Canyon Creek Complex Fire Salvage Project

Recreation and Scenic Values Report

Prepared by:
Eric Amstad
Recreation Specialist

for:
Blue Mountain Ranger District
Malheur National Forest

June, 6, 2016
In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at http://www.ascr.usda.gov/complaint_filing_cust.html and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.

USDA is an equal opportunity provider, employer, and lender.
Contents

Introduction .......................... 1
Regulatory Framework .................. 1
Resource Elements, Indicators and Measures ............. 2
Resource Element #1: Recreation .................. 2
  Affected Environment .................. 2
  Methodology .......................... 2
  Existing Condition .................... 3
  Desired Condition .................... 7
Environmental Consequences .................. 8
  Methodology .......................... 8
  Alternative 1 – No Action ............... 10
  Alternative 2 – Proposed Action .......... 11
  Compliance with Forest Plan and Other Relevant Laws, Regulations, and Policies .......... 14
Resource Element #2: Scenic Quality and Visual Resources .................. 14
  Affected Environment .................. 14
  Methodology .......................... 14
  Existing Condition .................... 14
  Desired Condition .................... 18
Environmental Consequences .................. 19
  Methodology .......................... 19
  Alternative 1 – No Action ............... 21
  Alternative 2 – Proposed Action .......... 21
  Compliance with Forest Plan and Other Relevant Laws, Regulations, and Policies .......... 22
Monitoring ................................ Error! Bookmark not defined.
References ................................ 24

List of Tables

Table 1. Resource elements, indicators and measures for assessing effects .................... 2
Table 2. Past, present, and reasonably foreseeable activities relevant to recreation cumulative
  effects analysis .......................... 8
Table 3. Project design criteria for recreation ......................................................... 9
Table 4. Scenic integrity levels, visual quality levels, and scenic integrity objectives .......... 16
Table 5. Past, present, and foreseeable activities relevant to cumulative effects analysis for scenic
  quality and visual resources ................. 19
Table 6. Project design criteria for scenic quality and visual resources .................... 20
Introduction
This specialist report contains an analysis of existing recreation and scenery conditions in the Canyon Creek Complex Fire Salvage Project planning area and an analysis of effects from proposed activities on recreation facilities, recreation activities, and scenery.

Description of Area
The Canyon Creek Complex Fire Salvage Project planning area is located on the Blue Mountain Ranger District within the Malheur National Forest. The project planning area is located in Grant County, approximately 8 miles south of John Day, Oregon. It encompasses nearly 57,800 acres, within the East Fork Canyon Creek, Upper Canyon Creek, and Middle Canyon Creek subwatersheds. Of the approximately 57,800 acres within the project planning area, 53,500 are National Forest System (NFS) lands. The remaining 4,300 acres are private lands.

Access
The primary roads for accessing recreational opportunities through the project planning area are U.S. Highway 395, County Road 65, and Forest Service Road (FSR) 1500000. U.S. Highway 395 provides project planning area access from the south (Seneca) and north (Canyon City). County Road 65 and FSR 1500000 provide access from the west via U.S. Highway 395. FSR 1500000 also provides access from the east (Logan Valley).

Regulatory Framework
Guidelines from the 1990 Malheur National Forest Land and Resource Management Plan are used to determine the condition of developed recreation facilities and dispersed campsites. The Strawberry Mountain Wilderness is to be managed in accordance with values specified in the Wilderness Act of 1964 and the Oregon Wilderness Act of 1984. The wilderness character of the resources will be preserved and protected while providing for recreational, scenic, educational, scientific, and historical uses (USDA Forest Service 1990). See ‘Forest Direction’ under the Recreation Existing Condition section for more information regarding the regulatory framework for recreation.

The Malheur Land and Resource Management Plan (USDA Forest Service 1990) (Malheur Forest Plan) establishes management areas (MA), goals, objectives, and standards and guidelines for land management activities and other uses within the project planning area (see Chapter 4 of the Malheur Forest Plan for applicable standards and guidelines). Recreation in the Canyon Creek Complex Fire Salvage Project planning area is managed to meet the objectives of the Malheur Forest Plan, as amended. The Final Environmental Impact Statement (FEIS) for the Malheur Forest Plan was adopted with a Record of Decision in 1990, with subsequent amendments. Objectives for management of the developed and dispersed recreation opportunities within the project planning area are established by the standards and guidelines of the Malheur Forest Plan with a strong emphasis on providing recreation opportunities. They are also informed by the application of the guidance included in the Recreational Opportunity Spectrum (ROS), which helps to describe desired recreational settings to achieve different types of recreational experiences. The Malheur Forest Plan also prescribes important management objectives for the health and resilience of the forest and public safety which are directly related to the recreational setting. Special guidance and attention is also given in the Malheur Forest Plan to the important functions of those portions of the landscape near to streams and lakes, which often overlap with the areas that are most popular for recreational use.
For visual resources, the goal of the Malheur National Forest is to maintain and enhance the scenic character of the forest through integration of the principles of landscape architecture and environmental design arts into forest land management practices, and to provide and maintain pleasant visual experiences for forest visitors consistent with public demand and natural landscape capabilities. The Malheur Forest Land and Resource Management Plan states that the goal for visual corridors is to “manage corridor viewsheds with primary consideration given to their scenic quality and the growth of large diameter trees. Visual quality objectives of retention, partial retention, and modification will be applied while providing for other uses and resources” (USDA Forest Service 1990).

**Resource Elements, Indicators and Measures**

The resource indicators in this recreation and scenic values report are: recreation opportunity spectrum, recreation opportunities, public access to recreation, and scenic integrity.

<table>
<thead>
<tr>
<th>Resource element</th>
<th>Resource indicator</th>
<th>Measure (quantify if possible)</th>
<th>Source (LRMP S/G; law or policy, BMPs, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recreation</td>
<td>Recreation opportunity spectrum</td>
<td>Impacts to ROS classes</td>
<td>Malheur Forest Plan Management Area 10 Standard 1; Malheur Forest Plan Management Area 11 Standard 1</td>
</tr>
<tr>
<td>Recreation</td>
<td>Recreation opportunities</td>
<td>Changes to recreation opportunities in the Canyon Creek Complex Fire Salvage Project planning area</td>
<td>Malheur Forest Plan Forest Goals 1-7</td>
</tr>
<tr>
<td>Recreation</td>
<td>Public access to recreation</td>
<td>Temporal changes to recreation access</td>
<td>Malheur Forest Plan Forest Goals 1-7</td>
</tr>
<tr>
<td>Scenic quality and visual resources</td>
<td>Scenic integrity</td>
<td>Changes to scenic integrity level</td>
<td>Malheur Forest Plan Forest Goals 9-10; Forest Service Manual 2380.3.4</td>
</tr>
</tbody>
</table>

**Resource Element #1: Recreation**

**Affected Environment**

**Methodology**

The Malheur National Forest uses recreation opportunity spectrum (ROS) classes to develop management direction for recreation on the Forest. This analysis would use the ROS classes defined by the Malheur Forest Plan as the basis of this assessment. Geographic information system (GIS) information was used to query and analyze data and create maps displaying location of dispersed campsites, trails, management units, fuelwood gathering, and analysis of Malheur Forest Plan ROS mapping and proposed treatments. In addition, field work and observed visitor activities from the recreation specialist are incorporated to confirm GIS analysis, and to provide perspective on local forest activities.
Existing Condition

Special Features

Strawberry Mountain Wilderness
The Strawberry Mountain Wilderness was designated under the Wilderness Act of 1964. It was more than doubled to 69,350 acres in 1984 as part of the Oregon Wilderness Act. The 1964 Wilderness Act (Section 2c) defines wilderness as “an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable, and has outstanding opportunities for solitude or a primitive and unconfined type of recreation.”

