

# Eiler Fire Salvage and Restoration Project

## Recreation & Visual Quality Resources



Prepared by: */s/ Tamera Taylor*

*April 14, 2015*

---

**Tamera Taylor, Recreation Officer**

**Date**

## Table of Contents

Introduction.....	3
Management Framework.....	3
Recreation.....	3
Visual Resources.....	5
Impacts Relevant to Recreation and Scenery.....	8
Affected Environment.....	9
Existing Condition.....	9
Management Direction.....	10
Environmental Consequences.....	11
Spatial and Temporal Context.....	11
Connected Actions, Past, Present, and Foreseeable Activities.....	11
Effects Analysis.....	12
Alternative 1.....	12
Alternative 2.....	20
Alternative 3.....	22
References.....	24
Tables	
Table 1: Prescriptions for Recreation.....	4
Table 2: Prescriptions for Visual Resources.....	6
Maps	
Map 1: Visual Quality Objectives for the Reading Reforestation and Restoration Project.....	18

## Introduction

On July 31, 2014, the Eiler Fire started in the north eastern corner of the Thousand Lakes Wilderness. The fire burned in a northerly direction, scorching approximately 33,162 acres, including 14,926 acres of National Forest System lands. The Forest Service is proposing to conduct 8,702 of salvage and fuels treatments and 5,645 acres of artificial reforestation in the fire area.

The purpose of this analysis is to examine the existing Recreation and Visual Resources within the Eiler Fire Salvage and Restoration Project (Eiler Project) area and investigate how these resources may be affected by the proposed actions in regards to issues and consistency with the Lassen National Forest Land and Resource Management Plan (LRMP) standards and guidelines.

## Management Framework

Recreation and Visual Resources are managed under the 1992 *Lassen National Forest Land and Resource Management Plan*, as amended. The Eiler Project is located in Management Area #4 (Hat Creek), #9 (Logan), and #15 (Thousand Lakes). The Project area falls under the A (Non-Timber Wildlife), E (Early Successional), K (Rocky/Sparse Timber Production), L (Late Successional), T (Timber), V (View/Timber), and W (Wilderness) prescriptions.

### Recreation

Listed below are the applicable Forest Goals (LRMP 4-4) as well as the associated Forest Standards and Guidelines for Recreation (LRMP 4-24 & 4-25):

- Provide a wide range of outdoor recreation opportunities to meet public demand by furnishing different levels of access, service, facilities, and information.
  - Manage recreation according to the Recreation Opportunity Spectrum (ROS) classes described in the ROS User's Guide (described below).
  - Remove hazard trees in developed recreation sites, and along roads and trails.
  - During project analyses, identify dispersed campsites. Near those identified, maintain natural-appearing timber stands meeting a visual quality objective of Partial Retention.
- Provide diverse opportunities for off-highway vehicle (OHV) recreation.
  - Mountain bike and OHV use is allowed in all areas not specifically closed to protect other resource values.

**Table 1 – Prescriptions for Recreation**

Prescription	Standards & Guidelines
<i>A – Non-Timber Wildlife</i>	<ul style="list-style-type: none"> <li>• Provide opportunities for viewing wildlife, hunting, gathering forest products, and vehicle camping.</li> <li>• Manage recreation according to the specified Recreation Opportunity Spectrum Classes.</li> </ul>
<i>E – Early Successional</i>	<ul style="list-style-type: none"> <li>• Manage recreation according to Recreation Opportunity Spectrum Class of Roaded Natural.</li> </ul>
<i>K – Rocky/Sparse Timber</i>	<ul style="list-style-type: none"> <li>• Manage Recreation according to the Recreation Opportunity Spectrum classes of Semi-Primitive Non-Motorized or Roaded Natural.</li> </ul>
<i>L – Late Successional</i>	<ul style="list-style-type: none"> <li>• Manage Recreation according to the Recreation Opportunity Spectrum classes of Semi-Primitive Non-Motorized, Semi-Primitive Motorized, or Roaded Natural.</li> </ul>
<i>T – Timber</i>	<ul style="list-style-type: none"> <li>• None</li> </ul>
<i>V – View Timber</i>	<ul style="list-style-type: none"> <li>• Manage Recreation according to the Recreation Opportunity Spectrum class of Roaded Natural or Rural.</li> </ul>
<i>W - Wilderness</i>	<ul style="list-style-type: none"> <li>• Manage each wilderness to provide primitive recreation opportunities consistent with natural processes, primitive conditions, and solitude.</li> </ul>

**Recreation Standards & Guidelines for Management Area #4 – Hat Creek**

None applicable

**Recreation Standards & Guidelines for Management Area #9 – Logan**

None applicable

**Recreation Standards & Guidelines for Management Area #15 – Thousand Lakes**

None applicable

**Recreation Opportunity Spectrum (ROS)**

The Recreation Opportunity Spectrum (ROS) is a system for classifying and managing recreation opportunities based on the following criteria: physical setting, social setting, and managerial setting. The ROS classes for the Eiler Project area are *Roaded Natural* and *Semi-Primitive Non-Motorized*. Appendix J of the LRMP describes these classes as:

***Roaded Natural:***

*The area is ½ mile or less from roads and trails open to motorized use. Resource modifications and utilization practices are evident, but harmonize with the natural environment. Roads may be Maintenance Levels 2 to 5. Recreation sites may be Development Level 2 to 4. The social setting provides for moderate to high frequency of contact on roads and low to moderate frequency on trails away from roads. Capacity ranges from 10 to 20 RVDs<sup>◇</sup>/acre/year. On-site user controls are noticeable, but harmonize with the natural environment. Typical activities include, but are not limited to: hiking, cross-country skiing, downhill skiing, power boating, snowmobiles, OHV touring, trailer camping, hunting, and fishing. The compatible visual quality objectives are Partial Retention or Modification.*

### *Semi-Primitive Non-Motorized*

*The area is ½ mile from roads or trails with motorized use and generally exceeds 2,500 to 5,000 acres in size unless contiguous to wilderness. There is little evidence of roads. The area is closed to motorized travel. Access roads are Maintenance Level 1. The natural setting may have subtle modifications that would be noticed, but would not draw the attention of an observer in the area. Structures are rare and isolated. The social setting provides for 6 to 15 parties encountered per day on trails and 6 or less parties visible at campsites. Capacity ranges 2 to 3 RVD's<sup>◇</sup>/acre/year. On-site protocols are present, but subtle. Interpretation is through self-discovery with some use of maps, brochures, and guidebooks. Typical activities include hiking, cross-country skiing, horseback riding, canoeing, hunting, and fishing. The compatible visual quality objective is retention. For specific management standards and guidelines, see the Semi-Primitive Non-Motorized Prescription.*

