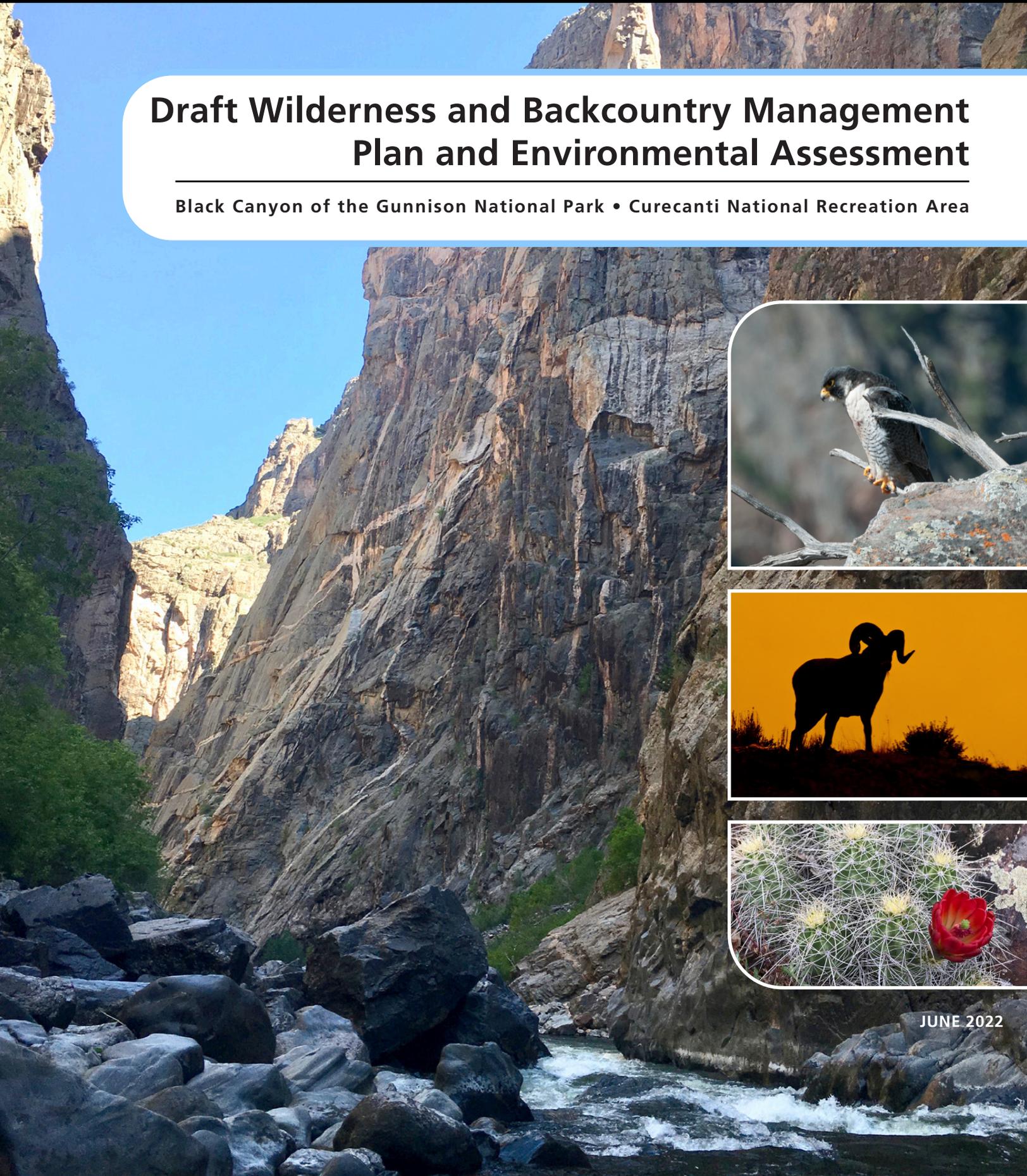




Draft Wilderness and Backcountry Management Plan and Environmental Assessment

Black Canyon of the Gunnison National Park • Curecanti National Recreation Area



JUNE 2022

EXECUTIVE SUMMARY

This draft Wilderness and Backcountry Management Plan and Environmental Assessment proposes a long-term direction for the National Park Service (NPS) to manage and protect the wilderness designated by Congress in 1978 and backcountry lands in Black Canyon of the Gunnison National Park (abbreviated in this document as Black Canyon of the Gunnison NP) and backcountry lands in Curecanti National Recreation Area (abbreviated as Curecanti NRA). Lands designated by Congress as “wilderness” are administered “for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and to provide for the protection of these areas and the preservation of their wilderness character” (sec. 2(a) 1964 Wilderness Act); designated wilderness requires additional protections and management considerations under the Wilderness Act. The term “backcountry” is a generic descriptor for primitive, undeveloped portions of a park unit outside of highly developed frontcountry areas. Lands that are NOT highly developed with roads, parking lots, overlooks, vehicle campgrounds, and visitor centers are often considered the backcountry.

The purpose of this draft plan is to accomplish the following:

- Provide an integrated framework for decision making for the stewardship of wilderness and backcountry lands of Black Canyon of the Gunnison NP and the backcountry lands of Curecanti NRA.
- Balance the demands of visitor activities to protect resources and wilderness character.
- Provide long-term direction to preserve wilderness and backcountry resources while offering a spectrum of visitor opportunities across both units.
- Identify resource indicators and measures to monitor changes in condition as well as visitor capacities in fulfillment of legal requirements (1978 National Parks and Recreation Act).

The Black Canyon of the Gunnison Wilderness (hereinafter referred to as wilderness) possesses unique qualities of wilderness character and opportunities that could be impaired without the foresight of good planning and future management. The backcountry land base of Curecanti NRA is often overshadowed by attention to water-based recreation. There are opportunities to improve land-based natural and cultural resource conditions and visitor experiences. This plan is needed because underlying trends such as increasing visitation, if not addressed in planning and management strategies, could result in the establishment of incompatible uses and entrenched harmful practices, which in turn, could impact natural resources, high-quality visitor opportunities, wilderness character, and backcountry conditions.