The rugged Strawberry Mountain Wilderness ranges in elevation from 4,600 to 9,038 feet at the top of Strawberry Mountain. The ecologically diverse Strawberry Mountain Wilderness contains five of the seven major life zones of North America. It is home to native wildlife populations of Rocky Mountain elk, mule deer, antelope, big horn sheep, mountain goat, black bear, cougar, and bald eagle. The headwaters of several important watersheds begin within the Strawberry Mountain Wilderness. An east-west hydrologic divide separates the Strawberry Mountain range into two distinct parts. Canyon Creek, Pine Creek, Indian Creek, Strawberry Creek, and Roberts Creek drain into the John Day River, while Big Creek, Lake Creek, and Bear Creek drain into the Malheur and Silvies rivers. Numerous wildfires have occurred within the eastern portion of this wilderness over the past 25 years. The western half of the wilderness remained largely unburned before the Canyon Creek Complex Fire swept across it, which accounts for the more severe burning in the western portion.

For recreation, the Strawberry Mountain Wilderness offers dense forest, open ridges with scenic vistas, alpine lakes, and waterfalls. Recreationists enjoy a variety of experiences through hunting, fishing, day hiking, backpacking, and camping. The wilderness contains a network of trails throughout that provide access to these activities. Approximately 20,114 acres of the Strawberry Mountain Wilderness overlaps the Canyon Creek Complex Fire Salvage Project planning area.

Wildlife Management Unit
The Canyon Creek Complex Fire Salvage Project planning area lies within the Oregon Department of Fish and Wildlife’s Wildlife Management Unit of Murderer’s Creek (Unit 46). Hunting is one of the primary recreation uses in the Canyon Creek Complex Fire Salvage Project planning area.

Recreational Seasons of Use
The typical peak use period in the summer is late May to early September. For hunting, peak use is September through November. Outside of summer, the usage patterns are impacted by the presence or absence of snow and its limitations on access. Camping, fishing, and other dispersed activities such as woodcutting, will often continue beyond the typical seasons unless snow makes motorized access impractical to the area. Recreational use generally declines in the project planning area after the summer season, except during deer and elk hunting seasons. During hunting season, hunting and related camping becomes the dominant recreational activity in the project planning area. In the winter season, snowmobiling becomes the dominant recreational activity.
Recreation Facilities and Activities

Like most recreational activities in the Blue Mountains, recreation on the Malheur National Forest is focused around where there is water or access to trails or dispersed recreation. The most popular recreation activities on the Malheur National Forest are driving for pleasure, hunting, hiking and walking, viewing wildlife, relaxing, primitive camping, and viewing natural features (National Visitor Use Monitoring [NVUM] 2009). All of these activities have been available within the Canyon Creek Complex Fire Salvage Project planning area.

Approximately 62 miles of designated trail exists within the project planning area. This mileage includes both dedicated trail, and trail that is codesigned with a road. There are several recreation sites, campgrounds, and trailheads and numerous trails within the project planning area. Damage to recreation sites and trails from the Canyon Creek Complex Fire varied from no impact to high severity fire that damaged recreation facilities and trail treads, removing organic matter within and outside the trail prism. Each of the recreation sites, with the exception of Starr campground, experienced some level of damage requiring removal of hazard trees and replacement of sign boards; and each has received a sign that warns the public of post-fire hazards in the area. The following is a list of recreation sites and trails that are either entirely or partially within, or adjacent to the project planning area:

- **Starr Campground**, located on the western project boundary; the campground’s facilities were not affected by the Canyon Creek Complex fire.

- **Starr Bowl Snow Play Area**, which is adjacent to the western project boundary, contains a sledding hill, some fencing, signage, two toilet buildings and a warming cabin. The fire burned up to the edge of the site with low severity. Hazard tree dangers have been mitigated. The fence, damaged by the fire and suppression activities, has been repaired.

- **Canyon Meadows Campground** was heavily burned with mostly high severity fire by the Canyon Creek Complex. The campground contained two toilet buildings, four campsites, signage, picnic tables, and fire rings. The signage and both toilet buildings completely burned. The toilet vaults have been filled in as a part of BAER hazard mitigation. The one surviving picnic table and the fire rings have been removed for use in other locations. As a flood potential mitigation measure, the Canyon Meadows dam was removed, completely eliminating the reservoir that the campground was historically built around. The fire that burned through the campground was intense. It is unlikely that more than just a few trees will survive. Most of the trees would need to be removed in order to make the campground safe for visitors. The suitability of the site as a campground location is now low.

- **Wickiup Campground** is within the fire corridor along FSR 1500000. Although the campsites themselves did not burn, the fire burned down the hill into the campground with low and moderate severity on the south side. The results of the fire are evident, as many hazard trees were removed from the south edge of the campground. The facilities at Wickiup campground are all intact.

- **Joaquin Miller Trailhead** sustained low to moderate severity fire damage to much of the surrounding vegetation. However the facilities, which consist of the parking area and the trailhead sign, remain intact.

- **East Fork Canyon Creek Trailhead** was completely burned with moderate severity by the Canyon Creek Complex fire. The trailhead contained a large parking area, a set of
horse corrals, hitching posts, and trailhead signage. The facilities were all completely burned. Post-fire hazard tree mitigation has taken place at the trailhead.

- **Table Mountain Trailhead** was partially burned with moderate severity. The trailhead contained a small parking area, two horse corrals, a retaining wall, and trailhead signage. One horse corral remains, as well as part of the retaining wall and the trailhead signage. There are a few hazard trees to mitigate before re-opening the site to public access.

- **Buckhorn Meadows Trailhead** was within a low severity burn area. The trailhead facilities, which consist of a parking area, a horse corral, and trailhead signage, remain intact.

- **Snowmobile trails** (15 total miles within the project boundary):
  
  - *Snowmobile S-5100 trail* which goes over FSR 4920000 on the west end of the project planning area, weaving in and out of the project planning area 8 times for a total of 1.9 miles within the project boundary.
  
  - *Snowmobile S-5096 trail* which goes over FSR 3925196 on the west end, FSR 1530000 on the east end, and FSR 3925000, FSR 1500000, FSR 1520000 in between. The trail weaves in and out of the project boundary 29 times for a total of 11.1 miles within the project boundary.
  
  - *Snowmobile S-5220 trail* which goes over FSR 1516000 from Wickiup campground to the southern project boundary for 2.0 miles.
  
  - *Snowmobile S-5103 trail* which goes over FSR 3925000 from its junction with FSR 3925196 to the southern project boundary. It is 0.02 miles long within the project boundary.

Summer motorized use for both highway legal and non-highway legal vehicles (OHVs) is currently allowed on most Maintenance Level 2 roads within the project planning area.

- **Cross-country Ski trails** (0.3 miles within the project boundary):
  
  - *Starr Ski (XC-5085) trail*: 0.02 miles within the project boundary.
  
  - *Eagle Ski (XC-5088) trail*: 0.12 miles within the project boundary.
  
  - *Tenderfoot Ski (XC-5091) trail*: 0.16 miles within the project boundary.

Short segments of these three cross-country ski trails fall within the project boundary. All three are in the vicinity of Starr campground and Starr Bowl snow play area. All three of these cross-country ski trails follow over roads.

- **Bicycle trails** (15.6 miles within the project boundary):
  
  - *Table Mountain Loop (B-5042) trail* is a loop bicycle trail that follows over FSR 1500000, FSR 1518000, and FSR 1518663, which leads back to FSR 1500000. The entire loop trail lies within the project boundary.
  
  - *Crazy Creek Loop (B-5043) trail* follows over FSR 1500000, FSR 1520000, and FSR 1530000 within the project boundary for 6.8 miles.
o **Starr Ridge (B-5044) trail** follows over FSR 3925196 on the west end and FSR 3925000 on the east end. The trail weaves in and out of the project boundary 22 times for a total of 4.3 miles within the project boundary.

