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Service

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# Inventoried Roadless Area Resource Report

## Westside Fire Recovery Project

Happy Camp/Oak Knoll and Salmon/Scott River Ranger Districts,  
Klamath National Forest  
Siskiyou County, California

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## Executive Summary

Information on six inventoried roadless areas (IRAs) within the Westside Fire Recovery project area is analyzed in this section, and the effects of the project on these IRAs are disclosed. The detailed history of IRAs and Forest Service direction for management in IRAs is included in the body and appendices of the Inventoried Roadless Area resource report, available on the project website.

### Methodology

Geographic Information System (GIS) layers provide information for the location of IRAs and proposed activities that may affect IRAs. A synopsis of the conditions of IRAs at the time the Record of Decision for the Forest Plan was published (1995) is provided in appendix C of the Forest Plan final EIS.

### Analysis indicators

Acres of IRA where roadless characteristics potentially will be affected by treatments proposed in the project, and degree of effect, are analysis indicators. Factors used to determine whether or not roadless characteristics will be affected by treatments, identified in the Roadless Area Conservation Rule of 2001 (36 CFR Part 294), are effects on:

- High quality or undisturbed soil, water and air resources;
- Sources of public drinking water;
- Diversity of plant and animal communities;
- Habitat for Threatened, Endangered, Proposed, Candidate, and Sensitive species and species dependent on large undisturbed areas of land;
- Primitive, semi-primitive non-motorized, and semi-primitive motorized classes of recreation;
- Reference landscapes for research study or interpretation;
- Natural appearing landscapes with high scenic quality;
- Traditional cultural properties and sacred sites; and
- Other locally identified unique characteristics.

The effects of the project on the currently roadless portions of IRAs and the portions that include roads are analyzed and disclosed separately because retaining roadless character is difficult, if not impossible, in areas of IRAs that already include roads.

### Spatial and temporal bounding

The spatial boundary for analysis includes the IRAs within the project area boundary because only activities that occur within the IRAs affect the roadless characteristics of the IRAs.

The short-term temporal bounding is one to five years because effects will be realized during and shortly after project implementation. The long-term timeframe is 20 years because effects will fade by the end of that time.

## Affected Environment

There are six IRAs within the Westside Fire Recovery project area. Four of these IRAs are totally or partially within the Happy Camp Fire area: Grider; Johnson; Kelsey; and Tom Martin. Two IRAs are partially within the Whites Fire area: Russian; and Snoozer. Only Grider and Snoozer IRAs retain a roadless character for the entire IRA; roads were constructed in portions of the other IRAs between 1984, when these IRAs were “released” for road construction and other activities by the California Wilderness Act, and 2001 when the Roadless Area Conservation Rule limiting road construction and associated activities in IRAs was published. The total number of acres in each IRA within the project area, the acres that are considered to retain their roadless character because no roads were constructed in them, and the acres that no longer retain roadless character are displayed in table 3-39.

**Table S- 1: Acres within each IRA, and within the portions of each IRA that retain roadless character**

IRA	Total Acres of IRA within project area	Acres that retain roadless character	Acres that do not retain roadless character
Grider	10,640	10,640	0
Johnson	4,900	3,970	930
Kelsey	3,230	510	2,720
Russian	13,540	11,910	1,630
Snoozer	9,250	9,250	0
Tom Martin	9,050	5,650	3,400
<b>TOTAL</b>	<b>50,610</b>	<b>41,930</b>	<b>8,680</b>

## Environmental Consequences

### Alternative 1

#### Direct and Indirect Effects

Since there are no management actions with this alternative, there will be no direct or indirect effects on IRAs.

#### Cumulative Effects

Since there are no direct or indirect effects, there are no cumulative effects of adding the zero effects of alternative 1 to the past, ongoing or reasonable foreseeable future actions listed in appendix C that overlap IRAs in time or space.

### Alternative 2

#### Direct and Indirect Effects

The direct or indirect effects on roadless characteristics in IRAs are based on the type and extent of activities within each IRA, especially within the roadless portions since the roadless

characteristics of the roaded portions have already been affected. Acres of IRAs within the project boundary that retain roadless character and those that do not are displayed in table 3-40.

**Table S- 2: Alternative 2 proposed activities within each IRA, in portions that retain and do not retain roadless character**

IRA	Acres within IRA	% of IRA with Activity	Acres within IRA retaining roadless character	% of IRA with Activity retaining roadless character	Acres within IRA no longer retaining roadless character	% of IRA with Activity no longer retaining roadless character
<b>Grider</b>	<b>125</b>	<b>1 %</b>	<b>125</b>	<b>1 %</b>	<b>0</b>	<b>0 %</b>
Fuels Treatment	43	<1 %	43	<1 %	0	0 %
Site prep./plant	82	1 %	82	1 %	0	0 %
<b>Johnson</b>	<b>345</b>	<b>7 %</b>	<b>152</b>	<b>4 %</b>	<b>192</b>	<b>21 %</b>
Fuels Treatment	160	3 %	114	3 %	47	5 %
Site prep./plant	184	4 %	39	1 %	146	16 %
<b>Kelsey</b>	<b>44</b>	<b>1 %</b>	<b>0</b>	<b>0 %</b>	<b>44</b>	<b>2 %</b>
Fuels Treatment	0	0 %	0	0 %	0	0 %
Site prep./plant	44	1 %	0	0 %	44	2 %
<b>Russian</b>	<b>2,066</b>	<b>15 %</b>	<b>1,822</b>	<b>15 %</b>	<b>245</b>	<b>15 %</b>
Fuels Treatment	1,935	14 %	1,782	15 %	153	9 %
Site prep./plant	131	1 %	39	<1 %	92	6 %
<b>Snoozer</b>	<b>3,459</b>	<b>37 %</b>	<b>3,459</b>	<b>37 %</b>	<b>0</b>	<b>0 %</b>
Fuels Treatment	3,459	37 %	3,459	37 %	0	0 %
Site prep./plant	0	0 %	0	0 %	0	0 %
<b>Tom Martin</b>	<b>261</b>	<b>3 %</b>	<b>50</b>	<b>1 %</b>	<b>210</b>	<b>6 %</b>
Fuels Treatment	213	2 %	50	1 %	163	5 %
Site prep./plant	47	<1 %	0	0 %	47	1 %
<b>TOTAL</b>	<b>6,300</b>	<b>12 %</b>	<b>5,608</b>	<b>13 %</b>	<b>692</b>	<b>8 %</b>
Fuels Treatment	<b>5,811</b>	<b>11 %</b>	<b>5,448</b>	<b>13 %</b>	<b>363</b>	<b>4 %</b>
Site prep./plant	<b>489</b>	<b>1 %</b>	<b>160</b>	<b>&lt;1 %</b>	<b>329</b>	<b>4 %</b>

