

3.6 RECREATION

Affected Environment

Introduction

The purpose of this section is to provide information about the recreational uses within the Big Creek Analysis Area. This section identifies the recreational opportunities and settings, the recreation infrastructure, recreational activities, and estimated recreational use levels that are a part of or occur in the Big Creek Analysis Area. Key sources of information and data for this section include documents from the Ogden Ranger District Travel Plan Revision project (USDA Forest Service 2007), the forest's transportation management system database (INFRA), data layers from the Wasatch-Cache National Forest geographic information system (GIS) database, data from a system of vehicle counters, 1998 Dispersed Campsite inventory and the knowledge and experience of Ogden Ranger district personnel.

Recreation Opportunity Spectrum

The Recreation Opportunity Spectrum (ROS) encompasses a variety of recreational settings under which certain experiences are possible. Seven elements provide the basis to inventory and delineate recreational settings. These are: access, remoteness, naturalness, facility and site management, visitor management, social encounters, and visitor impacts. Based on the seven elements described above, a spectrum of seven recreation opportunity classes has been applied to the Wasatch-Cache National Forest. These recreation opportunity classes include: Urban, Rural, Roaded Natural, Semi-Primitive Motorized, Semi-Primitive Non-Motorized, Wilderness/Semi-Primitive Non-Motorized, and Wilderness/Primitive.

The recent Revised Forest Plan inventoried and classified areas of the Forest by recreation opportunity class. The Big Creek Analysis Area contains two of these recreation opportunity classes: Roaded Natural and Semi-Primitive Motorized. Descriptions of these two recreation opportunity classes used in the Revised Forest Plan are provided in the Table 3.6.0 (USDA Forest Service 2003, FEIS, Appendix D2-6&7).

**Table 3.6.0. Description of recreation opportunity classes:
roaded natural and semi-primitive motorized.**

ROS CLASS	DESCRIPTION	
	Setting	Characteristics
Semi-Primitive Motorized	Physical	<p>Theme: Predominately a natural appearing landscape character with minimal improvements to protect resources</p> <p>Infrastructure: <i>Access</i> – motorized trails and primitive roads (maintenance level 2 roads) <i>Fishing Sites</i> – rivers, lakes, and reservoirs with some trails and primitive roads <i>Camp/Picnic Sites</i> – not developed, leave no trace, some identified concentrated use areas <i>Sanitation</i> – limited facilities, rustic, may have rustic outhouse available <i>Water Supply</i> – undeveloped natural, rustic developments <i>Signing</i> – rustic, made of natural materials <i>Interpretation</i> – self discovery, some located on site or at trailheads <i>Water crossings</i> – rustic structures or bridges made of natural material, some designed for motorized use</p> <p>Vegetation: Treatment areas are very small in number, widely disbursed, and consistent with natural vegetation patterns.</p>
	Managerial	Minimum or subtle on-site controls with some restrictions. Motorized and mechanized travel restricted to designated travel routes, no motorized or mechanized travel allowed off designated travel routes
	Social	<p>Motorized Travel Ways: Low to moderate contact frequency on loop travel ways, moderate contact frequency on cherry stem travel ways</p> <p>Local Adjustment for Weekends and Holidays: Check with local Ranger Districts for information on travel ways with High encounters with other parties</p> <p>Concentrated Use Sites: Low to moderate group and family interaction</p> <p>Opportunities: Closeness to nature, high degree of challenge and risk using motorized equipment, evidence of motorized equipment on trails and primitive roads, and by audible motor sounds.</p>
Roaded Natural	Physical	<p>Theme: Predominately a natural appearing and developed natural appearing landscape character with nodes and corridors of development such as campgrounds, trailheads, boat launches, small-scale resorts, and recreation residences</p> <p>Infrastructure: <i>Access</i> – roads (typically maintenance levels 3-5) and motorized and non-motorized trails <i>Fishing Sites</i> – rivers, lakes, and reservoirs with some facilities <i>Camp/Picnic Sites</i> – concentrated use areas and developed sites <i>Sanitation</i> – developed outhouses that blend with natural setting <i>Water Supply</i> – often developed <i>Signing</i> – Rustic with natural materials to more refined using a variety of materials such as fiberglass, metal, etc. <i>Interpretation</i> – simple roadside signs, some interpretive programs <i>Water crossings</i> – bridges generally constructed of natural material</p> <p>Vegetation: Changes (treatments) to natural vegetation patterns are evident, but in harmony with natural environment.</p>

ROS CLASS	DESCRIPTION	
	Setting	Characteristics
	Managerial	Opportunity to be with other users in developed sites, some obvious signs (information and regulation) and low to moderate likelihood of meeting Forest Service Rangers, motorized and mechanized travel restricted to designated routes, no motorized or mechanized travel allowed off designated travel routes
	Social	Developed and Concentrated Use Areas: Moderate evidence of human sights and sounds Travel Ways: Moderate to high sites and sounds of humans Opportunities: Moderate concentration of users at campsites, little challenge or risk.

ROS designations are depicted within the Big Creek Analysis Area (see Specialist Report for Recreation, Bullock and Vallejos 2008). The proposed vegetation treatment units are referenced to help identify which treatment units might affect the physical, managerial, and social conditions prescribed by each recreation opportunity class. The Roaded Natural opportunity class occurs along the primary road corridors. These Roaded Natural corridors include the Curtis Ridge (20059), Rock Creek (20060), Old Canyon (20061), New Canyon (20058), and Otter Creek (20014) roads. The remaining area within the Big Creek Analysis Area is assigned the opportunity class of Semi-Primitive Motorized.