This document consists of two parts—Part 1: Draft Wilderness and Backcountry Management Plan and Part 2: Environmental Assessment. Part 1 proposes a management framework that would maintain or improve wilderness and backcountry conditions in Black Canyon of the Gunnison NP and Curecanti NRA. To accomplish this objective, the plan would update management zones and corresponding desired conditions to provide a spectrum of wilderness and backcountry opportunities; enhance public understanding of wilderness character and backcountry values; and restore, preserve, and enhance wilderness character and backcountry resources. Part 1 also includes an updated climbing management plan, a monitoring framework, identified visitor capacities, and commercial services analysis for wilderness and backcountry lands at both units.

Part 2 contains an environmental analysis of those actions and strategies in the plan that have the potential to significantly impact the human environment. This environmental assessment was prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended; the 2020 Council on Environmental Quality (CEQ) Regulations for Implementing NEPA (40 Code of Federal Regulations [CFR] 1500 et seq.); guidance in the 2015 *NPS NEPA Handbook*; NPS Director's Order 75a: *Civic Engagement and Public Involvement*; the National Historic Preservation Act of 1966, as amended; and the Endangered Species Act of 1973, as amended.

Deanna Greco, superintendent

Black Canyon of the Gunnison National Park/Curecanti National Recreation Area

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PART ONE

DRAFT WILDERNESS AND BACKCOUNTRY

MANAGEMENT PLAN



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CHAPTER 1: INTRODUCTION TO THE PLAN

INTRODUCTION

This Wilderness and Backcountry Management Plan establishes comprehensive management direction for the Black Canyon of the Gunnison Wilderness and backcountry lands in Black Canyon of the Gunnison National Park (Black Canyon of the Gunnison NP) and the backcountry in Curecanti National Recreation Area (Curecanti NRA). The plan provides long-term guidance for managing natural and cultural resources, while providing opportunities for a primitive type of recreational experience, both in wilderness and backcountry (nonwilderness) areas. The Black Canyon of the Gunnison Wilderness (hereinafter referred to as wilderness) is managed to preserve wilderness character and meet the purposes of the Wilderness Act of 1964.

The document consists of two parts—Part 1: Draft Wilderness and Backcountry Management Plan and Part 2: Environmental Assessment. Part 1 encompasses seven interrelated chapters; collectively these propose a comprehensive plan for management that would maintain or improve wilderness and backcountry conditions in the park and the recreation area. The general direction and management strategies described in this framework correspond to alternative B, the NPS proposed action and preferred alternative, in part 2, which contains environmental analysis of those actions and strategies in the plan that have potential to significantly impact the human environment.

BACKGROUND AND PROJECT AREA

Black Canyon of the Gunnison NP and Curecanti NRA are situated between Gunnison and Montrose, Colorado (figure 1). Black Canyon of the Gunnison National Monument was established by Presidential Proclamation 2033, signed by President Herbert Hoover on March 2, 1933, and was subsequently designated a national park through an act of Congress in 1999 (Public Law 106-76). Curecanti NRA was established in 1965 to manage the waters and federal lands around Blue Mesa, Morrow Point, and Crystal Reservoirs.

The purpose of Black Canyon of the Gunnison NP is to preserve an area encompassing spectacular gorges, the Gunnison River, and breathtaking landscapes by protecting its natural, cultural, and wilderness integrity for public benefit, inspiration, and enjoyment. The fundamental resources and values of Black Canyon of the Gunnison NP include the following:

- The Black Canyon of the Gunnison, the canyon itself
- Recreation
- The Gunnison River and its roar
- Wilderness
- Native plant and wildlife communities
- Spectacular views

