

Rio Grande National Forest- Draft Assessment 9 Recreation



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Introduction

In this assessment, we (the USDA Forest Service Rio Grande National Forest) evaluate and describe the extent to which the Rio Grande National Forest currently meets the demand for recreational opportunities placed on the forest under the management direction provided in our 1996 Forest Plan. In this assessment we also discuss the ability of the forest to sustain existing recreation direction and expectations¹ while contributing to the socio-economic sustainability of the broader landscape of the San Luis Valley and Southwest Colorado. Most importantly, in this assessment process we are considering information provided by the public regarding recreation opportunities, activities, and scenery that are not covered by our management modeling tools - the recreation opportunity spectrum, the scenery management system and the national visitor use monitoring system. Notes from our recreation-related meetings and comments we have received from the public are embedded in this document where relevant, and also provided in their entirety in the appendices to this assessment process (separate).

Information Sources and Gaps

Primary Sources

- National Visitor Use Monitoring Reports: We use national visitor use monitoring data throughout this document. National visitor use monitoring provides the most relevant, reliable and accurate information on forest visitation. We collect national visitor use monitoring data using a random sampling method that yields statistically valid results at the forest level.
- INFRA: We use a database application called “INFRA” to house information on developed facilities and natural resources, such as buildings, trails, roads, wilderness areas, and water systems.
- Recreation Opportunity Spectrum: We use the Forest Service recreation opportunity spectrum classification system, to describe the different recreation settings that are available on a given landscape and the differing levels of development of constructed recreation facilities.
- Motor Vehicle Use Maps and Travel Management Plans: The Forest Service Travel Management Rule, published in 2005, requires each national forest or ranger district to designate roads, trails, and areas open to motor vehicles. It requires we publish a motor vehicle use map (36 CFR 212.56) which identifies motorized route/area designations. It also provides us with the authority to regulate use of over-snow vehicles on forest system roads and forest system trails and in designated areas on the National Forest (36 CFR 212.81).
- Recreation Facility Analysis: Recreation facility analysis is a Forest Service analysis process we use to help us design a sustainable recreation program for our developed recreation sites and facilities. Our last recreation facility analysis was conducted in 2007. Our next recreation facility analysis will be completed in 2016.

Secondary Sources:

- Travel and tourism reports
- Social, environmental and economic research reports, including April 2015 San Luis Valley Statistical profile provided by San Luis Valley Council of Governments
- Forest Plan monitoring reports

¹ The Recreation Assessment follows direction provided in FSH 1909.12, Chapter 10 - The Assessment, Section 13.4 - Assessing Recreation Settings, Opportunities and Access and Scenic Character, Effective Date: 01/30/2015.

- State comprehensive outdoor recreation plans (SCORP), the latest published in 2014
- State or county land management planning and strategy documents
- National Survey on Recreation and the Environment (NSRE)
- Relevant analysis or information offered for consideration by the public about recreation or scenic character
- Colorado Fourteeners Initiative website (<http://www.14ers.org/stay-informed/colorado-14ers-statewide-report-card/#>)
- Trail log data based on personal and professional observations during surveys of motorized and nonmotorized trails located throughout the forest and wilderness
- Campground use logs
- Ski area ticket sales and associated visitor use data
- Annual monitoring and evaluation reports as part of the 1996 forest plan recommendation.

Gaps

- We need more studies to evaluate the interactions between recreation use and the impacts to ecological integrity, especially in terms of the effects of dispersed recreation on species diversity, distribution, and ecological integrity.
- There is limited data regarding the concept of sustainable recreation, given that sustainable recreation is a new and recent requirement in forest planning.
- We have limited documentation on the Rio Grande National Forest regarding the location, type, and frequency of recreation user conflicts.
- We have limited winter use data, including surveys that determine user types and impacts on the Rio Grande National Forest, and no recreation opportunity spectrum inventory specific to seasonal variations between summer and winter settings and our Forest's capacity to support winter opportunities.
- We have limited data regarding public preferences and demands for site-specific recreation activities on the Rio Grande National Forest.
- There are limitations to the recreation opportunity spectrum tool in outcome-focused management. Our 1996 Forest Plan ties prescriptions for all resource areas to watershed boundaries, which is not always an accurate reflection of how recreation uses are distributed across the landscape. For example, when we ask the public to identify areas important to them during Forest Plan Revision public engagement, their boundaries often do not match watershed boundaries or management area prescriptions.
- We lack recreation opportunity spectrum inventory data assessing current and future recreation demand needs. We do not know the actual supply of recreation opportunity spectrum summer and winter settings or whether recreation opportunity spectrum allocations established in the 1996 Forest Plan have been met.
- There are limitations to national visitor use monitoring as a tool to gather accurate recreation data on the Rio Grande National Forest, particularly in regard to the significant local Hispanic community. We know that the local Hispanic user groups are underrepresented in the national visitor use monitoring survey process due to general suspicion of surveys and survey locations. Further, we have

found that the survey has no clearly defined Hispanic category so many respondents end up labeled as white.

Existing Forest Plan Direction for Recreation

Forest-wide Desired Conditions

The forest-wide desired conditions for the management of the Forest's recreation programs include:

- Offer opportunities for motorized and nonmotorized recreation within appropriate settings
- Be responsive to visitors' desires and increase services to the public
- Maintain a broad range of quality developed recreation facilities
- Feature traditional and nontraditional dispersed-recreation opportunities
- Showcase scenic byways and landscapes
- Expand interpretative services where needed
- Allow for current areas used as recreation residents, resorts, and youth camps to continue to be managed as recreation special-use development areas (Forest Plan, chapter 1, pages 4-5).

Forest-wide Objectives

We identified eight multiple-use objectives for integrated resource management across the entire Forest in our 1996 Forest Plan. These objectives are tied directly to the Regional Objectives identified in the Rocky Mountain Regional Guide, 1992.

Our forest plan objective 4 addresses recreation.

Objective 4: Provide for scenic quality and a range of recreational opportunities that respond to the needs of Forest customers and local communities.

4.1: Provide natural-appearing landscapes with diverse scenery, and increase access to recreation opportunities in attractive settings.

- a. Meet the scenic integrity objectives as described in the Forest Plan.

4.2: Manage heritage resources and integrate them with recreation and education, while complying with all applicable laws and regulations.

- a. Increase numbers and types of quality heritage resource interpretive sites and opportunities.
- b. Conduct heritage-resource stabilization and rehabilitation projects.
- c. Nominate quality eligible sites for the National Register of Historic Places.

4.3: Establish wilderness management practices designed to enhance and perpetuate wilderness as a resource.

- a. Keep wilderness use within determined social capacity if it exists.
- b. Avoid resource damage resulting from overuse of designated wilderness.

4.4: Protect the integrity of any eligible wild and scenic rivers.

4.5: Offer a diverse range of outdoor-recreation opportunities.

4.6: Offer interpretation, information, and environmental education as an important part of outdoor recreation.

Forest-wide Standards and Guidelines

Recreation -- General

Standards

1. Availability of outfitter-guide special-use permits will be based on a capacity study.
2. When capacity has been met for a certain special-use activity, no further permits will be issued.

Guidelines

1. Use concessionaire operations whenever possible when fees are appropriate.
2. Changes in recreation opportunity spectrum class should be documented in a decision memo.

Developed Recreation

Standards

1. Design and manage developed recreation sites according to the Forest Plan recreation opportunity spectrum class and scenic integrity objective(s).
2. All new or reconstructed developed recreation sites will offer a range of opportunities accessible to people with disabilities, within the limits of the site characteristics.
3. Vegetative management plans shall be developed and implemented for all developed sites, to enhance the natural setting and maintain or develop the desired vegetation.
4. Camping will be limited to 14 days in any one location within a 30-day period, established appropriate forest order.
5. Facilities at trailheads shall be consistent with the recreation setting and include adequate space for parking, trailhead panels for trail information, and appropriate sanitation facilities, based on high visitor use, resources impact potential, and long-term operation and maintenance strategy.
6. Developed recreation areas will be withdrawn from locatable mineral entry.

Guidelines

1. Use the *Recreation Facility Design Catalog* or other approved designs, if appropriate, to assist the planning and design of recreation facilities. Quality facilities should be designed that require low maintenance and are cost effective.
2. When campground occupancy is less than 20 percent, analysis shall be conducted to decide whether to close the campground or convert it to a concentrated dispersed site.
3. Each Ranger District should document backlog maintenance and rehabilitation needs and associated costs in INFRA, and update twice a year.
4. At fee campgrounds, furnish readily available off-site and onsite information on recreation opportunities for developed sites.

Dispersed Recreation

Standards

1. A scenic integrity objective of "high" ("management activities are not evident to the casual visitor and the area appears natural") will be met within the foreground for all national scenic and recreation trails.
2. Camping is limited to 14 days within a 30-day period.
3. Close, rehabilitate, or otherwise mitigate dispersed sites when:
 - a. Campsite condition reaches Frissell-Cole Class 4 or 5 (Cole 1989).
 - b. Site occupancy does not meet the adopted scenic integrity objective.
 - c. There are social conflicts.
 - d. Unacceptable environmental damage is occurring.
4. If use exceeds the area capacity for a given recreation opportunity spectrum class, the following management actions, in order of priority, should be employed to address the impacts or effects on the recreation setting:
 - a. Inform the public and restore the site.
 - b. Regulate use.
 - c. Restrict the number of users.
 - d. Close the area or site.
5. Recreation use will be managed to stay within the capacity for the recreation opportunity spectrum objective, as shown in the table below.

Table 1. Maximum use and capacity levels for each recreation opportunity spectrum class (1996)

Recreation Opportunity Spectrum Class/capacity Range	Very Low	Low	Moderate	High
Primitive				
On Trails – Persons at one time /Mile	0.5	1	2	3
Area Wide – Persons at one time /M Acres	1	2	7	25
Semiprimitive-nonmotorized				
On Trails – Persons at one time /Mile	2	3	9	11
Area Wide – Persons at one time /M Acres	4	8	50	80
Semiprimitive Motorized				
On Trails – Persons at one time /Mile	2	3	9	11
Area Wide – Persons at one time /M Acres	4	8	50	80
Roaded Natural				
On Trails – Persons at one time /Mile	2	3	9	11
Area Wide – Persons at one time /M Acres	40	80	1200	2500
Rural				
On Trails – Persons at one time /Mile	2	3	9	11
Area Wide – Persons at one time /M Acres	500	800	5000	7500

Capacity Ranges are defined as follows:

VERY LOW and LOW apply to rock, mountain grass, and clearcuts 1 to 20 years old.

MODERATE applies to mountain grass, mature and pole-size ponderosa pine, mature aspen, shelterwood cuts 90 to 120 years old, selection cuts 1 to 20 years old, and clearcuts 80 to 120 years old.

HIGH applies to mature and pole-size spruce, pole-size aspen, and clearcuts 20 to 80 years old.

PAOT = Persons at one time

Guidelines

1. Trail development shall be coordinated with trail systems developed by municipalities, counties, states, other federal agencies, and partners.
2. Different accessibility levels will be planned, depending on the nature of the improvement and the principal form of recreation being provided.
3. Loop trails should be considered for all trail networks, especially those constructed in low elevations, for year-round use, associated with campgrounds or other attractions.
4. Congressionally designated national historic, scenic, or recreation trails and the Colorado Trail will receive higher priority than other trails for reconstruction, operation, and maintenance.
5. Dispersed camping is prohibited within a 100-foot zone around lakes and streams, unless pre-defined exceptions are justified by terrain, and as implemented by a forest order.

Management Area Direction

The Forest Plan contains seventeen management area (MA) prescriptions and associated standards and guidelines. The management area direction guides the range of uses, management activities, or management restrictions associated with each specific management area. Each management area contains a chart that lists the activities allowed, including timber harvest, motorized recreation, grazing, mineral development and oil and gas leasing. Motorized recreation is allowed in MA 3.3 (limited to designated roads and trails), MA 4.21, MA 4.3, MA 4.4, MA 5.11, MA 5.13, MA 5.41, MA 5.42, MA 6.6 and MA 8.22 (by permission). The associated range of uses, management activities, or management restrictions associated with each established management area on the Rio Grande National Forest are described in greater detail in the current Forest Plan.

