
**EDDY GULCH LATE-SUCCESSIONAL RESERVE
FUELS / HABITAT PROTECTION PROJECT**

SCENERY REPORT

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May 31, 2009

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Scenery Report

1.1 Introduction

Viewing natural or natural-appearing scenery has been shown in nationwide studies to be directly beneficial to the mental and physical well-being of individuals. On the Klamath National Forest, it is the most popular recreational activity and, as such, contributes to the quality of life, tourism, and economic vitality of the region and its communities. The scenery in the Eddy Gulch Late-Successional Reserve (LSR) is an important part of that larger aesthetic. Projects on the Eddy Gulch LSR shall be designed to provide attractive, ecologically stable Scenic Character that mimics disturbance consistent with the historic range of variability.



1.1.1 Project Location

The Eddy Gulch LSR Project Assessment Area is located on the Salmon River and Scott River Ranger Districts, Klamath National Forest, in southwestern Siskiyou County. The LSR is located mostly west of Etna Summit, south of North Russian Creek and the town of Sawyers Bar, east of Forks of Salmon, and north of Cecilville. The LSR is about 61,900 acres in size, making it one of the largest LSRs on the Klamath National Forest. The LSR encompasses much of the area between the North and South Forks of the Salmon River, as well as headwaters of Etna Creek. Elevations range from 1,100 feet to about 8,000 feet. The terrain is generally steep and dissected by sharp ridges and streams. There are a few private inholdings in the LSR and along the main Salmon River and other stream corridors adjacent to the LSR.

The legal description for the Eddy Gulch LSR includes the following (all Mount Diablo Meridian):

T38N, R11W, Sections 2–5, 8–10, and 17–19
T38N, R12W, Sections 1–3, 9–16, and 22–24
T39N, R10W, Sections 2–10, 15–21, and 29–31
T39N, R11W, Sections 1–18, 20–29, and 32–36
T39N, R12W, Sections 11–14, 23–25, and 36
T40N, R10W, Sections 3–5, 8–11, and 13–35
T40N, R11W, Sections 24–27 and 34–36
T41N, R10W, Sections 2–5, 8–17, 20–24, 26–29, and 31–34
T42N, R10W, Sections 28–29 and 32–35

1.1.2 Terms

Eddy Gulch LSR — the entire 61,900-acre LSR.

Assessment Area — the 37,239-acre portion of the Eddy Gulch LSR west of Etna Summit where various treatments are proposed. All released roadless areas that occur in the LSR were excluded from planning efforts and are therefore not part of the Assessment Area.

Treatment Unit — the acres proposed for some type of on-the-ground treatment under a particular alternative.

Analysis Area — the area around treatment units considered in the effects analysis (the analysis area may be larger than the LSR Assessment Area). The analysis area varies by resource.

1.2 Summary of the Alternatives

Chapter 2 in the environmental impact statement (EIS) for the Eddy Gulch LSR Project presents more information about the three alternatives, and Appendix A in the EIS contains project maps.

1.2.1 Alternative A: No Action

The no-action alternative is described as continuation of the current level of management and public use—this includes road maintenance, dispersed recreation (hunting, fishing, camping, and hiking), mining, watershed restoration projects, and the modeled wildfire. The time frame for analysis is considered to be 20 years. Given the fuel hazard in the Eddy Gulch LSR and current predictions of climate change, it is assumed at least one wildfire will escape initial attack during the 20-year period and burn under 90th percentile weather conditions (defined as 10 percent of the days in the historical weather database that had lower fuel moisture and higher wind speeds compared to the rest of the days). An analysis of a wildfire for three days that escaped initial attack in the Eddy Gulch LSR Project Assessment Area indicates that fire would burn 7,200 acres. Of those 7,200 acres, 1,355 acres (19 percent) would be surface fire; 5,065 acres (70 percent) would be a passive crown fire; and 780 acres (11 percent) would be an active crown fire.

1.2.2 Alternative B: Proposed Action

The Klamath National Forest proposes 25,969 acres of treatments to protect late-successional habitat and communities. Three primary treatment types were identified in the Assessment Area: Fuel Reduction Zones (FRZs), Prescribed Burn Units (Rx Units), and Roadside (RS) treatments along emergency access routes, which are described below.

- **FRZs**—strategically located on ridgetops to increase resistance to the spread of wildfires. The FRZs would be wide enough to capture most short-range spot fires, and ground, ladder, and crown fuels would be reduced so as to change crown fires to surface fires within the treated areas. The FRZs would provide safe locations for fire-suppression personnel to take fire-suppression actions during 90th percentile weather conditions, and they serve as anchor points for additional landscape-level fuel treatments, such as underburning.
 - **Proposed Action.** Construct 16 FRZs totaling 8,291 acres to increase resistance to wildfires. The 8,291 acres includes 931 acres in 42 M Units (thinning units) and 7,383 acres in fuel reduction areas (outside the M Units) to reduce ground and ladder fuels.
- **Rx Units**—a series of landscape-level treatments (ranging from 250 to 4,300 acres in size) designed to increase resilience to wildfires by reducing ground and ladder fuels. Most of these treatments would occur on south-facing aspects where fuels dry faster, and treatments would support the role of the FRZs.
 - **Proposed Action.** Implement 17,524 acres of Rx Units to increase resiliency to wildfires.
- **RS treatments**—along 60 miles of emergency access routes identified in the Salmon River Community Wildfire Protection Plan (CWPP) (SRFSC 2007) and designed to facilitate emergency access for residents to evacuate and for suppression forces to safely enter the LSR in the event of a wildfire.
 - **Proposed Action.** Treat 44 miles of emergency access routes in FRZs and Rx Units (treatments would be similar to the FRZ or Rx Unit the route passes through) and 16 miles (with 154 acres of treatments) of RS treatments outside of FRZs and Rx Units—a total of 60 miles of RS treatments along emergency access routes.

Proposed Temporary Roads and Landings

The construction of new temporary roads and the use of former logging access routes are proposed to access treatment units.

- Approximately 1.03 miles (5,433 feet) of new temporary roads would be used to access all or portions of seven M Units. All of these temporary roads would be closed (ripped and mulched, as needed) following thinning.

- Approximately 0.98 mile (5,177 feet) of former logging access routes would be re-opened (vegetation removed and bladed) to access all or portions of five M Units. These routes would be water-barred and closed immediately after thinning is completed.
- Five short spurs, each less than 100 feet long, would be bladed for tractor or cable yarding operations in two units.
- Existing landings would be used.

1.2.3 Alternative C: No New Temporary Roads Constructed

Alternative C responds to public concerns regarding the environmental and economic effects of constructing new temporary roads. Alternative C is similar to the Proposed Action but approximately 1.03 miles (5,443 feet) of new temporary roads identified in the Proposed Action would not be constructed. As a result, no fuels treatments would occur in portions of seven M Units. This reduces the total acres of treatments in M Units from 931 acres under Alternative B to 832 acres in Alternative C. Fuels treatments could not be carried out in those M Units because of excessive treatment costs, high existing dead crown fuel loadings, and potential heat damage to the overstory if these untreated units were prescribed burned.

Under Alternative C, the FRZs would continue to total 8,291 acres; however, 99 acres in M Units would remain untreated. The total number of acres treated by tractor yarding would remain at 361 acres; however, the acres of cable yarding would be reduced from 570 acres under Alternative B to 471 acres under Alternative C. Reducing acres of M Units treated would also reduce the number of acres treated in two Rx Units because excessive fuels remaining in M Units would preclude safely burning portions of the two Rx Units. Six-foot-wide control lines would be constructed around the perimeter of those untreated areas to keep prescribed burns out of those portions of Rx Units. There would be no changes in the miles of emergency access routes treated, transportation plan, or resource protection measures.

1.3 Significant Issue

Public and agency comments received during collaboration and scoping efforts did not identify any significant issues related to scenery. The only significant issue was in regard to construction of new temporary roads to access some of the treatment units. Alternative C was developed in response to public concerns regarding the environmental and economic impacts of constructing new temporary roads.

1.4 Regulatory Framework

Direction for scenic quality in the Eddy Gulch LSR Project Assessment Area is found primarily in the Klamath LRMP and also in several laws and United States Forest Service policies. “Forestwide” standards in the Klamath LRMP establish overall process direction for scenic quality, which is based on Forest Service policy. More specific direction for scenic quality of the Eddy Gulch LSR Project Assessment Area lies within Management Area goals, desired conditions, and Standards

and Guidelines, including accompanying Visual Quality Objective (VQO) / Scenic Integrity Objectives. Klamath LRMP scenic quality directions most pertinent to this project are summarized below:

1.4.1 Forestwide Scenic Quality Standards and Guidelines

1. Perpetuate the forest's ecologically established landscape character (Standard and Guideline 11-4).
2. Meet VQOs Retention, Partial Retention, and Modification within three years of project completion, and meet Preservation and Maximum Modification after project completion. These objectives are to be met as viewed from all inventoried sensitive locations such as Wilderness Areas, recreation sites, communities, roads, trails, and rivers (Standard and Guideline 11-1). These are minimum conditions to be achieved, and higher scenic quality is recommended when compatible with other project objectives (Standard and Guideline 11-3).
3. Rehabilitate landscapes that currently do not meet Klamath LRMP Scenic Integrity Objectives (Standard and Guideline 11-5). This Standard and Guideline is not within the scope of the Eddy Gulch LSR Project.

1.5 Methodology

Methods found in the *Landscape Aesthetics: A Handbook of Scenery Management* (SMS Handbook) (USFS 1995b) were used for the scenery analysis, as amended by Appendix J. These methods are outlined below.

1.5.1 Analysis Methods and Assumptions

The following are the methods used for analyzing the existing scenic resources:

- Determine Scenic Character based upon ecological unit descriptions and existing landscape patterns;
- Identify scenic attractiveness based upon landform patterns and features, surface water characteristics, vegetation patterns and (relatively limited) land use / cultural patterns;
- Determine Scenic Integrity based upon dominance of landscape modifications, degree of modification and landscape intactness;
- Identify landscape visibility from travelways (roads, trails, and waterways) and observation points;
- Determine Scenic Stability based upon how well the scenery that people value will last through time, given existing conditions of the socially valued scenery attributes and their ecosystem stressors; and

- Determine visual absorption capability based upon slope, vegetation, geology, and soils.

1.5.2 Scope of the Analysis

1.5.2.1 Analysis Area

The scenic quality analysis area for the Eddy Gulch LSR Project encompasses several Klamath LRMP Management Areas, which establish direction for Scenic Integrity (VQOs) (see Map A-5 Appendix A for the Klamath LRMP Visual Quality Objectives, as applied to the Eddy Gulch LSR). Sensitive viewpoints outside of the Eddy Gulch LSR have been included in the analysis area if proposed treatment areas are visible from those viewpoints.

1.5.2.2 Analysis Period

- Short-term effects are those occurring from actions in the immediate future (0–3 years).
- Long-term effects are those occurring over several seasons, 3 years and beyond.