#### *Applicable management standard for Semi-Primitive Non-Motorized:*

- *Monitor and limit visitor use when other resources are damaged or recreation experiences are reduced.*
- *Prohibit motorized recreation, including four-wheel driving, motorcycling, and snowmobiling.*

◇ *Recreation Visitor Days (RVDs) equals 12 hours of recreation use by one person or any combination thereof that equals 12 hours.*

### **Visual Resources**

Applicable Forest Goals (4-5) and associated Standards and Guidelines (LRMP 4-31) state that planning for Visual Resources should:

- Throughout the Forest, maintain visual quality commensurate with other resource needs. Adopt and apply specific Visual Quality Objectives (VQOs) for all areas of the Forest.
  - Meet or exceed VQOs identified on the “Adopted Visual Quality Objective Map” or in the prescriptions and Management Area Direction. To meet Retention and Partial Retention VQOs, use additional guidelines listed in the View/Timber prescription (4-73 – 4-75). To meet Modification and Maximum Modification VQOs, use additional guidelines given in the Timber Prescription (4-71 – 4-72).
  - Keep VQOs compatible with ROS classes as specified.
  - Vegetative treatments should be designed to blend as much as possible with the characteristic landscape.
  - Road construction and other earthwork should be designed to minimize cuts and fills. Areas of bare soil should be re-vegetated by natural or artificial methods.
- Where past management activities do not meet adopted visual quality objectives, use visual rehabilitation to return visual quality to an acceptable level.

- If adopted VQO’s cannot be met for management activities in response to fire, insect and disease attack, or other catastrophic event, then assess and document any such deviation in a site-specific environmental analysis.

**Table 2 – Visual Resource Prescriptions**

Prescription	Standards & Guidelines
<i>A – Non-Timber Wildlife</i>	<ul style="list-style-type: none"> <li>• In area with an adopted VQO of Retention or Partial Retention, visually blend vegetation manipulation (such as prescribed burns) into the surrounding landscape.</li> </ul>
<i>E – Early Successional</i>	<ul style="list-style-type: none"> <li>• Meet a VQO of Retention of Modification and Maximum Modification where specified on the Adopted Visual Quality Objective Map. Employ the Visual Resources guidelines of the Timber Prescription.</li> </ul>
<i>K – Rocky/Sparse Timber</i>	<ul style="list-style-type: none"> <li>• None</li> </ul>
<i>L – Late Successional</i>	<ul style="list-style-type: none"> <li>• None</li> </ul>
<i>T – Timber</i>	<ul style="list-style-type: none"> <li>• Meet VQOs of at least Modification and Maximum Modification, as specified on the Adopted Visual Quality Objectives Map.</li> <li>• Apply these guidelines to meet the VQO of Modification.                             <ul style="list-style-type: none"> <li>○ Management activities may dominate the landscape.</li> <li>○ Vegetative alterations will be within the scale of the surrounding area or characteristic landscape.</li> <li>○ Vegetation alterations will borrow from natural form, line, color, or texture so completely that it resembles the surrounding area or characteristic landscape.</li> <li>○ Design openings to avoid straight, geometric lines and to borrow form and size from natural openings.</li> <li>○ Avoid disruption of the continuous skyline.</li> </ul> </li> <li>• Apply these guidelines to meet a VQO of Maximum Modification.                             <ul style="list-style-type: none"> <li>○ Management activities may dominate the characteristic landscape.</li> <li>○ Vegetative alterations may be out of scale with their surrounding natural landscape when viewed as foreground or middle-ground.</li> <li>○ Vegetative alterations may not completely borrow from natural form, line, color, or texture when viewed as foreground or middle-ground. However, when viewed as background they must resemble the surrounding area or characteristic landscape.</li> <li>○ Design openings to avoid straight geometric lines and shapes.</li> <li>○ e. Avoid disruption of the continuous skyline.</li> </ul> </li> </ul>
<i>V – View Timber</i>	<ul style="list-style-type: none"> <li>• <i>Retention in the Foreground</i> – Apply these guidelines to meet a VQO of Retention in the Foreground as viewed from Sensitivity Level 1 roads, trails, streams, and other recreation use areas.                             <ul style="list-style-type: none"> <li>○ Manage vegetation to maintain or increase the diversity of tree, shrub, forb, and/or grass species common to the area. Manage timber stands to achieve a range of age and size classes up to 48” dbh in multi-storied stands. Tree spacing should be irregular to retain the appearance of unmanaged timber stands.</li> <li>○ Emphasize the Limited Timber Management Practice, using uneven-aged silvicultural methods (group and individual tree selection) for sanitation or salvage of high risk trees.</li> <li>○ Apply the Modified Timber Management practice where appropriate to enhance or maintain visual quality or vegetative diversity.</li> <li>○ Treat slash to restore aesthetic values within one year of project completion. Require slash clean-up of up to 100 percent. Treat slash in visible areas up to 400 feet or within view, whichever is less, along Sensitivity Level 1 roads and trails. Treat slash up to 150 feet or within view, whichever is less, along Sensitivity Level 2 roads and trails.</li> <li>○ Assure that buildings and structures meet a VQO of Retention as seen from</li> </ul> </li> </ul>

	<p>public travel routes or recreation use areas, except those constructed for public use and situated in the foreground.</p> <ul style="list-style-type: none"> <li>• <i>Retention in the Middle-ground</i> – Apply these guidelines to meet a VQO of Retention in the middle-ground when viewed from designated Sensitivity Level 1 roads, trails, streams, lakes and other recreation use areas.             <ul style="list-style-type: none"> <li>○ Manage vegetation to provide diverse, natural-appearing landscapes. Retain the appearance of continuous forest cover in timber stands.</li> <li>○ Apply the Limited Timber Management Practice, using uneven aged silvicultural methods.</li> <li>○ Apply the Modified Timber Management practice where appropriate to enhance or maintain visual quality or vegetative diversity.</li> <li>○ Treat slash to restore aesthetic values within one year of project completion.</li> </ul> </li> <li>• <i>Partial Retention in the Foreground</i> – Apply these guidelines to meet a VQO of Partial Retention in the foreground as viewed from designated Sensitivity Level 1 and 2 roads, trails, streams, lakes, and other recreation use areas.             <ul style="list-style-type: none"> <li>○ Manage vegetation to maintain the diversity of tree, shrub, forb, and/or grass species common to the area. Manage timber stands to achieve a range of age and size classes up to 36”+ dbh in multi-storied stands. Tree spacing should be irregular to retain the appearance of unmanaged timber stands.</li> <li>○ Treat slash to restore aesthetic values within one year of project completion.</li> <li>○ Apply the Modified Timber Management practice, using both even-aged and uneven aged silvicultural methods.</li> <li>○ Design harvest units to have natural appearing, irregular shapes and edges, such as those found in the natural landscape.</li> </ul> </li> <li>• <i>Partial retention in the Middle-ground</i> – Apply these guidelines to meet a VQO of Partial Retention in the middle-ground as viewed from Sensitivity Level 1 and 2 Roads, trails, streams, lakes, and other recreation use areas.             <ul style="list-style-type: none"> <li>○ Manage timber stands to provide a range of age and size classes over time using Modified Timber Management practices. Retain the appearance of irregular, naturally shaped openings in the forest cover.</li> <li>○ Design and construct roads so that they are visually subordinate to the natural landscape character.</li> <li>○ The effects of management activities may be noticeable, but should not attract attention. The cumulative effects of openings should remain visually subordinate to the characteristic landscape.</li> <li>○ d. Treat slash to restore aesthetic values within one year of project completion.</li> </ul> </li> </ul>
<p><i>W - Wilderness</i></p>	<ul style="list-style-type: none"> <li>• Meet a visual quality objective of preservation</li> <li>• Where occupancy for other resource use is specifically authorized by legislation, require a visual quality objective of Retention to be met.</li> </ul>

