EDDY GULCH LATE-SUCCESSIONAL RESERVE FUELS / HABITAT PROTECTION PROJECT

WILD AND SCENIC RIVERS REPORT

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Wild and Scenic Rivers Report

1.1 Introduction

1.1.1 Project Location

The Eddy Gulch Late-Successional Reserve (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 this report 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 would 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.

1.2.2.1 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 forest vegetation. 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

1.4.1 Wild and Scenic Rivers Act

The primary means of designating America's rivers as Wild and Scenic has been provided by the landmark *Wild and Scenic Rivers Act* (WSR Act) of 1968. The WSR Act was designed to preserve selected rivers in their natural, free-flowing condition for the use and enjoyment of the public. Rivers that are designated as Wild and Scenic receive protection from the development of new hydropower plants, federal water resource development projects, and other federally assisted water resource projects that would alter the river's free-flowing characteristics, or would otherwise have a direct adverse effect on the river's outstanding resources (USFWS 2000).

1.5 Methodology

1.5.1 Analysis Methods and Assumptions

The existing conditions for Wild, Scenic, and Recreational Rivers analysis were compiled through study and review of maps and geographical information system (GIS) data, the Klamath National Forest Land and Resource Management Plan (Klamath LRMP) (USFS 1995) sections pertaining to WSRs, Wild and Scenic Rivers Analysis Standards, Summary of Wild and Scenic River Requirements for the Klamath National Forest, field photographs, site reconnaissance, and internet resources. This analysis has been performed to ensure that the Eddy Gulch LSR project is in compliance with the management goals and Standards and Guidelines set for in the Klamath LRMP for WSRs and their protected resource values.

Per the Klamath LRMP for Designated WSRs, fisheries is the primary "Outstandingly Remarkable Value" to be protected. In addition secondary resources to be protected are water quality, recreation, scenery, and wildlife among other similar values. The protection of the WSR's free-flowing characteristics is emphasized (Summary of Wild and Scenic Rivers April 2007).

Recommended WSRs within the Assessment Area include Russian Creek and the East Fork South Fork Salmon River. The Outstandingly Remarkable Values to be protected on Russian Creek include conifer vegetation diversity, including a "magnificent stand of old growth Engleman spruce" (KNF LRMP EIS Appendix E) and a largely pristine watershed. Outstandingly Remarkable Values to be protected on the East Fork South Fork Salmon River include fisheries and largely pristine riparian habitat and wildlife, including sightings of peregrine falcon, goshawk, fisher, and pileated woodpecker.

Pursuant to the WSR Act and the process of designating a WSR under the National Wild and Scenic Rivers System, designated rivers are given one of three classifications (wild, scenic, or recreational), which are defined in Section 1.5.3. Each classification represents the existing level of development along a river segment, which is used as a guide to determine which future land and water uses might be appropriate along the river segment. Under this National WSR System, there are Designated Rivers and Recommended Rivers. The Klamath LRMP identifies the following

designated and recommended Wild, Scenic, and Recreational rivers in the vicinity of the Assessment Area:

- Wild: South Russian Creek (within Russian Wilderness)
- Scenic: South Fork Salmon River (downstream of Cecilville)
- Recreational: North Fork Salmon River, South Russian Creek (downstream of Russian Wilderness), South Fork Salmon River (upstream of Cecilville), and East Fork of the South Fork Salmon River

1.5.2 Scope of the Analysis

Analysis Area

The analysis area for WSRs is coincident with the Assessment Area.

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 environmental impact statement.)

Wild, Scenic, and Recreational Rivers — Rivers that have Outstandingly Remarkable Values (such as scenic, recreation, historic, cultural, fish and wildlife, geologic, or similar values). These rivers must also be in a free-flowing condition.

Wild Rivers — Those rivers or sections of rivers that are free from impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted (USDA 1995).

Scenic Rivers — Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by road (USDA 1995).

Recreational Rivers — Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines and that may have undergone some impoundment or diversion in the past (USFS 1995a).

Outstandingly Remarkable Value — One or more significant values (such as scenic, recreational, geologic, fish, wildlife, historic, or cultural) that qualify a river for inclusion in the National WSR system, in addition to the river's "free-flowing" condition (Interagency Wild and Scenic Rivers Coordinating Council 1998).

Visual Quality Objective — The Klamath LRMP identifies the following minimum Visual Quality Objectives for wild, scenic, and recreational river corridors: wild – retention; scenic – retention; and recreational – partial retention.

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 effects analysis are described below.

1.5.4.1 Fire and Fuels

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.

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 (beneficial or adverse) or loss of resources, values, or processes and would likely be permanent.

1.5.5 Measurement Indicators

Measurement indicators have been designed for consistency with the Klamath LMRP WSR Standards and Guidelines (USDA 1995a). The management of the Outstandingly Remarkable Values will be the driving management intent, consistent with maintaining the scenic and recreational character of the river. When the Outstandingly Remarkable Values can be maintained or protected without adversely effecting the river designation, that activity or project will be implemented (USDA 1995a). The management of the Outstandingly Remarkable Values will be measured by the following indicators:

- Scenic integrity of WSR river corridors as related to Klamath LRMP VQO goals;
- Indicators for water quality and fish habitat quality are presented in the "Aquatic Resources" section of the environmental impact statement for the Eddy Gulch LSR Project or the Aquatic Resources Report for the project.
- Indicators for forest vegetation and botanical resource values within Russian Creek are presented in the Silviculture Report and Botanical Resources Report, respectively, for this project.
- Indicators for Wildlife values within the East Fork South Fork of the Salmon River are presented in the Wildlife and Habitat Report for this project.