**Cumulative Effects**

Adding the effects of alternative 2 to the past, ongoing or reasonable foreseeable future actions listed in appendix C that overlap IRAs in time and space will produce negligible cumulative effects to roadless characteristics. Few if any proposed projects on the Forest include any treatments in IRAs and IRAs do not exist on private lands.

**Alternative 3**

**Direct and Indirect Effects**

The actions proposed in this alternative are the same as alternative 2; therefore, direct and indirect effects will be the same as for alternative 2.

**Cumulative Effects**

Adding the effects of alternative 3 to the past, ongoing or reasonable foreseeable future actions listed in appendix C will produce the same cumulative effects to roadless characteristics as for alternative 2.

**Alternative 4**

**Direct and Indirect Effects**

The actions proposed in this alternative are the same as alternative 2; therefore, direct and indirect effects will be the same as for alternative 2.

**Cumulative Effects**

Adding the effects of alternative 3 to the past, ongoing or reasonable foreseeable future actions listed in appendix C will produce the same cumulative effects to roadless characteristics as for alternative 2.

**Alternative 5**

**Direct and Indirect Effects**

No site preparation and planting actions are proposed in IRAs in this alternative as noted below in table 3-43. The direct and indirect effects on roadless characteristics are due to fuels treatments.

**Table S- 3Alternative 5 proposed activities within each IRA, in portions that retain and do not retain roadless character:**

IRA	Acres within IRA	% of IRA with Activity	Acres within IRA retaining roadless character	% of IRA with Activity retaining roadless character	Acres within IRA no longer retaining roadless character	% of IRA with Activity no longer retaining roadless character
<b>Grider</b>	<b>43</b>	<b>&lt;1 %</b>	<b>43</b>	<b>&lt;1 %</b>	<b>0</b>	<b>0 %</b>
Fuels Treatment	43	<1 %	43	<1 %	0	0 %
Site prep./plant	0	0 %	0	0 %	0	0 %
<b>Johnson</b>	<b>160</b>	<b>3 %</b>	<b>114</b>	<b>3 %</b>	<b>47</b>	<b>5 %</b>
Fuels Treatment	160	3 %	114	3 %	47	5 %
Site prep./plant	0	0 %	0	0 %	0	0 %
<b>Kelsey</b>	<b>0</b>	<b>0 %</b>	<b>0</b>	<b>0 %</b>	<b>0</b>	<b>0 %</b>
Fuels Treatment	0	0 %	0	0 %	0	0 %

IRA	Acres within IRA	% of IRA with Activity	Acres within IRA retaining roadless character	% of IRA with Activity retaining roadless character	Acres within IRA no longer retaining roadless character	% of IRA with Activity no longer retaining roadless character
Site prep./plant	0	0 %	0	0 %	0	0 %
<b>Russian</b>	<b>1,935</b>	<b>14 %</b>	<b>1,782</b>	<b>15 %</b>	<b>153</b>	<b>9 %</b>
Fuels Treatment	1,935	14 %	1,782	15 %	153	9 %
Site prep./plant	0	0 %	0	0 %	0	0 %
<b>Snoozer</b>	<b>3,459</b>	<b>37 %</b>	<b>3,459</b>	<b>37 %</b>	<b>0</b>	<b>0 %</b>
Fuels Treatment	3,459	37 %	3,459	37 %	0	0 %
Site prep./plant	0	0 %	0	0 %	0	0 %
<b>Tom Martin</b>	<b>213</b>	<b>2 %</b>	<b>50</b>	<b>1 %</b>	<b>163</b>	<b>5 %</b>
Fuels Treatment	213	2 %	50	1 %	163	5 %
Site prep./plant	0	0 %	0	0 %	0	0 %
<b>TOTAL</b>	<b>5,811</b>	<b>11 %</b>	<b>5,448</b>	<b>13 %</b>	<b>363</b>	<b>4 %</b>
Fuels Treatment	<b>5,811</b>	<b>11 %</b>	<b>5,448</b>	<b>13 %</b>	<b>363</b>	<b>4 %</b>
Site prep./plant	<b>0</b>	<b>0 %</b>	<b>0</b>	<b>0 %</b>	<b>0</b>	<b>0 %</b>

**Cumulative Effects**

Adding the effects of alternative 3 to the past, ongoing or reasonable foreseeable future actions listed in appendix C that overlap IRAs in time and space will produce negligible cumulative effects to roadless characteristics.

**Comparison of Effects**

There is little difference among alternatives in effects on roadless character of IRAs because the treatments proposed in any alternative have little effect on the roadless areas that retain roadless characteristics. Alternative 1 does not propose any treatments in IRAs; IRAs will regenerate naturally as described in the vegetation section of this chapter . In action alternatives, only prescribed burning affects a sizeable number of acres; this action mimics the effects of low intensity wildfire and will not substantially affect roadless character. Construction and maintenance of shaded fuel breaks on a small number of acres that retain their roadless characteristic and removal of small fuels (generally less than 3 inches in diameter at breast height) will also not substantially affect roadless character. Site preparation and planting using hand tools and methods in alternatives 2, 3 and 4 (with implementation of project design feature IRA-1) will have a minor effect; this will occur on only 160 acres of areas that currently retain roadless character. No site preparation and planting will occur in alternative 5; effects of natural regeneration will be the same as for alternative 1.