Recreational Activities and Uses

A variety of recreational opportunities occur within the Big Creek Analysis Area. As discussed in the previous section, the analysis area has been classified on the Recreation Opportunity Spectrum as Roaded Natural and Semi-Primitive Motorized. These two classifications provide the natural, managerial, and social conditions right for a variety of recreation activities including: hunting, camping, motorized trail use, non-motorized trail use, and winter snowmobile use.

Developed Recreation

As defined by the Revised Forest Plan: “Developed recreation sites are those areas containing a concentration of improvements, facilities and services which are built primarily to invite, encourage or enhance participation in a recreation activity or visitor experience as opposed to providing facilities just for resource protection. Improvements considered developed sites could range from campgrounds with water systems, flush toilets and showers, to small trailheads with bulletin boards or barrier rocks, to delineated parking lots” (USDA Forest Service 2003, FEIS, 3-234).

No developed recreation sites such as campgrounds or trailheads are within the Big Creek Analysis Area boundaries. The nearest developed recreation site is the Monte Cristo Campground located on Highway 39, to the southwest of the analysis area.

Undeveloped Recreation

Undeveloped recreation occurs along most of the paved and natural surface roads in the Big Creek Analysis Area. Motorized recreation, hunting, and dispersed camping are the primary activities in the Big Creek Analysis Area. The analysis area also provides recreational access to private lands. For example, the Sandy Camp girl’s camp is accessed by way of Curtis Ridge (20059) and Old Canyon (20061) roads during the months of June, July, and August. In the winter, snowmobiling is the dominant recreational activity.

Motorized Recreation. Motorized travel is the primary means of access and recreation in the Big Creek

Analysis Area. Motorized recreation is usually accompanied by hunting and dispersed camping activities. Motorized recreation is frequently the primary purpose of recreation visitors along Curtis Ridge, the western boundary of the analysis area during most of the summer.

The Shoshone OHV Trail System provides motorized recreational access to much of the Big Creek Analysis Area. ATV's, motorcycles, and 4x4s are the primary vehicle types for this trail system. The current road system provides opportunities for motorized recreation over the entire Big Creek Analysis Area.

Numerous unclassified routes are regularly used in the analysis area. ATV use specifically is encroaching upon decommissioned roads, non-motorized trails, and administrative roads. District policy will be to enforce travel management orders as part of the normal operation and management.

Hunting. Hunting is the primary recreational activity on the majority of the Big Creek Analysis Area during the late summer and fall season. Hunting activity is generally accompanied by motorized recreation and dispersed camping activity. A variety of big game hunts occur beginning in the middle of August through the beginning of November. As a general hunt area, the Big Creek Analysis Area combined with the BLM lands east receives more hunters since all nearby hunting on private land is within a Cooperative Wildlife Management Unit (CWMU).

Dispersed Camping. Dispersed camping is a popular activity throughout the summer and fall seasons. The locations of dispersed campsites are described below in the recreation infrastructure section. Campsite use is heaviest during holiday weekends and during the hunting season. Nearly all of the inventoried undeveloped sites are used only during the big game hunting season. Camping in the Big Creek Analysis Area is dominated by the use of camp trailers and 5-wheel campers. Tent camping is rarely seen.

Snowmobiling. The Big Creek Analysis Area is part of the Hardware Ranch Snowmobiling Complex. This groomed snowmobile trail system is one of the most popular and highly visited in the State of Utah.

Geocaching. Geocaching is a recreational activity growing in popularity. Visitors use GPS devices to locate points of interest and find markers left by other visitors. The locations of these caches are posted on websites. A search of several popular geocaching websites was conducted to determine if geocache sites exist in the analysis area. No geocache sites were found within Big Creek Analysis Area.

Recreation Infrastructure

Roads and Trails

The roads and trails within the Big Creek Analysis Area are central to the recreation infrastructure that provides opportunities for visitors to access forest lands and participate in recreational activities. Recreation is the largest single use of National Forest System roads, accounting for the majority of the use on them” (USDA Forest Service 2003, FEIS, 3-213). This statement holds true for roads of the Big Creek Analysis Area.

The roads and trails within the Big Creek Analysis Area are identified and described in detail in the companion report for the transportation system entitled “Specialist Report for Big Creek Analysis Area-Transportation System” (Bullock and Vallejos 2008). Readers are referred to this report for tables and maps that contain a complete listing of the roads and trails within the analysis area.

Roads within the Big Creek Analysis Area are identified and described in Chapters 1 and 2. The impacts of roads are analyzed by resource area.

Dispersed Campsites

In 1997, an inventory of the dispersed campsites located on the Ogden and Logan Ranger Districts was conducted and entered into the forest GIS database. Dispersed campsites are generally found to be located within 150 feet of forest system roads. From this campsite inventory, 33 dispersed campsites have been identified within the Big Creek Analysis Area boundary. An additional 32 dispersed campsites are within 0.5 miles of the Big Creek Analysis Area boundary, most of which are located along Curtis Ridge. Some of these campsites may no longer be in use. Campsite conditions (e.g., area of bare ground, number of damaged trees, etc.) have likely changed based on the amount and type of use that each campsite has received over time. Though new campsites have certainly been created within the boundaries of the analysis area, the inventoried sites provide information as to the areas where new sites are likely to have been.