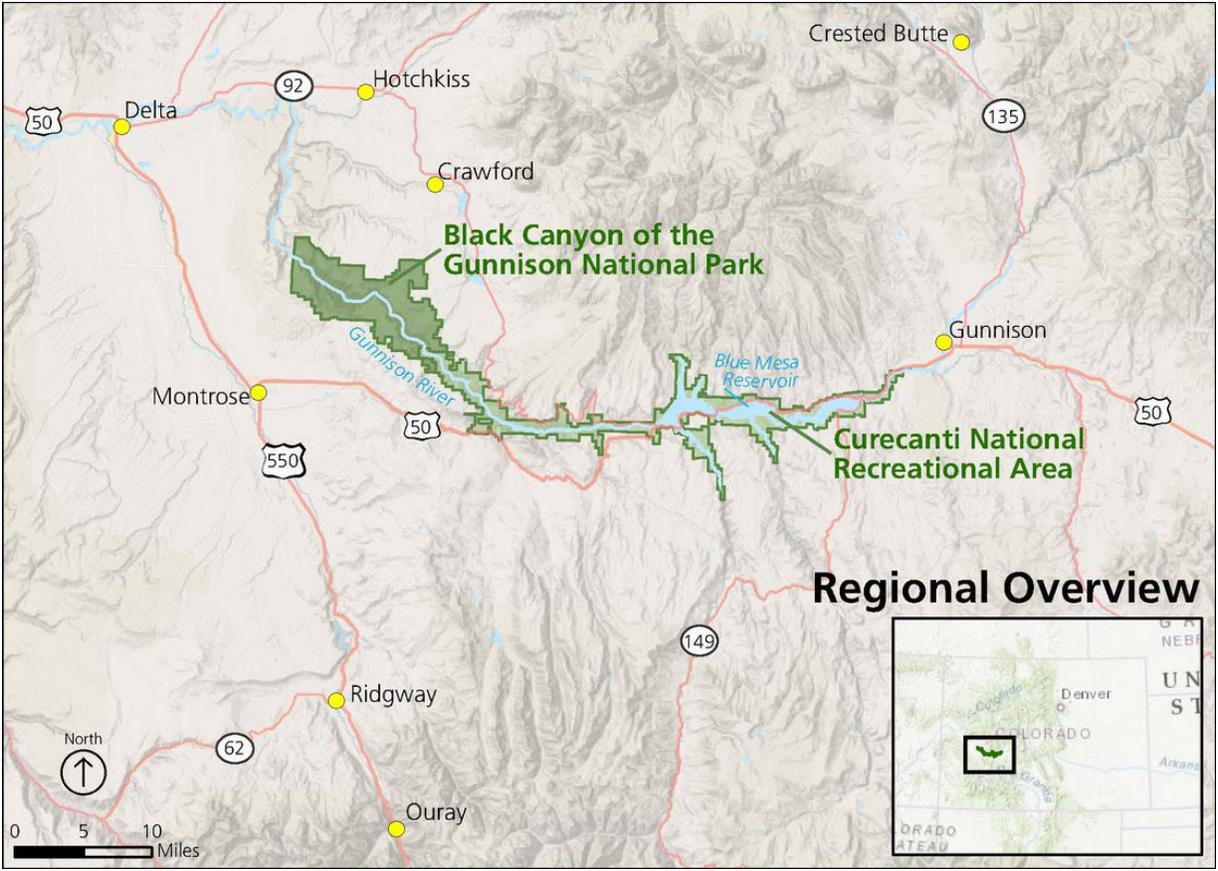


Figure 1. Black Canyon of the Gunnison National Park and Curecanti National Recreation Area Regional Overview Map

The adjacent Curecanti NRA is managed by the National Park Service through a 1965 memorandum of agreement between the United States (US) Bureau of Reclamation and the National Park Service and pursuant to public law, including the Colorado River Storage Project Act of 1956. Through the agreement, the National Park Service manages recreation and other resources on federal land withdrawn for project purposes. However, the Bureau of Reclamation maintains management of the actual water storage and hydroelectric operations. The purpose of Curecanti NRA is to protect an abundance of natural, historic, and archeological features in a western landscape encompassing canyons, pinnacles, cliffs, rivers, reservoirs, and mesas, while offering opportunities for recreation, public benefit, and personal reflection. The fundamental resources and values of Curecanti NRA encompass the following:

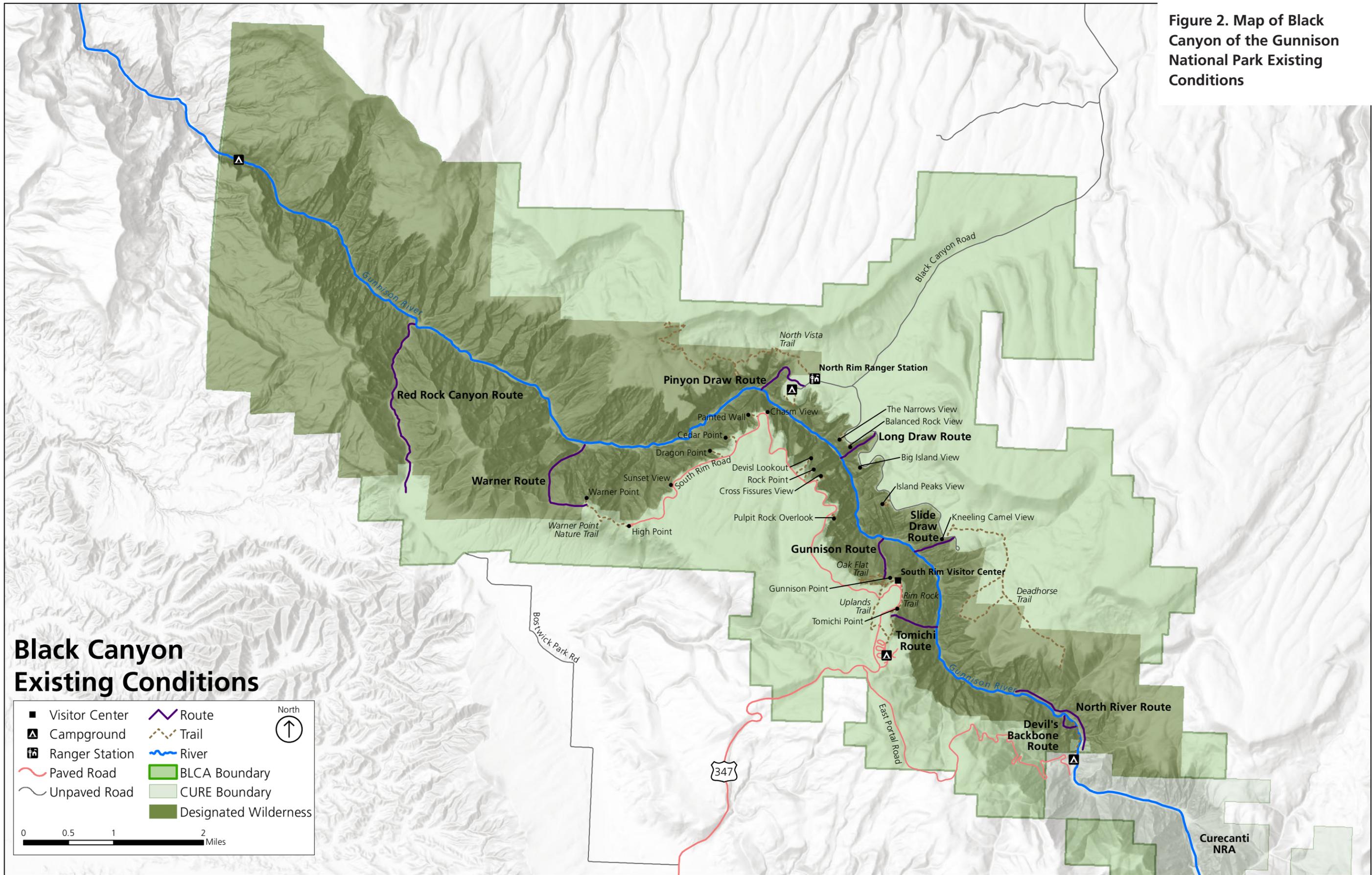
- Archeology
- Geology and paleontology
- Aquatic resources
- Recreation
- Scenic views
- Riparian plant and wildlife communities

The project area encompasses the 15,599-acre Black Canyon of the Gunnison Wilderness, including 11,180 acres designated by Congress in 1976 (Public Law 94-567) and an additional 4,419 acres added in 1999 (Public Law 106-76) and the undeveloped backcountry of Black Canyon of the Gunnison NP (approximately 10,370 acres), and the land-based backcountry visitor activities and resources at Curecanti NRA (approximately 30,330 acres) (figures 2 and 3).