1.5.3 Definitions for Terms Used in this Report

(Note: A full glossary can be found in Chapter 5 of the EIS.)

Scenic character — The combination of physical, biological, and cultural images that give an area its positive scenic identity and sense of place.

Scenic stability — The degree to which the valued Scenic Character can be sustained through time and ecological progression. The amount of valued scenic attributes present is an essential element of Scenic Stability.

Scenic integrity — The degree to which a landscape is free from visible disturbances that detract from the natural or socially valued appearance, including any visible disturbances due to human activities or extreme natural events. The Klamath LRMP uses VQOs to measure visual disturbance.

Scenic attractiveness — The scenic importance of a landscape based upon the intrinsic beauty of landforms, geology, water bodies, and vegetation.

Scenic quality — The degree to which the appearance of a place, landscape or feature can elicit psychological and physiological benefits to individuals and, therefore, to society in general.

Visual absorption class — The relative ability of a landscape to absorb alterations without loss or degradation of scenic quality.

Visual Quality Objectives (VQOs) — Measurable standards for scenery resource management based on the acceptable degree of visual disturbance to the characteristic landscape.

1.5.4 Intensity of Effects

“Intensity” refers to the severity of effects or the degree to which the action may adversely or beneficially affect a resource. The intensity definitions used throughout this analysis are described below.

Negligible. Effects would be at the lowest levels of detection and would have no appreciable effect on resources, values, or processes.

Minor. Effects would be perceptible but slight and localized. If mitigation were needed to offset any adverse effects, it would be relatively simple to implement and would likely be successful.

Moderate. Effects would be readily apparent and widespread, and would result in a noticeable change to resources, values, or processes.

Major. Effects would be readily apparent and widespread, and would result in a substantial alteration or loss of resources, values, or processes and would likely be permanent.

1.5.5 Measurement Indicators

Numerous environmental measures, or indicators, were used for determining existing conditions. These same indicators will be used to predict if desired conditions would be met following project implementation.

The two primary indicators for determining effects of a proposed project on the LSR are *Scenic Stability* and *Scenic Integrity*.

1.6 Affected Environment (Existing Conditions)

1.6.1 Scenic Character

In Eddy Gulch LSR Assessment Area, Scenic Character is composed of steep rugged mountain landforms, steeply incised stream channels, and diverse mixed-conifer forests. The Scenic Character of the Eddy Gulch LSR is primarily divided into three relatively distinct forms:

1. Higher-elevation true-fir forests composed of white fir, grand fir, and red fir often dominated by open fire patterns within continuous forest cover, high mountain meadows, and rocky ridgelines;
2. Relatively dense mid- to lower-elevation Douglas-fir and mixed-conifer stands (Figure 1); and
3. Lower-elevation (below 4,000 feet) hardwood–mixed-conifer forests with madrone, chinquapin, canyon live oak, and other hardwoods (Figure 2).



Figure 1. Vista view representative of Scenic Character of much of the Eddy Gulch LSR Project Assessment Area.



Figure 2. Representative mixed hardwood forest below 4,000 feet.

The above vegetative attributes tend to produce the following Scenic Character in the LSR: the more distant higher elevation landscapes are often characterized by old fire scars identified by changes in conifer vegetative cover based on the age of the earlier fire, generally continuous forest cover, high mountain meadows, and rocky ridgelines. Much of this middleground and background character is seen from trails and viewpoints in the Wilderness Areas surrounding the LSR, as well as some viewpoints such as Eddy Gulch Lookout. In foreground scenery throughout the LSR, these attributes produce or potentially could produce large trees with distinctive bark, dense, over-stocked stands, small-scale open spaces, hardwood species such as chinquapin and madrone, snags, large woody debris, shrubs, forbs, and wildlife habitat. Positive attributes such as open park-like stands and large trees are largely underrepresented due to the overly dense condition of many of the forest stands within the LSR.

Scenic attractiveness varies little throughout the Assessment Area, with the majority of the Eddy Gulch LSR being “Typical or Common.” Areas in the Scenic portion of the Wild and Scenic Salmon River (Figure 3) can be classified as “Distinctive.” “Indistinctive” areas are rare in the Assessment Area.



Figure 3. Distinctive scenery along the Salmon River.

Scenic visibility can be divided into viewsheds of high concern and those with moderate concern for visibility.

1.6.1.1 Viewsheds with a HIGH Concern for Scenery

- Pacific Crest National Scenic Trail (PCT), from Etna Summit through Russian Wilderness to Callahan Summit. It offers views at foreground (0–0.5 mile), but middleground (0.5–5 miles) distances are the primary concerns.
- PCT, through Marble Mountain Wilderness high points, including English Peak Lookout and Olson Meadows area. Views of the Assessment Area middlegrounds are the primary concern.
- Trinity Divide Trail, including Five Dollar Camp to Salmon Summit. Views of the Assessment Area backgrounds are the primary concern.
- Grizzly Lake Trail, from China Creek trailhead through Thompson Peak and Caesar Peak. Background views of the Assessment Area are the primary concern from Grizzly Lake Trail.

Top of Rush Creek Trail, near Deadman Peak in the Trinity Alps Wilderness. Concerns are same as above.

1.6.1.2 Roads of HIGH Concern for Scenery

There are no roads of high concern for scenery in the Eddy Gulch LSR Project Assessment Area.

1.6.1.3 Viewsheds with MODERATE Concern for Scenery

- Eddy Gulch Road 2E001: Sawyers Bar to Black Bear Summit;
- Portion of Road 39: Black Bear Summit to Eddy Gulch Lookout;
- Black Bear Summit to Blue Ridge Lookout, portions of roads 39N24 and 39N41;
- North Fork of the Salmon River Road 1C01;
- *Exception:* Sawyer's Bar Community. The community of Sawyer's Bar does not qualify as a viewshed of High or Moderate concern for scenery for this project because it is located outside of, and has limited views into, the Assessment Area;
- South Fork of the Salmon River Road 1C02;
- Eddy Gulch Lookout Road 39 from intersection with Lookout access road to its intersection with Cecilville Road / Highway 93;
- Deacon Lee Trailhead Road 39N58: From Road 39 to the trailhead; and

- **Wild and Scenic Rivers:** Most of the North Fork Salmon River and South Fork Salmon River are congressionally designated under the *Wild and Scenic Rivers Act*, a legal status precluding dam construction and placing further emphasis on management for habitat and other noncommodity values. Activities are judged from beaches, roads, dispersed sites, and the river itself.

1.6.1.4 Optional Viewsheds

The following are the optional Viewsheds that would ideally achieve the VQOs contained in the Klamath LRMP (Map A-5 in Appendix A):

- Deacon Lee Trail, eastward to Russian Wilderness; and
- Ridge road linking Blue Ridge Lookout, Eddy Gulch Lookout, and Deacon Lee Trailhead.

Distance zones viewed from these highly and moderately sensitive viewpoints are defined as foreground (less than 0.5 mile), middleground (0.5–5 miles), and background (over 5 miles).

1.6.2 Existing Scenic Integrity

Scenic Integrity is the degree to which a landscape is free from visible disturbances that detract from the natural or socially valued appearance, including any visible disturbances due to human activities or extreme natural events outside the Historic Range of Variability (historic range of variability). Definitions of the Scenic Integrity Levels can be found on page 11 (Appendix J) of the United States Department of Agriculture *Landscape Aesthetics: Handbook of Scenery Management 701*, which is incorporated by reference. These levels can be applied in two ways: (1) to describe a **level** of existing Scenic Integrity, or (2) to describe an **objective** for future Scenic Integrity to be achieved. These levels and descriptors of how people perceive them are shown in Table 1.

Table 1. Levels and descriptors of Scenic Integrity.

Levels of Scenic Integrity (the VQOs in the Klamath LRMP)	The Forest's Scenic Integrity as People Perceive It
Preservation	Unaltered, Complete
Retention	Unnoticeably Altered
Partial Retention (most common level for the Eddy Gulch LSR Project)	Slightly Altered
Modification	Moderately Altered
Maximum Modification	Heavily Altered
Unacceptable Modification (is never an objective on National Forest System lands)	Unacceptably Altered

Note: The Natural Appearance remains dominant in areas that meet the Preservation, Retention, and Partial Retention levels, while an Altered Appearance dominates areas where integrity meets Modification, Maximum Modification, or Unacceptable Modification levels. The Eddy Gulch LSR Project's existing Scenic Integrity, from most of the sensitive viewpoints, is Partial Retention or better. There are occasional activities or structures that do not meet Partial Retention, but overall, the landscape feeling is one of being only Slightly Altered or less.

The existing Scenic Integrity for the Eddy Gulch LSR Project Assessment Area ranges from Retention through Maximum Modification, with an overall cumulative impression of Retention / Partial Retention along the WSR corridors (Figure 4); Preservation to Unacceptable Modification, with an overall impression of Partial Retention for high-elevation viewpoints, such as the PCT and Eddy Gulch Lookout; and Preservation to Unacceptable Modification, with an overall cumulative rating of Partial Retention along recreational access roads.



Figure 4. Viewpoint within Wild and Scenic River corridor showing Retention / Partial Retention Scenic Integrity.

- 1. High Elevation Viewpoints:** Marble Mountain, Russian and Trinity Alps Wilderness Areas, PCT, and Eddy Gulch Lookout. Evidence of thinning and roads are the greatest existing scenery alterations, ranging in individual integrity levels from Preservation to Unacceptable Modification. These contrasts, considered cumulatively together, generally display Retention Scenic Integrity for foreground views within 0.5 mile, and Partial Retention for both middleground and background views (Figure 5).



Figure 5. Photograph from high-elevation viewpoint showing Retention foreground and Partial Retention middleground / background.

- 2. Recreational Access Roads:** For example, the road to Eddy Gulch Lookout. Evidence of roads, thinning, and mining are the greatest scenery alterations that exist in the Assessment Area. They range in Scenic Integrity level individually from Preservation to Unacceptable Modification. These contrasts, considered cumulatively together, generally display a Partial Retention degree of Scenic Integrity for foreground views (within 0.5 mile) and also for both middleground and background views (Figure 6).