1.6 Affected Environment (Existing Conditions)

The WSR Act was created in 1968 to preserve selected rivers in a free-flowing condition and to protect their associated river resources.

Most of the North and South Fork of the Salmon River as well as a segment of Russian Creek in the Eddy Gulch LSR are either Designated or Recommended Recreational Rivers. Additionally, there are several segments outside of the designated river portions that are Recommended Potential WSRs to be protected as Recreational Rivers in the Klamath LRMP (see "Map A-2. Eddy Gulch LSR Viewpoints of Concern" in the "Scenery Analysis" for the Eddy Gulch LSR Project). A river section of the North Fork of the Salmon River occurs within the Assessment Area that is a Designated Recreational River. Additionally, a portion of the North Fork of the Salmon River is a Recommended Wild River, although this area is outside of the LSR boundary but within the Marble Mountain Wilderness Area. There is one section of the South Fork of the Salmon River that is considered to be sufficiently scenic, containing dramatic bluffs and incised canyons, to be designated as a Scenic River. Also, a portion of the South Fork of the Salmon River that occurs in the Assessment Area is a Recommended Recreational River. A portion of Russian Creek that occurs in the Assessment Area is a Recommended Recreational River, while a portion of Russian Creek that occurs outside of the Assessment Area (within the Russian Wilderness Area) has been identified as a Recommended Wild River.

The South and North Forks of the Salmon River were formally designated in 1981 as elements of the nation's WSR system, largely to protect their free-flowing condition and Outstandingly Remarkable Fishery Values. For Recommended Rivers, numerous Outstandingly Remarkable Values have been identified, including conifer vegetation diversity, a large pristine watershed on Russian Creek, and fisheries and largely pristine riparian habitat and wildlife on the East Fork South Fork Salmon River.

- Russian Creek Outstandingly Remarkable Values = conifer vegetation diversity and largely pristine watershed

- East Fork South Fork Salmon River Outstandingly Remarkable Values = fisheries and largely pristine riparian habitat and wildlife / falcon, goshawk, fisher, and pileated woodpecker habitat as described in the Klamath LRMP EIS, Appendix E Table E-2, page 90)

See "Section 3.5 Aquatic Resources" in the Eddy Gulch LSR Project EIS or the project's "Aquatic Resources Report for Water Quality and Fisheries" for detail discussions about watershed quality and fisheries in the Assessment Area. The Silviculture Report (summarized in Section 3.2 of the EIS) and Wildlife and Habitat Report (summarized in Section 3.4 of the EIS) also contain information with respect to the Outstandingly Remarkable Values to Recommended Rivers. The few "Distinctive" *scenic attractiveness* areas in the Assessment Area are located in the WSR corridors.

The Klamath LRMP goals for Recreational River corridors include preservation of rivers in free-flowing condition, protection and enhancement of values leading to the WSR designation, and managing recreational activities to avoid adverse effects on valued WSR resources.

1.7 Desired Stand Conditions

Fisheries, as the only Outstandingly Remarkable Value within the designated rivers of the KNF, are protected. Outstandingly Remarkable Values contained within the Recommended WSRS as listed above are also protected. All WSR rivers are maintained in a generally natural riverine appearance, for areas located within and outside the designated WSR corridor. Free flow of the natural condition, without impoundment, diversion, straightening, riprapping, or other modification of waterway is maintained. Other values such as aesthetic, scenic, archaeological, historic, and scientific values are protected. Scenery Management Techniques are used to protect scenic and aesthetic values. The physical and biological integrity of the aquatic system is maintained and protected, by adherence to Klamath LRMP Standards and Guidelines and other pertinent requirements such as the Aquatic Conservation Strategy. The VQOs of WSR rivers are retention, retention, and partial retention, respectively, for the river corridors of wild, scenic, and recreational WSR classifications. For areas recommended for WSR classification, the free-flowing water conditions and their specific Outstanding Remarkable Values are protected. There are no adverse effects on the potential classification of these rivers or river segments.

1.8 Environmental Consequences

1.8.1 Alternative A: No Action

1.8.1.1 Integrity of WSR River Corridors / Outstandingly Remarkable Values

Direct Effects

There would be no direct effects to WSR Free-flowing Conditions and the numerous Outstandingly Remarkable Values of the WSRs (Water Quality, Fisheries, Scenic Integrity, Vegetation and Wildlife) in and near the Assessment Area.

Indirect Effects

Additional vegetation growth in the North and South Fork of the Salmon and Russian Creek corridors may eventually disguise and/or screen visual disturbances and lead to slightly higher levels of Scenic Integrity. This would be a negligible beneficial effect on Scenic Integrity.