Scale of Analysis

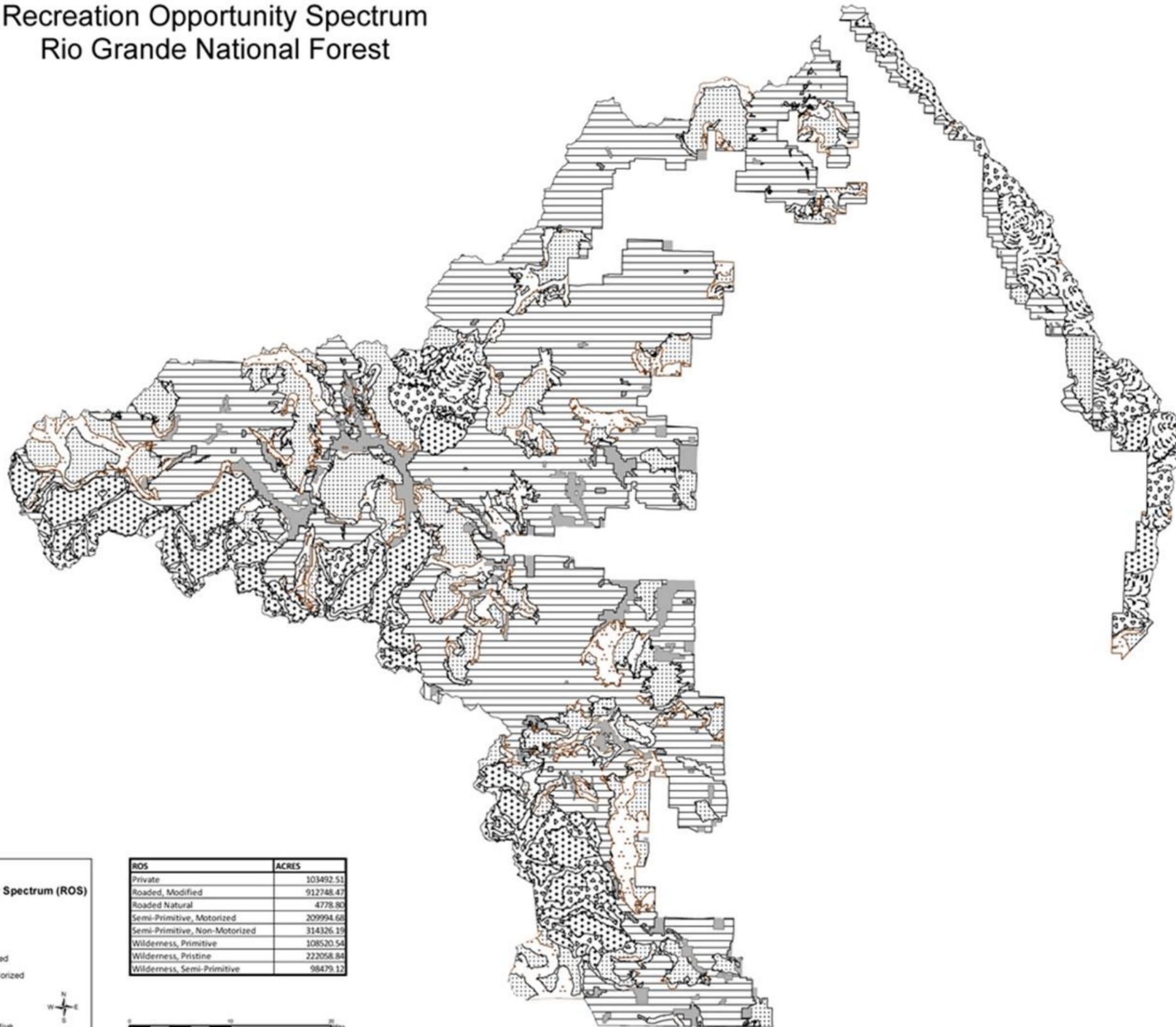
Our plan area for this assessment includes all lands within the Rio Grande National Forest, regardless of ownership or jurisdiction. When we address the broader landscape, our focus is on Hinsdale, Mineral, Rio Grande, Saguache, Alamosa, Conejos and Costilla counties, known regionally as the San Luis Valley. When we discuss larger population trends driving demand for recreation on the Rio Grande National Forest from surrounding areas outside the San Luis Valley; the scale of our analysis includes Albuquerque and Santa Fe, New Mexico and Pueblo, Colorado Springs, Denver, and Durango, Colorado.

Existing Recreation Information

Recreation Opportunity Spectrum

As we assess the need to change our 1996 Forest Plan, we will use the recreation opportunity spectrum as a tool to consider the sustainability of current recreation settings, opportunities, development scale, and access on the forest. Recreation opportunity spectrum is a nationally recognized classification system used to describe the different recreation settings that are available on a given landscape. It is also a tool that gives us a site-specific way to integrate the value of different types of recreation with the range of other resource values on the forest. The broader objective of recreation opportunity spectrum is to help us identify and appropriately allocate Rio Grande National Forest lands to maximize sustainable uses and benefits.

Recreation Opportunity Spectrum Rio Grande National Forest



Legend
Recreation Opportunity Spectrum (ROS)

- Modified, Roaded
- Private Property
- Roaded Natural
- Semi-Primitive, Motorized
- Semi-Primitive, Nonmotorized
- Wilderness, Primitive
- Wilderness, Pristine
- Wilderness, Semi-Primitive

ROS	ACRES
Private	103492.51
Roaded, Modified	912748.47
Roaded Natural	4778.80
Semi-Primitive, Motorized	209994.68
Semi-Primitive, Non-Motorized	314326.19
Wilderness, Primitive	108520.54
Wilderness, Pristine	222058.84
Wilderness, Semi-Primitive	98479.12

Figure 1. Rio Grande National Forest recreation opportunity spectrum map

Our 1996 Forest Plan and 1998 Wilderness Management Direction Plan Amendment show the allocations, or forest plan desired conditions, we established for recreation opportunity spectrum in wilderness and non-wilderness areas (see Table 2 and Figure 1). Our current mix of recreation settings on the forest provides for summer and winter, as well as motorized and nonmotorized recreation opportunities. We have not conducted a recreation facility analysis inventory based on current and future recreation demand since the 1996 Forest Plan allocations/desired conditions were established. Without a current recreation opportunity spectrum inventory relative to roads, trails, developed recreation sites, wilderness, and roadless areas; we do not know the actual supply of recreation opportunity spectrum settings or whether the recreation opportunity spectrum allocations established in the 1996 Forest Plan have been met or need to be changed.

Table 2. Rio Grande National Forest recreation opportunity spectrum recreation settings (1996)

ROS Setting	Acres	Percent of Forest Land
Wilderness		
Primitive & Semiprimitive-nonmotorized	429,055	23%
Non-wilderness		
Semiprimitive-nonmotorized	304,125	17%
Semiprimitive Motorized	209,993	11%
Roaded Modified ^a	914,323	49%

a - A subclass of Roaded Natural used to identify and manage landscapes that are extensively modified by management activities such as logging, widespread road development or mineral extraction.

Seasonal Recreation Opportunity Spectrum Setting Variation

Seasonal variation occurs when a recreation opportunity spectrum setting provides different recreation opportunities during different seasons of the year (e.g. summer (non-snow) and winter (snow and ice based)). Forests that traditionally offer winter recreation opportunities should inventory and classify a winter recreation opportunity spectrum, as well as a summer recreation opportunity spectrum. We have not yet inventoried, mapped or distinctly identified summer and winter recreation opportunity spectrum setting variations.

Although we have not mapped summer and winter recreation opportunity spectrum settings, we do provide distinct summer and winter recreation opportunities. Summer months are typically mild, pleasant, and dry while the winters are characteristically cool with limited snowfall accumulation except in the higher elevations. Due to relatively mild winter conditions, we provide motorized and nonmotorized recreation opportunities on a year-round basis on much of the forest. Only the highest elevations (8,500 feet and above) receive sufficient snow pack to allow for snowmobile use as well as other winter sport activities (downhill and cross-country skiing, snowboarding, tubing, sledding, snowshoeing) on a regular basis. The snow accumulation period is generally September to May and with snow possible all year at extreme elevations (generally 10,000 feet or more). The yurts on the Rio Grande National Forest are popular for summer as well as overnight winter camping, however not all of the yurts are open for summer use². For more background information on recreation opportunity spectrum, see appendix A.

² While we permit year-round use for all yurts on the Divide District, we do not permit summer use for yurts on the Conejos Peak District.

Recreation Opportunities

Our Forest has diverse recreational opportunities ranging from nonmotorized hiking, fishing, snowshoeing and cross-country skiing to motorized dirt bikes, four-wheeling and snowmobiling, seven “fourteeners”, numerous developed campgrounds and recreation rentals.

Nonmotorized Recreation

Our Forest offers abundant nonmotorized opportunities such as hiking, back packing, climbing, horseback riding, fishing, primitive camping, nonmotorized boating (kayaking, rafting, canoeing), fishing, downhill skiing, cross country skiing and snowshoeing. Roughly forty percent of the forest is either designated wilderness (420,055 acres) or inventoried roadless (304,125 acres), where we strictly prohibit or limit the use of motorized vehicles. Popular summer areas for nonmotorized recreation on the forest include hiking trails to North Crestone, South Crestone and Willow Lake in the Sangre de Cristos on the Saguache Ranger District, Red Lake, Duck Lake, Blue Lake and South Fork of the Conejos on the Conejos Peak District, and long stretches of the Continental Divide National Scenic Trail, Lake Fork Trail, San Francisco Trails, Shallow Creek, and Inspiration Point Trail on the Divide Ranger District. Popular winter use areas include Cumbres and La Manga passes, Rock Creek, Big Meadows, Deep Creek and Middle Creek for cross-country skiing and access to backcountry yurts and Wolf Creek Pass and Lobo Overlook for snowshoeing and backcountry skiing.

Motorized Recreation

Our Forest also offers abundant motorized recreation opportunities across roughly sixty percent of the forest. Designated routes are clearly identified by time of year or vehicle class on our motor vehicle use map per Forest Service Manual 7716.03 direction. Within semiprimitive and roaded modified recreation opportunity spectrum settings, we restrict motor vehicle use to designated routes that can include paved highways and roads, gravel or dirt Forest Service roads, and trails designated for motor vehicle travel. Our motor vehicle use map identifies 378 miles of trails and 681 miles of roads for public motorized use on the Conejos Peak, Divide and Saguache Ranger Districts. These trails and roads may be open to all motor vehicle use or restricted to specific vehicle classes. Many are seasonal or may be closed to protect resources, wildlife, and permit specific special uses or road uses. Many forest roads also serve in the winter as designated groomed trails or as user-created paths for snowmobiles into areas that are inaccessible by any other means in the winter.

Snowmobile use areas include Cumbres/La Manga Pass, Archuleta Trail, Como Lake Road and the Alamosa Canyon area. There are also extensive groomed winter snowmobile trail networks near Creede and South Fork. The Park Creek corridor is another popular snowmobiling area southeast of Wolf Creek Pass.

We do not permit motorized recreation:

- in any wilderness area (prohibited by law in all designated wilderness), primitive, or semiprimitive-nonmotorized settings
- on rivers or river segments identified as eligible wild rivers (North and Middle Forks of the Conejos River and El Rito Azul Forks from sources to the confluence with Conejos River, Tothe Creek, Hansen Creek, and Saguache Creek). Eligible segments of wild rivers on the Rio Grande National Forest are within designated wilderness and primitive recreation opportunity spectrum settings.
- in research natural areas which are managed as semiprimitive-nonmotorized.

There are opportunities for both motorized and nonmotorized recreation in our designated backcountry areas (identified as management area 3.3 in the 1996 Forest Plan), which contain both semiprimitive motorized and semiprimitive-nonmotorized recreation opportunity spectrum classes.

Developed and Dispersed Recreation

We provide extensive developed and dispersed recreation opportunities. We provide developed recreation opportunities in management areas outside designated wilderness, primarily in roaded-modified recreation opportunity spectrum settings. We provide dispersed recreation opportunities throughout the Forest, within and outside of designated wilderness areas, across the entire range of recreation opportunity spectrum settings. Our roaded-modified settings provide dispersed (undeveloped) and developed recreation opportunities mostly along road corridors in areas that have relatively easy access to a water feature or other natural attraction where activities occur year-round. Our management emphasis is to provide developed and dispersed recreation opportunities in roaded-modified settings in management area 4.3. We also emphasize existing and potential ski –based resorts in management area 8.22. This management area encompasses the Wolf Creek Ski Area, including locations where expansion may occur.

Developed Recreation

The main developed recreation activities on the Rio Grande National Forest are overnight developed camping, trailhead use, fishing at developed fishing areas and downhill skiing. Developed recreation includes recreation that typically occurs at distinctly defined sites or areas where we have facilities such as campgrounds, picnic areas, interpretive sites and trailheads developed for public use and enjoyment. Our developed recreation sites are most often in roaded modified settings. Roads, trailheads, parking lots, picnic tables, toilets, drinking water, boat ramps, fishing piers and buildings such as lodges and cabins may be present or within developed sites and areas. Wolf Creek Ski Area is a popular local attraction that provides opportunities for the downhill skier. We administer this ski area, which is operated by a Forest Service permittee under a special use permit.

Table 3. Type and number of developed recreation sites currently located on the Rio Grande National Forest

Developed Site Type	Total number of Sites	Capacity (Persons at one time)
Boating Site	7	338
Campground	40	2647
Dispersed Camping Area	2	105
Fishing Site	10	455
Group Picnic Site	4	110
Interpretive Site	11	289
Lookout/Cabin	11	512
Observation Site	2	55
Picnic Site	10	464
Ski Area Alpine	1	20
Target Range	1	30
Trailhead	59	6,394
Total	158	11,419

Source: INFRA RecSite Report from C.Powell (10/31/2014)

Persons-At-One-Time: a measure of social carrying capacity. National conventions include 5 people per family picnic/camp unit, 3.5 people per parking lot stall at a trailhead or visitor center, 1.5 people per motorcycle parking stall and 40 people per tour bus parking stall.

We have a total of 159 developed sites on the Forest with the ability to support 11,419 persons at one time. Our developed sites are operated and maintained by concessionaire, by us, or through other permitted services. Most campgrounds and other facilities at higher elevations are open on a seasonal basis generally occurring from Memorial Day through Labor Day. Sites at lower elevations may be open year-round. The operating season may vary from year to year due to unforeseen weather or from temporary closures due to maintenance or construction needs. If a site cannot be maintained to meet health and safety standards, then we close the sites until they are repaired. The emphasis for our managed seasons on developed sites is the high-use summer months, and peak-use times such as elk and deer hunting seasons. We have found that during the peak-use seasons developed recreation sites are not completely full, which indicates that we are successfully meeting demand.

We have 40 campgrounds with a capacity of roughly 2,647 persons-at-one-time. Many of the campgrounds are operated by concessionaire and some have on-site hosts, and not all have running water due to cost.

Our 2007 recreation facility analysis identified significant deferred maintenance and operating costs on the Forest related to our developed recreation infrastructure, including the campground and water systems. Costs are a significant concern as we plan for a sustainable program through the twenty-year life cycle of our next Forest Plan. Our recreation facility analysis identified the baseline annual cost to operate and maintain developed sites on the Rio Grande National Forest as \$98,981 and \$100,519 respectively and baseline deferred maintenance as \$2,985,656. Implementing the 2007 recreation facility analysis recommendations has resulted in an increased cost of \$1,156 to maintain sites and has reduced overall deferred maintenance cost, though still high, to \$2,349,678.