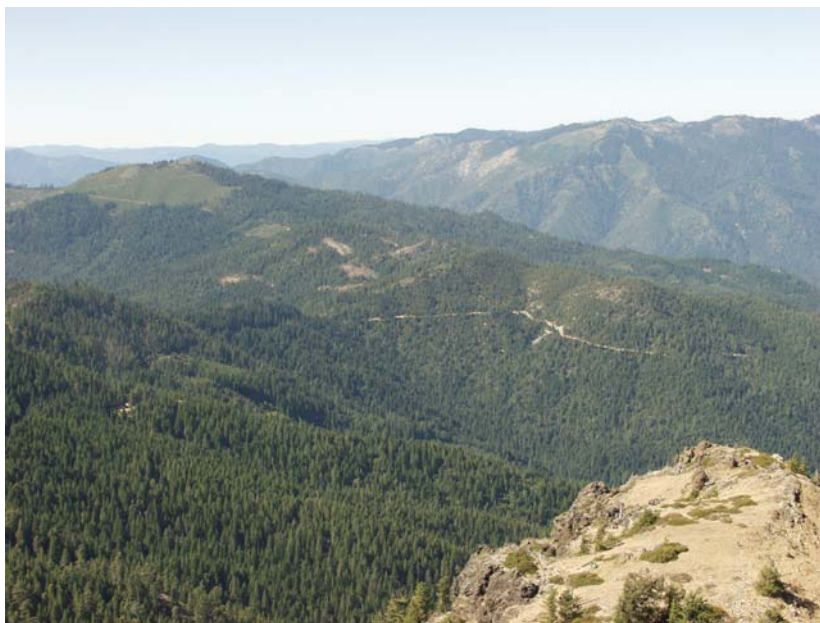


Figure 6. View from Eddy Gulch Lookout exhibiting Partial Retention Scenic Integrity.

1.6.2.1 Existing Scenic Stability

Scenic Stability is the degree to which the valued Scenic Character can be sustained through time and ecological succession. The Scenic Stability of the Eddy Gulch LSR's Scenic Character is of concern primarily because of the existing vegetative conditions. Many of the stands are not sustainable because they have departed too far from reference / historic conditions. The existing Scenic Stability for the majority of the Assessment Area is low for two primary reasons: (1) the fire hazard is high, and (2) many of the valued scenery attributes are absent or at risk of loss (open and diverse forest canopy, large tree prominence, views to understory vegetation, and wildlife are under-represented). An example of this would be in a landscape where, historically, the fire regime is one of frequent low-intensity fires, which have cleaned out the understory and woody debris, but kept the overstory crowns alive and intact. More recent fire suppression activities, however, have allowed the understory to become very dense with accumulations of highly flammable woody debris, which acts as a fuel ladder that sends fire into the crowns, and the occurrence of crown fires can potentially kill the entire stand. Stand-replacing fires result in conditions where there are fewer large trees with open and diverse forest canopies; fewer understory shrubs, forbs, and grasses; and fewer opportunities to view wildlife.

The dense stands of small- and intermediate-sized trees tend to obscure views into the stand, thereby diminishing the variety of small open spaces; large trees with distinctive bark; colorful hardwoods, shrubs, forbs, and grasses; and fewer opportunities to view wildlife. And lastly, because of the role these dense stands tend to play in a wildfire situation, there is a much higher risk of a stand-replacing fire blackening the entire foreground. People tend to find the results of these large-scale fires very unattractive and inconsistent with historic scenic character within the Assessment Area.

Most of the Eddy Gulch Project Assessment Area is inconsistent with, and trending away from, vegetation conditions that are more sustainable in this fire-adapted ecosystem. About 85 percent of the Assessment Area is moderately or severely inconsistent with historic vegetation conditions: yellow and green areas of the Eddy Gulch LSR Scenic Stability map (Map A-2 in Appendix A). This map is taken from the Fire Regime Condition Class (FRCC) analysis found in the "Fuels and Air Quality Report" for the Eddy Gulch LSR Project. This FRCC analysis system serves not only the resources of fire and fuels management but also works well to determine the levels of Scenic Stability for managing scenery. The key attribute shared by both efforts is the sustainability of the vegetation component. Wildlife and fisheries management need this system because of the dependence of habitat on sustainable vegetation. The scenic attribute of land and rock forms are not nearly as critical, since they change very little over time, regardless of fire behavior in the Assessment Area. Lastly, the FRCC system has been mapped, well tested, and accepted over time. The FRCC matrix in Table 2 includes very helpful information for designing vegetative treatments.

Visual absorption capability is moderate to low. Areas of dense vegetation are better able to screen human modifications, but steep slopes reduce this ability significantly. Higher elevations with sparse vegetation have little ability to absorb significant modifications without degradation of scenic quality.

Table 2. Fire Regime Condition Class.

Condition Class	Attributes	Example Management Options
FRCC 1 (Scenic Stability is Very High/High)	<ul style="list-style-type: none"> Fire regimes are within or near an historical range. The risk of losing key ecosystem components is low. Fire frequencies have departed from historical frequencies by no more than one return interval. Vegetation attributes (species composition and structure) are intact and functioning within an historical range. 	Where appropriate, these areas can be maintained within the historical fire regime by treatments such as fire use.
FRCC 2 (Scenic Stability is Moderate/Low)	<ul style="list-style-type: none"> Fire regimes have been moderately altered from their historical range. The risk of losing key ecosystem components has increased to moderate. Fire frequencies have departed (either increased or decreased) from historical frequencies by more than one return interval. This results in moderate changes to one or more of the following: fire size, frequency, intensity, severity, or landscape patterns. Vegetation attributes have been moderately altered from their historical range. 	Where appropriate, these areas may need moderate levels of restoration treatments, such as fire use and hand or mechanical treatments, to be restored to the historical fire regime.
FRCC 3 (Scenic Stability is Very Low/None)	<ul style="list-style-type: none"> Fire regimes have been significantly altered from their historical range. The risk of losing key ecosystem components is high. Fire frequencies have departed from historical frequencies by multiple return intervals. This results in dramatic changes to one or more of the following: fire size, frequency, intensity, severity, or landscape patterns. Vegetation attributes have been significantly altered from their historical range. 	Where appropriate, these areas may need high levels of restoration treatments, such as hand or mechanical treatments. These treatments may be necessary before fire is used to restore the historical fire regime.

1.7 Desired Stand Conditions

An important desired future condition within the Eddy Gulch LSR is the restoration and perpetuation of socially valued scenery attributes. In order to accomplish this, the Eddy Gulch LSR Project Scenic Character goal is to reduce the excessive wildfire fuels that currently exist and modify the forest canopy so it mimics the pre-European fire regime within the proposed treatment units and also to increase the diversity of their vegetative structure, form, and distribution. This goal will improve Scenic Stability, Scenic Character, and Scenic Integrity. A specific objective under this primary goal should be to create and maintain structural diversity with more open, park-like stands, and irregular spacing with scattered clumps.

An important goal of the desired conditions is to increase the average tree size, and large tree character will significantly improve Scenic Stability, but will have very little, if any, effect upon Scenic Integrity. A specific objective of this secondary goal should be to maintain about 20–30 percent of the foregrounds in high and moderately sensitive viewsheds in late-successional stage over time. In areas that are thinned, foregrounds should meet Partial Retention within three years from activity debris and site disturbance, and middlegrounds meet Partial Retention from the many sensitive viewpoints, including Wilderness. Hardwood species in the middle-ground view will improve scenic diversity.

The more open canopy conditions to be created would result in a greater ecological resilience of these areas to potential disturbance events and increase the sustainability of vegetation-dependent values, including the valued Scenic Character attributes. To the degree practicable, achieving these goals would improve forage areas, thermal and hiding cover, and areas for reproduction for wildlife species, which will improve opportunities to see and hear wildlife, such as birds.

This Scenic Character represents the ideal sustainable form that offers the greatest enjoyment of positive aesthetic attributes over the longest period of time.

1.8 Environmental Consequences

Scenery effects can be classified according to effects to two measurable elements: *Scenic Stability* and *Scenic Integrity*. Scenic Stability is the degree to which the socially valued Scenic Character can be sustained through time and ecological progression. Changes to Scenic Stability can be either positive or negative, depending upon how they affect the richness and longevity of the valued Scenic Character or result in greater risk of change. Scenic Integrity is the degree to which a landscape is free from visible disturbances that detract from the natural or socially valued appearance, including visible disturbances due to human activities or extreme natural events. Positive changes to Scenic Integrity result from lessening of visible disturbances and may be due to a variety of factors, including vegetation growth; modification of human disturbances to have more naturally appearing form, line, color or pattern; and other human actions or naturally occurring events. Negative changes to Scenic Integrity result from an increase in visible disturbances, either in number or magnitude and can occur due to either human actions or natural events beyond the Historic Range of Variability (HRV) in a landscape. Acceptable levels of Scenic Integrity are defined by the VQOs for the Assessment Area established by the Klamath LRMP.

1.8.1.1 Scenic Stability Effects Analysis

Much of the LSR currently has very low to low Scenic Stability due primarily to overly dense vegetation conditions, resulting in the possibility that a large fire would significantly change the existing valued vegetation patterns. The primary valued scenic attributes within the Eddy Gulch LSR are vegetation, landform, rockform, waterform, and to a lesser extent, wildlife. All of the alternatives have the potential to change Scenic Stability through changes to vegetation patterns, but it is unlikely that any of the alternatives would result in changes to landform, rockform, or waterform within the Assessment Area. Wildlife changes may result from implementation of all three alternatives as a result of vegetation changes.

The Eddy Gulch LSR's scenery vegetation attributes that could be affected by the alternatives, resulting in potential changes to valued Scenic Character, are as follows:

- Higher-elevation true-fir forests composed of white fir and red fir often dominated by open fire patterns within continuous forest cover, high mountain meadows, and rocky ridgelines;
- Relatively dense mid- to lower-elevation Douglas-fir and mixed-conifer stands; and
- Lower elevation (below 4,000 feet) hardwood mixed-conifer forests with madrone, chinquapin, canyon live oak, and other hardwoods.

Valued scenic attributes potentially at risk through continuance of overly dense vegetation conditions in all three Scenic Character types include large trees, some of which have distinctive bark; open park-like stands; small scale and large scale open spaces; diversity of vegetation including hardwood species, snags and large woody debris; and wildlife viewing opportunities.

Scenic Stability effects vary by the types of treatments proposed, specific locations of those treatments, and the specific methods used to recreate naturalistic lines, forms, colors, and patterns.

1.8.1.2 Scenic Integrity Effects Analysis

The Klamath LRMP uses the VQOs (Table 3) to measure Scenic Integrity in degrees of visual disturbance.

Table 3. Visual Quality Objectives.

VQO	Description
Preservation	Unaltered. Ecological changes only.
Retention	Unnoticeably Altered. Activities are not evident to casual forest visitor.
Partial Retention	Slightly Altered. Activities may be evident but must be subordinate to characteristic landscape.
Modification	Moderately Altered. Activities may dominate, but must use naturally established form and texture. Areas should appear natural when viewed in foreground and middleground.
Maximum Modification	Heavily Altered. Activities may dominate, but must use naturally established form and texture. Areas should appear natural when viewed in background.

The vast majority of the Eddy Gulch LSR has a Scenic Integrity goal of Partial Retention. Since the overall impression of the Assessment Area ranges from Partial Retention to preservation, the current condition meets Klamath LRMP VQOs, even though individual disturbances may result in lower ratings in a localized area. Corridors along the South Fork of the Salmon River, a designated Recreational River, and the PCT have an LRMP VQO of Retention. The proposed project alternatives have the possibility of negatively affecting existing levels through increased evidence of disturbance, including natural events that are outside the HRV, such as a stand-replacing wildfire, and human modifications, such as cable corridors, stumps, and/or post-thinning debris.