Areas excluded from this plan include the developed, or frontcountry, areas defined as locales including roads, visitor centers, marinas and boat ramps, parking lots, campgrounds, scenic overlooks with associated turnouts and trails, picnic areas, and a 100-foot buffer zone around the frontcountry and developed areas. Appendix B contains a detailed list of areas at Black Canyon of the Gunnison NP and Curecanti NRA that are outside the planning area, including existing management zoning for these areas. The Curecanti NRA backcountry includes some campsites, which are addressed in this plan. While this plan does not address water-based recreation on the reservoirs within Curecanti NRA, the plan uses NPS commercial services policy to evaluate water-based recreational activities along the Gunnison River inside the national park. This policy falls within the scope of the plan to provide park staff with comprehensive guidance for the management of commercial services in wilderness and backcountry lands. This guidance complements the 2013 *Curecanti National Recreation Area Commercial Services Strategy* (NPS 2013a) for the frontcountry areas of Curecanti NRA.

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Figure 2. Map of Black Canyon of the Gunnison National Park Existing Conditions



Black Canyon Existing Conditions

| | | |
|------------------|-----------------------|-------|
| ■ Visitor Center | Route | North |
| ▲ Campground | Trail | ↑ |
| 🚒 Ranger Station | River | |
| — Paved Road | BLCA Boundary | |
| ~ Unpaved Road | CURE Boundary | |
| | Designated Wilderness | |

0 0.5 1 2 Miles

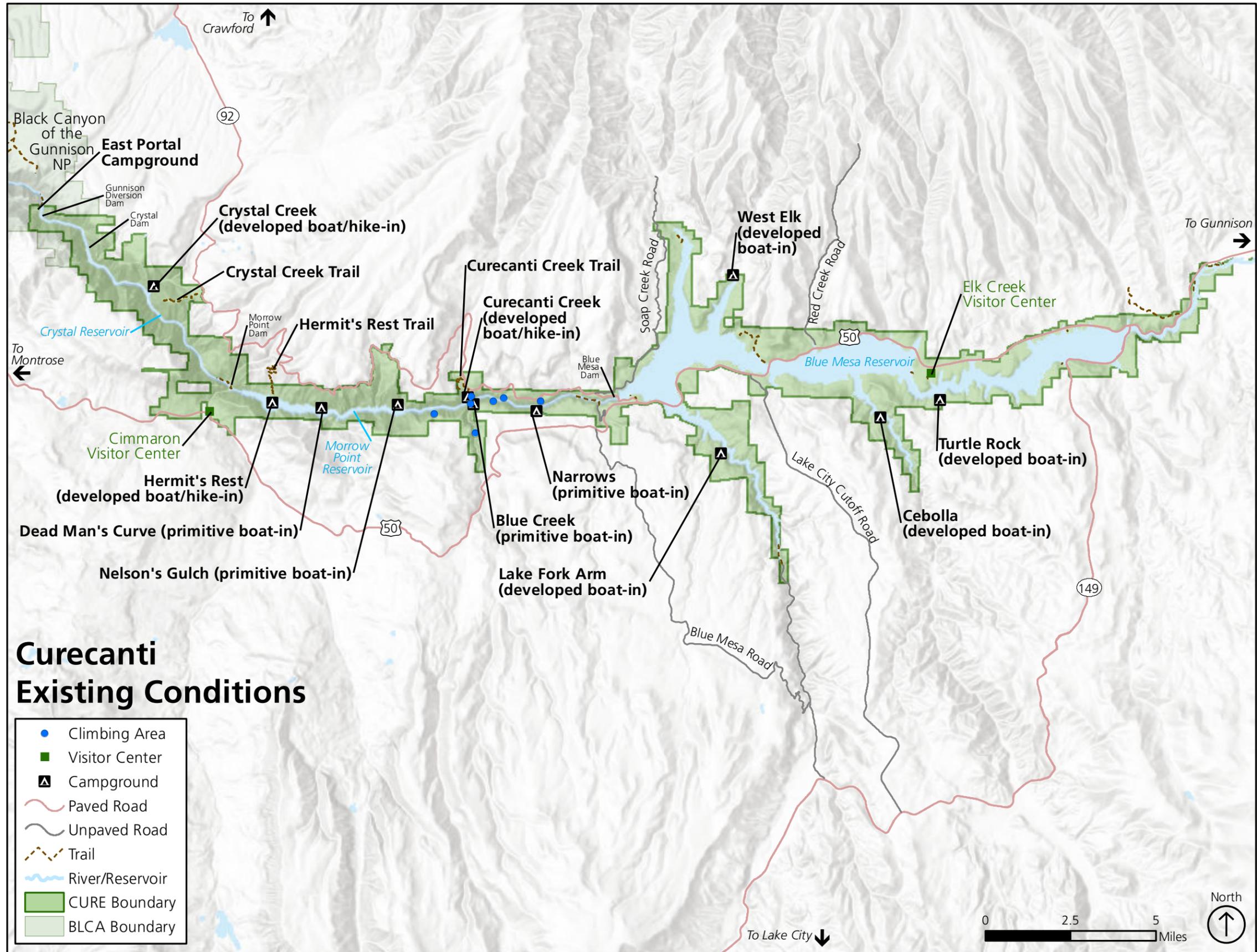


Figure 3. Map of Curecanti National Recreation Area Existing Conditions

Produced by NPS Denver Service Center Planning Division

Date: 6/30/2021

PLANNING HISTORY

The National Park Service released a Draft Wilderness and Backcountry Management Plan and environmental assessment for Black Canyon of the Gunnison NP and Curecanti NRA for public review in September 2011. The completion of that plan was suspended while the National Park Service deliberated its response to public comments regarding an alternative that prohibited commercial services within the inner canyon of Black Canyon of the Gunnison NP.

