
INVENTORIED ROADLESS AREAS and OTHER UNROADED AREAS – Specialist Report

INVENTORIED ROADLESS AREAS

Introduction

In 1972, the Forest Service began identifying roadless areas for wilderness consideration through Roadless Area Review and Evaluation (RARE I). In 1979, the agency completed RARE II, a more extensive national inventory of roadless areas. The Fremont National Forest incorporated RARE II data to develop inventories of roadless areas into the Forest Plan.

Regulatory Framework

On January 12, 2001, the Department of Agriculture issued the Roadless Area Conservation Final Rule accompanied by a FEIS and Record of Decision, published as part of the final rule, 36 CFR 294, Special Areas, Roadless Area Conservation, (NARA, 2001). The rule established prohibitions on road construction, road reconstruction, and timber harvesting in inventoried roadless areas on National Forest System lands. The intent of the rule was to provide lasting protection for inventoried roadless areas within the National Forest System in the context of multiple-use management. On May 10, 2001, the Idaho District Court enjoined the Forest Service from implementing all aspects of the Roadless Area Conservation Rule as well as a section in the Forest Planning Rule that addresses the inventory and evaluation of roadless areas during Forest Plan revision (USDC, 2001). On December 14, 2001, Forest Service Manual (FSM) Interim Directive No. 1920-2001-1 was issued (USDA, 2001). This created a new Manual section on Management of Inventoried Roadless Areas and revised decision authorities for timber harvest and road construction and reconstruction projects in Inventoried Roadless Areas (IRAs). On December 12, 2002 the Ninth Circuit Court of Appeals reversed the May 10, 2001, ruling by the U.S. District Court for the District of Idaho (United States Court of Appeals for the Ninth Circuit. 2002).

Existing Condition

There are no inventoried roadless areas (IRA) within the Toolbox Fire Recovery project area. The nearest IRA is the Antler Roadless Area, which at its nearest point is approximately three miles west of the project area boundary (and the fire perimeter). The Antler IRA is 5,413 acres.

Environmental Consequences

Direct and Indirect Effects

Alternatives A (No Action), C, D, E, G and H

There are no inventoried roadless areas (IRA) within the Toolbox Fire Recovery project area and none of the alternatives include proposed activity within an IRA. It is unlikely that either sound from Toolbox Fire Recovery Project activities or smoke associated with activity fuels reduction would impact the Antler IRA. The IRA is, at a minimum, three miles to the west of the project area. Prevailing winds are from the west and southwest. It is very unusual for winds to blow from east to west in the area. The Antler IRA is both upslope and upstream from the project area. Because of these factors, none of the alternatives would affect the natural integrity, solitude, apparent naturalness, special features, manageability or boundaries of the Antler IRA, or any IRA. There would be no direct or indirect effect as a result of implementation of either the no action alternative, or any action alternative.

Cumulative Effects

Cumulative effects to be considered in the context of this analysis include the impact on the environment which results from the incremental impact of the Toolbox Fire Recovery Project, when added to other past, present, and reasonably foreseeable future actions. Cumulative effects are the total effect of direct and indirect effects of the action plus past, present, and reasonably foreseeable future actions on a given resource. The Antler Roadless Area occupies portions of both the West Fork Silver Creek subwatershed and the Thompson Reservoir subwatershed, both of which are within the Toolbox Fire Recovery Project cumulative effects analysis area.

Common to All Alternatives

All past present and reasonably foreseeable future activities within the cumulative effects analysis area are listed in Appendix A. An examination of the analysis that is documented in Appendix C of the FEIS for the Fremont National Forest LRMP and Appendix A for this analysis (Tables A-2 – Composite of Vegetative Treatments, Table A-5 – Recreation Facility Development and Table A-8 – Livestock Grazing and Allotments), reveal that “human influences have had a minor impact on the natural integrity and long-term ecological process of the area. Overall the impacts (of livestock grazing and timber harvesting) are not severe and the area appears natural to most visitors, with the possible exception of encountering cattle” (USDA Forest Service, 1989, FEIS Appendix C, 21). In 1992, three years after the LRMP was issued, livestock grazing within the Antler IRA ceased. Current and reasonably foreseeable future allotment management plans do not include any livestock grazing within the Antler IRA. Prior to 1989, timber harvesting within the Antler IRA was limited to salvage logging in localized spots along the periphery of the area (USDA Forest Service, 1989, FEIS Appendix C, 21). No timber harvest activities have occurred within the Antler IRA since the LRMP was issued. No livestock grazing, timber harvest, prescribed fire or other activities are planned for the future within the Antler IRA.

Future fire suppression could have a long-term negative effect on natural integrity by altering the successional pathways of habitats and a short-term negative effect on solitude through noise and activities associated with fire suppression.

The area is allocated to semi primitive non-motorized recreation with light levels of use. Prior to the early 1990’s when the area was traversed by the Fremont National Recreation Trail, the area received approximately 250 recreation visitor days (RVD’s) annually. Presently, with the existence of the trail, that use has increased, but is still within the 800 RVD’s that the Fremont National Forest LRMP FEIS indicated that the area was capable of accommodating, while still providing outstanding opportunities for solitude” (USDA Forest Service, 1989, FEIS Appendix C, 21). Recreational hunting and fishing would have very minor and short-term effects on solitude. Indirect effects associated with recreational use include noxious weed spread, soil compaction and erosion, litter, evidence of fire rings, etc. These effects are minor but long-term.

In conclusion, all alternatives, which themselves would have no direct or indirect effects, together with reasonably foreseeable and ongoing activities would likely result in minor reductions in solitude within the Antler IRA.

Consistency with Forest Plan and Other Laws and Regulations

All alternatives are consistent with Forest Plan direction regarding IRAs and the Interim Directives associated with the Roadless Area Conservation Final Rule.

OTHER UNROADED AREAS

Introduction

National Forest Management Act regulations define unroaded areas as any area without the presence of classified roads, and of a size and configuration sufficient to protect the inherent characteristics associated with its roadless condition. Unroaded areas do not overlap with Inventoried Roadless Areas (IRA), which are considered in the previous section. For the sake of clarity, the term “unroaded area” will be used in this section to differentiate these areas from IRAs. Unroaded areas are defined in the FEIS for the Roadless Area Conservation Final Rule as “any area, without the presence of a classified road, of a size and configuration sufficient to protect the inherent characteristics associated with its roadless

condition. Unroaded areas do not overlap with inventoried roadless areas.” (USDA, 2000, FEIS Glossary, G-12). Unroaded areas have typically not been inventoried and are therefore separate from inventoried roadless area.

Regulatory Framework

There are no Forest-wide or Management Area standards specific to unroaded areas, though many of the resources that unroaded areas typically contain (i.e. wildlife, riparian resources, trails and non-motorized recreation) are specifically covered by LRMP standards and guidelines or goals.

Approximately 80% of the area within the units listed in “**Table 3.xx** Activities Within the Unroaded Areas on ONRC Submitted Map” is allocated to Management Area 5 (MA 5) in the Fremont National Forest Land and Resource Management Plan (LRMP). MA 5 is allocated for commercial production of sawtimber within Forest-Wide Standards and Guidelines for all resources including soil, water and wildlife habitat. The LRMP establishes an objective in MA 5 of creating a healthy forest condition characterized by a variety of age classes, through control of stocking levels, species mix, and protection from insects, disease, and other damage. Approximately 10% of the area within the proposed salvage units is allocated to Management Area 1 (MA 1) Mule Deer Winter Range Habitat. The remaining area within salvage units is within MA 2 Bald Eagle (BEMA) and MA 15 (Fish and Wildlife Habitat/Water Quality). Information provided elsewhere in Chapter 3 in the following sections: Watersheds; Air Quality; Wildlife; and Threatened, Endangered and Sensitive Species sections, is also applicable to unroaded areas.