The remainder of this section examines the direct, indirect, and cumulative effects of the three alternatives: (1) Alternative A: No Action, (2) Alternative B: Proposed Action, and (3) Alternative C: No New Temporary Roads Constructed.

1.8.1.3 Projects Used to Determine Cumulative Effects Under Each Alternative

The following reasonably foreseeable future projects were analyzed for cumulative effects:

- Installation of telephone and fiber-optic lines through the Ranger District.
- North Fork road maintenance.
- Construction of a fuelbreak system west of Black Bear Ranch.
- Projects on private lands funded through the Salmon River Community Wildfire Protection Plan.

1.8.2 Alternative A: No Action

1.8.2.1 Scenic Integrity

Direct Effects. There would be no direct effects on Scenic Integrity from the no-action alternative.

Indirect Effects

Allowing uncontrolled shrub and small tree growth could lead to slightly higher levels of Scenic Integrity—Additional vegetation growth in the Assessment Area may eventually disguise or screen existing and/or future human-induced visual disturbances (such as from thinning, campground or trail development, or temporary roads), leading to slightly higher levels of Scenic Integrity. This primarily applies to areas with previously decommissioned roads. This would be a negligible beneficial effect.

Cumulative Effects

Uncontrolled burning of a large wildfire would result in significantly lower Scenic Integrity—Due to the density of vegetation growth in the Assessment Area, wildfires covering a projected 5,065 acres of passive crown fire and 780 acres of active crown fire would likely create large openings in the forest canopy, thereby exposing existing roads and effects from past salvage operations. These effects have a strong probability of lowering the Scenic Integrity levels to Modification or Maximum Modification, which are well outside Klamath LRMP VQOs. This would be a long-term major adverse effect.

Cumulative scenic and stability effects of Alternative A, combined with the reasonably foreseeable future projects identified above, will be dependent upon specific mitigation undertaken by those projects and the actual locations of proposed activities. The cumulative changes in scenic resources should be minimal as long as specific actions undertaken in future projects are consistent with Klamath LRMP VQOs and other Standards and Guidelines.

Conclusion. The no-action alternative in itself would cause negligible effects on Eddy Gulch LSR scenery; however, the cumulative effects of future wildfire would potentially create long-term major adverse effects on the Scenic Resources in the Assessment Area.

1.8.2.2 Scenic Stability

Direct Effects. There would be no direct effects on Scenic Stability from the no-action alternative.

Indirect Effects

Maintaining current vegetation conditions would maintain low Scenic Stability—Scenic Stability could degrade further to low / very low if future vegetation growth of ladder fuels (overly dense stands of small- and intermediate-sized trees) and lack of open stands increases the wildfire risk. Climate change may contribute to further drying conditions in the Assessment Area and an extended dry season, further increasing the risk of fire and lowering the areas of Scenic Stability currently rated as moderate/low to a low/very low level.

Cumulative Effects

Uncontrolled burning of a large wildfire would maintain low Scenic Stability and possibly further reduce Scenic Stability to a low / very low level—Surface fires are expected to consume all of the litter and woody debris less than 3 inches in diameter and all shrubs and small trees less than 6 inches dbh; however, a large fire would eliminate most valued scenery attributes and likely leave a heavy fuel load that would further increase future risk to scenery attributes / Scenic Character within the approximately 7,200-acre wildfire that was modeled for Alternative A. This would result in major adverse effects.

Increased population growth in northern California and southern Oregon could increase recreation use in the Eddy Gulch LSR (and the entire forest), which may further increase the likelihood of igniting an accidental wildfire. This would be a negligible adverse effect of itself, with a much more significant cumulative effect combined with fire.

Conclusion. The no-action alternative in itself would cause negligible effects on Eddy Gulch LSR scenery; however, the cumulative effects of future wildfire would potentially create long-term major adverse effects on the scenic resources in the Assessment Area.

1.8.3 Alternative B: Proposed Action

1.8.3.1 Scenic Integrity

Direct Effects

Reducing canopy cover from approximately 60 percent to approximately 40 percent along ridgelines would affect middleground and background views from sensitive viewpoints—These effects on Scenic Integrity are likely to be short-term minor adverse, and if thinning is performed in such a way as to follow natural line, form, and pattern, it is likely that such effects would be reduced to a negligible level.

Potentially short-term moderate adverse effects on Scenic Integrity include visible disturbance in foreground through stumps, slash, and other debris, and/or evidence of tractor operations and skid and cable corridors. The resource protection measures (such as flush-cutting and obscuring stumps and removal of debris from the vicinity of PCT) described in the Scenery Analysis document would reduce these potential effects to minor or negligible levels. The one mastication treatment visible from the PCT is approximately 400 feet below the trail, thus only the tops of the trees would be visible, and treatments in this unit would have negligible affects on PCT users. Effects of fuel reduction techniques on Scenic Integrity occurring in middleground and background views would be negligible.

Short-term minor temporary effects on Scenic Integrity may occur during treatment operations themselves through dust, smoke, and visibility of equipment. To reduce the potential for these occurrences, treatments should be done during a time when trail, river and campground use is at a minimum. This may not be possible for prescribed burning, since burning is dependent upon air quality, weather, and fuel moisture conditions. In this case, however, the effects would not be outside the historic range of variability for natural fire events, so Scenic Integrity effects would be negligible. Potential effects on public safety are discussed in the Recreation Report.

Implementing fuel reduction techniques adjacent to roads with a Moderate Concern for Scenery could affect Scenic Integrity of foreground views—Thinning in M Units has the potential to affect the Scenic Integrity of foreground views if stumps within visual sightlines become dominant over natural landforms. The majority (if not all) of the roads with a Moderate Concern for Scenery, such as Road 39, pass through areas having a VQO of Partial Retention or better, so human disturbances must be subordinate to the natural landscape. Without mitigation, stumps may be highly visible for many years following thinning, potentially resulting in both short-term and long-term moderate adverse effects. With implementation of the resource protection measures described in the Scenery Analysis document, effects on Scenic Integrity would be reduced to short-term minor or negligible adverse.

Implementing fuel reduction techniques adjacent to the South Fork of the Salmon River would affect the Scenic Integrity of foreground views—Moderate beneficial effects include creating more open, park-like settings with larger trees and better visibility into the forest. This could be particularly important to visitors in the Shadow Creek campground, which occurs within FRZ 15. Additionally, selective thinning has the potential to open up more middleground and background vista views in areas of dense vegetation. Potentially short-term moderate adverse effects on Scenic Integrity include visible disturbance in foreground through stumps, slash, and other debris, and/or evidence of tractor and cable corridors. The prescriptions contained in the Proposed Action call for fuel reduction in two areas along the South Fork of the Salmon River. One of these is located along the Designated WSR segment and the other along the Designated Scenic River segment. Prescribed burning is specified within both of these segments as well. Fuel reduction operations would result in some hand felling of smaller material (less than 10 inches dbh) and low-intensity fire in the Riparian Reserves. Treatments methods incorporated in the Proposed Action would meet Partial Retention VQOs for Recreation Rivers and Riparian Areas. Additionally, the Proposed Action specifies implementation of mitigation measures similar to the PCT when treatment is necessary adjacent to Recreation Special Places. These measures should reduce potential effects on Scenic Integrity to negligible levels. The effects of fuel reduction treatments on Scenic Integrity occurring in middleground and background views would be negligible.

Constructing cable corridors in the M Units (thinning units) would affect the Scenic Integrity of middleground and background views from the sensitive viewpoints—Cable corridors will be narrow, 15–20 feet wide, and may largely be obscured by larger tree crowns; however, vertical lines in the landscape created by cable corridors could be significant source of visual disturbance and, therefore, have the potential to be a short-term moderate adverse effect on Scenic Integrity throughout the M Units within the FRZs. Locating the cable corridors such that the distinctive vertical line seen in middleground and background views from moderate and highly sensitive viewpoints is broken up by debris, and differences in stand density across the corridor is minimized, as included in the resource protection measures would reduce the effect to short-term minor adverse.

Constructing temporary roads could affect the Scenic Integrity of middleground and background views from sensitive viewpoints—Approximately 1.03 miles of temporary roads would be constructed in FRZ 5 to connect M Units within that zone. This temporary road climbs a ridge from Road 39N23 and may be visible from points west and southwest. The only sensitive viewshed in this direction is the South Fork of the Salmon River, and intervening ridges between the river and the

temporary road should effectively screen any potential effects. Scenic Integrity effects due to construction of temporary roads would be negligible and within Partial Retention VQOs.

Implementing fuel reduction treatments along emergency access routes could affect Scenic Integrity of middleground and background views from sensitive viewpoints—

Approximately 16 miles of emergency access routes outside FRZs and Prescribed Burn Units (Rx Units) would receive treatment within 50 feet of the road. Treatments include removal of trees 10 inches dbh or less on slopes less than 45 percent and removal of trees up to 6 inches dbh on slopes greater than 45 percent. This includes 69.5 acres within Riparian Reserves, including a segment along the South Fork of the Salmon River, which is a Designated WSR. VQOs along the South Fork of the Salmon are Partial Retention, which allows some evidence of activities as long as they are subordinate to the natural landscape. Since fuel reduction techniques involve selective thinning of small trees in an irregular pattern and spacing and post cleanup of unsightly debris along these roads, the resulting appearance would remain dominantly natural appearing, meeting the Partial Retention VQO. A potentially more significant effect may arise from treatments along emergency access routes outside of FRZ or Rx Units that are set within areas of overly dense vegetative growth. These areas could potentially appear as 100 or more foot-wide horizontal stripes in the landscape. Forest Road 40N61 is the only emergency access route identified for treatment that is outside an FRZ or Rx Unit. This route is located in the Whites Gulch canyon until it switchbacks steeply up to meet Road 39. Road 40N61 is not visible from sensitive viewpoints while in the canyon, but as it climbs out of the watershed, segments may be visible from Road 39, which has been identified as a viewpoint of Moderate Concern. The down-slope oblique angle of the view, however, would minimize any visual differences in vegetation density, and potential scenic effects would be negligible.

Indirect Effects

Weathering of stumps and growth of forest floor vegetation would improve Scenic Integrity—As stumps weather, discolor, and decay, evidence of human disturbance in FRZs would lessen, and Scenic Integrity would improve. This, along with screening provided by growth of grasses, shrubs and trees, would combine to provide a minor to moderate beneficial effect on Scenic Integrity in foregrounds in areas of high and Moderate Concern for sensitivity.