During that earlier planning process, some NPS staff and local stakeholders expressed hesitancy about allowing commercial services within the inner canyon wilderness, with concern that these activities would not achieve desired conditions to provide opportunities for challenge, self-reliance, and adventure, and would monopolize the public's opportunity to access the inner canyon. A few hiking trails within Black Canyon of the Gunnison NP provide access for climbers hoping to challenge themselves in one of the most difficult and rugged ascents in the state. Therefore, park staff were concerned that guided climbing would exclude other visitors, including those primarily interested in hiking or camping in the canyon, from accessing the area. When the draft plan and environmental assessment was released in 2011, members of the public and local stakeholders expressed their objections to this prohibition of commercial services in the inner canyon. In response to public comments, the planning team elected to pause the planning process and review the analysis. The National Park Service reviewed the draft plan and released revised alternatives for public review in 2015.

After 2015, the interdisciplinary planning team reevaluated actions identified in the 2011 draft plan and terminated the previous environmental assessment. The National Park Service has now updated the plan to account for current conditions and planning needs, including updated requirements under the National Environmental Policy Act (NEPA), the National Parks and Recreation Act of 1978, and NPS policies. This new Wilderness and Backcountry Management Plan builds on the earlier proposed alternatives and includes an updated and comprehensive evaluation of commercial services, updated management zoning, a climbing management plan, resource condition monitoring strategy, and identified visitor capacities for all use areas in the backcountry and wilderness.

WHY IS THIS PLAN NEEDED?

This Wilderness and Backcountry Management Plan is needed to provide an integrated framework for decision making for the stewardship of wilderness and backcountry lands of Black Canyon of the Gunnison NP and the backcountry of Curecanti NRA. This plan is needed because underlying trends such as increasing visitation, if not addressed in planning and management strategies, could result in the establishment of incompatible uses and entrenched harmful practices, which in turn, could impact natural resources, high-quality visitor opportunities, wilderness character and backcountry conditions.

The Black Canyon of the Gunnison Wilderness is composed of the following qualities of wilderness character: untrammeled (free of intentional manipulation or intervention), natural, and undeveloped surroundings that offer opportunities for solitude or primitive and unconfined recreation.¹ These

¹ Within the untrammeled quality, wilderness is essentially unhindered and free from human control or manipulation. Within the natural quality, wilderness ecological systems are substantially free from the effects of modern civilization. Within the undeveloped quality, wilderness retains its primeval character

wilderness qualities could substantially change or be degraded without the foresight of good planning and management.

Concentrated visitor use within portions of the inner canyon (area below the canyon rims to the Gunnison River) requires attention and planning to ensure that wilderness and backcountry experiences and resources remain available for future generations. Within the inner canyon, human impacts on the natural environment threaten the natural quality of wilderness. Structures and installations diminish the undeveloped quality of wilderness, while actions that manipulate the biophysical environment detract from the untrammelled and solitude or primitive and unconfined recreation qualities of wilderness. There is a need to clarify management direction to preserve these qualities.

Similarly, clear management direction is needed for the Curecanti NRA backcountry, with terrain from East Portal to Morrow Point composed of a scenic, rugged, natural, and remote landscape. There are unrealized opportunities in Curecanti NRA to improve land-based natural and cultural resource conditions and enhance visitor experiences.

Black Canyon of the Gunnison NP and Curecanti NRA offer opportunities for high-quality backcountry and wilderness resources and experiences; however, increasing visitation and demand for some activities, including climbing and fishing access into the inner canyon, require thoughtful decision making. Potential expanded recreational opportunities require planning to ensure the desired resource conditions and visitor experiences are being achieved and maintained, consistent with the purposes for which the area was established.

Related Issues

The following key issues were addressed in this plan (see the environmental assessment in part 2 for additional detail on environmental issues):

- The lack of a current comprehensive management framework for wilderness and backcountry lands
- Increasing frontcountry visitation and its effect on wilderness/backcountry resources, such as soundscape and viewshed impacts, inner canyon and upland hiking access, and fishing and climbing access
- Lack of consistent management of overnight use (e.g., formalized camping and availability of campsites)
- The lack of a formal climbing management plan
- Increased public interest in backcountry and wilderness recreation opportunities
- Changes in types of use and emerging uses on the Gunnison River in Black Canyon of the Gunnison NP
- Lack of consistent commercial services guidance for wilderness and backcountry lands

and influence and is essentially without permanent improvement or modern human occupation. Wilderness provides opportunities for solitude or primitive and unconfined recreation. For more information on the qualities of wilderness character, see *Keeping It Wild 2: An Updated Interagency Strategy to Monitor Trends in Wilderness Character Across the National Wilderness Preservation System* (Landres et al. 2015).

- Lack of measures/indicators, standards/thresholds, visitor capacities, and monitoring guidance and protocols for wilderness and backcountry lands

PURPOSE, GOALS, AND OBJECTIVES OF THIS PLAN

Purpose

The purpose of the Wilderness and Backcountry Management Plan is to accomplish the following:

- Provide an integrated framework for decision making for the stewardship of designated wilderness and backcountry lands of Black Canyon of the Gunnison NP and the backcountry lands of Curecanti NRA.
- Balance the demands of visitor activities to protect resources and wilderness character.
- Provide long-term direction to preserve wilderness and backcountry resources while offering a spectrum of visitor opportunities across both units.
- Identify resource indicators and measures to monitor changes in condition as well as visitor capacities in fulfillment of legal requirements (1978 National Parks and Recreation Act).