Increasing the overly dense stands of small and intermediate trees within the WSR corridors could further restrict fishing access to the creek. This could have a minor beneficial effect on fisheries in more isolated segments, but could also have a minor adverse effect on fisheries in established fishing holes, which would get more pressure as general river access is limited. It would have a minor adverse effect on recreation, as mentioned previously. The overall effect would likely be negligible.

Cumulative Effects

A major wildfire would result in significant levels of tree mortality, which could contribute substantially to debris loads in the existing and proposed WSRs and creeks. As discussed in "Section 3.5 Aquatic Resources," modeling of sediment loads suggests an approximate 50-fold increase in per-acre sediment yield in the first year following fire, which could threaten WSR Outstandingly Remarkable Values. Loss of tree cover in riparian areas may result in increased water temperatures and corresponding decreased dissolved oxygen, and increased predation of fish fry due to loss of cover. Ash deposition in streams by rainwater may lead to changes in water chemistry. This

could result in adverse effects on all Outstandingly Remarkable Values for both recommended and designated WSRs, including water quality and fisheries on the North Fork, South Fork, and East Fork South Fork of the Salmon River, depending upon the magnitude and extent of these changes.

The loss of tree, shrub, and herbaceous vegetation could result in significant losses to riparian habitat and wildlife on the East Fork South Fork of the Salmon River, as well as damaging the pristine watershed condition and vegetation diversity of Russian Creek. This could result in adverse effects on all Outstandingly Remarkable Values for recommended WSRs, including pristine watershed condition (Russian Creek), pristine riparian habitat and wildlife (East Fork South Fork Salmon), depending upon the magnitude and extent of these changes.

Conclusion. Potential beneficial effects of the no-action alternative would be negligible on free-flowing condition, scenery, water quality, fisheries, watershed condition, wildlife/riparian habitat, and vegetation diversity. However, when considered cumulatively with the possibility of future wildfire, the no-action alternative has the potential for adverse effects on Outstandingly Remarkable Values in fisheries and water quality on the North and South Fork of the Salmon River; pristine watershed condition and vegetation diversity on Russian Creek; and fisheries, riparian habitat, and wildlife on the East Fork South Fork Salmon River. Some WSR values and resources, and their current/potential WSR classifications could be impaired or possibly eliminated by extreme wildfires that are more likely by the no-action alternative's lack of fuels reduction.

1.8.2 Alternative B: Proposed Action

1.8.2.1 Integrity of WSR River Corridors / Outstandingly Remarkable Values

Direct Effects

The temporary roads proposed under Alternative B would have no effect on salmonids (and therefore, no effect on the Outstandingly Remarkable Values associated with fish or fishing) or their habitat because (1) all road segments are on ridgetop locations and distant from salmonid habitat; (2) proposed new temporary roads do not cross Riparian Reserves or streams; (3) new temporary roads will be outsloped where necessary to reduce erosion, covered with slash, if needed, and blocked after each season of use and prior to winter storms, and then permanently closed by the end of the project; and (4) none of the proposed roads are located on slopes with indicators of active or latent instability (Berg 2009)

Possible effects are increased sediment delivery to streams, increased stream temperature, and altered rates and patterns of LWD recruitment—these effects can potentially be detrimental to fish habitat. Such events, however, are expected to be few in number and limited in size by the fact that underburning will be done at low intensities, 90 percent of the large wood in Riparian Reserves will be retained, burn plans will incorporate retention of cover in conformance with Klamath LRMP guidance (ACS, Riparian Reserve Standards and Guidelines, BMPs, and related resource protection measures). This potential effect at the site level is expected to be negligible with no effects on water quality, fish, and fish habitat. Should such effects occur, they would be short term because regrowth and adjacent unburned stands would contribute to the rapid re-establishment of soil cover.

Underburning will also be consistent with guidelines in the *Biological Assessment and Evaluation for Pre-Commercial Thin and Release Actions and Fuel Reduction Actions on the Klamath National*

Forest (USFS 2001), which limits burn prescriptions and design within Riparian Reserves, and establishes a cap on the amount of acreage that can be burned in a given year to prevent adverse effects on aquatic habitat and fish.

Implementing the prescriptions contained in the Proposed Project, as well as those included in the Scenic Analysis section above, should reduce the potential Scenic Integrity effects to minor adverse.

Indirect Effects

Reducing density of stands would reduce tree mortality and increase the size of trees. Larger trees will provide more shade, which would help maintain cool water temperatures and improve fisheries (North Fork, South Fork, and East Fork South Fork of the Salmon River), enhance vegetation diversity and pristine watershed conditions (Russian Creek), and improve pristine riparian habitat and wildlife (East Fork South Fork of the Salmon River). Reducing short-term small tree mortality would avoid a large influx of small woody debris that could be detrimental to fisheries. These would be minor beneficial effects on Outstandingly Remarkable Values.

Cumulative Effects

There would be no cumulative effects on WSR Outstandingly Remarkable Values.

Conclusion. Minor beneficial effects on Outstandingly Remarkable Values include promotion of larger trees and improvement of the overall health of stands of vegetation in and around the riparian corridor. The project would have no effects on free-flow and the other Outstandingly Remarkable Values of Recommended Rivers (vegetation diversity, watershed condition, fisheries, wildlife habitat). All WSR values and resources are fully protected per Klamath LRMP direction and associated resource requirements, such as the Aquatic Conservation Strategy, and current/potential WSR classifications will be perpetuated.