**Compliance with law, policy, regulation and the Forest Plan**

All alternative will comply with the Roadless Area Conservation Rule and applicable Forest Plan standards as amended by this rule.

## Resource Report

### Introduction

This document has been compiled to bring together 1) information on activities proposed under the action alternatives of the Westside Fire Recovery project as they pertain to the Grider, Johnson, Kelsey, Russian, Snoozer and Tom Martin Inventoried Roadless Areas (IRAs) and 2) verification that related law, regulation, policy and standards from the Forest Plan will be followed.

IRAs were identified through the Roadless Area Review and Evaluation II (RARE II) process. The California Wilderness Bill (1984) designated Wilderness areas in the state and “released” IRAs that were not designated as wilderness to multiple-use management. In 1995, the Forest Plan addressed the “released” inventoried roadless areas and provided specific management guidance through forest-wide standards and guidelines 6-23 and 14-1 (USDA 1995). Since 1995, the Forest has managed IRAs under several different directives; the regulations that are now in place were published as 36 CFR 294 (Special Areas; Roadless Area Conservation; Final Rule) in 2001. Management direction for Forests in the southern pacific region (region 5) includes a tiered review process of proposed activities in IRAs and coordination with the State of California. See appendix B of this report for references to current direction.

Chapter 2 of the EIS provides details of what is being proposed in alternatives. The actions proposed in IRAs in the project area include mitigation of roadside hazards; site preparation and planting; and fuels reduction, primarily as shaded fuel breaks and around private property and infrastructure. An IRA briefing paper, provided for review by the regional office and State of California, was approved in January 2015; it is available on the project website and provides details on treatments by individual IRA in the proposed action. None of the alternatives propose more treatments in IRAs than the refined proposed action on which the briefing paper is based.

### Analysis Framework

Direction relevant to the proposed action as it affects agency-identified IRAs is listed in Appendix A of this resource report.

### Effects Analysis Methodology

This analysis focuses on how each alternative will affect roadless characteristics within the IRAs in the Westside Fire Recovery project area. See appendix B for detailed descriptions of each roadless characteristic to be considered for effects analysis per 36 CFR 294.

The evaluation of the Grider (Area #05067), Johnson (Area #05068), Kelsey (Area #B5070), Russian (Area #A5081, B5081), Snoozer (Area #B5077) and Tom Martin (Area #05069) IRAs is documented in the RARE II Final Environmental Statement (USDA 1979) as 99,000 gross and 78,100 net acres allocated to non-Wilderness. The subsequent map developed for the initial draft of the Forest Plan “Klamath National Forest RARE II Areas and Contiguous RARE II Areas on Adjacent National Forests” (USDA 1985) displays the relationship between roads and the IRA boundaries. Subsequent mapping for the Forest Plan EIS (USDA 1994) as carried forward to 2001 Roadless Rule maps (USDA 2000) shows the Grider, Johnson, Kelsey, Russian, Snoozer

and Tom Martin IRAs as being adjacent to and intermittently straddling portions of National Forest Transportation System (NFTS) roads (see appendix C of the Forest Plan EIS for additional information).

**Data Sources:** See appendix B of this report and appendix C of the Forest Plan FEIS. Geographic Information System (GIS) layers provide information for the location of IRAs and proposed activities.

**Indicator:** Acres of IRA where roadless characteristics potentially will be affected by treatments proposed. Factors used to determine whether or not roadless characteristics will be affected by treatments are displayed in table 1.

**Table 1: Direct and indirect effects on Roadless characteristics**

Roadless Area Characteristics	Roadless Character Descriptions (from 36 CFR Part 294, Special Areas; Roadless Area Conservation Rule, 2001)	Factors used to measure effects
High quality or undisturbed soil, water and air resources (See Soils, Hydrology and Air Quality Resource Reports for more information)	“These three key resources are the foundation upon which other resource values and outputs depend. Healthy watersheds catch, store, and safely release water over time, protecting downstream communities from flooding; providing clean water for domestic, agricultural and industrial uses; helping maintain abundant and healthy fish and wildlife populations; and are the basis for many forms of outdoor recreation.”	Soil—acres of soil disturbance due to use of mechanical equipment Water—temperature, sediment, peak flow, channel morphology, Aquatic Conservation Strategy objectives Air—air (criteria) pollutant emissions relative to air quality standards.
Sources of public drinking water (See the Hydrology Resource Report for more information)	“Maintaining [watersheds contributing to drinking water] in a relatively undisturbed condition saves downstream water filtration costs. Careful management of these watersheds is crucial in maintaining the flow and affordability of clean water to a growing population.”	Existence and effects on municipal watersheds

<p><b>Roadless Area Characteristics</b></p>	<p><b>Roadless Character Descriptions</b> (from 36 CFR Part 294, Special Areas; Roadless Area Conservation Rule, 2001)</p>	<p><b>Factors used to measure effects</b></p>
<p>Diversity of plant and animal Communities (See the Botany and Wildlife Resource Reports for more information)</p>	<p>“Roadless areas are more likely than roaded areas to support greater ecosystem health, including the diversity of native and desired nonnative plant and animal communities due to the absence of disturbances caused by roads and accompanying activities. Inventoried roadless areas also conserve native biodiversity by serving as a bulwark against the spread of nonnative invasive species.”</p>	<p>Diversity of tree species Diversity of terrestrial and aquatic wildlife species and communities Diversity of fish and aquatic species and communities Risk of introducing or spreading non-native invasive plant populations</p>
<p>Habitat for Threatened, Endangered, Proposed, Candidate, and Sensitive species and species dependent on large undisturbed areas of land (See the Wildlife Biological Assessment and Biological Evaluation, Botany Biological Assessment and Evaluation, Fisheries Biological Assessment and the related resource reports)</p>	<p>Roadless areas are biological strongholds and refuges for many species. Roadless areas support a diversity of aquatic habitats and communities, providing or affecting habitat for more than 280 TES species.”</p>	<p>Likelihood of affecting existing Threatened, Endangered, Proposed and Candidate botanical populations Likelihood that effects to Sensitive botanical populations will result in a trend toward listing Likelihood of adversely affecting Threatened, Endangered, Proposed, and Candidate terrestrial wildlife species, especially those that are dependent on large undisturbed areas of land Likelihood that the effects to Sensitive wildlife species will result in a trend toward listing Effects to habitat for Management Indicator Species that depend on large undisturbed areas of land Likelihood of affecting Threatened, Endangered, Proposed and Sensitive species of fish and aquatic species if dependent on large undisturbed areas of land</p>