**Visual Resource Standards & Guidelines for Management Area #4 – Hat Creek**

None applicable

**Visual Resource Standards & Guidelines for Management Area #9 – Logan**

Listed below are the applicable Standards & Guidelines for Management Area #9 – Logan (4-118):

- Meet a VQO of Partial Retention in the foreground of Forest Roads 16 and 26, and require intensive slash cleanup for new timber sales.
- Meet a VQO of Partial Retention in the foreground of the Tamarack Trail access road.

**Visual Resource Standards & Guidelines for Management Area #15 – Thousand Lakes**

Listed below are the applicable Standards & Guidelines for Management Area #15 – Thousand Lakes (4-144):

- Meet a visual quality objective of preservation throughout the area

### **Visual Quality Objectives**

Visual Quality Objectives are standards for the visual management of all Forest lands. There are three visual quality objectives covered by this Project: retention, partial retention, and modification.

*Preservation (P) – This allows ecological changes only. Most management activities are prohibited. Trails, trail bridges, and other trail related improvements are designed and located to be visually unobtrusive.*

*Retention (R) - Management activities result in a natural appearing landscape. Activities may occur, but are not visually evident to the casual observer. Activities repeat form, line, color, or texture common to the characteristic landscape. Changes in qualities of size, amount, intensity, direction, and pattern should not be evident. Reduction in form, line, color, and texture contrast to meet retention should be accomplished either during operation or immediately after.*

*Partial Retention (PR) - Management activities remain visually subordinate to the characteristic landscape. Activities and structures may repeat form, line, color, or texture common to the characteristic landscape, and may also introduce form, line, color, or texture which are found infrequently or not at all in the characteristic landscape. Reduction in form, line, color and texture contrast to meet partial retention should be accomplished as soon after project completion as possible or at a minimum within the first year.*

*Modification (M) - Management activities may dominate the original landscape. However, activities of vegetative and land form alteration must borrow from naturally established form, line, color, or texture so completely, and at such a scale, that its visual characteristics are those of natural occurrences within the surrounding area of character type. Reduction in form, line, color, and texture contrast to meet modification should be accomplished in the first year.*

### **Impacts Relevant to Recreation and Scenery**

- The effect of proposed actions on activities experienced at the various recreation sites and facilities within the project area.
- Compatibility of proposed actions with established recreation (ROS) and visual resource (VQO) objectives for the affected areas.

### **Issue Indicators**

Indicator measures are intended to address how each alternative as the sum total of its proposed actions conforms to the Forest Plan. Measurement indicators will focus on effects or impacts relevant to recreation and scenery according to the Forest Plan standards and guidelines.

## Recreation

### **Measurement Indicator 1: Effects to Dispersed Recreation Sites, Trails, and Activities**

Analyzes how the proposed actions affect the use, availability, and quality of the recreation activities available within the project area.

### **Measurement Indicator 2: ROS Consistency with the LRMP**

Comparison of the Recreation Opportunity Spectrum class with the types of vegetative treatment proposed per alternative followed by disclosure of any potential change.

## Visual Resources

### **Measurement Indicator 1: VQO Consistency with the LRMP**

Comparison of Visual Quality Objective classes within the project area, the types of vegetative treatment proposed per alternative, and disclosure of potential change.

## Affected Environment

The Lassen National Forest lies at the crossroads where the Sierras, the Cascades, the Modoc Plateau, and the Great Basin all come together in a fusion of mountains, canyons, forests, lakes, streams, and high desert plains. The diverse landscape and beautiful scenery sets the stage for a multitude of year-round recreational activities.

The 14,926 acre Eiler Project lies east of Burney Mountain and north of Eiler Butte in the Thousand Lakes Wilderness. It is within the Hat Creek Watershed. Previous to the fire, the area was forested in natural stands and pine plantations interspersed with brush fields, grasslands, and lava flows. Vegetation included ponderosa pine, Jeffrey Pine, Douglas fir, sugar pine, incense cedar, Baker cypress, red fir, aspen, black oak, manzanita, deerbrush, chinquapin, and various grasses and forbs.

Recreational activities in the Hat Creek Recreation Area include backcountry hiking, developed and dispersed camping, hunting, scenic driving, OHV riding, and horseback riding. The Lassen Backcountry Byway, also known as the Backcountry Discovery Trail, follows National Forest System Roads 16 and 26 and skirts the northern and western edges of the Cypress Plantation. Forest road 34N60 is the route into the Cypress Trailhead and the main equestrian access into the Thousand Lakes Wilderness. It is also listed in the *Lassen National Forest Backcountry Byway Guide* as a "Side Trip to Discovery Point" for the Byway. Forest road 33N25, in the south-eastern portion of the project area, is the sole access route for the Tamarack Trailhead. The Tamarack Trail is the easiest access to the Thousand Lakes Wilderness and the most popular for family groups. The season of use for the Wilderness is May to October, depending on the weather. The project area also supports firewood cutting and, when conditions permit, serves as a traditional Christmas tree cutting area. Multiple routes designated under 36 CFR 212.51 for motor vehicle use are within the project area. These routes are very popular for hunting, OHV use, and horseback riding.

## Existing Condition

The Eiler Fire dramatically changed the landscape in terms of both visual quality and recreation experience. It burned in a mosaic pattern resulting in a patchwork of dead, blackened, and

green trees. Areas of low to moderate burn severity (approximately 25 percent of the fire area) are primarily located along the fire's perimeter leaving the area with the higher severity (approximately 75 percent) concentrated in the interior of the project area. The large swaths of fire-killed trees and denuded understory have opened up the landscape and exposed many of the lava flows and geological features. Meadows and grassy areas, popular for dispersed camping have been burned through or around. The open sight lines in the fore and middle grounds reduce opportunities for seclusion and may encourage intrusion or cross country travel by OHVs. Opportunities for hunting are reduced as the lack of vegetation and cover has likely displaced game such as bear and deer.