Dispersed Recreation

The Rio Grande National Forest is a popular destination for both motorized and nonmotorized recreationists seeking backcountry areas for dispersed recreation. Essentially the recreation that happens “everywhere else”, dispersed recreation occurs in and outside wilderness areas on roads, trails and general forest and water areas which are not managed as developed sites. These activities can be motorized or nonmotorized, and include hunting (including game retrieval), fishing, boating, hiking, cross-country skiing, horseback riding, mountain biking, OHV riding, snowmobiling, gathering forest products, school or education functions, family and religious gatherings and rock and mineral collecting. People who enjoy dispersed activities often avoid developed sites because they prefer less human disturbance and on-site control, or know the best places that have no fee.

Often, dispersed recreation is concentrated near water or alongside roads. These types of sites are called concentrated use areas and are less formally managed. Popular concentrated use areas on the Rio Grande National Forest include Cumbres/La Manga Pass, Forest Service Road 103, 250 and 520 corridors, Chama Basin, Como Lake, Fox Creek, Trail Creek, Platoro Reservoir, Park-Pass Creek, Embargo Creek, Groundhog Park and Bristol Head areas. In these dispersed use areas there are sometimes user conflicts during peak seasons (especially hunting season), health and safety concerns (i.e., littering and human waste), and visible resource degradation (i.e., vegetative removal, trampling, soil erosion, wildlife disturbance, etc.). Inventory and monitoring of these concentrated use areas has been challenging for us where access is limited, such as with Como Lake at the base of Blanca Peak. As a result, we have limited documentation on the locations and impacts of these dispersed sites.

There is a lot of dispersed recreation on trails and at dispersed camping areas throughout the wilderness and backcountry areas. We use a Forest Service database application called INFRA to catalogue and manage resources, such as buildings, trails, roads, water systems, wilderness areas, and special use permits. According to information gathered from the INFRA trails database, there are 1365.9 miles of

trails on the Rio Grande National Forest, with 480.6 miles in wilderness and 885.3 miles in non-wilderness. Multiple opportunities for day hiking as well as longer overnight backpacking trips exist. Table 4 shows the total miles of trails on the Forest by primary managed use. We may allow numerous managed uses on a trail; with the primary managed use type requiring the most demanding design, construction, and maintenance parameters (i.e. trails designed, constructed and maintained for pack and saddle also used by mountain bikes).

Table 4. Trail miles by primary managed use type

Primary Managed Use Type	Miles
Hiker	418.05
Pack and Saddle	833.7
Motorcycle	181
All-Terrain Vehicle (ATV)	53.0
Cross- Country Ski	18.0
Over-snow Vehicle	22.30

Source: INFRA Trails ATM Report from HC Dyer (11/20/2015)

Recreation Special Uses

Our special uses permit³ program includes temporary and long-term noncommercial and commercial events, activities and privately owned improvements on National Forest System lands. We authorize short-term events such as recreation competitions, and other commercial recreation gatherings that are temporary in nature. We also authorize other short-term use permit types such as noncommercial group use by 75 people or more. Long-term permits include Wolf Creek Ski Area, outfitter and guide concessions, and private recreation residences. At this time, there are 38 permanent and numerous annual temporary use outfitter and guide permits providing a variety of commercial services on the forest. We are seeing an increase in requests for outfitter and guide and recreation event permits (source of outfitter and guide information from C. Powell Infra Report 10/31/2014).

Special use activities include:

- recreation residence permits which are privately owned recreational cabins built on national forest system lands,
- shelter permits which include yurt rentals,
- noncommercial group use permits that are issued for gatherings of 75 or more people,
- recreation events which authorize recreational competitions or activities requiring temporary authorized use of national forest system lands,
- temporary commercial permits that allow non-priority permitted holders to use national forest system lands for temporary commercial purposes or activities, and
- a special use permit for Wolf Creek Ski Area.

³ A special use authorization is a legal document such as a permit, term permit, lease, or easement, which allows occupancy, use, rights, or privileges of national forest system land. The authorization is granted for a specific use of the land for a specific period of time.

Niche Opportunities identified in 2007 Recreational Facilities Analysis

In 2007, we conducted a required recreational facility analysis characterize the quality of recreational opportunities on the forest. The purpose of the analysis was to help us prioritize sustainable management of the recreation program under declining budgets, represented in the “niche” statement below:

“Solitude in every Season”

“From the Sangre de Cristo to the San Juan Mountains, the jagged peaks and rushing rivers of the San Luis Valley public lands wrap themselves around this Rocky Mountain basin. Whether viewing the mountain scenery from roads or finding challenge on trails, visitors discover solitude and self-reliance through uncrowded year-round recreation opportunities. As recreation pressures increase in other parts of Colorado, the public lands of the San Luis Valley maintain their remote spirit and traditional culture.”

We used the recreation facility analysis process to identify the following “niche” settings on the Rio Grande National Forest:

- Remote Adventure – This setting is relatively undeveloped and offers visitors hundreds of miles of designated roads and trails. Visitors have room to roam and a sense of freedom in this setting.
- Solitude – This setting includes designated wilderness areas and other remote areas with both motorized and nonmotorized trails. Visitors have opportunities for challenge and self-reliance in rugged terrain.
- Scenic Corridors – These paved corridors connect the forest and public lands to the San Luis Valley. Visitors have opportunities for adventure on the water and enjoying the scenic views, wildlife and history along these corridors.
- Scenic Backways – These unpaved routes are more rugged and offer outstanding opportunities to get away, enjoy scenery, and learn about history.
- Winter Overlay – This setting overlays other settings. Reliable snowfall and desirable terrain offer visitors opportunities to challenge themselves in the winter backcountry.

The niche emphasis activities and opportunities we assigned to the various settings are:

- Remote Adventure – Designated OHV routes, overnight stays at historic cabins, and other forest-wide activities.
- Solitude – Backpacking, horseback riding, and other forest-wide activities. Mountaineering opportunities are found on some high peaks.
- Scenic Corridors – Developed camping, picnicking, rafting and kayaking.
- Scenic Backways – Developed camping, designated OHV routes, picnicking, driving for pleasure. Both dispersed and developed areas for groups are found here.
- Winter Overlay – Snowmobiling, downhill skiing, backcountry skiing, ice climbing and snow play.

For more information about the recreational facility analysis methodology, see appendix B.

Important Recreational Sites and Areas

Fourteeners

Colorado is the only state in the Rocky Mountain Region with mountains over 14,000 feet in elevation (fourteeners). Nearly 500,000 people visit Colorado's fourteeners each year. A goal for many outdoor enthusiasts of all skill levels is to climb all of the fourteeners. Repeat visits to fourteeners are also popular as peaks range from easy to very difficult, with hiking trails for exploring and viewing outstanding scenery and rugged landscapes. While some of the more remote peaks remain pristine, increased recreational use has seriously impacted many peaks and their alpine basins.

There are six fourteeners on the Rio Grande National Forest, some more accessible than others with related impacts. The Sangre de Cristo Range on the eastern edge of the Saguache Ranger District is home to Crestone Peak, Crestone Needle, Kit Carson Mountain; and Ellingwood, Little Bear and Blanca Peaks. There has been a significant increase in use of connected trails and base camps to hike these peaks since 1996, particularly at Blanca Peak and Willow Lake; a base-camp area to hike Crestone Peak, Crestone Needle and Kit Carson above the town of Crestone. There are documented significant adverse impacts around the lake as hiking and camping traffic have increased. A similar situation is developing at Lake Como, which is reached by the four-wheel drive Forest Road 975 or Lake Como road; and is the principle access to hike Blanca, Ellingwood, and Little Bear Peaks.

San Luis Peak is another fourteener which although located on the neighboring forest, can be accessed by way of the Divide District north of Creede, off of Forest Road 503.

The Colorado Fourteeners Initiative

The Colorado Fourteeners Initiative has partnered with the Forest Service to:

1. “Create a structure for engaging local communities in the protection of Colorado’s highest peaks
2. Build and maintain sustainable hiking routes on the fourteeners to accommodate hiking use while minimizing damage to native alpine ecosystems
3. Stabilize and restore trampled and eroded areas to protect sensitive alpine plant and animal communities
4. Educate fourteener hikers about leave-no-trace principles and sustainable recreational practices designed to lessen ecosystem impacts”

The Colorado Fourteeners Initiative has inventoried summit trails to determine long-term sustainability and a cost estimate for fixing and maintaining the trails. Blanca and Crestone Peak and Needle were rated highest on the Rio Grande. Approximate cost to bring those trails into ideal conditions is less than \$125,000 each. Kit Carson has yet to be inventoried, Ellingwood was not listed in the report card, and Little Bear Peak will not be inventoried by the Colorado Fourteeners Initiative as it states the trail is too hazardous to maintain (<http://www.14ers.org/stay-informed/colorado-14ers-statewide-report-card/#>).

Wilderness Areas

The Rio Grande National Forest includes portions of four wilderness areas, the La Garita (129,626 acres), Sangre de Cristo (220,803 acres), South San Juan (158,790 acres) and Weminuche (499,771 acres). Portions of these four wilderness areas make up almost 25 percent of the forest or 429,055 acres. Per legislative direction, wilderness is managed on the forest to provide outstanding recreation opportunities for solitude or a primitive and unconfined type of recreation. We coordinate management of the Weminuche and South San Juan wilderness areas with the San Juan National Forest, however primary management responsibility for the South San Juan wilderness lies with us. We coordinate management of

the Sangre de Cristo with the Pike/San Isabel National Forest, and management of the La Garita Wilderness with the Grand Mesa, Uncompaghre and Gunnison National Forest.

For more information regarding wilderness including a brief description of the wilderness areas on the Rio Grande National Forest, see the Assessment 15 Designated Areas.

Scenic Byways and Other Important Recreation Sites

Conejos Peak Ranger District

Starting at the south end of the Rio Grande National Forest and moving north, there are many important recreation resources, historic trails and corridors which attract users. The Conejos Peak Ranger District borders the Carson National Forest to the south in New Mexico and the San Juan National Forest to the west.

Conejos Canyon Corridor

The scenic Conejos Canyon corridor; including campgrounds at Mogote, Aspen Glade, Elk Creek, Spectacle Lake, Lake Fork, Mix Lake and Stunner; is part of the Conejos Peak Ranger District. Conejos Canyon includes at least one stretch considered a “gold medal” fishery by the State of Colorado near the Pinnacles, a portion of the Conejos River recommended as an eligible Recreation River (governed by management area prescription 4.4).

Los Caminos Scenic Byway

Colorado Highway 17 crosses the district along a portion of the Los Caminos Scenic Byway, which celebrates the ancestral hispano roots of the San Luis Valley. The byway offers recreational opportunities as it climbs over La Manga and Cumbres passes, with numerous scenic pullouts overlooking Conejos Canyon, and access to Trujillo Meadows campground and the Cumbres and Toltec Scenic Railroad. Unlike many mountain passes in Colorado, the area between Cumbres and La Manga Pass is park-like, with rolling high elevation mesas and peaks which support high winter use by both snowmobilers and cross country skiers, resulting in some conflicts. There are also five backcountry yurts on this part of the district, with the same user conflicts. The Chama Basin area is a popular dispersed camping and big game hunting area. Osier Park is another popular area for dispersed camping and hunting in the summer and fall, as well as snowmobiling in the winter.

Alamosa Canyon

Alamosa Canyon is another popular recreation corridor on Conejos Peak Ranger District, with the Alamosa campground and popular motorized trails for single-track motorized users that connect with the Rock Creek Corridor to the north, and the Rock Creek and Comstock campgrounds in the neighboring Divide District.

Sangre de Cristo National Heritage Area

Significant portions of the Conejos Peak District are included in the Sangre de Cristo National Heritage Area. Designated by Congress in 2009, the heritage area’s mission is to promote, preserve, protect and interpret the extensive historical, religious, environmental, geographic, geologic, cultural and linguistic resources of the southern San Luis Valley area, specifically Alamosa, Costilla and Conejos counties.

Divide Ranger District

The Divide Ranger District borders the San Juan National Forest to the west and Grand Mesa, Uncompaghre and Gunnison National Forest to the north.

U.S. Highway 160

Divide Ranger District contains an important recreation corridor along U.S. Highway 160 culminating at Wolf Creek Pass, elevation 10,857 feet. This corridor accesses Highway Springs, Park Creek, Columbine, Big Meadows and Tucker Ponds campgrounds along or within three miles of the highway. Wolf Creek Pass also accesses Wolf Creek Ski Area, the only ski area on the forest. Beaver Creek, Upper Beaver Creek, and Cross Creek campgrounds are accessed off of secondary forest roads south of Highway 160, as well as Ellwood Cabin, a historic recreational rental on Ellwood Pass (technically on the Conejos Peak District) and Fitton Cabin and Off Cow Camp cabin recreation rentals below Blowout Pass. North of highway 160, the Divide district recreation resources include Cathedral campground and the Alder Guard Station, another historic recreation rental cabin. In addition, the Divide district resources include Natural Arch and Summer Coon Volcanic Areas in the low-elevation country north of Del Norte.