If road management activities are planned, either in previously roaded areas or in unroaded areas outside of IRAs, Forest Service Handbook 7712.1 requires decisions that include road management activities be informed by an interdisciplinary science-based roads analysis, if those activities would result in new road construction, changes in access, such as changes in current use, traffic patterns, and road standards, or where there may be adverse effects on soil and water resources, ecological processes, or biological communities (road construction, reconstruction, and decommissioning) (USDA, 2001. *FS Manual 7700*, 17)

Analysis Area

The Oregon Natural Resources Council (ONRC) submitted a map of five unroaded areas in and adjacent to the project area to Toolbox Fire Recovery Project IDT Leader. The ONRC map was a follow-up to a response from ONRC during initial project scoping that requested that the project “avoid timber harvest, roads, mining, development and motorized recreation in roadless areas greater than or equal to 1000 acres” and further that the EIS should clearly state whether the project is in any portion of a roadless area inventories during the RARE II process, or in a non-inventoried roadless area greater than or equal to 1000 acres. The five unroaded areas will be referred to in this analysis by the letters “A” through “E”; corresponding to the following legal descriptions that reference a central location within each ONRC mapped unroaded area:

- A: Unroaded T29S, R14E, Section 17
- B: Unroaded T29S, R15E, Section 35
- C: Unroaded T 29S, R16E, Section 32
- D: Unroaded T30S, R16E, Section 22
- E: Unroaded T 31S, R14E, Section 11

Two of the areas identified on the ONRC map of unroaded areas (C and E above) are characterized by land areas that are between open roads, deeply incised by classified open roads or include areas that stick out like a peninsula. These areas may contain characteristics of unroaded areas such as high quality soil, water, and air or diversity of plant and animal communities, but would be less likely to provide the solitude that is often provide by unroaded areas. The analysis area for the direct and indirect effects on unroaded areas consists of the area within the ONRC mapped unroaded areas, within the Toolbox Fire Recovery Project area boundary. The analysis area for cumulative effects is the extent of these unroaded areas, both inside of and outside the project area boundary.

Table 3.xx Unroaded Areas

Unroaded Area Legal Description (representative location)	Approximate size of area w/i Toolbox Project Boundary (Acres)	Geographic or other Descriptive Features	Comments
A: Unroaded T29S, R14E, Section 17	900	In the area of Chase Spring, Silver Creek and West Fork Silver Creek	Approximately 48 percent National Forest; 52 percent Bureau of Land Management lands for a total approximate size of 4200 acres. About 45% of National Forest portion is w/i project boundary
B: Unroaded T29S, R15E, Section 35	200	Centered on Hager Mountain	Traversed by the Fremont National Recreation Trail (NRT). Total area approx. 3600 acres. Approx. 6% of area is within project area
C: Unroaded T 29S, R16E, Section 32	3400	East-west trending area, centered on "Indian Rim"	Traversed by the NRT. Incised by Classified Roads 2914021 and 3036012. Bounded on the east by Road 2901.
D: Unroaded T30S, R16E, Section 22	900	North-south trending area, primarily below Winter Ridge, with "fingers" above the rim.	Intermittently traversed by the NRT. Only those portions of the area that lie above Winter Ridge are within the Toolbox project boundary (a narrow strip never greater than ½ mile wide). Area is almost entirely below the rim within the Winter Fire. Approximately 5,000 acres total shown on submitted map, but total area not determined (the area extended beyond the coverage of the submitted map). Bounded on the north by Road 2901.
E: Unroaded T 31S, R14E, Section 11	1800 (north) 0 (south)	In the Graham Creek area	Contains 2 separate parts, divided by Classified Road 2800066. Total area approx. 2700 acres (north) and 2000 acres (south). Northern portion incised by Classified Road 2800505. Approx. 65% of Northern area is within project area. None of southern portion is within project area.

Analysis Methods

The areas included on the ONRC submitted map are identified in this analysis by a legal description that is approximately centered within the unroaded area in order to provide a representative location (see following table). The areas are unnamed on map submitted by ONRC. Specific acreage figures were not provided for of the areas, but estimates on their size were made using a "dot-grid" method. All were initially presumed to be greater than 1000 acres. None of the ONRC submitted unroaded areas were identified during the Roadless Area Review and Evaluation (RARE I), RARE II, or the EIS for the Roadless Area Conservation Final Rule as eligible areas, 5,000 or more acres in size.

The analysis of effects on unroaded areas requires a description of the activities that are proposed within them, weighed against the values unroaded areas can provide or contribute to. Those values include:

- Natural appearing landscapes for dispersed unroaded recreation opportunities such as hiking, camping, wildlife viewing, hunting and cross-country skiing, and the solitude they can provide.
- Protection of cultural and heritage resources.
- High quality or undisturbed soil, water, and air.
- Habitat for abundant and healthy fish and wildlife populations.
- Diversity of plant and animal communities, including areas that are relatively at less risk from noxious weeds.
- Habitat for threatened, endangered, and sensitive species

Effects of proposed actions were determined using a qualitative discussion based on amount and type of proposed activities. Those activities that have the potential to have an effect on unroaded areas include: commercial salvage, fuels treatments, temporary road construction, prescribed fire, and road management. These activities are proposed in varying amounts in the alternatives, as shown in the tables below. Other activities included in the action alternatives such as aspen enhancement; deciduous plantings, large woody debris placement, reforestation, and plantation thinning would have minimal effect and are not considered further in this section, though information provided in Soils and Geology; Watershed; Air Quality; Wildlife; Forested Plant Communities; Recreation; Noxious Weeds and Threatened, Endangered and Sensitive Species sections within the Wildlife, Fisheries and Botany sections is also applicable to unroaded areas.

Environmental Consequences

Direct and Indirect Effects

The analysis area for the direct and indirect effects on unroaded areas consists of the area within the ONRC mapped unroaded areas, within the Toolbox Fire Recovery Project area boundary, as displayed in the preceding table. The following table summarizes those potentially significant activities (other than road management), by proposed salvage unit number, that are proposed for the Toolbox Fire Recovery Project within the unroaded areas:

Table 3.xx Action Alternatives - Activities Within the Unroaded Areas on ONRC Submitted Map

Unroaded Area (Central Legal Descript.)	Unit No.	Commercial Salvage					Temporary Road										Prescribed Fire		
		Approximate <u>Acres</u> of Salvage within unroaded area shown on ONRC Map					Temporary Re-open Existing Unclassified Road (Miles)					New Temporary Construction (Miles)							
		Alt. C	Alt. D	Alt. E	Alt. G	Alt. H	C	D	E	G	H	C	D	E	G	H			
A: T29S, R14E, Sec 17 (Chase Spring, etc.)	177*H	20			14														None with any Alt.
	178	3		3	3	3							0.2			0.2	0.2	0.2	
	201	3	3	3	3	3													
	203*	8	1	8	8	7	0.5		0.5	0.5	0.5	0.1		0.1	0.1	0.1			
B: T29S, R15E, Sec 35 (Hager Mtn)	192	18	18		18	18	0.5	0.5		0.5	0.5							None with any Alt.	
	193	47	47	47	47	30	0.4	0.4	0.7	0.4	0.4								
C: T 29S, R16E, Sec 32 (Indian Rim)	19*	53	50	53	53	23												None with Alts. D & E; 10 Acres with Alts. C & G	
	20*	11		11	11	10													
	21	108	108	108	108														
	22*H	116	112	116	116														
	23*H	53	49	53	53														
	24H	87	86	87	87														
D: T30S, R16E, Sec 22 (Beneath Winter)	25	31			31	31						0.3			0.3	0.3	0.3	20 Acres with Alts. D & E; 35 Acres with Alts. C & G	
	26	99	2	99	99	94						0.4		0.4	0.4	0.4			
	140*	20			20	20													
	149*	55	6	55	55	55													
	165	10		10	10	10						0.1		0.1	0.1	0.1			
	169*	48	46	48	48	47													
	170*	14			14	14													
171*	32		32	32	32														
E: T 31S, R14E, Sec 11 (Graham Cr.)	172	29			29	29						0.1		0.1	0.1	0.1		None with any Alt.	
	173*	18		18	18	18						0.1		0.1	0.1	0.1			
	86	11			11	9	0.3			0.3	0.3								
	94	14	12	14	14	12	0.3	0.3	0.3	0.3	0.3								
	95	14		14	14	14	0.6		0.6	0.6									
96	12		12	12	12							0.1		0.1	0.1	0.1			
	97*	38			38	38						0.2		0.2	0.2	0.2			