<p><b>Roadless Area Characteristics</b></p>	<p><b>Roadless Character Descriptions (from 36 CFR Part 294, Special Areas; Roadless Area Conservation Rule, 2001)</b></p>	<p><b>Factors used to measure effects</b></p>
<p>Primitive, semi-primitive non-motorized, and semi-primitive motorized classes of recreation (See the Recreation Resource Report for more information)</p>	<p>“Roadless areas often provide outstanding dispersed recreation opportunities such as hiking, camping, picnicking, wildlife viewing, hunting, fishing, cross-country skiing and canoeing. These areas can also take pressure off heavily used wilderness areas by providing solitude and quiet, and dispersed recreation opportunities.”</p>	<p>Recreation opportunities (wildlife viewing, relatively undisturbed scenery viewing, etc.)</p>
<p>Reference landscapes for research study or interpretation</p>	<p>“Reference landscapes of relatively undisturbed areas serve as a barometer to measure the effects of development on other parts of the landscape.”</p>	<p>Existing or recommended research natural areas</p>
<p>Natural appearing landscapes with high scenic quality (See the Scenery Resource Report for more information)</p>	<p>“High quality scenery, especially scenery with natural-appearing landscapes, is a primary reason that people choose to recreate. In addition, quality scenery contributes directly to real estate values in nearby communities and residential areas.”</p>	<p>Scenic character and integrity (Visual Quality Objectives): scenic viewpoints identified in the Forest Plan</p>
<p>Traditional cultural properties and sacred sites (See the Cultural Resources Report for more information)</p>	<p>“Traditional cultural properties are places, sites, structures, art, or objects that have played an important role in the cultural history of a group. Sacred sites are places that have special religious significance to a group. Traditional cultural properties and sacred sites may be eligible for protection under the National Historic Preservation Act. However, many of them have not yet been inventoried especially those that occur in inventoried roadless areas.”</p>	<p>Sites identified as eligible or potentially eligible for listing on the National Register of Historic Places or identified by tribes as traditional cultural properties or sacred sites</p>

Roadless Area Characteristics	Roadless Character Descriptions (from 36 CFR Part 294, Special Areas; Roadless Area Conservation Rule, 2001)	Factors used to measure effects
Other locally identified unique characteristics	"Inventoried roadless areas may offer other locally identified unique characteristics and values. Examples include uncommon geological formations, which are valued for their scientific and scenic quality, or wetland complexes. Unique social, cultural or historical characteristics may also depend on the roadless character of the landscape. Examples include ceremonial sites, places for local events, areas prized for collection on non-timber forest products or exceptional hunting and fishing opportunities."	Existing, inventoried and un-inventoried special interest areas (botanical, geologic)

**Spatial and Temporal Bounding**

**Short-term timeframe:** one to five years because effects will be realized during and shortly after project implementation.

**Long-term timeframe:** 20 years because effects will fade by the end of that time.

**Spatial boundary:** IRA boundaries within the project area boundary because only activities that occur within the IRAs affect the roadless characteristics of the IRAs.

**Affected Environment**

There are six IRAs within the Westside Fire Recovery project area. Four of these IRAs are totally or partially within the Happy Camp Fire area: Grider (10,640 acres); Johnson (4,900 acres); Kelsey (3,230 acres); and Tom Martin (9,050 acres). Two IRAs are partially within the Whites Fire area: (Russian (13,540 acres) and Snoozer (9,250 acres). In 1994, an estimate was made of the number of acres retaining roadless character in each IRA; these rounded estimates are displayed in table 2 along with the acres within the project area as calculated by the Geographic Information System (GIS).

**Table 2: Acres of IRAs retaining and not retaining Roadless character**

IRA	Acres in 1994*	Acres within project area	Acres of the IRA retaining roadless character in 1994*	Acres within project area retaining roadless character	Acres of the IRA no longer retaining roadless character in 1994*	Acres within project area no longer retaining roadless character
Grider	11,000	10,640	11,000	10,640	0	0
Johnson	9,300	4,900	6,700	3,970	2,600	930
Kelsey	3,000	3,230	400	510	2,600	2,720
Russian	16,800	13,540	16,800	11,910	0*	1,630*
Snoozer	23,030	9,250	21,630	9,250	1,400	0
Tom Martin	9,400	9,050	5,640	5,650	3,760	3,400
<b>Total</b>	<b>72,530</b>	<b>50,610</b>	<b>62,170</b>	<b>41,930</b>	<b>10,360</b>	<b>8,680</b>

\*Table figures were derived from appendix C of the FEIS for the Forest Plan. Although appendix C states that the parts of the Russian IRA “basically retain their natural integrity,” there are roads within segments of this IRA that create a classification of “no longer retain roadless character” using GIS.

In 1985, the Forest Plan provided direction to manage IRAs according to the objectives of the management area in which they occur; since then, this direction has been refined by requirements in the Roadless Area Conservation Rule of 2001. Project activities are proposed within the following management areas allocated to each IRA by the Forest Plan as described in table 3. The existing and desired conditions are discussed in chapter 1 of the EIS for the management areas within the project area.

