing the mileage and/or standard of roads to maintain, or continuing to prioritize maintenance work on the existing system and accept a continued increase in our deferred maintenance backlog. Further road analysis accomplished for the National Environmental Policy Act (NEPA) process will include costs for maintenance, decommissioning, inactivation and other associated costs and revenues.

## **Management Direction**

Management direction for the transportation system is detailed in the Deschutes Land and Resource Management Plan, the Northwest Forest Plan, and the Inland Native Fish Strategy (Infish). Forest Service transportation management policy is outlined under Title 7700 of the Forest Service Manual (FSM) (USDA 1994).

## Forest Plan Direction

(Deschutes National Forest Land and Resource Management Plan - 1990)

### Goal:

The overriding goal of the Deschutes Forest Plan for management of the transportation system is to plan, design, operate, and maintain a safe and economical transportation system providing efficient access for the movement of people and materials involved in the use and protection of National Forest lands.

### Desired Future Condition:

Access to and within the Forest is well balanced between travel needs and the environment. The planned increase or decrease in recreation activities is coordinated with road and trail construction, reconstruction, and management. Roads and trails are maintained in safe conditions consistent with the expected user; the signing is accurate and informative.

Roads to most recreation sites are paved or gravel surfaced in a condition suitable for passenger cars. Many of these roads are also constructed with adequate alignment, grades, and structural capacity to safely allow the hauling of commercial products. The quality of scenic views has been maintained through timber management and road maintenance operations. The Cascade Lakes Highway continues to be maintained and improved to the standards of a National Scenic Byway.

Some of the road system has been closed for the protection of wildlife habitat or to reduce erosion; however, the majority of the mileage remains open for ongoing timber management activities or for general public access such as hunting, fishing, pleasure driving, and fuel wood gathering. These lower standard roads are available for use by the more experienced drivers. Maps, signing and primitive conditions at the beginning of the roads managed for high clearance vehicles give travelers advice on what to expect. Uncommon road conditions are adequately signed.

### Resource Objectives:

The development, maintenance, and management of the Forest development road system will be responsive to resource management objectives. Many

road-related activities will occur in support of the timber management program, with additional activities undertaken to facilitate recreational use, forest administration, and resource protection.

### Standards and Guidelines:

A management area is a unit of land with similar capabilities and common management prescriptions. Each management area describes a goal to be achieved and the standards and guidelines for affected resource areas. The Eyerly project area includes the 9 management areas listed in Table 2-3.

**Table 2-3: Management Areas within Eyerly Project Area by acres and square miles**

MANAGEMENT AREA	ACRES	SQ MI
(MA -7) Deer Habitat	5624.92	8.79
(MA -8) General Forest	8560.58	13.38
(MA -11) Intensive Recreation	370.38	0.58
(MA -19) Metolius Heritage	380.82	0.60
(MA -23) Black Butte, Special Interest	130.56	0.20
(MA -20) Metolius Wildlife, Primitive	9101.82	14.22
(MA -15) Old Growth	353.61	0.55
(MA -30) Other Ownership	1066.36	1.67
(MA -1) Balancing Rock, Special Interest	43.25	0.07
(MA -28) Metolius River, Scenic WS3	546.49	0.88
OTHER	16526.94	25.82
<b>Eyerly Project Area Total</b>	<b>42723.73</b>	<b>66.76</b>

### Management Area Prescriptions

**Balancing Rock, Special Interest (M1-14):** Roads will be constructed only as needed to serve the management objectives of the Special Interest Management Area. Some roads may be closed to protect resource values.

**Deer Habitat (M7-22 & 23):** Guideline open road densities shall average 1.0 - 2.5 miles per square mile in each Implementation Unit, unless impacts to deer can be avoided or the proposed project would result in a net benefit to deer habitat. The guideline open road density will be used as a threshold requiring a further evaluation, rather than an absolute standard.

To minimize animal disturbance or protect ecologically sensitive habitats, local roads may be administratively closed 12/1 through 3/31, with the option to extend this time period as needed. Hunting

season administrative closures, from a few days before to the day after the season, are also appropriate to enhance hunting quality. Road closures will be coordinated with the Oregon Department of Fish and Wildlife.

The existing condition is 37.6 miles of road within this Management Area. This represents 26% of the total project road system.

**General Forest (M8-20 & 21):** Roads constructed within this Management Area will generally be planned to serve a larger timber volume than in other areas.

Long-term local roads for timber access will be planned, constructed, maintained and operated to be economically efficient. During commercial hauling activities, public access will be discouraged or prohibited on some roads through appropriate signing. High clearance vehicles may be accepted during post sale activities.

There are 77.6 miles of road within this Management Area. This represents 53% of the total road system within the project area.

**Intensive Recreation (M11-38, 39 & 40):** Roads to developed recreation sites will be reconstructed, operated and maintained to encourage passenger car access. To maintain compatibility, emphasis will be placed on matching the road design and maintenance standard with the service level of the developed site and will be in accordance with the Highway Safety Act.

Commercial timber hauling will be restricted (limitations on haul during weekends, holidays, etc.) as needed to reduce conflict with recreation activities; however, when restrictions are not practical, short term closures of public access may be necessary to meet the timber objectives of this Management Area.

Off-highway vehicles will normally not be encouraged in this Management Area, especially in areas where recreation use is concentrated.

The existing condition is 2.65 miles of road within this Management Area: Road 6400500 with 0.23 miles; Road 6400600 with 0.53 miles; Road 6400620 with 0.42 miles; and County Road 64 with 1.48 miles. This represents 1.8% of the total project road system.

**Old Growth (M15-14):** Access by road or trail will be limited to the minimum standard and density that meets the objectives of this Management Area. Roads no longer needed will be closed and allowed to re-vegetate naturally. Helispots and transmission corridors will not be allowed.

The existing condition is 2.01 miles of road within this Management Area: Road 1170670 with 0.64 miles; Road 1190 with 0.2 miles; Road 1190220 with 1.01 miles; Road 1190222 with 0.09 miles; and Road 1190257 with 0.07 miles. This represents 1.4% of the total project road system.

**Metolius Heritage (M19-28, 29, 30 & 31):** (Wildlife M19-20) Selected closure of roads no longer needed will be undertaken with a guideline of 1.5 miles of open road per square mile. Roads to traditional dispersed use sites will generally remain open.

Roads to developed recreation sites will be reconstructed, operated, and maintained to encourage passenger car access. To maintain compatibility, emphasis will be placed on matching the road design and maintenance standard with the service level of the developed

site and will be in accordance with the Public Highway Safety Act.

Commercial timber hauling will be restricted (limitations on haul during weekends, holidays, etc.) as needed to reduce conflict with recreation activities; however, when restrictions are not practical, short-term closures of public access may be necessary to meet the timber objectives of this Management Area and adjacent Management Areas.

Unneeded roads and skid trails will be closed and returned to natural vegetative conditions.

Some roads may be closed by entrance treatment, or by obliteration and re-vegetation. Temporary closure may be used to limit access during sensitive nesting or migratory times.

The existing condition is 3.48 miles of road within this Management Area: Road 1149 with 0.15 miles; Road 1149100 with 1.19 miles; Road 1149180 with 0.18 miles; Road 1490 with 0.63 miles; Road 1490700 with 0.95 miles; Road 1490730 with 0.2 miles; Road 1490750 with 0.01 miles; Road 1490800 with 0.11 miles; and Road 1490900 with 0.08 miles. This represents 2.4% of the total project road system.

**Metolius Wildlife - Primitive (M20-22, 23, 24 & 25):** Trails and roads will be designed, constructed, and maintained to the minimum standard needed to achieve objectives and goals of this Management Area.

Road management strategies will generally be "accept" or "encourage" use by dispersed recreation enthusiasts. On some logging roads, dispersed recreational use may be "discouraged" or "eliminated" (See Forest-wide standards/guidelines for explanation of road management strategies).

Some roads may be closed by entrance treatment, or by obliteration and re-vegetation. Temporary closures may be used to limit access during sensitive nesting or migratory times.

Unneeded roads and skid trails will be closed and returned to a natural vegetative condition.

The existing condition is 24.06 miles of road within this Management Area. This represents 16% of the total project road system.

**Black Butte, Special Interest (M23-13):** Roads will be constructed only as needed to serve the management objectives of the Special Interest Area. Some roads may be closed to protect resource values. Metolius helispots are not normally a compatible resource within this management area.

**Metolius River, Scenic (M28-3):** As outlined in the Metolius Wild and Scenic River Management Plan - Motorized use is an expected and important part of the Recreational river segment, but not the Scenic river segment. In the upper river, motorized vehicles are managed with controls and limitations designed to protect the natural setting and river resources. Safety and water quality are the highest consideration in transportation planning and maintenance.

Private access across NFS lands is managed to reduce road density. No rights-of-way or easements are granted for new road construction on NFS lands unless there is no other reasonable access to private lands or the construction has a substantial resource benefit.



Motorized vehicle use is prohibited, except on open roads.

Forest roads to remain open for public use include 1490, as well as roads which access campgrounds and recreation residence tracts. Decision on all other roads regarding access, closure, or rehabilitation will be made on a case-by-case basis.

Public motorized access is closed on Rd 64 upstream from Monty Campground. However, emergency, administrative, and private land access remains.

Closed roads are rehabilitated unless access is maintained for private land or administrative use.

The existing condition is 6.61 miles of road within this Management Area: County Road 64 with 6.03 miles; and Forest Road 6400700 with 0.58 miles. This represents 4 ½% of the total project road system.

## **Commercial Road Rules**

In addition to the Forest Plan Direction described above, the Deschutes National Forest has established road rules and regulations for commercial use of roads on the Forest. These Road Rules regulate the use of Deschutes National Forest roads for the safety of all Forest users and for the protection of the roads and other National Forest values. Specific Road Rules are listed for roads 11 and 1170, which identify use limitations. Road 11 is closed to tandem axle trucks and trucks with trailers, weekends and holidays from April 15 through Labor Day (weekends begin Friday at noon) from the junction of road 1150 to road 1170. Road 1170 is also listed with the same use restriction, which is applicable from the junction of road 1170600 to County road 64.

## **Social and Economic Value**

The communities surrounding Green Ridge and the Deschutes National Forest depend on the forest to help meet their needs and the road system serves as the interface between the needs of the local communities (e.g. timber, forage, recreation) and the ecosystems themselves.

Timber was traditionally the backbone of the local economy, and as a result the existing road system was developed to reflect the importance of access to timber products. Uses of the road system and use of public lands are changing in character as a result of the changing social and economic conditions throughout the region.

In the last decade there has been a shift to use these roads primarily for recreation purposes (e.g. sightseeing, hunting, mountain biking, cross-country skiing, gathering firewood). Generally, higher standard roads are used to access more developed recreation sites, such as Perry South Campground and non-federally owned property along County Road 64, near Lake Billy Chinook. Forest Service roads also provide access to sites such as Jefferson County's Green Ridge Repeater Site and the gauging station on the Metolius River near Monty Campground.

## Recreation Areas

The Central Oregon area is a premier attraction for a wide variety of motorized and non-motorized recreation. The quality, quantity, and variety of recreation opportunities invite recreationists of all types to visit and reside in the area. The variety ranges from Cascade crest to high desert; from high elevation winter activities to the summer flats of Fort Rock, from designated areas for motorized activities to a multitude of non-motorized opportunities. Within reasonable driving times from much of the west coast, the area is accessible all year long for a number of attractive recreation opportunities. The consistently desirable weather increases the popularity and the population of central Oregon.

The gentle topography of much of the area made it easy to utilize the railroad to log much of this area in the early 1900's. Many of these railroad grades became roads after they were abandoned, while open forest stands on the gentle terrain provided easy access to large portions of the area. Over the years, access roads to key recreation sites, mostly related to water or geologic features, were constructed by the agencies or in some cases by the users. With the advent and refinement of the 4-wheel drive vehicle, additional roads were created accessing other dispersed recreation sites, firewood cutting, and in some cases, just accessing new areas. The increase of access leads to the increase the stocking of water-bodies, leading to more recreation use. The development of the reservoirs added to the draw of fishing and further access needs around the reservoirs.

As a result of the historic conditions and road creation, there are more roads across the landscape than is necessary to provide appropriate access to the developed and dispersed recreation sites. The relatively easy topography and the sparse vegetation have allowed the construction of user created roads.

### Developed Recreation

State, County, or Forest maintenance level 3-5 roads generally access developed recreation sites. In most cases these are paved or high standard gravel surfaced roads. In most cases, these are 2 or 4 digit roads (e.g: County Road 64 and Forest Road 11 are level 4). There are some sites, which are accessed by level 2 roads. These usually get maintained over other maintenance level 2 roads (Road 1170).

Approximately half of the recreation use on the Deschutes NF is associated with developed recreation sites. The typical season of use is the May through October with the bulk of the use occurring from the 4th of July through Labor Day. In addition to USFS sites there are many (8 on the DNF) private resorts, which are operated under a special use permit. In just about all cases state or county roads access these sites.

### Dispersed Recreation

An activity which takes place outside of developed recreation

facilities include such activities as hunting, fishing, hiking, caving, forest product collection. Most of these dispersed recreation activities take place at locations associated with a water feature (lake or river). This is where roads and trails have been constructed over the years, either planned or user created. It is also where some of the most significant impacts occur, such as the degradation of water quality and erosion problems.

Approximately half of the total recreation use is attributed to dispersed types of recreation as mentioned above. In general, dispersed recreation takes place on the lower standard roads as well as user created roads accessing the more remote parts of the area, further from developed sites and higher standard roads.

Driving for pleasure is the number one national recreation pastime. People drive roads of all types and standards just to explore. All types of vehicles will utilize most roads in order to access desirable areas.

Trailheads are considered developed sites, which access dispersed recreation activities such as hiking, horseback riding, mountain biking and OHV riding. The types of use seeing the most increase in central Oregon in recent years have been OHV, mountain bike and snowmobiles. In all 3 cases, the central Oregon area has become known as a destination for these uses. All of these uses utilize roads as trails, especially lower standard roads. There is continued opportunity for utilizing unnecessary roads as trails. There has been a move to reconstruct and authorize user created trails in OHV and mountain bike trailed areas.

Dispersed camping is desirable by those who seek a more primitive camping experience or for those who don't want to pay fees associated with many developed campgrounds. The more primitive experience fits well for some people. The increase in self-contained recreational vehicles has increased the level of dispersed camping. Dispersed sites are usually not maintained and can contribute to resource impacts such as soil erosion and water quality degradation. As a result of this and the trend for less roads to maintain, more and more of these dispersed campsites are being closed, obliterated, or just made less accessible due to the closing of roads. These are generally lower standard roads that access dispersed campsites.

Collection of forest products is a common use of the area. This includes woodcutting, plant collection, cone collection, rock hounding, Christmas tree cutting, etc. This generally requires the use of lower standard roads or user created roads for access into more remote areas.

Fishing and hunting are two very popular pastimes for today's society. Both require use of all types of roads. The popular fishing spots in most cases have primary roads leading to them. There are some cases where lower standard roads are used to reach more remote fishing holes. Hunting generally uses all roads but especially lower standard roads to reach remote areas. In general, hunting use has diminished over the years as more regulations have been placed by big game managing agencies. Fishing remains steady.

## **Primitive Areas**

There are a number of primitive areas in central Oregon, including wilderness areas, Oregon Cascades Recreation Area, and other unroaded areas. There are a total of eight National Forest Wilderness areas in central Oregon as well as numerous unroaded areas, such as old growth, research natural areas, and wilderness study areas. Improved level 3-5, or state and county roads mostly access these areas. There are additional restrictions in most of these areas, such as non-motorized and non-mechanical transportation means used within these areas. Travel is generally by foot or horseback. Roads leading to trailheads accessing these areas may be lower standard roads, but usually come off of primary roads. Use of these primitive areas is classified as dispersed recreation and consists of hiking, backpacking, horseback riding, sightseeing, photography, and others. The current trend is toward more (80%) day use, rather than overnight use.

## Cultural Resources

The majority of known cultural resource sites in the Deschutes National Forest reflect prehistoric use patterns prior to the 19th Century (e.g. stone tool detritus). More recent historic uses are related to exploration, early settlement, ranching, and timbering.

The Metolius River has been identified as a location of tribal value. In addition, The Tribes of the Warm Springs Reservation has identified 25 historical and archaeological sites which intersect system roads in 24 different locations.

Road construction, closing, or decommissioning will not affect tribal passive use values except where these activities may disturb archaeological sites and resources. With care to avoid disturbances by blading, subsoiling, or other displacement actions within archaeological sites can avoid an adverse affect.

## Botany Habitat

Roads exist within all the major types of plant communities within the project area. Major plant community types include, in order of decreasing abundance, Dry Ponderosa Pine, Wet Mixed Conifer, Dry Mixed Conifer, Wet Ponderosa Pine and a very small amount of Juniper Woodland. Along with these basic forest types, plant habitat is also provided by the courses of intermittent and permanent streams (riparian zones), seeps and springs, seasonally moist and dry meadows, forest fringes, scablands and large rock outcrops.

## Special Habitats

Botanical species diversity is directly related to the variety of plant habitats that exist within a given area. Botanical species diversity, in turn, directly influences levels of local animal diversity, including insects and other invertebrates, and amphibians, reptiles, birds and mammals. Special habitats in this analysis are defined as those that support plant communities whose species composition is unusual relative to those of the more common or dominant plant

communities (i.e., ponderosa pine, mixed conifer, juniper woodland) in the area. Special habitats typically comprise a geographically small portion of any given landscape, but make a very important contribution to an area's overall species diversity. Special habitats identified within the project area include riparian zones, seeps and springs, seasonally moist and dry meadows, scablands and large rock outcrops.

### **Threatened, Endangered, Sensitive (TES), and Survey & Manage Plants**

There are no listed Threatened or Endangered plant species that are known to exist within or nearby the project area. Currently, Deschutes National Forest has a Sensitive Plant List that includes 25 species and a Botanical Survey and Manage List that includes 7 species. These species and their range of habitats were addressed in the Forest-wide analysis. Pre-disturbance, presence/absence, surveys may be required to determine the existence of Sensitive Plant List or Botanical Survey and Manage List species within the project area. Pre-disturbance surveys are necessary when suitable habitat for a species exists within a planned project area and project activities may threaten the continued existence of that species at its occupied sites. Known sites of these species must be buffered and otherwise protected during project implementation. At this time, there are no populations of Sensitive Plant Species known to occur within 200 feet of roads within the project area.

Four roadside occurrences of the Survey and Manage species *Cypripedium montanum* (mountain lady-slipper) (CYMO) have been documented within the project area. To date, no formal surveys for TES plants or Survey and Manage species have been conducted within the project area. The Sensitive Species *Penstemon peckii* (PEPE) is known from a site that lies beside three roads immediately adjacent to the project area boundary. Further survey is necessary to determine whether this site extends to within 200 feet of any roads within the project boundary. Also, a second Sensitive Plant Species, *Agoseris elata* (AGEL), is known to occur a little more the one-quarter mile outside of the project area boundary. Pre-field reviews and, as appropriate, formal surveys for PEPE, CYMO, AGEL and other species where suitable habitat exists, must be conducted in order to develop an understanding of the near-road distribution for these species within the project area.

### **Noxious Weeds**

The dozen or so noxious weed sites known to exist within the project area are principally located along roads. Large noxious weed sites exist outside of the project area (the Fly Creek drainage to the east, Forest Road 11 to the south), along roads providing access to the project area. Motor vehicles are probably the major vector for the spread of noxious weeds within the project area. Such vehicles may include those associated with public recreational use or harvesting of special forest products (e.g., mushrooms, firewood), or general forest management operations including inventory, monitoring, road

maintenance and fire suppression. Such vehicles have the potential to transport weed seeds included in soil and mud stuck in tire treads or upon undercarriages. Also, portions of whole, seed-bearing weed plants can become wedged in bumpers and within undercarriages when vehicles drive through patches of weeds. By these means, weed seed can be imported to the project area or moved about within the project area.

Noxious weeds are an undesirable presence in forest ecosystems because they tend to displace native plants, including, potentially, rare and protected species, degrade habitat for animal species, promote soil erosion, and lessen the value of recreational experiences. Spotted and diffuse knapweed are responsible for the most serious and extensive roadside weed infestations near and within the project area. Noxious weeds such as the knapweeds are aggressive colonizers of disturbed native plant communities in relatively open, sunny settings. As perennially disturbed sites, roadsides are generally a highly suitable habitat for noxious weeds. Of course, much of the project area can now be described as sunny and disturbed. Knapweeds, unfortunately, are also aggressive competitors with native herbaceous plants; even within little-disturbed native plant communities, where light is abundant. Hence, knapweeds have the potential to move from roadside infestations, directly into adjacent native plant communities.

## Terrestrial Wildlife

Many wildlife species are sensitive to harassment or human presence at particular use sites (see Sensitive Animals, below). This activity is often facilitated by road access; potential reduction in productivity, increases in energy expenditures, or displacements in population distribution or habitat use can occur (Bennett 1991; Mader 1984; Trombulak and Frissell 2000).

Roads posing the greatest threat of wildlife mortality caused by motor vehicle collisions include the improved forest roads or highways that allow greater vehicle speeds. Forest Roads 11, 1140, 1150, 1158, 1170, 1180, 1190, 1490, and County Road 64 would be the most likely areas for this to occur; however, this is not a major problem in the project area for most mobile species such as mule deer, elk, coyotes, and birds.

## Threatened, Endangered & Sensitive Animals

The project roads are likely to be more impacting for small mammals and amphibians. They often restrict the movements of small mammals (Mader 1984, Merriam and others 1988, Swinart and Slade 1984). Consequently, roads can function as barriers to population dispersal and movement of some species of small mammals (Oxley and Fenton 1974).

Edge habitat is attractive to Cowbirds (*Molothrus Ater*), a parasitic nester that lays its eggs in the nests of other species to be incubated and raised. Edge habitat is also more inhabited by avian predators, such as jays and ravens that feed on the eggs of other species. Due to the presence of roads and the associated edge habitat, interior-

forest nesting birds may be experiencing higher than normal impacts from the next parasitism and predation.

A portion of the project area is considered biological deer winter range. Human disturbance can adversely affect mule deer by increasing deer activity and energy expenditure, decreasing critical fat reserves needed to survive through the winter.

Several findings of the Interior Columbia Basin Ecosystem Management Plan's comprehensive survey of existing literature address the effects of roads and road associated human activity.

Several large mammals are vulnerable to poaching, such as caribou, pronghorn mountain goat, bighorn sheep, wolf, and grizzly bear (Dood and others 1985, 1986; Knight and others 1988; McLellan and Shackleton 1988; Mech and others 1970; Scott and Servheen 1985; Stelfox 1971; Yoakum 1978). Roads facilitate poaching (Cole and others 1997).

Wolves and grizzly bears experience chronic, negative interactions with humans, and roads are a key facilitator of such interactions (Mace and others 1996; Mattson and others 1992; Thiel 1985). Repeated, negative interactions of these two species with humans increases mortality of both species and often causes high-quality habitats near roads to function as population shrinks (Mattson and others 1996a, 1996b; Mech 1973).

Carnivorous mammals such as marten, fisher, lynx, and wolverine are vulnerable to over-trapping (Bailey and others 1986; Banci 1994; Coulter 1966; Fortin and Cantin 1994; Hodgman and others 1994; Hornocker and Hash 1981; Jones 1991; Parker and others 1983; Thompson 1994; Witmer and others 1998). An over-trapping can be facilitated by road access (Bailey and others 1986; Hodgman and others 1994; Terra-Berns and others 1997; Witmer and others 1998).

## Aquatic Resources

Aquatic factors were developed in the Deschutes/Ochoco Forest-Wide Roads Analysis (2003) to capture key process associated with roads as they link to aquatic environments. The list of factors includes: geologic hazard; road related sediment; floodplain off-channel habitat riparian reserve function; flow effects; at risk fish populations; and wetlands. Each of the six risk factors being evaluated addresses one or more of 14 ecological questions. Where applicable, the Project Recommendations column of Table B-1 contains aquatic factors. These comments reflect road segment priorities to suggest future activity that would benefit aquatic habitat.

## Geologic Factors

The Eyerly Salvage Area includes significant portions of three 6th field subwatersheds that generally have higher density road networks in their upper and middle sections and fewer roads in their lower sections. The assessment of geologic hazards and their associated risks to aquatic habitats includes the identification of hydrologic functions within a subwatershed and determining the extent to which existing road patterns and locations interact with them. Road systems can alter the surface and subsurface hydrology of an area by

intercepting, concentrating, and diverting flows from their natural flow paths (Wemple et al 1996).

Hydrologic function within these subwatersheds is primarily a seasonal surface flow pattern, with many intermittent stream channels in the middle and upper portions that convey snowmelt or storm flows, and a year round subsurface flow pattern that provides steady spring-fed input into the perennial reaches of lower Spring and Street Creeks. Significant surface flows are generated from either mid-summer thunderstorm or mid-winter rain on snow and/or frozen ground events while much of the annual snowmelt and lower intensity rainfalls within the subwatersheds contribute to subsurface flows.