The visual quality from these routes no longer exists in the traditional sense. The fore and middle ground landscape has been completely altered. There is some residual background scenery, but, in many areas, the landforms block the background views. Honn Campground, the one developed recreation site within the Project area, received only minimal damage. Although green trees remain throughout the small campground, the adjacent landscape burned, altering the visual quality from most of the campsites.

In the Thousand Lakes Wilderness, the fire burned in more of a mosaic pattern covering two of the seven major lakes and several of the smaller ones. The patches that experienced the highest severity occur in the area north of Eiler Butte, east of Lake Eiler, and east of Box Lake over the Tamarack Trail. Damaged and fire-killed trees along the trails and lake shores are of concern because they pose a risk for backcountry users due to the inherently longer residence times in those areas (i.e. for hiking, resting, camping, fishing, etc.). Approximately two miles of the Tamarack Trail and a small portion of the Tamarack to Barrett Lake cut-off trail were burned.

Damaged and fire-killed trees exist along the roads creating a safety risk for both the public and Forest Service employees and contractors. The main travel routes pass, for the most part, through the center of the project area and the areas of highest mortality. These routes, including the Lassen Backcountry Byway, access high recreation use areas as well as private timber lands. These roads are used all year, but show an increase in use during the summer and fall recreation seasons.

## Management Direction

The LRMP, Chapter 4, Management Direction (4-2) states that "About 53 percent of the Forest is available and suitable for timber production...Timber lands managed less intensively for timber production will emphasize other resource objectives, such as wildlife habitat and/or visual quality...Recreation facilities are well maintained and are sufficient to handle the increased demand. Wilderness, semi-primitive, Wild and Scenic Rivers, Special Interest Areas, and other special areas are managed to provide generally primitive recreational experiences while maintaining healthy natural ecosystems."

Goals for achieving the desired condition for Recreation include:

- Provide a wide range of outdoor recreation opportunities to meet public demand by furnishing different levels of access, service, facilities, and information.
- Provide diverse opportunities for off-highway vehicle (OHV) recreation.

Goals for achieving the desired condition for Visual Resources include:

- Throughout the Forest, maintain visual quality commensurate with other resource needs. Adopt and apply specific visual quality Objectives (VQOs) for all areas of the Forest.
- Where past management practices do not meet adopted visual quality objectives, use visual rehabilitation to return visual quality to an acceptable level.

## Environmental Consequences

### Spatial and Temporal Context for Effects Analysis

#### *Recreation*

Effects to recreation are generally short term in nature. Travel routes and recreation areas are affected mostly by temporary delays, closures or restrictions due to operations in and around their vicinity. Associated sights, sounds, and smoke from such activity can affect the recreational experience of people in areas adjacent to those being treated. The time required to treat an area by mechanical means that causes the types of effects described varies. Past practices on the Forest suggest that such effects can range from one to several months, depending on the weather. No long term effects are anticipated – that is, effects as described above are not expected to last more than a few months at a time for each treatment area.

#### *Visual Resources*

Effects to visual resources can be both short and long term. Observation of past salvage and reforestation projects on the Lassen National Forest suggest that the range for short term effects is typically one to three years. This represents the time required for all aspects of treatments to be performed which include actual cutting, site preparation, and planting. Long term effects refer to visual result of activity approximately three or more years after completion and are associated with “green up”. That is, a period of vegetation recovery that is sufficient enough to allow the landscape to effectively mask visual signs associated with disturbances such as stumps left from cut trees, track and tire imprints, blackened ground caused by burning, and imprint of closed and re-vegetated temporary roads.

### Connected Actions, Past, Present, and Foreseeable Activities Relevant to Cumulative Effects Analysis

The cumulative effects area for recreation and scenery resources lies within the Eiler Project boundary. It is a well-established recreational center on the Hat Creek Ranger District. It contains one small developed campground and numerous dispersed campsites. Visitors often camp on National Forest Service (NFS) or private lands, participate in backcountry activities such as camping and fishing in the Thousand Lakes Wilderness, and utilize the network of roads and trails for OHV travel, hunting, riding, and hiking.

#### Past Activities

- Wildfires of various scales
- Vegetation treatments by FS and private landowners
- Wood cutting
- Dispersed campsites

- Road system maintenance

#### Present Activities

- Vegetation treatments at Hat Creek Work Center, and along Highway 89
- Vegetation treatments by private landowners
- Wood cutting
- Dispersed campsites
- Pedestrian and equestrian use
- Off-Highway Vehicle use
- Road system maintenance

#### Reasonable Foreseeable Activities

- Vegetation treatments by FS and private landowners
- Wood cutting
- Dispersed campsites
- Pedestrian and equestrian use
- Off-Highway Vehicle use
- Road system maintenance

## Effects Analysis

### Alternative 1 – Proposed Action

The forest proposes to implement a combination of fuels and vegetation treatments within the NFS portion of the Eiler Fire to meet the purpose and need.

- Hazard Tree Removal – Fire-affected hazard trees would be harvested along approximately two linear miles of trail along with 32 miles of maintenance level 2 (ML2) and higher roads and 2.4 miles of non-system routes proposed to be added to the NFS system. Trees would be felled and removed or felled and left in place. Non-merchantable trees would be left in place, piled and burned, or broadcast burned. Hazard trees in the Thousand Lakes Wilderness and Inventoried Roadless Areas would be felled and left in place.
- Area Salvage Harvesting – Salvage Harvesting would occur on approximately 3,048 acres within the fire perimeter, and merchantable trees would be removed as sawlogs. Non-merchantable trees of smaller diameter would be removed as biomass, masticated, felled and lopped, machine or hand piled and burned, or broadcast burned. Operations would utilize ground-based mechanical harvesting on slopes less than 35 percent and hand-felling and yarding by helicopter on slopes greater than 35 percent. Natural and activity-generated fuels would be piled and burned or broadcast burned. Snag retention leave islands, ranging two to five acres in size, would comprise approximately 25 percent of each unit. Within the helicopter units, approximately 100 square feet of basal area per acre of snags would be left to maintain black-backed woodpecker habitat.

Approximately 125 acres of salvage harvesting would occur within Riparian Conservation Areas (RCAs) adjacent to stream channels and seasonal wetlands. Of this area, approximately 110 acres would be treated with ground-based mechanical equipment. The balance of the acres would be treated with hand-felling and helicopter yarding. Snag retention in the RCA would be for woody debris recruitment. The amount and distribution of standing snags would vary to represent pre-fire suppression activities. Within meadows and intermittent streams, a minimum of one to two snags, greater than 15 inches in diameter would be retained per 100 feet.