1.8.3 Alternative C: No Temporary Roads Constructed

1.8.3.1 Integrity of WSR River Corridors / Outstandingly Remarkable Values

Direct Effects

Alternative C would not construct the 1.03 miles of new temporary roads, but it still proposes to use 0.98 mile of former logging access routes. Road beds are existing, and this project component would also have no effect on salmonids or their habitat (Berg 2009) for the same reasons listed above for Alternative B.

The effects from prescribed burning that would result from implementation of Alternative C are virtually identical to those described above for Alternative B, except there would be 822 less acres of prescribed burns under Alternative C. The effects of wildlife in the 822 acres that would not be treated by prescribed burns would be the same as described above for Alternative A in the paragraph labeled "Destruction of vegetation by wildfire could result in reduction of Outstandingly Remarkable Values on Recommended Rivers."

Implementing the prescriptions contained in the Proposed Project, as well as those included in the Scenic Analysis section above, would reduce the potential Scenic Integrity effects to minor adverse.

Indirect Effects

Larger trees will provide more shade, which would help maintain cool water temperatures and improve fisheries (North Fork, South Fork, and East Fork South Fork of the Salmon River), enhance vegetation diversity and pristine watershed conditions (Russian Creek) and improve pristine riparian habitat and wildlife (East Fork South Fork of the Salmon River). Reducing short-term small tree mortality would avoid a large influx of small woody debris that could be detrimental to fisheries. These would be minor beneficial effects on WSR Outstandingly Remarkable Values.

Cumulative Effects

There would be no cumulative effects on WSR Outstandingly Remarkable Values for fisheries, water quality, or Scenic Integrity.

Conclusion. Minor beneficial effects on Outstandingly Remarkable Values include promotion of larger trees and improvement of the overall health of stands of vegetation in and around the riparian corridor. Alternative C would have no effects on free-flow and the other Outstandingly Remarkable Values (vegetation diversity, watershed condition, fisheries, wildlife/riparian habitat) of Recommended Rivers. All WSR values and resources are fully protected per Klamath LRMP direction and associated resource requirements, such as the Aquatic Conservation Strategy, and current/potential WSR classifications will be perpetuated through implementation of this alternative.

Literature Cited

Berg, A. 2009. Biological Assessment and Biological Evaluation for Threatened, Endangered, Proposed, and Sensitive Fish Species That May Be Affected by the Eddy Gulch Late-Successional Reserve Fuels / Habitat Protection Project. April.

Interagency Wild and Scenic Rivers Coordinating Council (IWSRCC) 1998. An Introduction to Wild and Scenic Rivers. Accessed at http://www.rivers.gov/publications/wsr-primer.pdf.

Salmon River Fire Safe Council (SRFSC). 2007. Salmon River Community Wildfire Protection Plan. October 30. Accessed at http://www.srrc.org/publications/index.php

United States Department of Agriculture United State Forest Service (USFS). 1995. Klamath National Forest Land and Resource Management Plan. Accessed at http://www.fs.fed.us/r5/klamath/projects/forestmanagement/forestplan/index.shtml

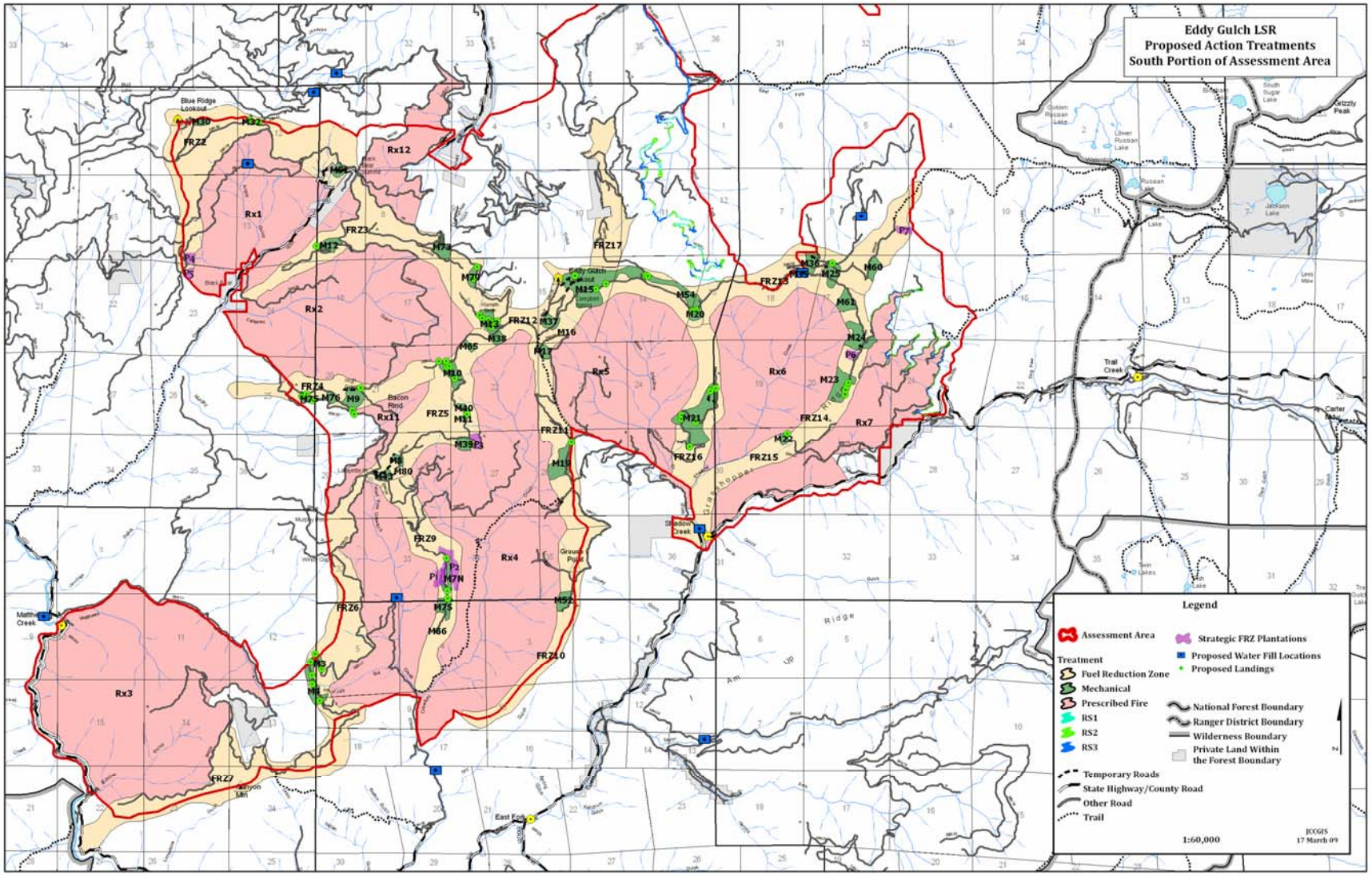
2001. Biological Assessment and Evaluation for Pre-Commercial Thin and Release Actions and Fuel Reduction Actions on the Klamath National Forest.