* Only a portion of the unit is within the area shown as unroaded on the ONRC map

H - Units 22, 23, 24 and 177 are helicopter units and would require no temporary roads

Units 19, 20, 21, 140, 149, 169, 170, 171 and 201 are accessible from existing classified roads and would not require any temporary road

The following table summarizes road management activity on classified roads, by alternative, that are proposed for the Toolbox Fire Recovery Project within or immediately adjacent to the unroaded areas

Table 3.xx Action Alternatives - Road Management of Classified Roads in or near the Unroaded Areas on ONRC Submitted Map

	"Relationship" of Classified Road to Unroaded Area	Road Management Action									
		Decommission (Miles)					Close (Miles)				
		Alt. C	Alt. D	Alt. E	Alt. G	Alt. H	Alt. C	Alt. D	Alt. E	Alt. G	Alt. H
A: Unroaded T29S, R14E, Section 17	Edge of Area	0	0	0	0	0	0	0	0	0	0
	Incised into Area	0.3	0.3	0.3	0.3	0.3	0	0	0	0	0
	Actually within Area	0	0	0	0	0	0	0	0	0	0
B: Unroaded T29S, R15E, Section 35	Edge of Area	0.2	0.2	0	0.2	0.2	0	0	0.2	0	0
	Incised into Area	0	0	0	0	0	0	0	0	0	0
	Actually within Area	0	0	0	0	0	0	0	0	0	0
C: Unroaded T 29S, R16E, Section 32	Edge of Area	1.9	1.9	0	1.6	1.9	0.8	0.8	1.6	0	0.8
	Incised into Area	1.2	1.2	0.4	1.2	1.2	2.3	2.3	0.8	0	2.3
	Actually within Area	0	0	0	0	0	0	0	0	0	0
D: Unroaded T30S, R16E, Section 22	Edge of Area	0	0	0	0	0	0	0	0	0	0
	Incised into Area	1.0	1.0	0	0.6	1.0	0.5	0.5	0.6	0	0.5
	Actually within Area	0.2	0.2	0	0.2	0.2	0.1	0.1	0.2	0	0.1
E: Unroaded T 31S, R14E, Section 11	Edge of Area	0	0	0	0	0	1.5	1.5	1.5	1.5	1.5
	Incised into Area	0	0	0	0	0	0	0	0	0	0
	Actually within Area	0	0	0	0	0	0	0	0	0	0

Alternative A

The no action alternative would not include any salvage activity, temporary road use or prescribed fire in any of the unroaded areas. There would be no direct effect on the natural appearance, opportunities for solitude, cultural resources, soil water or air, wildlife habitat, noxious weed presence or habitat for threatened, endangered or sensitive species. The degree of natural appearance would remain as is in both the short term and the long term, though it would evolve over an approximate 15 year period from one characterized by primarily by a mosaic of standing dead trees, to one of dead and downed trees. A potential indirect effect may occur because none of the road management activities that are included to varying extent in the action alternatives would be implemented. No action to decommission or close roads that are either along the edge, incised into or actually within the unroaded areas on the ONRC submitted map would occur. There would be no change in the roadless character of any of the areas.

Road decommissioning or closure can benefit opportunities for dispersed unroaded recreation, for solitude and can be an important tool in increasing the protection of cultural resources. With Alternative A, all existing access to areas containing heritage material would remain open. The potential for illegal gathering activity would be unchanged and the long-term benefit of increased protection would not be realized with Alternative A.

Under Alternative A, existing road densities and miles of open roads within Category 1 and 4 RHCAs would remain unchanged as no road closures or decommissions would occur. As discussed in the Fisheries section in Chapter 3, roads account for most of the sediment problems in a watershed because they are a link between sediment source areas (skid trails, landings, and cutslopes, etc.) and stream channels. With Alternative A, road conditions on the landscape would continue to exert stress on drainages within the project and their native trout populations by delivering fine sediment to instream habitats.

Alternatives C and G

For the five unroaded areas, Alternatives C and G differ only in regard to 6 acres of commercial salvage in a single helicopter unit in area A (29S, R14E, Sec 17 - Chase Spring) that has activity within unroaded area in Alternative C, but not in Alternative G, therefore they are grouped together. There is a difference between the two alternatives in regard to road management and salvage harvest within Riparian Habitat Conservation Areas that will be noted below.

As shown in the preceding table, with Alternatives C and G, each of the unroaded areas would have some commercial salvage activity. This ranges from approximately 34 acres within unroaded area A (29S, R14E, Sec 17 - Chase Spring B) to 558 acres within unroaded area C (T 29S, R16E, Sec 32 - Indian Rim). All salvage activity in four of the five unroaded areas for all areas would occur along the outer margins of the areas. For these four areas the direct and indirect effect would generally be limited to these border areas. Area C (T 29S, R16E, Sec 32 - Indian Rim) would have salvage activity within 3 helicopter units, totaling 256 acres that are more interior to the unroaded area.

All areas except B (T29S, R15E, Sec 35 - Hager Mtn) would have some new temporary road construction. This ranges from an estimated 0.3 miles in area A (29S, R14E, Sec 17 - Chase Spring), D (T30S, R16E, Sec 22 - Beneath Winter) and E (T 31S, R14E, Sec 11 -Graham Cr.) to 0.7 miles in area C (T 29S, R16E, Sec 32 - Indian Rim). Temporary roads would be built under Best Management Practices (see Appendix C). Re-opening of existing unclassified roads, in the amounts for each of the areas shown in the preceding table, would also occur under Best Management Practices for temporary road use during timber sale activity. In order to prevent low-level casual use, all temporary roads would be obliterated following use.

As shown in the preceding table, prescribed fire activity is minimal in all areas, with the most (35 acres) in area D (T30S, R16E, Sec 22 - Beneath Winter).

In addition to the closure of the unclassified temporary roads, road management actions, as shown on the preceding table, to decommission or close roads would occur with Alternative C and G for each of the five-unroaded areas. These roads are broken out in the tables by the descriptive terms: "edge", "incised" or "actually within".

Natural Appearance and Solitude; Unroaded Recreation Opportunity

Apparent naturalness would be decreased by harvesting timber on a total of approximately 970 acres within the five unroaded areas. Stumps would be visible in the foreground. Helicopter logging units (approximately 275 acres of the total acres) would not be expected to be noticeable from a distance. The amount of area that would be impacted this way is detailed in the preceding table. Since most fire-killed trees generally fall down within 15-20 years, removing some of these trees through timber harvest would have the same visual effect from a distance in the long term. There would be a short-term interruption of solitude due to equipment involved with timber harvest within and/or in the vicinity of unroaded areas. The re-opening of existing unclassified roads is greatest with Alternatives C and G, in comparison with the other action alternatives. In total, an estimated 2.6 miles of unclassified road would be temporarily re-opened within the five unroaded areas. Most of this would be within unroaded area B (T29S, R15E, Sec 35 - Hager Mtn) and E (T 31S, R14E, Sec 11 - Graham Cr.). An unclassified road is one that is not constructed, maintained, or intended for long-term use, such as a remnant of short-term-use roads associated with fire suppression, timber harvest, as well as travel-ways resulting from off-road vehicle use. Re-opening existing unclassified roads would have the effect of "reversing" (in the short term) the return to natural appearance that typically occurs with closed unclassified roads. In the long term, due to their temporary use and subsequent obliteration, their return to natural appearance would be expected to proceed. The development of temporary roads is greatest with Alternatives C and G, in comparison with the other action alternatives. The effects of these roads on solitude and apparent naturalness would be the same as attributed to the re-opening of unclassified roads.

Unroaded recreation opportunities would be somewhat diminished in the short term. The primary unroaded recreation opportunity that is present is the Fremont National Recreation Trail (NRT). It occurs within three of the five unroaded areas. While salvage activities are occurring a short-term interruption is solitude associated with the operation of either ground-based or helicopter yarding systems, would occur. In the long term, because mitigation measures designed to protect the NRT are included for all of the action alternatives (see Chapter 2), the effect on the recreation opportunity associated with the trail would be minimal.