In the Eyerly Salvage Area, primary Roads 1150, 1190 and 64 all contour across the easterly flow paths of overland and channel runoff in the subwatersheds. Numerous secondary and local roads also contour across the slopes of the upper portions of the subwatersheds. The location of these roads and their associated ditch systems do contribute to the interception, concentration and diversion of overland flows, although in many cases the overland flow created from higher intensity storm events is short-lived due to the coarser surface textures and related porosity of the ash soils present. The presence of compacted skid trails and landings from previous management activities, or frozen ground conditions at the time of rainfall, can increase the volume and magnitude of overland flows, in which case these roads and their associated ditch systems would tend to contribute them more quickly to what are primarily intermittent stream channels. Although not quantitatively measured, this could in turn alter the timing of storm runoff to stream channels, the duration of storm flows and the magnitude of peak flows in downstream perennial reaches of both Street and Spring Creeks.

Subsurface flows derived from snowmelt and lower intensity rainfalls within the subwatersheds are generally associated with the intermittent drainages throughout the area but can also be associated with upland hill slopes, especially those that are north facing. Both of these types of subsurface flows can be impeded by roadbeds that cross their flow paths, resulting in water accumulations near or at the soil surface. Some native surface road crossings of intermittent stream channels, especially in upper reaches of the subwatersheds, do not have culverts and many roadbeds such as the Road 1170600 contour across cooler, north facing slopes that tend to accumulate more snow and associated subsurface runoff. These conditions can contribute to an altered surface flow regime where subsurface flows have encountered impermeable tuffaceous geologic layers and are perched near the surface or emerge as springs. In some cases, new spring outlets can be created or temporarily increased in flow along uphill road cuts where the outflow is intercepted by the roadbed. Some of this outflow occurs along the bed and ditch system of road 64 and may require additional culverts to dissipate flow energy during peak events.

Another geologic hazard considered for its' effects to aquatic habitats is road-related mass wasting. This hazard is influenced by a number of factors, including hill slope gradient, slope position, soil type, bedrock geology, geologic structure, type of road construction, road



drainage, and groundwater characteristics. Mass wasting events such as debris torrents and debris flows often severely affect roadbed fills at stream crossings by transporting large amounts of sediment to higher order channels. The presence of roads across steep slopes can increase the risk of mass wasting due to the damming effect of the roadbed on subsurface flows.

Although there are appreciable areas within the fire perimeter that have slopes exceeding 30%, there is little evidence of major slope instability in the project area. The closest evidence of debris flow events can be found on the steep, west-facing scarp of Green Ridge, approximately two miles west of the project area. Rain on snow events of 1995 and 1996 created two large debris flows in ephemeral draws of >50% slope. These areas are associated with the 1490000 and the 1490750 roads which are located within the Metolius Horn subwatershed but are outside the fire area.

Slopes within the fire area exceeding 50% in lower Street and Spring Creeks are primarily comprised of comparatively stable tuffaceous outcrops with variable amounts of mineral soil on the surface. North facing slopes have accumulated more mineral soil susceptible to mass wasting than the drier, south-facing slopes but had significant forest and ground vegetation that helped reduce this risk prior to the fire. Elevated levels of risk for sediment loss and mass wasting for the north slopes exists for the next few years until ground vegetation re-establishes on these sites.

In addition to the 1490 roads previously mentioned, Forest Roads 1190220, 1170202, 1193200 and 1170600 within the fire perimeter appear to have slightly elevated risks associated with their locations across relatively steep, north and east facing slopes, especially following the loss of vegetative cover on these slopes from the fire.

## **Road Related Sediment and Off-channel Function**

Surface erosion occurs on most wildland roads because their surfaces, cut slopes, fill slopes and associated drainage structures are usually composed of materials susceptible to erosion (Bilby et al, 1989). Rates of erosion vary greatly depending on the slope and the erosive characteristics of the exposed surfaces, as well as the quantity and energy of accumulated storm flows. The energy of these storm flows is strongly influenced by topography, geology and local surface soil conditions such as porosity, organic litter levels and vegetative cover.

Several road segments evaluated show signs of surface erosion. Flows of increased magnitude are capable of detaching and moving sediment from road surfaces into stream channels, especially those comprised of finer-grained, native materials. Primary roads with coarser, graveled surfaces are less likely to contribute sediment to storm flows, although their associated ditch systems can provide a source of sediment during storm flow events. Roads listed as being located in the channel bottom or having hydrologic conductivity are of greatest concern when considering surface erosion sources and mechanisms.

Road crossings of stream channels with culverts are also potential inputs of sediment to streams, either when culvert hydraulic capacity

is exceeded or the culvert inlet is plugged and stream flows overtop the road fill. Erosion of the crossing fill and/or diversion of stream flow onto the road surface or inboard ditch can drastically alter channel morphology in the immediate downstream reaches of the affected stream and create a sediment input exceeding the bedload capabilities of the channel. Short-term water quality can also be affected due to increased turbidity and the creation of new cutbank sediment sources.

Culvert crossings of primary roads on Spring and Street Creeks have been repaired or replaced following the fire and currently convey surface runoff from snowmelt and storm flow events. Cement span culvert replacements were installed on the Road 64 crossings of Spring and Street Creeks in March of 2003. Culvert redesign and replacement at the Road 660 crossing of Street Creek was completed in December of 2002. Primary forest service road 1190 crosses intermittent reaches of the North, Middle and South Forks of the Street Creek drainage and the North and South Forks of the Spring Creek drainage. Cement section culverts damaged prior to fire suppression activities have been repaired at the Road 1190 crossings of the South and Middle Forks of Street Creeks, the South Fork of Spring Creek and the 1193100 crossing of Spring Creek. Culverts at the Road 1190 crossings of the North Fork of Street Creek, Alder Spring Creek and Bean Creek were not damaged during the fire. All of the aforementioned culverts are considered fully functional for spring runoff flows and elevated storm event flows.

Roads in the project area have the potential to create pollutants in several ways. Chemicals such as surfacing oils, de-icing salts, herbicides, and fertilizers may be applied to roads for maintenance, safety, or other improvement. Vehicle contaminants such as oils, brake pad linings, and hydraulic fluid, as well as accidental spills can also contaminate surface waters. The 1190 and 64 roads have the highest potential for sources of pollutants entering the stream system due to their proximity to primary channels and, in the case of Road 64, year-round travel and snow plowing. However, there are no known existing problems at this time.

Hydrologic connectivity between the road system and stream system occurs where roads intercept and collect runoff and convey it into established intermittent or perennial stream channels along their surfaces or within their associated ditch systems. Rapid runoff, sediments, and road-associated chemicals are provided an efficient route into the natural channel network wherever road locations create a hydrologic connection. Primary Roads 64, 1170 and 1190 all have sections with hydrologic connectivity to established intermittent or perennial stream channels. Many secondary and local roads within the fire perimeter also have this connectivity. Although their aggregate surfaces are less erosive than improved cinder or native surfaces, the hydrologic connections of primary roads do contribute elevated levels of sediment to stream systems by conveying accumulated flows from native surface roads, skid trails and landings upslope of their surfaces that have detached sediments from these more erosive areas. These flows are likely to have elevated levels of turbidity associated with them.

## **Flow Effects**

Stream systems are dynamic and typically migrate within historic floodplains as they carry and re-deposit bedload materials. Streams transport and deposit large pieces of woody debris and finer organic matter that provide physical structure and diverse aquatic habitat within the channel. Road alignment and road fills can isolate floodplains, increase flow energy by constricting the channel, constrain channel migration, and simplify riparian and aquatic habitat. Road encroachment on stream channels can also divert stream flows to the opposite bank from its natural position, creating a cut bank that destabilizes the hillslope and increases sediment input into the channel. Wood and sediment trapped behind stream crossings can limit the downstream transport of this material and increase the risk of a crossing failure.

Road segments identified in the Project Recommendation section of Table B-1 restrict stream channel floodplains or directly affecting stream morphology by being located within drainage bottoms are of concern for these factors. Roads primarily affect intermittent reaches of streams within the fire perimeter, including Roads 1170800, 1193130, 1190200, 1190740 and 1170900. The 1170900 road in lower Fly Creek alters physical channel dynamics, floodplain function, and sediment movement/input along an intermittent reach. The perennial reach of Street Creek and its aquatic habitat is not affected by road encroachment except for the road culvert and associated roadbed fill at the County road 64 crossing. The 6400600 and 6400620 roads affect the perennial and intermittent reaches of Spring Ck, respectively, modifying riparian habitat and floodplain in portions of the Perry South Campground.

Perennial reaches of Street Creek and Spring Creek both have culverts that could restrict channel migration and the movement of aquatic organisms. Roads 6400-600, 6400-620 and 6400-660 contain culverts that may restrict upstream migration of Redband trout, Kokanee salmon, and potentially Bull trout. Culvert work on the Street Creek crossings of the 64 and 6400-660 roads has improved culvert size and fish passage. Jumps were identified on 3 culverts on the 6400-620 road that are most likely impassable to juvenile fish species.

### **At Risk Fish Populations**

The project area contains no areas of high aquatic diversity or important productive areas for rearing and spawning. The two streams that contain fish, Street Creek and Spring Creek, are mostly used for juvenile rearing and are not considered streams targeted by anglers. Bull trout have been documented in Street Creek but adults have not been observed. Risk to poaching TES species is low due to limited road access. Street Creek contains straying juvenile bull trout from Lake Billy Chinook that would qualify it is a species of interest. Access to this habitat is from the 6400-660 road.

### **Wetlands**

Roads can affect wetlands by direct encroachment of roadbed fill or

by altering hydrologic function in areas adjacent to them. Changes in surface or subsurface drainage associated with wetlands can affect moisture regimes required by existing riparian communities and create conditions conducive for invasive species.

Defined wetlands are not prominent within the project area and generally have not been encroached by road construction or fire suppression activities. Wetlands present along the perennial reach of lower Street Creek do not have roads through them, except for the Road 64 culvert crossing and bed-fill on some of the adjacent floodplain. Road 64 also crosses through a mid-reach section of an intermittent tributary to Spring Creek where numerous springs occur, some of which have surfaced since the fire event. Both of these crossings have functioning culverts and minimally affect adjacent floodplains. The bed of Road 64 does contour across the slope above some of these springs and may affect subsurface flows toward these outlets.

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## GOTO

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Natural disturbance processes such as wildfire floods, drought, wildfire, insects, disease, landslides, and erosion affect change in stream channel morphology, water quality, aquatic habitat, vegetation patterns, and species distribution. Understanding these natural disturbance processes allows us to determine the relative effect and importance of human disturbance patterns on ecosystem conditions.

Human disturbances within the Eyerly Planning Area such as timber harvest, road development, fire exclusion, and grazing have affected the natural rates of change and function of certain ecosystem elements. Areas of concern focused on:

Soil erosion and subsequent sediment production to streams; Natural hydrologic flow regime and stream channel morphology; State water quality limited streams; Aquatic species distribution; Riparian vegetation contribution to stream shading; Abundance and distribution of noxious weeds; Recreation multiple use and access needs for camping, hunting and tribal use; Management implications associated with species of concern known, or expected to occupy the Watershed Analysis Area.

The forest road system provides access for public, private, and administrative uses. The road system has evolved over time. The primary roads in the Eyerly Project area were constructed in the mid-1950s. Smaller arterial roads were built as late as the 1970s, as need for access increased. Safe and efficient access for today's users cannot be provided without some form of change to the road system. Historical patterns and reasons for use have and are continuing to change and the annual road maintenance budget is currently insufficient to meet maintenance needs.

1. Funds to maintain roads have substantially declined over the last decade and are expected to continue declining. It is not possible to maintain the existing road system at levels expected by the public or to meet current Forest Plan requirements. The use of the road system has changed dramatically over the years from being predominantly used for support of timber management objectives to present day conditions where over 90 percent of use is estimated to be related to some form of recreation activity such as hunting, fishing, camping, hiking, gathering misc. forest products (i.e. Firewood), driving for pleasure, etc.

Along with the changing use patterns on the road system, especially the increase in recreation traffic, the Forest Service road budget is not able to keep up with road maintenance needs. It is estimated that, nation-wide, the Forest Service has a growing \$8.4 billion dollar maintenance and reconstruction backlog and receives only 20 percent of the annual maintenance funding needed to maintain the road system to environmental and safety standards. Current and projected road budgets are not likely to cover many road activities such as new road construction, road reconstruction, road maintenance, and system and non-system road closure.

2. Several recreation uses occur throughout the project area. These uses have occurred for many years and users expect to be able to continue using the project area. Closing roads could reduce access to traditional use areas for a variety of dispersed activities. Closing roads could also reduce user conflicts, particularly between motorized and non-motorized use.

3. Roads facilitate the control of forest insects and disease by allowing efficient access for crews and equipment to infested sites for treatment and monitoring purposes. Roads, including use and maintenance, increase the potential for introduction and spread of noxious weed species. There are several species of noxious weeds present in the area. The majority of weed populations within the project area are associated with roads.

4. Maintaining road densities at the current level would provide continued fragmentation of management area wildlife habitats, and potential adverse impacts to wildlife from disturbance and harassment by humans. Closing roads may increase response time for wildfire suppression crews.

## Analytical Questions to Evaluate Issues

The interdisciplinary team reviewed the questions in the Roads Analysis Guide (FS-643, August 1999) made a list of these questions, (Appendix A), to evaluate road-related issues. Some of the questions were not applicable to the Eyerly Planning Area. These questions are not intended to be prescriptive. Rather they are intended to assist in discerning and quantifying important interactions. Some of these questions will help in NEPA effects analysis at a later time.

## Status of Current Data

Currently, the Sisters Ranger District has a wide variety of data sources. The road layer contained in the Deschutes NF GIS system was updated as a result of the road inventory for this project. The road layer is accurate and up-to-date as a result of project planning and this roads analysis. The stream layer contained in the Geographic Information System (GIS) mapping database is also fairly accurate and up-to-date.

Developed recreation sites, and some dispersed recreation sites are in the GIS system. Resource specialists at both the Forest and District levels shared their knowledge of existing uses and locations throughout the project area.

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The analysis process considered all system and user-created roads within the planning area. Road maintenance activities were reviewed during this analysis. A two-step process systematically addressed all roads, and then considered issues including recreation use, administrative need, and specialists' information. This process attempted to synthesize benefits, problems, and risks and to assess the ability of the road system to meet objectives. Benefits are the potential uses and socioeconomic gains provided by roads and related access. Problems are conditions for certain environmental, social, and economic attributes that managers deem to be unacceptable. Risks are likely future losses in environmental, social, and economic attributes if the road system remains unchanged. The information that has been generated will be used as a baseline against which the existing and future road systems can be compared.

The interdisciplinary team reviewed the questions in the Roads Analysis Guide (FS-643, August 1999), and developed ranking factors to assess the benefits, problems, and risks associated with the current and future road system for the project area. Ranking factors were developed for four broad topic areas: Human Use, Aquatics, Wildlife, and Botany. The team relied in large part on efforts completed as part of the Forest-Wide roads analysis. Ranking factors from the Forest-Wide Roads Analysis were reviewed and used where applicable to this project-level analysis. In addition, some site-specific ranking factors were developed and used.

Items factored into the risk rating for each resource specialty were: 1) Issues; 2) Road location; 3) Resource values; and 4) Resource risk. Risk or value ratings were used for an initial determination for the need of each road segment. Ratings from 0-9 were assigned each segment by each resource, 0 being the lowest risk or value and 9 being the highest risk or value. The total rating for each road segment was averaged for both value and risk and given an initial recommendation for future status. Recommendations were to retain in the present condition, close, or decommission.

## **Human Use**

This factor includes those elements related to public use of forest roads for a multitude of reasons. These reasons revolve around providing access to developed and dispersed recreation areas, sites and facilities. Elements would include all outdoor recreation activities and related travel of a general nature where people visit agency lands.

As a whole, people use federal lands and roads to access areas and sites that will provide some form of leisure opportunities or recreation. In general, higher standard roads would access sites, which lead to more developed recreation sites, such as campgrounds and resorts. Access to primitive areas, such as Wilderness, is normally through trailheads, which fall into developed sites. Lower standard roads typically lead to more dispersed types of recreation such as primitive camping, fishing, hiking, caving, collecting forest products and simply driving for pleasure or exploration.

This factor would include the general spectrum of general road access. There may be significant differences in access during

different seasons. Various closures would affect access at different times of year and for different reasons, and may be either short or long term; annual or as needed. This factor is most important on a local and regional scale. There would be less importance on a national scale, as stakeholders that repeatedly use an area are mostly local.

There may be overlap with administration and economics as the same roads are used for different reasons. For instance, a form of recreation may be collecting and selling forest products for economic benefit, such as mushrooms. Table 4-1 summarizes the ranking of roads from a human use perspective.

**Table 4-1: Human Use Rankings**

HumUse	Miles	Segments	Percent
High	39.49	93	24%
Medium	40.64	82	25%
Low	75.25	187	46%
None	9.02	43	5%

Within the Eyerly Project road system, 24 percent of the road mileage received a high human use ranking, 25 percent received a medium ranking, and 46 percent received a low ranking. These rankings indicate that most roads in the project area are important to either public users or land managers.

**Public Access:** The roads in the analysis area are maintained and signed in accordance with their maintenance and traffic service levels, (Appendix B, following Table B-1), and are considered safe for normal traffic levels or use under normal operating conditions. Most Forest roads managed in maintenance level 1 or 2 and unclassified roads experience only minor vehicular traffic during periods of noncommercial use. During periods of commercial use, these roads experience much higher traffic volumes. Additional road maintenance may be required to safely accommodate increased volumes of large commercial vehicles and is the responsibility of the commercial user. Seasonal restrictions may be necessary to prevent undue wear and tear on roads by large commercial vehicles. Any management activity that increases use or considerably alters normal traffic patterns should be mitigated with appropriate warning and precautionary signs. Additional road maintenance or reconstruction may be required to safely accommodate heavier volumes.

**Recreation Road Use:** The recreating public takes advantage of the existing roads in the planning area for activities such as driving and sightseeing, camping, fishing, hunting, wildflower viewing, bird watching, horseback riding, off highway vehicle use, mountain biking, cross country skiing, and other activities. The Eyerly GIS mapping layer used for analysis shows one dispersed campsite (undeveloped). The dispersed campsite inventory is old and no longer valid. A more accurate estimate based on a current field check would be 15-30 sites. There are two developed campgrounds (Perry South and Monty). There are no trails or trailheads.

Most of the recreation use within the planning area occurs during the

summer season (Memorial Day through Labor Day) and during the hunting seasons for turkey in the Spring, deer and elk in the Fall. The area is just lightly hunted for elk with deer and turkey receiving the highest hunting pressure.

Most of the dispersed camping occurs along roads 1140, 1149, 1150, 1170, 1180, 1190, and 6400. One frequently used area is along 6400400 near The Balancing Rocks. Other heavily used sites are within a twenty minute drive of Perry South Campground and Lake Billy Chinook. These sites serve as an overflow area during holiday weekends when the campgrounds are full.

Recreation use has increased due to improved accessibility, increased hunting tags, increased amount of leisure time, and above all, an increasing population. It is expected that these trends will continue. As the population of Central Oregon increases and tourism grows, recreational use will increase on the Deschutes National Forest. The concern regarding access and travel management is to provide adequate open roads for recreational use throughout the year.

#### **Developed Sites:**

**High** - Road leads to one or more high use developed sites (moderate to high { >25% } week-day use, more than 50% of capacity on weekends).

**Medium** - Road leads to one or more trail-heads that access high use wilderness/unroaded area . (>20 people per day) 4200 rated as high, roads 1200, 4258 and 4270100 rated medium.

**Table 4-2: Developed Recreation Rankings**

Rating	Road #	MILES
Low	6400660	0.20
<b>Low Total</b>		<b>0.20</b>
Med.	1140000	1.41
Med.	1180000	3.47
<b>Medium Total</b>		<b>4.88</b>
High	1100000	2.05
High	1170000	4.90
High	1490000	3.71
High	6400400	1.30
High	6400410	0.10
High	6400600	0.59
High	6400620	0.42
High	6400700	0.58
<b>High Total</b>		<b>13.64</b>

ALL OTHER ROADS RATED 0.

**Dispersed Sites: High-** Road provides access to high number of dispersed sites with high use (some week-day use, occupied > 50% of summer weekends). 24.63 miles rank high and 35.66 miles ranked medium.

**Table 4-3: Dispersed Sites Rankings**

Rating	Road #	MILES
HIGH	1100000	2.05
HIGH	1140000	1.41
HIGH	1149000	7.70
HIGH	1170000	4.90
HIGH	1180000	3.47
HIGH	1490000	3.71
HIGH	6400400	1.30
HIGH	6400410	0.10
<b>Total</b>		<b>24.63</b>

**Private Access/ Private Ownership:** There are several parcels of non-federally owned property located along County Road 64 and in close proximity to Lake Billy Chinook. The Green Ridge Repeater Site contains communication equipment owned by Jefferson County as well as the USFS. These roads provide primary access.

**Table 4-4: Private Access Rankings**

Rating	Road #	MILES
Low	1140000	1.405
Low	1170910	0.4
Low	1180000	3.47
Low	1490000	3.705
<b>Low Total</b>		<b>8.98</b>
Med.	1170000	4.9
Med.	1170900	0.3
Med.	6400410	0.1
<b>Med.Total</b>		<b>5.3</b>
High	1100000	2.048
High	6400400	1.3
High	6400440	0.1
High	6400660	0.2
<b>High Total</b>		<b>3.648</b>

**Special-Use Permits / Special Forest Products:** Special-Use access areas requiring permits are the Green Ridge Repeater Site (Jefferson Co.), two road permits to private lakeside parcels near Perry South Campground, and a road and bridge permit for private lakeside parcels on Street Creek. Additionally, the Cochran property along Co. Rd. 64 has a permit for a road, spring box, and water line. The gauging station on the Metolius River near Monty CG is also only

accessible under permit.

Special Forest Products being gathered in the area under permit include firewood, cones, mushrooms, transplants, rocks/minerals, and posts and poles.

**Table 4-5: Special-Use Rankings**

Rating	Road #	MILES
Low	1149000	7.70
Low	1170000	4.90
Low	1170900	0.30
Low	1490000	3.71
<b>Low Total</b>		<b>16.61</b>
Med.	1140000	1.41
Med.	1180000	3.47
<b>Med.Total</b>		<b>4.88</b>
High	1100000	2.05
High	1149300	0.30
<b>High Total</b>		<b>2.35</b>

**Range:** There are no active range allotments within the analysis area.

**Lands/Minerals:** The existing transportation system is adequate for future needs (geothermal, mining claims, mineral material sources, etc). The two designated mineral sites within the analysis area are Sullivan Pit located at the Roads 1180 and 1180900 junction; and East Sullivan Pit: a rock quarry adjacent to Road 1180, with access from Road 1180600. The Sullivan Pit is used for administrative purposes and by the public for landscaping rock. The East Sullivan Pit is a newer quarry that will enable multiple agencies access for construction and reconditioning projects.

**Table 4-6: Lands/Minerals Rankings**

Rating	Road #	MILES
Low	1170000	4.90
Low	1180600	0.01
<b>LowTotal</b>		<b>4.90</b>
Med.	1100000	2.05
Med.	1140000	1.41
Med.	1180000	3.47
<b>Med.Total</b>		<b>6.92</b>

## Fire/Fuels

Fire/Fuels ranking factors provide a means of determining primary and secondary access for fire management and access to water sources, fire camp locations or other improvements. A ranking of High is assigned to road segments that provide primary (main route) access to fire management resources, or secondary (more than one access route) for fire management operations (suppression, fuel treatment). Medium rankings are assigned to segments that provide secondary access for fire management or access to only one water source, fire camp location, or other improvement. A Low ranking factor denotes road segments that are less strategic, where there is reasonable access adjacent to the area or there is no egress and there is a greater risk to firefighters.

The current road system provides adequate access for ground-based fire suppression forces to reach wildland fires. However many of the roads are mid-slope and proved to be less than optimum as fire control lines or serve as beneficial fire breaks. There is no egress to the north and limited east west access up and down slope. Roads typically are narrow and winding. The roads contour the slope and cross the heads of numerous draws where vegetation and surface fuels can increase the risk to firefighter and public safety. These very topographic features contribute most to a potential for high intensity wildfire, with rapid spread rates and prolific spotting. There are risks of entrapment (ingress/egress), smoke inhalation and falling trees adjacent to many of the roads in the Forest road system. Several roads dead-end and don't allow for retreat if cut off by fire. Proper road signing, gate management and fuels treatments along roads are critical to meet firefighting and public safety objectives. Harvest methods would contribute to fuels management and benefit future control of fires. During the Eyerly fire, managers built numerous safety zones on ridges and along the road system to mitigate their exposure to entrapment due of lack of access.