See Specialist Report for Recreation for a map of the location of each of the inventoried dispersed campsites in relation to the Big Creek Analysis Area (Bullock and Vallejos 2008). The proposed vegetation treatment units are referenced on this map to help identify which dispersed campsites might be affected by each treatment unit. The roads/areas with the most dispersed campsites are: New Canyon road (20058) with 12 sites, Old Canyon road (20061) with 13 sites, and Six Bit Spring road (20144) with 4 sites. Many campsites are also located along the western boundary of the analysis area following Curtis Ridge (20059), Running Water Spring 4x4 (20192), and Lambs Canyon 4x4 (20216) roads. Many of the inventoried dispersed campsites are used only during the big game hunting season and high use summer holiday weekends.

Recreational Use Levels

Vehicle Counters

A system of six vehicle counters has been installed at locations within and around the Big Creek Analysis Area. The locations of the counters were selected because they are the major recreational access points to the Big Creek Analysis Area. The counters detect ATV's, motorcycles, and larger 4x4 and passenger vehicles that use the forest roads.

Installed at various times during the month of August 2006, the counters provide information about the number of vehicle passes during late summer and early fall. The data do not represent the total number of visitors to the area, only the number of vehicle passes at each location. The data provide a good idea of the amount of use that could be expected in a typical year.

Each counter is located at points where visitors might enter the Big Creek Analysis Area. Counters 1 and 2 count vehicles along the western boundary of the Big Creek Analysis Area. Counter 1 is located near the south end of the Curtis Ridge (20059) road. Counter 2 is located at the forest boundary on the Baxter Sawmill (20130) road to count vehicles coming from Hardware Ranch. The remaining four counters count vehicles that enter from the eastern boundaries of the Big Creek Analysis Area. Counter 4 is located near the eastern forest boundary on Old Canyon (20061) road. Counter 5 is located on New Canyon (20058) road near the forest boundary. The remaining two counters are located at the north and south ends of the Valley Ridge (20189) road within the analysis area.

Patterns and Estimates of Recreational Use

Recreational use of the Big Creek Analysis Area is dominated by visitors from a five county area. Visitors come from Weber, Box Elder, Cache, Rich, and Davis counties. This high volume of local use helps to determine the activities, frequency and duration of recreational use.

Vehicle counter data described in Table 3.6.1 indicates that recreational use is higher on weekends than on weekdays at each of the counter locations. Tuesdays and Wednesdays appear to have the lowest

amount of use in each of the counter locations. This pattern of use can be expected throughout the summer season. Vehicle counts also occur during peak periods of the day, with increased use from approximately 11 am to 7 pm. Recreational use also peaks during peak specific times of the year, including holiday weekends and opening weekends of the specific hunts.

Table 3.6.1. Total and mean daily vehicle counts by counter location.

Counter # - Name	1- Curtis Creek	2- Baxter Sawmill	4- Old Canyon	5- New Canyon	6- Valley Ridge North	7- Valley Ridge South
Period Collected	8/2-9/27	8/3-9/25	9/1-9/26	9/1-9/26	8/25-9/26	8/25-9/26
Total Counts	5,201	1,833	607	447	148	81
Daily Mean Weekday	62.9	20.0	14.6	9.8	4.3	2.2
Daily Mean Weekend	163.9	67.0	43.1	33.9	4.9	3.0
Mean Monday	75.4	20.8	25.5	14.5	5.4	3.0
Mean Tuesday	44.6	12.3	11.8	6.8	2.2	3.0
Mean Wednesday	40.0	18.4	8.0	6.0	7.8	1.5
Mean Thursday	49.0	20.8	8.3	5.3	2.0	1.0
Mean Friday	108.3	26.8	16.0	14.3	4.4	2.2
Mean Saturday	173.8	80.1	42.8	33.8	3.0	4.2
Mean Sunday	154.1	53.9	43.5	34.0	6.8	1.8

1 Note that Counter 3 is located on the Willard Peak road and is not located in the analysis area. Therefore, counters referred to in this document skip Counter 3, and only include 1, 2, 4, 5, 6, and 7.

Environmental Consequences

a. Effects Common to All Alternatives

Both no action and action alternatives will not change the type or acres the Recreation Opportunity Spectrum designation. This is because the activities from the Big Creek Project alternatives will not permanently alter the transportation system, which directly effects ROS classifications. Vegetation treatments areas are very small in number, widely disbursed, and consistent with natural vegetation patterns. These changes to natural vegetation patterns are evident, but in harmony with natural environment.

It is anticipated that the season of use and types of recreation activities that occur in this area will not change based on the alternative selected. The amounts and quality of recreation activities will change by alternative. For example, smoke and area closures during prescribed fires would cause short-term impacts to recreation activities.

There are no developed recreation sites such as campgrounds or trailheads within the analysis area. Therefore, there will be no direct, indirect, or cumulative effects to developed recreation sites.

b. Alternative 1 – Proposed Action

1. Direct and Indirect Effects

Alternative 1 will temporarily affect the recreation activities in the area because of the type and amount of vehicle traffic into and out of this project area. This effect will be a reduction in the quality of the

solitude normally found in this area. Increased and changes of vehicle activities associated with timber harvest and hauling on designated roads will also have a negative effect. This is because of the impacts to the native soil road surfaces caused by large-vehicle traffic. These impacts to the road beds will be temporary and repaired to an improved condition (new road base on the main roads). The new intermittent service roads (approximately 1.5 miles) created by this alternative will be administratively closed and not open to motorized travel by the recreating public.