In the long term, due to the decommissioning and closure of classified roads associated with each of the five-unroaded areas, the degree of “roadless character” may increase on a local level. The total amount of decommissioning is similar between Alternatives C and G, but the overall level of road management activity is less with Alternative G, because substantially less road would be closed with Alternative G. For the project area as a whole, about half of the currently open road would be either decommissioned or closed with Alternative C; approximately one-third of the currently open road would be either decommissioned or closed with Alternative G. Due to this difference, the localized long-term increase of roadless character would be greater with Alternative C than Alternative G. Road management actions would have the effect of increasing the roadless character of these areas, particularly Area C (centered on T 29S, R16E, Sec 32 in the Indian Rim area) where the largest amount of road management would occur.

Cultural Resources

Mitigation measures designed to protect all known or discovered cultural resources are included for all of the action alternatives (see Chapter 2). Therefore there should be no short term or direct effects on any of the cultural resource sites that may occur within any of the five unroaded areas. Another important aspect of cultural resource protection, which unroaded areas generally contribute disproportionately to (in comparison to roaded area) is protection from illegal gathering. There have been recent cases of illegal gathering on the Silver Lake Ranger District that have resulted in arrest and prosecution. Long-term access to the areas where potential illegal gathering could occur would be more effectively controlled with Alternative C than G, as more miles of road are closed or decommissioned with Alternative C than G.

Noxious Weeds

Effects of the alternatives on the potential for spread of noxious weeds are discussed elsewhere in Chapter 3. There are no specific effects relating to noxious weeds within unroaded areas, that differ from those described under the general Noxious Weed section.

Soil, Air and Water; Wildlife Habitat; Habitat for Threatened, Endangered or Sensitive Species

Effects of the alternatives on the potential for effects on these resources are discussed elsewhere in Chapter 3. Only those effects that differ or are specific to a particular unroaded area will be discussed here.

Area A (29S, R14E, Sec 17 - Chase Spring) is the only one of the five unroaded areas that contain a perennial stream. Both West Fork Silver Creek and Silver Creek occur within this unroaded area. Alternative C and G have the most salvage harvest within area A of any of the alternatives. This includes unit 177 which is a helicopter unit in the vicinity of Silver Creek. No temporary roads, either re-opening of existing unclassified roads nor new construction would be used for unit 177. In Alternative C, approximately 6 acres of this unit are within the outer 100 feet of a Category 1 RHCA. In Alternative G, none of the unit is within the RHCA. For the entire Toolbox Fire Recovery Project, salvage harvest would occur only in the outer 100 feet of the RHCA in units that are within the Riparian Habitat Conservation Areas (RHCA) of a perennial stream (Category 1 RHCA). RHCAs for such streams are typically 300 feet wide (or wider) in slope distance beyond the edge of the active stream channel, on each side of the stream. No salvage would occur other than in the outer 100 feet of RHCA. No mechanized ground-based equipment would be allowed within the entire width of the RHCA. In addition, for all units, Timber Best Management Practices, Road Best Management Practices and Soil Productivity guidelines (see Appendix C) would be in effect. With these protective design measures in place any detrimental effects on the soil, water and fisheries resources within area A should be minimal and short term in nature. For Alternative C, salvage in Category 1 RHCAs would be via helicopter to minimize soil disturbance and compaction. If any project-generated sediment were to reach fish bearing streams, it is expected that it would be short-term in nature, and at an immeasurable, negligible level. No significant increases in water yield or sedimentation are predicted. See the Fisheries, Watershed and Soils sections of Chapter 3 for additional detail.

The following table displays summarized information (for all alternatives) from the Wildlife, Fisheries and Botany biological evaluations pertaining to Threatened, Endangered or Sensitive Species that have a presence (or habitat presence) within unroaded area, and the effects on these species and habitats. Additional detail is available in the appropriate sections elsewhere in Chapter 3.

Species Name	Status	Species or Habitat Present in Which Unroaded Area	Effects (on Species)						Effects (on Habitat)							
			Alt A	Alt C	Alt D	Alt E	Alt G	Alt H	Alt A	Alt C	Alt D	Alt E	Alt G	Alt H		
Green-tinged paintbrush (<i>Castilleja chlorotica</i>)	Sensitive	D	NI	MI IH	NI	MI IH	MI IH	MI IH	MI IH	NI	MI IH	NI	MI IH	MI IH		
Redband trout (<i>Oncorhynchus mykiss</i> spp.)	Sensitive	A	MI IH	MI IH	MI IH	MI IH	MI IH	MI IH	MI IH	MI IH	MI IH	MI IH	MI IH	MI IH		
Bald eagle (<i>Haliaeetus leucocephalus</i>)	Threatened	A, C	NE	NE						NE	NE					
Oregon spotted frog (<i>Rana pretiosa</i>)	Candidate; Sensitive	A	NI	MIIH						NI	MIIH					
Peregrine falcon (<i>Falco peregrinus</i>)	Sensitive	D (outside project area)	NI	NI						NI	NI					
Western sage grouse (<i>Centrocercus urophasianus</i>)	Sensitive	A, C	NI	MIIH						NI	NI					
Gray flycatcher (<i>Empidonax wrightii</i>)	Sensitive	A, B, C, D, E	NI	MIIH						NI	MIIH					
California wolverine (<i>Gulo gulo</i>)	Sensitive	D	NI	MIIH						NI	MIIH					
Pacific fisher (<i>Martes pennanti</i>)	Sensitive	A, B, C, D, E	NI	MIIH						NI	MIIH					
Northern Leopard Frog (<i>Rana boylei</i>)	Sensitive	A, D (for D: outside project area)	NI	MIIH						NI	MIIH					
Columbia Spotted Frog (<i>Rana luteiventris</i>)	Sensitive	A	NI	MIIH						NI	MIIH					
Oregon spotted frog (<i>Rana pretiosa</i>)	Sensitive	A	NI	MIIH						NI	MIIH					
Northwestern Pond Turtle (<i>Clemmys marmorata marmorata</i>)	Sensitive	A	NI	MIIH						NI	MIIH					

NE = No Effect from the project on the species or critical habitat.

NI = No Impact

MIIH = May impact individuals or habitat, but will not likely contribute to a trend toward federal listing or loss of viability to the population or species.

Alternative D

As shown in the Table 3.xx, with Alternative D each of the unroaded areas would have some commercial salvage activity. This ranges from approximately 4 acres within unroaded area A (29S, R14E, Sec 17 - Chase Spring) to 407 acres within unroaded area C (T 29S, R16E, Sec 32 - Indian Rim). All salvage activity in four of the five unroaded areas for all areas would occur along the outer margins of the areas. For these four areas the direct and indirect effect would generally be limited to these border areas. Area C (T 29S, R16E, Sec 32 - Indian Rim) would have salvage activity within 3 helicopter units, totaling 247 acres that are more interior to the unroaded area.

No areas would have any new temporary road construction. This is the least of any action alternative. Re-opening of 1.2 miles (total) of existing unclassified roads, in the amounts for each of the areas as shown in the preceding table, would

occur under Best Management Practices for temporary road use during timber sale activity (see Appendix C). In order to prevent low-level casual use, all temporary roads would be obliterated following use.

As shown in the preceding table, prescribed fire activity is limited to 20 acres in area D (T30S, R16E, Sec 22 - Beneath Winter).

In addition to the closure of the unclassified temporary roads, road management actions, as shown on the preceding table, to decommission or close roads would occur with Alternative D for each of the five-unroaded areas. These roads are broken out in the tables by the descriptive terms: “edge”, “incised” or “actually within”.