Colorado Highway 149

Colorado Highway 149 is another popular recreation corridor on the Divide District. Starting at South Fork and ending at Highway 50 near Blue Mesa Reservoir, this route is designated the Silver Thread Scenic Byway. Between South Fork and Creede, this byway accesses the Palisade campground and the gold medal fishery in neighboring Collier State Wildlife Area. Above Creede, are Marshall Park, Rio Grande, Bristol Head, Silver Thread and North Clear Creek campgrounds, as well as Ivy Creek, Thirty Mile, River Hill, Road Canyon and Lost Trail campgrounds off secondary forest roads 523 and 520. Forest Road 520 supports significant summer recreational use, taking users over the Continental Divide at Stony Pass and providing access to hiking of the popular Rio Grande Pyramid peak and fishing at Road Canyon and Rio Grande Reservoirs. The most popular recreation site on the forest is the 100-foot high North Clear Creek Falls, just off Highway 149. The Bachelor Loop and Wheeler Geologic Areas are additional unique scenic and historic features which attract visitors to the Divide District. Finally, the Divide district has issued three special use authorizations for a total of six yurts. These include one yurt in the Pass Creek area with an option for a second, two yurts in the Ivy/North Lime area, one in the Buck Creek area, and another authorized in the Fawn Lakes area.

Saguache Ranger District

On the northern end of the Rio Grande National Forest, the Saguache Ranger District borders the Grand Mesa, Uncompaghe and Gunnison National Forests to the north and Pike/San Isabel National Forest to the east. Served by a year-round ranger station in Saguache, many of this district's most significant recreational areas border Bureau of Land Management lands, particularly on the west edge where users find Penitente and Witches canyons and the Rock Garden. The Carnero Creek drainage contains the Poso and Storm King campgrounds, as well as the Carnero Creek Guard Station historic recreation rental. Further north along the Colorado Highway 114 corridor, is the Upper Crossing Guard Station recreation rental as well as access to Luders Creek and Buffalo Pass campgrounds. Remote Saguache Park borders the La Garita Wilderness and contains the historic Stone Cellar recreation rental and Stone Cellar Campground. North of Saguache, the Kerber Creek drainage contains the historic Brewery Creek Guard Station recreation rental and related interpretation of the historic Bonanza mining district. Along the Sangre de Cristo Mountains to the east, is the heavily used North Crestone Campground,.

Trails

Continental Divide National Scenic Trail

Approximately 170 miles of the Continental Divide National Scenic Trail lies on the Rio Grande National Forest, from the forests' northern boundary with the Gunnison National Forest to the New Mexico State Line. Designated by Congress in 1978, the nature and purposes of the Continental Divide National Scenic Trail are to:

- provide for high-quality scenic, primitive hiking and horseback riding opportunities; and
- conserve natural, historic, and cultural resources along the Continental Divide National Scenic Trail corridor (2009 Comprehensive Management Plan).

Management of the Trail is consistent with the nature and purposes of the Trail and the 2009 Continental Divide National Scenic Trail Comprehensive Plan and any revisions.

The Continental Divide National Scenic Trail is a quiet, continuous mountain path following the backbone of the Rocky Mountains from Mexico to Canada, linking 20 designated wilderness areas, 20 national forests, three national parks, one national monument, eight Bureau of Land Management resource areas, historic and traditional cultural sites, and primitive wildlands. The Continental Divide National Scenic Trail is the highest national scenic trail, reaching the 14,270-foot summit of Grays Peak, and connects the Chihuahuan Desert of New Mexico to majestic conifer forests, remote valleys and wild, snow-capped mountains and glaciers on the way to its northern terminus in Glacier National Park. The Trail corridor provides high-quality hiking and horseback riding opportunities and other compatible nonmotorized recreation opportunities; conserves natural characteristics, including solitude, remoteness, primitive recreation, fish and wildlife habitats; and conserves historic and cultural resources. Travelers along this path experience the heart of the Rocky Mountain west: untrammelled mountains that stretch to the horizons, plunging streams, snowfields, glaciers, cobalt-blue lakes, alpine wildflowers, and quiet camping under star-studded skies. Travelers may also encounter ancient travois trails, follow the footsteps of Lewis and Clark or early Spanish explorers, trace the routes of the Apache and follow fresh tracks of grizzlies, wolves, lynx, elk, moose, mountain goats and wolverines.

Old Spanish National Historic Trail

The Old Spanish National Historic Trail was not congressionally designated until 2002, so it is not included in the 1996 forest plan. Pioneered by Antonio Armijo in 1829 the Old Spanish Trail was a trade network with several routes that carried woolens and slaves from Santa Fe to Los Angeles in Mexico's California territory where they were traded for horses. The congressionally designated East Fork of the North Branch of the Old Spanish National Historic Trail runs through the planning area, generally following the west flanks of the Sangre de Cristo mountains through Fort Garland, north past the Great Sand Dunes and the town of Crestone and then turning west through the present day town of Saguache. From there, it winds its way over Cochetopa Pass into the Gunnison Basin. Inventory and research have occurred within the Baca Tract Special Interest Area and in the North Pass area on the Saguache Ranger District. There is at least one significant archaeological site related to the Old Spanish Trail on the Forest, called the Bunker Site north of Crestone. The Old Spanish National Historic Trail Comprehensive Management Plan is being completed at this time by the National Park Service and BLM, the designated management agencies for the trail. The plan will guide management of the trail across six states and several different management zones. Many opportunities for further research education and interpretation exist for this unique resource on the Rio Grande National Forest.

National Recreation Trails

The Rio Grande National Forest also has two National Recreation Trails, Lost Fork and West Lost Fork on the western edge of the Divide Ranger District.

Colorado Trail

The Colorado Trail has no official management designation. It is a long distance trail that stretches almost 500 miles from Denver to Durango, CO. About 80 miles of the Colorado Trail run through the Forest, along roughly the same route as the Continental Divide National Scenic Trail.

Inventoried Roadless Areas

There are 531,000 acres of inventoried roadless areas on the Rio Grande National Forest. They are important areas that provide extensive dispersed backcountry recreation opportunities. The Rio Grande National Forest manages trails in backcountry areas for either motorized or nonmotorized uses. Management area 3.3 of the current Forest Plan provides management emphasis and prescriptions for backcountry areas. Many people place a high value of importance on roadless areas especially for their relatively undeveloped, natural condition and their value for primitive and unconfined types of dispersed recreation. Under the Colorado Roadless Rule, we are allowed to construct and reconstruct roads in 93,000 acres of their inventoried roadless areas; and these activities are prohibited in 438,000 acres of their inventoried roadless areas. The majority of the inventoried roadless area acreage where roads are prohibited on the Rio Grande National Forest has been designated as backcountry areas (management area 3.3).

Safety

Recreation on the Rio Grande National Forest can create safety risks where there are user conflicts, deferred maintenance, or where users exceed their physical capacity. Since 1996, specific safety risks have increased; with the spruce beetle epidemic on the forest creating hazard trees, increased ATV/UTV use on forest service roads, conflicts between motorized and nonmotorized users, and our diminished capacity to maintain trail networks and deteriorating infrastructure such as bridges, roads and culverts.

The recreation opportunity spectrum tool can help us evaluate public perceptions of risk and related safety measures in various settings. Within the context of recreation opportunity spectrum, areas in primitive or semiprimitive settings (both motorized and nonmotorized) generally offer higher degrees of risk because they are more isolated and remote. The recreation opportunity spectrum as shown in Figure 1 illustrates how experience opportunities related to safety change from primitive to urban settings.

Recreation Conflicts and Incompatibilities

There is an increased interest in providing more opportunities for motorized recreation that has fueled disagreements over the optimum allocation or extent of motorized and nonmotorized recreational opportunities on the Rio Grande National Forest.

Conflict happens when a person's expectations for his or her recreational experiences are not met. This can occur as a result of contact with another user or through disturbance from the sound or physical evidence left by another user. The potential for conflict exists among all user groups, and even among members of the same group. Whether the activity is motorized or nonmotorized, conflict often occurs over competition for space. Conflict situations may also occur from management trying to provide too many activities in one setting that result in marginal quality for all users.

Motorized and Nonmotorized Recreation

Opponents of off-highway vehicles (including over-snow vehicles) assert that motorized vehicles damage the environment and cultural artifacts, pose safety concerns, and conflict with other forms of recreation. They also contend that staffing levels and recreation budgets are inadequate to effectively monitor motorized use and its impact on natural resources. Among environmental concerns raised by OHV critics are potential damage to wildlife habitat and land and water ecosystems; the impact of dust on winter snow melts and water supply; noise, air, and water pollution; and a diminished experience for recreationists seeking quiet and solitude and/or hunting and fishing opportunities. Critics also point to the beneficial economic impact of nonmotorized recreation on local communities.

By contrast, off-highway and over-snow vehicle supporters contend that using motorized vehicles allows visitors access to hard-to-reach natural areas; bring economic benefits to communities serving riders; provide outdoor recreation opportunities for the disabled, senior citizens, and others with mobility limitations; and, with snowmobiles, allow increased access to sites during winter. They assert that technological advances will continue to limit noise and pollution.

Both motorized and nonmotorized advocates want more routes and areas allocated to their use. Adding to the conflict are economic and environmental considerations, with some asserting that restrictions on motorized recreation harm local industries that serve vehicle users, and others that growth in motorized recreation damages valuable natural resources that also draw visitors to the forest and support gateway communities. Balancing the mix of motorized and nonmotorized opportunities and resolving the conflicts among users was identified in the 1996 Forest Plan and continues to challenge us.

Snowmobiles

Snow mobiles are another source of conflict in the motorized and nonmotorized recreation debate. At this time, we allow unrestricted cross country travel by snowmobiles and nonmotorized users in all management areas except designated wilderness. Combining open, unrestricted motorized and nonmotorized use increases safety concerns. In addition, technology is advancing the capability for snowmobiles to climb steeper terrain, giving snowmobilers access to higher elevations. The 2013 Forest Plan Monitoring Report also specifically identifies potential conflict between off-road vehicles and winter wildlife (big game) range, particularly the increasing use of snowmobiles and track vehicles in or near winter range areas. Management for this resource is evolving, as management direction catches up with the popularity and technology involved in both motorized and nonmotorized over-snow travel.

Bicycles on the Continental Divide National Scenic Trail

Another source of conflict is whether or not bicycles are compatible with the nature and purposes of the Continental Divide National Scenic Trail, which, according to the 2009 Continental Divide National Scenic Trail Comprehensive Management Plan, is to be managed primarily for high-quality hiking and horseback riding opportunities. While some consider bicycling a compatible use in some locations and under certain conditions, others feel strongly that bicyclers detract from the trail experiences that hikers and horseback riders are seeking. This conflict came to a head with a 2013 Decision Notice which would have allowed bicycle, hiker and equestrian use on a proposed 31 mile Continental Divide National Scenic Trail relocation project involving the Mesa, Uncompahgre and Gunnison National Forests, and Rio Grande National Forests. The Decision was appealed by entities opposing bicycle use on the trail. Unable to resolve the appeals, knowing that those who were in favor of allowing mountain bike use would appeal a decision that removed the use, the Forest Service withdrew the decision. The project has remained dormant since that time, but we intend to initiate discussions with key user groups this winter to see if there is a way to move forward with this project. We may allow bicycle use on the Continental Divide National Scenic Trail (16 U.S.C. 1246 c) using the appropriate trail design standards, if the use is consistent with the applicable Continental Divide National Scenic Trail unit plan and will not substantially interfere with the nature and purposes of the Continental Divide National Scenic Trail (FSM 2353.42). As of October 2015, this issue is still unresolved. However, this issue may be clarified when the Continental Divide National Scenic Trail unit plans are updated, allowing us to move forward in our management planning for this resource.

User-created Trails and Camp Sites

Another source of conflict we manage is user-created trails and camping sites in backcountry areas. Heavy recreation from hiking and backpacking to horseback riding, bicycling and off-road motor vehicle use has resulted in unauthorized user-created trails and campsites. These trails and areas are susceptible to

resource damage and contribute to conflict among user groups. Unauthorized trails generally take the easiest route from one point to another and typically fail to meet Forest Service trail construction standards. Grades are often steep and alignments do not meet design standards for safety and resource protection.

Park Creek and Cumbres / La Manga Pass

Our public engagement for Forest Plan Revision identified additional information on specific user conflicts on our Forest. In four different recreation-themed meetings, user groups identified the Park Creek corridor on the Divide Ranger District as a source of conflict between winter users, including snowmobiles and cross-country skiers accessing the Pass Creek yurt southeast of Wolf Creek Ski Area. (see meeting notes from Recreation Meeting 1- Monte Vista High School). The Cumbres/ La Manga Pass is another winter use area with conflicts between cross county skiers and snowmobilers.

Nature, Extent and Condition of Recreational Infrastructure and Access

In general, the existing inventoried transportation system of roads and trails “provides the access needed for resource management and recreation use on the majority of the Rio Grande National Forest” (USDA Forest Service 2010).

Table 5. Miles of Inventoried Roads and Trails

Route type	Miles, number
Inventoried national forest system roads	2,414 miles
Inventoried trails	1,366 miles, 61 trailheads
Roads managed for low-clearance (passenger cars)	777 miles (32 percent)
Roads managed for high clearance or four-wheel drive or roads restricted for motor vehicle access	1,643 miles (68 percent)

According to the Rio Grande National Forest 2004 Roads Analysis Process, our forest transportation system is adequate for existing and future management needs. The Roads Analysis Process further states that “*although some additional road construction or reconstruction may be needed to provide access for Forest Plan implementation, the system provides the access needed for resource management and recreation use on the majority of the Rio Grande National Forest*”. Additionally, visitors to the Rio Grande National Forest had a 90 percent satisfaction rating for overall recreational access and access sites (see the 2010 National Visitor Use Monitoring Report). However; the 2015 Transportation Analysis Project Report stated that of the 2,819 miles of existing national forest system roads (ML1 – ML5), approximately 1,532 miles, 54 percent, rated high benefit. These high benefit roads are important for Forest Service management and public use. However, 639 miles of those high benefit roads, 23 percent of total miles, are rated high risk due to resource concerns.

The overall spatial distribution and amount of access (roads, trails, parking areas, trailheads) across the forest is adequate. However, we have a maintenance backlog for many roads, trails and trailheads, indicating that we need to improve some recreational access.