- Area Fuel Treatments – In areas where the remaining timber is sub-merchantable, trees of smaller diameters would be removed as biomass, masticated, felled and lopped, machine or hand piled and burned, or broadcast burned. Ground-based mechanical equipment would be utilized to treat approximately 517 acres in areas with less than 35 percent slope. Soil windrows would be spread out using heavy mechanical equipment. Hand fuels treatments would occur on approximately 3,602 acres in areas that are inaccessible to mechanical equipment, slopes are greater than 35 percent, and where biomass is not removed. Natural and activity-generated fuels would be broadcast burned or piled, mechanically or by hand, and burned.
- Reforestation – Reforestation treatments would occur on approximately 5,645 acres on sites where preparation would be completed through harvest and surface fuel treatments. Planting would comply with Region 5 Stocking guidelines, reaching stocking levels of 75 to 300 trees per acre, depending on forest type. Conventional planting, cluster planting, founder stands, and natural regeneration strategies would be used. Planting would not occur in snag retention islands.

Hardwood trees would be promoted. Conifers would not be planted within 20 feet of live black oak tree crowns, including sprouts greater than three feet tall. Conifers would not be planted within 150 of aspen and cottonwood stands on the east, south, and west sides or 100 feet on the north side. Fencing would be used to protect suckers from browsing until sprouts exceed browse lines. No reforestation would occur within 50 feet of a meadow's edge or within 20 feet of existing riparian plant communities along stream channels and seasonal wetlands. Forest Service personnel would visit riparian areas during the 2015 growing season. If vegetation regrowth from natural regeneration does not appear sufficient, willow aspen, sedges and/or other appropriate riparian species would be hand planted as a follow up treatment.

First and third year survival exams would occur on all planted units to assess for competing vegetation and the need for follow up treatment. At least one release treatment would occur in the first one to three years of planting with another occurring within two to five years of planting. Release treatments would utilize manual or mechanical methods such as hand grubbing, mastication, or brush cutting. Animal control actions such as barriers or trapping may be used as warranted.

- Baker Cypress Treatments – Baker cypress treatments would occur on approximately 361 acres. On approximately 200 acres where occurrences are as isolated trees or stands, standing fuels would be mechanically piled and burned. A 16 acre unit would be replanted in founder stands. Windrow spreading may occur where windrows are not occupied by Baker cypress. On approximately 150 acres, where pre-fire densities were higher, hand thinning treatments would occur only where seedlings could be avoided. Hand thinning and pile burning would occur on the remaining 10 acres within Eiler Gulch, along the riparian corridor. No broadcast burning would occur within areas occupied by Baker cypress.
- Transportation System – The existing forest transportation system would be utilized to provide access to treatment units. NFS and non-paved county roads used for this project would receive pre-, during-, and post-implementation maintenance. A dust abatement plan would be included.

Approximately 2.4 miles of existing non-system roads would be used for project implementation. These roads would be added to the Forest Transportation system as Maintenance Level 2 roads. Approximately one mile of new construction would occur. These routes would be added to the Forest Transportation system as Maintenance Level 1 (ML1) roads. Approximately one mile of temporary roads may be constructed to access treatment areas. These temporary routes would be decommissioned following project completion.

Water sources for this project (Bidwell Pond and Boundary Camp) will be brought up to Best Management Standards.

## **Direct & Indirect Effects**

### ***Recreation***

#### *Measurement Indicator #1 – Effects to Recreation Sites, Facilities, and Activities*

#### **Recreation Areas/access**

Effects for recreation are generally localized to specific areas during the implementation time frame so changes in the overall ability for the public to participate in recreation opportunities are considered to be minor. Access along roads and trails may be interrupted or delayed for brief periods during implementation of the proposed treatments, most notably during tree removal. Public use may be limited if short term closures occur. No recreation facilities are proposed to be closed as a result of this alternative so overall opportunity is unaffected and no long term affects are anticipated.

Smoke, dust, and heavy equipment used in mechanical treatments may temporarily affect the sights, sounds, smells, and other physical and social qualities (collectively hereafter, qualities) that make recreation areas/routes desirable for use. Contractors and Forest Service personnel working in the vicinity may detract from the sense of separation or solitude, but no more so

than the loss of cover resulting from the fire. Hikers and dispersed campers may find these conditions amplified by their extended residence time within the project area. Overall, these effects are considered short term and do not represent the finished project which is a mosaic of treatment and non-treatment areas leading to a diverse and reforested landscape.

It is unlikely that hunting and wildlife viewing opportunities will be affected by implementation. Lack of vegetation and cover, as a result of the fire, has displaced many popular game species including bear and deer. These species will likely return over time as grasses, forbs, and brush regrow. Reforestation will speed up the recovery time for cover provided by large-tree canopy. Utilization of multiple reforestation methods will result in a diversity of canopy structures which may actually increase wildlife encounters.

### **Wilderness**

Although the Thousand Lakes Wilderness falls under the Semi-Primitive Non-Motorized ROS category, it is generally managed for a primitive recreation experience. When recreating in these conditions, there is an acceptance of some of the inherent risks such as snags and falling trees, rock slides, and wildlife encounters. Solitude and the opportunity to master these challenges are part of the wilderness experience.

Trail systems are put into wilderness areas to provide access to areas while protecting them from undue resource damage. When improvements, such as trail systems, are established, there is an implied invitation to use them. Along with this invitation, comes the responsibility to keep them maintained and safe for use. Hazard tree felling improves the safety conditions along trails. Implementation of this treatment may temporarily affect wilderness users. Trail access may be impaired by delays or closures during felling operations. The sense of solitude or other qualities may be temporarily diminished by the sights, sounds, and additional personnel in the area during treatment. The residual stumps may affect the primitive experience, but a more natural appearance will begin to return in these areas as post-fire vegetation regrows. These effects are considered to be short term in nature and will result in safe and effective access through the wilderness, both for the public and emergency personnel.

During treatment, Wilderness will be accessible by the three other trails into the area. Use of these trails cannot be seen as a long term solution, as the level of difficulty is higher than on the Tamarack Trail. The Thousand Lakes Wilderness is small in size, making it appropriate for day use and popular for family units. Trails with higher levels of difficulty may be a deterrent for less advanced hikers.

### **Transportation**

Several primary and secondary routes pass through or are in direct proximity to treatment areas. The proposed treatments should have no effect on the amount of recreation opportunities available in the long term, but can have effects on the quality of experience for some Forest visitors on the short term. Temporary road closures, re-routing, smoke, noise and fugitive dust are some of the short term effects that can be anticipated.