Natural Appearance and Solitude; Unroaded Recreation Opportunity

Apparent naturalness would be decreased by harvesting timber on a total of approximately 540 acres within the five unroaded areas. Stumps would be visible in the foreground. Helicopter logging units would not be expected to be noticeable from a distance. The amount of area that would be impacted this way is detailed in the preceding table. Since most fire-killed trees generally fall down within 15-20 years, removing some of these trees through timber harvest would have the same visual effect from a distance in the long term. There would be a short-term interruption of solitude due to equipment involved with timber harvest within and/or in the vicinity of unroaded areas. The re-opening of existing unclassified roads is least with Alternative D, in comparison with the other action alternatives. In total, an estimated 1.2 miles of unclassified road would be temporarily re-opened within the five unroaded areas. Most of this (0.9 miles) would be within unroaded area B (T29S, R15E, Sec 35 - Hager Mtn). Re-opening existing unclassified roads would have the effect of "reversing" (in the short term) the return to natural appearance that typically occurs with closed unclassified roads. In the long term, due to their temporary use and subsequent obliteration, their return to natural appearance would be expected to proceed. There is no development of new temporary roads with Alternative D.

Because of the small amount of activity proposed for unroaded areas, unroaded recreation opportunities would be only minimally decreased in the short term. The primary unroaded recreation opportunity that is present is the Fremont National Recreation Trail (NRT). The trail traverses or partially traverses three of the five unroaded areas. While salvage activities are occurring a short-term interruption in solitude, associated with the operation of either ground-based or helicopter yarding systems, would occur. In the long term, because mitigation measures designed to protect the NRT are included for all of the action alternatives (see Chapter 2), the effect on the recreation opportunity associated with the trail would be minimal.

In the long term, due to the road decommissioning and closure associated with each of the five-unroaded areas, the degree of “roadless character” may increase on a local level. The amount of decommissioning and closure within the five unroaded areas is the same with Alternative D as with Alternatives C and H. Road management actions would have the effect of increasing the roadless character of these areas, particularly Area C (centered on T 29S, R16E, Sec 32 in the Indian Rim area) where the largest amount of road management would occur. For the project area as a whole, the amount of decommissioning is slightly greater with Alternative D than the other action alternatives. For the project area as a whole, more than half of the currently open road would be either decommissioned or closed with Alternative D.

Cultural Resources

Mitigation measures designed to protect all known or discovered cultural resources are included for all of the action alternatives (see Chapter 2). Therefore there should be no short term or direct effects on any of the cultural resource sites that may occur within any of the five unroaded areas. Another important aspect of cultural resource protection, which unroaded areas generally contribute disproportionately to (in comparison to roaded area) is protection from illegal gathering. There have been recent cases of illegal gathering on the Silver Lake Ranger District that have resulted in arrest and prosecution. Long-term access to the areas where potential illegal gathering could occur would be more effectively controlled with Alternative D than any other alternative, as more miles of road are closed or decommissioned with Alternative D.

Noxious Weeds

Effects of the alternatives on the potential for spread of noxious weeds are discussed elsewhere in Chapter 3. There are no specific effects relating to noxious weeds within unroaded areas, that differ from those described under the general Noxious Weed section.

Soil, Air and Water; Wildlife Habitat; Habitat for Threatened, Endangered or Sensitive Species

Effects of the alternatives on the potential for effects on these resources are discussed elsewhere in Chapter 3. Only those effects that differ or are specific to a particular unroaded area will be discussed here.

Area A (29S, R14E, Sec 17 - Chase Spring) is the only one of the five unroaded areas that contain a perennial stream. Both West Fork Silver Creek and Silver Creek occur within this unroaded area. Alternative D has the least salvage harvest within area A of any of the action alternatives. Alternative D does not include unit 177, which was previously discussed under Alternatives C and G, nor does it contain any units in the project as a whole, other than those in roadside hard corridors, that are within any Riparian Habitat Conservation Areas (RHCA) of either a perennial stream or an intermittent stream. For all units in the project area, Alternative D would have in effect "Timber Best Management Practices", "Road Best Management Practice" and "Soil Productivity Guidelines" (see Appendix C). With these protective design measures in place any detrimental effects on the soil, water and fisheries resources within area A should be minimal and short term in nature. If any project-generated sediment were to reach fish bearing streams, it is expected that it would be short-term in nature, and at an immeasurable, negligible level. No significant increases in water yield or sedimentation are predicted. See the Fisheries, Watershed and Soils sections of Chapter 3 for additional detail.

Effects on threatened, endangered or sensitive species within the unroaded areas are displayed above, for all alternatives in Table 3.xx, in the Alternative C and G section.

Alternative E

As shown in the Table 3.xx, with Alternative E each of the unroaded areas would have some commercial salvage activity. This ranges from approximately 14 acres within unroaded area A (29S, R14E, Sec 17 - Chase Spring B) to 527 acres within unroaded area C (T 29S, R16E, Sec 32 - Indian Rim). All salvage activity in four of the five unroaded areas for all areas would occur along the outer margins of the areas. For these four areas the direct and indirect effect would generally be limited to these border areas. Area C (T 29S, R16E, Sec 32 - Indian Rim) would have salvage activity within 3 helicopter units, totaling 256 acres, which are more interior to the unroaded area.

All areas except B (T29S, R15E, Sec 35 - Hager Mtn) would have some new temporary road construction. This ranges from an estimated 0.2 miles in area D (T30S, R16E, Sec 22 - Beneath Winter) and E (T 31S, R14E, Sec 11 -Graham Cr.) to 0.7 miles in area C (T 29S, R16E, Sec 32 - Indian Rim). Temporary roads would be built under Best Management Practices (see Appendix C). Re-opening of existing unclassified roads, in the amounts for each of the areas shown in the preceding table, would also occur under Best Management Practices for temporary road use during timber sale activity. In order to prevent low-level casual use, all temporary roads would be obliterated following use.

As shown in the preceding table, no prescribed fire activity is proposed in any unroaded area.

Natural Appearance and Solitude; Unroaded Recreation Opportunity

Apparent naturalness would be decreased by harvesting timber on a total of approximately 791 acres within the five unroaded areas. Stumps would be visible in the foreground. Helicopter logging units would not be expected to be noticeable from a distance. The amount of area that would be impacted this way is detailed in the preceding table. Since most fire-killed trees generally fall down within 15-20 years, removing some of these trees through timber harvest would have the same visual effect from a distance in the long term. There would be a short-term interruption of solitude due to equipment involved with timber harvest within and/or in the vicinity of unroaded areas. The re-opening of existing unclassified roads is less with Alternative E than with Alternatives C and G. In total, an estimated 2.1 miles of unclassified road would be temporarily re-opened within the five unroaded areas. Re-opening existing unclassified roads would have the effect of "reversing" (in the short term) the return to natural appearance that typically occurs with closed unclassified roads. In the long term, due to their temporary use and subsequent obliteration, their return to natural appearance would be expected to proceed. The development of new temporary roads is less with Alternative E than with Alternatives C and G.

The effects of these roads on solitude and apparent naturalness would be the same as attributed to the re-opening of unclassified roads.

Unroaded recreation opportunities would be somewhat diminished in the short term. The primary unroaded recreation opportunity that is present is the Fremont National Recreation Trail (NRT). It occurs within three of the five unroaded areas. While salvage activities are occurring a short-term interruption in solitude associated with the operation of either ground-based or helicopter yarding systems, would occur. In the long term, because mitigation measures designed to protect the NRT are included for all of the action alternatives (see Chapter 2), the effect on the recreation opportunity associated with the trail would be minimal.

In the long term, due to the road decommissioning and closure associated with each of the five unroaded areas, the degree of “roadless character” may increase on a local level. The amount of decommissioning, both within the unroaded areas and for the project area as a whole is the least with Alternative E than any action alternative, but due to the amount of road closure, the overall level of road management activity is comparable to Alternative G. Road management in Area C (centered on T 29S, R16E, Sec 32 in the Indian Rim area) differ between Alternative E and the rest of the action alternatives in that only about 15% of the decommissioning that would occur with Alternatives C, D, G or H would occur with Alternative E. Instead of decommissioning, Alternative E relies more heavily on road closure. The effect on use patterns by vehicles should be similar to the other action alternatives, however the presence of the roadbed itself would be more apparent. For the project area as a whole, approximately one-third of the currently open road would be either decommissioned or closed with Alternative E.