The following goals and objectives articulate key aims for long-term successful management and protection of the wilderness and backcountry.

Goals

The goals of the Wilderness and Backcountry Management Plan are as follows:

- Restore, preserve, and enhance wilderness character in wilderness.
- Provide and manage a range of visitor opportunities while protecting fundamental resources and values and park purposes in wilderness and backcountry lands.
- Enhance public understanding of the relevance of wilderness character and opportunities, and stewardship of the wilderness and backcountry lands.

Objectives

The objectives of the Wilderness and Backcountry Management Plan encompass the following:

- Evaluate existing conditions and management practices and define desired resource and social conditions in wilderness and backcountry (nonwilderness) areas, consistent with park purposes.
- Provide a framework and programmatic guidance for consistent management direction of wilderness and backcountry lands.
- Define the role of commercial services in wilderness and backcountry lands.
- Ensure compliance with the statutory requirements of the Wilderness Act and NPS policies related to the minimum requirements analysis process.
- Integrate wilderness stewardship into the operations of all park divisions.
- Provide a template for basing management decisions on sound scientific research and informed observation. Incorporate new data and information, as available, into a dynamic backcountry and wilderness management program.
- Provide public information and outreach to promote backcountry and wilderness skills, responsible outdoor recreation, and the Leave No Trace outdoor ethics.

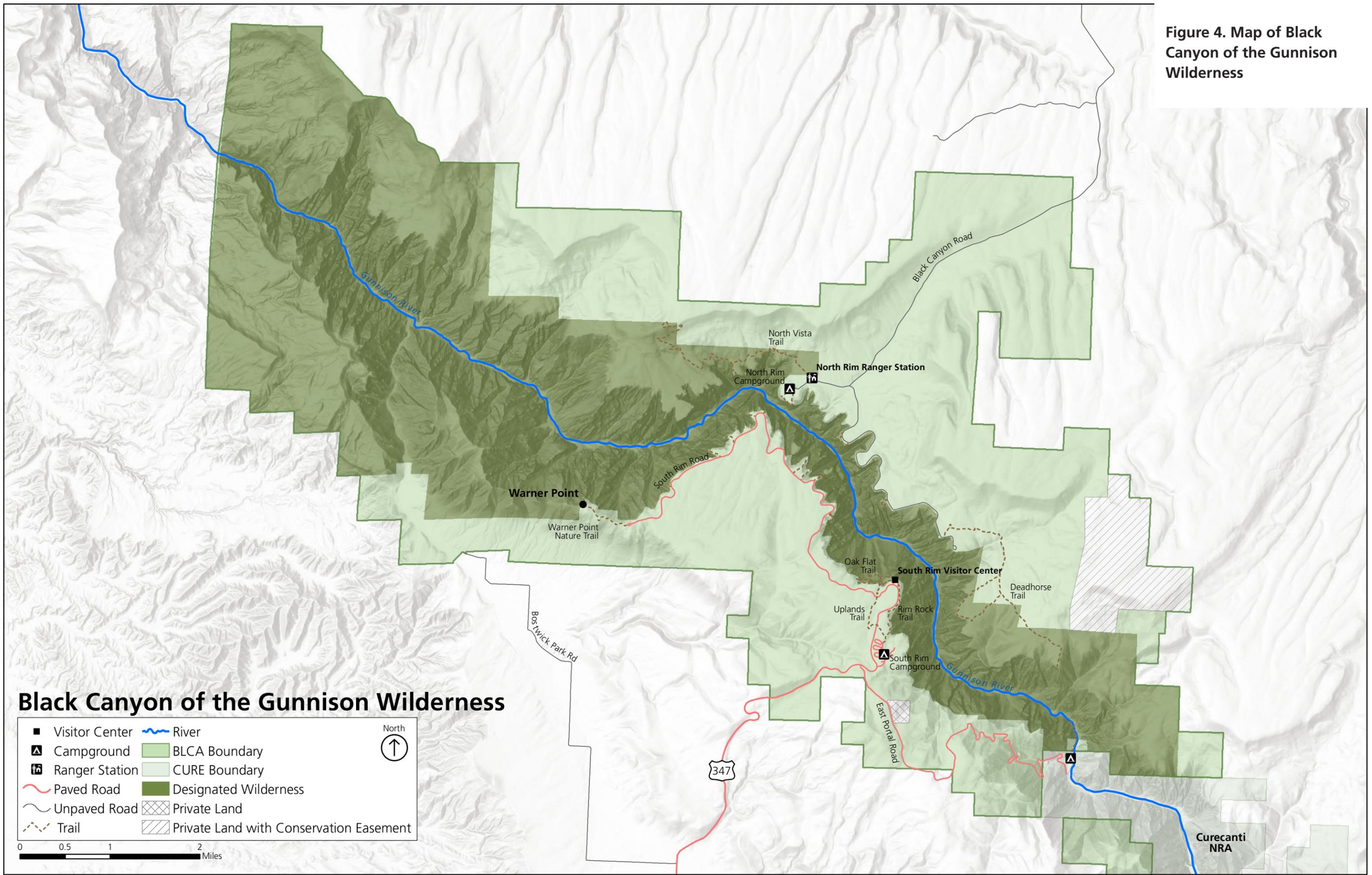
- Complete the wilderness character building blocks, including wilderness character basics, wilderness character baseline assessment, and integration of wilderness character into park operations.

This plan addresses both the backcountry and wilderness lands within the two units. Although the terms “backcountry” and “wilderness” may appear to refer similarly to undeveloped lands, there are important legal differences in terms of management. These distinctions include the following.

- The National Park Service uses the term “backcountry” to refer to primitive, undeveloped portions of parks. Backcountry is not the same as wilderness. Rather, it refers to a general condition of land that may include wilderness. Management of the wilderness portions of the parks requires different administrative practices than backcountry because the Wilderness Act and NPS management policies apply additional conditions and constraints (Source: *Reference Manual 41: Wilderness Stewardship*; NPS 2022).
- Wilderness is designated by Congress on federal lands and is administered “for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and to provide for the protection of these areas and the preservation of their wilderness character” (sec. 2(a) 1964 Wilderness Act).