All three of these bicycle trails are co-designations of bicycle riding routes that follow along forest roads. The bicycle trail mileage that comes from open and closed roads co-designated as trail was not designed for, nor improved, for bicycle use. There is no on site indication that the trails exist.

- **Strawberry Mountain Wilderness foot/horse trails** (30.7 miles within the project boundary):
  - **Pine Creek (201) Trail** lies within the project boundary for 2.8 miles across 6 segments.
  - **Tamarack Creek (202) Trail**: the entire 1.7 mile length of Tamarack Creek Trail lies within the project boundary.
  - **Buckhorn Meadows (205) Trail**: the entire 2.6 mile length of Buckhorn Meadows Trail lies within the project boundary.
  - **East Fork Canyon Creek (211) Trail**: the entire 9.5 mile length of East Fork Canyon Creek Trail lies within the project boundary.
  - **Table Mountain (217) Trail**: the entire 6.2 mile length of Table Mountain Trail lies within the project boundary.
  - **Canyon Mountain (218) Trail**: 2.7 miles of the Canyon Mountain Trail lies within the project boundary across 3 segments.
  - **Joaquin Miller (219) Trail**: 4.3 miles of the Joaquin Miller Trail lies within the project boundary across 16 segments.
  - **Table Mountain A (5000) Trail**: the entire 0.9 mile length of Table Mountain A Trail lies within the project boundary.

In addition to the developed recreation sites, the project planning area includes 59 known dispersed recreation campsites. Of those 59 dispersed sites, 42 are in the Wilderness. The remaining 17 sites are along roads. All but one of the 17 are in the southeast portion of the project planning area, along roads, and set in a Roaded Natural Recreation Opportunity Spectrum (ROS) area.

**Recreational Opportunity Spectrum**

The Recreation Opportunity Spectrum (ROS) is a description of various attributes that contribute to a particular recreational setting. The ROS describes recreational settings in terms of the “combination of physical, biological, social, and managerial conditions that give value to a place” (Clark and Stankey 1979). ROS categories are not binding direction for the area, but are, instead, guidance for the development of future recreational facilities. Changes in ROS settings may occur over time as a result of Forest Management Practices, and should be monitored for this. The ROS settings that apply to the Canyon Creek Complex Fire Salvage Project include:
• **Roaded Natural** – Visual Corridors (Management Area 14) are to be managed as roaded natural: this is the setting for 45 percent of the project planning area (23,989 acres). The “area is characterized by predominately natural-appearing environment with moderate evidences of the sights and sounds of humans. Such evidences usually harmonize with the natural environment. Interaction among users may be low to moderate, but with evidence of other users prevalent. Resource modification and utilization practices are evident, but harmonize with the natural environment. Conventional motorized use is provided for in construction standards and design of facilities.” (USDA Forest Service 1982)

• **Roaded Modified** – General Forest and Rangeland (Management Area 1 and 2) and the majority of Big-Game Winter Range Maintenance (Management Area 4A) are to be managed as roaded modified; this is the setting for 19 percent of the project planning area (10,231 acres). This “area is characterized by a setting that is heavily modified by human activity. Access is generally easy for highway vehicles. The setting is generally the result of intensive commodity production. There are no size criteria. Concentration of users is low, but there is considerable evidence of others. Users have a moderate degree of isolation from the sights and sounds of other people.” (USDA Forest Service 1982)

• **Semi-Primitive Non-Motorized** – This ROS setting is primarily in the wilderness portion of the project area, making up 36 percent of the project planning area (18,973 acres). This “area is characterized by a predominately natural or natural-appearing environment of moderate to large size. Interaction between users is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present, but are subtle. Motorized use is not permitted.” (USDA Forest Service 1982).

**Wilderness Recreation Opportunity Spectrum**

The wilderness as a whole, is managed for two Wilderness Recreation Opportunity Spectrum (WROS) classes. The “Pristine” class, which encompasses approximately 6,870 acres north of Berry Creek around Canyon Mountain, is not part of the Canyon Creek Complex Fire Salvage Project. The remaining 62,480 wilderness acres offer “Primitive” wilderness opportunities. Each WROS class has distinct management goals and standards in terms of physical/biological objectives, social setting objectives, and the desired managerial setting (USDA Forest Service 1990). Due to its distance from urban population centers, opportunities for solitude in the Strawberry Mountain Wilderness are numerous in each of the two WROS classes.

**Desired Condition**

For recreation, the goal of the Malheur National Forest is to encourage public participation and partnerships, provide interpretation, information, and education on land management and ecological principles, and to provide a range of high quality opportunities and settings which are consistent with public demand for a variety of activities and compatible with a forest environment, including safe and accessible developed recreation facilities and a diverse system of trails.

**Wilderness**

• Manage the Strawberry Mountain... wilderness to preserve the wilderness character in conformance with the Wilderness Act of 1964 and the Oregon Wilderness Act of 1984 (USDA Forest Service 1990, page IV-16).
Dispersed Recreation
- Construct, reconstruct, and manage trails to protect the resources and meet the objectives of each ROS class (USDA Forest Service 1990, page IV-13).

Developed Recreation
- Manage the following 20 campgrounds as developed facilities: Canyon Meadows, Starr, Wickiup… (USDA Forest Service 1990, page IV-14).
- Where the need is identified, upgrade, replace, and add facilities. Consider expansion or addition of new facilities where recreation demand and environmental concerns warrant (USDA Forest Service 1990, page IV-14).

Forest-Wide Standards
- Forest-wide Standard 7: Recognize undeveloped campsites, hunter camps, or areas where concentrated recreation use occurs as being significant in providing dispersed recreation opportunities in a roaded setting. Manage these areas for partial retention (USDA Forest Service 1990, page IV-25).
- Forest-wide Standard 11: Construct, relocate, or protect designated system trails and facilities during management activities (USDA Forest Service 1990, page IV-25).
- Forest-wide Standard 157: Plan, design, construct and maintain roads and trails to the minimum level required to meet integrated land management objectives (i.e., the needs of all resources). Minimize tie-through roads (USDA Forest Service 1990, page IV-42).
- Forest-wide Standard 166: Prepare and update the Forest travel map annually. Update and reprint the travel map as necessary (USDA Forest Service 1990, page IV-43).

Environmental Consequences

Methodology
Spatial and Temporal Context for Effects Analysis
The spatial context for this analysis of direct, indirect, and cumulative effects is the Canyon Creek Complex Fire Salvage Project planning area. The effects to the recreation resources can be short-term and long-term. Short-term is usually less than 5 years, and long-term is 5 to 50 years.

Past, Present, and Foreseeable Activities Relevant to Cumulative Effects Analysis
Past, present and reasonably foreseeable activities that are relevant to recreation are in Table 2.