Cultural Resources

Mitigation measures designed to protect all known or discovered cultural resources are included for all of the action alternatives (see Chapter 2). Therefore there should be no short term or direct effects on any of the cultural resource sites that may occur within any of the five unroaded areas. Another important aspect of cultural resource protection, which unroaded areas generally contribute disproportionately to (in comparison to roaded area) is protection from illegal gathering. There have been recent cases of illegal gathering on the Silver Lake Ranger District that have resulted in arrest and prosecution. Long term access to the areas where potential illegal gathering could occur would be less effectively controlled with Alternative E than the other action alternatives as less miles of road are closed or decommissioned with Alternative E than most other alternatives (same amount as with Alternative G). Only Alternative A (no action) would be less effective in limiting long-term access to the areas where potential illegal gathering could occur.

Noxious Weeds

Effects of the alternatives on the potential for spread of noxious weeds are discussed elsewhere in Chapter 3. There are no specific effects relating to noxious weeds within unroaded areas, that differ from those described under the general Noxious Weed section.

Soil, Air and Water; Wildlife Habitat; Habitat for Threatened, Endangered or Sensitive Species

Effects of the alternatives on the potential for effects on these resources are discussed elsewhere in Chapter 3. Only those effects that differ or are specific to a particular unroaded area will be discussed here.

Area A (29S, R14E, Sec 17 - Chase Spring) is the only one of the five unroaded areas that contain a perennial stream. Both West Fork Silver Creek and Silver Creek occur within this unroaded area. Alternative E does not include unit 177 which is a helicopter unit (in Alternatives C and G) in the vicinity of Silver Creek. For the entire Toolbox Fire Recovery Project, salvage harvest would occur only in the outer 100 feet of the RHCA in units that are within the Riparian Habitat Conservation Areas (RHCA) of a perennial stream (Category 1 RHCA). RHCAs for such streams are typically 300 feet wide (or wider) in slope distance beyond the edge of the active stream channel, on each side of the stream. No salvage would occur other than in the outer 100 feet of RHCA. No mechanized ground-based equipment would be allowed within the entire width of the RHCA. In addition, for all units, Timber Best Management Practices, Road Best Management Practices and Soil Productivity guidelines (see Appendix C) would be in effect. With these protective design measures in place any detrimental effects on the soil, water and fisheries resources within area A should be minimal and short term in nature. For Alternative E, salvage in Category 1 RHCAs would be via helicopter to minimize soil disturbance and

compaction. If any project-generated sediment were to reach fish bearing streams, it is expected that it would be short-term in nature, and at an immeasurable, negligible level. No significant increases in water yield or sedimentation are predicted. See the Fisheries, Watershed and Soils sections of Chapter 3 for additional detail.

Effects on threatened, endangered or sensitive species within the unroaded areas would be the same with Alternative E as discussed above under Alternatives C and G.

Alternative H

As shown in the Table 3.xx, with Alternative H each of the unroaded areas would have some commercial salvage activity. This ranges from approximately 13 acres within unroaded area A (29S, R14E, Sec 17 - Chase Spring) to 193 acres within unroaded area D (T30S, R16E, Sec 22 - Beneath Winter). Alternative H has the least total amount of proposed salvage harvest within unroaded area (483 total acres) of any of the action alternatives. All salvage activity for all areas would occur along the margins of the areas. Therefore, the direct and indirect effect would generally be limited to these border areas. The 3 helicopter units that are included in the other action alternatives within the interior of Area C are not included in Alternative H.

All areas except B (T29S, R15E, Sec 35 - Hager Mtn) would have some new temporary road construction. The amount and effect would be the same as described for Alternatives C and G. Re-opening of existing unclassified roads, in the amounts for each of the areas shown in the preceding table, would also occur under Best Management Practices for temporary road use during timber sale activity. In order to prevent low-level casual use, all temporary roads would be obliterated following use.

As shown in the preceding table, prescribed fire activity is limited to 20 acres in area D (T30S, R16E, Sec 22 - Beneath Winter).

Natural Appearance and Solitude; Unroaded Recreation Opportunity

Apparent naturalness would be decreased by harvesting timber on a total of approximately 483 acres within the five unroaded areas. This is the least of any action alternative. Stumps would be visible in the foreground. Helicopter logging units would not be expected to be noticeable from a distance. The amount of area that would be impacted this way is detailed in the preceding table. Since most fire-killed trees generally fall down within 15-20 years, removing some of these trees through timber harvest would have the same visual effect from a distance in the long term. There would be a short-term interruption of solitude due to equipment involved with timber harvest within and/or in the vicinity of unroaded areas. The re-opening of existing unclassified roads is less with Alternative H than with Alternatives C and G. In total, an estimated 2.0 miles of unclassified road would be temporarily re-opened within the five unroaded areas. Re-opening existing unclassified roads would have the effect of "reversing" (in the short term) the return to natural appearance that typically occurs with closed unclassified roads. In the long term, due to their temporary use and subsequent obliteration, their return to natural appearance would be expected to proceed. The development of new temporary roads is less with Alternative H than with Alternatives C and G. The effects of these roads on solitude and apparent naturalness would be the same as attributed to the re-opening of unclassified roads.

Unroaded recreation opportunities would be somewhat diminished in the short term. The primary unroaded recreation opportunity that is present is the Fremont National Recreation Trail (NRT). It occurs within three of the five unroaded areas. While salvage activities are occurring a short-term interruption is solitude associated with the operation of ground-based yarding systems would occur. There are no helicopter operations proposed with Alternative H, therefore this would not be a contributing factor to short term interruption of solitude. In the long term, because mitigation measures designed to protect the NRT are included for all of the action alternatives (see Chapter 2), the effect on the recreation opportunity associated with the trail would be minimal.

In the long term, due to the road decommissioning and closure associated with each of the five unroaded areas, the degree of "roadless character" may increase on a local level. The amount of decommissioning and closure within the five unroaded areas is the same with Alternative H as with Alternatives C and D. Road management actions would have the effect of increasing the roadless character of these areas, particularly Area C (centered on T 29S, R16E, Sec 32 in the

Indian Rim area) where the largest amount of road management would occur. For the project area as a whole, about half of the currently open road would be either decommissioned or closed with Alternative H.

Cultural Resources

Mitigation measures designed to protect all known or discovered cultural resources are included for all of the action alternatives (see Chapter 2). Therefore there should be no short term or direct effects on any of the cultural resource sites that may occur within any of the five unroaded areas. Another important aspect of cultural resource protection, which unroaded areas generally contribute disproportionately to (in comparison to roaded area) is protection from illegal gathering. There have been recent cases of illegal gathering on the Silver Lake Ranger District that have resulted in arrest and prosecution. Long-term access to the areas where potential illegal gathering could occur would be reduced with Alternative H, as about half of the currently open roads would be either decommissioned or closed.

Noxious Weeds

Effects of the alternatives on the potential for spread of noxious weeds are discussed elsewhere in Chapter 3. There are no specific effects relating to noxious weeds within unroaded areas, that differ from those described under the general Noxious Weed section.

Soil, Air and Water; Wildlife Habitat; Habitat for Threatened, Endangered or Sensitive Species

Effects of the alternatives on the potential for effects on these resources are discussed elsewhere in Chapter 3. Only those effects that differ or are specific to a particular unroaded area will be discussed here.

Area A (29S, R14E, Sec 17 - Chase Spring) is the only one of the five unroaded areas that contain a perennial stream. Both West Fork Silver Creek and Silver Creek occur within this unroaded area. Alternative H does not include unit 177, which was previously discussed under Alternatives C and G, nor does it contain any units in the project as a whole, other than those in roadside hard corridors, that are within any Riparian Habitat Conservation Areas (RHCA) of either a perennial stream or an intermittent stream. For all units in the project area, Alternative H would have in effect “Timber Best Management Practices”, “Road Best Management Practice” and “Soil Productivity Guidelines” (see Appendix C). With these protective design measures in place any detrimental effects on the soil, water and fisheries resources within area A should be minimal and short term in nature. If any project-generated sediment were to reach fish bearing streams, it is expected that it would be short-term in nature, and at an immeasurable, negligible level. No significant increases in water yield or sedimentation are predicted. See the Fisheries, Watershed and Soils sections of Chapter 3 for additional detail.