2007. Summary of Wild and Scenic River Requirements. April.

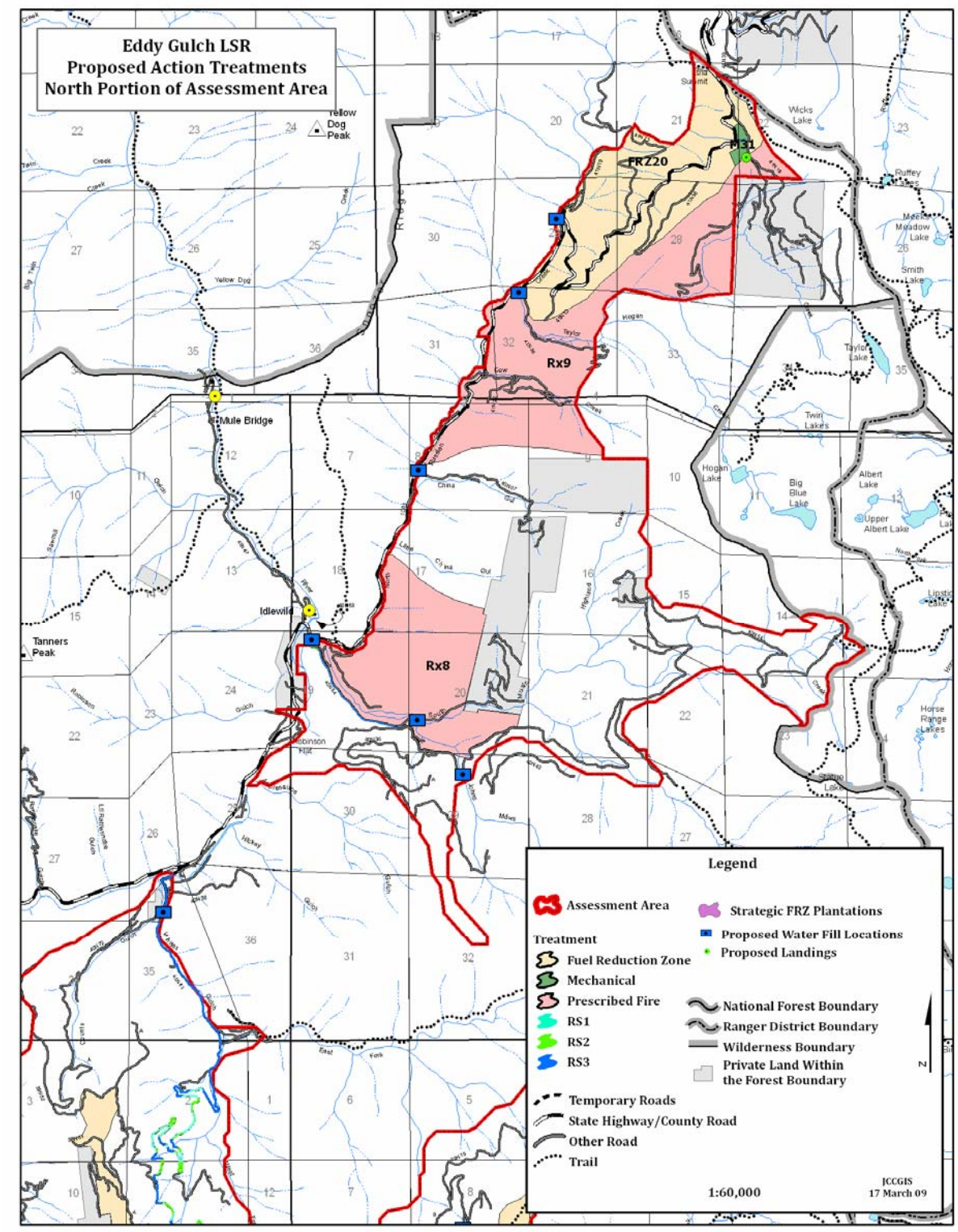
United States Department of Interior United States Fish and Wildlife Service (USFWS). 2000. (Revised 2007). Designating Rivers Through Section 2(a)(ii) of the Wild and Scenic Rivers Act. Technical report of the Interagency Wild and Scenic Rivers Coordinating Council.