One key road system is the 1149 road and several of its tributaries across the top of Green Ridge. Its location is strategic as a last defense for fires that start on both the east and west facing aspects of Green Ridge. The surface type, design speed, other road characteristics, and local weather conditions can contribute to airborne dust from road use. Airborne dust contributed to visibility during this last fire season on gravel and native-surfaced roads within the Green Ridge area. Road access within the analysis area is critical. The primary escape routes off Green Ridge are the 1149, 1150, 1190, and 1170 /1180 road systems.

The combined road system listed in Appendix B provides opportunities to implement post harvest activities as well as natural fuel treatments mid slope .The level 1 roads will provide short term access and act as natural barriers that provide options for fuels managers during planning or implementation. This will reduce machine and hand-lines, cuts costs and reduces resource damage.

**Table 4-7: Fire/Fuels Rankings**

Fire/Fuels	Miles	Segments	Percent
High	24.63	8	19%
Medium	35.66	15	27%
Low	71.21	89	54%

## Silviculture

Timber Management and Silviculture ranking factors have been developed to address how the road system affects logging system feasibility, and how the road system affects access to stands needing silviculture treatment. Road segments with a ranking of High will be needed in the next ten years for harvest/haul, and located in a primary location. Medium ranked road segments will probably not be needed for the next ten years, but provide primary access for harvest or haul to an area (or segment) possibly needed in the next ten years for duplicate access or movement to a more efficient location. A segment with a Low ranking will not be needed for harvest or haul in the next ten years, provides duplicate access to an area, or could easily be moved to another location. Road segments ranked as Not Needed are not required for access to reforestation or timber stand improvement projects.

Ground-based and cable logging systems have both been employed in this area. Beginning in the 1980's staggered-setting patch cuts, ranging from 10 to 40 acres, were the norm. On the flatter terrain, sanitation/salvage cuts were made in the areas between the regeneration units.

The current high-density road system in the areas previously managed for timber reflect a density that was based on the use of short-span high lead systems (e.g. jammer systems with a 600 ft. reach) and skidding with crawler tractors (primarily downhill). Road spacing for these systems was based on a maximum external yarding distance (EYD) of approximately 600 ft. (measured as slope distance).

Another factor in the development of this high-density road system was the use of crawler tractors on slopes up to 40 percent. To facilitate downhill skidding, roads were often located in the bottoms, close to intermittent streams and draws. Many of these steeper areas would now be logged using cable systems, because of the concerns for soil disturbance, displacement, and compaction, and the bottom roads are no longer needed. In general, road access to the tops of future cable logging settings is available with the use of short temporary spur roads out to landing locations.

**Areas Suitable for Ground-based Logging Systems:** Future entries would employ rubber-tired skidders or harvester/forwarder systems with economical yarding capabilities (EYD) of about 1000 ft. and 1400 ft. respectively. For skidders, this would generally equate to an average yarding distance (AYD) of about 600 ft., because settings tend to be fan-shaped affairs to a centralized landing. For harvester/forwarder systems, this would generally equate to an AYD of about 700 ft., because the forwarder trails are parallel to each other and perpendicular to the contours, resulting a more or less rectangular setting and a continuous landing. Road spacing for future access can be based on these parameters. Therefore, on flat ground haul roads could easily be spaced a half mile apart (assuming short temp roads to landings within units). On slopes over 20 percent, skidding direction needs to be downhill, and road spacings are necessarily tighter due to the single direction of yarding of logs (this



same principle applies to cable yarding; see next section).

**Areas Suitable for Cable Logging Systems:** Future cable entries would generally be skyline partial-cut systems using small mobile yarders with tower heights of 25 - 50 ft., and economical yarding distances (for uphill yarding) of 1000 - 1500 ft., with the external yarding distance being limited by the skyline drum capacity of the yarder. Road spacings of 1000 to 1500 ft. are within the capabilities of these machines, and this distance can be extended, under the right circumstances, well beyond 1500 ft. through the use of larger towers, standing skylines, and multi-span systems.

**Future Access for Silviculture Stand Treatment:** Prescribed treatments in the future would reduce stand densities, improve insect and disease resistance, and reduce ladder fuels that could contribute to a crown fire. This would apply to both natural stands and plantations within the project area. Broadly speaking, these types of treatments do not require road access directly to the stands treated. However, the costs of these non-commercial efforts would increase substantially due to increased hike-in time, and the possibility of recovering some product value would generally be lost.

**Temporary Roads:** In general, road access to the tops of future cable logging settings is available with the use of short temporary spur roads out to landing locations (e.g. segments of Roads 1170, 1190, and 1190100). These roads would be located along ridge-tops and would require little or no excavation. It is estimated that 2 to 4 miles of this type of road would be required.

Some temporary roads would also be needed for ground-based yarding, mainly where landings need to be located away from major travel routes and where road spacing would be in excess of economical skidding distances. It is estimated that approximately 2 miles of road would be required for these purposes.

**Table 4-8: Timber Management/Silviculture Rankings**

Timber/Silv	Miles	Segments	PERCENT
High	67.24	150	46.2%
Medium	44.76	115	30.8%
Low	21.55	82	14.8%
None	11.93	58	8.2%

## Botany

Botany ranking factors were developed to address three main issues; special plant habitats, TES plant species, and noxious weeds and non-native invasive plant species. Special habitats considered in this analysis are wetlands and riparian plant communities; wet, moist and dry meadows; aspen stands; cottonwood bottomlands; and scablands. Road proximity to plant populations and/or habitat (within 200 feet), current use, and other factors were used to develop the overall rankings.

**Ecological Attributes:** Botanically, no regionally unique ecological

attributes have been identified within the Project Area. However, virtually no surveys for rare or uncommon native species of plants, lichens or fungi have been conducted within the Project Area. Four local populations of the mountain lady's slipper orchid (*Cypripedium montanum*) are known to exist within the Project Area. All are located along FR 1190 and associated with seasonally damp lower slopes and drainages. This is a Survey and Manage Category C species requiring pre-disturbance surveys and management of high priority sites. Known sites of two R6 Sensitive Plant Species occur immediately adjacent to the Project boundary. A site of Peck's penstemon (*Penstemon peckii*), a species endemic to the Metolius Basin, occurs in the immediate vicinity of the "Four Corners" intersection of Forest Roads 11, 1170, 1190 and 1180. A site of tall agoseris (*Agoseris elata*), at Prairie Farm Spring, is less than ¼ mile south of the southwest corner of the Project Area. Potentially suitable habitat for each of these species - seasonally moist, gently sloping areas, for example, dry/moist meadows associated with intermittent drainages - likely exists within the Project Area. In the Metolius Watershed Analysis, the Horn of Green Ridge (Landscape Area 9), which includes both roaded and unroaded forest in the northwest corner of the Project Area, was identified as including old growth remnants that might be acting as refugia for rare or uncommon lichens and fungi. Much of the western half of the Project Area, including most of the Horn of Green Ridge, is allocated as Late Successional Reserve within the Northwest Forest Plan Area. New roads within the Project Area, particularly if in or near unburned or lightly burned areas, have the potential to directly or indirectly adversely impact currently unmapped rare plant locations and/or habitats.

**Introduction and Spread of Exotic Plants:** Deschutes National Forest biologists hike many miles through the forest each field season, in the search for noxious weeds and exotic plant species. Botany surveys are conducted along and off of trails. The high percentage of Forest noxious weed sites that are located along roads suggests that roads, and the vehicles that move along them, are the major means by which new noxious weed sites are established on the Forest. The effectiveness of a road's type and its effectiveness in dispersing weeds are apparently not well-studied. Along roads that accommodate high volumes of high speed traffic, weedy plants are generally not in direct contact with vehicles, but winds that routinely blow seeds and fruits and whole plant parts onto the roadway, along with the sheer volume of traffic, are likely to combine to produce a high probability of weed dispersal. On the other hand, weeds growing along small, low traffic volume, native-surface roads, may, by direct contact with passing vehicles, be effectively dispersed in spite of low traffic volumes. No systematic surveys for noxious weeds occurred within the Project Area until following the Eyerly Fire. Currently, 13 noxious weed sites are known within the Project Area. One of these, a knapweed site along lower Fly Creek, is among the largest noxious weed sites on Deschutes N.F. In order of abundance, noxious weeds within the Project Area include the knapweeds (*Centaurea* species), Scotch broom (*Cytisus scoparius*), and St. Johnswort (*Hypericum perforatum*). Noxious weeds have the potential to competitively eliminate small, local sites of rare plants, to generally degrade quantity and quality of habitat for native plants, and consequently, degrade quantity and quality of cover and forage for wildlife,

promote erosion and sedimentation in watercourses, and diminish quality of recreational experiences.

**Control of Insects, Diseases, and Parasites:** Roads generally facilitate surveys and treatment of noxious weed sites, but the circularity of this statement must be noted: the majority of noxious weed sites on Deschutes N.F. would not exist if not for the roads that they occur beside.

**Ecological Disturbance Regimes:** Through competition with native plants during natural or managed revegetation of disturbed sites, weed infestations have the potential to arrest vegetative succession at early seral stages. Weed infestation within a drainage can extend the period of watershed erosion and stream sedimentation following damage to local, native vegetation (fire, grazing, heavy recreational use). Roads can alter the route of surface water flow, and in turn, redirect the movement of surface water-borne seeds and other reproductive propagules.

Potential for Pollutants: Currently, within the Project Area, only the lower Fly Creek knapweed site, occurring along Forest Road 1170-900, has received analysis and clearance for herbicide use. Following direction within the Deschutes N.F. Integrated Weed Management Plan (1998), risk to Fly Creek water quality should be low. Principal proposed treatment is biological. Herbicide application is approved on 3.5 acres.

**Litterfall/Riparian Plant Communities:** As culverts generally provide a shaded watercourse, shade loss associated with a road corridor, in forested communities, is expected only at the edge of the corridor, near the points of water entry and exit from the culvert. Litterfall associated with stream crossings will be reduced somewhat in excess of the width of the road corridor. Loss of shade and litterfall has the greatest potential when roads closely parallel a forest stream. Roads that bisect a seasonally dry/moist meadow associated with an intermittent stream have the potential to redirect stream flow and alter the soil moisture regime, and, in turn, adversely impact the plant community composing the downstream portion of the meadow. Malfunctioning culverts can result in sedimentation within adjacent upstream riparian plant communities, and erosive scouring, both mineral and organic, within downstream riparian plant communities.

**Unique Feature/Threatened or Endangered Species:** Currently, there are no known sites, within the Project Area, of Threatened or Endangered Plants, or of R6 Sensitive or Survey and Manage plant species. These issues would not be a factor in project road closures and decommissioning.

**Table 4-9: Botany Rankings**

Botany	Miles	Segments	Percent
High	73.68	177	45%
Medium	75.32	184	46%
Low	15.4	44	9%

## Wildlife

The Deschutes National Forest sets management objectives for open road densities and seasonal closures to prevent disturbance to sensitive populations or habitats. As outlined in the Metolius Wild and Scenic River Management Plan, public motorized access is closed seasonally on Rd 64 at or near the SE boundary of the Eyerly property in Sec 19 SE, T11S, R11E when Monty Campground is closed.

A drastic increase in the population of Central Oregon is resulting in increased volume and type of vehicle access into wildlife habitats. Off Highway Vehicle (OHV) use has increased dramatically in the past several years. These new vehicles are capable of directly accessing habitats and further damaging habitats and reducing security levels. It is for this reason that some management areas of the Deschutes National Forest are designated route use only, and the Forest Service is adopting a "closed unless declared open to OHV" policy. Effects of OHVs on wildlife may include increased expenditure of energy due to stress from disturbance, destruction of vegetation which supports wildlife habitat and food, lower reproductive success due to disturbance during critical mating and reproductive periods, greater competition for resources due to population concentrations, displacement of animals, and although rare, even mortality. Species with greater sensitivity to human disturbances are likely precluded from utilizing habitats associated with these areas. Species like big game can adapt to predictable activities in specific areas but surprise encounters cause increased stress and may cause animals to move to other areas. This movement may cause greater risk of predation (Lyon 1979).

In addition to OHV use, the road system for the Eyerly project area facilitates numerous activities that affect wildlife and wildlife habitat including, but not limited to, firewood collection, four-wheel driving, recreational driving, sightseeing, mountain biking, horseback riding, cross country skiing, hiking, snowmobiling, hunting, fishing, camping, boating, and special forest product collection (i.e. mushrooms, cones, etc.). Recreation has a major affect on wildlife habitat in the project area. Roads originating from County Road 64 receive the greatest amount of use to access private residences along Lake Billy Chinook and two campgrounds that occur along the Metolius River and Lake Billy Chinook. Habitat loss from human activities like firewood collection primarily occurs on the 11, 1150, 1170, and 1180 but harvest of snags occurs throughout the project area. During the winter months the project area can be accessed from Culver and Madras, however it is difficult to access from the town of Sisters. Due to the location, the area has been known to receive illegal firewood cutting during the winter months.

**Table 4-10: Wildlife Rankings**

Wildlife	Miles	Segments	Percent
High	41.09	65	25%
Medium	58.15	151	35%
Low	65.01	188	40%
None	0.15	1	0%

## Aquatics

Aquatic factors were developed to capture key processes associated with roads as they link to aquatic environments. The list of factors includes: geologic hazard; road related sediment; floodplain off-channel habitat; riparian habitat function; flow effects; at risk fish populations; and wetlands. Geologic hazard relates to both active and dormant landslide terrain and its potential for mass wasting, and also to soil types and the potential for erosion (sediment movement).

**Downstream Beneficial Uses of Water:** The downstream beneficial uses of the water in the area, as defined by Oregon Department of Environmental Quality (ODEQ, 1998) are as follows; public domestic water supply, private domestic water supply, industrial water supply, irrigation, livestock watering, anadromous fish passage, salmonid fish rearing, salmonid fish spawning, resident fish and aquatic life, wildlife and hunting, fishing, boating, water contact recreation, and aesthetic quality.

There are no known or expected uses put at risk by road-derived pollutants.

**Surface and Subsurface Hydrology:** In general, road systems can alter the surface and subsurface hydrology of an area by intercepting, concentrating, and diverting flows from their natural flow paths (Wemple et al 1996). Intercepted ground and surface water flows can be routed more quickly to stream channels by road surfaces and adjacent ditch systems, especially where roads are located in valley bottoms or mid-slope on north-facing slopes. These interactions can affect the timing of storm runoff to streams, the duration of storm flows, and the magnitude of peak flows. Consequently, suspended sediment levels in stream systems may increase due to increased overland flow or from in-channel sources due to increased peak flow.

In the Eyerly Salvage Area there is evidence of interaction between roads and surface/subsurface flows. Primary roads 1150, 1190 and 64 all contour from north to south across the downhill flow of overland and channel runoff in the watershed. Their associated ditch systems can collect significant amounts of runoff and contribute them more quickly to the stream channels. There are also numerous secondary and local roads that also contour across the slopes of the upper portions of the watershed.

Subsurface flows within drainage bottoms are likely to be impeded by roadbed crossings, especially in upper reaches of the watershed where native surface road crossings may not have culverts. This can result in water accumulations on the surface that may contribute to an altered surface flow regime or loss of water from evaporation on site. Areas of the lower canyon where subsurface flows resurface at the interface of tuffaceous outcrops contribute to the perennial flow of Street Creek. These flows are likely supported by the infiltration of surface snowmelt and low energy rains accumulated on the watershed uplands throughout the winter precipitation season. Some of this outflow also occurs along the bed and ditch system of road 64 and may require additional culverts to dissipate flow energy during

peak events.

**Mass Wasting:** In general terms, road-related mass wasting is influenced by hill slope gradient, slope position, soil type, bedrock geology, geologic structure, type of road construction, road drainage, and groundwater characteristics. Mass wasting events such as debris torrents and debris flows often severely affect roadbed fills at stream crossings by transporting large amounts of sediment to higher order channels. The presence of roads across steep slopes can increase the risk of mass wasting due to the damming effect of the roadbed on subsurface flows.

Although there are appreciable areas within the fire perimeter that have slopes exceeding 30%, there is little evidence of major slope instability in the project area. The closest evidence of debris flow events can be found on the steep, west-facing scarp of Green Ridge, approximately two miles west of the project area. Rain on snow events of 1995 and 1996 created two large debris flows in ephemeral draws of >50% slope. These areas are associated with the 1490000 and the 1490750 roads listed above which are located within the Metolius Horn subwatershed but are outside the fire area.

Slopes within the fire area exceeding 50% in lower Street and Spring Creeks are primarily comprised of comparatively stable tuffaceous outcrops with variable amounts of mineral soil on the surface. North facing slopes have accumulated more soil susceptible to mass wasting than the drier, south-facing slopes but had significant forest and ground vegetation that helped reduce this risk prior to the fire. Elevated levels of risk for sediment loss and mass wasting for the north slopes exists for the next few years until ground vegetation re-establishes on these sites.

In addition to the 1490 roads previously mentioned, forest roads 1190220, 1170202 and 1170600 within the fire perimeter appear to have elevated risks associated with these factors, especially following the loss of vegetative cover after the fire.

**Local Stream Channels and Water Quality:** Road crossings of stream channels with culverts can cause large inputs of sediment to streams when culvert hydraulic capacity is exceeded, or the culvert inlet is plugged and stream flows overtop the road fill. Erosion of the crossing fill and/or diversion of stream flow onto the road surface or inboard ditch can drastically alter channel morphology in the immediate downstream reaches of the affected stream and create a sediment input exceeding the bedload capabilities of the channel. Short-term water quality can also be affected due to increased turbidity and the creation of new cutbank sediment sources.

Major road crossings within the project area occur on reaches of Street and Spring Creeks, all of which have culverts to convey surface runoff for snowmelt and storm flow events. Primary county road 64 and private road 660 are the only roads to cross the perennial reach of lower Street Creek. Culvert replacement on the road 64 crossings of Spring and Street Creeks is scheduled for March 2003. Culvert redesign and replacement at the road 660 crossing of Street Creek was completed in December, 2002.

Primary forest service road 1190 crosses ephemeral reaches of the North, Middle and South Forks of the Street Creek drainage and the North and South Forks of the Spring Creek drainage. Cement section

culverts damaged during fire suppression activities have been repaired at the crossings of the South Forks of Spring and Street Creeks, as well as the Middle Fork of Street Creek. Culverts at the 1190 crossing of the North Fork of Street Creek, the Alder Spring Creek and Bean Creek were not damaged during the fire and are considered functional. All of the aforementioned culverts should be fully functional by spring runoff flows.

One additional cement section culvert is present on the 1193100 crossing of the South Fork of Spring Creek that has been repaired following the fire.

**Affect on Wetlands:** Roads can affect wetlands by direct encroachment of roadbed fill or by altering hydrologic function in areas adjacent to them. Changes in surface or subsurface drainage associated with wetlands can affect moisture regimes required by existing riparian communities and create conditions conducive for invasive species.

Defined wetlands are not prominent within the project area and generally have not been encroached by road construction or fire suppression activities. Wetlands present along the perennial reach of lower Street Creek do not have roads through them, except for the road 64 culvert crossing and bed-fill on some of the adjacent floodplain. Road 64 also crosses through a mid-reach section of an ephemeral tributary to Spring Creek where numerous springs occur, some of which have surfaced since the fire event. Both of these crossings have functioning culverts and minimally affect adjacent floodplains. The bed of road 64 does contour across the slope above many of these springs and may affect subsurface flows toward these outlets.

Roads listed above that directly impact wetland areas by restricting floodplains or inhibiting channel flows are likely to affect wetland stability and function. The road system also affects man made wetlands around several of the impoundments.

**Potential for Pollutants:** Roads may create potential pollutants in several ways. Chemicals such as surfacing oils, de-icing salts, herbicides, and fertilizers may be applied to roads for maintenance, safety, or other improvement. Vehicle contaminants such as oils, brake pad linings, and hydraulic fluid, as well as accidental spills may also contaminate surface waters.

The 1190 and 64 roads have the highest potential for sources of pollutants entering the stream system. These roads are heavily traveled year-around, and during the winter may be sanded or de-iced, possibly polluting surface water. However, there are no known existing problems at this time.

**Table 4-11: Aquatic Rankings**

Aquatic	Miles	Segments	Percent
High	13.45	21	8%
Medium	33.38	44	20%
Low	117.57	340	71%

## Ability of the Road System to Meet Objectives

The purpose of an effective transportation system is to support resource activities and to serve multiple resource needs. A detailed assessment of the Eyerly Project objectives (presented in Chapter 1) are provided to display how resource activities and needs are addressed to improve the transportation system within the Eyerly Project Area.

- Maintain a safe and efficient transportation system that meets the needs of forest users:

Traffic is managed, as needed, to control access due to structural limitations of the road, safety, or to meet resource objectives, such as off-road vehicle travel management needs.

- Facilitate implementation of the Deschutes National Forest Land and Resource Management Plan:

Access to and within the Forest is well balanced between travel needs and the environment. Roads to most recreation sights are in a suitable condition for passenger cars. Road closures currently in place protect habitat and reduce erosion. Continued management activity will result in a decreased road density which will facilitate resource management planning goals.

- Allow for economical and efficient management within likely budget levels:

The current Highway Safety Act road management budget is insufficient to meet current maintenance needs. Administrative changes within the project area are required.

- Meet current and future resource management objectives:

Increased recreation traffic has been a key factor in the transition of management objectives to ensure public safety protection of wildlife and ecological habitat. Resource management objectives can be met through improvements to high traffic routes; and reconstruction or decommissioning where activities would best serve public access and environmental needs.



- Address associated ecological impacts across the planning area:

All roads within the project system planning area were evaluated. Ecological impacts are addressed throughout Chapter 4. Major areas of concern include impacts of public use of forest roads, access routes for fire management and timber management activity, road proximity to plant populations, road densities affecting wildlife, and the road systems effects on aquatic environments.

- Provide management recommendations for present and future motorized access within the Eyerly Project planning area:

The desired road system within the Eyerly Project planning area addresses current and access needs for recreation and administrative purposes. The Eyerly team proposes changes in maintenance levels and road use activities to reflect changes in motorized access outlined in Chapter 4 of this analysis document. A summary of proposed changes is contained in Chapter 5. Detailed explanations of project recommendation by road segment are listed in Appendix B, Table B-1.

- Identify the need for transportation system changes within the Eyerly Project planning area by comparing the current road system to the desired condition:

The Eyerly interdisciplinary team arrived at transportation system changes after a process that synthesizes benefits, problems, and risks. The desired condition within the project area balances public access, administrative need, while considering economic opportunities and environmental impact. A resource comparison of the current road system to the desired condition is summarized in Chapter 5.

- Balance the need for access with the need of other resources by examining important ecological, social, and economic issues related to roads:

The project team decided that the need for public and administrative access should be weighed among other issues. Public access provides for recreation, forest product collection, and education. Administrative access provides for protection from future wildfires, maintenance of road surfaces, and analysis of ecological conditions within the

## project area

- Describe transportation management opportunities and strategies that will better address future access needs, budgets, and environmental concerns.

The road system meets the objective of supporting resource activities. Minor reconstruction and 0.2 miles of new, temporary road would potentially be needed to access and support resource activities (such as commercial timber harvest and wildfire suppression). Reconstruction will generally occur when a poorly located road needs to be replaced. Ongoing road maintenance activities will be needed to control traffic and ensure safety. Economic concerns associated with Highway Safety Act budget limits are being addressed through inactivation of redundant roads. Impact to wildlife habitat will be improved within Forest Plan management areas through a reduction in road density. Plant and aquatic habitat can be improved through road reconstruction activities to avoid or decrease impact on sensitive environments.

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PLANS, ANALYSES, ASSESSMENTS

## Problems and Risks Posed by the Current Road System

An increase in local population and improved accessibility to the Deschutes National Forest road system is causing a significant increase in road use for recreation purposes. The advanced deterioration of the road surface is most evident within the Eyerly Project Area on Roads 1100 and 1170, which are often used as a shortcut for motorists coming to Lake Billy Chinook from

## Forest

**Deschutes National Forest**

1001 SW Emkay Drive  
Bend, OR 97702

(541) 383-5300

**Ochoco National Forest**

3160 N.E. 3rd Street  
Prineville, OR 97754

(541) 416-6500

**Crooked River National Grassland**

813 S.W. Hwy. 97  
Madras, OR 97741

(541) 475-9272



Highway 20 near Sisters. Additionally, high summer recreation use is causing the road to become washboarded, dusty, and in need of grading.

Increased recreation use in the project area, in addition to administrative activities which are a direct result of the Eyerly Fire, highlight the importance of evaluating and prioritizing needs. Current maintenance levels do not match access needs that would best serve current and future administrative purposes.

Current road maintenance budgets, as described in the Forest-wide Roads Analysis, are insufficient to meet current maintenance needs. Implementation of administrative changes within the Eyerly Project area will help prioritize maintenance needs and reduce the maintenance backlog.