Cumulative Effects

Thinning of ladder fuels would both increase and decrease the likelihood that future actions would affect Scenic Integrity—Thinning, which results in more open and attractive, park-like stands, would potentially increase the visibility of future human disturbances in the foreground of sensitive viewpoints by removing vegetative screening. The magnitude of the effect would be dependant upon the type and magnitude of future disturbance. Given the localized nature of this possibility, this is potentially a minor adverse effect. On the other hand, this same thinning would decrease the possibility that a large stand-replacing fire outside the historic range of variability would adversely affect valued scenic characteristics. This would be a major beneficial effect.

The cumulative scenic and stability effects of Alternative B, combined with the reasonably foreseeable future projects identified above, will be dependent upon specific mitigation undertaken by those projects and the actual locations for proposed actions. The cumulative changes in scenic resources would be minimal, as long as specific actions undertaken in future projects are consistent with Klamath LRMP VQOs and other Standards and Guidelines.

Conclusion. The Proposed Action would likely have short-term adverse effects on Scenic Integrity as viewed from identified sensitive viewpoints; however, with implementation of the resource protection measures, such effects would be minor and remain within the VQOs established by the Klamath LRMP.

1.8.3.2 Scenic Stability

Direct Effects

Removing overly dense stands of small- and intermediate-sized trees and shrubs in FRZs would decrease potential effects of wildfire on valued scenic resources and increase Scenic Stability—The thinning that will occur in FRZs would reduce the likelihood of a large wildfire spreading from one watershed to the next, thereby increasing Scenic Stability throughout the Assessment Area. This would result in a short-term moderate beneficial effect that could extend long-term, depending upon forest management.

Implementing treatments in the Rx Units would increase resiliency to wildfires and increase Scenic Stability—Reducing ladder fuels through prescribed burning would reduce the likelihood that a large stand-replacing wildfire—one that exceeds the historic range of variability—would occur in the Assessment Area. Fuel reduction would increase resiliency of valued scenic resources and improve Scenic Stability to moderate to high levels. This would be a short-term moderate beneficial effect that could extend long term, depending upon forest management.

Implementing fuel reduction techniques adjacent to the PCT and other trails with a High Concern for Scenery would affect Scenic Stability—Fuel reduction techniques would have a beneficial effect on Scenic Stability due to the return of the area to a fire regime within or close to the historic range of variability and increase attractive trailside scenery attributes associated with a more open forest canopy.

Indirect Effects

Removing small- and intermediate-sized trees would promote the growth of larger trees—This would result in improving Scenic Character and also result in an increase in Scenic Stability, since the landscape would display more large trees as experienced historically and would also become less vulnerable to change by fire. This would have a long-term moderate beneficial effect on Scenic Stability.

Cumulative Effects

Managing woody vegetation would affect future Scenic Stability within the Assessment Area—Cumulative effects on Scenic Stability would depend upon short- and long-term management actions in maintaining the reduced fuel loads following project implementation. This, in turn, would maintain a moderate to high Scenic Stability. Management that allows significant regrowth of removed ladder fuels would result in corresponding reductions in Scenic Stability. Effects may range from negligible to major, depending upon future vegetation management practices.

The cumulative scenic and stability effects of this alternative, combined with the reasonably foreseeable future projects identified above, will be dependent upon specific mitigation undertaken by those projects and the actual locations for proposed activities. The cumulative changes in scenic

resources would be minimal as long as specific actions undertaken in future projects are consistent with Klamath LRMP VQOs and other Standards and Guidelines.

Conclusion. The Eddy Gulch LSR Project would result in moderate to major beneficial effects because the proposed fuel reduction treatments would contribute to an increase in Scenic Stability due to reduction of fire hazards and enhancement of large tree and open forest canopy scenery attributes.

1.8.4 Alternative C: No Temporary Roads Constructed

1.8.4.1 Scenic Integrity

Direct Effects

Reducing canopy cover from approximately 60 percent to approximately 40 percent along ridgelines would affect Scenic Integrity of middleground and background views from sensitive viewpoints—This would likely result in short-term minor adverse effects, and if thinning is performed in such a way so as to follow natural line, form, and pattern, it is likely that such effects would be reduced to a negligible level.

Implementing fuel reduction techniques adjacent to the PCT and other trails with a High Concern for Scenery would affect the Scenic Integrity of foreground views—Potentially moderate short-term adverse effects on Scenic Integrity include visible disturbance in foreground through stumps, slash, and other debris, and/or evidence of tractor operations and skid and cable corridors. The resource protection measures (such as flush-cutting and obscuring stumps and removal of debris from the vicinity of PCT) described in the Scenery Analysis document, would reduce these potential effects to minor or negligible levels. The one mastication treatment visible from the PCT is approximately 400 feet below the trail, thus only the tops of the trees would be visible and treatments within this unit would have negligible affects on PCT users. Effects of fuel reduction treatments occurring in middleground and background views would be negligible. Fuel reduction techniques would have a beneficial effect on Scenic Stability as indicated earlier in this analysis.

Short-term minor temporary effects may occur during treatment operations themselves through dust, smoke, and visibility of equipment. To reduce the potential for these occurrences, treatments would be done during a time when trail use is at a minimum. This may not be possible for prescribed burning, since burning is dependent upon air quality, weather, and fuel moisture conditions. In this case, however, the effects would not be outside the historic range of variability for natural fire events, so Scenic Integrity effects would be negligible. Potential effects on public safety are discussed in the “Fuels and Air Quality Report” and the “Recreation Report.”

Implementing fuel reduction techniques adjacent to roads with a Moderate Concern for Scenery would affect Scenic Integrity of foreground views—Thinning in M Units has the potential to affect foreground views if stumps within visual sightlines become dominant over natural landforms. The majority, if not all, of the roads with a Moderate Concern for Scenery, such as Road 39, pass through areas having a VQO of Partial Retention, so human disturbances must be subordinate to the natural landscape. Without mitigation, stumps can be highly visible for many years following thinning operations, potentially resulting in both short-term and long-term moderate adverse effects. Implementation of the resource protection measures described in the Scenery Analysis document would reduce effects to minor or negligible short-term adverse.

Implementing fuel reduction techniques adjacent to the South Fork of the Salmon River would affect Scenic Integrity foreground views—The potential short-term moderate adverse effects on Scenic Integrity include visible disturbance in foreground views with the presence of stumps, slash, and other debris, and/or evidence of tractors and cable corridors. The prescriptions contained in the Proposed Action call for fuel reduction in two areas along the South Fork of the Salmon River. One area is located along the Recommended Recreational River segment and the other along the Designated Scenic River segment. Prescribed burning is specified in both of these segments as well. Fuel reduction operations would result in some hand thinning of smaller material (less than 10 inches dbh) and low-intensity fire in the Riparian Reserves. The proposed treatment methods would meet Partial Retention VQOs for Recreational Rivers and Riparian Areas. Additionally, the Proposed Action and Alternative C both specify implementation of resource protection measures when treatment is necessary adjacent to Recreation Special Places. These measures would reduce potential effects to negligible levels. The effects of fuel reduction treatments occurring in middleground and background views would be negligible.

Short-term minor temporary effects on Scenic Integrity may occur during treatment operations themselves through dust, smoke, and visibility of equipment. To reduce the potential for these occurrences, treatments would be done during a time when river and campground use is at a minimum. This may not always be possible for prescribed burning, since burning is dependent upon air quality, weather, and fuel moisture conditions. In this case, however, the effects would not be outside the historic range of variability for natural fire events, so Scenic Integrity effects would be negligible. Potential effects on public safety are discussed in the “Fuels and Air Quality Report” and the “Recreation Report.”

Constructing cable corridors in thinning units would affect the Scenic Integrity of middleground and background views from the sensitive viewpoints—Cable corridors would be narrow, 15–20 feet wide, and may be largely obscured by larger tree crowns; however, vertical lines in the landscape created by cable corridors could be a source of visual disturbance and, therefore, result in a short-term moderate adverse effect on Scenic Integrity throughout the M Units (thinning units). Effects could be reduced to short-term minor adverse by locating the cable corridor such that the distinctive vertical line seen in middleground and background views from moderate and highly sensitive viewpoints is broken up by debris and differences in stand density across the corridor, as included in the resource protection measures.

Implementing fuel reduction treatments along emergency access routes would affect Scenic Integrity of middleground and background views from sensitive viewpoints—Approximately 16 miles of emergency access routes outside of FRZs and Rx Units would receive treatment within 50 feet of the road. Treatments include removal of trees 10 inches dbh or less on slopes less than 45 percent and removal of trees up to 6 inches dbh on slopes greater than 45 percent. This includes 69.5 acres in Riparian Reserves, including a segment along the South Fork of the Salmon River that is a Recommended Recreational River. VQOs along the South Fork of the Salmon are Partial Retention, which allows some evidence of activities as long as they are subordinate to the natural landscape. Since fuel reduction treatments involve selective thinning of small trees around the roads, the possibility of modifications being dominant would be minor. A potentially more significant effect may arise from treatments along emergency access routes outside of FRZ or Rx Units that are set within areas of overly dense vegetative growth. These areas could potentially appear as 100 or

more foot-wide horizontal stripes in the landscape. Forest Road 40N61 is the only emergency access route identified for treatment that is outside an FRZ or Rx Unit. This route is located in the Whites Gulch canyon until it switchbacks steeply up to meet Road 39. Road 40N61 is not visible from sensitive viewpoints while in the canyon, but as it climbs out of the watershed, segments may be visible from Road 39, which has been identified as a viewpoint of Moderate Concern. The down-slope oblique angle of the view, however, would minimize any visual differences in vegetation density, and potential scenic effects would be negligible.

Indirect Effects

Weathering of stumps and growth of forest floor vegetation would improve Scenic Integrity—As stumps weather, discolor, and decay, evidence of human disturbance in FRZs would lessen and Scenic Integrity would improve. This, along with screening provided by growth of grasses, shrubs and trees, would combine to provide a minor to moderate beneficial effect on Scenic Integrity in foregrounds in areas of High and Moderate Concern for sensitivity.

Cumulative Effects

Thinning of ladder fuels would both increase and decrease the likelihood that future actions would affect Scenic Integrity—Thinning, which results in more open and attractive park-like stands, would potentially increase the visibility of future human disturbances in the foreground of sensitive viewpoints by removing vegetative screening. The magnitude of the effect would be dependant upon the type and magnitude of future disturbance. Given the localized nature of this possibility, it would result in a potentially minor adverse effect. On the other hand, this same thinning would decrease the possibility that a large, stand-replacing fire outside the historic range of variability would adversely affect valued scenic characteristics. This would be a major beneficial effect.

The cumulative scenic and stability effects of this alternative, combined with the reasonably foreseeable future projects identified above, will be dependent upon specific mitigation undertaken by those projects and the actual locations for proposed activities. The cumulative changes in scenic resources would be minimal as long as specific actions undertaken in future projects are consistent with Klamath LRMP VQOs and other Standards and Guidelines.

Conclusion. The Proposed Action would likely have short-term adverse effects on Scenic Integrity as viewed from identified sensitive viewpoints; however, with proposed resource protection measures, such effects would be minor and remain within the VQOs established by the Klamath LRMP.