<table>
<thead>
<tr>
<th>Activity name</th>
<th>Timeframe</th>
<th>Location</th>
<th>Activity description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire suppression</td>
<td>1910 to present</td>
<td>Project planning area</td>
<td>In the recent past, wildfires were actively suppressed leading to a buildup of ground fuels and overstocked stands. Because of current uncharacteristic fire behavior, all fires are being actively suppressed to reduce the chance of other major stand replacement fires.</td>
</tr>
<tr>
<td>Activity name</td>
<td>Timeframe</td>
<td>Location</td>
<td>Activity description</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>-----------</td>
<td>--------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Canyon Creek Complex Fire suppression</td>
<td>2015</td>
<td>Project planning area</td>
<td>Wildfire suppression activities include dozerlines, retardant drops, drafting sites, staging areas, safety zones, drop points, increased vehicular traffic.</td>
</tr>
<tr>
<td>Canyon Creek Complex Fire BAER</td>
<td>On-going</td>
<td>Project planning area</td>
<td>BAER funded activities will occur within the fire perimeter focusing on emergency measures to reduce flooding, erosion, and provide for human safety.</td>
</tr>
<tr>
<td>Canyon Creek Complex Fire Hazard Tree Mitigation</td>
<td>On-going</td>
<td>Project planning area</td>
<td>Mitigation of hazard trees, including commercial removal, along forest roads within the boundary of the Canyon Creek Complex Fire.</td>
</tr>
<tr>
<td>Cross-country off-highway vehicle (OHV) use</td>
<td>On-going</td>
<td>Project planning area</td>
<td>Cross-country OHV use occurs throughout the project planning area.</td>
</tr>
<tr>
<td>Travel Management Plan</td>
<td>Reasonably foreseeable future activity</td>
<td>Project planning area</td>
<td>Cross country travel may be prohibited across 1,337,770 acres on the Malheur National Forest where it is not already prohibited with the exception of cross-country travel from designated open routes for the purpose of dispersed camping when resource damage caused by motor vehicle use can be avoided and/or for big game retrieval purposes. The distance that cross-country travel may be allowed from open routes to existing dispersed camp sites would vary by alternative considered in the travel management analysis. Existing dispersed sites in riparian areas may also have a setback distance from the stream where motorized access may be restricted.</td>
</tr>
<tr>
<td>Trail maintenance</td>
<td>On-going</td>
<td>Project planning area</td>
<td>Approximately 62 miles of designated trails are located within the project planning area. These trails receive ongoing maintenance.</td>
</tr>
<tr>
<td>Firewood cutting</td>
<td>On-going</td>
<td>Project planning area</td>
<td>Use is generally late spring through late fall.</td>
</tr>
<tr>
<td>Dispersed camping</td>
<td>On-going</td>
<td>Project planning area</td>
<td>Use is generally late spring through late fall. There are approximately 59 known dispersed camping sites within the project planning area.</td>
</tr>
</tbody>
</table>

Project Design Criteria and Mitigation Measures

**Table 3. Project design criteria for recreation**

<table>
<thead>
<tr>
<th>Criteria number</th>
<th>Objective</th>
<th>Design criteria</th>
<th>Alternative</th>
<th>Responsible person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recreation-1</td>
<td>Minimize impacts to dispersed campsites</td>
<td>Dispersed recreation sites located on existing landings may be reused for log decks, slash piling, or road rock storage. Each site will be rehabilitated after use.</td>
<td>2</td>
<td>Recreation specialist, Timber Sale Administrator</td>
</tr>
<tr>
<td>Recreation-2</td>
<td>Minimize impacts to dispersed campsites</td>
<td>Minimize use of dispersed recreation sites as landing zones. If a dispersed recreation site is used as a landing zone, chipping or haul back of slash will be required of logging debris to</td>
<td>2</td>
<td>Recreation specialist, Timber Sale Administrator</td>
</tr>
<tr>
<td>Criteria number</td>
<td>Objective</td>
<td>Design criteria</td>
<td>Alternative</td>
<td>Responsible person</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>-------------</td>
<td>--------------------------------------------------------</td>
</tr>
<tr>
<td>Recreation-3</td>
<td>Minimize impacts to dispersed campsites</td>
<td>Activities adjacent to dispersed recreation sites will be designed to retain visual screening within 150 feet.</td>
<td>2</td>
<td>Recreation specialist, Timber Sale Administrator</td>
</tr>
<tr>
<td>Recreation-4</td>
<td>Minimize impacts to trails and trailheads</td>
<td>Landing zones shall not be located on (but could be adjacent to) system trails</td>
<td>2</td>
<td>Recreation specialist, Timber Sale Administrator</td>
</tr>
<tr>
<td>Recreation-5</td>
<td>Minimize impacts to trails and trailheads</td>
<td>Grapple piling is prohibited within 50 feet of trails and trailheads; hand piling is allowed.</td>
<td>2</td>
<td>Timber Sale Administrator</td>
</tr>
<tr>
<td>Recreation-6</td>
<td>Minimize impacts to trails and trailheads</td>
<td>After project-related activities are complete, disturbed sections of system trails will be reconstructed to the existing (pre-activity) condition within 2 months of activity or funds will be collected for reconstruction. This includes replacing any trail markers that are removed as a result of activities.</td>
<td>2</td>
<td>Recreation specialist, Timber Sale Administrator</td>
</tr>
<tr>
<td>Recreation-7</td>
<td>Minimize impacts to trails and trailheads</td>
<td>Along system trails, if trees containing trail markers are designated for removal, the trail markers will be moved to a nearby tree that is not designated for removal</td>
<td>2</td>
<td>Timber Sale Administrator</td>
</tr>
<tr>
<td>Recreation-8</td>
<td>Minimize impacts to trails and trailheads</td>
<td>Boundary tags, markers, and flagging along trails will be removed after completion of treatment activities.</td>
<td>2</td>
<td>Recreation specialist, Timber Sale Administrator</td>
</tr>
<tr>
<td>Recreation-9</td>
<td>Minimize impacts to trails and trailheads</td>
<td>For safety, trailheads that can only be accessed through treatment units will be posted as closed to the public during commercial tree felling operations; posting will occur at highly visible locations such as intersections.</td>
<td>2</td>
<td>Timber Sale Administrator</td>
</tr>
</tbody>
</table>

**Alternative 1 – No Action**

Direct and Indirect Effects

Recreational access would have a slight improvement in the short-term by not taking action, as there would not be any recreation facility closures due to treatment activity. Recreational safety would be negatively affected for both the short-term and long-term due to higher risks associated with danger trees. As mortality due to fire damage would increase over time, so too would the risk to the public. Dispersed recreation in the areas of the treatment units would continue to be at risk due to abundance of standing dead trees.

The negative safety effects of the no action alternative are lessened by the following factors:
• Except for Joaquin Miller and East Fork Canyon Creek trailheads, the developed recreation facilities are not located within treatment units. Therefore, the treatments would not affect the immediate surroundings of most developed recreation facilities.

• Some of the danger tree hazards have already been mitigated through the Canyon Creek Complex Fire Hazard Tree Mitigation Project. The area around Canyon Meadows campground and Buckhorn Meadows trailhead have received a considerable amount of hazard tree removal through the project.

Cumulative Effects
Because there are no direct or indirect effects due to the no action alternative, no cumulative effects would occur.

**Alternative 2 – Proposed Action**

**Direct and Indirect Effects**

**Salvage Treatment and Logging System Activities**

Under alternative 2 approximately 1,210 acres would be treated across 34 treatment units. This alternative would have a direct effect on recreation due to activities such as cutting, skidding, and decking logs, distributing non-commercial woody material and logging slash, and the operation of heavy machinery within the vicinity of developed recreation sites, trails, and dispersed campsites. Recreation use across the Forest often involves using travel routes while exploring more than one location. Therefore, it is expected that the typical visitor may be exposed to some degree of harvest and treatment activity while traveling through the area. Visitors to the area could experience increased noise levels from machinery and logging activities, and delays due to traffic flaggers as well as an increase in road traffic. In periods following the treatment of units, visitors could experience the presence of stumps and slash piles until removed. Ground disturbance from activities such as skid trails and temporary roads would be much less evident after 2 to 5 years. Visual signs of slash piles at landings would mostly go unnoticed within the backdrop of a fire burned landscape such as that within the Canyon Creek Complex Fire planning project.