**Table 3: Management Areas and their acres by IRA**

IRA	Management Area	Management Area Acres in Project Area
Grider	MA 10 Riparian Reserve	3,017 (overlaps MA5)
	MA 5 Special Habitat—Late Successional Reserve & Falcon	10,641
	MA 3 Designated or Recommended Wild River	918 (overlaps MA5)
	MA 12 Designated or Recommended Scenic River	1,470 (overlaps MA5)
Johnson	MA 10 Riparian Reserve	1,243 (overlaps MA15, MA17)
	MA 11 Retention VQO	265
	MA 15 Partial Retention VQO	1,208
	MA 5 Special Habitat—Late Successional Reserve	1,315
	MA 3 Designated or Recommended Wild River	389 (overlaps MA11)
Kelsey	MA 17 General Forest	1,097
	MA 10 Riparian Reserve	980 (overlaps MA5, MA15, MA17)
	MA 15 Partial Retention VQO	1,297

IRA	Management Area	Management Area Acres in Project Area
	MA 5 Special Habitat—Late Successional Reserve & Falcon	699
	MA 17 General Forest	401
Russian	MA 10 Riparian Reserve	3,094 (overlaps MA5, MA15)
	MA 15 Partial Retention VQO	207
	MA 5 Special Habitat—Late Successional Reserve & Falcon	13,213
	MA 13 Designated or Recommended Recreational River	707 (overlaps MA5)
Snoozer	MA 10 Riparian Reserve	2,056
	MA 15 Partial Retention VQO	6,303
	MA 17 General Forest	258
Tom Martin	MA10 Riparian Reserve	2,083
	MA5 Special Habitat--Late Successional Reserve	2,330
	MA 11 Retention VQO	72
	MA 15 Partial Retention VQO	2,559
	MA 17 General Forest	1,973

The existing condition of each IRA at the time of the Forest Plan is described below. The existing condition before the 2014 fires is assumed to be similar to that described in 1994 because no prohibited management activities, or those that require approval by the Regional Forester or Chief, have taken place in the IRAs since the adoption of the Roadless Area Conservation Rule in 2001.

**Grider IRA:** As provided in the appendix C of the final environmental impact statement (FEIS) for the Forest Plan (pages C-24 through C26) as of 1994: “[T]he area retains its natural integrity and appearance...” but opportunities for expansion of the area are limited by the wilderness to the south and the roads and management activities to the east and west.” As identified in the Forest Plan FEIS, the area is entirely within a Late Successional Reserve and within a key watershed (the Grider 6<sup>th</sup> field watershed) where no new road construction is permitted unless there is an equal reduction in the number of miles of road in the area. There is a 40-acre parcel of private land within the IRA. A Wild and Scenic River classified as “Scenic” is located entirely in the IRA This IRA is entirely within the project area associated with the Happy Camp complex fires.

**Johnson IRA:** As provided in the appendix C of the FEIS for the Forest Plan (pages C-28 through C-30): after management activities under contract in 1995, about 6,700 acres of the 9,300-acre area retained their roadless character; about 2,600 acres were roaded. The area is within a Late Successional Reserve and within a key watershed (the Elk Creek 5<sup>th</sup> field watershed) where no new road construction is permitted unless there is an equal reduction in the number of miles of road in the area. There is an 80-acre parcel of private land within the IRA. About 4,900 acres of this 9,300-acre IRA are within the project area associated with the Happy Camp Complex fires.

**Kelsey IRA:** As provided in the appendix C of the FEIS for the Forest Plan (pages C-38 through C-39): in 1994, “[D]ue to the development that has occurred, only the portion in the northwest

[about 400 acres of the 3,000-acre IRA] retains its natural integrity.” This IRA is entirely within the project area associated with the Happy Camp Complex fires.

**Russian IRA:** As provided in the appendix C of the FEIS for the Forest Plan (pages C-62 through C-65), in 1994: [T]here are three disconnected segments of this IRA: Russian-1 is the southernmost segment, approximately 11,800 acres in size; road access is available from the north, northwest, west and southwest and six roads extend into the IRA. Russian-1 is “mainly ‘untouched’ with some ‘excessive alternation’ in the south along the road.” Most of Russian-1 is within a Late Successional Reserve except the southeast portion (outside the project boundary). Russian-2 includes about 1,500 acres under Federal management; access is from a road to the south that extends into the IRA. Most of Russian-2 is within a Late Successional Reserve except for the northeast portion (within the project boundary). The project area does not include any of Russian-3 so that segment of the Russian IRA will not be discussed further. The IRA is partly within key watersheds (North Fork Salmon and South Fork Salmon 5<sup>th</sup> field watersheds) where no new road construction is permitted unless there is an equal reduction in the number of miles of road in the area. About 13,500 acres of this 16,800-acre IRA (parts of Russian-1 and Russian-2) are within the project area associated with the Whites fire.

**Snoozer IRA:** As provided in the appendix C of the FEIS for the Forest Plan (pages C-78 through C-81), in 1994: Snoozer IRA included three segments. Snoozer-1, about 9,700 acres, is southeast of the Marble Mountain Wilderness; one road extends into the roadless area and a number of roads are adjacent to the area. About 8,400 acres meet the original inventory criteria for roadless (primarily the unroaded portions). The southwest portion of Snoozer-1 is within a Late Successional Reserve but this portion is outside the project area boundary. Mineral potential and historic mining are part of the southern portion of Snoozer-1; quite a few mining claims are within the IRA. Snoozer-2 includes about 13,100 acres east of the Marble Mountains Wilderness. Almost all of Snoozer-2 met the original inventory criteria in 1995; this segment was ‘untouched’ except for the southeastern edge. Roads and infrastructure are adjacent to the west and southeast of Snoozer-2. Both Snoozer-1 and Snoozer-2 are within the North Fork Salmon 5<sup>th</sup> field key watershed where no new road construction is allowed unless an equal number of roads are removed. About 9,200 acres of this 23,030-acre IRA (parts of Snoozer-1 and Snoozer-2) are within the project area associated with the Whites fire.