1.8.4.2 Scenic Stability

Direct Effects

Removing overly dense stands of small and intermediate trees and shrubs in FRZs would decrease potential effects of wildfire on valued scenic resources and thereby increase Scenic Stability from low / very low to moderate/high—Thinning of woody vegetation in FRZs would reduce the likelihood of a large wildfire spreading from one watershed to the next, thereby increasing Scenic Stability throughout the Assessment Area. This would be a short-term moderate beneficial effect that could extend long-term, depending upon future forest management.

Implementing Rx Units outside of FRZs would increase resiliency to wildfires and increase Scenic Stability from low / very low to moderate/high—Reducing ladder fuels through prescribed burning would reduce the likelihood that a large stand-replacing wildfire—one that exceeds the historic range of variability—would occur in the Assessment Area. Fuel reduction would increase the resiliency of valued scenic resources and improve Scenic Stability. This would be a short-term moderate beneficial effect that could extend long term, depending upon future forest management.

Implementing fuel reduction techniques adjacent to the PCT and other trails with a High Concern for Scenery would affect Scenic Stability—Fuel reduction techniques would have a beneficial effect on Scenic Stability due to the return of the area to a fire regime within or close to the historic range of variability and increase attractive trailside scenery attributes associated with a more open forest canopy.

Indirect Effects

Removing small- and intermediate-sized trees would promote the growth of larger trees—This would improve Scenic Character and also result in an increase in Scenic Stability, since the landscape would display more large trees as experienced historically and would also become less vulnerable to potential major adverse effects of a wildfire. This would have a long-term moderate beneficial effect on Scenic Stability.

Cumulative Effects

Managing woody vegetation would affect future Scenic Stability within the Assessment Area—Cumulative effects on Scenic Stability would depend upon short- and long-term future management actions in maintaining the reduced fuel loads established by the Eddy Gulch LSR Project. Fuel management that maintains fuels at low levels would maintain a moderate to high Scenic Stability. Management that allows significant regrowth of removed ladder fuels would result in corresponding reductions in Scenic Stability. Effects may range from negligible to major, depending upon future vegetation management practices.

The cumulative scenic and stability effects of this alternative, combined with the reasonably foreseeable future projects identified above, will be dependent upon specific mitigation undertaken by those projects and the actual locations for proposed activities. The cumulative changes in scenic resources would be minimal as long as specific actions undertaken in future projects are consistent with Klamath LRMP VQOs and other Standards and Guidelines.

Conclusion. This project would result in moderate to major beneficial effects because the proposed fuel reduction treatments would contribute to an increase in Scenic Stability due to reduction of fire hazards and enhancement of large tree character and open forest canopy scenery attributes.

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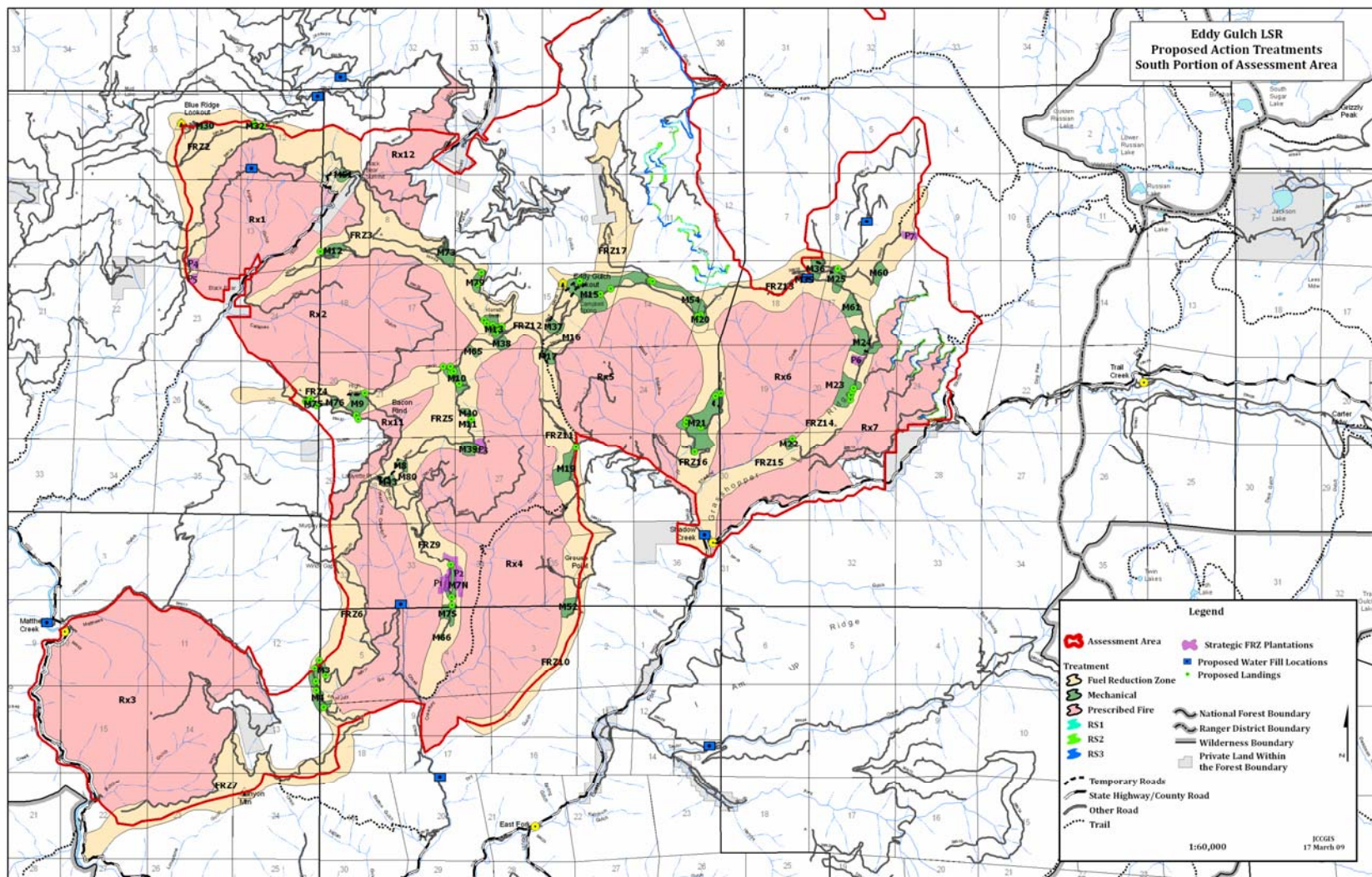
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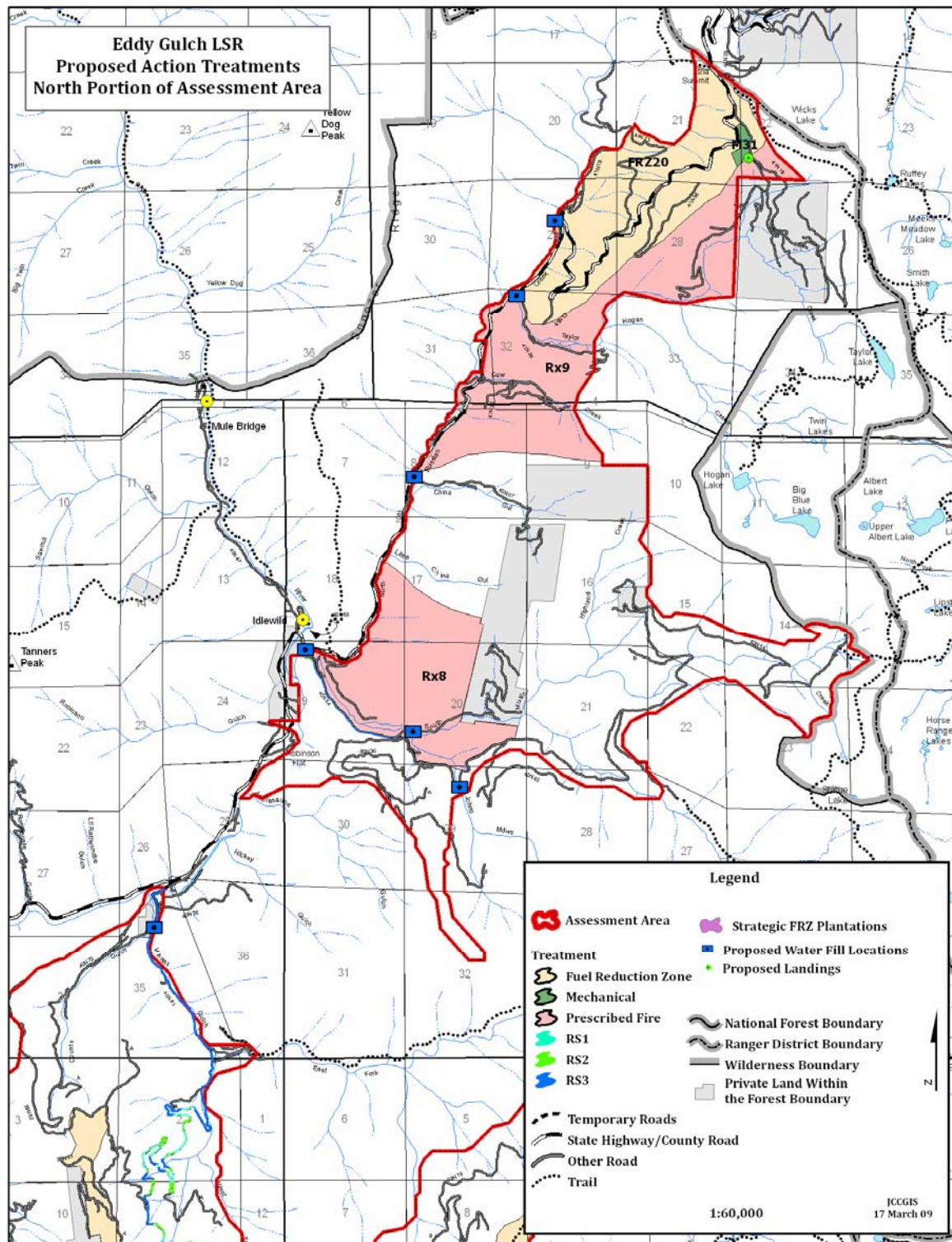
Appendix A