There often is increased dispersed visitor use in burned areas for harvesting mushrooms for both personal and commercial use. If yields are noticeably productive, increased dispersed and developed recreation sites may experience higher than normal occupancies. Facilities such as Starr and Wickiup campgrounds would be particularly accommodating for parking and access to desirable mushroom harvests. Maintaining open public access to these campgrounds would potentially benefit more visitors. Although the developed facilities at Canyon Meadows campground were destroyed by the fire, if opened it could accommodate mushroom harvesters as a dispersed camping site. August 27, 2016, is the opening day of archery season. There could be a short-term displacement of deer and elk due to the activities. If treatment activities extend near or past the opening of archery season, there could be a decrease in hunting opportunities within the vicinity of the treatment units.

Users of Joaquin Miller, East Fork Canyon Creek, Table Mountain, and Buckhorn Meadows trailheads could be inconvenienced by the treatment activities while traveling to the trailheads. Users of the Joaquin Miller Trailhead and the East Fork Canyon Creek Trailhead would experience a temporary displacement during treatment activities on units 1 through 11, due to temporary safety closures. The direct effects of the treatment activities and associated noises, the immediate evidence of ground disturbances, and recreation area closures could detract from the
recreation experience. Noise and visibility of treatment activities adjacent to the wilderness (several treatment units in study units 1 and 2) could impact opportunities for solitude and isolation from sights and sounds of humans. Nearby wilderness recreation experiences may be changed in the short-term by the proposed activities.

Treatment would improve public safety, reducing danger trees by treating units that are near high density use associated with developed recreation facilities. Some dispersed site users may be temporarily displaced due to loss of access during the treatment activities. This could increase camping use at other dispersed sites. Visual evidence of treatment activities may be apparent to the casual forest visitor at or near some of these camping areas.

All of the treatment units fall within land classified as either Roaded Modified or Roaded Natural in the Recreation Opportunity Spectrum. Roaded Modified is characterized by a setting that is heavily modified by human activity and generally the result of intensive commodity production. The proposed treatment activities fall below that threshold, and therefore remain compatible with the Roaded Modified setting. Roaded Natural is characterized by a predominately natural-appearing environment with moderate evidences of the sights and sounds of humans, where resource modification and utilization practices are evident, but harmonize with the natural environment. The project design criteria, listed above for alternative 2 (see Table 3) were created in part, to ensure that the treatment activities would harmonize with the natural environment, and remain compatible with the Roaded Natural setting. There would be no treatment activities within the Strawberry Mountain Wilderness. The wilderness recreation opportunity spectrum (WROS) class for this area would not be affected.

**Forest Road Activities**

Recreational use of forest roads would be minimally affected by forest road activities in the project planning area. No currently open roads would be closed as part of the project, however 7.5 miles of currently closed roads, without prior NEPA documentation, would be confirmed as closed under this project. Recreational driving and access would benefit due to road maintenance that would be needed for haul routes. Road maintenance for hauling would occur on 50 miles of maintenance level 2 and 3 open roads. Additional road activities for treatment activities would be 4 miles of temporary road construction and 10 miles of closed road that would be temporarily opened for hauling. Those temporary actions would have minimal impact on recreation.

**Research Activities**

Recreational cross-country motor vehicle use could be affected by the research within the project planning area. A temporary forest closure order prohibiting cross-country motor vehicle use within the project study and control units would be implemented between April 1st and August 30th for four years, which would limit motorized recreational use of the affected area. There would not be any other effects to recreation from the research proposals within the project planning area.

**Conclusion**

All of the potential negative effects to recreation due to the proposed activities in the Canyon Creek Complex Fire Salvage planning project would be short-term. However, there would be long-term benefits and perceived benefits to safety due to a reduction in danger trees, and benefits to access due to road maintenance.
Cumulative Effects

**Access and Dispersed Recreation**

Reasonably foreseeable future activities in the project planning area that have a potential to affect recreationists include road closures. Road closures would reduce motorized access to areas where visitors could drive, view scenery, and participate in other dispersed recreation activities. Once the Travel Management Plan is implemented, motorized cross country travel may be prohibited across a portion of the project planning area, where it is not already prohibited. The distance that cross-country travel may be allowed from open routes to existing dispersed camp sites would vary by alternative considered in the travel management analysis. Existing dispersed sites in riparian areas may also have a setback distance from the stream where motorized access may be restricted. As the project planning area changes over time, visitor demographics and the activities they pursue may change along with it. It is likely that dispersed camping sites would change over time along with visitor patterns. New sites are likely to be created, while existing sites become less used. With travel management plan implementation, access would be maintained to developed recreation sites and trailheads.

**Hunting**

Due to Canyon Creek Complex fire suppression activities and related closures during the 2015 hunting season, the proposed treatment activities would make it the second year in a row that hunting was impacted in the area. Hunting in the area could decrease in the short-term due not only to treatment activities, but to lack of forage for big game animals. As ground cover grows, it would provide more forage for big game animals, and hunting would become more desirable as the big game animals return. For that reason, hunting is likely to increase in the burned areas over the next several years. Mushroom hunting is expected to increase in the near short-term. Tree planting would have minimal cumulative effects to hunting, potentially decreasing forage and increasing cover in the long-term.

**Recreation Facilities**

The dam at Canyon Meadows campground was removed in 2015, permanently altering the recreational environment at Canyon Meadows campground. However, restoration of Canyon Meadows campground is likely to occur. The vault toilet would likely be replaced with a fire resistant concrete structure, and sites with picnic tables and fire rings would be reestablished. A re-vegetation plan would likely be included in the restoration. Renovation of trailheads and trailhead facilities within the project planning area is a foreseeable future activity. Recreation site and wilderness trail maintenance is ongoing. Through the Canyon Creek Complex Burned Area Emergency Response (BAER) project, funding has been provided for erosion control work on the Joaquin Miller, East Fork Canyon Creek, and Table Mountain trails in 2016. The proposed activities within the project planning area are distinctly separate from and would not compound with the effects of the above potential recreation related actions. Therefore, in the absence of other unforeseen actions or events, recreation opportunities would continue to be available within the project planning area at current levels, and existing ROS classes would remain the same.

**Conclusion**

Cumulative effects of the proposed actions are not likely to have adverse or significant effects to the recreation opportunities or experiences. There may be some short-term changes to recreational activities while treatments are performed, but there are many alternative locations for forest visitors to seek opportunities. Displacement of recreation activities would be short-term and
Removal of danger trees and keeping road access open would have the greatest positive effect for the majority of public visitors.

Compliance with Forest Plan and Other Relevant Laws, Regulations, and Policies

Alternative 1
Alternative 1 is consistent with the Malheur Forest Plan as it pertains to recreation because there are no direct or indirect effects. The recreation goals of the Malheur National Forest would therefore not be affected.

Alternative 2
Alternative 2 is consistent with the Malheur Forest Plan as it pertains to recreation. Under alternative 2, the potential changes to recreation opportunities and access by the proposed actions are limited in time and scope to the degree that there would not be any impacts to ROS classes (roaded natural and roaded modified) of the affected management areas, and the potential impacts would remain compatible with the recreation goals of the Malheur National Forest.

Resource Element #2: Scenic Quality and Visual Resources

Affected Environment

Methodology
The Malheur National Forest uses scenic integrity objectives and sensitivity levels to manage the scenic quality of the landscape within visual corridors. The Malheur Forest Plan defines visual corridors and outlines the scenic integrity objectives and sensitivity levels for each of them. The indication of effects of the Canyon Creek Complex Fire Salvage Project on scenery is determined by an analysis of changes to scenic integrity. To determine these effects, the Forest Service’s Scenery Management System principles are applied to indicate direct, indirect, and cumulative changes to the project planning area’s scenic landscape character as a result of the proposed actions. These changes are measured using criteria established by the Forest Service’s Landscape Aesthetics, A Handbook for Scenery Management, Agriculture Handbook 701 (USDA Forest Service 1995) and National Forest Landscape Management Volume 2, Agriculture Handbook Number 462 (USDA Forest Service 1974). Geographic information system (GIS) information was used to query and analyze data and create maps displaying location of viewsheds, management areas, fire boundaries, and analysis of Forest Plan visual corridor mapping and proposed treatments. In addition, field work and observed visitor activities from the recreation specialist are incorporated to confirm GIS analysis, and to provide perspective on local forest activities.