The current road system and its uses pose potential risks to plants and plant habitat within the Eyerly Fire boundary. A knapweed site within the project area (along lower Fly Creek) is one of the largest in the Deschutes National Forest. There are currently thirteen noxious weed sites identified within the project area. Additional site surveys during the field season will identify to what extent the road system adversely affects the local environment by the dispersal of noxious weeds. Continued monitoring for noxious weed infestations along all roads is recommended.

The current road system poses a risk to water quality where roads run parallel to (or cross) streams, restrict floodplains, and deliver sediment from surface erosion. As noted in the Project Recommendations column of Table B-1, opportunities exist to improve water quality and stream health through road decommissioning and stream rehabilitation.

The Deschutes Forest Plan prescribes desired road densities for the purpose of minimizing disturbance to animals and protecting ecologically sensitive habitats. For example, seasonal and year-round closures are prescribed to reduce disturbance to deer habitat during reproductive seasons and during the winter months. While seasonal closures decrease the disturbance to habitat, the existing road system density of 4.1 miles per square mile (Table B-5) within the project area does not allow for the Forest Plan management resource guideline. The Forest Plan prescription within Deer Habitat, (Management Areas 7-22 & 23), is between 1.0 and 2.5 miles per square mile of road density.

## Opportunities for Addressing Important Problems and Risks

The Eyerly Roads Analysis assessment is designed to provide a road system that is safe, affordable, has minimal ecological impacts, and meets immediate and projected long-term public and resource management needs. Resource management needs are based on LRMP direction and an interdisciplinary discussion of the ecological and access effects from the Eyerly Fire.

Each individual road segment was assessed by the IDT using the two (2) steps described at the beginning of chapter 4 to confirm or alter the initial recommendation. The IDT analyzed the 140.27 miles of maintenance level 1 and 2 roads to provide management recommendations for various road access and resource objectives (Definitions of road maintenance levels are found in Chapter 2, Table 2-1). Of roads analyzed in the Eyerly Roads Analysis, only 5.96 miles are maintenance level 3 roads: also reviewed for long-term safety and maintenance needs within the scope of this analysis. The project area contains no maintenance level 4 or 5 roads. The Eyerly Roads Analysis also analyzed level 2 roads if they were determined to be arterial or collector roads.

Arterial and collector roads are the backbone of any transportation system. Specific segments of these roads have been identified as high traffic routes, Appendix B, Table B-1. Opportunities exist for road improvements that will carry these needs safely into the future: implementation of reconstruction, realignment, resurfacing, and brushing would support the long-term needs of both public access and resource management.

The decommissioning of roads reduces the risk of introducing or spreading noxious weeds. Weed control treatments can also reduce the size and density of weed populations. Road maintenance equipment can be cleaned of all soil and plant material before and after completing maintenance work to reduce the risk of spreading weeds. Forest users can be encouraged to use weed-free hay for livestock (i.e. horses) during special activities such as endurance rides.

Aquatic risks associated with the existing road system are described in Chapter 4. Decommissioning, closing (inactivating), or relocating roads in proximity to streams can reduce sediment movement. Reconstructing roads to install drainage structures and filter strips can also reduce sediment movement. Where roads are decommissioned or relocated, vegetation can be restored and help contribute to stream shade. Replacing undersize culverts would ensure that culverts are not plugged or topped during high-flow (flood) events which can also reduce sediment movement. Replacing undersize culverts will also remove barriers to fish passage. Ensuring adequate drainage on roads can reduce their effect on the hydrologic network.

Prescribed Forest Plan density within key management resource areas (e.g. Deer Habitat, Metolius Wildlife-Primitive) can be reached by closing or decommissioning roads in or near key wildlife areas. Decommissioning and rehabilitating redundant roads and unneeded skid trails would result in reduced disturbance to animals and ecologically sensitive habitats. Decommissioning roads in allocated old-growth areas would assist in managing for species associated with old growth and would reduce disturbance. Key habitat components associated with old-growth areas include snags and down logs. Limiting road access can reduce the potential for firewood cutters to remove these habitat components.

## Management Recommendations

The existing Forest road system within the Eyerly Project area includes 87.3 miles of open road, and 58.9 miles of closed or inactivated roads. There are 66.8 square miles of land within the project area, resulting in a road density of 2.19 miles per square mile.

The desired Forest road system within the Eyerly Project area addresses current and future access needs for both recreation and administrative purposes, while considering available resources for maintenance of the system. The Eyerly IDT recommends 22.5 miles of road be changed to a basic custodial care (closed) status. A total of 40.67 segmented road miles have been identified for decommissioning (obliteration) due to redundancy of access to an area; proximity to wildlife or ecologically sensitive habitat; or concerns for aquatic health. The recommended activities would result in a project area road density of 1.58 miles per square mile (105.56 miles within 66.8 square acres).

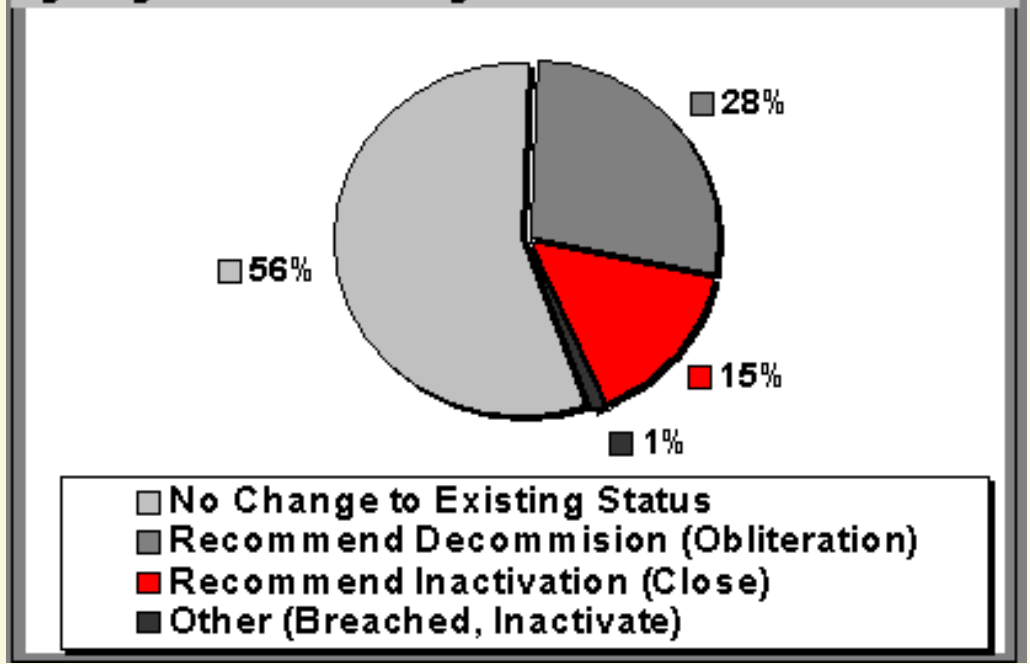
Additionally, segments of road totaling 1.2 miles require re-closing since previous inactivation work had been breached. In the event of a salvage of burned timber within the project area, 0.2 miles of temporary connector roads would be established, and then inactivated after completion of salvage activity.

Figure 1 provides a visual representation of the net change in activity between the existing Eyerly roads system and recommendations provided by the Eyerly project team.

### Figure 1: Recommended Net Change in Eyerly Road System

Of the 146.23 miles of system roads within the Eyerly Project Area, approx. 56% (82 miles) would remain unchanged; 28% (40 1/2 mi) would be decommissioned; 15% (22 1/2 mi) inactivated; and 1% (1 1/4 mi) would require measures to treat previously inactivated road that had been breached.

## Eyerly Roads Analysis Recommendations



Detailed descriptions of recommended changes in maintenance levels and road system activities within the Eyerly Project Area are displayed in Appendix B, following Table B-1.

Based on the ecological, social, and economic considerations, existing and desired conditions, and key issues, the IDT recommends the following list of road management actions. Tables 5-1 identifies management recommendations for roads.

**Table 5-1: Summary of Road Management Recommendations**

Operational Maintenance Level	Existing (Miles)	Recommended (Miles)	Difference (Miles)
Level 1 - Basic Custodial Care (Closed)	58.95	50.52	(-) 8.43
Level 2 - High Clearance Vehicles	81.32	49.08	(-) 32.24
Level 3 - Suitable For Passenger Cars	5.96	5.96	0
Decommission		40.67	(+) 40.67
<b>Total Miles:</b>	<b>146.23</b>	<b>146.23</b>	<b>0</b>

### Road Maintenance Needs

During the course of completing maintenance surveys of the Forest Service roads within this analysis area, a large amount of data was gathered on work that needed to be completed on the FS road system. More roads are reconstructed than constructed because the primary transportation system is in place. Miles of road needing construction or reconstruction varies with the timber sale program each year. This road work falls under either a timber sale

or a public works road contract.

## NEPA Analysis Needs

Project-level area analysis contained in this document will be associated with salvage issues addressed in the project Environmental Impact Statements (EIS). Refer to the site-specific project EIS documents for needs as they apply to the NEPA process. Project road and restoration activities may not require further action under NEPA.

Because this roads analysis is being completed concurrently with the Eyerly Salvage EIS, many opportunities identified can be incorporated into the EIS process. Several of the activities included in Appendix B, Table B-1 were proposed as part of the Eyerly Salvage project have been included in the Eyerly Salvage EIS. Similarly, the data in Appendix B was compiled to identify road resource ratings that could be applied to the salvage project. These road management activities have been noted. If there are opportunities identified that will not be incorporated into the salvage EIS, the need for further site-specific NEPA analysis would be determined in the future (activities other than maintenance and administrative decisions). The Eyerly interdisciplinary team will determine the need for further NEPA analysis during the formulation of additional activities within the project area, such as post-fire rehabilitation.

## Reporting Data

This analysis was developed to capture key processes associated with roads as they link to cultural, terrestrial, ecological, and aquatic environments, and to identify those roads that may be of concern to sensitive resources. The process allowed interdisciplinary team members to make recommendations based on resource discussions and rankings. This is not a decision document; however, it provides a list of roads recommended for action. By closing/ decommissioning these roads, over time, it is expected that resources damage would be minimized and eventually eliminated in identified problem areas.

## Report

The roads analysis resulted in the Road Analysis Report, and accompanying maps, data tables, and references. This purpose of this report is to document the information and analysis methods used to identify social and environmental opportunities, problems, risks, and priorities for future road management. The Road Analysis Report documents the key findings of the analysis and contains graphical, tabular, and geospatial displays of the transportation system options, including a minimum road system. It is important that the roads analysis identify access needs and opportunities that are based on current budget levels and realistic projections of future funding. Analysts located, interpreted, and used relevant scientific literature in the analysis and disclosed assumptions on which the analysis is based. Public involvement is a very important aspect of the decision-making process: public comments will be weighed before deciding

## Road Atlas

The initial transportation atlas consists of those maps incorporated into the Forest-wide GIS transportation coverage-associated information available. The Forest will maintain a current record of forest transportation facilities in the atlas. INFRA will be used for the storage and analysis of information in the transportation atlas. Unit transportation managers shall document changes in



road management status, including changes such as accomplishment of decommissioning objectives or the addition of an unclassified road to the forest road system. The two project maps contained in Appendix C, in addition to maps of larger scale and scope of analysis are maintained in the project file at the Sisters Ranger District, in addition the GIS database at the Deschutes National Forest Supervisor's Office.

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▶ **Evaluate Our Service**

We welcome your comments on our service and your suggestions for improvement.

Forest

**Deschutes National Forest**

1001 SW Emkay Drive  
Bend, OR 97702

(541) 383-5300

**Ochoco National Forest**

3160 N.E. 3rd Street  
Prineville, OR 97754

(541) 416-6500

**Crooked River National  
Grassland**

813 S.W. Hwy. 97  
Madras, OR 97741

(541) 475-9272



EF(1): What ecological attributes, particularly those unique to the region, would be affected by roading of current unroaded areas?

EF(2): To what degree do the presence, type, and location of roads increase the introduction and spread of exotic plant and animal species, insects, diseases, and parasites? What are the potential effects of such introductions to plant and animal species and ecosystem function in the area?

EF(3): To what degree do the presence, type, and location of roads contribute to the control of insects and diseases?

EF(4): How does the road system affect ecological disturbance regimes in the area?

EF(5): What are the adverse effects of noise caused by developing, using, and maintaining roads?

## Aquatic, Riparian Zone, and Water Quality

AQ(1): How and where does the road system modify the surface and subsurface hydrology of the area?

AQ(2): How and where does the road system generate surface erosion?

AQ(3): How and where does the road system affect mass wasting?

AQ(4): How and where do road-stream crossing influence local stream channels and water quality?

AQ(5): How and where does the road system create potential for pollutants, such as chemical spills, oils, de-icing salts, or herbicides, to enter surface waters?

AQ(6): How and where is the road system "hydrologically connected" to the stream system? How do the connections affect water quality and quantity (such as, the delivery of sediments and chemicals, thermal increases, elevated peak flows)?

AQ(7): What downstream beneficial uses of water exist in the area? What changes in uses and demand are expected over time? How are they affected or put at risk by road derived pollutants?

AQ(8): How and where does the road system affect wetlands?

AQ(9): How does the road system alter physical channel dynamics, including isolation of floodplains; constraints on channel migration; and the movement of large wood, fine organic matter, and sediment?

AQ(10): How and where does the road system restrict the migration of and movement of aquatic organisms? What aquatic species are affected and to what extent?

AQ(11): How does the road system affect shading, litterfall, and riparian plant communities?

AQ(12): How and where does the road system contribute to fishing, poaching, or direct habitat loss for at-risk aquatic species?

AQ(13): How and where does the road system facilitate the introduction of non-native aquatic species?

AQ(14): To what extent does the road system overlap with areas of exceptionally high aquatic diversity or productivity, or areas

containing rare or unique aquatic species or species of interest?

## Terrestrial Wildlife

TW(1): What are the direct affects of the road system on terrestrial species habitat?

TW(2): How does the road system facilitate human activities that affect habitat?

TW(3): How does the road system affect legal and illegal human activities (including trapping, hunting, poaching, harassment, road kill, or illegal kill levels)? What are the affects on wildlife species?

TW(4): How does the road system directly affect unique communities or special features in the area?

## Economics

EC(1): How does the road system affect the agency's direct costs and revenues? What, if any, changes in the road system will increase net revenue to the agency by reducing cost, increasing revenue, or both?

EC(2): How does the road system affect the priced and non-priced consequences included in economic efficiency analysis used to assess net benefits to society?

EC(3): How does the road system affect the distribution of benefits and costs among affected people? (benefits of non-priced activities, i. e. wildlife viewing, etc)?

## Commodity Production/Timber Management

TM(1): How does road spacing and location affect logging system feasibility?

TM(2): How does the road system affect managing the suitable timber base and other lands?

TM(3): How does the road system affect access to timber stands needing silviculture treatment?

## Minerals Management

MM(1): How does the road system affect access to locatable, leasable, and salable minerals?

## Range Management

RM(1): How does the road system affect access to range allotments?

## Water Production

WP(1): How does the road system affect access, constructing, maintaining, monitoring, and operating water diversions, impoundments, and distribution canals or pipes?

WP(2): How does road development and use affect water quality in municipal watersheds?

WP(3): How does the road system affect access to hydroelectric power generation?

## **Special Forest Products**

SP(1): How does the road system affect access for collecting special forest products?

## **Special-Use Permits**

SU(1): How does the road system affect managing special-use permit sites (concessionaires, communication sites, utility corridors, and so on)?

## **General Public Transportation**

GT(1): How does the road system connect to public roads and provide primary access to communities?

GT(2): How does the road system connect large blocks of land in other ownership to public roads (ad hoc communities, subdivisions, in-holdings, and so on)?

GT(3): How does the road system affect managing roads with shared ownership or with limited jurisdiction (RS 2477, cost share, prescriptive rights, FLPMA easements, FRTA easements, DOT easements)?

GT(4): How does the road system address the safety of road users?

## **Administrative Use**

AU(1): How does the road system affect access needed for research, inventory, and monitoring?

AU(2): How does the road system affect investigative or enforcement activities?

## **Protection**

PT(1): How does the road system affect fuels management?

PT(2): How does the road system affect risk to firefighters and public safety?

PT(3): How does the road system affect the capacity of the Forest Service and cooperators to suppress wildfires?

PT(4): How does the road system contribute to airborne dust emissions resulting in reduced visibility and human health concerns?

## Unroaded Recreation

UR (1): Is there now or will there be in the future excess supply or excess demand for unroaded recreation opportunities?

UR (2): Is developing new roads into unroaded areas, decommissioning of existing roads or changing the maintenance of existing roads causing substantial changes in the quantity, quality, or type of unroaded recreation opportunities?

UR (3): What are the adverse effects of noise and other disturbances caused by developing, using and maintaining roads, on the quantity, quality, and type of unroaded recreation opportunities?

UR (4): Who participates in unroaded recreation in the areas affected by constructing, maintaining, and decommissioning roads?

UR (5): What are these participants' attachments to the area, how strong are their feelings, and are alternative opportunities and locations available?

UR (6): How are developing new roads into unroaded areas affecting the Scenic Integrity Objective, SIO(s)?

## Road-Related Recreation

RR(1): Is there now or will there be in the future excess supply or excess demand for roaded recreation opportunities?

RR(2): Is developing new roads into unroaded areas, decommissioning of existing roads, or changing maintenance of existing roads causing substantial changes in the quantity, quality, or type of roaded recreation opportunities?

RR(3): What are the adverse effects of noise and other disturbances caused by constructing, using and maintaining roads on the quantity, quality, or type of roaded recreation opportunities?

RR(4): Who participates in roaded recreation in the areas affected by road constructing, changes in road maintenance, or road decommissioning?

RR(5): What are these participants' attachments to the area, how strong are their feelings, and are alternative opportunities available?

RR(6): How does the road system affect the Scenic Integrity Objective, (SIO)?

## Passive-Use Value

PV(1): Do areas planned for road constructing, closure, or decommissioning have unique physical or biological characteristics, such as unique features and threatened or endangered species?

PV(2): Do areas planned for road construction, closure, or decommissioning have unique cultural, traditional, symbolic, sacred,

spiritual, or religious significance?

PV(3): What, if any, groups of people (ethnic, subcultures, and so on) hold cultural, symbolic, spiritual, sacred, traditional, or religious values for area planned for road entry or road closure?

PV(4): Will constructing, closing, or decommissioning roads substantially affect passive-use values?

## Social Issues

SI(1,2): What are people's perceived needs and values for roads and access? How does road management affect people's dependence on, need for and desire for roads and access?

SI(3): How does the road system affect access to paleontological, archaeological, and historical sites?

SI(4): How does the road system affect cultural and traditional uses (such as plant gathering, and access to traditional and cultural sites) and American Indian treaty rights?

SI(5): How are roads that constitute historic sites affected by road management?

SI(6): How is community social and economic health affected by road management (for example, lifestyles, businesses, tourism industry, infrastructure maintenance)?

SI(7): What is the perceived social and economic dependency of a community on an unroaded area versus the value of that unroaded area for its intrinsic existence and symbolic values?

SI(8): How does road management affect wilderness attributes, including natural integrity, natural appearance, opportunities for solitude, and opportunities for primitive recreation?

SI(9): What are traditional issues of animal and plant species in the area of analysis?

SI(10): How does road management affect people's sense of place?

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## GOTO

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- [CHAPTER 3: IDENTIFYING ISSUES](#)
- [CHAPTER 4: ASSESSING BENEFITS, PROBLEMS, AND RISKS](#)
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**Appendix**

**B**

**Roads Analysis Data Tables**

**Table B-1: Recommended Changes in Maintenance Levels and Activities**

RECOMMENDED SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA								
Road No.	BMP	EMP	Length (Mi)	ACTION	Surf	CURRENT MAINTENANCE LEVEL	RECOMMENDED MAINTENANCE LEVEL	PROJECT_RECOMMENDATION
1100000	18.70	20.22	1.52	NC	AGG	4 - MODERATE DEGREE OF USER COMFORT	4 - MODERATE DEGREE OF USER COMFORT	Opportunity for reconstruction to improve safety, access, and reduce surface erosion; highway safety act road, primary haul route, concern about weeds, spot surfacing.
1100000	20.22	20.75	0.53	NC	AGG	4 - MODERATE DEGREE OF USER COMFORT	4 - MODERATE DEGREE OF USER COMFORT	Opportunity for reconstruction to improve safety, access, and reduce surface erosion; highway safety act road, primary haul route, concern about weeds, spot surfacing.
1100950	0.00	1.30	1.30	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Just outside project area, guzzler on road, install gate, adjacent to weed population,
1140000	9.19	9.61	0.42	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Mixed traffic, alternate haul route, concern about weeds dispersal from both haul and public, spot surfacing may be required, primary access for fire.
1140000	9.61	10.42	0.81	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Mixed traffic, alternate haul route, concern about weeds dispersal from both haul and public, spot surfacing may be required, primary access for fire.
1140000	10.42	10.58	0.16	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Mixed traffic, alternate haul route, concern about weeds dispersal from both haul and public, spot surfacing may be required, primary access for fire.
1140000	10.58	10.59	0.01	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Mixed traffic, alternate haul route, concern about weeds dispersal from both haul and public, spot surfacing may be required, primary access for fire.
1140900	0.00	0.25	0.25	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Keep open for fire
1140900	0.25	0.60	0.35	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Keep open for fire
1140900	0.60	1.20	0.60	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Keep open for fire
1140920	0.00	0.49	0.49	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Candidate for inactivation, close using berm and debris at both ends, to reduce density, next to stream, parallel to creek decommission first .2 miles
1140920	0.49	0.90	0.41	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Candidate for inactivation, inactivate
1140970	0.00	0.06	0.06	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Field verify open status, breached

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

RECOMMENDED SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA								
Road No.	BMP	EMP	Length (Mi)	ACTION	Surf	CURRENT MAINTENANCE LEVEL	RECOMMENDED MAINTENANCE LEVEL	PROJECT_RECOMMENDATION
1140970	0.06	0.20	0.14	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Field verify open status, check on status of channels, crosses multiple stream channels
1140970	0.20	0.57	0.37	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Field verify open status, check on status of channels, crosses multiple stream channels
1140970	0.57	1.10	0.53	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Field verify open status, check on status of channels, crosses multiple stream channels
1149000	0.00	0.94	0.94	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	North end is within castle rocks area, several portions of NERF, Level II road
1149000	0.94	1.20	0.26	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	
1149000	1.20	1.93	0.73	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	
1149000	1.93	2.13	0.20	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	
1149000	2.13	3.98	1.85	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	
1149000	3.98	4.06	0.08	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	
1149000	4.06	4.10	0.04	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	
1149000	4.10	4.19	0.09	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	
1149000	4.19	4.21	0.02	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	
1149000	4.21	4.25	0.04	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	
1149000	4.37	5.17	0.80	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	
1149000	5.17	5.86	0.69	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	
1149000	5.86	7.70	1.84	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	
1149100	0.00	1.14	1.14	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Decommission to reduce road density, was fuelbreak access, quick access needed

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

RECOMMENDED SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA								
Road No.	BMP	EMP	Length (Mi)	ACTION	Surf	CURRENT MAINTENANCE LEVEL	RECOMMENDED MAINTENANCE LEVEL	PROJECT_RECOMMENDATION
1149100	1.14	1.90	0.76	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Decommission to reduce road density, was fuelbreak access, quick access needed
1149180	0.00	0.20	0.20	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Fire escape route
1149200	0.00	0.12	0.12	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Fuelbreak, future timber man.
1149200	0.12	0.74	0.62	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Fuelbreak, future timber man.
1149200	0.74	1.10	0.36	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Fuelbreak, future timber man.
1149300	0.00	0.27	0.27	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	Gated rd., repeater site, special use permit
1149300	0.27	0.30	0.03	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	Gated rd., repeater site
1149310	0.00	0.40	0.40	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	Currently closed?
1149490	0.00	0.14	0.14	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	Salvage
1149490	0.14	0.40	0.26	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	Salvage
1149570	0.00	0.10	0.10	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Within spotted owl home range, seasonal restriction
1149580	0.00	0.80	0.80	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	WQ-Was opened for Fire, Needs closure; within spotted owl home range, seasonal restriction; parallels stream, signs of erosion, flow, floodplain
1149780	0.00	0.34	0.34	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Fuel break, within spotted owl fuel break
1149780	0.34	0.40	0.06	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	Fuel break, within spotted owl fuel break
1149781	0.00	0.20	0.20	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Within spotted owl home range