Appendix A
Maps

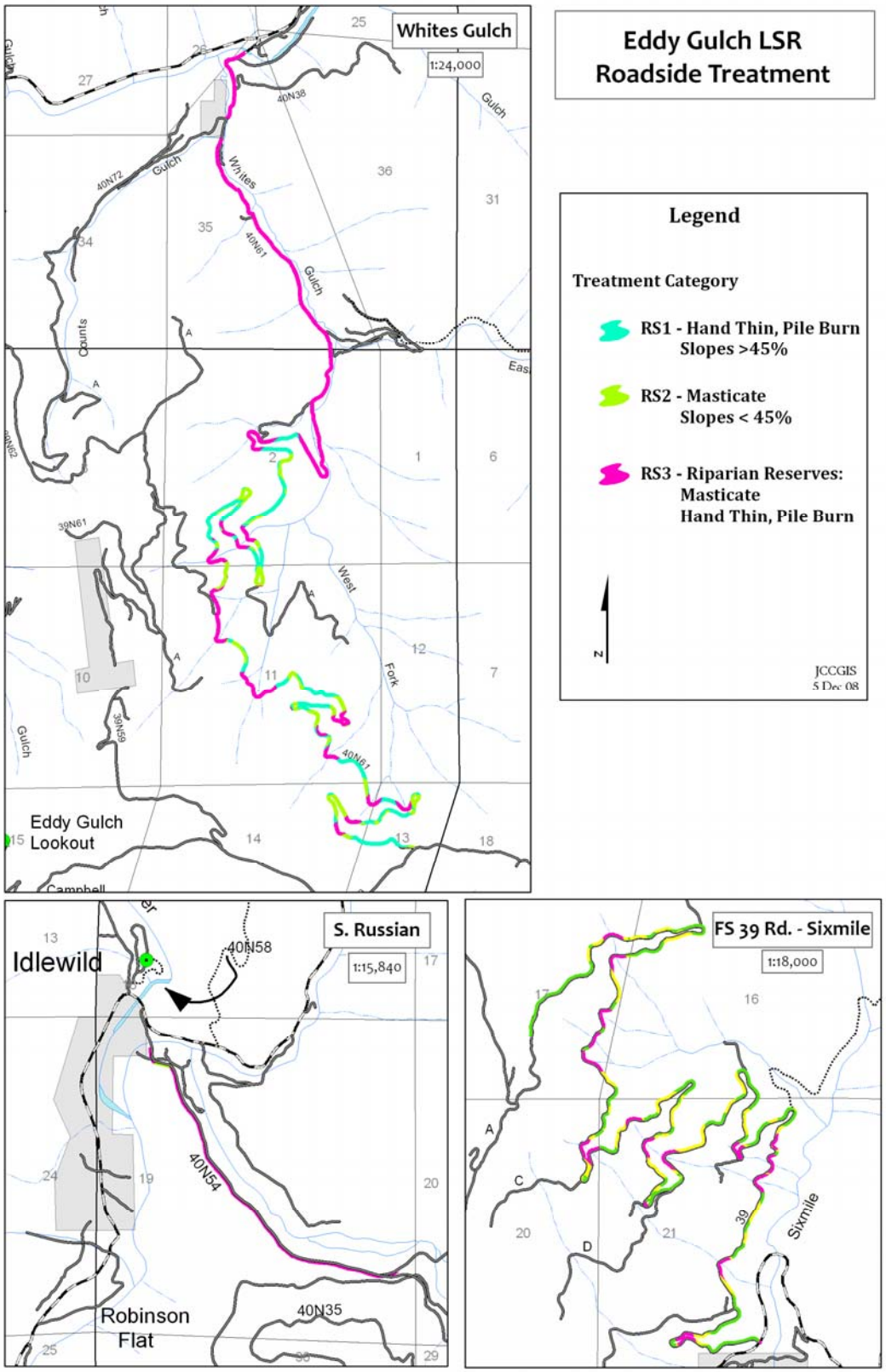
Map A-1. Proposed treatment units in the south portion of the Eddy Gulch LSR Project Assessment Area.