There are primary access routes in the recreation area, including NFS 34N19 (26 Road) and 33N25. The 26 Road provides the main access through the Project area and serves as the

Lassen Backcountry Byway. NFS 33N25 is the only road into the Tamarack Trailhead. Removal of hazard trees will improve public safety and reduce instances of blocked routes due to fallen trees. Treatment of activity-generated surface fuels will reduce the risk of subsequent wildfire starts from the roadway. These routes would be used both for haul and to transport personnel and equipment into treatment areas. Although a dust abatement plan is in place for this alternative, fugitive dust and increased traffic could be a concern for motorists as well as and pedestrians recreating in the area.

Approximately one mile of temporary road would be constructed for access and then decommissioned and rehabilitated after all treatments have been implemented. Approximately one mile of new road would be constructed for access and added to the system as an ML1 road. The proposed new road is over ½ mile from the Wilderness boundary and approximately two miles from the Tamarack Trailhead. It is blocked by visual barriers from both locations. Sounds of road construction may be perceived, but, such effects are expected to be minimal and short term in nature. Heavy equipment used during the proposed construction and decommissioning of roads may temporarily affect the qualities that make recreation areas and routes desirable for use.

Approximately 2.4 miles of existing non-system road would be upgraded to standard and added to the NFS system as ML2 roads. These routes are currently closed to motor vehicle use. Reclassification of these roads would increase the recreation opportunity by adding them to the NFS system. Equipment used during the proposed upgrades may temporarily affect the qualities that make nearby recreation areas and routes desirable for use.

#### *Measurement Indicator #2 – ROS Consistency with LRMP*

Effects associated with ROS pertain to how recreation settings will be affected once project implementation is completed – not during the process. This Project provides for better protection against future wildfires and moves toward a forest that better meets its natural forested condition. Both the Roaded Natural and Semi-Primitive Non-Motorized ROS classes allow for some modification of the natural landscape. The Eiler Fire drastically changed the physical characteristics of the area. The treatments proposed in this alternative will help return the landscape to its former condition while accounting for public safety. No changes to the existing ROS classifications are anticipated with this alternative.

The Forest Standards and Guidelines (LRMP 4-24 – 4-25) directs personnel to “Remove hazard trees in developed recreation sites, and along roads and trails.” The removal of hazards trees along roads and trails proposed in this alternative is consistent with this direction.

One of the forest goals for the desired condition for Recreation (LRMP 4-4) is to “provide diverse opportunities for off-highway vehicle (OHV) recreation”. Adding non-system roads to the NFS may increase OHV riding opportunities should they, at some point, be designated as legal driving routes under 36 CFR 212.51.

## *Visual Resources*

### *Measurement Indicator #1 – VQO Consistency with LRMP*

Approximately 75 percent of the Eiler Fire burned under moderate or high severity. In high severity burn areas, the landscape has been dramatically altered. The general character of the land has changed to fire-killed trees interspersed with rock outcroppings and patches completely denuded of vegetation. VQOs can no longer be met in the traditional sense (e.g. that green trees would be maintained as the dominant visual feature). The desired visual conditions under this alternative are “landscapes dominated by site-appropriate trees with variable densities” as well as “ecological services that provide...improvements to recreational benefits and aesthetics”. Reforestation of severely burned areas would expedite the re-establishment of forested areas, improve visual quality, and provide a mixture of vegetation types and age classes. By treating the slash and surface fuels through piling and burning, vegetation would occur that provides visually pleasing contrast to surrounding features and landforms. The overall result of the proposed treatments would be an improved visual quality.

The majority of what can be perceived as negative effects to the visual resource occurs during implementation. While the treatments are being carried out, control lines, treatment edges, ground disturbance, and untreated slash can be anticipated. Scenes during this initial implementation phase do not represent a completed treatment; effects to scenic quality are based on completed treatments. This initial appearance is short term in duration. At the conclusion of treatment, visual signs of activity (i.e., cut stumps or track and tire marks on the ground) are not anticipated to remain characteristic to the landscape. Evidence of burning on remaining trees and various ground features may be prevalent, but such sights are naturally occurring in forests where wildfire regimes are common. Some plantation treatments may include spreading of the soils in the windrows. Although this portion of the treatment may incur additional disturbance in the short term, removal of the windrows will restore the natural landscape, improving long term visual quality. The goals in Chapter 4 of the LRMP state, “Where past management practices do not meet adopted visual quality objectives, use visual rehabilitation to return visual quality to an acceptable level”. When growth of shrubs, grasses, and forbs is underway, the majority of evidence left behind by management activities is not anticipated to be evident to the casual forest visitor.

Hazard tree removal treatments that occur throughout the project area will alter the appearance of the immediate foreground. Stumps will be visible initially, but will become less obtrusive as “green up” occurs. Reforestation along the roadways would be consistent with the surrounding areas to blend treatment lines from the fore to middle ground.

The majority of the Project area has a VQO of Modification (management activities may dominate but must borrow from the characteristic landscape) and Partial Retention (management activities remain visually subordinate to the characteristic landscape). The Eiler Fire changed the view shed so completely, the rock formations are the only remaining characteristic to borrow from. Treatment will bring the area closer to meeting its visual quality objective by speeding up the reforestation process. Differing treatment types intermixed with the existing geologic features will allow variation in the scenery and emphasize natural

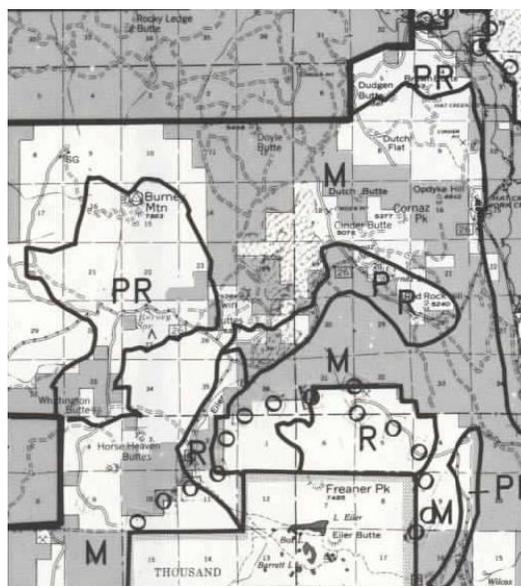
landscape characteristics. Using multiple planting methods during reforestation will add variety to the landscape, breaking up lines and giving it a more natural appearance.

Two areas of Retention (Management activities would result in a natural appearing landscape. Activities may occur, but are not visually evident to the casual observer) exist within the project area. One incorporates the Inventoried Roadless Area (IRA) (Area 7), and the other is a narrow strip along 34N60 near Eiler Gulch area (Area 5). A Natural Recovery treatment is proposed for Area 7. There are roads in the northeast corner of the Retention area, outside the IRA (Area 6). This corner has proposed treatments for Roadside Hazard Tree Removal, Hand and Mechanical treatments, and a conventional reforestation method. It backs up to a section of land with a VQO of Modification with the same proposed treatments. In this case, the visual lines will be better blended if the same treatment continues across VQOs. Moving west, as the ground becomes steeper, the treatments change to hand fuels with cluster planting and finally founder planting. The roads in this area are designated for OHV travel through 36 CFR 212.51, but are used primarily for management access.