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

RECOMMENDED SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA								
Road No.	BMP	EMP	Length (Mi)	ACTION	Surf	CURRENT MAINTENANCE LEVEL	RECOMMENDED MAINTENANCE LEVEL	PROJECT_RECOMMENDATION
1149790	0.00	0.20	0.20	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	Access for timber needs
1149800	0.00	0.20	0.20	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	NERF, CHU, fire access
1149800	0.20	0.40	0.20	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	1149-900 selected as primary access for salvage and fire
1149900	0.00	0.40	0.40	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	May need to extend to access end area
1149930	0.00	0.18	0.18	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Road to lookout site, map error field verify
1150000	4.33	7.29	2.96	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; ATM strategy secondary, fire access, 1158 & 1190 weed pop.
1150000	7.29	7.74	0.45	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access
1150000	7.74	7.85	0.11	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access
1150000	7.85	7.96	0.11	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access
1150000	7.96	7.98	0.02	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access
1150000	7.98	8.16	0.18	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access
1150000	8.16	8.21	0.05	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access
1150000	8.21	8.59	0.38	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access
1150000	8.59	10.69	2.10	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access
1150000	10.69	11.02	0.33	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access
1150000	11.02	11.13	0.11	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

RECOMMENDED SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA								
Road No.	BMP	EMP	Length (Mi)	ACTION	Surf	CURRENT MAINTENANCE LEVEL	RECOMMENDED MAINTENANCE LEVEL	PROJECT_RECOMMENDATION
1150000	11.13	11.14	0.01	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access
1150000	11.14	11.19	0.05	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access
1150000	11.19	11.38	0.19	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access
1150000	11.38	12.96	1.58	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access
1150000	12.96	14.05	1.09	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access
1150685	0.00	0.40	0.40	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Fire access inactivate but provide quick access, wildlife snag retention and fire wood removal
1150700	0.00	0.01	0.01	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Fire and timber access, botany weeds along 1158,
1150700	0.01	0.88	0.87	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Fire and timber access, botany weeds along 1158,
1150700	0.88	0.90	0.02	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Fire and timber access, botany weeds along 1158,
1150702	0.00	0.70	0.70	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	TES habitat, streams (L), discussion about east west access, decommission west portion
1150705	0.00	0.20	0.20	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Decommission, not need for future need, adequate access with other roads.
1150710	0.00	1.60	1.60	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	TES habitat, reduce road density, inactivate, need to review in field and discuss decommission, inactivate with easy access 800-810-820 link
1150710	1.60	2.10	0.50	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Preferred to inactivate, provide rapid access
1150711	0.00	0.20	0.20	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Inactivate for snag retention and TES,
1150719	0.00	0.01	0.01	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Candidate for decommission: parallel to intermittent stream, erosion, flow, floodplain.
1150719	0.01	0.15	0.14	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Candidate for decommission, parallel to intermittent stream

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RECOMMENDED SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA								
Road No.	BMP	EMP	Length (Mi)	ACTION	Surf	CURRENT MAINTENANCE LEVEL	RECOMMENDED MAINTENANCE LEVEL	PROJECT_RECOMMENDATION
1150720	0.00	0.02	0.02	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Wanted for fire access, field check and decommission either 710 or 720; erosion fine sediment.
1150720	0.02	1.90	1.88	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Wanted for fire access
1150730	0.00	0.30	0.30	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Recommend to decommission, excess to needs
1150740	0.00	0.40	0.40	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Access for timber, TES and weeds potential, lower road density, eliminate two riparian crossings
1150740	0.40	1.10	0.70	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Aces for timber, TES and weeds potential, lower road density, eliminate two riparian crossings
1150749	0.00	0.20	0.20	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Check actual location, gate
1150790	0.00	0.57	0.57	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Candidate for decommission, inactivate first section and decommission second part north of drainage, cross intermittent stream, parallel roads, road density
1150800	0.00	0.40	0.40	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	Currently closed
1150800	0.40	1.33	0.93	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Lots of discussion on level use, inactivate with fire access
1150800	1.33	2.50	1.17	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Lots of discussion on level use, inactivate with fire access
1150820	0.00	0.10	0.10	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Floodplain and riparian issues; TES habitat.
1150825	0.00	0.30	0.30	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Not needed, was temp that became part system
1150895	0.00	0.20	0.20	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Not needed, was temp that became part system
1150900	0.00	0.63	0.63	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	ATM secondary, key fire access, leave as is
1150900	0.63	1.20	0.57	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	ATM secondary, key fire access, leave as is

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

RECOMMENDED SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA								
Road No.	BMP	EMP	Length (Mi)	ACTION	Surf	CURRENT MAINTENANCE LEVEL	RECOMMENDED MAINTENANCE LEVEL	PROJECT_RECOMMENDATION
1158000	0.00	0.58	0.58	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; ATM secondary, key fire access, noxious weeds Jct. 1190 to 1158 (1/2 mile), crosses multiple riparian areas TES, deer transition range
1158000	0.58	0.59	0.01	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; ATM secondary, key fire access, noxious weeds Jct. 1190 to 1158 (1/2 mile), crosses multiple riparian areas TES, deer transition range
1158000	0.59	0.61	0.02	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; ATM secondary, key fire access, noxious weeds Jct. 1190 to 1158 (1/2 mile), crosses multiple riparian areas TES, deer transition range
1158000	0.61	0.67	0.06	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; ATM secondary, key fire access, noxious weeds Jct. 1190 to 1158 (1/2 mile), crosses multiple riparian areas TES, deer transition range
1158000	0.67	0.74	0.07	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; ATM secondary, key fire access, noxious weeds Jct. 1190 to 1158 (1/2 mile), crosses multiple riparian areas TES, deer transition range
1158000	0.74	0.77	0.03	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; ATM secondary, key fire access, noxious weeds Jct. 1190 to 1158 (1/2 mile), crosses multiple riparian areas TES, deer transition range
1158000	0.77	0.79	0.02	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; ATM secondary, key fire access, noxious weeds Jct. 1190 to 1158 (1/2 mile), crosses multiple riparian areas TES, deer transition range
1158000	0.79	0.88	0.09	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; ATM secondary, key fire access, noxious weeds Jct. 1190 to 1158 (1/2 mile), crosses multiple riparian areas TES, deer transition range
1158000	0.88	1.01	0.13	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; ATM secondary, key fire access, noxious weeds Jct. 1190 to 1158 (1/2 mile), crosses multiple riparian areas TES, deer transition range

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

RECOMMENDED SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA								
Road No.	BMP	EMP	Length (Mi)	ACTION	Surf	CURRENT MAINTENANCE LEVEL	RECOMMENDED MAINTENANCE LEVEL	PROJECT_RECOMMENDATION
1158000	1.01	1.06	0.05	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; ATM secondary, key fire access, noxious weeds Jct. 1190 to 1158 (1/2 mile), crosses multiple riparian areas TES, deer transition range
1158000	1.06	1.06	0.00	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; ATM secondary, key fire access, noxious weeds Jct. 1190 to 1158 (1/2 mile), crosses multiple riparian areas TES, deer transition range
1158000	1.06	1.15	0.09	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; ATM secondary, key fire access, noxious weeds Jct. 1190 to 1158 (1/2 mile), crosses multiple riparian areas TES, deer transition range
1158000	1.15	1.21	0.06	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; ATM secondary, key fire access, noxious weeds Jct. 1190 to 1158 (1/2 mile), crosses multiple riparian areas TES, deer transition range
1158000	1.21	1.29	0.08	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; ATM secondary, key fire access, noxious weeds Jct. 1190 to 1158 (1/2 mile), crosses multiple riparian areas TES, deer transition range
1158000	1.29	1.37	0.08	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; ATM secondary, key fire access, noxious weeds Jct. 1190 to 1158 (1/2 mile), crosses multiple riparian areas TES, deer transition range
1158000	1.37	1.47	0.10	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	ATM secondary, key fire access, noxious weeds Jct. 1190 to 1158 (1/2 mile), crosses multiple riparian areas TES, deer transition range
1158000	1.47	1.80	0.33	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; ATM secondary, key fire access, noxious weeds Jct. 1190 to 1158 (1/2 mile), crosses multiple riparian areas TES, deer transition range
1158000	1.80	2.70	0.90	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; ATM secondary, key fire access, noxious weeds Jct. 1190 to 1158 (1/2 mile), crosses multiple riparian areas TES, deer transition range
1158040	0.00	0.18	0.18	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Decommission, not need for future need, adequate access with other roads, lower density



EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

RECOMMENDED SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA								
Road No.	BMP	EMP	Length (Mi)	ACTION	Surf	CURRENT MAINTENANCE LEVEL	RECOMMENDED MAINTENANCE LEVEL	PROJECT_RECOMMENDATION
1158040	0.18	0.18	0.00	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	
1158040	0.18	0.20	0.02	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	
1158040	0.20	0.20	0.00	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	
1158200	0.00	0.20	0.20	I	IMP	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Inactivate, provide access for fire
1158200	0.20	0.50	0.30	I	IMP	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Inactivate
1158210	0.00	0.63	0.63	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission, not need for future need, adequate access with other roads, lower density, trade for 1158-200
1158400	0.00	0.74	0.74	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	AM Secondary, fire access wildlife unburned island NERF, TES
1158400	0.74	1.33	0.59	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	AM Secondary, fire access wildlife unburned island NERF, TES
1158400	1.33	1.52	0.19	I	IMP	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	AM Secondary, fire access wildlife unburned island NERF, TES
1158400	1.52	2.02	0.50	I	IMP	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Inactivate upper loop, fire access, wildlife unburned island NERF, TES
1158400	2.02	2.81	0.79	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Inactivate upper loop, fire access, wildlife unburned island NERF, TES
1158400	2.81	2.86	0.05	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Inactivate upper loop, fire access, wildlife unburned island NERF, TES
1158470	0.00	0.18	0.18	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	No change, wildlife unburned island NERF, TES
1158470	0.18	0.19	0.01	D	IMP	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Decommission, pull rock wildlife unburned island NERF, TES
1158470	0.19	0.25	0.06	D	IMP	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Decommission, pull rock wildlife unburned island NERF, TES
1158480	0.00	0.44	0.44	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Access to Alder Spr, TES and weed, fire access
1158480	0.44	0.47	0.03	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Access to Alder Spr, TES and weed, fire access

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

RECOMMENDED SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA								
Road No.	BMP	EMP	Length (Mi)	ACTION	Surf	CURRENT MAINTENANCE LEVEL	RECOMMENDED MAINTENANCE LEVEL	PROJECT_RECOMMENDATION
1158480	0.47	0.61	0.14	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Access to Alder Spr, TES and weed, fire access
1158480	0.61	0.63	0.02	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Access to Alder Spr, TES and weed, fire access
1158480	0.63	0.65	0.02	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Access to Alder Spr, TES and weed, fire access
1158480	0.65	0.65	0.00	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Access to Alder Spr, TES and weed, fire access
1158486	0.00	0.07	0.07	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Access to Alder Spr / H2o Source; change MP to .560 ft, multi function impoundment; TES and weed.
1158486	0.07	0.25	0.18	D	IMP	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission, not needed has grown in with snow brush
1158490	0.00	0.07	0.07	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Decommission, attached to closed system
1158490	0.07	0.20	0.13	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Decommission, attached to closed system
1158500	0.00	0.39	0.39	I	IMP	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Noxious weeds 1158 site,
1158500	0.39	0.47	0.08	I	IMP	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Inactivation for future management
1158500	0.47	0.69	0.22	I	IMP	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Inactivation, keep for future management
1158500	0.69	1.20	0.51	I	IMP	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Inactivation for future management
1158510	0.00	0.10	0.10	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission, close proximity to noxious weed site
1158560	0.00	0.50	0.50	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	Fine sediment and flood plain, intercepts flow; no change for first .5 miles.
1158560	0.50	1.14	0.64	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission, WQ-Recommended closure; rebuild channel
1158566	0.00	0.57	0.57	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	WQ-Dozer line, some rehab LEB, weeds indirect association with weed site,

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

RECOMMENDED SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA								
Road No.	BMP	EMP	Length (Mi)	ACTION	Surf	CURRENT MAINTENANCE LEVEL	RECOMMENDED MAINTENANCE LEVEL	PROJECT_RECOMMENDATION
1170000	0.00	0.44	0.44	NC	AGG	3 - SUITABLE FOR PASSENGER CARS	3 - SUITABLE FOR PASSENGER CARS	Opportunity for reconstruction to improve safety, access, and reduce surface erosion; Highway Safety Act Road, high concern for spreading noxious weeds from, TES deer winter range, MA7 deer habitat east side
1170000	0.44	1.34	0.90	NC	AGG	3 - SUITABLE FOR PASSENGER CARS	3 - SUITABLE FOR PASSENGER CARS	Opportunity for reconstruction to improve safety, access, and reduce surface erosion; Highway Safety Act Road, high concern for spreading noxious weeds from, TES deer winter range, MA7 deer habitat east side
1170000	1.34	1.43	0.09	NC	AGG	3 - SUITABLE FOR PASSENGER CARS	3 - SUITABLE FOR PASSENGER CARS	Opportunity for reconstruction to improve safety, access, and reduce surface erosion; Highway Safety Act Road, high concern for spreading noxious weeds from, TES deer winter range, MA7 deer habitat east side
1170000	1.43	1.63	0.20	NC	AGG	3 - SUITABLE FOR PASSENGER CARS	3 - SUITABLE FOR PASSENGER CARS	Opportunity for reconstruction to improve safety, access, and reduce surface erosion; Highway Safety Act Road, high concern for spreading noxious weeds from, TES deer winter range, MA7 deer habitat east side
1170000	1.63	1.63	0.00	NC	AGG	3 - SUITABLE FOR PASSENGER CARS	3 - SUITABLE FOR PASSENGER CARS	Opportunity for reconstruction to improve safety, access, and reduce surface erosion; Highway Safety Act Road, high concern for spreading noxious weeds from, TES deer winter range, MA7 deer habitat east side
1170000	1.63	1.77	0.14	NC	AGG	3 - SUITABLE FOR PASSENGER CARS	3 - SUITABLE FOR PASSENGER CARS	Opportunity for reconstruction to improve safety, access, and reduce surface erosion; Highway Safety Act Road, high concern for spreading noxious weeds from, TES deer winter range, MA7 deer habitat east side
1170000	1.77	2.30	0.53	NC	AGG	3 - SUITABLE FOR PASSENGER CARS	3 - SUITABLE FOR PASSENGER CARS	Opportunity for reconstruction to improve safety, access, and reduce surface erosion; Highway Safety Act Road, high concern for spreading noxious weeds from, TES deer winter range, MA7 deer habitat east side
1170000	2.30	3.53	1.23	NC	AGG	3 - SUITABLE FOR PASSENGER CARS	3 - SUITABLE FOR PASSENGER CARS	Opportunity for reconstruction to improve safety, access, and reduce surface erosion; Highway Safety Act Road, high concern for spreading noxious weeds from, TES deer winter range, MA7 deer habitat east side
1170000	3.53	4.88	1.35	NC	AGG	3 - SUITABLE FOR PASSENGER CARS	3 - SUITABLE FOR PASSENGER CARS	Opportunity for reconstruction to improve safety, access, and reduce surface erosion; Highway Safety Act Road, high concern for spreading noxious weeds from, TES deer winter range, MA7 deer habitat east side

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

RECOMMENDED SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA								
Road No.	BMP	EMP	Length (Mi)	ACTION	Surf	CURRENT MAINTENANCE LEVEL	RECOMMENDED MAINTENANCE LEVEL	PROJECT_RECOMMENDATION
1170000	4.88	4.90	0.02	NC	AGG	3 - SUITABLE FOR PASSENGER CARS	3 - SUITABLE FOR PASSENGER CARS	Opportunity for reconstruction to improve safety, access, and reduce surface erosion; Highway Safety Act Road, high concern for spreading noxious weeds from, TES deer winter range, MA7 deer habitat east side
1170200	0.00	0.01	0.01	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Remove secondary status of road but stay as open road, guzzler need access for maintenance, discussed closing with gates - too open to effectively close
1170200	0.01	1.00	0.99	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Remove secondary status of road but stay as open road, guzzler need access for maintenance, discussed closing with gates - too open to effectively close
1170201	0.00	0.00	0.00	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Not needed decommission,
1170201	0.00	0.10	0.10	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Not needed decommission,
1170202	0.00	0.70	0.70	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission first .7 of road 202, side hill, last .39 miles will be left inactivated.
1170202	0.70	1.14	0.44	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommission first .7 of road 202, side hill, last .39 miles will be left inactivated.
1170210	0.53	0.90	0.37	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	Noxious weeds, first .4 miles will remain a level I, last .5 will be decommissioned
1170215	0.00	0.40	0.40	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	Noxious weeds, road segments 210-215-202 combined to form new single road
1170250	0.00	0.70	0.70	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	No change, remain closed
1170300	0.00	0.16	0.16	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission, cultural sites, weeds deer winter range , forest plan deer habitat
1170300	0.16	0.21	0.05	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission, cultural sites, weeds deer winter range , forest plan deer habitat
1170300	0.21	0.93	0.72	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission, cultural sites, weeds deer winter range , forest plan deer habitat

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

RECOMMENDED SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA								
Road No.	BMP	EMP	Length (Mi)	ACTION	Surf	CURRENT MAINTENANCE LEVEL	RECOMMENDED MAINTENANCE LEVEL	PROJECT_RECOMMENDATION
1170300	0.93	1.08	0.15	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission, cultural sites, weeds deer winter range , forest plan deer habitat
1170300	1.08	1.16	0.08	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission, cultural sites, weeds deer winter range , forest plan deer habitat
1170300	1.16	1.18	0.02	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission, cultural sites, weeds deer winter range , forest plan deer habitat
1170300	1.18	1.19	0.01	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission, cultural sites, weeds deer winter range , forest plan deer habitat
1170300	1.19	1.30	0.11	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission, cultural sites, weeds deer winter range , forest plan deer habitat
1170310	0.00	0.40	0.40	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission, cultural sites, weeds deer winter range , forest plan deer habitat
1170310	0.00	0.40	0.40	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission, cultural sites, weeds deer winter range , forest plan deer habitat
1170360	0.00	0.10	0.10	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission, cultural sites, weeds deer winter range , forest plan deer habitat
1170400	0.00	0.08	0.08	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	ATM secondary, fire access, private land access, winter deer range, potential for noxious weed conduit, winter restriction,
1170400	0.08	0.76	0.68	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	ATM secondary, fire access, private land access, winter deer range, potential for noxious weed conduit, winter restriction,
1170400	0.76	1.10	0.34	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	ATM secondary, fire access, private land access, winter deer range, potential for noxious weed conduit, winter restriction,
1170400	1.10	1.54	0.44	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	No change, remain closed
1170410	0.00	0.17	0.17	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	No change, remain closed, could be conduit of noxious weeds

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

RECOMMENDED SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA								
Road No.	BMP	EMP	Length (Mi)	ACTION	Surf	CURRENT MAINTENANCE LEVEL	RECOMMENDED MAINTENANCE LEVEL	PROJECT_RECOMMENDATION
1170410	0.17	0.60	0.43	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	
1170600	0.00	2.00	2.00	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Rebuilt after fire, conduit for noxious weeds from fly creek, fire and timber access
1170600	2.00	2.80	0.80	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	ATM secondary 0.0 to 2.0, inactivate section from Gunsite Pass (mp 2.0) to crossing (mp 2.8); stream restoration needed from mp 2.8 to 4.2.
1170600	2.80	4.42	1.62	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission from crossing (mp 2.8) to end of road (mp 4.2)
1170640	0.00	0.40	0.40	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Fine sediment and flow impacts.
1170650	0.00	0.70	0.70	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	No change
1170670	0.00	0.80	0.80	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	No change
1170800	0.00	2.00	0.10	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	I-B - Gates on both ends, WQ-Obliterate road, Road is often in stream, rehab draw crossings; noxious weed; quick fire access from east, evaluate should we reroute the west portion, western 700-1000 feet, relocate western gate to 1170890.
1170800	2.00	2.20	2.10	I	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	I-B - Gates on both ends, WQ-Obliterate road; Road is often in stream, rehab draw crossings; noxious weed, quick fire access from east, evaluate should we reroute the west portion, western 700-1000 feet, relocate western gate to 1170890.
1170810	0.00	0.04	0.04	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Linked to 800; stream crossing needs rehab.
1170820	0.00	0.10	0.10	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Linked to 800; stream crossing needs rehab.
1170860	0.00	0.20	0.20	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Inside Roadless area; stream crossing needs rehab.

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

RECOMMENDED SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA								
Road No.	BMP	EMP	Length (Mi)	ACTION	Surf	CURRENT MAINTENANCE LEVEL	RECOMMENDED MAINTENANCE LEVEL	PROJECT_RECOMMENDATION
1170890	0.00	1.30	1.30	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	Noxious weeds, linked to 800 road for access, culverts; sediment, flow, floodplain issues, needs rehab.
1170900	0.00	0.02	0.02	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Noxious weeds - largest pop, TES Pepe; accesses private land, popular dispersed use, unburned winter deer range, winter closure in connection with private landowners; Fire access gate, Avoid Heritage impacts; parallels stream.
1170900	0.02	0.26	0.24	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Noxious weeds - largest pop, TES Pepe, accesses private land, popular dispersed use, unburned winter deer range, winter closure in connection with private landowners. Fire access gate, Avoid Heritage impacts,
1170900	0.26	0.30	0.04	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Noxious weeds - largest pop, TES Pepe, accesses private land, popular dispersed use, unburned winter deer range, winter closure in connection with private landowners. Fire access gate, Avoid Heritage impacts,
1170910	0.00	0.40	0.40	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	High weeds; Fine sediment and flow; Links 900 and 64 rd.; Has pvt. Land access; Not needed.
1180000	0.00	0.71	0.71	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; ATM strategy secondary, community access, weed conduit for dispersal, TES Pepe population, concern about snag density
1180000	0.71	0.71	0.00	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; ATM strategy secondary, community access, weed conduit for dispersal, TES Pepe population, concern about snag density
1180000	0.71	0.94	0.23	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; ATM strategy secondary, community access, weed conduit for dispersal, TES Pepe population, concern about snag density
1180000	0.94	0.95	0.01	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; ATM strategy secondary, community access, weed conduit for dispersal, TES Pepe population, concern about snag density
1180000	0.95	0.97	0.02	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; ATM strategy secondary, community access, weed conduit for dispersal, TES Pepe population, concern about snag density

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

RECOMMENDED SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA								
Road No.	BMP	EMP	Length (Mi)	ACTION	Surf	CURRENT MAINTENANCE LEVEL	RECOMMENDED MAINTENANCE LEVEL	PROJECT_RECOMMENDATION
1180000	0.97	0.98	0.01	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; ATM strategy secondary, community access, weed conduit for dispersal, TES Pepe population, concern about snag density
1180000	0.98	1.93	0.95	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; ATM strategy secondary, community access, weed conduit for dispersal, TES Pepe population, concern about snag density
1180000	1.93	2.14	0.21	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; ATM strategy secondary; Community access; Weed conduit for dispersal; TES Pepe population; Concern about snag density; Wetlands impact.
1180000	2.14	3.47	1.33	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; ATM strategy secondary; Community access; Weed conduit for dispersal; TES Pepe population, concern about snag density; Wetlands impact.
1180090	0.00	0.29	0.29	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Inactivate fire access on
1180090	0.29	0.57	0.28	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	
1180090	0.59	0.68	0.09	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	
1180090	0.68	1.00	0.32	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	
1180093	0.00	0.10	0.10	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Not needed decommission,
1180200	0.00	0.47	0.47	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Cannot effectively close it, check on surfacing or cinders, part of potential haul rout
1180200	0.47	0.60	0.13	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Cannot effectively close it, check on surfacing or cinders, part of potential haul rout
1180200	0.47	0.60	0.13	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Cannot effectively close it, check on surfacing or cinders, part of potential haul rout
1180300	0.00	0.01	0.01	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Potential for noxious weeds
1180500	0.00	0.65	0.65	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Cannot effectively close it, field check, fire access



EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

RECOMMENDED SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA								
Road No.	BMP	EMP	Length (Mi)	ACTION	Surf	CURRENT MAINTENANCE LEVEL	RECOMMENDED MAINTENANCE LEVEL	PROJECT_RECOMMENDATION
1180500	0.65	0.70	0.05	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	
1180600	0.00	0.01	0.01	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Weeds, pull back from canyon edge water quality
1180601	0.10	0.10	0.00	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Decommission, weeds
1180680	0.00	0.11	0.11	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Decommission, weeds
1180680	0.11	0.20	0.09	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Decommission, weeds
1180690	0.00	0.01	0.01	I-NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	I-B, timber management, breached,
1180690	0.01	0.25	0.24	I-NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	I-b
1180700	0.00	0.00	0.00	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Check GIS database for duplicates, fire access, noxious weed conduit between two road systems, discussion on making ATM second strategy
1180700	0.00	0.00	0.00	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Check GIS database for duplicates, fire access, noxious weed conduit between two road systems, discussion on making ATM second strategy
1180700	0.00	0.07	0.07	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Check GIS database for duplicates, fire access, noxious weed conduit between two road systems, discussion on making ATM second strategy
1180700	0.00	0.07	0.07	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Check GIS database for duplicates, fire access, noxious weed conduit between two road systems, discussion on making ATM second strategy
1180700	0.07	0.18	0.11	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Check GIS database for duplicates, fire access, noxious weed conduit between two road systems, discussion on making ATM second strategy
1180700	0.07	0.18	0.11	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Check GIS database for duplicates, fire access, noxious weed conduit between two road systems, discussion on making ATM second strategy
1180700	0.18	0.20	0.02	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Check GIS database for duplicates, fire access, noxious weed conduit between two road systems, discussion on making ATM second strategy
1180700	0.20	1.47	1.27	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Check GIS database for duplicates, fire access, noxious weed conduit between two road systems, discussion on making ATM second strategy