Partnerships, Education and Volunteering

We offer a variety of recreation-related opportunities including conservation education, interpretation, stewardship, volunteering and partnership offerings and programs.

We have a long history of providing education and interpretation opportunities including educational talks at schools, on-forest natural and cultural resource learning opportunities, and outdoor displays and interpretive signage.

Volunteer stewardship organizations provide an important source to educate the public about natural resources. Volunteers for Outdoor Colorado, a non-profit group, helps to coordinate and sponsor volunteer opportunities on the Rio Grande National Forest. They host and staff the Colorado Outdoor Stewardship Coalition, a statewide collaboration of nonprofit stewardship organizations and federal, state and local land managers.

We coordinate and administer a variety of volunteer and partnership agreements that focus on trails and work with partners such as the Backcountry Horsemen, the Continental Divide National Scenic Trail Coalition and the Colorado Trail Foundation. Significant volunteer and partnership coordination occurs between the Saguache County Resource Advisory Committee, the Upper Rio Grande Resource Advisory Committee, the BLM, the National Park Service, and nearby national forests (Pike San Isabel, San Juan, Gunnison, Uncompahgre, Carson).

Outfitters and guides are also important partners, helping us clear and maintain trails, monitoring conditions, sponsoring educational clinics, reporting illegal activity, restoring campsites, and assisting with search and rescue efforts.

Other important partnerships and programs include:

- The National Wilderness Stewardship Alliance, working on the formation of a new wilderness volunteer organization in the San Luis Valley
- the America's Great Outdoor initiative
- the San Luis Valley Great Outdoors Coalition developing trail systems and identifying strategies and resources for funding and sustaining recreation improvements in the San Luis Valley
- Creepers Jeepers Gang partnership through Adopt-a-Trail - trail and road work for the Como Lake Road
- Southwest Conservation Corps projects that help protect, restore and sustain recreation opportunities on public lands
- Rocky Mountain Field Institute restoration work on Blanca Peak

Partnerships and volunteering are a key element in maintaining and expanding recreation opportunities on the forest through education, collaboration and physical labor. Because our recreation funding is limited (see Fiscal Capacity), pooling resources with volunteers and other groups and agencies allows us to offer recreation opportunities on the forest that might not be possible otherwise.

Conditions and Trends that Affect the Quality and Sustainability of Recreation Settings and Opportunities

There are conditions and trends that may affect the quality as well as the sustainability of recreation settings and opportunities on the Rio Grande National Forest; fiscal capacity, climate change, invasive species, and wildfire.

Fiscal Capacity

Existing levels of allocated funds are inadequate to meet National Quality Standards at all developed sites and trails on the Rio Grande National Forest. National Quality Standards are national criteria that

establish the level of quality in terms of health and cleanliness, resource setting, safety and security, responsiveness, and condition for National Forest System trails and facilities managed at a full-service level. Our funding is tight or nonexistent for construction and renovation of facilities, operations and maintenance, planning and monitoring, and staffing programs. Our lack of fiscal capacity can lead to closures and we may be unable to maintain trails and facilities to a level that ensures environmental integrity and sustainability. The shortfall in our recreation budget is a considerable constraint that negatively affects the quality and sustainability of our recreation settings and opportunities. Securing adequate funding to maintain, construct and/or reconstruct recreation facilities and trails to National Quality Standards is not likely to improve. However, we expect concession operations, partnerships, grants, and site prioritization with management options developed through the upcoming recreation facility analysis to buffer the shortfall in our recreation budget.

Climate Change

A Report for the Colorado Water Conservation Board, “*Climate Change in Colorado: A Synthesis to Support Water Resources Management and Adaptation*”, is a synthesis of climate change science important for Colorado’s water supply. The report summarizes Colorado-specific findings from peer-reviewed regional studies and presents information projecting warmer temperatures into the future. Climate models project Colorado will warm by 2.5 degrees Fahrenheit by 2025 and 4 degrees Fahrenheit by 2050, relative to a 1950-1999 baseline. Summers are projected to warm more than winters. Projections show a precipitous decline in lower elevation (below 8200 feet) snowpack across the West by the mid-21st century. Modest declines are projected (10–20 percent) for Colorado’s high-elevation (above 8200 feet) snowpack. This condition or trend has implications that may affect the sustainability of water and snow based recreation opportunities on the Rio Grande National Forest. The report states that

changes in reservoir storage affect lake and river recreation activities; changes in streamflow intensity and timing will continue to affect rafting directly and trout fishing indirectly and changes in the character and timing of snowpack and the ratio of snowfall to rainfall will continue to influence winter recreational activities and tourism.

Invasive Species

Executive Order 13112 defines an invasive species as:

- Non-native (or alien) to the ecosystem under consideration, and
- One whose introduction causes or is likely to cause economic or environmental harm or harm to human health.

Invasive species can be plants, animals, and other organisms (e.g., microbes). Human actions are the primary means of invasive species introductions. Of primary concern on the Rio Grande National Forest is the potential for aquatic nuisance species aquatic plants and animals that invade lakes, reservoirs, rivers and streams. Examples of aquatic nuisance species are the zebra mussel, quagga mussel, New Zealand mudsnail, Asian carp or Eurasian watermilfoil. Aquatic nuisance species can also include fish pathogens and diseases, such as viral hemorrhagic septicemia or whirling disease. The zebra and quagga mussels pose a significant threat to recreation opportunities on the Rio Grande National Forest. While these species have not yet been detected on the Rio Grande National Forest, they have been identified in waters on the Pueblo Reservoir (just 130 miles of the San Luis Valley). Aquatic nuisance species such as the quagga and zebra mussels can damage boats, gear and fishing equipment and impair all forms of water based recreation.

Invasive forest pests can greatly affect the sustainability of recreation settings and opportunities on the Rio Grande National Forest. The effects may be short or long term depending on location, severity,

frequency, or duration of the forest pest outbreak and infestation. Forest pests are exotic insects that can eliminate a species of tree or defoliate an entire landscape. The Rio Grande National Forest has a long history of forest pest infestations and recurring tree kill on large portions of the forest. Of particular concern is the spruce beetle which has killed ninety percent of the mature spruce on the Rio Grande National Forest since 2008.

A recreation study conducted by Walsh et al. (1989) found that the “*recreationist’s demand for trees is an essential part of the recreation setting and experience*”. Based on this study, the estimated aggregate recreation demand for developed camping, primitive camping, backpacking, hiking, fishing, and picnicking decreased under all of the following conditions:

- a 15 percent reduction in the number of trees onsite;
- a 15 percent reduction in the number of trees on adjacent land; or
- a 15 percent reduction in the number of trees on distant land.

A 15 percent reduction in the average size of the trees on the recreation site also reduced demand. Either a 15 percent increase in the percentage of visible beetle damage or a 15 percent increase in the amount of dead and down trees decreases recreation demand. If 15 percent of the recreation site is a contiguous treeless area as the result of beetle infestations, recreation demand for the site decreases. A one percent decrease in the number of large specimen trees on the recreation site also decreases recreation demand.

The Walsh study and other research clearly indicate that trees are an essential part of the recreation setting. Our on-going and wide-spread beetle-kill represents a potential threat to the sustainability of some recreation settings and opportunities on the forest, especially in primitive and semiprimitive recreation opportunity spectrum settings and wilderness where the natural appearing landscape and high quality trees are an essential part of the recreation experience.

Wildfire

Wildfire on the Rio Grande National Forest can result in structures and homes lost or damaged, high suppression costs, and damage to the natural resource base. Among negative effects to recreation, wildfires can close businesses, destroy the recreation infrastructure on which many rural communities rely and reduce the appeal of recreation and tourism in the area. Recreationists and local communities are often concerned about the effects of smoke on health and safety, as well. Depending on the severity and location of a wildfire, post-disaster recovery can come with a considerable price tag. Factors that affect forest and recreation budgets in the long-term include:

- replacing lost facilities and associated infra-structure,
- mitigating watershed and water quality, and
- restoring sensitive species and habitat.

Wildfire alters ecosystems and affects outdoor recreation opportunities, services, settings and experiences. The trend of larger-scale longer-burning fires has the potential to substantially affect the quality and sustainability of recreation settings and opportunities in both the short and long term. Little research on these impacts has been conducted.

Recreation’s Impact on Ecological Integrity and Species Diversity

Ecological integrity is diminished when the quality of habitat is degraded, the distribution and abundance of species is altered, or natural ecological processes are interrupted or degraded. Threats to ecological integrity and ecosystems from recreation, in general, include habitat damage, erosion, wildlife

disturbance, sources for the invasion and spread of exotic species, and human-caused wildfire. For a more detailed assessment of the potential impacts from recreation to ecological integrity and species diversity, see Assessments 1, 3 and 5.

Recreation Demand Analysis

Our recreation demand analysis requires we consider information related to:

1. The preferences of the public and demand for specific recreation opportunities or settings.
2. The availability of recreation opportunities on other lands within the broader landscape.
3. The stated goals in approved plans or other published reports of Tribes, States, or local governments, for recreational opportunities in our plan area.
4. The social, cultural, and economic conditions or trends such as changing population demographics, traditional uses, or income levels that influence the demand for various types of recreation activities.
5. The emerging new or unique recreational trends or interests that may affect future demand for recreation in our plan area.
6. The issues or dynamics involved in social, cultural, or economic conditions that may prevent or preclude minorities and other underrepresented groups from seeking, accessing, or participating in recreational activities typically demanded by others.

Visitor Preferences

National Visitor Use Monitoring Results

National visitor use monitoring data provide information on visitor activity participation (use) and visitor satisfaction, both of which are good indicators of the types of recreation opportunities and settings that forest recreation visitors prefer. We participated in the national visitor use monitoring project in 2000, 2005 and 2010. We conducted a fourth survey cycle over the summer of 2015 when this assessment was written, but data was not yet available. Recreation use on the Rio Grande National Forest for fiscal year 2010 was 874,000 site visits⁴ compared to 845,000 site visits in 2005. The Rio Grande National Forest receives low visitation in comparison to other national forests in Colorado, as shown in Figure 2.

⁴ The entry of one person onto a National Forest site or area to participate in recreation activities for an unspecified period of time

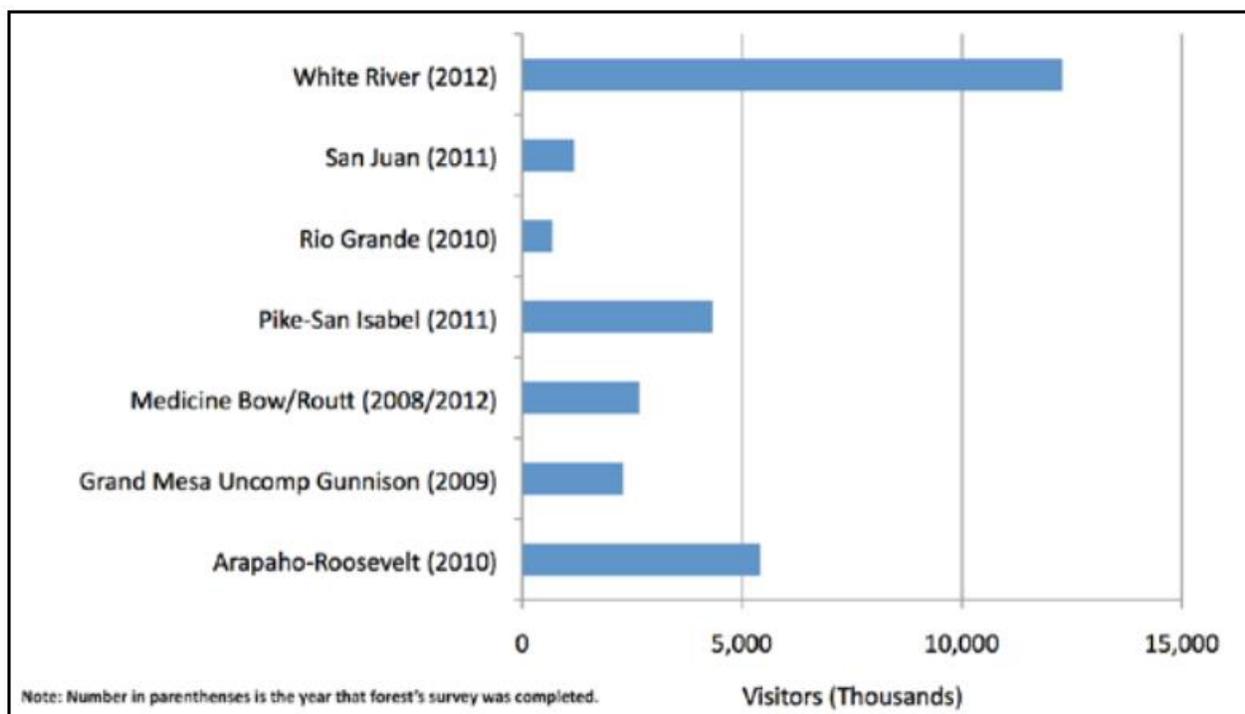


Figure 2. Estimated annual site visits to Colorado's national forests

The top ten most popular activities in terms of visitor participation on the Rio Grande National Forest stayed relatively constant between 2000 and 2010, though rankings have changed over time. They include:

- Viewing natural features
- Hiking/walking
- Viewing wildlife
- Relaxing
- Downhill skiing
- Driving for pleasure
- Fishing
- Motorized trail activity
- OHV use
- Developed camping

This list of top ten activities represents the types of activities that people most frequently participate in. It does not identify visitor's preference for a main or primary recreational activity. The five most frequently listed primary activities in 2010 are downhill skiing, viewing natural features, hiking/walking, fishing, and hunting (Table 13 national visitor use monitoring). Not quite half of the visits include viewing scenery as one of the activities for the visit, although for most of them, it is a secondary activity. The top five most highly used special facilities or areas are scenic byways, forest roads, designated ORV areas, motorized dual track trails and visitor centers or museums. In 2010 visitors highest preference was for

overnight use of developed sites (43 percent) followed by designated wilderness (22.2 percent), undeveloped areas (18.9 percent), and day use developed areas (3.8 percent).