These new miles of intermittent service routes will also have an effect during the hunting season by increasing the number of hunters in areas where it will be easier to access on foot. There could be instances of unauthorized vehicle access from new roadways. The changes to vegetation age and structure may effect recreation by changing wildlife hunting and viewing activities based on access, vegetation densities, and on-going vegetation management activities.

Hunting and dispersed camping are two activities that are very connected. The direct and indirect effects to hunting and viewing from this alternative will have a similar effect to dispersed camping. If big game hunting improved, then the amount of dispersed camping occurring in this general area will increase. No inventoried dispersed campsites fall within a proposed unit but a few are adjacent to treatment units.

c. Alternative 2 – No Action

1. Direct and Indirect Effects

Under the No Action Alternative, there would not be an apparent effect to the recreation activities for both the short and long term. Although there may be a short-term effect caused by unplanned fire or insect damage to tree stands changes to the natural appearing landscape, which will impact the recreation quality of this area.

d. Alternative 3 – Reduced Treatment and Wildlife Emphasis

1. Direct and Indirect Effects

Alternative 3 would have similar effects to Alternative 1 except that there would be a relative reduction of total acres being treated and a reduction in the total miles of intermittent service roads developed (approximately 0.5 miles). This will decrease the effects caused by large-truck traffic especially along the Curtis Ridge Road (#20059) where most of this area's motorized access occurs. The quality of the motorized recreation on designated roads and trails will be improved by the decrease in commercial and Forest Service traffic created by Alternative 3. Since intermittent roads are being managed as administratively closed and not open to motorized travel by the recreating public, no changes should occur with motorized recreation. However, new roadways could lead to increases in unauthorized access.

The direct effect to big game hunting and viewing will be very similar to Alternative 1. Changes to the age and size structure of the forests in the Big Creek area will have a varied habitat that will have a direct effect to the recreation hunting quality and quantity based on access, vegetation densities, and on-going vegetation management activities. As stated before in Alternative 1, this has a direct effect to the amount of dispersed camping that will occur as a result of big and small game hunting in this area.

e. Cumulative Effects

Cumulative effects to recreation will be directly caused by the creation and management of additional roads and miscellaneous routes through the Forest caused by management activities. If new intermittent service roads, skid trails, and especially temporary roads are not managed by mitigation, there will be a

potential increase in unauthorized motorized recreation activities. This is based on an assumption that illegal/unauthorized recreation activities will continue to occur into the future.

The cumulative effect to dispersed camping will be quantified by and if there are new dispersed sites created along the system roads in or near the Big Creek area. There will also be an effect if older inventoried dispersed camp sites expand in size or become more established by increased use. Historically, the location and amount of dispersed sites in the Big Creek area are located alongside the main roads in this area. The main roads in this area are Curtis Ridge (20059), Rock Creek (20060), Old Canyon (20061), New Canyon (20058), and Otter Creek (20014) roads. Since these main routes will remain essentially the same, additional and expanded campsites are not expected. Increased monitoring and mitigation will be necessary to verify this assumption.

ROADLESS AREA INVENTORY

One inventoried roadless area exists within the Big Creek Analysis Area. This is the Rock Creek – Green Fork Roadless Area. Approximately half of the 5,600 acre area is located within the analysis area. To the west of the analysis area is the Mollens Hollow Roadless Area, which is removed from all proposed activities by a distance of approximately six miles and is not affected by this project.

The Wasatch-Cache Forest Plan revision process included a roadless area inventory which identified roadless areas and evaluated their attributes both for Wilderness recommendation and for the importance they hold for many people as undeveloped places. This roadless area inventory was a required part of the forest planning effort and decisions regarding the programmatic management of these areas and was incorporated into the Revised Forest Plan (USDA Forest Service 2003).

Appropriate planning for and administration of roadless areas has been the subject of national regulatory efforts for several years.

In September 2006 United States District Court for the Northern District of California enjoined the 2005 State Petitions Rule and reinstated the 2001 Roadless Rule including the Tongass Amendment in the consolidated cases California v. USDA and Wilderness Society v. USFS. The 2001 Rule established prohibitions to road construction/reconstruction and timber harvest in areas identified in the 2000 Roadless Area Conservation Final Environmental Impact Statement. However, exceptions to these prohibitions (such as road construction/reconstruction) are allowed in certain situations.

As of January 2008 road construction and reconstruction and timber harvest is prohibited except under specified circumstances. Because in no alternative is a road to be constructed in an inventoried roadless areas nor is any timber harvest proposed, all alternatives are consistent with the 2001 Roadless Area Conservation Rule.

The 2001 Roadless Areas Conservation Rule identifies Roadless area characteristics as

- (1) High quality or undisturbed soil, water and air. (*Refer to Section 3.8 for effects on Soil, Section 3.11 for effects on Water, and Section 3.3 for effects on Air*).
- (2) Sources of public drinking water. (*Refer to Section 3.11 for effects on Water*).
- (3) Diversity of plant and animal communities. (*Refer to Section 3.10 for effects on Plants, Section 3.2 for effects on Aquatic Resources, and Section 3.12 for effects on Terrestrial Wildlife*).
- (4) Habitat for threatened, endangered, proposed, candidate, and sensitive species and for those species dependant on large, undisturbed areas of land. (*Refer to Section 3.10 for effects on Plants, Section 3.2 for effects on Aquatic Resources, and Section 3.12 for effects on Terrestrial Wildlife*).