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

RECOMMENDED SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA								
Road No.	BMP	EMP	Length (Mi)	ACTION	Surf	CURRENT MAINTENANCE LEVEL	RECOMMENDED MAINTENANCE LEVEL	PROJECT_RECOMMENDATION
1180710	0.00	0.18	0.18	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Not needed decommission, steep slope, creek crossing
1180710	0.18	0.20	0.02	D	NAT		Decommissioned	
1180800	0.00	0.06	0.06	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Fire access, small impoundment for water
1180800	0.06	0.25	0.19	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	
1180810	0.00	0.27	0.27	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Noxious weeds
1180810	0.27	0.56	0.29	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	
1180810	0.56	0.60	0.04	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	
1180820	0.00	0.27	0.27	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Inactivate, fire access on, density
1180820	0.27	0.56	0.29	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	
1180900	0.00	0.01	0.01	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	ATM strategy secondary, weed conduit for dispersal, TES Pepe population, concern about snag density
1180900	0.01	0.10	0.09	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	
1180900	0.10	0.23	0.13	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	
1180900	0.23	0.24	0.01	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	
1180900	0.24	0.39	0.15	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	
1180900	0.39	0.47	0.08	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	
1180900	0.82	0.83	0.01	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	
1180900	0.83	0.95	0.12	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	
1180930	0.00	0.60	0.00	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Leave open for fire access along ridgeline, ATM secondary, dispersed campsites, least amount of impacts, weeds conduit

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

RECOMMENDED SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA								
Road No.	BMP	EMP	Length (Mi)	ACTION	Surf	CURRENT MAINTENANCE LEVEL	RECOMMENDED MAINTENANCE LEVEL	PROJECT_RECOMMENDATION
1180931	0.00	0.04	0.04	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Not needed
1180960	0.00	0.04	0.04	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Not needed
1180970	0.00	0.04	0.04	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Not needed
1190000	0.00	0.17	0.17	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; ATM strategy secondary, Weed conduit for dispersal; TES pepe & spotted owl; Population; Concern about snag density; Crosses stream.
1190000	0.17	0.53	0.36	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; Crosses stream.
1190000	0.53	3.75	3.22	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; Crosses stream.
1190000	3.75	7.11	3.36	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; Crosses stream.
1190000	7.11	7.12	0.01	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; Crosses stream.
1190000	7.12	7.23	0.11	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; Crosses stream.
1190000	7.23	7.60	0.37	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; Crosses stream.
1190000	7.60	7.89	0.29	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; Crosses stream.
1190000	7.89	10.36	2.47	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access; Need to surface on each side of Bean Creek, Potential haul: economics should determine; Sedimentation issue.
1190000	10.36	12.24	1.88	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Opportunity for reconstruction to improve safety and access
1190000	12.24	13.80	1.56	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Opportunity for reconstruction to improve safety and access; Needs to stay open fire, NEPA historic decision was to gate at beginning south loop of 900 rd date Oct. 30th 1995, Wildlife wants closed, Fire line extended.
1190030	0.00	0.10	0.10	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Not needed

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

RECOMMENDED SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA								
Road No.	BMP	EMP	Length (Mi)	ACTION	Surf	CURRENT MAINTENANCE LEVEL	RECOMMENDED MAINTENANCE LEVEL	PROJECT_RECOMMENDATION
1190050	0.00	0.04	0.04	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Not needed
1190050	0.04	0.41	0.37	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Not needed
1190050	0.41	0.50	0.09	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Not needed
1190050	0.50	0.63	0.13	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Not needed
1190050	0.63	0.85	0.22	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Not needed
1190050	0.85	1.00	0.15	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Not needed
1190100	0.00	0.33	0.33	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	ATM strategy secondary, weed conduit for dispersal, population, concern about snag density,
1190100	0.33	0.48	0.15	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	ATM strategy secondary, weed conduit for dispersal, TES Pepe, population, concern about snag density,
1190100	0.48	0.62	0.14	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	ATM strategy secondary, weed conduit for dispersal, TES Pepe, population, concern about snag density,
1190100	0.62	0.73	0.11	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	ATM strategy secondary, weed conduit for dispersal, TES Pepe, population, concern about snag density,
1190100	0.73	0.94	0.21	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	ATM strategy secondary, weed conduit for dispersal, TES Pepe, population, concern about snag density,
1190100	0.94	1.28	0.34	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	ATM strategy secondary, weed conduit for dispersal, TES Pepe, population, concern about snag density,
1190100	1.28	1.29	0.01	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	ATM strategy secondary, weed conduit for dispersal, TES Pepe, population, concern about snag density,
1190100	1.29	1.60	0.31	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	ATM strategy secondary, weed conduit for dispersal, TES Pepe, population, concern about snag density,
1190200	0.00	1.00	1.00	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Decommission, in Spring Creek drainage bottom.
1190202	0.00	0.04	0.04	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Crosses Spring Creek, floodplain, flow, fine sediment.

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

RECOMMENDED SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA								
Road No.	BMP	EMP	Length (Mi)	ACTION	Surf	CURRENT MAINTENANCE LEVEL	RECOMMENDED MAINTENANCE LEVEL	PROJECT_RECOMMENDATION
1190205	0.00	0.10	0.10	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Crosses Spring Creek, floodplain, flow, fine sediment.
1190220	0.00	0.42	0.42	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	WQ-Recommend Rehab of channel, culvert, hardened, bank work
1190220	0.42	2.00	1.58	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	
1190222	0.00	0.59	0.59	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Decommission sediment routing, hydrologic extension
1190257	0.00	0.04	0.04	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Not needed, Avoid Heritage impacts.
1190257	0.04	0.10	0.06	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Not needed, Avoid Heritage impacts.
1190260	0.00	0.20	0.20	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	WQ-Recommended closure and Rehab/ decommission and rehab channel
1190270	0.00	0.10	0.10	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission, not needed
1190280	0.00	0.50	0.50	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	Inactivate keep for future management; floodplain and flow, crosses Street Creek.
1190290	0.00	0.50	0.50	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Crosses creek/ decommission for wq, weeds, no use
1190300	0.00	1.00	1.00	I-NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	I-B / re-close
1190310	0.00	0.50	0.50	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	I-B/ decommission
1190400	0.00	0.63	0.63	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Inactivate/ fire access need
1190400	0.63	1.71	1.08	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	
1190440	0.00	1.10	1.10	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	Keep inactivated

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

RECOMMENDED SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA								
Road No.	BMP	EMP	Length (Mi)	ACTION	Surf	CURRENT MAINTENANCE LEVEL	RECOMMENDED MAINTENANCE LEVEL	PROJECT_RECOMMENDATION
1190445	0.00	0.50	0.50	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	Keep inactivated
1190450	0.00	0.60	0.60	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	Keep inactivated
1190460	0.00	0.50	0.50	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	Keep inactivated
1190469	0.00	0.09	0.09	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	
1190469	0.09	0.10	0.01	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	
1190490	0.00	0.20	0.20	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	WQ-Concentrates flows on the road
1190490	0.20	0.78	0.58	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Decommission, not needed
1190490	0.78	0.80	0.02	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Decommission, not needed
1190491	0.00	0.04	0.04	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Decommission, short
1190495	0.00	0.90	0.90	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Inactivate/ fire access need
1190500	0.00	0.90	0.90	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	WQ-Substantial on road flow, I-B, pop. Of knapweed along Alder Ck, Access for guzzler. Easy access for fire
1190500	0.90	0.99	0.09	I	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	WQ-Substantial on road flow, I-B, pop. Of knapweed along Alder Ck, Access for guzzler. Easy access for fire
1190500	0.99	1.17	0.18	I	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	WQ-Substantial on road flow, I-B, pop. Of knapweed along Alder Ck, Access for guzzler. Easy access for fire
1190500	1.17	2.20	1.03	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	WQ-Substantial on road flow, I-B, pop. Of knapweed along Alder Ck, Access for guzzler. Easy access for fire
1190505	0.00	0.20	0.20	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission, not needed

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

RECOMMENDED SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA								
Road No.	BMP	EMP	Length (Mi)	ACTION	Surf	CURRENT MAINTENANCE LEVEL	RECOMMENDED MAINTENANCE LEVEL	PROJECT_RECOMMENDATION
1190530	0.00	0.40	0.40	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Not needed; Hydrologic connectivity; Avoid Heritage impacts.
1190532	0.00	0.70	0.70	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Not needed; Hydrologic connectivity.
1190545	0.00	0.40	0.40	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission, not needed
1190549	0.00	0.10	0.10	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Keep inactivated, need access for guzzler
1190580	0.00	0.36	0.36	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Change to ATM secondary, edge of fire, in proximity to pop of knapweed, dozed line
1190580	0.36	0.55	0.19	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Change to ATM secondary, edge of fire, in proximity to pop of knapweed, dozed line
1190580	0.55	0.62	0.07	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Change to ATM secondary, edge of fire, in proximity to pop of knapweed, dozed line
1190580	0.62	0.68	0.06	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Change to ATM secondary, edge of fire, in proximity to pop of knapweed, dozed line
1190580	0.68	0.90	0.22	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Change to ATM secondary, edge of fire, in proximity to pop of knapweed, dozed line
1190587	0.00	0.34	0.34	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	
1190600	0.00	0.16	0.16	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Inactivate and provide easy fire access, lots of discussion, potential for introduction of weeds,
1190600	0.16	0.64	0.48	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Inactivate and provide easy fire access, lots of discussion, potential for introduction of weeds,
1190600	0.64	1.60	0.96	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	Inactivate and provide easy fire access, lots of discussion, potential for introduction of weeds,
1190620	0.00	0.30	0.30	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	Inactivate and provide easy fire access and timber, closed 532, potential for introduction of weeds,
1190690	0.00	0.70	0.70	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission after salvage and haul

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

RECOMMENDED SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA								
Road No.	BMP	EMP	Length (Mi)	ACTION	Surf	CURRENT MAINTENANCE LEVEL	RECOMMENDED MAINTENANCE LEVEL	PROJECT_RECOMMENDATION
1190700	0.00	0.64	0.64	D	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Not needed; Hydrologic connectivity; High concern for weed dispersal.
1190700	0.64	1.35	0.71	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	Hydrologic connectivity.
1190710	0.00	0.80	0.80	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	May use as skid trail if logged
1190730	0.00	0.30	0.30	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission after salvage logging
1190740	0.00	0.95	0.95	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Wildlife within flood plane; TES and noxious weeds; Parallels stream, flow, fine sediment, floodplain; Overgrown and starting to heal
1190800	0.00	0.40	0.40	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Currently closed, decommission first 0.4 mile on north end, inactivate rest of road
1190800	0.40	1.01	0.61	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Keep this section inactivated
1190800	1.01	1.04	0.03	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Inactivate, well drained, fire and timber access
1190800	1.04	1.20	0.16	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Inactivate, well drained, fire and timber access
1190850	0.00	0.01	0.01	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Decommission in roadless area
1190850	0.01	0.38	0.37	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission in roadless area
1190900	0.00	0.90	0.90	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Castle Rocks view point access
1190900	0.90	1.20	0.30	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission, NEPA decision to obliterate Oct1 995o
1190905	0.00	0.01	0.01	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Castle Rocks view point access, ATM secondary Part of NEPA decision on Castle Rocks.
1190905	0.01	0.03	0.02	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Castle Rocks view point access



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RECOMMENDED SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA								
Road No.	BMP	EMP	Length (Mi)	ACTION	Surf	CURRENT MAINTENANCE LEVEL	RECOMMENDED MAINTENANCE LEVEL	PROJECT_RECOMMENDATION
1190920	0.00	0.34	0.34	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission
1190930	0.00	0.40	0.40	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Keep inactivated
1193000	0.00	2.10	2.10	NC	IMP	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	Gate at Junction w/1190 (wildlife), accesses winter range, deer habitat, two guzzlers, surfacing
1193000	2.10	3.60	1.50	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	Gate at Junction w/1190 (wildlife)
1193040	0.00	0.60	0.60	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission, not needed after salvage.
1193100	0.00	1.00	1.00	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	I-B, WQ-Recommended closure and Rehab, need rehab/reconstructing
1193130	0.00	1.60	1.60	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	WQ-Recommended closure and Rehab, in drainage; Wildlife winter deer habitat.
1193200	0.00	0.10	0.10	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	Keep inactivated, need access for guzzler
1193200	0.10	0.11	0.01	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	At guzzler, impacts flow and wetlands.
1193200	0.11	0.41	0.30	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	
1193200	0.11	0.41	0.30	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	
1193200	0.41	0.52	0.11	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	
1193200	0.41	0.52	0.11	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	
1193200	0.52	0.53	0.01	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

RECOMMENDED SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA								
Road No.	BMP	EMP	Length (Mi)	ACTION	Surf	CURRENT MAINTENANCE LEVEL	RECOMMENDED MAINTENANCE LEVEL	PROJECT_RECOMMENDATION
1193200	0.52	0.53	0.01	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	
1193200	0.53	0.74	0.21	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	
1193200	0.53	0.74	0.21	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	
1193200	0.74	1.15	0.41	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	
1193200	1.15	1.15	0.00	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	
1193200	1.15	3.10	1.95	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	Northern part, first 2.5 miles to remain inactivated for both fire and guzzler access
1193200	3.10	4.80	1.70	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	Southern Segment, southern portion from junction to guzzler
1193210	0.00	1.06	1.06	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	Inactivated, , forest plan winter deer habitat, border between deer habitat wildlife primitive wildlife primitive
1193210	1.06	1.40	0.34	NC	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	1 - BASIC CUSTODIAL CARE (CLOSED)	
1193211	0.00	1.08	1.08	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	In winter deer habitat,,
1193211	1.08	1.10	0.02	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Avoid Heritage impacts.
1193214	0.00	0.34	0.34	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission, deer habitat Avoid Heritage impacts.
1193214	0.34	0.40	0.06	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission, deer habitat Avoid Heritage impacts.

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RECOMMENDED SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA								
Road No.	BMP	EMP	Length (Mi)	ACTION	Surf	CURRENT MAINTENANCE LEVEL	RECOMMENDED MAINTENANCE LEVEL	PROJECT_RECOMMENDATION
1193219	0.00	0.40	0.40	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission, deer habitat, not needed
1193240	0.00	0.83	0.83	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission, wildlife primitive, reduce road density,
1193245	0.00	0.10	0.10	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission, wildlife primitive, biological deer winter range, reduce road density,
1193280	0.00	0.30	0.30	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission, wildlife primitive, biological deer winter range, reduce road density, crosses drainage
1490000	2.14	3.93	1.79	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	ATM strategy secondary, surfaced w/culverts, 16 drainage crossings, mass wasting, plugging of culverts
1490000	3.93	4.70	0.77	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	ATM strategy secondary, surfaced w/culverts, 16 drainage crossings, mass wasting, plugging of culverts
1490000	4.70	5.14	0.44	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	ATM strategy secondary, surfaced w/culverts, 16 drainage crossings, mass wasting, plugging of culverts
1490000	5.14	5.37	0.23	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	ATM strategy secondary, surfaced w/culverts, 16 drainage crossings, mass wasting, plugging of culverts
1490000	5.37	5.84	0.47	NC	AGG	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	ATM strategy secondary, surfaced w/culverts, 16 drainage crossings, mass wasting, plugging of culverts
1490700	0.00	0.59	0.59	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Keep inactivated, need access for fuel break and timber access
1490700	0.59	0.63	0.04	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Keep inactivated, need access for fuel break and timber access
1490700	0.63	0.67	0.04	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Keep inactivated, need access for fuel break and timber access
1490700	0.67	0.70	0.03	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Keep inactivated, need access for fuel break and timber access
1490700	0.70	0.75	0.05	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Keep inactivated, need access for fuel break and timber access
1490700	0.75	0.88	0.13	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Keep inactivated, need access for fuel break and timber access
1490700	0.88	0.89	0.01	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Keep inactivated, need access for fuel break and timber access

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

RECOMMENDED SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA								
Road No.	BMP	EMP	Length (Mi)	ACTION	Surf	CURRENT MAINTENANCE LEVEL	RECOMMENDED MAINTENANCE LEVEL	PROJECT_RECOMMENDATION
1490700	0.89	1.14	0.25	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Keep inactivated, need access for fuel break and timber access
1490700	1.14	1.70	0.56	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Keep inactivated, need access for fuel break and timber access
1490730	0.00	0.20	0.20	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Inactivated, links 800 with 100, Metolius Heritage Area
1490750	0.00	0.01	0.01	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Midslope road, parallels 700; Hydrologic connectivity; Metolius Heritage Area; reduce road density.
1490800	0.00	0.80	0.80	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Inactivate w/access for fuelbreak. Keep for timber access
1490900	0.00	0.08	0.08	NC	IMP	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Leave as is, rec. Site feild verify
6400400	0.00	0.10	0.10	I	NAT	2 - HIGH CLEARANCE VEHICLES	1 - BASIC CUSTODIAL CARE (CLOSED)	Accesses Balancing Rocks, long term decommission past Balancing Rocks, check heritage status, BR, BEAR temp closure, use barriers to close roads, dispersed sites , accesses private property, gate at MP 1.3, Develop site
6400400	0.10	1.30	1.20	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Accesses Balancing Rocks, long term decommission past Balancing Rocks, check heritage status, BR, BEAR temp closure, use barriers to close roads, dispersed sites , accesses private property, gate at MP 1.3, Develop site
6400410	0.00	0.10	0.10	NC	NAT	2 - HIGH CLEARANCE VEHICLES	2 - HIGH CLEARANCE VEHICLES	Balancing rocks spur
6400420	0.00	0.10	0.10	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Decommission, after consultation with landowner and Balancing Rocks site plan
6400430	0.00	0.04	0.04	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Decommission, after consultation with landowner and Balancing Rocks site plan
6400440	0.00	0.10	0.10	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Decommission, after consultation with landowner and Balancing Rocks site plan
6400460	0.00	0.30	0.30	D	NAT	2 - HIGH CLEARANCE VEHICLES	Decommissioned	Decommission, after consultation with landowner and Balancing Rocks site plan Avoid Heritage impacts.
6400500	0.00	0.20	0.20	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Not needed; Historic eagle nest; Hydrologic connectivity.
6400500	0.20	0.75	0.55	D	NAT	1 - BASIC CUSTODIAL CARE (CLOSED)	Decommissioned	Decommission, not needed, historic eagle nest

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

RECOMMENDED SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA								
Road No.	BMP	EMP	Length (Mi)	ACTION	Surf	CURRENT MAINTENANCE LEVEL	RECOMMENDED MAINTENANCE LEVEL	PROJECT_RECOMMENDATION
6400600	0.00	0.59	0.59	NC	BST	3 - SUITABLE FOR PASSENGER CARS	3 - SUITABLE FOR PASSENGER CARS	Perry South (East), WQ-Clean culverts, reset culverts to remove jump, remove floodplain constriction, snag retention camp safety.
6400620	0.00	0.42	0.42	NC	BST	3 - SUITABLE FOR PASSENGER CARS	3 - SUITABLE FOR PASSENGER CARS	Perry South (West), WQ-Culvert needs to be replaced. Same as above
6400660	0.00	0.20	0.20	O	NAT	1 - BASIC CUSTODIAL CARE (CLOSED	2 - HIGH CLEARANCE VEHICLES	Private access, gate requested by landowner, accesses USFS Boat Ramp, historic campsite closed, maintain level II; New stream crossing; Revisit opening campground, move gate to Pvt. Land dry.
6400700	0.00	0.58	0.58	NC	NAT	3 - SUITABLE FOR PASSENGER CARS	3 - SUITABLE FOR PASSENGER CARS	Monty CG; Snags and eagle nest, fall roost site; Special use permit gauging station, fish trap, floodplain contribution.

**Definitions**

**Management Strategies**

- A. Maintain As Is:** (Existing maintenance efforts are generally in balance with access needs, no resource impacts are identified that would warrant a change in maintenance levels.)
- B. Increase Maintenance Level:** (Access needs identified exceed existing maintenance efforts and/or resource impacts have been identified that indicate a need to perform maintenance at a higher level.)
- C. Decrease Maintenance Level:** (Access needs identified do not support maintaining road at current level. Resource impacts are low and do not require maintenance to continue at present level.)
- D. Implement Seasonal Travel Restrictions:** (Access is generally needed during the snow free season, but resource concerns indicate a need for travel restrictions to be implemented to mitigate negative impacts.)
- E. Close Year Around:** (Access needs are low and only necessary for administrative or project use. Road can be closed between projects. Resource concerns or maintenance budget limitations indicate a need to close road between project activities.)

- F. Decommission or Convert to Other Uses:** (Full-sized vehicle access is no longer needed, road can be removed from the transportation inventory. Road can either be stabilized and returned to resource production or converted to other uses such as a motorized or non-motorized trail.)

### **Current and Recommended Condition**

- ✓ **Open** - These roads are maintained to be suitable for use by passenger cars. Generally, these roads are identified as maintenance level 3, 4, or 5.
- ✓ **High Clearance Vehicles** - These roads are kept open for high clearance vehicles such as pickups or all purpose vehicles). These roads are identified as maintenance level 2.
- ✓ **Closed** - These roads are kept in a storage or closed condition. These roads are needed for long-term, intermittent access and are occasionally reopened. These roads are identified as maintenance level 1.
- ✓ **Decommissioned** - These roads have been closed, stabilized, and are allowed to revert to a more natural state. These roads are not needed. These roads are not categorized by maintenance level.
- ✓ **System** - A new road that is needed for long-term motor vehicle access.