Language in the Wilderness Act is similar to the NPS Organic Act but differs in specifying lands to be left unimpaired *as wilderness*, a higher standard of protection than backcountry. The Wilderness Act charges agencies managing wilderness, including the National Park Service, to preserve wilderness character. In 2015, *Keeping It Wild 2: An Updated Interagency Strategy to Monitor Trends in Wilderness Character Across the National Wilderness Preservation System* (Landres et al. 2015) was produced by an interagency team and published by the US Department of Agriculture. This strategy was endorsed by the Interagency Wilderness Policy Council and is included as a Level 3 policy in *Reference Manual 41: Wilderness Stewardship* (NPS 2022). *Keeping It Wild 2* provides a tangible description of wilderness character and identifies four qualities of wilderness character that apply uniquely to every wilderness: untrammeled, natural, undeveloped, and solitude or primitive and unconfined recreation. These qualities are derived from the definition of wilderness in the Wilderness Act (section 2(c)). In addition to these four qualities, a fifth quality—other features of value—was also identified in the Wilderness Act: a wilderness “may also contain ecological, geological, or other features of scientific, educational, scenic or historical value” (Landres et al. 2012; Landres et al. 2015). NPS wilderness preservation and management is further guided by *NPS Management Policies 2006*, Section 6: Wilderness Preservation and Management Director’s Order 41: Wilderness Stewardship and *Reference Manual 41: Wilderness Stewardship* (NPS 2022). Figure 4 depicts the designated wilderness within Black Canyon of the Gunnison NP.

Figure 4. Map of Black Canyon of the Gunnison Wilderness



Black Canyon of the Gunnison Wilderness

| | | |
|------------------|---|------------|
| ■ Visitor Center | ~ River | North ↑ |
| ▲ Campground | ■ BLCA Boundary | |
| 🚒 Ranger Station | ■ CURE Boundary | |
| — Paved Road | ■ Designated Wilderness | |
| ~ Unpaved Road | ▨ Private Land | |
| ⋯ Trail | ▨ Private Land with Conservation Easement | |

0 0.5 1 2 Miles

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Existing Conditions at Black Canyon of the Gunnison National Park

The Gunnison River moves sediments with enough force to erode through volcanic, sedimentary, and eventually harder, older Precambrian crystalline rocks. When the waters reached the metamorphic and volcanic Precambrian rocks 2 million years ago, the river began carving the dramatic walls of the dark, 0.5-mile-deep canyon. The narrow, nearly vertical canyon walls inspire awe in visitors viewing the chasm from the rim. Ledges on the canyon walls support nests of peregrine falcons (*Falco peregrinus*), common ravens (*Corvus corax*), and canyon wrens (*Catherpes mexicanus*), among other wildlife species. Rocky Mountain bighorn sheep (*Ovis canadensis*) forage above and below the rim, and the adjacent uplands support American black bear (*Ursus americanus*), elk (*Cervus canadensis*), mule deer (*Odocoileus hemionus*), and coyote (*Canis latrans*), in addition to several raptor and passerine bird species. Along the river, American dippers (*Cinclus mexicanus*) bob for aquatic insects, larvae, and fish eggs; controlled flows of outstandingly clean water provide habitat for the species-rich aquatic life, including stoneflies such as the giant salmonfly (*Pteronarcys californica*) and rainbow trout (*Oncorhynchus mykiss*) that entice adventurous anglers to the canyon bottom for unparalleled fly-fishing experiences. Climbers are drawn to the challenges of scaling the vertical and beautiful walls of hard Precambrian rock using traditional methods. Between the high, steep, narrow walls of the canyon, the continuous roar of the river, accentuated by the wind, predominates. The duration of sunlight to the canyon bottom is relatively short in a given day. This deep, narrow canyon environment is primarily influenced by natural forces (flows and sediment transport are altered by upstream dams) and shows little visual influence of modern humanity. Vertical separation within the canyon offers isolation and remoteness while protecting habitats and ecological systems.

The uplands within Black Canyon of the Gunnison NP, both wilderness and backcountry (nonwilderness), include woodlands characterized by pinyon pine (*Pinus edulis*), Douglas-fir (*Pseudotsuga menziesii*), and juniper (*Juniperus* spp.) trees. Open stands of Gambel oak (*Quercus gambelii*), Utah serviceberry (*Amelanchier utahensis*), and big sagebrush (*Artemisia tridentata*) provide habitat for the Gunnison sage-grouse (*Centrocercus minimus*, a federally threatened species under the Endangered Species Act), red-tailed hawks (*Buteo jamaicensis*), turkey vultures (*Cathartes aura*), common ravens, great horned owls (*Bubo virginianus*), a variety of passerine birds and small mammals, and American black bear, elk, and mule deer. Expansive vistas during the day are exchanged for wide open, star-filled night skies offering serenity to visitors. Black Canyon of the Gunnison NP preserves an exceptionally dark night sky and was certified as an International Dark Sky Park in 2015.

The overall untrammeled quality of the Black Canyon of the Gunnison Wilderness is trending downward due to management actions taken to address the effects of climate change that degrade the natural quality. In visitor use areas the untrammeled quality is diminished because actions are required to control invasive plants, cleanup waste, and maintain/restore native plants. There are some trammeling actions taken by the National Park Service to improve the natural condition, including controlling nonnative plants, and responding to wildfires according to the fire management plan. These types of management actions slightly diminish the untrammeled quality.

The overall natural quality of Black Canyon of the Gunnison Wilderness is considered good and the trend is stable for some indicators and downward for others. Ecosystems are protected and improved through programs like invasive plant removal. There are several native plant and animal communities, including species that are proposed or listed as threatened or endangered, sensitive, or of concern. Authorized livestock grazing in the uplands alters the composition of natural

communities and stocked nonnative fish species occupy wilderness waters. The water quality is good, as is regional air quality. Black Canyon of the Gunnison NP is adjacent to other federally managed land and relatively undeveloped private land, providing a larger protected landscape that connects critical wildlife habitat.