Maps

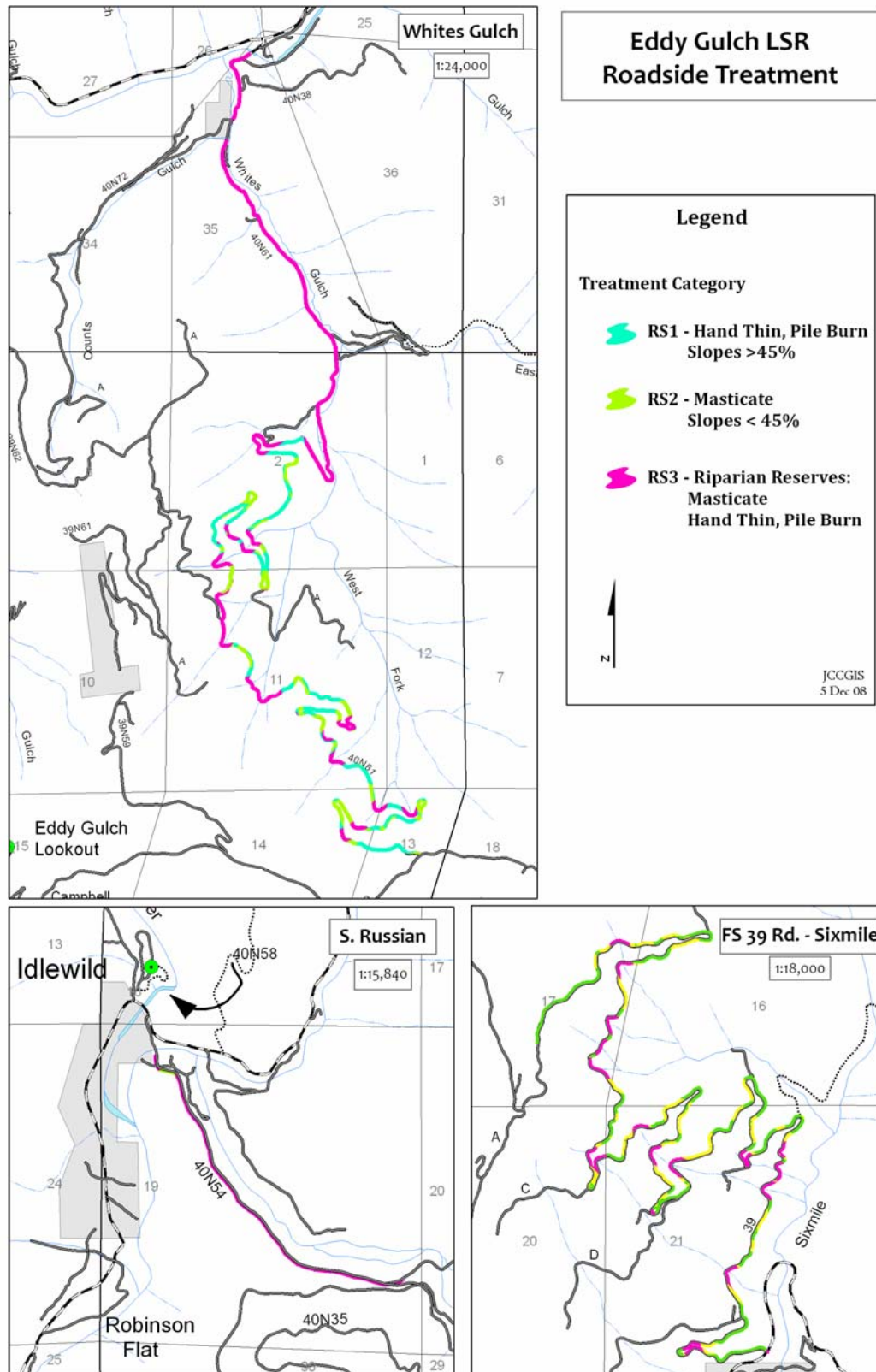
Map A-1. Proposed treatment units in the south portion of the Eddy Gulch LSR Project Assessment Area.



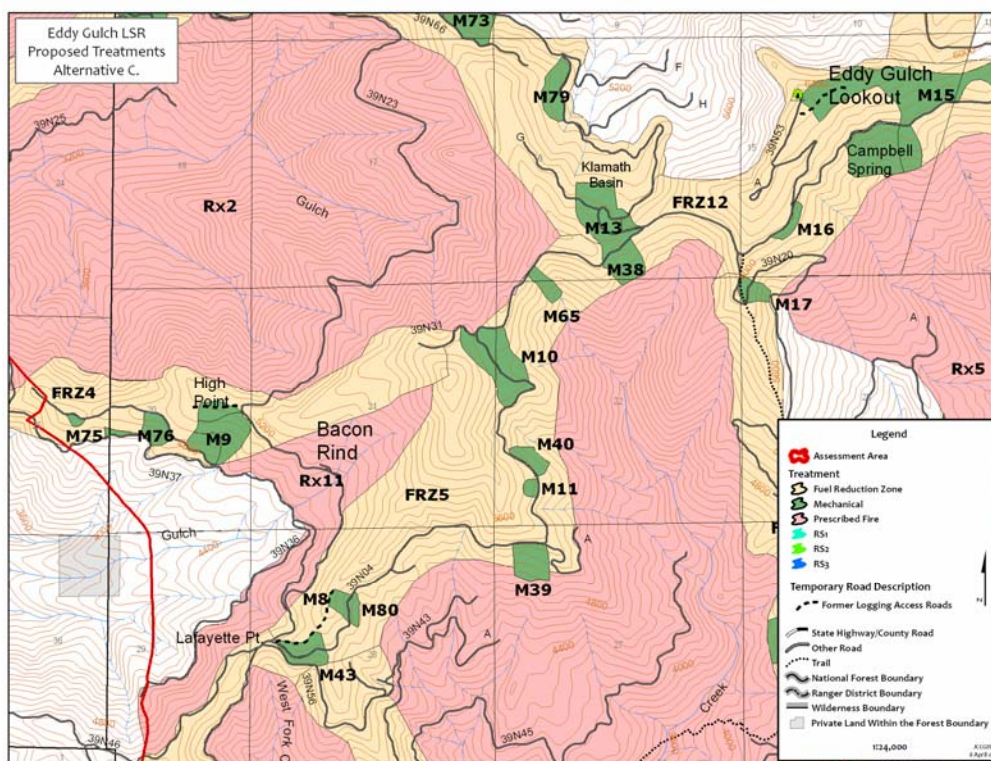
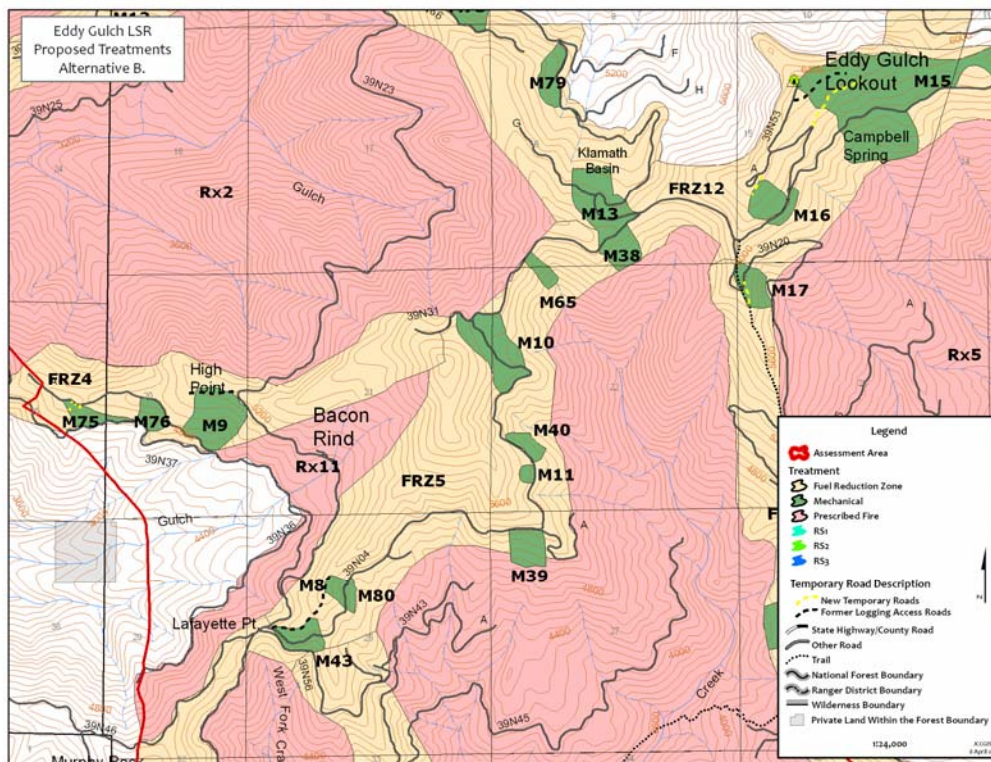
Map A-2. Proposed treatment units in the north portion of the Eddy Gulch LSR Project Assessment Area.