The second Retention area is a long strip near Eiler Gulch. This area is proposed for Mechanical Fuels, including windrow spreading, and Baker Cypress treatments. Windrow spreading may cause an additional visual disturbance in the short term, but will improve aesthetics in the long term by restoring the natural landscape. This is consistent with LRMP direction.

The Thousand Lakes Wilderness falls under the VQO of Preservation (This allows ecological changes only. Most management activities are prohibited.). In this alternative, hazard trees would be felled and left in place, mimicking a natural event. Stumps, though visible in the short term, would become less noticeable as grasses, forbs, and brush begins to regrow. Hazard tree felling along the Tamarack Trail is inconsistent with the Preservation VQO, but does fall within the ROS standard of Semi-Primitive Non-Motorized. The Forest Standards and Guidelines (LRMP 4-24 – 4-25) also directs personnel to “Remove hazard trees in developed recreation sites, and along roads and trails.” Public safety would be given higher consideration than visual quality.

**Map #1 – Visual Quality Objectives for Eiler Fire Salvage and Restoration Project**



## Cumulative Effects

Although there may be some decrease in use in the short term, recreation activities would likely continue in the Project area. The management activities proposed under this alternative, along with those already listed under the Connected Actions listed above, would result in some short term effects of noise, traffic, and smoke associated with treatment activities. Some temporary and short-term displacement of recreationists during the time when treatment occurs can be anticipated. Standards and guidelines are in place to minimize effects of the project on recreation and scenic resources.

Salvage treatments have begun on private lands within the Project area. Increased traffic, noise, smoke, and fugitive dust are currently present in the area, but, due to the season, are causing only minimal disturbance to recreationists. Private salvage and clean-up activities will likely be completed before the Eiler Project would be implemented.

Clean-up activities on private lands have made an impact to the visual landscape in the Eiler Fire perimeter. Property boundary lines are clearly visible and treatment lines are starkly evident. To the casual observer, NFS lands appear unkempt and neglected. The proposed treatments in the Eiler Project would dramatically improve the visual scenery and blend lines between property ownerships.

Vegetation treatments and the transportation activities associated with this Project and past, present, and foreseeable activities already listed would have no significant cumulative effects to recreation resources and overall recreation opportunities. Effects from the proposed treatments, especially since they vary in size and space and occur within a disturbed area, will seem minimal in comparison to the disturbance of the Eiler Fire itself. Over the long term, the proposed treatments will improve the visual impacts from the fire as well as restore some of the natural characteristics that were affected by past treatments.

## Design Features and Mitigation Measures

Recreation and Visual quality resources are managed in accordance with the Recreation Opportunity Spectrum (ROS) and Visual Quality objectives (VQOs) as stated in the Lassen National Forest LRMP. The following serve to minimize impacts to recreation opportunities, to mitigate visually unappealing landscape scenes during the vegetative recovery period where treatment is seen, and to ensure the affected environment continues to meet prescribed ROS and VQO setting descriptions.

- National Forest Transportation System (NFTS) trailheads and trails would be protected during operations and informational signs posted in advance of project implementation.
- Cut tree marking would be applied within 150 feet of NFTS trails, including the Lassen Backcountry Byway within Retention (R) and Partial Retention (PR) Visual Quality Objectives (VQO) classes in areas where residual green trees are greater than 50 percent.
- Operations-created slash within 50 feet of trails and view roads, including the Lassen Backcountry Byway, would be piled, and piles burned or removed within one year.

- Post treatment, in areas where residual green trees are greater than fifty percent, piles would be located a minimum of 50 feet from the edge of trail or view road.
- Within areas with the Recreational Opportunity Spectrum (ROS) designation of semi-primitive, non-motorized (SPNM), impacts of mechanical treatment would be minimized.
  - In salvage units, trees removed within 50 feet on either side of NFTS trails would leave a maximum eight-inch stump.
  - Equipment crossings would be limited to designated crossings. The trail tread would be restored at crossings.
  - In areas of high recreational use, some vegetation, where available, would be left along the edge of trails and roads. Residual vegetation can act as a visual barrier to discourage future unauthorized routes.

## **Alternative 2 – No Action**

Alternative 2 would result from a decision not to implement the Eiler Project. This alternative would not achieve the purpose or address the need of the project.

The no action alternative provides a baseline for comparative analysis of the action alternatives. Although there would be no action to treat vegetation under this project, other activities in the area such as road maintenance, fire suppression, firewood cutting, dispersed camping, and other recreational activities would continue. Hazard trees along roads and NFST trails could be felled and left in place as part of road maintenance.

## **Direct & Indirect Effects**

### ***Recreation***

#### *Measurement Indicator #1 – Effects to Recreation Sites, Facilities, and Activities*

Under the no action alternative, hazard trees representing an imminent threat along roads and trails would be felled for public safety as directed in the LRMP (4-24 – 4-25). Due to the sheer number of roadside hazard trees and the amount of available personnel, safety road closures may be put in place until hazards can be removed. Downed trees may partially or fully block roads. This would reduce or deny access for hunting, camping, hiking, and firewood cutting. Blocked routes may encourage cross-country travel and resource damage as vehicles attempt to drive around the blockages. Pedestrians and equestrians may move farther into unsafe, burned areas to circumvent downed trees.

Salvage harvest, fuels treatments, and reforestation would not occur in Alternative 2 and would not change the present road related experience (i.e., access or opportunity for driving). Users would continue to see blackened and fire-killed trees and areas of charred ground denuded of vegetation. Distinct treatment lines between NFS and private lands would continue to exist. The characteristics of past treatments (i.e. windrowed plantations) would still be visible. The physical experience of the post-fire environment would remain unchanged. Existing ground fuels along with those associated with the cut trees would continue to accumulate along the roadway. The potential for subsequent fires would be increased. Some wildlife encounters may

decrease due to the longer replacement time for conifers. Due to the number and proximity of fire-killed trees, campers may be displaced to meadows and open areas. This may result in additional resource damage from trash, waste, and compaction. Instances of encroachment into wetland by OHVs may increase.

Some uses may decrease under this alternative. In studying the effects of fire on recreation demand in Montana, Hesseln, Loomis and Gonzalez-Caban (2004) found a slight decrease in hikers' demand in areas recovering from crown fire and also found that as burned area increased and the amount of burned area viewed increased, recreation demand decreased suggesting size and extent of burns affect visitation. Taylor and Daniel (1984) found that camping was the recreational activity most affected by severe fire while hiking and nature study were less affected by severe fire.

### **Wilderness**

Effects to the Thousand Lakes Wilderness, in this alternative, are the same as in Alternative 1.