Overall visitor satisfaction on the Rio Grande National Forest is very high. In 2010, over 80 percent of visitors gave an overall rating of very satisfied. Another 14 percent were somewhat satisfied. Less than two percent indicated any level of dissatisfaction.

Visitors rated their perception of how crowded the Rio Grande National Forest recreation sites or areas felt to them. Crowding was reported on a scale of 1 to 10 where 1 denotes hardly anyone was there, and a 10 indicates the area was perceived as overcrowded. For day use developed sites the average rating was 5.2, overnight developed sites (5.6), undeveloped areas (4.1) and designated wilderness (3.5). These lower numbers indicate there are generally no crowding issues on the Rio Grande National Forest.

National visitor use monitoring results for any single year or season may under- or over-represent some groups of visitors. Unusual weather patterns, major fire closures, or unanticipated pulses or lapses in visitation are not incorporated into the sampling framework. There are limitations to national visitor use monitoring as a tool to gather accurate recreation data on the Rio Grande National Forest, particularly in regard to the significant local Hispanic community. We know that the local Hispanic user groups are underrepresented in the national visitor use monitoring survey process due to general suspicion of surveys and survey locations. Further, we have found that the survey has no clearly defined Hispanic category so many respondents end up labeled as white.

Recreation Trends

National Trends

The national assessment report, *Outdoor Recreation Trends and Futures* (Cordell 2012), is one of several USDA Forest Service reports done for the 2010 Renewable Resources Planning Act Assessment. The objectives of the *Trends and Futures* assessment report include a review of past trends in outdoor recreation participation and also include providing projections of outdoor recreation participation out to the year 2060.

One overriding national trend is quite evident: the mix of outdoor activities chosen by Americans and the relative popularity of activities overall have been evolving over the last several decades. One general category of activity that has been showing growth in the first decade of the 21st century is nature-based recreation. Between 2000 and 2009, the number of people who participated in nature-based outdoor recreation grew by 7.1 percent and the number of activity days grew about 40 percent. Among types of nature-based recreation, motorized activities showed growth up to about 2005, but then ended up toward the end of the 2000-2009 decade at about the same level as in 2000. The trend in hunting, fishing, and backcountry activities remained relatively flat during this period. Various forms of skiing, including snowboarding, declined during this decade. The clear growth area was within the overall group of activities oriented toward viewing and photographing nature. Generally, outdoor recreation activities are projected to grow in number of participants out to 2060. Population growth is projected to be the primary driver of growth in number of adult participants.

There is a distinct trend and growth in the overall group of nature-based activities named “viewing and photographing nature.” Substantial growth occurred in both participants and annual days for five nature-based viewing and photography activities: viewing birds, other wildlife (besides birds), fish, wildflowers/trees and other vegetation, and natural scenery.

The top five activities in terms of growth of number of participants are developed skiing, other skiing, challenge activities, equestrian activities, and motorized water activities. The lowest rates of participant

growth are visiting primitive areas, motorized off-road activities, motorized snow activities, hunting, fishing, and floating water activities. At the same time, a number of activities are projected to decline in per-capita adult participation rates.

Human-powered snowsports are the fastest growing segment of winter recreation and include backcountry skiing, alpine touring, snowshoeing and cross-country skiing. The Outdoor Foundation's 2013 *Outdoor Recreation Participation Report* found that over the previous five years national participation in telemark skiing increased by 87 percent with a 13 percent increase in the past 3 years. The number of participants in undeveloped skiing is projected to increase by 55 to 106 percent by 2060 (Cordell 2012).

Declining or less popular recreation activities include snowmobiling, with participation decreasing over the past decade; and in 2011, fishing trips declined by about 10 percent to 840 million trips during the year. Fishing is often seen as a gateway activity that leads to other outdoor recreation, such as boating and hiking. Just over 5 percent of Americans participated in any type of hunting (rifle, shotgun, handgun and bow). The average hunter went on 34 outings annually for a total of 61.3 million outings.

Across the nation, horseback riding on trails continues to stay steady in the number of recreation days but fell slightly in number of participants over the past decade. Just over 16 million people (6.8 percent of the US) ride horses on trails. The average participant rides 16.3 days annually on a trail.

State Trends

The 2014 Statewide Comprehensive Outdoor Recreation Plan (SCORP) for Colorado identifies outdoor recreation trends and issues to identify demands for outdoor recreation.

Colorado offers a vast array of recreational opportunities including hiking, boating, fishing, camping, horseback riding and motorized recreation. About 66 percent of all Colorado residents recreate outdoors at least one day a week, and 60 percent of Coloradans are likely to increase their participation in outdoor recreation over the next five years. Walking, hiking, backpacking and picnicking make up the three most popular outdoor recreation activities, with fishing ranking a close fourth. Most of the outdoor recreation in the state (75 percent) takes place in the North Central, Metro, and in the Northwest regions of the state. Residents from the Southwest Region are the least likely to travel to other regions for recreation.

Similar to national trends, hiking, jogging, camping and wildlife viewing are also popular activities in Colorado. Tent camping is the most popular overnight accommodation. Thirty-six percent of all Coloradans fish. Almost 16 percent of residents participate in hunting; 12 percent of Coloradans hunt for big game.

Considering all the activities identified in the Statewide Comprehensive Outdoor Recreation Plan, 80 percent of trips taken for outdoor recreation are day outings. However, one notable trend is the increasing number of Colorado overnight visitors who originate from within the state. About 40 percent of overnight visitors originated from instate in 2011, up from just over 20 percent in 1992. Tent camping is most preferred (43 percent), followed by hotel/motel stays (32 percent), then RV camping (18 percent).

In terms of services, 50 percent of residents prefer basic services, such as toilets, shelters, running water and picnic areas in outdoor recreational areas as opposed to more developed areas (with concessions and guided tours) and areas that do not offer any services. There is a trend towards fewer services and away from developed services from 2007 to 2013.

Recreation Opportunities on the Broader Landscape

The availability of recreation opportunities on other lands within the Rio Grande National Forest broader landscape is extensive. The Rio Grande National Forest is bordered by several other national forests (Pike San Isabel, San Juan, Gunnison, Uncompahgre and Carson), all of which offer a wide variety and abundance of recreation settings and opportunities. These national forests also contain an abundance of special interest areas and designated wilderness.

There are also recreation opportunities within the broader landscape on neighboring federal lands, including the Bureau of Land Management, U.S. Fish and Wildlife Service and National Park Service. These lands offer a variety of nonmotorized and motorized recreation opportunities as well as various settings for dispersed and developed recreation. The BLM's San Luis Valley's Field Office has myriad recreation opportunities ranging from camping and hiking to bird watching and rock climbing. There is a growing network of multi-use motorized and nonmotorized trails at the BLM's Limekiln Trail Area. The BLM's Penitente Canyon also offers many popular climbing routes, as well as miles of single track trails and multiple riding loops. The BLM's Blanca Wetlands complex also offers hiking and birding.

The Great Sand Dunes National Park and Preserve contains the tallest sand dunes in North America. Recreation opportunities are primarily for hiking and sightseeing, and lodging is available by on-site camping or through the Nature Conservancy's neighboring Zapata Ranch. The San Luis Valley Refuge Complex includes the Alamosa, Monte Vista and Baca National Wildlife Refuges and attracts significant visitation each year, particularly tied to the Sandhill crane migration in March and October.

Colorado Parks and Wildlife has a significant recreation presence both on and off the Rio Grande National Forest. Popular areas include San Luis Lake State Park, Dome Lakes, Russell Lakes, Shriver-Wright, Higel, Hot Creek, La Jara and Coller State Wildlife Areas.

Other popular areas within the broader landscape for recreation opportunities include:

- The small town of Bonanza - popular destination for ATV trail riding
- Orient Mine - bat flight viewing and hiking
- Sangre de Cristo National Heritage Area – cultural interpretation and learning opportunities
- Smith Reservoir – fishing, swimming, multiple water sports
- Mountain Home Reservoir – fishing, swimming, multiple water sports

State and Local Planning

The 2014 Colorado Statewide Comprehensive Outdoor Recreation Plan identifies statewide outdoor recreation priority areas to focus attention and energy over the next five years. These priority areas are:

- Outdoor Education
- Funding and Financial Sustainability
- Integration of Outdoor Recreation Interests
- Healthy Lifestyles and Communities
- Stewardship

The San Luis Valley Great Outdoors is a regional, cooperative initiative to create a long-term plan for increasing physical activity and access to trails and recreation in the San Luis Valley. This initiative, spearheaded by the San Luis Valley Great Outdoors Coalition, is a partnership among counties,

municipalities, interested organizations and federal, state and local land management agencies and includes the Rio Grande National Forest. Efforts to holistically approach trail and recreation development in the San Luis Valley began in 1996 with the development of the Great San Luis Valley Trails and Recreation Master Plan. Building on the 1996 Master Plan and inspired by the America's Great Outdoors initiative launched by President Obama in 2010, the San Luis Valley Great Outdoors Coalition brings partners from all reaches of the San Luis Valley together in developing a framework for improving, sustaining and promoting outdoor recreation opportunities.

The 2014 *San Luis Valley Trails and Recreation Plan* lays the foundation for improving the San Luis Valley's outdoor recreation opportunities and for enhancing promotions of the region's varied recreational resources over the course of the next ten years. With this master plan, the San Luis Valley Great Outdoors Coalition provides the Valley's counties and communities a set of tools and strategies for enhancing the quality of life for residents through outdoor recreation while also attracting more tourism. This master plan is designed to serve as a road map that the San Luis Valley Great Outdoors Coalition, its partners and San Luis Valley residents can use to increase awareness of the region's recreation resources and increase exploration and enjoyment of the San Luis Valley's outdoors.

Social, Cultural and Economic Conditions or Trends

Population trends

The San Luis Valley has seen a slight increase in population since the 1996 Forest Plan, from 40,207 in 1990 to 46,780 in 2013. Within a land mass of over 8,000 square miles, the region averages only 5.6 people per square mile. Most of this population is concentrated near Alamosa on the Valley floor (see [San Luis Valley Statistical Profile](#), San Luis Valley Council of Governments, April 2015). The State of Colorado, however, has seen explosive growth since 1996 and that regional population growth will likely drive more visitors to the Rio Grande National forest over the next twenty years. Colorado's population is forecast to grow 1.5 percent per year over the next five years increasing to over 7.7 million by 2040, with the greatest growth projected in the metropolitan Front Range counties, western slope counties such as Eagle, Garfield and Mesa counties, and other mountain counties such as Summit and Lake Counties. Extension of the urbanized landscape is likely to occur in Front Range communities, and high growth is expected near other existing population centers in Colorado, such as Glenwood Springs, Pueblo and Grand Junction. The human-dominated landscape in these areas should increase while areas available for outdoor recreation should decrease, pushing visitors to more distant recreation opportunities like the Rio Grande. The Hispanic, Black, Asian, and other minority share of the Colorado's total population are predicted to increase from close to 30 percent in 2010 to over 40 percent by the year 2040. Also by 2040, all counties within the Rio Grande National Forest planning area should have population growth ranging between one percent and 3 percent or greater growth. Increased population growth should increase demand for all forms of outdoor recreation.

While Colorado is expected to see an increase in the population among all age cohorts, there are two notable demographic trends that are important to recognize. First, Colorado is experiencing growth in members of the population over age 65. By 2030, Colorado's population of citizens age 65 and older is predicted to be 150 percent larger than it was in 2010, increasing from 540,000 to 1,350,000 just as a result of aging. While many members of the baby boomer generation are choosing to work past age 65, it is anticipated that approximately one million workers will age out of the workforce over the next 20 years. This segment displays a strong interest in an active lifestyle and travel during retirement, which may lead to an increased interest in trails, hunting, fishing, bird and wildlife watching and other activities among residents and nonresident visitors.

While this trend stands true for Colorado as a whole, the San Luis Valley is not experiencing this, at least not in year-round relocation of individuals over 65. Although summer visitation through the region may reflect the state-wide trend, long, cold winters and the high elevation of the Valley floor makes the region an unlikely retirement community. Crestone, South Fork and potentially Del Norte are communities bordering the Rio Grande National Forest which may attract a year-round retirement population. Generally, however, the San Luis Valley is like much of rural America, where the majority of the population is either very young or very old, with a significant out-migration of young adults to the bigger cities during their working years.

A second major demographic trend across the U.S. and Colorado is the growth of the Hispanic population. At the national level, the number of Hispanics increased 43 percent from 35.3 million in 2000 (13 percent of total population) to 50.5 million in 2010 (16.3 percent of total population). In Colorado, where Hispanics are the state's most populous minority group, the Hispanic population increased by 41 percent from 735,000 to more than 1 million between 2000 and 2010. The San Luis Valley includes a number of communities with significant Hispanic immigrant populations tied to the agricultural workforce, primarily in Rio Grande and Saguache Counties.

While notable, the projected increase in the Hispanic population will build on an already significant Hispanic population in the San Luis Valley which dates to the mid-19th century and Mexican-Colonial settlement. Unlike other forests in Region 2, parts of the Rio Grande National Forest have been used by Hispanic families since before Colorado was a state and before the forest was withdrawn into the federal domain (see Cultural and Historical Assessment 11). California-based studies on the culture-specific patterns and expectations of Hispanic outdoor recreation participants do not fully represent the ancestral Hispano users on the Rio Grande National Forest because this unique group is rural rather than urban, is not mono-lingual and is not tied to an immigrant experience.