**Tom Martin IRA:** As provided in the appendix C of the FEIS for the Forest Plan (pages C-84 to C-85), in 1994: of the inventoried 9,400 acres, about 6,100 acres of the north and east portions of this IRA meet the original inventory criteria. The area is south of Highway 96 and the town of Hamburg, and west of the Scott River road. “Feelings of spaciousness are limited due to the dense vegetation, but there are opportunities for adventure and solitude. Sights and sounds of human activities are evident in the lower elevations from Highway 96 and Hamburg.” A part of the IRA is within a Late Successional Reserve but the IRA is not within a key watershed. About 9,000 acres of this 9,400-acre IRA are within the project area associated with the Happy Camp Complex fires.

## Environmental Consequences

### Alternative 1

#### *Direct and Indirect Effects*

Since there are no management actions proposed with this alternative, there will be no direct or indirect effects on IRAs. Acres of IRAs within the project boundary that are roadless and roaded (using GIS data for the project) are provided in table 4.

**Table 4: Alternative 1 proposed activities within each IRA, within roadless and roaded portions of each IRA**

IRA	Activity: Acres within IRA	Activity: Acres within IRA retainin roadless character	Activity: Acres within IRA no longer retaining roadless character
Grider	0	0	0
Johnson	0	0	0
Kelsey	0	0	0
Russian	0	0	0
Snoozer	0	0	0
Tom Martin	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>

#### *Cumulative Effects*

Since there are no direct or indirect effects, there are no cumulative effects of adding the zero effects of alternative 1 to the past, ongoing or reasonable foreseeable future actions listed in appendix C of the draft EIS.

### Alternative 2

#### *Direct and Indirect Effects*

The direct or indirect effects on roadless characteristics in IRAs are based on the type of extent of activities within each IRA, especially within the roadless portions since roadless characteristics of the roaded portions have already been affected. Acres of IRAs within the project boundary that are roadless and roaded (using GIS data for the project) are provided in table 5.

**Table 5: Alternative 2 proposed activities within each IRA, within roadless and roaded portions of each IRA**

IRA	Acres within IRA	% of IRA with Activity	Acres within IRA retaining roadless character	% of IRA with Activity retaining roadless character	Acres within IRA no longer retaining roadless character	% of IRA with Activity no longer retaining roadless character
<b>Grider</b>	<b>125</b>	<b>1 %</b>	<b>125</b>	<b>1 %</b>	<b>0</b>	<b>0 %</b>
Fuels Treatment	43	<1 %	43	<1 %	0	0 %
Site prep./plant	82	1 %	82	1 %	0	0 %

IRA	Acres within IRA	% of IRA with Activity	Acres within IRA retaining roadless character	% of IRA with Activity retaining roadless character	Acres within IRA no longer retaining roadless character	% of IRA with Activity no longer retaining roadless character
<b>Johnson</b>	<b>345</b>	<b>7 %</b>	<b>152</b>	<b>4 %</b>	<b>192</b>	<b>21 %</b>
Fuels Treatment	160	3 %	114	3 %	47	5 %
Site prep./plant	184	4 %	39	1 %	146	16 %
<b>Kelsey</b>	<b>44</b>	<b>1 %</b>	<b>0</b>	<b>0 %</b>	<b>44</b>	<b>2 %</b>
Fuels Treatment	0	0 %	0	0 %	0	0 %
Site prep./plant	44	1 %	0	0 %	44	2 %
<b>Russian</b>	<b>2,066</b>	<b>15 %</b>	<b>1,822</b>	<b>15 %</b>	<b>245</b>	<b>15 %</b>
Fuels Treatment	1,935	14 %	1,782	15 %	153	9 %
Site prep./plant	131	1 %	39	<1 %	92	6 %
<b>Snoozer</b>	<b>3,459</b>	<b>37 %</b>	<b>3,459</b>	<b>37 %</b>	<b>0</b>	<b>0 %</b>
Fuels Treatment	3,459	37 %	3,459	37 %	0	0 %
Site prep./plant	0	0 %	0	0 %	0	0 %
<b>Tom Martin</b>	<b>261</b>	<b>3 %</b>	<b>50</b>	<b>1 %</b>	<b>210</b>	<b>6 %</b>
Fuels Treatment	213	2 %	50	1 %	163	5 %
Site prep./plant	47	<1 %	0	0 %	47	1 %
<b>TOTAL</b>	<b>6,300</b>	<b>12 %</b>	<b>5,608</b>	<b>13 %</b>	<b>692</b>	<b>8 %</b>
Fuels Treatment	<b>5,811</b>	<b>11 %</b>	<b>5,448</b>	<b>13 %</b>	<b>363</b>	<b>4 %</b>
Site prep./plant	<b>489</b>	<b>1 %</b>	<b>160</b>	<b>&lt;1 %</b>	<b>329</b>	<b>4 %</b>

Most of the acres of fuels reduction treatments proposed in Russian and Snoozer are prescribed burning. Omitting acreages of prescribed burning, the largest percentages of treated acres in IRAs are within areas that no longer retain roadless characteristics. Only treatments in areas retaining roadless characteristics are considered in determining the effects of actions on the retention of roadless character.

Specific effects on soil, water and air resources, the first factors used to measure effects on roadless character, are disclosed in the soil, water and air sections of chapter 3 of the draft EIS and in the appendix on the aquatic conservation strategy. Specific effects on municipal watersheds, the second factor used to measure effects, are disclosed in the water quality section of chapter 3 of the draft EIS. Specific effects on the diversity of plant and animal communities, the third factor used to measure effects, are disclosed in the wildlife and botany sections of chapter 3 of the draft EIS. Specific effects on habitat for threatened, endangered, proposed, candidate and sensitive species, the fourth factor used to measure effects, are disclosed in the wildlife, botany and fisheries sections of chapter 3 of the draft EIS and supporting documents. Specific effects on primitive and semi-primitive classes of recreation, the fifth factor used to measure effects, are disclosed in the recreation section of chapter 3 of the draft EIS. Specific

effects on reference landscapes, the sixth factor used to measure effects, are not disclosed in chapter 3 of the draft EIS because there are no reference landscapes, defined as research natural areas for the purposes of this project, in IRAs within the project area. Specific effects on natural appearing landscapes with high scenic quality, the seventh factor used to measure effects, are disclosed in the scenery section of chapter 3 of the draft EIS. Specific effects on traditional cultural properties and sacred sites, the eighth factor used to measure effects, are disclosed in the cultural resources section of chapter 3 of the draft EIS. Specific effects on locally identified unique characteristics, identified as special interest areas, the ninth factor used to measure effects, are disclosed in the botany and geology sections of chapter 3 of the draft EIS. To summarize the effects to the roadless character of IRAs, there are minor, negligible effects to these factors from the activities proposed in this alternative.