- (5) Primitive, Semi-Primitive Non-Motorized, and Semi-Primitive Motorized classes of dispersed recreation. (*The Big Creek project area contains two of these recreation opportunity classes (Roaded Natural and Semi-Primitive Motorized) the effects are discussed in Section 3.6.*)
- (6) Reference landscapes. (*Refer to Section 3.7 for effects on Scenery.*)
- (7) Natural appearing landscapes with high scenic quality. (*Refer to Section 3.7 for effects on Scenery.*)
- (8) Traditional cultural properties and sacred sites. (*Refer to Section 3.4 for effects on Heritage Resources.*)
- (9) Other locally identified unique characteristics. (*No locally unique characteristics have been identified; therefore, this is not discussed further.*)

The Wasatch-Cache Forest Plan revision process included a roadless area inventory and identified the following values for the potentially affected roadless area (USDA Forest Service 2003, FEIS, Appendix C-2)

Table 3.6.2. Summary of values for roadless areas.

Roadless Area Name	Location	Values for Wilderness	Values as Roadless	Acres
Rock Creek – Green Fork	Curtis Ridge (east)	Low value due to small size, impacted environmental conditions, and current uses	Mostly low values except for high values for fish species at risk and moderate SPM experience.	5,600

See Specialist Report for the Big Creek Analysis Area – Transportation System (Bullock and Vallejos 2008) for a map of the Rock Creek – Green Fork roadless area in relation to the Big Creek Analysis Area.

a. Effects Common to All Alternatives

In relation to the Rock Creek – Green Fork Roadless Area which is within the boundary of the Big Creek Analysis area, there are effects common to all alternatives. There are two system roads that penetrate and consequently are surrounded by the inventoried roadless area (USDA Forest Service 2003, FEIS, Appendix C2, p. 34). These two roads are the Longhurst Spring Road (26980) and the Right Ridge Road (26981).

The Longhurst Spring road is a 2.7 mile road and the Right Ridge Road is a 2.41 mile road. Both these roads are not open to general public use. They do allow administrative use, which means that it is available for fire protection, resource projects, and range management.

The other effect common to all alternatives is the effect to roadless characteristics caused by motorized traffic in the vicinity of these inventoried areas. Traffic on the New Canyon Road (20058) is adjacent to the northern boundary of Rock Creek – Green Fork inventoried roadless area. Traffic on this route will cause noise, dust, and other evidence of motorized vehicle uses. The Old Canyon Road (20061) has the same effect on a portion of the southern boundary. Rock Creek Road (20060) is on the western boundary with similar effects. The effect is negligible because motorized activities already exist in the area.

b. Alternative 1 – Proposed Action

1. Direct and Indirect Effects

Alternative 1 will not have any direct effects caused by roads or timber harvest since none is proposed within the boundary of the roadless area. Alternative 1 has a mosaic pattern of prescribed fire located

adjacent and partially within the Rock Creek – Green Fork Roadless Area. This will not have a lasting impact to the roadless characteristics because the fire activity does not create constructed permanent fire lines.

The indirect effects caused by Alternative 1 are the result of proposed activities near the roadless boundary on the north. A clearcut is proposed adjacent to the roadless area near the New Canyon Road. This will result in minor effects to scenic quality.

c. Alternative 2 – No Action

1. Direct and Indirect Effects

The indirect effects caused by Alternative 2 will be the same as listed in the Effects Common to All Alternatives.

d. Alternative 3 – Reduced Treatment and Wildlife Emphasis

1. Direct and Indirect Effects

The proposed activities and related effects within the Rock Creek – Green Fork Roadless Area are the same as Alternative 1.

e. Cumulative Effects

The proposed alternatives for vegetation management in the affected roadless area are very minor or non-existent. None of the effects are long-term or permanent. In addition to the Alternatives proposed above for this project, few future actions in the roadless area are anticipated beyond current uses, except those that would tend to conserve or protect roadless values, such as aggressive motorized travel management. Consequently, cumulative effects on roadless areas are anticipated to be negligible.

3.7 SCENERY

Affected Environment

Introduction

The purpose of this Section is to provide information concerning aesthetics and intactness of the natural appearing landscape within the Big Creek Analysis Area. This document identifies viewing platforms, concern levels, distance zones, forest management direction, scenic attractiveness, seen area and a systematic approach for determining the relative value and importance of scenery in the national forest. This Section will discuss assumptions and methodologies used in this analysis; describe desired conditions; scenic resource features and conditions; effects of alternatives; and recommended mitigation.

Table 3.7.1 describes the treatment acres within the Big Creek Analysis area for Alternatives 1 and 3 of Scenic Integrity Object (SIO) and Ownership in a natural appearing landscape character theme by alternative.

Table 3.7.1. Alternatives 1 and 3 – treatment acres within the Big Creek Analysis of Scenic Integrity

Object (SIO) in a natural appearing landscape character theme.