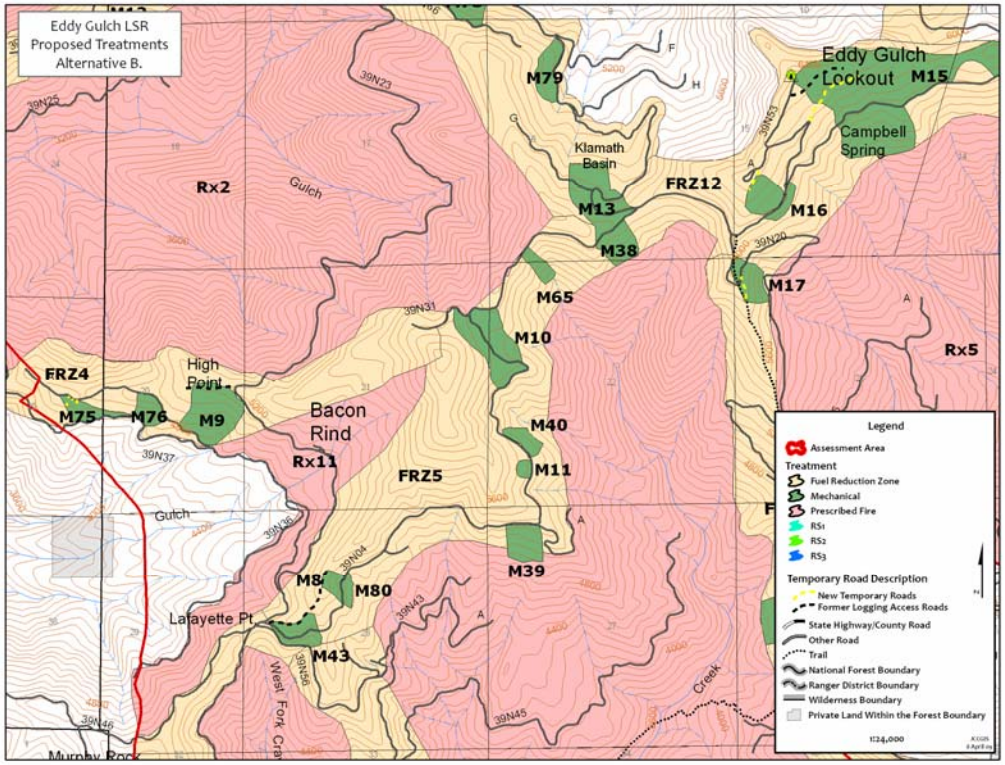
Map A-2. Proposed treatment units in the north portion of the Eddy Gulch LSR Project Assessment Area.

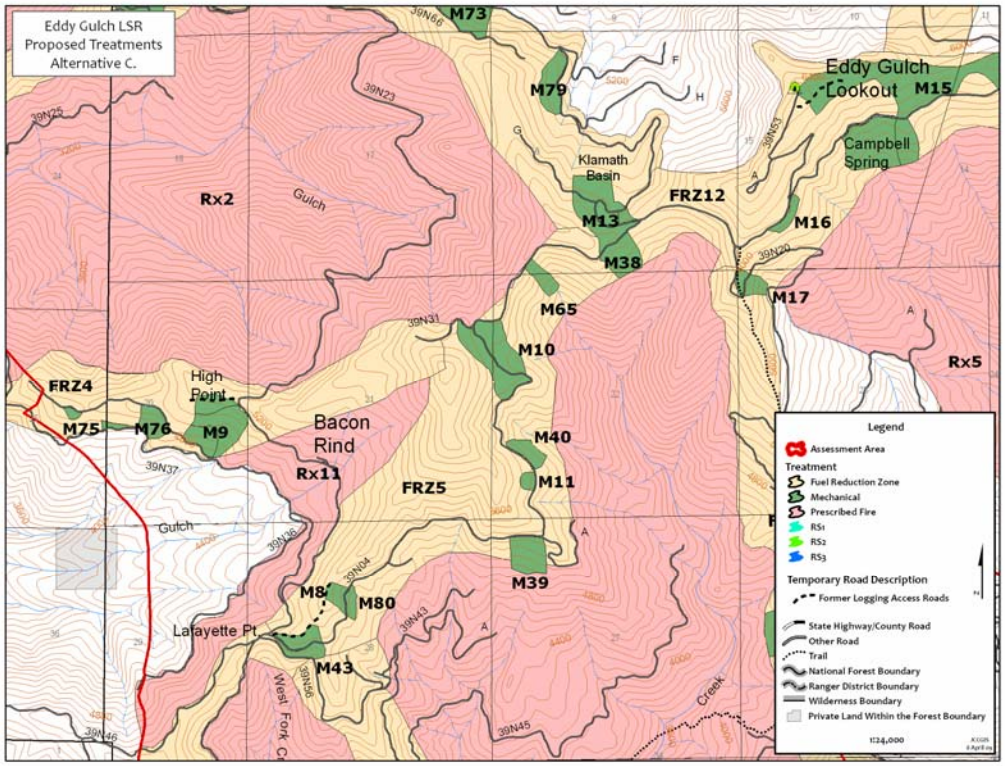


Map A-3. RS treatments along emergency access routes that do not pass through an FRZ or Rx Unit.