### ***Cumulative Effects***

Adding the effects of alternative 2 to the past, ongoing or reasonable foreseeable future actions listed in appendix C of the draft EIS will produce negligible cumulative effects to roadless characteristics. Few if any proposed projects on the Forest include any treatments in IRAs and IRAs do not exist on private lands.

### **Alternative 3**

#### ***Direct and Indirect Effects***

The actions proposed in this alternative are the same as alternative 2; therefore, direct and indirect effects will be the same as for alternative 2.

#### ***Cumulative Effects***

Adding the effects of alternative 3 to the past, ongoing or reasonable foreseeable future actions listed in appendix C of the draft EIS will produce the same cumulative effects to roadless characteristics as for alternative 2.

### **Alternative 4**

#### ***Direct and Indirect Effects***

The actions proposed in this alternative are the same as alternative 2; therefore, direct and indirect effects will be the same as for alternative 2.

#### ***Cumulative Effects***

Adding the effects of alternative 3 to the past, ongoing or reasonable foreseeable future actions listed in appendix C of the draft EIS will produce the same cumulative effects to roadless characteristics as for alternative 2.

### **Alternative 5**

#### ***Direct and Indirect Effects***

No site preparation and planting actions are proposed in IRAs in this alternative as noted below in table IRA-6. The direct and indirect effects on roadless characteristics will be minimal.

**Table 6: Alternative 5 proposed activities within each IRA, within roadless and roaded portions of each IRA**

IRA	Acres within IRA	% of IRA with Activity	Acres within IRA retaining roadless character	% of IRA with Activity retaining roadless character	Acres within IRA no longer retaining roadless character	% of IRA with Activity no longer retaining roadless character
<b>Grider</b>	<b>43</b>	<b>&lt;1 %</b>	<b>43</b>	<b>&lt;1 %</b>	<b>0</b>	<b>0 %</b>
Fuels Treatment	43	<1 %	43	<1 %	0	0 %
Site prep./plant	0	0 %	0	0 %	0	0 %
<b>Johnson</b>	<b>160</b>	<b>3 %</b>	<b>114</b>	<b>3 %</b>	<b>47</b>	<b>5 %</b>
Fuels Treatment	160	3 %	114	3 %	47	5 %
Site prep./plant	0	0 %	0	0 %	0	0 %
<b>Kelsey</b>	<b>0</b>	<b>0 %</b>	<b>0</b>	<b>0 %</b>	<b>0</b>	<b>0 %</b>
Fuels Treatment	0	0 %	0	0 %	0	0 %
Site prep./plant	0	0 %	0	0 %	0	0 %
<b>Russian</b>	<b>1,935</b>	<b>14 %</b>	<b>1,782</b>	<b>15 %</b>	<b>153</b>	<b>9 %</b>
Fuels Treatment	1,935	14 %	1,782	15 %	153	9 %
Site prep./plant	0	0 %	0	0 %	0	0 %
<b>Snoozer</b>	<b>3,459</b>	<b>37 %</b>	<b>3,459</b>	<b>37 %</b>	<b>0</b>	<b>0 %</b>
Fuels Treatment	3,459	37 %	3,459	37 %	0	0 %
Site prep./plant	0	0 %	0	0 %	0	0 %
<b>Tom Martin</b>	<b>213</b>	<b>2 %</b>	<b>50</b>	<b>1 %</b>	<b>163</b>	<b>5 %</b>
Fuels Treatment	213	2 %	50	1 %	163	5 %
Site prep./plant	0	0 %	0	0 %	0	0 %
<b>TOTAL</b>	<b>5,811</b>	<b>11 %</b>	<b>5,448</b>	<b>13 %</b>	<b>363</b>	<b>4 %</b>
Fuels Treatment	<b>5,811</b>	<b>11 %</b>	<b>5,448</b>	<b>13 %</b>	<b>363</b>	<b>4 %</b>
Site prep./plant	<b>0</b>	<b>0 %</b>	<b>0</b>	<b>0 %</b>	<b>0</b>	<b>0 %</b>

The direct and indirect effects of actions are similar to, but slightly less than, those of alternative 2.

**Cumulative Effects**

Adding the effects of alternative 5 to the past, ongoing or reasonable foreseeable future actions listed in appendix C of the draft EIS will produce negligible cumulative effects to roadless characteristics.

**Comparison of Effects**

There is little difference among alternatives in effects on roadless character of IRAs because the treatments proposed in any alternative have little effect on the roadless areas that retain roadless characteristics. Alternative 1 does not propose any treatments in IRAs; IRAs will regenerate naturally as described in the vegetation section of chapter 3 of the draft EIS. In action alternatives, only prescribed burning affects a sizeable number of acres; this action mimics the effects of low intensity wildfire and will not substantially affect roadless character. Construction and maintenance of shaded fuel breaks on a small number of acres that retain their roadless characteristic and removal of small fuels (generally less than 3 inches in diameter at breast height) will also not substantially affect roadless character. Site preparation and planting using hand tools and methods in alternatives 2, 3 and 4 (with implementation of project design feature IRA-1) will have a minor effect; this will occur on only 160 acres of areas that currently retain roadless character. No site preparation and planting will occur in alternative 5; effects of natural regeneration will be the same as for alternative 1.