Landscape Character Theme	Scenic Integrity Objective	Alt. 1 Acres	Alt. 3 Acres
Natural Appearing	High	878	834
	Moderate	3,394	3,346
Natural Appearing Total		4,272	4,181
Non-Forest Service Lands		Ownership	
Pvt	Pvt	423	7
Utah	Utah	53	0
Grand Total		4,748	4,188

Assumptions and Methodologies of Analysis

The following is a list of key assumptions and methodologies used for analysis:

- Views from all other roads, trails and viewing platforms such as dispersed primitive car camping sites have a level 2 concern level where there is a local importance associated with all types of use including recreation and tourism. (USDA Forest Service 1995a).
- The visibility analysis is of the landform only and was conducted from representative view points in the landscape.
- Distance zones
 - Immediate foreground is equal to 0 to 300 feet from the viewer.
 - Foreground is equal to 300 feet to ½ mile from the viewer.
 - Middleground is equal to ½ mile to 4 miles from the viewer.
 - Background is equal to 4 miles to the horizon from the viewer.
- Effects described in the analysis are based on snow off season and after herbaceous plants are established within the disturbed areas.
- Seed mixes used in the proposed project for vegetation of disturbed areas should be from local sources that reflect the elevation and climate of the project area.
- Management actions should maintain Revised Forest Plan direction for landscape character and scenic integrity objectives.

Existing Inventories, Monitoring, and Research Literature Review

Existing inventories of the area are in conjunction with actions that have taken place in previous years.

The information in Table 3.7.2 was generated from GIS layers. National Agricultural Imagery Program (NAIP) imagery. GIS maps will be provided as part of the project file. Visibility analysis was generated using GIS 10 meter digital elevation model (DEM). For the visibility analysis a 1 meter z factor (viewer height) was used with a 10 meter output. The seen area analysis uses landform only; screening from vegetation was determined by ocular examination of NAIP imagery zoomed into a map scale of approximately 1:6000.

Table 3.7.2 Acres of landscape character theme and scenic integrity objective within the Big Creek Analysis Area.

Landscape Character Theme	Scenic Integrity Objective	Acres
Natural appearing	high	5023
	moderate	11,361
Natural Appearing Theme Total		16,384
Non-Forest Service Lands		Ownership
Pvt	Pvt	2,661
Utah	Utah	1,759
Grand Total		20,805

Pictures of Project Area



Photo 3.7.1. Looking west from near the Forest Boundary on New Canyon Road, limited view beyond ridgeline of canyon.



Photo 3.7.2. Looking west into Old Canyon.



Photo 3.7.3. Looking west into Old Canyon, typical landscape.



Photo 3.7.4. Looking south west at typical landscape.



Photo 3.7.5. Looking northwest into the typical landscape.



Photo 3.7.6. Looking into past burn, forest floor has established vegetation and burnt snags are still standing.

Desired Condition

The Revised Forest Plan states that the desired condition for the Scenic Environment is:

The Wasatch-Cache National Forest provides a balance of diverse landscapes and natural settings. The scenic environment within the Forest ranges from landscapes with high scenic quality displaying little or no evidence of management activities, to landscapes with different scenic quality that have dominant visible evidence of management activities. The high scenic quality in areas of outstanding value, and other highly used recreation areas and corridors are protected or enhanced. (USDA Forest Service 2003, p. 4-11 to 4-13)

Ecological Unit: Bear River Highlands and Bear Lake Section

General Landscape Character:

Bear River Highlands

1. **Landform:** Plateau-like surface with uplifted portions of overthrust fault zones. Undulating upland. Slopes of incising valleys are benchy and largely un-dissected.
2. **Surface Water Characteristic:** Streams, rivers, with some small lakes and beaver ponds.
3. **Vegetation Pattern:** Open parklands with forb-grass meadows and clumps of subalpine fir. Extensive aspen stands. Sagebrush-grass dominates lower slopes. Willows dominate stream sides.
4. **Land use Pattern:** Recreation cabins, campgrounds, parking lots, dispersed recreation, hiking, driving for pleasure, motorized and non-motorized recreational activities, ranching, and organization facilities.

Bear Lake Section

1. **Landform:** Steep north-south oriented mountain range with broad linear valleys.
2. **Surface Water Characteristic:** Low to moderate frequency of rapidly flowing rivers and streams. Few lakes and wet meadows are associated higher areas above 5,000 feet. Large lakes include Bear Lake.
3. **Vegetation Pattern:** Mixed conifers and sagebrush-grassland with Douglas-fir, lodgepole pine, and aspen occupying northern aspects.
4. **Land use Pattern:** Grazing is the major land use, with agricultural crop production also important. Recreation cabins, campgrounds, parking lots, dispersed recreation, hiking, driving for pleasure, motorized and non-motorized recreational activities, ranching, and organization facilities.

Area of Analysis

The analysis area is defined by the proclaimed boundary on National Forest System lands within the Big Creek watershed.

Project Landscape Character Theme

Natural Appearing

The existing landscape character has been influenced by both direct and indirect human activities, but appears natural to the majority of viewers. Natural elements such as native trees, shrubs, grasses, forbs, rock outcrops and streams or lakes dominate the views. While there is evidence of human influence from historic use, campgrounds, small organization camps, rustic structures and management activity, it is part of the valued built environment in the landscape to the majority of viewers.

Project Scenic Integrity Objectives (SIO)

Natural Appearing Landscape Character Theme (LCT) with a High SIO where 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.

Potential cultural features found in the landscape are:

- Campgrounds, group sites, organization camps, picnic areas, recreation cabins, and organizational sites follow architectural themes and harmonize with the surrounding landscape. Historic sites are maintained or enhanced to propagate their inherent values.
- Roadway guardrails integrate into the surrounding landscape. Bridges complement the surrounding landscape. Fences are subordinate to the landscape by use of color and blending with the historical cultural context of the communities. Parking lots, trailheads, restrooms are present. Architecture is thematic and borrows from the form, line, color and texture of the surrounding landscape. Parking lots, roads, and other amenities appear to be part of the natural appearing landscape by eliminating the geometry of the built feature upon the landscape. For example, road cuts do not slice through the landscape, but are shaped, contoured and constructed so that the landscape is only interrupted by the track of the road.