California studies do indicate a number of key findings. For one, Hispanics frequently report having one day off from work per week, resulting in primarily day-use visits to outdoor recreation sites. Hispanics also place strong emphasis on spending time with their families (both nuclear and extended), and consider leisure time an important contribution to family bonding. Studies indicate the average group size of Hispanics at outdoor recreation sites is 8 to 15 people, with some groups numbering more than 100 people. Another interesting characteristic of Hispanics at outdoor recreation sites is their approach to picnicking, which can be a 6- to 10-hour long activity during which many meals are cooked from scratch. The length of picnicking may result in relatively low turnover at picnic sites.

Another overall cultural trend is that different segments of society choose different types and levels of participation in different mixes of outdoor activities. The 2010 national survey assessment report (USDA Forest Service 2010), found that viewing and photographing nature was higher among people with higher education, higher incomes, non-Hispanic Whites, people ages 35 to 54, those having some college to post graduate education, and those earning more than \$50,000 per year. For backcountry activities, participation was highest among males, Whites, Native Americans, people under 55 years, people well-educated with higher incomes, and rural residents. Participation in hunting, fishing and motorized outdoor activities was higher among rural, non-Hispanic White males with middle-to-high incomes. Nonmotorized boating activities and skiing/snowboarding participation tended to be greater for younger, non-Hispanic White urban males with higher incomes and education levels.

Economic Trends

Economic conditions can heavily influence growth rates and participation in recreational activities. The San Luis Valley is one of the poorest regions in Colorado (see Socio-economic Assessment 6). Residents travel long distances to employment hubs like Alamosa and spend a disproportionate part of their income

on food and fuel, including gasoline for their vehicles and propane to heat their homes. Gasoline prices have an almost direct effect on forest visitation, unless that visit is tied to a subsistence activity like gathering firewood or hunting or fishing. Some would argue, therefore, that those same subsistence activities are recreational uses.

Based on findings from the 2010 national assessment report on recreation and the environment social, cultural and economic trends indicate that outdoor recreation participation will continue to grow and change in the future. Changing demographics, lifestyles, reliance on digital technologies, economic fluctuations (e.g., from rapid growth in the 1990s to recession in the last half of the 2000s), changing landscape and natural land base, globalization, and population growth are the primary drivers for changes in outdoor recreation.

Supply factors such as proximity and availability of recreation resources are important in determining whether and to what degree individuals recreate. Previous research has shown that the amount of outdoor recreation settings or opportunities available to an individual will affect the individual's choice and intensity of participation in given activities. For example, whether and how often an individual partakes in winter activities such as skiing and snowmobiling can in part be explained by the proximity and amount of snow opportunities (Bowker 1999).

Emerging or Unique Recreation

Coloradans use advances in technology and transportation to expand their outdoor experiences, allowing them to go further and faster than ever before. The expanding technology related to over snow vehicles is advancing the ability and extending the uses of snowmobiles resulting in crossover machines that go faster, are more comfortable and capable of reaching farther and farther into off-trail backcountry areas where before they couldn't go. Hybrid snowmobile/backcountry skiing adventures are becoming more popular. The use of fat tire bikes is a popular new winter recreation activity. Traditional winter resort areas are increasing summer tourism by adding summer resort activities such as mountain bike trails. In addition, the internet has increased access to information about recreation opportunities and has allowed people to virtually visit public lands. Geo-caching is one example of a high-tech adventure game that is increasing in popularity and merges the internet with outdoor recreation.

Recreation Participation Issues Related to Underserved Groups

The national visitor use monitoring is used to help recreation managers understand the profile of visitors and those who may be disadvantaged or underserved. The national visitor use monitoring provides descriptions of forest recreational visits based upon the characteristics of interviewed visitors (respondents) and expanded to the national forest visitor population. Basic demographic information about visitors is used to identify underserved populations based on gender, race/ethnicity, and age. Demographic results from the national visitor use monitoring (2010) show that the majority of visits on the Rio Grande National Forest come from white males (67 percent) and just less than one-third of visits are made by females (32 percent). White Caucasians account for 96 percent of visits while Native Americans are the most common racial minority (3.6 percent). Also according to national visitor use monitoring, Hispanics account for almost 12 percent of visits. Just over 14 percent of visits are made by children under the age of 16 and people aged 60 and over account for a little more than 20 percent of all visits.

During the Forest Plan Revision public engagement process, it became clear that national visitor use monitoring as a planning tool for the Rio Grande National Forest has significant limitations because we know that many local forest users do not participate in these surveys (see Conejos County Clean Water meeting notes). While the survey data shows Hispanics accounting for 12 percent of visits, the overall San Luis Valley population is 46.7 percent Hispanic and forest boundary counties of Alamosa, Saguache, Rio

Grande and Conejos are all over 40 percent Hispanic (see [San Luis Valley Statistical Profile](#), San Luis Valley Council of Governments, April 2015).

The travel distances for visits to the Rio Grande National Forest are either quite short or quite long. About 24 percent of visits are made by people living within 50 miles of the forest; however, over 37 percent travel more than 500 miles. Very few visitors come from distances between 50 and 100 miles. Based on the survey data, fewer people living in local communities (within 50 miles of the forest) visit the forest than those living farther away. This data is contrary to comments we received at meetings during our Forest Plan Revision Public Engagement Process. The counties containing lands covered by the Rio Grande National Forest generally have high unemployment and low per capita income; which are indicators that these populations recreate close to home. We believe that local use is not accurately captured in our data, skewing the results. We feel this may be due to local user's general mistrust of surveys and data collection sites being associated with fee-collection facilities that are not used by locals.

Based on the national visitor use monitoring data, underserved groups on the Rio Grande National Forest include females, minorities (Hispanics, Native Americans), youth under the age of 16, seniors (people aged 60 and over) and low income families. Any research to identify issues or dynamics related to the specific social, cultural or economic conditions that may be constraining, preventing or precluding how particular disadvantaged or underserved groups seek, access, or participate in recreational activities on the Rio Grande National Forest is scarce to non-existent. We have taken information and findings from "*Outdoor Recreation Trends and Futures: A Technical Document Supporting the Forest Service 2010 RPA Assessment*" (Cordell 2012) to identify constraints to participation by the underserved groups that recreate on the Rio Grande National Forest.

Females

Among females ages 16 to 20, indoor fitness overtakes outdoor recreation as the preferred physical activity, and it remains the most popular form of activity throughout life. Fear of attack and harassment also represent very real psychological constraints to women's pursuit of outdoor recreation. Women are likely to feel apprehensive about camping or hiking alone in remote areas because of fear of attack, rape or other sexual harassment.

Minorities

In comparing the results of Blacks, Asian/Pacific Islanders, and Hispanics considerable overlap appears to exist in their perceived constraints to recreation participation. Minority groups felt constrained from participating in their favorite recreation activities for the reasons of *not enough time because of work, safety problems, can't understand the language, and feel afraid in forests*. A lack of culturally appropriate and bilingual messaging is often the most significant barrier to increased participation by some minority groups.

This generality fails to capture the long tradition among the ancestral Hispano community in the San Luis Valley of using the Rio Grande National Forest at a subsistence level where safety and language barriers are not an issue.

Youth

Barriers that prevent youth from participating in outdoor recreation include both personal interests as well as logistical barriers. Youth participation and interest in sports is higher than in outdoor recreation activities. This higher interest in organized sports influences and constrains the amount of time available for outdoor recreation activities on forests and other natural areas. Technology is considered a barrier in that youth are often more interested in playing video games and watching TV than playing outdoors.

There is often a general lack of knowledge about the types and location of outdoor recreation opportunities available to youth. Not knowing what to expect coupled with perceptions of safety and costs often prevent parents from letting their children become more involved in outdoor recreation.

A lack of community and forest based outdoor programs also impacts the types of activities and the frequency that youth participate in outdoor recreation. Teaching children and teens about natural resources and outdoor recreation resources in their own community and local national forest is a jumping off point to increased participation. Trips that take kids on life changing adventures to more distant parks, open spaces and outdoor recreation areas are most often made possible through sponsored programs. Such programs create a sense of family, a safe and fun environment, and opportunities for partnerships.

Seniors

For seniors, inaccessible infrastructure and a lack of opportunities that enable senior adults to continue to engage in outdoor recreation constrains recreation participation.

Low Income Families

Generally, national studies have found that lower income households feel more constrained for the following reasons, *don't have enough money, health reasons, inadequate transport, no one to do activities with, feel afraid in forests, pollution problems, outdoor pests, feel unwelcome or uncomfortable, can't understand the language, physically limiting condition, and household member has a disability*. These results indicate that people with lower incomes feel more constrained than all other groups. The least mentioned constraints are poorly maintained areas and crowded activity areas. In general, the setting has little influence on perceived constraints (Cordell 2012).

Communities of the Rio Grande National Forest

These national findings do not accurately reflect the communities surrounding the Rio Grande National Forest, which are some of the poorest communities in Colorado. The median household income in the San Luis Valley is \$35,634 compared to the state average of \$58,433 (see [San Luis Valley Statistical Profile](#), San Luis Valley Council of Governments, April 2015). While many local users of the Rio Grande National Forest fall within the low-income category, they do not fit the profile of national studies because they have grown up on and know the forest intimately, and combine their recreational activities like fishing and picnicking with subsistence activities like fire-wood gathering.

We need to find better and more accurate tools to identify and distinguish between the different types of Hispanic users on our forest, where we have first generation urban immigrants and multi-generational families whose presence pre-dates the forest.

Large-scale Issues

Further research and study of race/ethnicity and the dynamics and issues affecting recreation by underserved groups is needed. The primary gaps or areas of concern for future research are (1) a more thorough investigation of the role of language as a cultural marker and determinant, (2) the role that value systems play in race/ethnicity and recreation participation, and (3) a more critical examination of White hegemony (i.e., participation domination) and racial discourse as it relates to the recreation participation context (Chavez et al. 2008).

Regional, National, or International Significance

National visitor use monitoring visitor use data indicates very little international visitation to the Rio Grande National Forest. Overall, national visitor use monitoring data for 2010 indicated that recreation

use on the forest was low with only 874,000 site visits⁵. When compared to other national forests in the region (the White River, San Juan, Pike San Isabel, Medicine Bow/Routt, Grand Mesa Uncompahgre Gunnison and the Arapaho Roosevelt), the Rio Grande National Forest had the lowest visitation of all as shown in Figure 2 (see the Recreation Demand Analysis section of this report). Likewise, visitor use data showed little use on a national scale as fewer than 16 percent of the visits to the Rio Grande National Forest originated outside the state of Colorado. Overwhelmingly, visitation to the Forest came from within the state of Colorado (over 84 percent).

Potential to Offer New Sustainable Recreation Opportunities

The 2012 Planning Rule emphasizes sustainable recreation as an important multiple use and as a contributor to social and economic sustainability. Direction for sustainable recreation⁶ emphasizes that planning should identify, evaluate, and provide a set of recreational settings, opportunities and access for a range of uses, recognizing the need for that set to be ecologically, economically, and socially sustainable over time. To be sustainable, the set of recreational settings, opportunities and access must be compatible with other plan components including those components that provide for ecological sustainability, be designed to address potential user conflicts among recreationists, and be within the fiscal capability of the planning unit (FSH 1909.12 Chapter 20 at 23.22b).

Perhaps the biggest challenge for existing and new sustainable recreation opportunities on the Rio Grande National Forest is fiscal capability. The current levels of appropriated funding are inadequate to meet National Quality Standards for many of our existing developed sites and trails on the Rio Grande National Forest. Our levels of funding for recreation are not likely to improve. However, we have the potential to increase fiscal capacity by working more with partners and volunteers, and by increasing our collaboration with state and local agency planning efforts to expand sustainable recreation opportunities, which requires long-term commitment on our part to community engagement and collaboration. Aligning our programs and funding with efforts such as the Colorado Statewide Comprehensive Outdoor Recreation Plan and the San Luis Valley Great Outdoors Master Plan could be beneficial. Without adequate funding, it will be increasingly important for the Rio Grande National Forest to connect and rely on multiple partners and volunteers.

It is important to realize that we cannot meet all demand for recreation placed on us by a growing population due not only to fiscal capability, but also because of potential impacts of recreational use on other forest resources such as ecological integrity and species diversity. However, by using the recreation opportunity spectrum framework, we can manage recreation settings to provide a set of diverse opportunities that range from highly developed, to less developed and more remote settings.

As we develop the revised Forest Plan, we will use the recreation opportunity spectrum to consider the sustainability of recreation settings, opportunities and access in an integrated and comprehensive fashion. We will identify a set of recreational settings, opportunities and access that is compatible with other plan components, especially those that provide for ecological sustainability. We will use long term monitoring to ensure the forest has the ecological capability to sustain recreation opportunities and meet new demand.

Recreation's Contribution to Social, Economic and Ecological Sustainability

Americans make over 170 million visits to national forests and grasslands each year. The Rio Grande National Forest had 874,000 visits in 2010. These visits provide an important contribution to the

⁵ The entry of one person onto a National Forest site or area to participate in recreation activities for an unspecified period of time

⁶ Sustainable recreation is defined as “*the set of recreation settings and opportunities on the National Forest System that is ecologically, economically, and socially sustainable for present and future generations*”. (36 CFR 219.19)

economic vitality of rural communities as spending by recreation visitors in areas surrounding national forests amounts to nearly 11 billion dollars annually. Visitors who live more than 50 miles from the forest account for the bulk of these contributions; they spend about \$5 billion annually. As visitor spending ripples through the US economy, it contributes a little more than \$13 billion to the gross domestic product, and sustains about 190,000 full and part time jobs. On the Rio Grande National Forest, almost a quarter of the visits are made by local area residents on a day trip away from home. A bit more than 30 percent of the visits are from non-local residents who are in the area for multiple days, but are spending the night in lodging facilities off of National Forest System lands. The relatively high proportion of non-local visits, and especially non-local overnight visits, is a major reason that per party spending amounts are somewhat higher than the national average. For the Rio Grande National Forest, about half of the visiting parties spend over \$200 per party per visit (National Visitor Use Monitoring 2010).