Existing Condition
People are concerned about the quality of their environment, including aesthetic values of landscapes, particularly scenery and spiritual values. Research has shown that high-quality scenery, especially that which is related to natural-appearing forests, enhances people's lives and benefits society. Research findings support the logic that scenic quality and naturalness of the landscape directly enhance human well-being, both physically and psychologically, and contribute to other important human benefits. Specifically, these benefits include people's improved physiological well-being as an important by-product of viewing interesting and
pleasant natural appearing landscapes with high scenic diversity. The benefits of high-quality scenery are numerous despite the fact that a dollar value is seldom assigned to it (USDA Forest Service 1995). Viewing scenery is one of the most popular recreation activities on the Malheur National Forest (National Visitor Use Monitoring [NVUM] 2009).

This section addresses the existing post-fire scenic quality of the Canyon Creek Fire Salvage Project planning area. Ecological unit descriptions, known as corridor viewsheds or visual corridors in the Malheur Forest Plan, consist of the visible and potentially visible landscapes along major travel routes where the traveling public has a medium to high sensitivity to the scenery. They are to be managed with primary consideration given to their scenic quality and the growth of large diameter trees (USDA Forest Service 1990). The visual corridors include all of the foreground (up to ½ mile from the viewer) and middleground (up to 4 miles from the foreground) areas visible and potentially visible from the primary roads that go through and define them.

Scenery Management System

In 1995, the Forest Service adopted the Scenery Management System for the inventory and analysis of the aesthetic value of National Forest Lands. The Scenery Management System (SMS) evolved from and replaces the Visual Management System (VMS), which was published in 1974 (USDA Forest Service 1974). While the essence of the system remains essentially intact and still supported by current research, terminology has changed and the system has been expanded to incorporate updated research findings (USDA Forest Service 1995). The Malheur Forest Plan, published in 1990, uses outdated VMS terminology. Therefore, while writing this report in SMS terminology, for congruence of meaning, reference has been made to VMS terminologies where the differing terminologies directly correlate.

The Effects of the Canyon Creek Complex Fire on Scenic Quality

Fire is considered a natural ecological process. Due to fire suppression and lack of a realistic low intensity fire regime, some of the pre-Canyon Creek Complex fire stands in the visual corridors were dense and the shade-tolerant understories were over-stocked, suppressing the growth of larger trees such as ponderosa pine, western larch, and Douglas-fir. The depth of view for those traveling through the visual corridors was limited in places to the immediate foreground of the landscape due to vegetation density. Generally, areas previously burned in recent history experienced lower burn severity or were unburned. The patchwork burning pattern that the Canyon Creek Complex fire took has left some areas with the pre-fire conditions intact. In high and moderate severity burn areas, the fire resulted in a change in structural stage composition, and a loss of key components of the ecosystem and dominant scenic attributes such as stands of large ponderosa pine. In those areas, the effects of the fire have significantly altered the landscape. Visible in the foreground and middleground are burned trees, blackened soil, and a lack of understory. The foreground view has been opened up, but to a view of dead and dying trees. In some middleground locations, rock outcrops and other interesting features have become visible. Increased erosion has occurred and will continue for several years. The watershed response of the Canyon Creek Complex fire has included rill and gully erosion in drainages and on steep slopes within the burned areas, and allows higher chance of flash floods with increased peak flows and sediment deposition (Kwan et al. 2015).

Landscape Character and Scenic Integrity

Landscape character (characteristic landscape in VMS) is a combination of the scenic attributes that make each landscape identifiable or unique. Landscape character creates a "sense of place,"
and describes the image of an area. The landscape character description is used as a reference for the scenic integrity of all lands. Scenic integrity indicates the degree of intactness and wholeness of the landscape character; conversely, scenic integrity is a measure of the degree of visible disruption of the landscape character. Human alterations can sometimes raise or maintain integrity. More often it is lowered, depending on the degree of deviation from the character valued for its aesthetic appeal (USDA Forest Service 1995).

Scenic Integrity Levels and Scenic Integrity Objectives
A landscape with very minimal visual disruption is considered to have high scenic integrity. Those landscapes having increasingly discordant relationships among scenic attributes are viewed as having diminished scenic integrity. Visual corridors are managed to meet specific scenic integrity levels and scenic integrity objectives (visual quality levels and visual quality objectives in VMS). The fire did not change the scenic integrity levels (and objectives) because they are tied to management areas and resource features. Upon adoption of a management plan, the landscape character description becomes the goal and the scenic integrity levels become scenic integrity objectives (USDA Forest Service 1995). They are ranked on a scale ranging from Very High Scenic Integrity to Unacceptably Low Scenic Integrity (see Table 4). The following scenic integrity objective levels are present in the visual corridors of the Canyon Creek Complex Fire Salvage Project:

- **High Scenic Integrity (Retention):** These objectives are met when the valued landscape character “appears intact”. Deviations may be present but must repeat the form, line, color, texture, and pattern common to the landscape character so completely and at such scale that they are not evident.

- **Moderate Scenic Integrity (Partial Retention):** These objectives are met when valued landscape character "appears slightly altered”. Noticeable deviations must remain visually subordinate to the landscape character being viewed.

- **Low Scenic Integrity (Modification):** These objectives are met when valued landscape character "appears moderately altered”. Deviations begin to dominate the valued landscape character being viewed but they borrow valued attributes such as size, shape, edge effect, and pattern of natural openings, vegetative type changes or architectural styles outside the landscape being viewed. They should not only appear as valued character outside the landscape being viewed but compatible or complimentary to the character within (USDA Forest Service 1995).

Table 4. Scenic integrity levels, visual quality levels, and scenic integrity objectives

<table>
<thead>
<tr>
<th>Scenic integrity level</th>
<th>Visual quality level</th>
<th>U.S. Highway 395 visual corridor</th>
<th>Wilderness Loop visual corridor</th>
<th>Canyon Creek visual corridor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very high (unaltered)</td>
<td>Preservation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High (appears unaltered)</td>
<td>Retention</td>
<td>Foreground</td>
<td>Foreground</td>
<td></td>
</tr>
<tr>
<td>Moderate (slightly altered)</td>
<td>Partial Retention</td>
<td>Middleground</td>
<td>Middleground</td>
<td>Foreground</td>
</tr>
<tr>
<td>Low (moderately altered)</td>
<td>Modification</td>
<td>Middleground</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very low (heavily altered)</td>
<td>Maximum Modification</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Constituent Analysis and Concern Level (Sensitivity Level in VMS)

Concern or Sensitivity Levels are a measure of people's concern for the scenic quality of the National Forests (USDA Forest Service 1974). Constituent analysis serves as a guide to perceptions of attractiveness, helps identify special places, and helps to define the meaning people give to the subject landscape. Constituent analysis leads to a determination of the relative importance of aesthetics to the public; this importance is expressed as a concern level. Sites, travel routes, special places, and other areas are assigned a concern level value of 1, 2, or 3 to reflect the relative High, Medium, or Low importance of aesthetics (USDA Forest Service 1995). In the Malheur Forest Plan, visual corridors are ranked by these concern (sensitivity) levels. The U.S. Highway 395 and Wilderness Loop visual corridors are sensitivity level 1. The Canyon Creek visual corridor is sensitivity level 2.

Ecological Unit Descriptions (Visual Corridors)

There are three visual corridors located within the Canyon Creek Complex Fire Salvage project planning area. Between the three visual corridors, the project area contains 9,070 acres of foreground and 9,422 acres of middleground. The following descriptions of the visual corridors pertain to the portions of the corridors that lie within the project boundary.