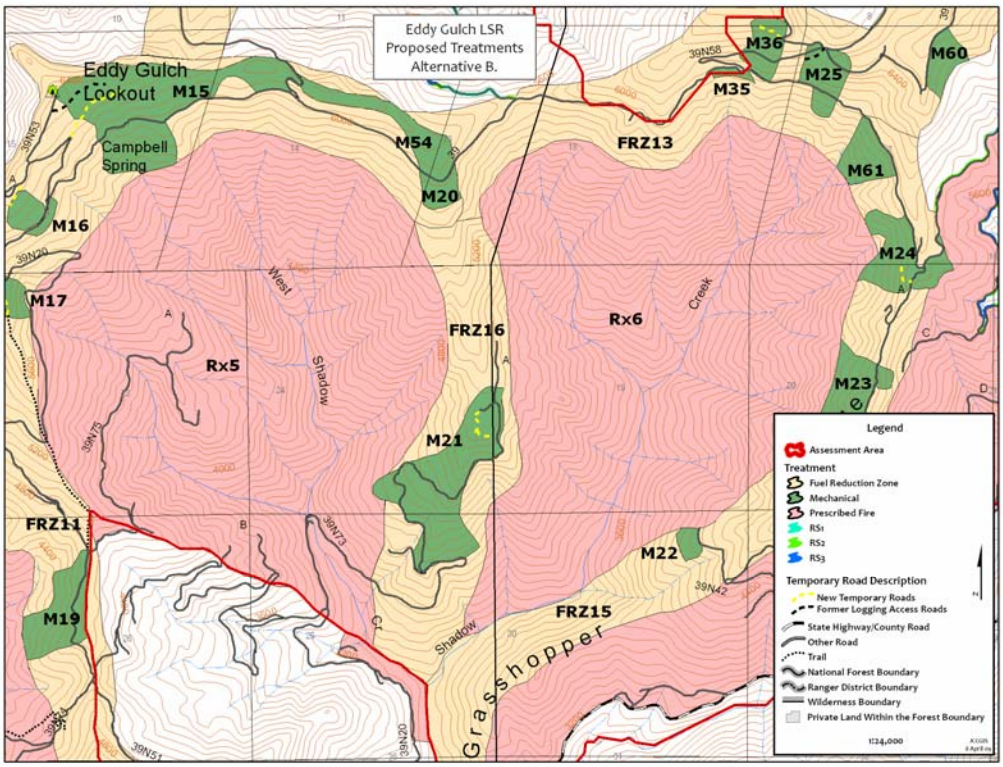


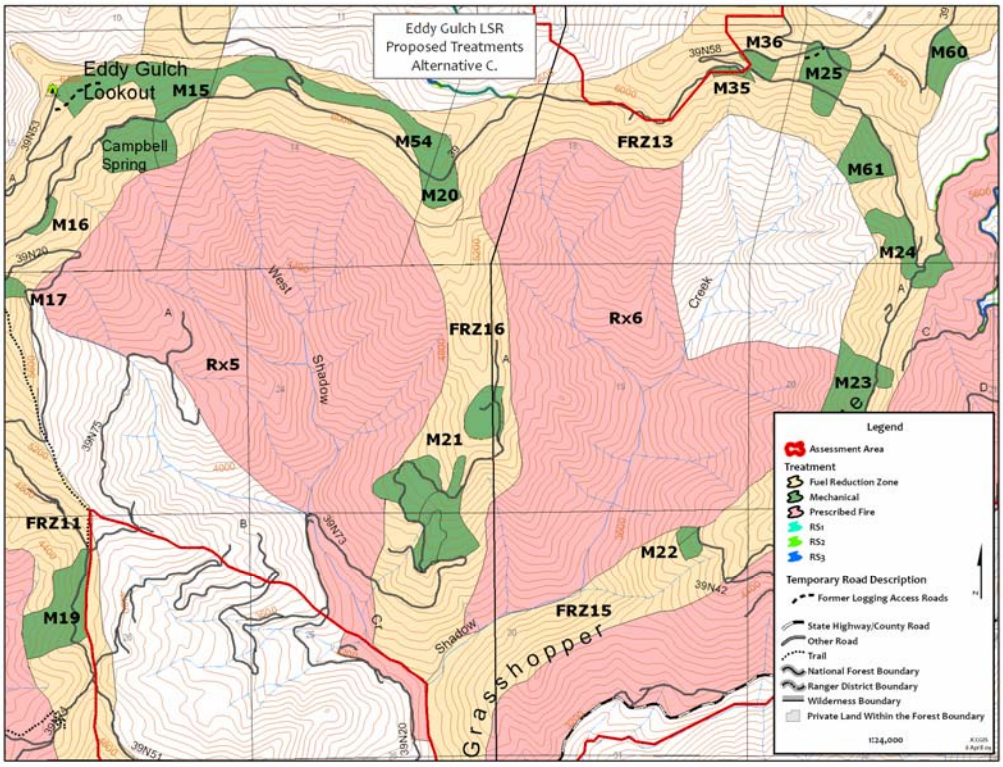
Map A-4a. View 1: Alternative B–configuration of treatment units *with construction* of 1.03 miles of new temporary roads and Alternative C–configuration of treatment units *without construction* of 1.03 miles of new temporary roads.





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. Eddy Gulch LSR Viewpoints of Concern.