### **Surface Type**

**Asphalt** – Paved or concrete roads.

**Aggregate** – Gravel roads.

**Bituminous** – Roads have a gravel/oil surface that closely resembles paved roads.

**Improved** – Rock surface Roads.

**Native** – Dirt roads.

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

Table B-2: Existing System Roads

EXISTING SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA						
Road No.	BMP	EMP	Length (miles)	SURFACE	PRIMARY/ SECONDARY	Current Condition
1100000	18.70	20.22	1.52	AGG	PRIMARY	4 - MODERATE USER COMFORT
1100000	20.22	20.75	0.53	AGG	PRIMARY	4 - MODERATE USER COMFORT
1100950	0.00	1.30	1.30	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1140000	9.19	9.61	0.42	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1140000	9.61	10.42	0.82	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1140000	10.42	10.58	0.16	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1140000	10.58	10.59	0.01	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1140900	0.00	0.25	0.25	NAT		2 - HIGH CLEARANCE VEHICLES
1140900	0.25	0.60	0.36	NAT		2 - HIGH CLEARANCE VEHICLES
1140900	0.60	1.20	0.60	NAT		2 - HIGH CLEARANCE VEHICLES
1140920	0.00	0.49	0.49	NAT		2 - HIGH CLEARANCE VEHICLES
1140920	0.49	0.90	0.41	NAT		2 - HIGH CLEARANCE VEHICLES
1140970	0.00	0.06	0.06	NAT		2 - HIGH CLEARANCE VEHICLES
1140970	0.06	0.20	0.14	NAT		2 - HIGH CLEARANCE VEHICLES
1140970	0.20	0.57	0.37	NAT		1 (CLOSED)
1140970	0.57	1.10	0.53	NAT		1 (CLOSED)
1149000	0.00	0.94	0.94	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1149000	0.94	1.20	0.26	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1149000	1.20	1.93	0.73	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1149000	1.93	2.13	0.20	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1149000	2.13	3.98	1.85	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1149000	3.98	4.06	0.09	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1149000	4.06	4.10	0.04	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1149000	4.10	4.19	0.08	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1149000	4.19	4.21	0.02	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1149000	4.21	4.25	0.04	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1149000	4.25	4.29	0.05	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1149000	4.29	4.37	0.08	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1149000	4.37	5.17	0.80	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1149000	5.17	5.86	0.70	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1149000	5.86	7.70	1.84	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1149100	0.00	1.14	1.14	NAT		2 - HIGH CLEARANCE VEHICLES
1149100	1.14	1.90	0.76	NAT		2 - HIGH CLEARANCE VEHICLES
1149180	0.00	0.20	0.20	NAT		2 - HIGH CLEARANCE VEHICLES
1149200	0.00	0.12	0.12	NAT		2 - HIGH CLEARANCE VEHICLES
1149200	0.12	0.74	0.62	NAT		2 - HIGH CLEARANCE VEHICLES
1149200	0.74	1.10	0.36	NAT		2 - HIGH CLEARANCE VEHICLES
1149300	0.00	0.27	0.27	NAT		1 (CLOSED)
1149300	0.27	0.30	0.04	NAT		1 (CLOSED)
1149310	0.00	0.40	0.40	NAT		1 (CLOSED)
1149490	0.00	0.14	0.14	NAT		1 (CLOSED)
1149490	0.14	0.40	0.26	NAT		1 (CLOSED)
1149570	0.00	0.10	0.10	NAT		1 (CLOSED)
1149580	0.00	0.80	0.80	NAT		1 (CLOSED)
1149780	0.00	0.34	0.34	NAT		2 - HIGH CLEARANCE VEHICLES

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

EXISTING SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA						
Road No.	BMP	EMP	Length (miles)	SURFACE	PRIMARY/ SECONDARY	Current Condition
1149780	0.34	0.40	0.06	NAT		1 (CLOSED)
1149781	0.00	0.20	0.20	NAT		1 (CLOSED)
1149790	0.00	0.20	0.20	NAT		1 (CLOSED)
1149800	0.00	0.20	0.20	NAT		2 - HIGH CLEARANCE VEHICLES
1149800	0.20	0.40	0.20	NAT		1 (CLOSED)
1149900	0.00	0.40	0.40	NAT		1 (CLOSED)
1149930	0.00	0.18	0.18	NAT		2 - HIGH CLEARANCE VEHICLES
1150000	4.33	7.29	2.96	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1150000	7.29	7.74	0.45	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1150000	7.74	7.85	0.11	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1150000	7.85	7.96	0.11	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1150000	7.96	7.98	0.02	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1150000	7.98	8.16	0.18	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1150000	8.16	8.21	0.05	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1150000	8.21	8.59	0.37	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1150000	8.59	10.69	2.11	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1150000	10.69	11.02	0.32	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1150000	11.02	11.13	0.12	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1150000	11.13	11.14	0.00	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1150000	11.14	11.19	0.06	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1150000	11.19	11.38	0.19	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1150000	11.38	12.96	1.58	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1150000	12.96	14.05	1.09	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1150685	0.00	0.40	0.40	NAT		2 - HIGH CLEARANCE VEHICLES
1150700	0.00	0.01	0.01	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1150700	0.01	0.88	0.88	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1150700	0.88	0.90	0.02	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1150702	0.00	0.70	0.70	NAT		2 - HIGH CLEARANCE VEHICLES
1150705	0.00	0.20	0.20	NAT		2 - HIGH CLEARANCE VEHICLES
1150710	0.00	1.60	1.60	NAT		1 (CLOSED)
1150710	1.60	2.10	0.50	NAT		2 - HIGH CLEARANCE VEHICLES
1150711	0.00	0.20	0.20	NAT		2 - HIGH CLEARANCE VEHICLES
1150719	0.00	0.01	0.01	NAT		1 (CLOSED)
1150719	0.01	0.15	0.14	NAT		1 (CLOSED)
1150720	0.00	0.02	0.02	NAT		1 (CLOSED)
1150720	0.02	1.90	1.88	NAT		1 (CLOSED)
1150730	0.00	0.30	0.30	NAT		2 - HIGH CLEARANCE VEHICLES
1150740	0.00	0.40	0.40	NAT		2 - HIGH CLEARANCE VEHICLES
1150740	0.40	1.10	0.70	NAT		2 - HIGH CLEARANCE VEHICLES
1150749	0.00	0.20	0.20	NAT		2 - HIGH CLEARANCE VEHICLES
1150790	0.00	0.57	0.57	NAT		2 - HIGH CLEARANCE VEHICLES
1150800	0.00	0.40	0.40	NAT		1 (CLOSED)
1150800	0.40	1.33	0.93	NAT		2 - HIGH CLEARANCE VEHICLES
1150800	1.33	2.50	1.17	NAT		2 - HIGH CLEARANCE VEHICLES
1150820	0.00	0.10	0.10	NAT		2 - HIGH CLEARANCE VEHICLES



EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

EXISTING SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA						
Road No.	BMP	EMP	Length (miles)	SURFACE	PRIMARY/ SECONDARY	Current Condition
1150825	0.00	0.15	0.15	NAT		2 - HIGH CLEARANCE VEHICLES
1150895	0.00	0.20	0.20	NAT		1 (CLOSED)
1150900	0.00	0.63	0.63	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1150900	0.63	1.20	0.57	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1158000	0.00	0.58	0.58	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1158000	0.58	0.59	0.01	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1158000	0.59	0.61	0.02	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1158000	0.61	0.67	0.07	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1158000	0.67	0.74	0.06	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1158000	0.74	0.77	0.03	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1158000	0.77	0.79	0.02	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1158000	0.79	0.88	0.09	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1158000	0.88	1.01	0.13	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1158000	1.01	1.06	0.04	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1158000	1.06	1.06	0.00	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1158000	1.06	1.15	0.10	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1158000	1.15	1.21	0.05	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1158000	1.21	1.29	0.08	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1158000	1.29	1.37	0.08	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1158000	1.37	1.47	0.10	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1158000	1.47	1.80	0.33	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1158000	1.80	2.70	0.90	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1158040	0.00	0.18	0.18	NAT		2 - HIGH CLEARANCE VEHICLES
1158040	0.18	0.18	0.00	NAT		2 - HIGH CLEARANCE VEHICLES
1158040	0.18	0.20	0.02	NAT		2 - HIGH CLEARANCE VEHICLES
1158040	0.20	0.20	0.00	NAT		2 - HIGH CLEARANCE VEHICLES
1158200	0.00	0.20	0.20	IMP		2 - HIGH CLEARANCE VEHICLES
1158200	0.20	0.50	0.30	IMP		2 - HIGH CLEARANCE VEHICLES
1158210	0.00	0.63	0.63	NAT		1 (CLOSED)
1158400	0.00	0.74	0.74	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1158400	0.74	1.06	0.33	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1158400	1.06	1.52	0.46	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1158400	1.52	2.02	0.50	IMP		2 - HIGH CLEARANCE VEHICLES
1158400	2.02	2.81	0.79	NAT		2 - HIGH CLEARANCE VEHICLES
1158400	2.81	2.86	0.06	NAT		2 - HIGH CLEARANCE VEHICLES
1158470	0.00	0.18	0.18	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1158470	0.18	0.19	0.02	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1158470	0.19	0.25	0.06	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1158480	0.00	0.44	0.44	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1158480	0.44	0.47	0.03	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1158480	0.47	0.61	0.14	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1158480	0.61	0.63	0.03	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1158480	0.63	0.65	0.02	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1158480	0.65	0.65	0.00	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1158486	0.00	0.15	0.15	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

EXISTING SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA						
Road No.	BMP	EMP	Length (miles)	SURFACE	PRIMARY/ SECONDARY	Current Condition
1158486	0.15	0.25	0.10	IMP		1 (CLOSED)
1158490	0.00	0.07	0.07	NAT		2 - HIGH CLEARANCE VEHICLES
1158490	0.07	0.20	0.14	NAT		2 - HIGH CLEARANCE VEHICLES
1158500	0.00	0.39	0.39	IMP		2 - HIGH CLEARANCE VEHICLES
1158500	0.39	0.47	0.08	IMP		2 - HIGH CLEARANCE VEHICLES
1158500	0.47	0.69	0.22	IMP		2 - HIGH CLEARANCE VEHICLES
1158500	0.69	1.20	0.51	IMP		2 - HIGH CLEARANCE VEHICLES
1158510	0.00	0.10	0.10	NAT		1 (CLOSED)
1158560	0.00	0.00	0.00	NAT		1 (CLOSED)
1158560	0.89	1.14	0.25	NAT		1 (CLOSED)
1158566	0.00	0.57	0.57	NAT		1 (CLOSED)
1170000	0.00	0.44	0.44	AGG	PRIMARY	3 - PASSENGER CARS
1170000	0.44	1.34	0.90	AGG	PRIMARY	3 - PASSENGER CARS
1170000	1.34	1.43	0.09	AGG	PRIMARY	3 - PASSENGER CARS
1170000	1.43	1.63	0.19	AGG	PRIMARY	3 - PASSENGER CARS
1170000	1.63	1.63	0.01	AGG	PRIMARY	3 - PASSENGER CARS
1170000	1.63	1.77	0.14	AGG	PRIMARY	3 - PASSENGER CARS
1170000	1.77	2.30	0.53	AGG	PRIMARY	3 - PASSENGER CARS
1170000	2.30	3.53	1.23	AGG	PRIMARY	3 - PASSENGER CARS
1170000	3.53	4.88	1.35	AGG	PRIMARY	3 - PASSENGER CARS
1170000	4.88	4.90	0.02	AGG	PRIMARY	3 - PASSENGER CARS
1170200	0.00	0.01	0.01	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1170200	0.01	1.00	0.99	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1170201	0.00	0.00	0.00	NAT		1 (CLOSED)
1170201	0.00	0.10	0.10	NAT		1 (CLOSED)
1170202	0.00	1.14	1.14	NAT		1 (CLOSED)
1170203	0.00	0.10	0.10	NAT		1 (CLOSED)
1170210	0.00	0.90	0.90	NAT		1 (CLOSED)
1170215	0.00	0.40	0.40	NAT		1 (CLOSED)
1170250	0.00	0.70	0.70	NAT		1 (CLOSED)
1170300	0.00	0.16	0.16	NAT		1 (CLOSED)
1170300	0.16	0.21	0.05	NAT		1 (CLOSED)
1170300	0.21	0.93	0.72	NAT		1 (CLOSED)
1170300	0.93	1.08	0.15	NAT		1 (CLOSED)
1170300	1.08	1.16	0.08	NAT		1 (CLOSED)
1170300	1.16	1.18	0.02	NAT		1 (CLOSED)
1170300	1.18	1.19	0.01	NAT		1 (CLOSED)
1170300	1.19	1.30	0.11	NAT		1 (CLOSED)
1170310	0.00	0.00	0.00	NAT		1 (CLOSED)
1170310	0.00	0.40	0.40	NAT		1 (CLOSED)
1170360	0.00	0.10	0.10	NAT		1 (CLOSED)
1170400	0.00	0.08	0.08	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1170400	0.08	0.76	0.68	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1170400	0.76	1.10	0.34	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1170400	1.10	1.54	0.44	NAT		1 (CLOSED)

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

EXISTING SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA						
Road No.	BMP	EMP	Length (miles)	SURFACE	PRIMARY/ SECONDARY	Current Condition
1170410	0.00	0.17	0.17	NAT		1 (CLOSED)
1170410	0.17	0.60	0.43	NAT		1 (CLOSED)
1170600	0.00	2.00	2.00	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1170600	2.00	4.42	2.42	NAT		1 (CLOSED)
1170640	0.00	0.40	0.40	NAT		1 (CLOSED)
1170650	0.00	0.70	0.70	NAT		1 (CLOSED)
1170670	0.00	0.80	0.80	NAT		1 (CLOSED)
1170800	0.00	2.20	2.20	NAT		1 (CLOSED)
1170810	0.00	0.04	0.04	NAT		1 (CLOSED)
1170820	0.00	0.10	0.10	NAT		1 (CLOSED)
1170860	0.00	0.20	0.20	NAT		1 (CLOSED)
1170890	0.00	1.30	1.30	NAT		1 (CLOSED)
1170900	0.00	0.02	0.02	NAT		2 - HIGH CLEARANCE VEHICLES
1170900	0.02	0.26	0.25	NAT		2 - HIGH CLEARANCE VEHICLES
1170900	0.26	0.30	0.04	NAT		2 - HIGH CLEARANCE VEHICLES
1170910	0.00	0.40	0.40	NAT		2 - HIGH CLEARANCE VEHICLES
1180000	0.00	0.71	0.71	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1180000	0.71	0.71	0.00	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1180000	0.71	0.94	0.24	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1180000	0.94	0.95	0.01	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1180000	0.95	0.97	0.02	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1180000	0.97	0.98	0.01	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1180000	0.98	1.93	0.94	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1180000	1.93	2.14	0.21	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1180000	2.14	3.47	1.33	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1180090	0.00	0.29	0.29	NAT		2 - HIGH CLEARANCE VEHICLES
1180090	0.29	0.57	0.28	NAT		2 - HIGH CLEARANCE VEHICLES
1180090	0.59	0.68	0.09	NAT		2 - HIGH CLEARANCE VEHICLES
1180090	0.68	1.00	0.32	NAT		2 - HIGH CLEARANCE VEHICLES
1180093	0.00	0.00	0.00	NAT		2 - HIGH CLEARANCE VEHICLES
1180093	0.00	0.10	0.10	NAT		2 - HIGH CLEARANCE VEHICLES
1180200	0.00	0.47	0.47	NAT		2 - HIGH CLEARANCE VEHICLES
1180200	0.47	0.60	0.13	NAT		2 - HIGH CLEARANCE VEHICLES
1180200	0.47	0.60	0.13	NAT		2 - HIGH CLEARANCE VEHICLES
1180300	0.00	0.01	0.01	NAT		1 (CLOSED)
1180500	0.00	0.65	0.65	NAT		2 - HIGH CLEARANCE VEHICLES
1180500	0.65	0.70	0.06	NAT		2 - HIGH CLEARANCE VEHICLES
1180600	0.00	0.01	0.01	NAT		2 - HIGH CLEARANCE VEHICLES
1180601	0.10	0.10	0.00	NAT		2 - HIGH CLEARANCE VEHICLES
1180680	0.00	0.11	0.11	NAT		2 - HIGH CLEARANCE VEHICLES
1180680	0.11	0.20	0.09	NAT		2 - HIGH CLEARANCE VEHICLES
1180690	0.00	0.01	0.01	NAT		1 (CLOSED)
1180690	0.01	0.25	0.24	NAT		1 (CLOSED)
1180700	0.00	0.00	0.00	NAT		2 - HIGH CLEARANCE VEHICLES
1180700	0.00	0.00	0.00	NAT		2 - HIGH CLEARANCE VEHICLES

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

EXISTING SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA						
Road No.	BMP	EMP	Length (miles)	SURFACE	PRIMARY/ SECONDARY	Current Condition
1180700	0.00	0.07	0.07	NAT		2 - HIGH CLEARANCE VEHICLES
1180700	0.00	0.07	0.07	NAT		2 - HIGH CLEARANCE VEHICLES
1180700	0.07	0.18	0.12	NAT		2 - HIGH CLEARANCE VEHICLES
1180700	0.07	0.18	0.12	NAT		2 - HIGH CLEARANCE VEHICLES
1180700	0.18	0.20	0.02	NAT		2 - HIGH CLEARANCE VEHICLES
1180700	0.20	1.47	1.27	NAT		2 - HIGH CLEARANCE VEHICLES
1180710	0.00	0.18	0.18	NAT		2 - HIGH CLEARANCE VEHICLES
1180710	0.18	0.20	0.02	NAT		2 - HIGH CLEARANCE VEHICLES
1180800	0.00	0.06	0.06	NAT		2 - HIGH CLEARANCE VEHICLES
1180800	0.06	0.25	0.19	NAT		2 - HIGH CLEARANCE VEHICLES
1180810	0.00	0.27	0.27	NAT		2 - HIGH CLEARANCE VEHICLES
1180810	0.27	0.56	0.29	NAT		2 - HIGH CLEARANCE VEHICLES
1180810	0.56	0.60	0.05	NAT		2 - HIGH CLEARANCE VEHICLES
1180820	0.00	0.27	0.27	NAT		2 - HIGH CLEARANCE VEHICLES
1180820	0.27	0.56	0.29	NAT		2 - HIGH CLEARANCE VEHICLES
1180900	0.00	0.01	0.01	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1180900	0.01	0.10	0.09	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1180900	0.10	0.23	0.13	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1180900	0.23	0.24	0.01	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1180900	0.24	0.39	0.15	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1180900	0.44	0.47	0.03	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1180900	0.47	0.63	0.17	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1180900	0.63	0.82	0.19	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1180900	0.82	0.83	0.01	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1180900	0.83	0.95	0.12	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1180930	0.00	0.00	0.00	NAT		2 - HIGH CLEARANCE VEHICLES
1180930	0.00	0.60	0.60	NAT		2 - HIGH CLEARANCE VEHICLES
1180931	0.00	0.04	0.04	NAT		2 - HIGH CLEARANCE VEHICLES
1180960	0.00	0.04	0.04	NAT		2 - HIGH CLEARANCE VEHICLES
1180970	0.00	0.04	0.04	NAT		2 - HIGH CLEARANCE VEHICLES
1190000	0.00	0.17	0.17	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1190000	0.17	0.53	0.37	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1190000	0.53	3.75	3.22	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1190000	3.75	7.11	3.36	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1190000	7.11	7.12	0.01	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1190000	7.12	7.23	0.10	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1190000	7.23	7.60	0.38	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1190000	7.60	7.89	0.29	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1190000	7.89	10.36	2.47	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1190000	10.36	11.90	1.54	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1190000	11.90	13.80	1.90	NAT		2 - HIGH CLEARANCE VEHICLES
1190030	0.00	0.10	0.10	NAT		1 (CLOSED)
1190050	0.00	0.04	0.04	NAT		1 (CLOSED)
1190050	0.04	0.41	0.38	NAT		1 (CLOSED)
1190050	0.41	0.50	0.08	NAT		1 (CLOSED)

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

EXISTING SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA						
Road No.	BMP	EMP	Length (miles)	SURFACE	PRIMARY/ SECONDARY	Current Condition
1190050	0.50	0.63	0.14	NAT		1 (CLOSED)
1190050	0.63	0.85	0.22	NAT		1 (CLOSED)
1190050	0.85	1.00	0.15	NAT		1 (CLOSED)
1190100	0.00	0.33	0.33	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1190100	0.33	0.48	0.14	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1190100	0.48	0.62	0.14	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1190100	0.62	0.73	0.11	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1190100	0.73	0.94	0.21	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1190100	0.94	1.28	0.35	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1190100	1.28	1.29	0.00	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1190100	1.29	1.60	0.31	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1190200	0.00	1.00	1.00	NAT		2 - HIGH CLEARANCE VEHICLES
1190202	0.00	0.04	0.04	NAT		2 - HIGH CLEARANCE VEHICLES
1190205	0.00	0.10	0.10	NAT		2 - HIGH CLEARANCE VEHICLES
1190220	0.00	0.42	0.42	NAT		2 - HIGH CLEARANCE VEHICLES
1190220	0.42	2.00	1.58	NAT		2 - HIGH CLEARANCE VEHICLES
1190222	0.00	0.59	0.59	NAT		2 - HIGH CLEARANCE VEHICLES
1190257	0.00	0.04	0.04	NAT		2 - HIGH CLEARANCE VEHICLES
1190257	0.04	0.10	0.06	NAT		2 - HIGH CLEARANCE VEHICLES
1190260	0.00	0.20	0.20	NAT		2 - HIGH CLEARANCE VEHICLES
1190270	0.00	0.10	0.10	NAT		1 (CLOSED)
1190280	0.00	0.50	0.50	NAT		1 (CLOSED)
1190290	0.00	0.50	0.50	NAT		1 (CLOSED)
1190300	0.00	1.00	1.00	NAT		1 (CLOSED)
1190310	0.00	0.50	0.50	NAT		1 (CLOSED)
1190400	0.00	0.63	0.63	NAT		2 - HIGH CLEARANCE VEHICLES
1190400	0.63	1.71	1.08	NAT		1 (CLOSED)
1190440	0.00	1.10	1.10	NAT		1 (CLOSED)
1190445	0.00	0.50	0.50	NAT		1 (CLOSED)
1190450	0.00	0.60	0.60	NAT		1 (CLOSED)
1190460	0.00	0.50	0.50	NAT		1 (CLOSED)
1190469	0.00	0.09	0.09	NAT		1 (CLOSED)
1190469	0.09	0.10	0.01	NAT		1 (CLOSED)
1190490	0.00	0.40	0.40	NAT		2 - HIGH CLEARANCE VEHICLES
1190490	0.40	0.78	0.38	NAT		2 - HIGH CLEARANCE VEHICLES
1190490	0.78	0.80	0.02	NAT		2 - HIGH CLEARANCE VEHICLES
1190491	0.00	0.04	0.04	NAT		2 - HIGH CLEARANCE VEHICLES
1190495	0.00	0.90	0.90	NAT		2 - HIGH CLEARANCE VEHICLES
1190500	0.00	0.90	0.90	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1190500	0.90	0.99	0.09	NAT		1 (CLOSED)
1190500	0.99	1.17	0.19	NAT		1 (CLOSED)
1190500	1.17	2.20	1.03	NAT		1 (CLOSED)
1190505	0.00	0.20	0.20	NAT		1 (CLOSED)
1190530	0.00	0.40	0.40	NAT		1 (CLOSED)
1190532	0.00	0.70	0.70	NAT		1 (CLOSED)

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

EXISTING SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA						
Road No.	BMP	EMP	Length (miles)	SURFACE	PRIMARY/ SECONDARY	Current Condition
1190545	0.00	0.40	0.40	NAT		1 (CLOSED)
1190549	0.00	0.10	0.10	NAT		2 - HIGH CLEARANCE VEHICLES
1190580	0.00	0.36	0.36	IMP		2 - HIGH CLEARANCE VEHICLES
1190580	0.36	0.55	0.18	IMP		2 - HIGH CLEARANCE VEHICLES
1190580	0.55	0.62	0.08	IMP		2 - HIGH CLEARANCE VEHICLES
1190580	0.62	0.68	0.06	IMP		2 - HIGH CLEARANCE VEHICLES
1190580	0.68	0.90	0.22	IMP		2 - HIGH CLEARANCE VEHICLES
1190587	0.00	0.34	0.34	NAT		1 (CLOSED)
1190600	0.00	0.16	0.16	NAT		2 - HIGH CLEARANCE VEHICLES
1190600	0.16	0.64	0.48	NAT		2 - HIGH CLEARANCE VEHICLES
1190600	0.64	1.60	0.96	NAT		1 (CLOSED)
1190620	0.00	0.30	0.30	NAT		1 (CLOSED)
1190690	0.00	0.70	0.70	NAT		1 (CLOSED)
1190700	0.00	0.64	0.64	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1190700	0.64	1.35	0.71	NAT		1 (CLOSED)
1190710	0.00	0.80	0.80	NAT		1 (CLOSED)
1190730	0.00	0.30	0.30	NAT		1 (CLOSED)
1190740	0.00	0.95	0.95	NAT		1 (CLOSED)
1190800	0.00	0.56	0.56	NAT		1 (CLOSED)
1190800	0.56	1.01	0.45	NAT		2 - HIGH CLEARANCE VEHICLES
1190800	1.01	1.04	0.03	NAT		2 - HIGH CLEARANCE VEHICLES
1190800	1.04	1.20	0.16	NAT		2 - HIGH CLEARANCE VEHICLES
1190850	0.00	0.01	0.01	NAT		2 - HIGH CLEARANCE VEHICLES
1190850	0.01	0.38	0.37	NAT		1 (CLOSED)
1190900	0.00	0.90	0.90	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1190900	0.90	1.20	0.30	NAT		1 (CLOSED)
1190905	0.00	0.01	0.01	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1190905	0.01	0.03	0.01	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1190920	0.00	0.34	0.34	NAT		1 (CLOSED)
1190930	0.00	0.40	0.40	NAT		2 - HIGH CLEARANCE VEHICLES
1193000	0.00	2.10	2.10	IMP	OTHER	1 (CLOSED)
1193000	2.10	3.60	1.50	NAT	OTHER	1 (CLOSED)
1193040	0.00	0.60	0.60	NAT		1 (CLOSED)
1193100	0.00	1.00	1.00	NAT		1 (CLOSED)
1193130	0.00	1.60	1.60	NAT		1 (CLOSED)
1193200	0.00	0.10	0.10	NAT	OTHER	1 (CLOSED)
1193200	0.10	0.11	0.01	NAT	OTHER	1 (CLOSED)
1193200	0.11	0.41	0.30	NAT	OTHER	1 (CLOSED)
1193200	0.11	0.41	0.30	NAT	OTHER	1 (CLOSED)
1193200	0.41	0.52	0.11	NAT	OTHER	1 (CLOSED)
1193200	0.41	0.52	0.11	NAT	OTHER	1 (CLOSED)
1193200	0.52	0.53	0.01	NAT	OTHER	1 (CLOSED)
1193200	0.52	0.53	0.01	NAT	OTHER	1 (CLOSED)
1193200	0.53	0.74	0.21	NAT	OTHER	1 (CLOSED)
1193200	0.53	0.74	0.21	NAT	OTHER	1 (CLOSED)