The **U.S. Highway 395 visual corridor** surrounds U.S. Highway 395 from the Malheur National Forest boundary on the north end, to the project boundary at Starr campground on the south end. It contains 2,403 acres of foreground and 4,349 acres of middleground. The foreground scenic integrity level is high (retention), and the middleground scenic integrity level is moderate (partial retention). The scenic integrity objective (desired visual condition in the Forest Plan) is moderate (slightly altered). The emphasis is to maintain and enhance the scenery for travelers along U.S. Highway 395 and to maintain the large tree appearance. Visitor concern (sensitivity) is high along U.S. Highway 395 because it is a major travel route between John Day and Burns. The U.S. Highway 395 visual corridor was highly impacted by the fire. Much of the corridor’s foreground and middleground within the project area experienced the burn conditions that are described above. The immediate foreground has already been moderately altered by roadside salvage and hazard tree removal. In the middleground, alterations to the landscape are highly evident due to a lack of vegetation screening.

The **Wilderness Loop visual corridor** surrounds County Road 65 and FSR 1500000 from U.S. Highway 395 to the southeast project boundary. It contains 4,349 acres of foreground and 7,136 acres of middleground. The foreground scenic integrity level is high (retention), and the middleground scenic integrity level is moderate (partial retention). The scenic integrity objective (desired visual condition in the Forest Plan) is moderate (slightly altered). The emphasis is to maintain and enhance the scenery for travelers along County Road 65 and FSR 1500000, and to maintain the large tree appearance. Visitor concern (sensitivity) is high through this corridor because it is a major travel route from U.S. Highway 395 into the Malheur National Forest, Logan Valley, and the south side of the Strawberry Mountain wilderness. This Wilderness Loop visual corridor was highly impacted by the fire. The fire followed a patch-work pattern through much of the corridor, but a significant portion of the corridor’s foreground experienced high tree mortality. The immediate foreground has already been slightly altered by roadside salvage and
hazard tree removal. In the middleground, alterations to the landscape are highly evident due to a lack of vegetation screening.

The *Canyon Creek visual corridor* surrounds FSR 1520000 from 1500000 to Buckhorn Meadows trailhead. It contains 2,608 acres of foreground and 0 acres of middleground, and is completely contained within the project planning area. The foreground and middleground scenic integrity levels are moderate (partial retention) and low (modification), respectively. The scenic integrity objective (desired visual condition in the Forest Plan) is low (moderately altered). The emphasis is to maintain and enhance the scenery for travelers through the Canyon Creek visual corridor and to maintain the large tree appearance. Visitor concern (sensitivity) is medium along the Canyon Creek visual corridor because it is an access road for Canyon Meadows campground, Buckhorn Meadows trailhead, and numerous dispersed recreation activities, but is not along a primary access road. The Canyon Creek visual corridor was highly impacted by the fire. The fire followed a patch-work pattern through much of the corridor, but a significant portion of the corridor’s foreground experienced high tree mortality. From a scenic value standpoint, this is especially evident around Canyon Meadows campground, where the fire devastated the foreground’s landscape character. The immediate foreground throughout the corridor has already been moderately altered by roadside salvage and hazard tree removal, and heavily altered by the removal of Canyon Meadows dam. In the middleground, alterations to the landscape are highly evident due to a lack of vegetation screening.

**Desired Condition**

**Federal, State and County Road Visual Corridors**
- Emphasize visual quality along all of the State and Federal highway corridor viewsheds. Manage as major corridor viewsheds ...the 15 and 16 roads as they loop around the Strawberry Mountain Wilderness. Manage lands within view of these scenic routes under foreground retention and middleground partial retention visual quality objectives. Manage other specified forest and county roads with a lower emphasis on maintaining visual quality. Meet the visual quality objectives of foreground partial retention and middleground modification in these corridor viewsheds. The effects of management activities will be obvious in these middlegrounds (USDA Forest Service 1990, page IV-15).

**Scenic Diversity**
- Emphasize horizontal diversity in the visual corridors. This will be experienced as one moves through the corridor, not as vertical diversity on every acre. The effect is to have a multi-aged appearance in the corridor utilizing group selection and even-aged management. Manage unroaded areas and wilderness with sensitivity for the visual resource (USDA Forest Service 1990, page IV-16).

**Forest-Wide Standards**
- Manage (remaining land) under modification and maximum modification visual quality objectives. The appearance of these lands as viewed from forest roads will be altered to heavily altered. Even though management activities may dominate the landscape, they are still to be designed to borrow from the natural character of the land (USDA Forest Service 1990, page IV-16).
Environmental Consequences

Methodology

Spatial and Temporal Context for Effects Analysis
The spatial context for this analysis is the Canyon Creek Complex Fire Salvage project planning area. The effects to the scenic quality and visual resources can be short-term and long-term. Short-term is usually less than 5 years, and long-term is 5 years to 50 years.

Past, Present, and Foreseeable Activities Relevant to Cumulative Effects Analysis
Past, present and reasonably foreseeable activities that are relevant to recreation are in Table 5.

Table 5. Past, present, and foreseeable activities relevant to cumulative effects analysis for scenic quality and visual resources

<table>
<thead>
<tr>
<th>Activity name</th>
<th>Timeframe</th>
<th>Location</th>
<th>Activity description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historical timber harvest</td>
<td>1860s to 1980s</td>
<td>Project planning area</td>
<td>Historic logging has occurred across the project planning area. Treatments included stand clear-cuts, shelterwood, seed treat, overstory removals, salvage, commercial thinning, and improvement cut treatments.</td>
</tr>
<tr>
<td>Recent timber harvest</td>
<td>1990s to present</td>
<td>Project planning area</td>
<td>Wave, Chamber, Crazy, Dry Gulch, Sloan, Hanscock, Pearson, Can, Dry, Bend, Windfall, and Van Aspen timber sales. Treatment types included, but not limited to, salvage, clearcut, overstory removal, shelterwood, improvement cuts, and single-tree selection. Commercial and precommercial thinning associated with the Soda Bear, Damon, and Starr projects.</td>
</tr>
<tr>
<td>Canyon Creek Wildland Urban Interface Fuel Reduction Project</td>
<td>2006 to present</td>
<td>Project planning area</td>
<td>Reduce fire hazard through the use of timber harvest, precommercial thinning, machine and hand piling, pile burning, and prescribed burning on approximately 8,000 acres within the 22,000 acre project area. The Canyon Creek Complex Fire burned through the entire project area prior to completion of all activities.</td>
</tr>
<tr>
<td>Fire suppression</td>
<td>1910 to present</td>
<td>Project planning area</td>
<td>In the recent past, wildfires were actively suppressed leading to a buildup of ground fuels and overstocked stands. Because of current uncharacteristic fire behavior, all fires are being actively suppressed to reduce the chance of other major stand replacement fires.</td>
</tr>
<tr>
<td>Table Mountain Fire</td>
<td>1988</td>
<td>Project planning area</td>
<td>Approximately 640 acre fire entirely within the project planning area.</td>
</tr>
<tr>
<td>Wildcat Fire</td>
<td>1996</td>
<td>Northeast portion of the Project planning area</td>
<td>Approximately 10,000 acre fire.</td>
</tr>
<tr>
<td>Grindstone Fire</td>
<td>2012</td>
<td>Project planning area</td>
<td>Approximately 25 acre lightning caused fire within the Strawberry Mountain Wilderness.</td>
</tr>
<tr>
<td>Canyon Creek Complex Fire suppression</td>
<td>2015</td>
<td>Project planning area</td>
<td>Wildfire suppression activities include dozerlines, retardant drops, drafting sites, staging areas, safety zones, drop points, increased vehicular traffic.</td>
</tr>
<tr>
<td>Canyon Creek Complex Fire suppression</td>
<td>2015</td>
<td>Project planning area</td>
<td>Sale of decks created by felling of trees during suppression activities.</td>
</tr>
</tbody>
</table>
### Project Design Criteria and Mitigation Measures