### **Transportation**

In this Alternative, no roads will be constructed or added to the transportation system. There would be no changes to access. There would be no road maintenance outside that which is regularly scheduled.

#### *Measurement Indicator 2: ROS Consistency with the LRMP*

No Action as proposed in Alternative 2 would not change or alter the ROS classifications as they currently exist. Recreation Visitor Days may decrease, but this would not necessarily change the determination for a *Roaded Natural* classification as other factors are taken into consideration.

Hazard tree felling is consistent with direction in the LRMP (4-24 – 4-25).

### **Visual Resources**

#### *Measurement Indicator 1: VQO Consistency with the LRMP*

Alternative 2 would result in no immediate change to the existing condition. Swathes of blackened and fire-killed trees would remain in the fore and middle ground. No variations in treatment would occur except at NFS boundaries. The changes in those areas would continue to show noticeable treatment lines. Windrows would not be removed and the goal in Chapter 4 of the LRMP, "Where past management practices do not meet adopted visual quality objectives, use visual rehabilitation to return visual quality to an acceptable level," would not be met. Untreated areas and debris may delay natural regeneration of vegetation and would increase the potential for subsequent fires.

There are no expected changes to the VQOs within the project area. The Eiler Fire dramatically changed the appearance of the landscape, and VQOs can no longer be met in the traditional sense (e.g. that green trees would be maintained as the dominant visual feature). The quality of scenery would change over time, as vegetation returns and becomes denser. The favorable landscape views such as topography and other natural features would be visible from roads and trails for the long term. The desired visual condition of "landscapes dominated by site-appropriate trees with variable densities," listed in the Purpose and Need for this project, would be delayed.

## **Cumulative Effects**

Past and future fuels and vegetation management directly affect recreation use during the time of implementation, but are generally considered to be short term in duration. Access may be temporarily suspended or delayed and the qualities favorable to the recreation and visual scenery may be affected during implementation. Road maintenance activities have the potential to limit access at the time and place it occurs, but overall, is beneficial to recreation in the access it provides and user comfort it brings to the driving and sight-seeing experience. Wildfires can affect scenery resources for years into the future depending on soils, aspect, and vegetation species composition. A study by Vaux, Gardner, and Mills (1984) on the impact of fire on forest recreation suggests higher intensity fires had negative effects on recreation values but also caution that the impact of fire was not always negative among their respondents, and preferences of recreationists change over time.

## **Alternative 3 –Hazard Removal Only**

Under Alternative 3, commercial sized hazards would be removed along ML2 and higher roads. Sub-merchantable hazards would be felled and left in place or piled and burned. No other site preparation or reforestation would occur along these roads. No other actions would occur in the fire perimeter.

### *Measurement Indicator #1 – Effects to Recreation Sites, Facilities, and Activities*

Effects for recreation are generally localized to specific areas during the implementation time frame so changes in the overall ability for the public to participate in recreation opportunities are considered to be minor. Access along roads and trails may be interrupted or delayed for brief periods during implementation, most notably during tree removal. Public use may be limited if short term closures occur.

Smoke, dust, and heavy equipment associated with hazard removal may temporarily affect the qualities that make recreation areas/routes desirable for use. These effects are considered short-term in nature and will result in safer roads and trails. Removal of larger trees will reduce the amount of fuel on the ground decreasing the chance of future roadside fire starts.

## **Wilderness**

Effects to Wilderness are consistent with Alternatives 1 and 2.

## **Transportation**

Effects from transportation would be the same as in Alternative 2.

### *Measurement Indicator 2: ROS Consistency with the LRMP*

Removal of hazard trees as proposed in Alternative 3 would not change or alter the ROS classifications as they currently exist. Recreation Visitor Days may decrease, but this would not necessarily change the determination for a *Roaded Natural* classification as other factors are taken into consideration.

Removal of hazards will improve public safety and reduce instances of blocked routes due to fallen trees. The Forest Standards and Guidelines (LRMP 4-24 – 4-25) directs personnel to “Remove hazard trees in developed recreation sites, and along roads and trails.” The removal of Hazard trees proposed in this alternative is consistent with this direction.

#### *Measurement Indicator 1: VQO Consistency with the LRMP*

Hazard tree removal treatments that occur throughout the project area will alter the appearance of the immediate foreground. The majority of what can be perceived as negative effects to the visual resource occurs during implementation. The sight of control lines, treatment edges, ground disturbance, and untreated slash can be anticipated. Stumps will be visible initially, but will become less obtrusive as “green up” occurs.

In this alternative, there would no immediate change to the existing condition in the middle and background scenery. Rock formations and swathes of blackened and fire-killed trees would remain. No variations in treatment would occur except at NFS boundaries. The changes in those areas would continue to show noticeable treatment lines. Untreated areas and debris may delay natural regeneration of vegetation and would increase the potential for subsequent fires.

There are no expected changes to the VQOs within the project area. Since the Eiler Fire, VQOs can no longer be met in the traditional sense. As vegetation returns, the quality of scenery would change over time, but the desired visual condition of “landscapes dominated by site-appropriate trees with variable densities,” listed in the Purpose and Need for this project, would be delayed.

#### **Cumulative Effects**

Although there may be some decrease in use in the short term, recreation activities would likely continue in the Project area. The management activities proposed under this alternative would result in some short term effects of noise, traffic, and smoke associated with treatment activities. Some temporary and short-term displacement of recreationists during the time when treatment occurs can be anticipated.

Noise, smoke, fugitive dust, and increased traffic associated with salvage activities on private lands are causing only minimal disturbance to recreationists. Current use is mostly by those cutting firewood and those curious of the fire damage. Private salvage and clean-up activities will likely be completed before the Eiler Project would be implemented.

Transportation activities associated with this Project and past, present, and foreseeable activities already listed would have no significant cumulative effects to recreation resources and overall recreation opportunities.

#### **References**

- Hesseln, Hayley; Loomis, John B.; and Gonzalez-Caban, Armando. 2004. The effects of fire on recreation demand in Montana. *Western Journal of Applied Forestry*. Vol. 19, no. 1 (Jan. 2004): p. 47-53.
- Taylor, Jonathan G. and Terry C. Daniel. 1984. Prescribed fire: public education and perception. *Journal of Forestry*. 82: p. 361-365.

USDA Forest Service. 1992. Lassen National Forest Land and Resource Management Plan. Lassen National Forest. Pacific Southwest Region.

USDA Forest Service. 1995. Landscape Aesthetics – A Handbook for Scenery Management. USDA Agriculture Handbook Number 701.

Vaux, H.J., Jr., P.D. Gardner, and T.J. Mills. 1984. Methods for assessing the impact of fire on forest recreation. USDA Forest Service. Gen. Tech. Rep. PSW-79. 13 p.