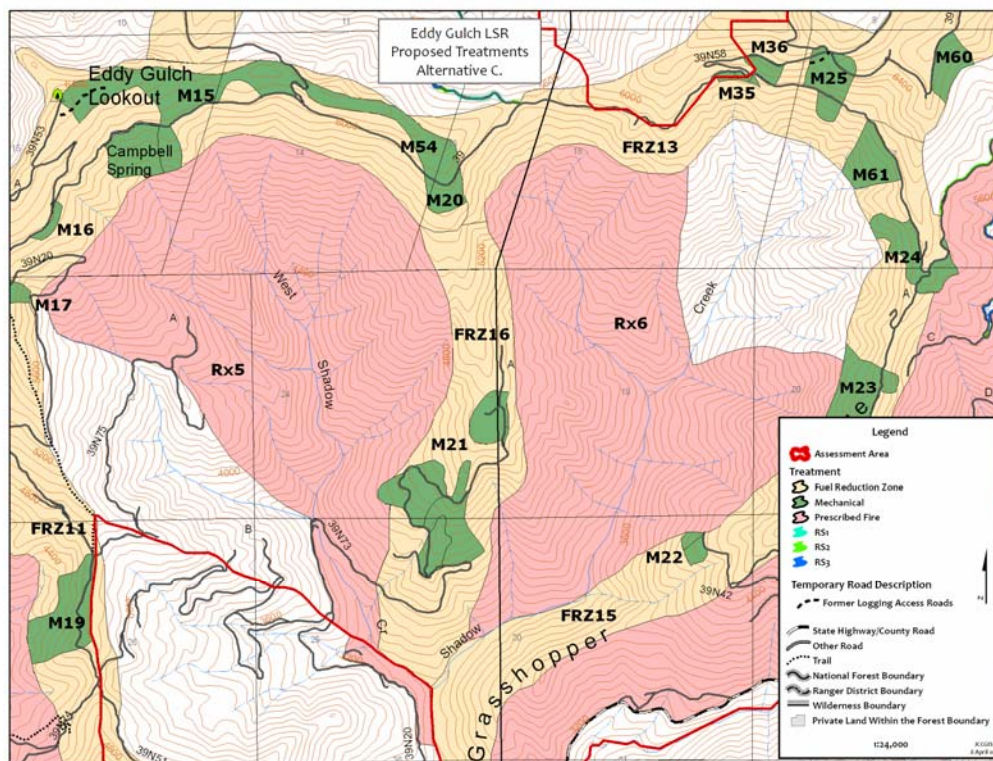
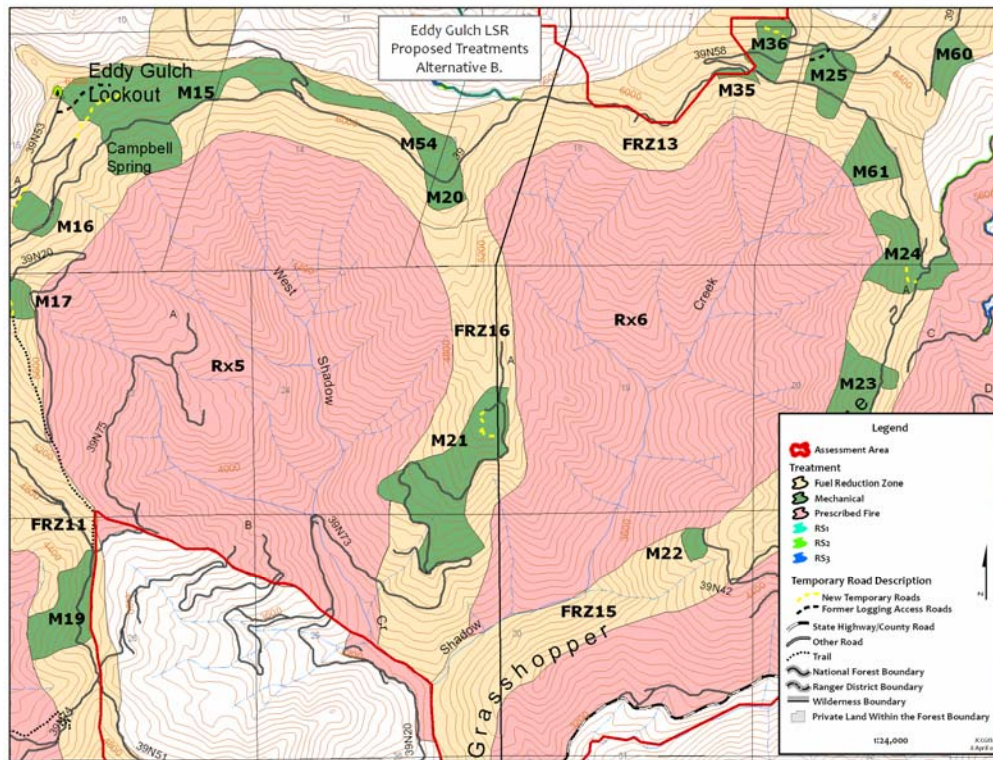
Map A-3. RS treatments along emergency access routes that do not pass through an FRZ or Rx Unit.

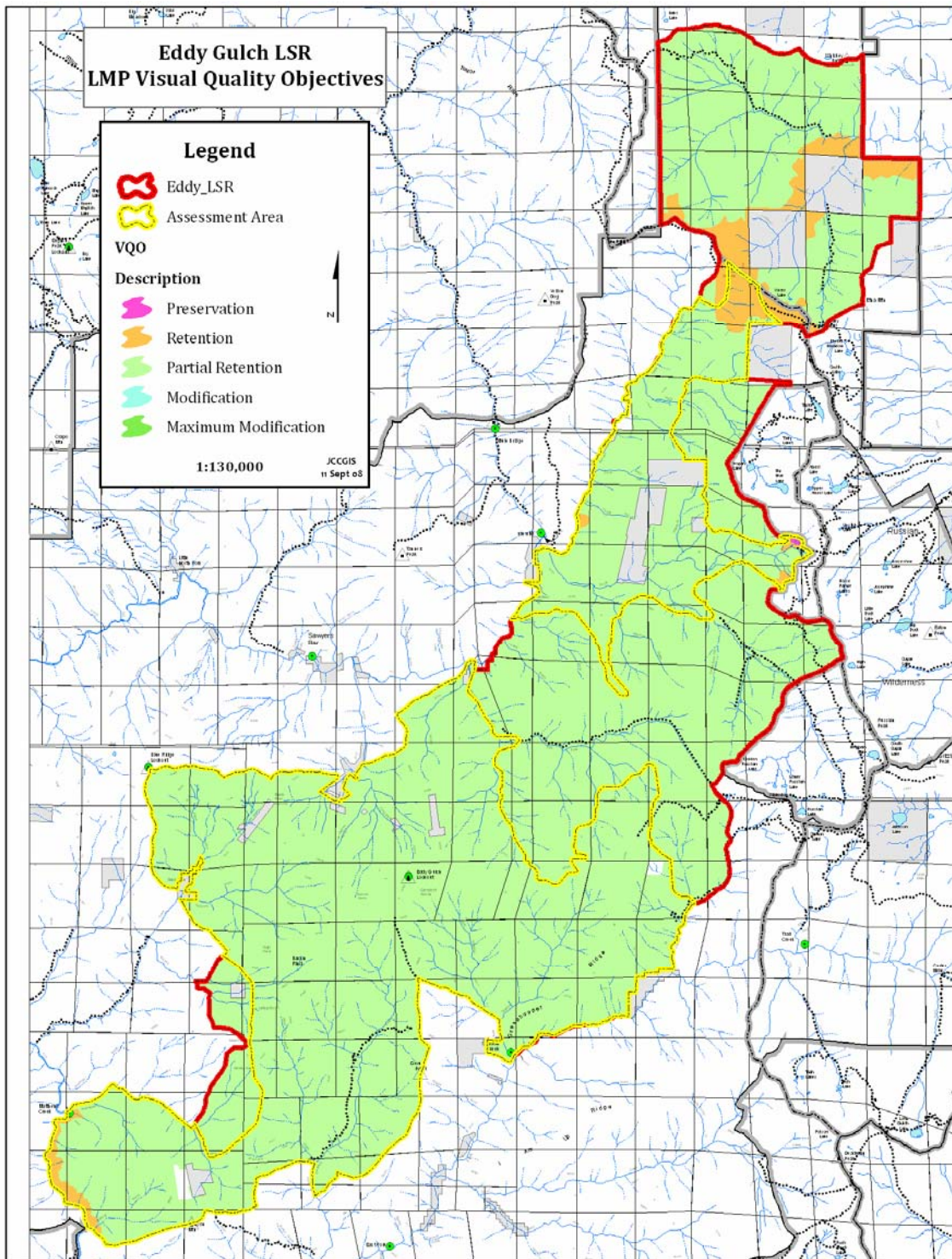


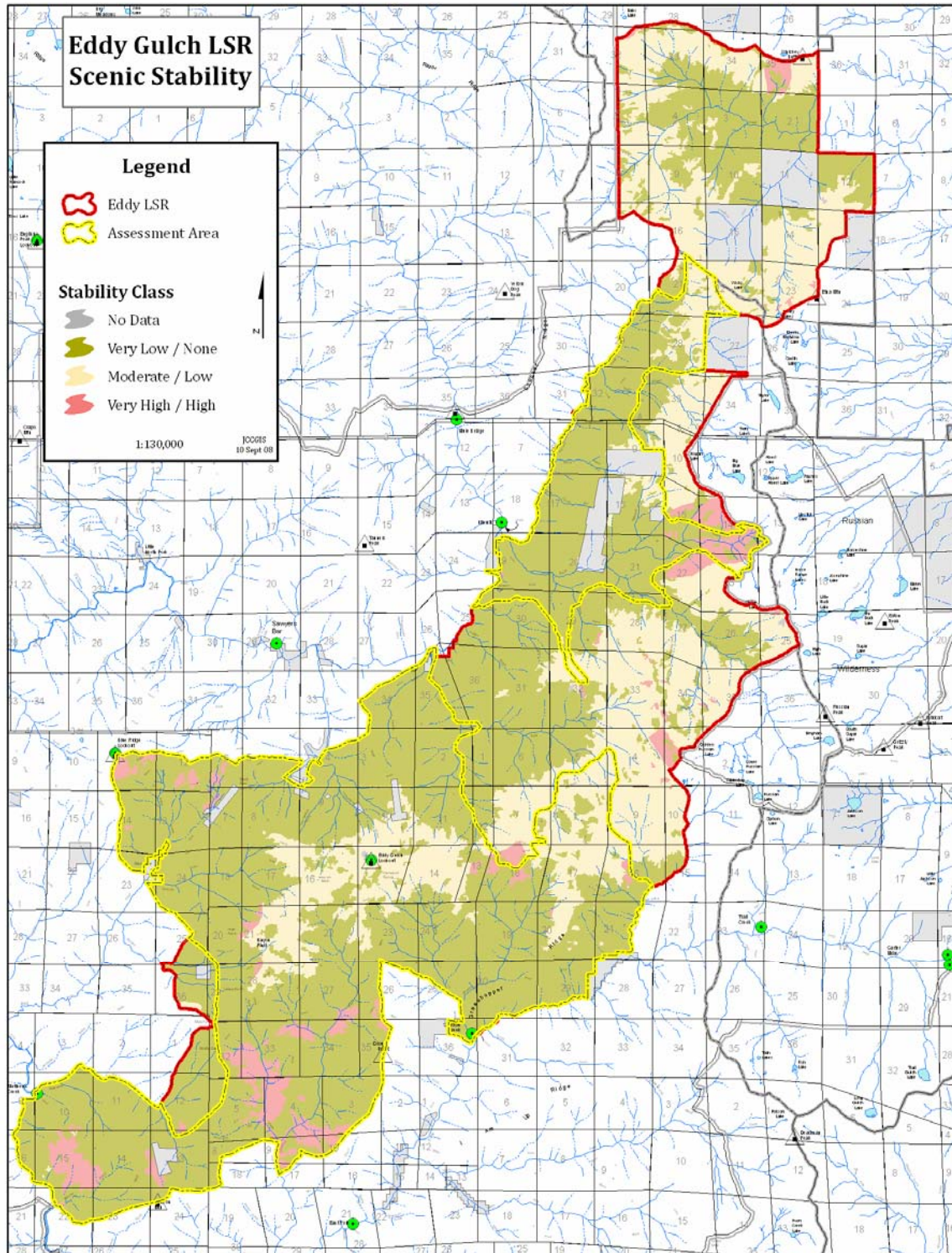
Map A-4a. View 1: Alternative B—configuration of treatment units *with construction* of 1.03 miles of new temporary roads and Alternative C—configuration of treatment units *without construction* of 1.03 miles of new temporary roads.



Map A-4b. View 2: Alternative B—configuration of treatment units *with construction* of 1.03 miles of new temporary roads and Alternative C—configuration of treatment units *without construction* of 1.03 miles of new temporary roads.



Map A-5. Klamath LRMP Visual Quality Objectives, as applied to the Eddy Gulch LSR.

Map A-6. Eddy Gulch LSR Scenic Stability.

Map A-7. Eddy Gulch LSR viewpoints of concern