#### Table 6. Project design criteria for scenic quality and visual resources

<table>
<thead>
<tr>
<th>Criteria number</th>
<th>Objective</th>
<th>Design criteria</th>
<th>Alternative</th>
<th>Responsible person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visuals-1</td>
<td>Minimize impacts to visual resources</td>
<td>On slopes facing roads, slash piles shall be placed 50 feet or more away from</td>
<td>2</td>
<td>Timber Sale Administrator, fire/fuels specialist</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the road where practicable to reduce visual impacts. Slash within 150 feet of</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>the road shall be removed, dispersed, or masticated.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visuals-2</td>
<td>Minimize impacts to visual resources</td>
<td>Where marking paint can be seen, it shall be applied to the side of the tree</td>
<td>2</td>
<td>Layout crew, Timber Sale Administrator</td>
</tr>
<tr>
<td></td>
<td></td>
<td>facing away from the road. Boundary tags, markers, flagging, and signs that</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>are visible from the road shall be removed upon completion of treatment</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>activities.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visuals-3</td>
<td>Minimize impacts to visual resources</td>
<td>Stumps shall be cut flush close to the ground where practicable, and always</td>
<td>2</td>
<td>Timber Sale Administrator</td>
</tr>
<tr>
<td></td>
<td></td>
<td>within 6 inches of the ground on the uphill side.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visuals-4</td>
<td>Minimize impacts to visual resources</td>
<td>Landing size shall be minimized, and landings shall be shaped to blend with</td>
<td>2</td>
<td>Timber Sale Administrator</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the contours of the landscape to maintain visual standards. Use established</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Criteria

<table>
<thead>
<tr>
<th>Criteria number</th>
<th>Objective</th>
<th>Design criteria</th>
<th>Alternative</th>
<th>Responsible person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visuals-5</td>
<td>Minimize impacts to visual resources</td>
<td>Landings, temporary roads, and skid trails shall be returned to their natural profile, with no continuous berms or soil piles left behind.</td>
<td>2</td>
<td>Timber Sale Administrator</td>
</tr>
</tbody>
</table>

### Alternative 1 – No Action

**Direct and Indirect Effects**

The no action alternative would result in no immediate changes to the scenic integrity of the landscape within the project planning area. However, the pre-fire dense mosaic has resulted in high tree mortality that has now resulted in danger trees. It is foreseeable that short- and long-term changes would contribute to increased public danger, which could limit public access. There also would not be any reforestation of desired tree species that could have benefited both the human and natural environment and provide a speedier vegetative recovery, particularly where higher fire intensities resulted in loss of seed banks. As dead and dying trees fall, they will likely be removed by public fire wood cutters that can travel off of a road with their vehicles and trailers any time of the year that their permit allows. This activity will be ongoing for years and will include all days of the week and season, regardless of any other human planned or natural activities.

**Cumulative Effects**

Because there are no direct or indirect effects due to the no action alternative, no cumulative effects would occur.

### Alternative 2 – Proposed Action

**Direct and Indirect Effects**

**Introduction**

Due to the Canyon Creek Complex fire, the landscape character in the Canyon Creek Complex Fire Project planning area has changed dramatically, as the landscape has deviated from the character valued for its aesthetic appeal. Many factors affect the character of the landscape. Attributes such as landform, vegetative pattern and species makeup, water characteristics, and architectural elements all contribute to the aesthetic character of the landscape within the project planning area. Scenic integrity objectives establish limits of acceptable human alterations as the landscape moves toward a landscape character goal. The scenic integrity levels and objectives remain the same, but the short-term and long-term scenic quality of the landscape has been diminished due to the fire.

**Salvage Treatment and Logging System Activities**

Under alternative 2, approximately 1,210 acres would be treated across 34 treatment units. Treatment activities would occur primarily within visual corridor middlegrounds with a scenic integrity objective of moderate (slightly altered). Treatment units 17, 18, 19, 20, 21, and 27 slightly overlap visual corridor foregrounds with a scenic integrity objective of high (appears unaltered). However, except for unit 21, the closest any of the treatment units come to one of the
primary roads that the visual corridors are based around is 0.4 miles. The Forest visitor could potentially see stumps, blackened woody debris, and hand piles from the harvest activity. But, with fewer standing snags and dying trees, field of view could be slightly enhanced, allowing for the observance of more natural features. There would not be any immediate change in scenic integrity around developed recreation sites, due to the project design criteria. Scenic integrity and ecological health objectives are expected to enhance the natural setting in the long-term.

**Forest Road Activities**

Road activities that could affect scenic integrity would be the construction of 4 miles of temporary road. The design criteria for the project states that temporary roads shall be restored to their natural profile. Therefore, changes to scenic integrity in the project planning area due to road activities would be temporary, and minimal.

**Research Activities**

The proposed research activities would not alter the landscape at all. Therefore, no direct or indirect effects to scenic integrity would occur due to the proposed research activities of the project.

**Conclusion**

The proposed activities of the Canyon Creek Complex Fire Salvage Project would not change the scenic integrity level of any of the three visual corridors contained within the project planning area. All of the potential negative effects to scenic integrity due to the proposed activities within the planning area would be short-term. The short-term scenic quality within the treatment areas may improve slightly over the existing condition. Out of a 57,800 acre project planning area, 1,210 acres (2 percent) are proposed for treatment. Treatment units near visual corridor foregrounds are sparse and would not be visually dominant to the surrounding landscape viewsheds. Though harvest and salvage activities would be noticeable to those present during treatments, the activity would be of relatively short duration. Stumps and slash may be visible until forbs, brush, and understory become established, likely one to five years. Planting of desirable species in treated units will establish the historical range of variability faster, while providing aesthetic and ecological advantages over non treatment.

**Cumulative Effects**

All of the activities listed in Table 5, above, affected fuels across the landscape, and therefore played a role in the outcome of the Canyon Creek Complex Fire. Before the fire, any future fuels management activities would have had effects that are cumulative with the activities listed in the table. The fire has reset the landscape, so that the proposed treatment activities in the Canyon Creek Complex Fire Salvage Project are not cumulative with the activities that took place previous to the fire. There are currently no other foreseeable future actions that would have cumulative effects on scenery and visual resources within the project planning area.

**Compliance with Forest Plan and Other Relevant Laws, Regulations, and Policies**

**Alternative 1**

Alternative 1 is consistent with the Malheur Forest Plan as it pertains to scenic quality and visual resources because there are no direct or indirect effects. The visual resources goals of the Malheur National Forest would therefore not be affected.
Alternative 2

Alternative 2 is consistent with the Malheur Forest Plan as it pertains to scenic quality and visual resources. Under alternative 2, the potential changes to scenic quality are limited in time and scope to the degree that there would not be any impacts to scenic integrity, and the potential impacts would remain compatible with the visual resources goals of the Malheur National Forest. The forest’s visual resources goals, as listed in the Malheur Forest Plan are:

- Maintain and enhance the scenic character of the Forest through integration of the principles of landscape architecture and environmental design arts into forest land management practices
- Provide and maintain pleasant visual experiences for Forest visitors consistent with public demand and natural landscape capabilities (USDA Forest Service 1990).

In addition, the potential impacts of the proposed actions are compatible with FSM 2380.3.4, which says to apply scenery management principles routinely in all National Forest System activities. Agency direction is to apply Agriculture Handbook #701, Landscape Aesthetics in project planning and decision making (Bedwell and Dillard 2007). Utilization of the handbook during the planning of this project has assured the routine application of scenery management principles.
References