Natural Appearing LCT with a Moderate SIO where the valued landscape character may have noticeable deviations that remain visually subordinate to the valued landscape character being viewed.

Potential cultural features found in the landscape are:

- Dams, road cuts and fills with slope rounding and contouring with minimal vegetation of grasses, stock ponds, reservoirs, canals etc. Electronic Sites harmonize with the surrounding landscape. Oil fields repeat the form and line of adjacent landscapes and are compatible in color and texture. Mineral development sites are of such a scale that they are subordinate to, and borrow the form, line, color and texture from the surrounding landscape. Mechanical treatments and fire use are subordinate to the surrounding landscape by repeating the form, line and edge found in the surrounding landscape. Fuel breaks are mitigated to mimic natural appearing lines, forms and edges found in the existing landscape.

Scenic Attractiveness

Viewing scenery is one of the top five things to do on the Wasatch-Cache National Forest according to research conducted for the National Visitor Use Monitoring (NVUM) in 2002 and 2003. Within the proposed project area, the Wasatch-Cache National Forest is managing the landscape character as Natural Appearing landscape character theme (LCT). For this theme, the naturalness or apparent naturalness is the dominant image that people see, with some introduced positive cultural elements (such as, fences, roadways, trails, and dispersed primitive car camping sites) that are subordinate to the viewed landscape.

The analysis area is on the east slope of the Bear River Range and is composed of two ecological subsections Bear River Highlands, and Bear Lake Section (Bailey 1994). This transition area has a mosaic of vegetation types, with conifer, aspen and mountain mahogany at higher elevations and sagebrush and grass on the lower slopes. Infrequent broad canyons descend from the upland to the base of the valley. The Ogden River Scenic Byway (Highway 39) is south of the analysis area. Year-round recreationists can find trails, primitive roads, camping spots, and open snow play fields to explore. Cattle and sheep can be seen grazing on rangelands in the area. Forest openings resulting from vegetation management approximate historic patterns. Recreation occurs amidst quaking aspen, lodgepole pine, and Douglas-fir.

This landscape is typically seen from roadways that follow drainages that connect the valley floor with the upper portions of the forest. As people travel onto the Forest from the west to east views change from panoramic sagebrush dominant landscapes to confined V shaped canyon walls or filtered aspen or conifer curtains that meander along the canyon bottoms or side slopes. Most views within these segments range from immediate foreground 300 minus feet to the foreground of approximately ½ mile. Within these distances the landscape is defined by its texture of leaves, boughs, large branches and dominant individual natural and built forms of this natural appearing landscape. The east-west secondary travelways that have some local importance for recreation are Otter Creek, Six Bit Spring, and Old and New Canyons.

Valley Ridge is the north-south secondary road that provides a connector between the east-west travelways. For the large vegetation management views from this corridor are in the middleground and range from ½ to 3 miles. The viewed landscape is more coherent because the casual visitor is able to see the overall context of the landscape. In the foreground views: fences, roadways, and rolling sagebrush plains move towards the mosaic of aspen stands, mix conifer and aspen conifer forests on the sidehills. Small rock outcrops punctuated ridgelines and v shape canyon create ribbons of light and dark flowing down slope from the higher benches of the landscape.

The desired future condition would be to maintain or enhance the natural appearing landscape.

Environmental Consequences

The indicator used to compare alternatives is the relative degree to which management actions are evident to the casual visitor.

a. Effects Common to All Alternatives

Both no action and action alternatives will affect the natural appearing landscape either through natural processes or through mimicking natural processes. For immediate foreground and foreground views the intactness of the action alternatives is based on what remains of the action in the landscape. In the middleground both natural and human caused actions could appear nearly the same because of the mosaic of openings and vegetation masses and forms found in the landscape. There are numerous areas in the landscape that are seldom seen from existing travelways and may only be seen from aircraft or the occasional viewer wandering through the forest.

For all alternatives that there will be some short-term effect of less desirable appearing landscape as a result of implementation of the alternatives. See the effect's of this Section for more specific changes in the characteristics of the landscape.

b. Alternative 1 – Proposed Action

1. Direct and Indirect Effects

Immediate foreground and foreground

The direct effect of implementation of this alternative for the short to mid term in the immediate foreground would be the evidence of management of activities such as cut off tree stumps, temporary and/or intermittent roads, slash piles, burned tree skeletons and concentration of up turned root balls. Once understory vegetation has reached a height that it covers or fragments the evidence of human activities the casual visitor may not see the change in character of structure of the past vegetation treatment and the view could appear intact to them. An indirect effect could be the desire for the casual visitor to be able to view under the canopy of a mature forest for wildlife or other desired amenities such

as dispersed camping opportunities or travelways.

In this alternative there are approximately 7 ½ miles of concern level 2 existing roads that are parallel to or bisect the proposed treatments. Almost 5 miles of these roads are located in a High SIO of which just a little more than 2 ½ miles are adjacent to units that are proposed to have all conifer and aspen stems removed. See Section 3.9 - Vegetation (Forested) for application of the treatments.

In the lodgepole and aspen conifer units where most of the vegetation will be removed the duration of the effect could be until vegetation has reached a height that would visually screen evidence of the past proposed activities. The time frame for natural regeneration could be up to 20 years. After that time it would be likely that the casual visitor would consider the landscape intact where the landscape is being managed in a High SIO.