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

EXISTING SYSTEM ROADS IN THE EYERLY PROJECT ROADS ANALYSIS AREA						
Road No.	BMP	EMP	Length (miles)	SURFACE	PRIMARY/ SECONDARY	Current Condition
1193200	0.74	1.15	0.40	NAT	OTHER	1 (CLOSED)
1193200	0.74	1.15	0.40	NAT	OTHER	1 (CLOSED)
1193200	1.15	1.15	0.01	NAT	OTHER	1 (CLOSED)
1193200	1.15	3.10	1.94	NAT	OTHER	1 (CLOSED)
1193200	3.10	4.80	1.70	NAT	OTHER	1 (CLOSED)
1193210	0.00	1.06	1.06	NAT		1 (CLOSED)
1193210	1.06	1.40	0.34	NAT		1 (CLOSED)
1193211	0.00	1.08	1.08	NAT		1 (CLOSED)
1193211	1.08	1.10	0.02	NAT		1 (CLOSED)
1193214	0.00	0.34	0.34	NAT		1 (CLOSED)
1193214	0.34	0.40	0.06	NAT		1 (CLOSED)
1193219	0.00	0.40	0.40	NAT		1 (CLOSED)
1193240	0.00	0.83	0.83	NAT		1 (CLOSED)
1193245	0.00	0.10	0.10	NAT		1 (CLOSED)
1193280	0.00	0.30	0.30	NAT	OTHER	1 (CLOSED)
1490000	2.14	3.93	1.79	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1490000	3.93	4.70	0.77	IMP	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1490000	4.70	5.14	0.44	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1490000	5.14	5.37	0.23	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1490000	5.37	5.84	0.47	AGG	SECONDARY	2 - HIGH CLEARANCE VEHICLES
1490700	0.00	0.59	0.59	NAT		2 - HIGH CLEARANCE VEHICLES
1490700	0.59	0.63	0.03	NAT		2 - HIGH CLEARANCE VEHICLES
1490700	0.63	0.67	0.05	NAT		2 - HIGH CLEARANCE VEHICLES
1490700	0.67	0.70	0.03	NAT		2 - HIGH CLEARANCE VEHICLES
1490700	0.70	0.75	0.04	NAT		2 - HIGH CLEARANCE VEHICLES
1490700	0.75	0.88	0.14	NAT		2 - HIGH CLEARANCE VEHICLES
1490700	0.88	0.89	0.00	NAT		2 - HIGH CLEARANCE VEHICLES
1490700	0.89	1.14	0.26	NAT		2 - HIGH CLEARANCE VEHICLES
1490700	1.14	1.70	0.56	NAT		2 - HIGH CLEARANCE VEHICLES
1490730	0.00	0.20	0.20	NAT		2 - HIGH CLEARANCE VEHICLES
1490750	0.00	0.01	0.01	NAT		2 - HIGH CLEARANCE VEHICLES
1490800	0.00	0.80	0.80	NAT		2 - HIGH CLEARANCE VEHICLES
1490900	0.00	0.08	0.08	IMP		2 - HIGH CLEARANCE VEHICLES
6400400	0.00	1.30	1.30	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
6400410	0.00	0.10	0.10	NAT		2 - HIGH CLEARANCE VEHICLES
6400420	0.00	0.10	0.10	NAT		2 - HIGH CLEARANCE VEHICLES
6400430	0.00	0.04	0.04	NAT		2 - HIGH CLEARANCE VEHICLES
6400440	0.00	0.10	0.10	NAT		2 - HIGH CLEARANCE VEHICLES
6400460	0.00	0.30	0.30	NAT	SECONDARY	2 - HIGH CLEARANCE VEHICLES
6400500	0.00	0.20	0.20	NAT		1 (CLOSED)
6400500	0.20	0.75	0.55	NAT		1 (CLOSED)
6400600	0.00	0.59	0.59	BST	PRIMARY	3 - PASSENGER CARS
6400620	0.00	0.42	0.42	BST	PRIMARY	3 - PASSENGER CARS
6400660	0.00	0.20	0.20	NAT	OTHER	1 (CLOSED)
6400700	0.00	0.58	0.58	NAT	PRIMARY	3 - PASSENGER CARS

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B



EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

Table B-3: Eyerly Project Area Existing Density by Subwatershed

EYERLY PROJECT AREA EXISTING DENSITY		MILES	MILES	MILES	MILES	TOTAL	MI/SQMI	TOTAL	MI/SQMI	SQ
SUB NAME	JURISDICTION	CLOSED	OPEN	OPEN	OPEN	SYSTEM	SYSTEM	OPEN	OPEN	SQ
		LEV 1	LEV 2	LEV 3	LEV 5	MILES	DENSITY	MILES	DENSITY	MILES
Lower Fly Creek	COUNTY				1.41	1.41	0.42	1.41	0.42	3.36
	FOREST SERVICE	1.52	1.17	2.39		5.08	1.51	3.56	1.06	3.36
	PRIVATE		0.03			0.03	0.01	0.03	0.01	3.36
<b>Lower Fly Creek Total</b>		<b>1.52</b>	<b>1.20</b>	<b>2.39</b>	<b>1.41</b>	<b>6.52</b>	<b>1.94</b>	5.00	<b>1.49</b>	3.36
Lower Fly Creek	PRIMARY / SECONDARY		0.45	2.39				2.84	0.85	3.36
Lower LBC Metolius	COUNTY		0.53	0.40	0.55	1.48	0.08	1.48	0.08	18.41
	FOREST SERVICE	0.28	1.94	0.02		2.24	0.12	1.96	0.11	18.41
<b>Lower LBC Metolius Total</b>		<b>0.28</b>	<b>2.47</b>	<b>0.43</b>	<b>0.55</b>	<b>3.72</b>	<b>0.20</b>	3.45	<b>0.19</b>	18.41
Lower LBC Metolius	PRIMARY / SECONDARY		1.60	0.02				1.62	0.09	18.41
Metolius	COUNTY	0.57	7.09			7.66	0.36	7.09	0.34	21.16
	FOREST SERVICE	10.49	18.35	0.58		29.42	1.39	18.93	0.89	21.16
<b>Metolius Total</b>		<b>11.06</b>	<b>25.45</b>	<b>0.58</b>		<b>37.09</b>	<b>1.75</b>	26.03	<b>1.23</b>	21.16
Metolius	PRIMARY / SECONDARY		12.133	0.58				12.71	0.60	21.16
Metolius Horn	FOREST SERVICE	0.04	1.86			1.90	2.92	1.86	2.86	0.65
<b>Metolius Horn Total</b>		<b>0.04</b>	<b>1.86</b>			<b>1.90</b>	<b>2.92</b>	1.86	<b>2.86</b>	0.65
Metolius Horn	PRIMARY / SECONDARY		1.12					1.12	1.72	0.65
Prairie Farm	FOREST SERVICE		5.53			5.53	6.58	5.53	6.58	0.84
<b>Prairie Farm Total</b>			<b>5.53</b>			<b>5.53</b>	<b>6.58</b>	5.53	<b>6.58</b>	0.84
Prairie Farm	PRIMARY / SECONDARY		2.81					2.81	3.35	0.84
Scarp	FOREST SERVICE		0.91			0.91	6.09	0.91	6.09	0.15
<b>Scarp Total</b>			<b>0.91</b>			<b>0.91</b>	<b>6.09</b>	0.91	<b>6.09</b>	0.15
Scarp	PRIMARY / SECONDARY		0.23					0.23	1.53	0.15
Spring Creek	COUNTY			2.30	0.97	3.26	0.31	3.26	0.31	10.58
	FOREST SERVICE	25.93	17.36	2.96		46.26	4.37	20.33	1.92	10.58
	PRIVATE		0.20			0.20	0.02	0.20	0.02	10.58
<b>Spring Creek Total</b>		<b>25.93</b>	<b>17.56</b>	<b>5.26</b>	<b>0.97</b>	<b>49.72</b>	<b>4.70</b>	23.79	<b>2.25</b>	10.58
Spring Creek	PRIMARY / SECONDARY		11.01	2.96				13.97	1.32	10.58
Street	COUNTY		1.01			1.01	0.09	1.01	0.09	11.42
	FOREST SERVICE	20.70	34.20			54.89	4.81	34.20	2.99	11.42
<b>Street Total</b>		<b>20.70</b>	<b>35.21</b>			<b>55.90</b>	<b>4.90</b>	35.21	<b>3.08</b>	11.42
Street	PRIMARY / SECONDARY		17.88					17.88	1.57	11.42
<b>PROJECT AREA</b>	COUNTY	0.57	8.63	2.70	2.93	14.83	0.22	14.26	0.21	66.76
	FOREST SERVICE	58.95	81.32	5.96	0.00	146.23	2.19	87.28	1.31	66.76
	PRIVATE	0.00	0.23	0.00	0.00	0.23	0.00	0.23	0.00	66.76
<b>PROJECT AREA TOTAL</b>		<b>59.52</b>	<b>90.19</b>	<b>8.66</b>	<b>2.93</b>	<b>161.29</b>	<b>2.42</b>	<b>101.77</b>	<b>1.52</b>	66.76
Project Area	PRIMARY / SECONDARY		47.24	5.96				53.20	0.80	66.76

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

Table B-4: Eyerly Fire Area Existing Density by Subwatershed

EYERLY FIRE AREA EXISTING DENSITY		MILES CLOSED	MILES OPEN	MILES OPEN	MILES OPEN	TOTAL SYSTEM MILES	MI/SQMI SYSTEM DENSITY	TOTAL OPEN MILES	MI/SQMI OPEN DENSITY	SQ MILES
SUB NAME	JURISDICTION	LEV 1	LEV 2	LEV 3	LEV 5					
Lower Fly Creek	COUNTY				1.41	1.41	0.42	1.41	0.42	3.35
	FOREST SERVICE	1.52	1.17	2.39		5.08	1.51	3.56	1.06	3.35
	PRIVATE		0.03			0.03	0.01	0.03	0.01	3.35
<b>Lower Fly Creek Total</b>		1.52	1.20	2.39	1.41	6.52	1.95	5.00	1.49	3.35
Lower Fly Creek	PRIMARY / SECONDARY		0.45	2.39				2.84	0.85	3.35
Lower LBC Metolius	COUNTY		0.73	0.40	0.55	1.46	0.42	1.69	0.49	3.46
	FOREST SERVICE	0.28	1.94	0.02		2.24	0.65	1.96	0.57	3.46
<b>Lower LBC Metolius Total</b>		0.28	2.47	0.43	0.55	3.72	1.08	3.45	1.00	3.46
Lower LBC Metolius	PRIMARY / SECONDARY		1.60	0.02				1.62	0.47	3.46
Metolius	COUNTY		4.34			4.34	0.37	4.34	0.37	11.64
	FOREST SERVICE	8.42	9.20	0.58		18.20	1.56	9.78	0.84	11.64
<b>Metolius Total</b>		8.42	13.54	0.58		22.54	1.94	14.12	1.21	11.64
Metolius	PRIMARY / SECONDARY		6.74	0.58				7.32	0.63	11.64
Metolius Horn	FOREST SERVICE		0.85			0.85	2.82	0.85	2.82	0.30
<b>Metolius Horn Total</b>			0.85			0.85	2.82	0.85	2.82	0.30
Metolius Horn	PRIMARY / SECONDARY		0.85					0.85	2.82	0.30
Spring Creek	COUNTY			2.30	0.97	3.26	0.34	3.26	0.34	9.61
	FOREST SERVICE	25.56	11.98	2.77		40.30	4.19	14.75	1.53	9.61
	PRIVATE		0.20			0.20	0.02	0.20	0.02	9.61
<b>Spring Creek Total</b>		25.56	12.18	5.07	0.97	43.77	4.55	18.21	1.89	9.61
Spring Creek	PRIMARY / SECONDARY		7.79	2.77				10.56	1.10	9.61
Street	COUNTY		1.01			1.01	0.13	1.01	0.13	7.62
	FOREST SERVICE	14.30	16.16			30.45	4.00	16.16	2.12	7.62
<b>Street Total</b>		14.30	17.17			31.46	4.13	17.17	2.25	7.62
Street	PRIMARY / SECONDARY		7.77					7.77	1.02	7.62
<b>FIRE AREA</b>	COUNTY	0.00	6.28	2.70	2.93	11.68	0.32	11.91	0.33	36.15
	FOREST SERVICE	50.07	41.28	5.76	0.00	97.12	2.69	47.05	1.30	36.15
	PRIVATE	0.00	0.23	0.00	0.00	0.23	0.01	0.23	0.01	36.15
<b>FIRE AREA TOTAL</b>		50.07	47.59	8.46	2.93	109.06	3.02	58.98	1.63	36.15
FIRE Area	PRIMARY / SECONDARY		25.19	5.76				30.95	0.86	36.15

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

Table B-5: Eyerly Project Area Existing Density by Management Area

EYERLY PROJECT AREA EXISTING DENSITY		MILES CLOSED LEV 1	MILES OPEN LEV 2	MILES OPEN LEV 3	MILES OPEN LEV 5	TOTAL SYSTEM MILES	MI/SQMI SYSTEM DENSITY	TOTAL OPEN MILES	MI/SQMI OPEN DENSITY	SQ MILES
MANAGEMENT AREA	JURISDICTION									
DHB M7	COUNTY			0.05	1.56	1.60	0.18	1.60	0.18	8.79
	FOREST SERVICE	22.37	10.03	3.62		36.02	4.10	13.65	1.55	8.79
<b>DHB Total</b>		<b>22.37</b>	<b>10.03</b>	<b>3.67</b>	<b>1.56</b>	<b>37.63</b>	<b>4.28</b>	<b>15.26</b>	<b>1.74</b>	<b>8.79</b>
GFO M8	FOREST SERVICE	18.13	59.43			77.56	5.80	59.43	4.44	13.38
<b>GFO Total</b>		<b>18.13</b>	<b>59.43</b>			<b>77.56</b>	<b>5.80</b>	<b>59.43</b>	<b>4.44</b>	<b>13.38</b>
INR M11	COUNTY			1.48		1.48	2.54	1.48	2.54	0.58
	FOREST SERVICE	0.23		0.95		1.18	2.03	0.95	1.63	0.58
<b>INR Total</b>		<b>0.23</b>		<b>2.42</b>		<b>2.65</b>	<b>4.58</b>	<b>2.42</b>	<b>4.17</b>	<b>0.58</b>
<b>MHE M19 Total</b>	<b>FOREST SERVICE</b>		<b>3.48</b>			<b>3.48</b>	<b>5.80</b>	<b>3.48</b>	<b>5.80</b>	<b>0.6</b>
<b>MSJ M23 total</b>	<b>FOREST SERVICE</b>	<b>0.30</b>	<b>0.49</b>			<b>0.79</b>	<b>3.96</b>	<b>0.49</b>	<b>2.46</b>	<b>0.2</b>
MWP M20	COUNTY		0.71			0.71	0.05	0.71	0.05	14.22
	FOREST SERVICE	17.27	6.08			23.35	1.64	6.08	0.43	14.22
<b>MWP Total</b>		<b>17.27</b>	<b>6.78</b>			<b>24.06</b>	<b>1.69</b>	<b>6.78</b>	<b>0.48</b>	<b>14.22</b>
OGR M15	FOREST SERVICE	0.64	1.37			2.01	3.65	1.37	2.49	0.55
<b>OGR Total</b>		<b>0.64</b>	<b>1.37</b>			<b>2.01</b>	<b>3.65</b>	<b>1.37</b>	<b>2.49</b>	<b>0.55</b>
OOS M30	COUNTY		2.47	1.18	0.28	3.93	2.35	3.93	2.35	1.67
	FOREST SERVICE		0.13	0.81		0.94	0.56	0.94	0.56	1.67
	PRIVATE		0.23			0.23	0.14	0.23	0.14	1.67
<b>OOS Total</b>			<b>2.83</b>	<b>1.99</b>	<b>0.28</b>	<b>5.10</b>	<b>3.05</b>	<b>5.10</b>	<b>3.05</b>	<b>1.67</b>
WS3 M28	COUNTY	0.57	5.46			6.03	6.85	5.46	6.20	0.88
	FOREST SERVICE			0.58		0.58	0.66	0.58	0.66	0.88
<b>WS3 Total</b>		<b>0.57</b>	<b>5.46</b>	<b>0.58</b>		<b>6.61</b>	<b>7.51</b>	<b>6.04</b>	<b>6.86</b>	<b>0.88</b>
OTHER	COUNTY				1.09	1.09	0.04	1.09	0.04	25.82
	FOREST SERVICE		0.32			0.32	0.01	0.32	0.01	25.82
<b>OTHER Total</b>			<b>0.32</b>		<b>1.09</b>	<b>1.41</b>	<b>0.05</b>	<b>1.41</b>	<b>0.05</b>	<b>25.82</b>
<b>PROJECT AREA TOTAL</b>		<b>59.52</b>	<b>90.19</b>	<b>8.66</b>	<b>2.93</b>	<b>161.29</b>	<b>2.42</b>	<b>101.77</b>	<b>1.52</b>	<b>66.76</b>

EYERLY PROJECT ROADS ANALYSIS - APPENDIX B

Table B-6: Eyerly Fire Area Existing Density by Management Area

EYERLY FIRE AREA EXISTING DENSITY		MILES	MILES	MILES	MILES	TOTAL	MI/SQMI	TOTAL	MI/SQMI	SQ
MANAGEMENT AREA	JURISDICTION	CLOSED	OPEN	OPEN	OPEN	SYSTEM	SYSTEM	OPEN	OPEN	MILES
		LEV 1	LEV 2	LEV 3	LEV 5	MILES	DENSITY	MILES	DENSITY	
DHB M7	COUNTY			0.05	1.56	1.60	0.19	1.60	0.19	8.38
	FOREST SERVICE	22.37	9.33	3.43		35.12	4.19	12.75	1.52	8.38
<b>DHB Total</b>		<b>22.37</b>	<b>9.33</b>	<b>3.47</b>	<b>1.56</b>	<b>36.72</b>	<b>4.38</b>	<b>14.35</b>	<b>1.71</b>	<b>8.38</b>
GFO M8	FOREST SERVICE	10.28	26.94			37.21	5.55	26.94	4.01	6.71
<b>GFO Total</b>		<b>10.28</b>	<b>26.94</b>			<b>37.21</b>	<b>5.55</b>	<b>26.94</b>	<b>4.01</b>	<b>6.71</b>
INR M11	COUNTY			1.48		1.48	2.59	1.48	2.59	0.57
	FOREST SERVICE	0.23		0.95		1.18	2.07	0.95	1.66	0.57
<b>INR Total</b>		<b>0.23</b>		<b>2.42</b>		<b>2.65</b>	<b>4.66</b>	<b>2.42</b>	<b>4.25</b>	<b>0.57</b>
MWP M20	COUNTY		0.71			1.48	0.13	0.71	0.06	11.25
	FOREST SERVICE	16.55	3.21			19.76	1.76	3.21	0.29	11.25
<b>MWP Total</b>		<b>16.55</b>	<b>3.91</b>			<b>20.46</b>	<b>1.82</b>	<b>3.91</b>	<b>0.35</b>	<b>11.25</b>
OGR M15	FOREST SERVICE	0.64	1.37			2.01	3.65	1.37	2.49	0.55
<b>OGR Total</b>		<b>0.64</b>	<b>1.37</b>			<b>2.01</b>	<b>3.65</b>	<b>1.37</b>	<b>2.49</b>	<b>0.55</b>
OOS M30	COUNTY		2.47	1.18	0.28	3.93	2.85	3.93	2.85	1.38
	FOREST SERVICE		0.13	0.81		0.94	0.68	0.94	0.68	1.38
	PRIVATE		0.23			0.23	0.17	0.23	0.17	1.38
<b>OOS Total</b>			<b>2.83</b>	<b>1.99</b>	<b>0.28</b>	<b>5.10</b>	<b>3.69</b>	<b>5.10</b>	<b>3.69</b>	<b>1.38</b>
WS3 M28	COUNTY		2.70			2.70	10.01	2.70	10.01	0.27
	FOREST SERVICE			0.58		0.58	2.15	0.58	2.15	0.27
<b>WS3 Total</b>			<b>2.70</b>	<b>0.58</b>		<b>3.28</b>	<b>12.16</b>	<b>3.28</b>	<b>12.16</b>	<b>0.27</b>
OTHER	COUNTY				1.09	1.09	0.16	1.09	0.16	6.97
	FOREST SERVICE		0.32			0.32	0.05	0.32	0.05	6.97
<b>OTHER Total</b>			<b>0.32</b>		<b>1.09</b>	<b>1.41</b>	<b>0.20</b>	<b>1.41</b>	<b>0.20</b>	<b>6.97</b>
<b>FIRE AREA TOTAL</b>		<b>50.07</b>	<b>47.39</b>	<b>8.46</b>	<b>2.93</b>	<b>108.86</b>	<b>3.01</b>	<b>58.79</b>	<b>1.63</b>	<b>36.15</b>

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\* **Wildlife**

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PLANS, ANALYSES, ASSESSMENTS

**Map C-1: Recommended Open Road System**

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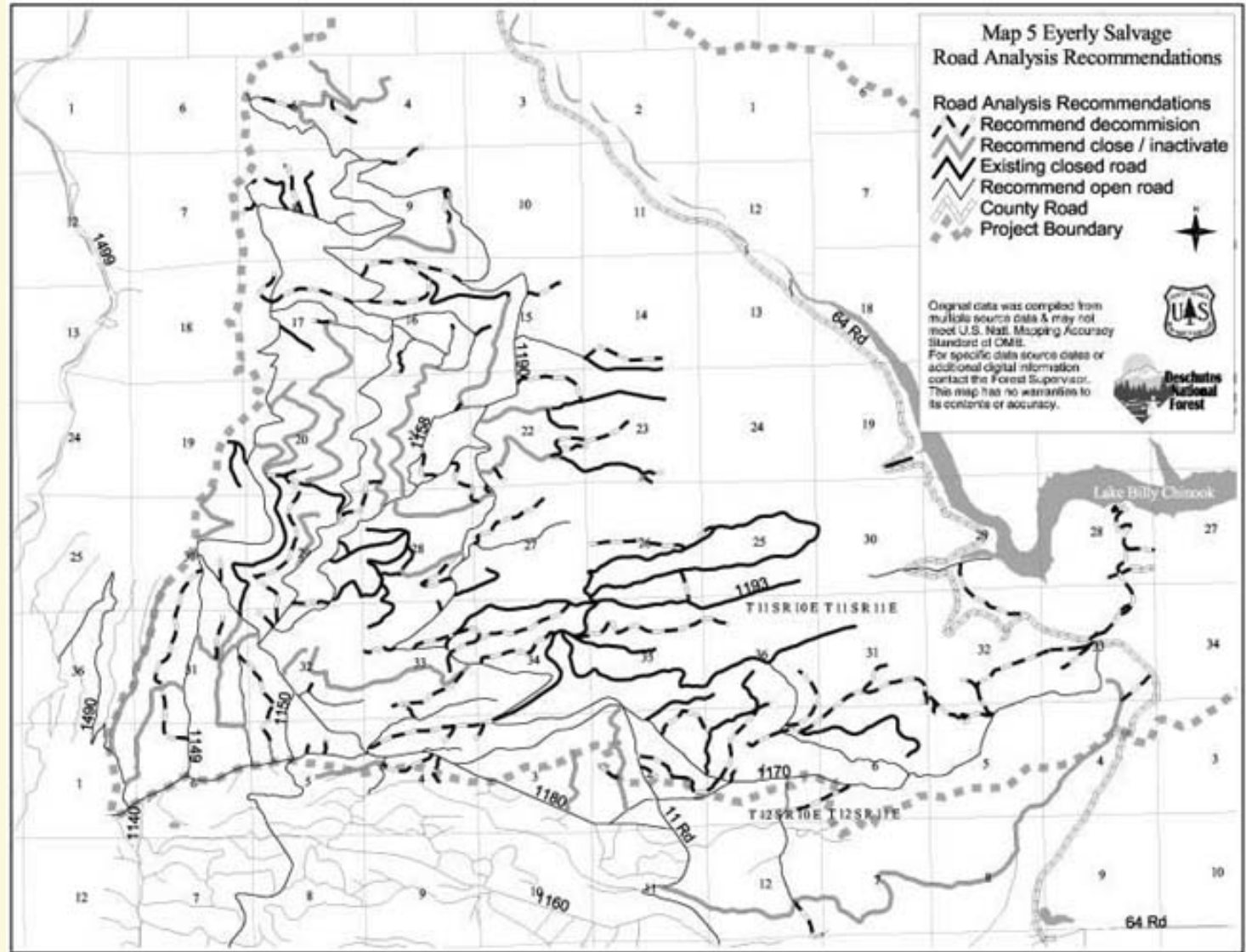
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**Crooked River National Grassland**

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Map C-2: Existing Open Road System



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