Effects on threatened, endangered or sensitive species within the unroaded areas would be the same with Alternative H as discussed above under Alternatives C and G.

Cumulative Effects

The analysis area for cumulative effects is the extent of the unroaded areas, both inside of and outside the project area boundary. Of the five unroaded areas on the map submitted by ONRC, only Area C (centered on T 29S, R16E, Sec 32 - Indian Rim) is fully on National Forest lands and fully within the project area boundary. Table 3.xx “Unroaded Areas” displays the extent of the unroaded beyond project area boundaries (see Table 3.xx “Comments” column).

The analysis of cumulative effects on unroaded areas requires a consideration of past, present and reasonably foreseeable future activities within the cumulative effects analysis area, regardless of ownership weighed against the values unroaded areas can provide or contribute to.

Past Activities

On National Forest lands, timber harvest and road construction has occurred within all five unroaded areas, though to a lesser extent than on many other areas within the Fremont National Forest. This past activity is born out by the fact that re-opening existing unclassified roads, to be used as temporary roads, would provide access to 9 of the 27 units that are

displayed in Table 3.xx. Other past activities relating to road construction have resulted in two of the unroaded areas being significantly incised with classified roads: area C (T 29S, R16E, Sec 32 - Indian Rim and area E (T 31S, R14E, Sec 11 - Graham Cr.). The portion of Area D (T30S, R16E, Sec 22 - Beneath Winter) that is within the project area, specifically that area on top of Winter Ridge, contains several short fingers of classified road 0.1 to 0.2 miles in length.

Other than timber harvest and road construction, the primary additional past activities that have occurred include livestock grazing within all areas for at least the past 100 years, fire suppression activity for approximately that same length of time, and dispersed recreation including hunting and fishing and since the early 1990s hiking on the NRT that traverses three of the five unroaded areas. Area A includes about 2200 acres that are on Bureau of Land Management lands. The primary past activity in this area has been livestock grazing for approximately 100 years.

The most significant past event that has occurred within at least portions of the five unroaded areas was the Toolbox Complex Fire of 2002 itself and the suppression activities in response to the fires.

Despite this past activity, and its effect on the unroaded characteristics of the areas, they continue to provide many of the values that are often best provided in an unroaded setting, including natural appearing landscapes, solitude, and habitat for abundant and healthy fish and wildlife populations.

Alternative A and Action Alternatives

Natural Appearance and Solitude; Unroaded Recreation Opportunity

In addition to the direct and indirect effects discussed in the previous section, several future or on-going activities have the potential to have an effect. This includes the neighboring Winter Fire Salvage timber sales (approximately 4 miles southeast of the Toolbox Fire Recovery project). This project activity, currently planned for implementation in 2003 and 2004, includes primarily helicopter yarding of fire salvage timber sale units. In examining the unroaded area map submitted by ONRC, it appears that some of this activity would be within or near the southern extension of unroaded area D (T30S, R16E, Sec 22 - Beneath Winter); however, the area extended beyond the coverage of the submitted map. There would be a short-term interruption of solitude due to this activity.

Other planned future activities that could have a cumulative effect include the expected re-building of the Fremont Point Cabin, the reconstruction of the Fremont National Recreation Trail (NRT). The Fremont Point Cabin is near unroaded area D (T30S, R16E, Sec 22 - Beneath Winter), while the NRT traverses portions of area B (T29S, R15E, Sec 35 - Hager Mtn), area C (T 29S, R16E, Sec 32 - Indian Rim) and unroaded area D (T30S, R16E, Sec 22 - Beneath Winter). This activity has the potential to cumulatively affect solitude because of the sounds associated with the activity (short term) and indirectly due to anticipated increases in recreation use (long term).

Of the other reasonably foreseeable future activities listed in Appendix A, the only one on National Forest lands that would likely have an impact on any of the unroaded areas is listed in Appendix A, Table A-16 as a 2004 to 2007 project for commercial thinning, activity fuels treatment and pre-commercial thinning within the Upper Silver Creek subwatershed. Portions of nine commercial thinning units in the Triad Restoration Project occur within area B (T29S, R15E, Sec 35 - Hager Mtn). The effects of this are documented in the Triad Restoration Project analysis file (Silver Lake Ranger District). Approximately 150 acres with area B (T29S, R15E, Sec 35 - Hager Mtn) would be commercially and pre-commercially thinned during the next three years with this project. No classified road would be constructed, however, approximately 1.2 miles of temporary road would be constructed to access the nine units. These roads would be developed under Best Management Practices and in order to prevent low-level casual use, these roads would be obliterated following use. The Triad Decision Notice incorporates protective measures in regard to those resources which unroaded areas typically offer, including, a measure to minimize impact on the National Recreation Trail and ensure its continued integrity that requirements pertaining to the locations of landings and skid trails in four units that are within the foreground viewing zone of the NRT. The Triad project contains thinning prescriptions that would limit activities to trees less than 21 inches dbh. The effect of the thinning prescriptions would be to open up the forest and allow increased sight distance and larger trees to develop. A short-term impact on solitude would occur during project implementation. In the short term, the increased numbers of stumps and the open nature of the forest stand would likely be the most apparent visual change resulting from implementation. The use of whole-tree yarding should minimize the effects pertaining to slash. In the long term the project would result in the development of historic "open park-like" conditions, characterized by large, orange-barked ponderosa pine trees

Reasonably foreseeable future activities outside National Forest lands that would likely have an impact within any of the unroaded areas are noted in Appendix A, Table A-15, as seedling planting and seeding within the Upper Silver Creek subwatershed during the period 2003 to 2005. This includes planting 250 acres of ponderosa pine and bitterbrush and seeding (primarily grasses, both aerial and ground application) 290 acres in the Upper and Middle Silver Creek subwatersheds. Portions of the activity would occur within Area A (29S, R14E, Sec 17 - Chase Spring). The effects of this activity would include a short-term reduction in solitude, particularly in relation to aerial seeding, and the long-term development of desirable vegetation. No new roads would be developed.

Additional reasonably foreseeable future activities outside National Forest lands that would impact solitude within any of the unroaded areas include the 71 acres of fire salvage on BLM lands listed in Appendix A, Table A-15, for 2003. While this activity would not occur within any of the ONRC mapped unroaded areas, it is adjacent to area C (T 29S, R16E, Sec 32 - Indian Rim).

Grazing on both National Forest lands and BLM lands may have minor long-term impacts on apparent naturalness, although effects would not be greater than past impacts.

Future fire suppression on National Forest lands would be expected to produce a long-term negative effect on the development of sustainable ponderosa pine ecosystems. Fire suppression on both National Forest lands and BLM lands would have a short-term negative effect on solitude.

Indirect effects associated with recreational use, including noxious weed spread, erosion, litter, and evidence of fire rings, are expected to remain minor but could create localized long-term negative impacts on natural appearance.

Cultural Resources

All reasonably foreseeable future activities that could potentially affect cultural resources would include mitigation measures designed to protect all known or discovered cultural resources. Therefore there should be direct cumulative effects on any of the cultural resource sites that within any of the five unroaded areas. However, the overall cumulative effect from the combination of Alternative A and other reasonably future activities could potentially be greatest for Alternative A because there would be no decrease in open road density associated with Alternative A. Long term access to the areas where potential illegal gathering could occur would be more effectively controlled with the action alternatives, than with Alternative A.

Noxious Weeds

Cumulative effects of the alternatives, when considered in the context of other past, present and reasonably foreseeable future activities on the potential for spread of noxious weeds are discussed elsewhere in Chapter 3. There are no specific cumulative effects relating to noxious weeds within unroaded areas, that differ from those described under the general Noxious Weed section.

Soil, Air and Water; Wildlife Habitat; Habitat for Threatened, Endangered or Sensitive Species

Effects of the alternatives on the potential for cumulative effects on these resources are discussed elsewhere in Chapter 3. There are no specific cumulative effects relating to these resources within unroaded areas, that differ from those described under the appropriate sections found elsewhere within Chapter 3.