Areas where group selection or thinning is proposed to be used once treatment has occurred and initial ground vegetation has established the landscape should appear natural and be intact.

The sage treatment area could have a short-term effect just after treatment until grasses are established. After establishment of grass in High SIO areas the landscape should appear to be intact because of the mosaic created by treatments.

Middleground and Background

For middleground and background views the landscape should appear intact by creating mosaics and eliminating any geometric edges during treatments. This should be the case for both “High and Moderate” SIO in the natural appearing landscape.

2. Cumulative Effects

The watersheds linear width from south to north is approximately 23 miles and from east to west is about 19 miles. For a person to see the entire width of the watershed all at once the individual would need to be 23 miles to the east. From this distance the viewshed of the eastern slope of the watershed would be fragmented because of screening from topographical features and vegetation. From the middle-background views of this east facing landscape most past activities are not evident and would not expand the visible mosaic as viewed by the casual visitor. There has been about 1,400 acres of past harvesting mapped in the watershed including some on private land dating back to 1965. Currently 76% of the total acres of stand treatment occurred over 20 years ago giving the canopy time to establish and fill in the open mosaic making it difficult for the casual visitor to know if any type of management has occurred. In the foreground existing trees screen most views from travelways and only offer glimpses of past management. What are being proposed in Alternatives 1 and 3 on this project are the only foreseeable vegetation treatments for this watershed that overlap or interact with scenery.

Table 3.7.3. Vegetation treatments located within the boundaries of watershed.

SALE NAME	GIS Acres	Date	Age	Over 20 years
Bug Lake Sale	160	1976	31	yes
Campground Springs Sale	194	1986	21	yes
Curtis Salvage	59	2000	7	
Greenfork II Sale	160	1980	27	yes
Greenfork Sale	58	1980	27	yes
Old Canyon Sale	121	1970	37	yes
Pole Canyon Sale	144	1997	10	

SALE NAME	GIS Acres	Date	Age	Over 20 years
Private Sale	121	??		
Roundup I Sale	0	1983	24	yes
Roundup I Sale?	112	1983	24	yes
Six Bit Sale	185	1980	27	yes
Spencer Basin Sale	84	1965	42	yes
West Red Spur Sale	21	1988	19	
Total	1,419			
	76%	Acres over 20 years since harvest		
	69%	Over 20 years since harvest		

Prescribed burns in the past 20 years have added to the open mosaic landscape and are not evident from background and middleground views. In the foreground remnants of burnt tree skeletons are evident but are considered part of the landscape character for this watershed. The prescribed burns in the foreseeable future are Curtis Aspen, Blacksmith and Hells Hollow all of these management activities are not in the watershed and would not be part of the cumulative effect to viewed scenic resource.

Table 3.7.4. Prescribed burns located within the watershed boundaries.

FIRE NAME	ACRES	DATE OF TREATMENT	AGE AS OF 2008
Big Crawford Range RX	100	1990	18
Pole Canyon Wildlife RX	360	1990	18

Past wildfires have burned large portions of the watershed but have mainly occurred in the sage, and grass plain west of the Forest boundary and are no longer are apparent. Where fires did burn into the overstory, burnt tree skeleton remained but are considered part of the landscape character. In the short term wildfire would have some effect in the overstory of conifer and aspen, but would diminish overtime as the overstory matured and replaced the burnt tree skeletons. The cumulative effect of the past and present would add to the open mosaic that exists in the current landscape.

Table 3.7.5. Past wildfires located inside watershed boundaries.

FIRE NAME	ACRES	DATE OF FIRE	AGE AS OF 2008
Dry Canyon 2	10,500	1994	14
Green Fork	93	1999	9

The casual visitor may notice grazing activities by the change in vegetation height in the immediate foreground. This annual short-term effect would only occur in active allotments. In middle and background views grazing activities would not be evident and should appear to be intact in the viewed landscape except the cultural feature of fences which are considered to be part of the natural appearing landscape. This ongoing activity should have no cumulative effects on the viewed landscape.

Dispersed recreation primitive car camping sites, roads and trails would be evident in the immediate foreground views but should not be evident in the middle and background views. These recreation

activities are considered part of the landscape character and should not add to the overall cumulative effects in the landscape of the watershed from the past, present or future activities.

The cumulative effects of vegetation management, prescribed burns and wildfires within the watershed from the past, present or foreseeable future should have no effect on the scenic resource.

c. Alternative 2 – No Action

1. Direct and Indirect Effects

Under the No Action Alternative, there would be no an apparent effect to the landscape character as seen by a casual visitor in both the short and long term. Although there may be a shot-term effect of a dominant less desirable fire or bug kill mosaic canopied in the natural appearing landscape.

2. Cumulative Effects

There would be no cumulative effects because no actions are taken under this Alternative. The landscape would evolve naturally from this point forward with minimal human intervention.

d. Alternative 3 – Reduced Treatment and Wildlife Emphasis

1. Direct and Indirect Effects

This alternative would have similar effects to Alternative 1 except that there would be reduction of 13% of acres being treated, which would reduce the total miles of concern level 2 roads by about 1% from Alternative 1. Alternative 3 varies from 5 to 10% in miles of road adjacent to treatment areas located in High and Moderate SIOs.

e. Cumulative Effects

Cumulative effects would be similar to Alternative 1.