Recreation contributes to the Rio Grande National Forests sense of place and national identity which is enhanced by the many special places, historic sites and breathtaking landscapes that represent the abundant natural and cultural resources of the area. Especially important are the abundant backcountry semiprimitive and wilderness settings on the Rio Grande National Forest. Semiprimitive settings outside of wilderness are relatively rare on many national forests so these settings are especially important

Our recreation planning and management on the Forest contributes to ecologic sustainability through our design of recreation trails and facilities. Our recreation planning includes how to best design, manage, and interpret settings to foster public appreciation, understanding, respect, behaviors, and partnerships that contribute to the stewardship of the forest. Our recreation managers work with other resource managers, researchers, botanists, pathologists, ecologists, and other scientists to help develop policies and procedures that help sustain and protect the environment.

Recreation contributes to human and community benefits that accrue from recreation participation such as improved physical and mental health, family cohesion, social integration, civic engagement, child development, economic stimulation, work productivity, and promotion of environmental resource stewardship and conservation ethic.

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Appendix A - ROS Definitions and Characteristics

The recreation opportunity spectrum is a systems oriented approach that recognizes each distinct set of recreation settings and opportunities provided on a given National Forest is part of a larger system of recreation settings and opportunities that contributes to the diverse needs and demands of all National Forest visitors as a whole. Recreation setting is defined as:

The social, managerial, and physical attributes of a place that, when combined, provide a distinct set of recreation opportunities. The Forest Service uses the recreation opportunity spectrum to define recreation settings and categorize them into six distinct classes: primitive, semiprimitive-nonmotorized, semiprimitive motorized, roaded natural, rural, and urban. (36 CFR 219.19)

Not everyone visiting forested landscapes prefer similar settings, are looking for comparable experiential outcomes, or desire the same activities and equivalent benefits. Some people desire an emphasis on undeveloped, remote recreation settings while others desire more development and less isolation or remoteness. Consequently, recreation opportunity spectrum places an emphasis on providing visitors the opportunity to participate in a specific recreation activity in a particular recreation setting to enjoy their choice of desired recreation experiences and other benefits that accrue. A recreation opportunity setting includes features provided by nature or deliberately created by management practices and activities.

The recreation opportunity spectrum defines six recreation opportunity classes that provide different settings and opportunities for recreational visitors; primitive, semiprimitive-nonmotorized, semiprimitive motorized, roaded natural, rural, and urban. Where necessary, sub-classes and seasonal variations are established to reflect local and Regional conditions as long as they fit within the six major classes. By providing and maintaining a spectrum of recreational settings, a broad segment of the public can find quality recreational opportunities for a variety of motorized and nonmotorized recreational activities. Changes in a national forest's mix of recreation opportunity spectrum classes affect the recreational opportunities offered (USDA Forest Service, ROS Book 1986). Figure 1. Rio Grande National Forest recreation opportunity spectrum map on page 7 displays each of the six distinct recreation opportunity spectrum classes.

The recreation opportunity spectrum classes have different social, managerial and physical attributes. The physical, social and managerial attributes of settings are used to determine the recreation opportunity spectrum class for an area and include: remoteness (distance from the sights and sounds of humans), size (vastness of a relatively undeveloped area) naturalness (visual evidence of human-induced environmental modification), visitor interaction (amount of interaction or contact between individual visitors or groups), visitor management (degree and noticeability by which visitors' actions are regulated, regimented or controlled) and site management (the amount or degree of on-site modification (vegetation manipulation, landscaping, etc.) and the level or scale of development of constructed features (access sites, parking areas, campgrounds, trails, administrative facilities, buildings and other structures).

For over-all forest planning purposes, recreation opportunity spectrum is primarily used to:

- Describe and identify the current existing inventory and spatial distribution of recreation opportunity spectrum settings (supply)
- Describe and identify the desired recreation opportunity spectrum settings toward which management of a new or revised Forest Plan is to be directed

A recreation opportunity spectrum inventory is conducted to determine the current supply and existing condition of recreation settings on a given landscape or "place", such as a National Forest. Current,

existing recreation opportunity spectrum settings are the result of how and to what degree the social, managerial, and physical attributes of a “place” have been managed. The 2003 National Recreation Opportunity Spectrum Inventory Protocol provides the most current direction and process for conducting a recreation opportunity spectrum inventory.

Recreation opportunity spectrum desired conditions are typically assigned or allocated to the management or geographic areas established in a forest plan. The goal is to provide a set of recreation settings and opportunities on National Forest System lands that is ecologically, economically, and socially sustainable for present and future generations. A recreation opportunity spectrum desired condition is a description of the specific recreation opportunity spectrum settings toward which management is directed and may or may not be the same as the inventoried recreation opportunity spectrum. Describing desired conditions and allocating resources is a primary focus of a plan. Once recreation opportunity spectrum desired conditions and allocations are made, they should be monitored by conducting a periodic recreation opportunity spectrum inventory. The recreation opportunity spectrum inventory is then used to help determine if forest plan management direction is adequate for sustaining the desired recreation settings (recreation opportunity spectrum) set forth in the forest plan.

To assist with understanding how to use and apply the recreation opportunity spectrum, the Forest Service developed the Recreation Opportunity Spectrum Users Guide (USDA, Forest Service: 1982. 37 p.) to serve as the source handbook for integrating recreation opportunity spectrum into forest planning under 1982 planning regulations. Until the 1982 Users Guide is updated, replaced or otherwise revised, it also serves as the source handbook for using recreation opportunity spectrum in forest planning under the current 2012 planning regulations.

Primitive

Setting

Essentially unmodified natural or natural appearing environment of fairly large size (5,000 acres). Sights and sounds of humans are rare to minimal. Very low interaction between visitors. Essentially free from managerial restrictions and controls. No site modification and limited to no constructed features; only rudimentary facilities and minimally developed trails essential for resource protection are appropriate. Access and travel is nonmotorized on trails or cross country on a year-long basis (unless specifically allowed by special provision or law).

Activity

Nonmotorized only. Nonmotorized activities may occur on or off trail throughout the primitive area.

Experience

Extremely high opportunity to feel close to nature. Extremely high opportunity for experiencing tranquility and solitude. Extremely high opportunity for independence, self-reliance, challenge and risk. No opportunities for comfort and convenience.

Semiprimitive-nonmotorized

Setting

Predominantly unmodified natural-appearing environment of moderate-to-large size (2,500 acres). Sights and sounds of humans are minimal. Low interaction between visitors. Minimum managerial restrictions and controls. Facilities/trails provided for resource protection or the safety and enjoyment of visitors are appropriate. Limited site modification for facilities; minimally to moderately developed trails; rustic or

rudimentary on-site developments designed primarily for protection of the setting rather than visitor comfort or convenience. Access and travel emphasize nonmotorized use on trails or cross country.

Activity

Nonmotorized only. Nonmotorized activities may occur on or off trail throughout the semiprimitive-nonmotorized area.

Experience

High, but not extremely high, opportunity to feel close to nature. High, but not extremely high, opportunity for experiencing tranquility, solitude, independence, self-reliance, challenge and risk. Limited to no opportunities for comfort and convenience.

Semiprimitive Motorized

Setting

Predominantly unmodified natural-appearing environment of moderate-to-large size (2,500). Sights and sounds of humans are moderate (due to motorized use). Low interaction between visitors. Minimum to moderate managerial restrictions and controls. Facilities/trails provided for resource protection or the safety and enjoyment of visitors are appropriate. Limited site modification for facilities; minimally to moderately developed trails; rustic or rudimentary on-site developments designed primarily for protection of the setting rather than visitor comfort or convenience. Access and travel emphasize off-highway motorized use on designated trails, routes or areas.

Activity

Motorized and nonmotorized, with an emphasis on motorized. Within the semiprimitive motorized area, use of off-highway vehicles (any motor vehicle designed for or capable of cross-country travel on or immediately over land, water, sand, snow, ice, marsh, swampland, or other natural terrain (36 CFR 212.1), on designated routes, areas and trails designed and managed for off-highway use by vehicle types such as ATVs and snowmobiles is emphasized. Trails and roads open for use by 4WD high clearance vehicles, off-highway motorcycles and motor vehicles 50 inches or less in width are typical and appropriate. Passenger car traffic on roads and trails within the area is not typical.

Experience

High, but not extremely high, opportunity to feel close to nature. Moderate opportunity for experiencing tranquility and solitude due to emphasis on motorized activities. High, but not extremely high, opportunity for experiencing independence, self-reliance, challenge and risk. Limited opportunities for comfort and convenience.

Roaded Natural

Setting

Essentially modified natural-appearing environment of no size limit with environmental modification evident, but harmonizing with the natural appearing environment. Sights and sounds of humans are generally moderate. Interaction between visitors may be low to moderate. Managerial restrictions and controls may be evident. Facilities and trails for resource protection and intensified multiple uses, comfort, convenience and safety are appropriate. Moderate site modification for facilities; trails may be minimally to highly developed; contemporary or rustic on-site developments that harmonize with and protect the natural setting and provide some comfort and convenience for the visitor. Both motorized and

nonmotorized use often occurs on the same trails, routes or areas. Access and travel for motorized use is on designated trails, routes or areas. Access and travel for nonmotorized use on trails or cross country.

Activity

Nonmotorized and motorized. Roads and trails may be present for both motorized and nonmotorized use. Off-highway motor vehicle use of all vehicle types and classes and use by standard passenger car (typically 2WD) may be included.

Experience

High to moderate opportunity to feel close to nature. Moderate to low opportunity for experiencing tranquility and solitude. About equal opportunity to experience independence, self-reliance, challenge and risk. Moderate to high opportunities for comfort and convenience at many managed sites.

Rural

Setting

Substantially modified natural-appearing environment of no size limit with environmental modification evident yet attractive (i.e., pastoral farmlands intermixed with woodland environments). Sights and sounds of humans are readily evident. Interaction between visitors is moderate to high. Managerial restrictions and controls are obvious and highly prevalent. Facilities and trails for resource protection and intensified multiple recreational uses, comfort, convenience or safety are appropriate. Moderate to heavy site modification for facilities; trails are generally moderate to highly developed; some facilities designed primarily for visitor comfort and convenience; some (but not all) facilities may be complex and refined. Facilities and trails are often designed for intensified motorized or nonmotorized uses with parking available by a large number of people. Access and travel by conventional motorized use is common on primary roads and routes.

Activity

Nonmotorized and motorized. Motor vehicle use on roads is typically maintained for travel by a prudent driver in a standard passenger car. Trails may be present for both motorized and nonmotorized use.

Experience

High to moderate opportunity to feel close to nature. Low opportunity for experiencing tranquility and solitude; low or moderate opportunity to experience independence, self-reliance, challenge and risk, unless at a developed site such as downhill ski areas where challenge and risk may be high. Moderate to high opportunities for comfort and convenience at managed sites.

Urban

Setting

Substantially urbanized environment of no size limit with environmental modification evident yet with natural-appearing elements in the background. On National Forests, urban settings are typically confined to a single large scale development or managed site complex such as a modern ski lodge or highly developed administrative site and visitor center. Urbanized sites are extensively modified and may contain on-site exotic and manicured vegetation. Extremely high levels of the sights and sounds of human activity prevail. Interaction between large numbers of visitor's is high to extremely high. Highly intensified parking and access is available with various on-site paved trails for hiking and walking available. Facilities are mostly designed for comfort, convenience and safety of visitors. Facility design may be

highly complex and refined but in harmony or complimentary to the site and background setting. Trails are highly to fully-developed. Major interpretive sites (typically staffed) are common. Motorized access and travel is highly intense and often with mass transit supplements to carry people to or throughout the site.

Activity

Nonmotorized and motorized. Motor vehicle use is primarily for accessing urban sites by standard passenger vehicle and often includes mass transit elements. Off-highway motor vehicle use of roads within the site is not a consideration.

Experience

Low to moderate opportunity to feel close to nature. No opportunity for experiencing tranquility and solitude; low or no opportunity to experience independence, self-reliance, challenge and risk, unless at a developed site such as downhill ski areas where challenge and risk may be high. Extremely high opportunities for comfort and convenience at managed sites.

DRAFT

Appendix B – Recreational Facility Analysis background and methodology

Recreational facility analysis is an analysis process used to assist Forests in creating a sustainable recreation program that aligns recreation sites with visitors' desires, expectations, and use. The initial product of the process is a 5 year proposed program of work intended to help the forest meet national recreational facility analysis goals which are:

- Improve customer satisfaction
- Provide recreation opportunities consistent with the Forest recreation “niche”.

Niche is what the forest has to offer in terms of special places, opportunities and potential experiences, overlapped with what people desire and expect in terms of outdoor recreation from public lands.

Operate and maintain a financially sustainable recreation sites program to accepted quality standards

Eliminate deferred maintenance at recreation sites.

Since 2007, national forest recreation programs throughout the country have been guided by program niche statements and complementary niche settings developed through the recreational facility analysis process. Niche statements broadly define the scope of a national forest’s recreation program and highlight those aspects that are special, unique or distinctive. The niche statements are used to help focus project planning and limited funding on the special or unique settings on the Forest.

The abundant primitive and semiprimitive recreation opportunity spectrum settings in both designated wilderness and non-wilderness are reflective of the recreational facility analysis niche emphasis on outstanding opportunities for solitude and remote adventure. The niche settings for the Rio Grande National Forest represent descriptive geographic areas that provide a contiguous backdrop for particular activities and opportunities. The recreational facility analysis niche specific settings and associated geographic locations for the forest have not been mapped or integrated with recreation opportunity spectrum settings.