Two sensitive species have a presence (or habitat presence) within unroaded area outside the project area boundary. This includes Peregrine falcon (*Falco peregrinus*), which is present in unroaded area D (T30S, R16E, Sec 22 - Beneath Winter) to the east of the project area and Northern Leopard Frog (*Rana boylei*) which has habitat present in unroaded area D (T30S, R16E, Sec 22 - Beneath Winter) to the east of the project area. The biological evaluation pertaining to these species, reported in the Wildlife section of Chapter 3, document the expected cumulative effects relating to these species.

Common to All Action Alternatives

Natural Appearance and Solitude; Unroaded Recreation Opportunity

The reasonably foreseeable future activities as discussed above under “Alternative A and Action Alternatives” would occur and combine with the indirect and direct effects of the Toolbox action alternatives, as noted below.

Looking at the direct effects from the Toolbox Fire Recovery Project on natural appearance and solitude, on an area by area basis reveals that Alternative H would result in the least amount of salvage activity within area B (T29S, R15E, Sec 35 - Hager Mtn) and substantially less activity within area C (T 29S, R16E, Sec 32 - Indian Rim) compared to other action alternative. Alternative D would result in the least amount of salvage activity within area A (29S, R14E, Sec 17 - Chase Spring), area D (T30S, R16E, Sec 22 - Beneath Winter) and area E (T 31S, R14E, Section 11 – Graham Creek). Apparent naturalness would be decreased in the short term by salvage harvest. Stumps would be visible in the foreground. Helicopter logging units would not be expected to be noticeable from a distance. The amount of area that would be impacted this way is detailed in the preceding table. Since most fire-killed trees generally fall down within 15-20 years, removing some of these trees through timber harvest would have the same visual effect from a distance in the long term. There would be a short-term interruption of solitude due to equipment involved with timber harvest within and/or in the vicinity of unroaded areas.

In summary, because Alternative H has the least total amount of proposed salvage harvest within all unroaded areas (483 total acres) of any of the action alternatives, and because all salvage activity with Alternative H for all areas would occur along the margins of the areas, it would have the least amount of negative short-term cumulative effects on natural appearance and solitude. In addition, Alternative H, along with Alternatives C and D includes the most potential to have a long-term benefit on natural appearance and solitude because these alternatives include the greatest amount of road decommissioning and closure of any of the alternatives. Because Alternative G and Alternative C have the greatest total amount of proposed salvage harvest within all unroaded areas (972 acres, Alternative C and 966 acres, Alternative G), these alternatives have the greatest amount of negative short-term cumulative effects on natural appearance and solitude. Alternatives E and G include the least potential to have a long-term benefit on natural appearance and solitude because these alternatives include the least amount of road decommissioning and closure of any of the alternatives. However, the overall long-term cumulative effect would still be positive for these less intensive road management alternatives as approximately one-third of the currently open road would be either decommissioned or closed for the area as a whole.

In conclusion, all alternatives, together with reasonably foreseeable and ongoing activities would produce a short-term reduction in solitude within the ONRC mapped unroaded areas. Solitude is likely to be reduced in Alternative A as well, although not to the degree of the action alternatives in the short-term (2-5 years). Natural appearance would also be reduced in the short term regardless of the alternative selected. The additional effect on natural appearance and solitude attributable to other on-going or reasonably foreseeable future activities is the same for all action alternatives. The action alternatives have the potential to increase the acres of unroaded lands in the long-term due to decommissioning of roads. Eventually, these roadbeds would disappear or would be hidden with vegetation and motorized use should decrease. Natural appearance and solitude would be increased in the long-term, most likely to the extent that it counteracts the other ongoing and reasonably foreseeable activities within the areas. Cumulatively, the effect would be an increase in the value of the roadless characteristics and an increase in acres classified as unroaded, although the effects are not likely to be apparent for 20 to 30 years.

Noxious Weeds

Cumulative effects of the alternatives, when considered in the context of other past, present and reasonably foreseeable future activities on the potential for spread of noxious weeds are discussed elsewhere in Chapter 3. There are no specific cumulative effects relating to noxious weeds within unroaded areas, that differ from those described under the general Noxious Weed section.

Soil, Air and Water; Wildlife Habitat; Habitat for Threatened, Endangered or Sensitive Species

Effects of the alternatives on the potential for cumulative effects on these resources are discussed elsewhere in Chapter 3. There are no specific cumulative effects relating to these resources within unroaded areas, that differ from those described under the appropriate sections found elsewhere within Chapter 3.

Two sensitive species have a presence (or habitat presence) within unroaded area outside the project area boundary. This includes Peregrine falcon (*Falco peregrinus*), which is present in unroaded area D (T30S, R16E, Sec 22 - Beneath Winter) to the east of the project area and Northern Leopard Frog (*Rana boylei*) which has habitat present in unroaded area D (T30S, R16E, Sec 22 - Beneath Winter) to the east of the project area. The biological evaluation pertaining to these species, reported in the Wildlife section of Chapter 3, document the expected cumulative effects relating to these species.

Consistency with Forest Plan and Other Laws and Regulations

All alternatives are consistent with Forest Plan direction.

All proposals pertaining to road management were developed through a road analysis process that consisted of six steps: Setting up the analysis, describing the situation, identifying issues, assessing benefits, problems, and risks, describing opportunities and setting priorities, and reporting. The recommendations regarding road management were made with a full complement of pertinent resource specialists, including: soils, hydrology, fisheries, wildlife, cultural, silviculture, recreation, engineering, timber and fire. Each road was reviewed in a systematic manner by the roads analysis team. The engineer shared pertinent information found during the field inventory and a discussion ensued regarding the necessity of each road as it pertained to each resource.

References

- National Archives and Records Administration (NARA). 2001. "Federal Register: January 12, 2001". Volume 66, Number 9: 3244.
- United States District Court (USDC), Idaho. 2001. *Kootenai Tribe of Idaho v. Veneman and State of Idaho v. U.S. Forest Service*. Case No. CV01-10-N-EJL, May 10, 2001
- United States Court of Appeals for the Ninth Circuit. 2002. *Kootenai Tribe of Idaho v. Veneman and State of Idaho v. U.S. Forest Service* D.C. No. CV-01-00010-EJL, December 12, 2002
- USDA Forest Service. 1989. *Forest Service Roadless Area Conservation, Final Environmental Impact Statement*; Glossary, G-12.
- USDA Forest Service. 2000. *Fremont National Forest Land and Resource Management Plan, Final Environmental Impact Statement*; Appendix C, 21.
- USDA Forest Service. 2001. *FS Manual 1900*. Planning, Chapter 20 – Land and Resource Management Planning; 1925.04a, 1925.04b, 1925.05.
- USDA Forest Service. 2001. *FS Manual 7700*. Transportation Analysis, 7712.1 - Roads Analysis; 7712.13c, 17.

This Toolbox Fire Recovery Project specialist report was prepared during March, April and May of 2003. It will be used, along with specialist reports from multiple resource areas, to prepare a Draft Environmental Impact Statement (DEIS) for the Toolbox Fire Recovery project. This specialist report will become a part of the planning record for the project, filed under:

“Toolbx/ Planning Record/ E_Specialists_reports_data_inventory_and_collection”

This report will be filed both in the ‘hard-copy’ planning record binders, on file at the Silver Lake Ranger District, and on the Fremont National Forest “K-Drive”. In the interest of planning process efficiency, particularly in light of time and budget constraints, editing that occurs to the content of this report during the preparation of the DEIS will be reflected in the DEIS and will not necessarily be entered back into the content of this report. To insure the accuracy of such edits, I will review the content of both the DEIS and the (Final) FEIS and certify that their content is consistent with the analytical conclusions in this report. If during DEIS or FEIS editing, substantially different conclusions or interpretations are reached or substantial additional analysis is prepared from that displayed in this report, an addendum to this report will be prepared.

Specialist: Rick Elston /s/

Discipline: District Environmental Coordinator

Date: 5/14/03