**Compliance with law, policy, regulation and the Forest Plan**

All alternative will comply with the Roadless Area Conservation Rule and applicable Forest Plan standards as amended by this rule.

## Appendix A:

### Regulatory Framework & Information Sources

**Inventoried Roadless Areas** (IRAs) were identified through the Roadless Area Review and Evaluation II (RARE II) process (in the late 1970's). The California Wilderness Bill of 1984 designated wilderness areas in the state, and “released” IRAs not designated as wilderness to multiple-use management. See Forest Service Roadless Area Conservation Webpage: <http://roadless.fs.fed.us/>

**The 2001 Roadless Rule** (USDA 2001) provided amendments to 36 CFR Part 294 under *Subpart B- Protection of IRAs* to include the prohibition on road construction and road reconstruction in IRAs (§294.12) and the prohibition on timber cutting, sale, or removal in IRAs (§294.13) with certain exceptions. Exceptions include: Maintenance of classified roads is permissible in IRAs (§294.12(c)); and where [T]he cutting, sale, or removal of timber is incidental to the implementation of a management activity not otherwise prohibited by this subpart (§294.13(b)(2)). The 2001 Roadless Area Conservation Rule (36CFR 294) established prohibitions on road construction, road reconstruction, and timber harvesting in IRAs on National Forest System lands. See webpage: [http://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb5050459.pdf](http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5050459.pdf)

IRAs are identified in a set of maps contained in the Forest Service Roadless Area Conservation Final Environmental Impact Statement, Volume 2, dated November 2000 (and on any subsequent updated or revision of those maps through the land management planning process) (36 CFR 294.11). The Klamath National Forest map of IRAs (dated Sept. 15, 2000) is available on the *Forest Service Roadless Website* at <http://www.roadless.fs.fed.us>.

Forest IRA Webpage for IRA map:

[http://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/fsmrs\\_072414.pdf](http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fsmrs_072414.pdf)

**The 1995 Klamath National Forest Land and Resource Management Plan** (as amended) provides Forest direction for IRAs. However, the Forest Plan did not identify IRAs as a management area. The Forest Plan addressed the “released” roadless areas and provided specific management guidance through forest-wide standards and guidelines 6-23 and 14-1 (USDA 1995). The Forest Plan provides for management of IRAs according to the objectives of the management area (MA) in which they occur.

Standard 6-23: “No new roads will be built in remaining un-roaded portions of inventoried (RARE II) roadless areas in Key Watersheds.” (Forest Plan, page 4-25)

Standard 14-1: “Released roadless areas [IRAs] will be managed according to the objectives of the management area in which they occur.” (Forest Plan, page 4-38)

The 1994 Klamath National Forest Land and Resource Management Plan Final Environmental Impact Statement Appendix C–Released Roadless Areas describes each of the Forest’s 18 IRAs (1994): [http://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb5333259.pdf](http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5333259.pdf)

**Regional Forester Randy Moore’s November 6, 2013 Letter** provides direction for activities proposed within IRAs. Direction including review requirements to consider is outlined the review process table attached to this letter. These documents can be found on the project website at: [http://www.fs.fed.us/nepa/nepa\\_project\\_exp.php?project=45579](http://www.fs.fed.us/nepa/nepa_project_exp.php?project=45579).

## Appendix B:

### Roadless Area Characteristics and Descriptions

As identified in the 2001 Roadless Rule, the following values or features often characterize IRAs: (1) high quality or undisturbed soil, water, and air; (2) sources of public drinking water; (3) diversity of plant and animal communities; (4) habitat for threatened, endangered, proposed, candidate, and sensitive species and for those species dependent on large, undisturbed areas of land; (5) primitive (P), semi-primitive non-motorized (SPNM) and semi-primitive motorized (SPM) classes of dispersed recreation; (6) reference landscapes; (7) natural appearing landscapes with high scenic quality; (8) traditional cultural properties and sacred sites and, (9) other locally identified unique characteristics.

Characteristic	Description
<i>Roadless</i>	
Soil, water and air resources	These three key resources are the foundation upon which other resource values and outputs depend. Healthy watersheds provide clean water for domestic, agricultural, and industrial uses; help maintain abundant and healthy fish and wildlife populations; and are the basis for many forms of outdoor recreation.
Sources of public drinking water	NFS lands contain watersheds that are important sources of public drinking water. Careful management of these watersheds is crucial in maintaining the flow of clean water to a growing population.
Diversity of plant and animal communities	IRAs may play a role in conserving native biodiversity by providing areas where nonnative invasive species are rare, uncommon, or absent.
Habitat for TES and species dependent on large undisturbed areas of land	Large undisturbed areas of land function as biological strongholds and refuges for many species.
Primitive, semi-primitive non-motorized, and semi-primitive motorized classes of recreation	These areas often provide outstanding recreation opportunities such as hiking, camping, picnicking, wildlife viewing, hunting, fishing, cross-country skiing, and canoeing. While they may have many wilderness-like attributes, unlike wilderness, the use of mountain bikes and motorized vehicles is allowed.
Reference landscapes for research study or interpretation	The body of knowledge about the effects of management activities over long periods of time and on large landscapes is very limited. Reference landscapes can provide comparison areas for evaluation and monitoring. These areas provide a natural setting that may be useful as a comparison to study the effects of more intensely managed areas.
Landscape character and integrity	High quality scenery, especially scenery with natural-appearing landscapes, is a primary reason that people choose to recreate. In addition, quality scenery contributes directly to real estate values in neighboring communities and residential areas.
Traditional cultural properties and sacred sites	Traditional cultural properties are places, sites, structures, art, or objects that have played an important role in the cultural history of a group. Sacred sites are places that have special religious significance to a group. Traditional cultural properties and sacred sites may be eligible for protection under the National Historic Preservation Act.

## **References**

USDA Forest Service (1994) Klamath National Forest Land and Resource Management Plan, Final Environmental Impact Statement, Appendix C.

USDA Forest Service (1995) Klamath National Forest Land and Resource Management Plan.