The Black Canyon of the Gunnison Wilderness is relatively undeveloped overall. The undeveloped quality of the canyon is good and is not likely to change or may even be improved over time as unnecessary structures and installations are removed. Trend is primarily stable. This wilderness quality is degraded by settings that reduce the undeveloped nature of the wilderness, such as signs of modern civilization in or adjacent to the wilderness area and facilities provided by the agency or created by users. A few structures diminish the undeveloped quality, including fences to exclude cattle, stock ponds, a radio repeater, abandoned roads (mostly unpaved two-tracks), an irrigation ditch, and other structures related to livestock grazing. Chainsaws and motorized vehicles are occasionally used for vegetation and wildlife management in the uplands, and helicopters are used in the rugged terrain of the inner canyon for emergency rescues and resource management. Unauthorized uses, including motorized vehicle trespass, are also a concern. The rugged terrain of the inner canyon has naturally constrained development.

There are many opportunities for solitude or primitive and unconfined recreation in the inner canyon and the uplands. Trends associated with solitude and primitive or unconfined recreation are stable for some measures and downward for others. Rugged and primitive routes provide visitors access to the inner canyon. Hiking routes into the canyon are constrained by steep terrain and colluvial slopes; they are mostly rocky, some with highly eroded gullies, have few signs, and are lightly maintained. Managed access via an existing backcountry use permit system provides increased opportunities for solitude by managing the number of people on each route at any given time. Increased demand for backcountry use permits and more days where permit slots are full may reduce opportunities for solitude and the presence of visitor created trails and informal campsites may reduce visitor opportunities to experience primitive recreation. That managed access, however, reduces opportunities for unconfined recreation. Recreational installations such as pit toilets and maintained climbing infrastructure such as fixed anchors and Tyrolean traverse lines also diminish this quality. Some aspects such as dark night skies and soundscapes are likely to be diminished over time from increasing regional development and urbanization.

Existing Conditions at Curecanti National Recreation Area

Rugged and semiarid mesas, cliffs, slopes, canyons, and the valley bottom with narrow, long reservoirs exist in a setting between the West Elk Mountains and the San Juan Mountains, offering dramatic vistas. Pinnacles and needles eroded from mesa tops and cliff faces exemplify a history of volcanic activity. A variety of wildlife, including bald eagles (*Haliaeetus leucocephalus*), waterfowl, migrant passerine birds, Rocky Mountain bighorn sheep, American black bear, elk, mule deer, and coyotes use the upland and reservoir habitats of Curecanti NRA seasonally and year-round, depending on the species. Archeologists have uncovered the remains of ancient shelter structures called wickiups that, along with diagnostic stone tools and other artifacts, indicate human occupation for thousands of years. Exposed rock faces and slopes of the Morrow Point and Crystal reservoirs provide secluded locations for climbing, hiking, and camping. Boaters on Blue Mesa Reservoir seek secluded landings for remote camping. Other activities in the backcountry of Curecanti NRA include hiking, horseback riding, fishing, water sports, nature viewing, and cross-country skiing. A few selected facilities support these activities (trails, toilets, and backcountry campgrounds), which provide an experience of solitude, quiet, and the natural environment as

identified in the 1997 general management plan. Much of the national recreation area offers solitude and silence in the canyons and on the ridges and mesas. Some motorized access is allowed on specific routes, which have been addressed in the existing 2010 *Curecanti National Recreation Area Motorized Vehicle Access Plan/Environmental Assessment*.

The backcountry of Curecanti NRA has a number of minor developments. NPS radio repeaters and regional powerlines cross the backcountry, primarily in the Blue Mesa area. Additionally, several other structures related to grazing exist, including stock ponds, two-track dirt roads, irrigation development, and fences. Unlike wilderness, the administrative use of motor vehicles, motorized equipment, or mechanical transport is allowed.

Backcountry visitor opportunities are similar to wilderness opportunities in Black Canyon of the Gunnison NP, but there is less emphasis on opportunities for solitude and more allowable recreation facilities in support of semiprimitive experiences. No permits are required for land-based recreation in the East Portal–Morrow Point and Blue Mesa areas and there is a lack of information about use levels and demand for hiking, camping, fishing, and other land-based activities. Night sky visibility in the backcountry is exceptional and Curecanti NRA was certified as an International Dark Sky Park in 2021.

Most visitors view the lands between the Blue Mesa Dam site and the boundary of Black Canyon of the Gunnison NP from overlooks on the canyon rims and a few hiking trails, most of which are steep and challenging. Campsites with picnic tables, tent pads, and vault toilets exist on the Morrow Point Reservoir shoreline; some visitors hike down for overnight camping. A few visitors hike to the reservoir shoreline to fish and some carry light boats to the reservoir. Except for boat tours on Morrow Point Reservoir, which in the past have run twice daily from mid-June to mid-September and motorized access adjacent to Cimarron, the soundscape in the East Portal–Morrow Point backcountry is largely natural. The overall experience is remote and natural in an isolated canyon. A commercial guided motorized fishing boat operator has provided service on Morrow Point Reservoir in the past. Due to fluctuating water levels in all Curecanti NRA reservoirs and continued uncertainty about water levels, boat tours may or may not be possible in the future.

Most visitors to Blue Mesa Reservoir recreate using motorized watercraft and use the shoreline for fishing, picnicking, swimming, and camping. There are boat-in campsites with vault toilets, tent pads, and picnic tables. Visitors are allowed to camp below the high waterline on the south shore of Blue Mesa Reservoir and 0.5 mile from any developed road or area, including designated backcountry campsites. There are a few hiking trails (Dillon Pinnacles and Neversink); horseback riders are allowed on Dillon Pinnacles. A limited amount of rock climbing takes place in the Gunnison River Canyon of the Blue Mesa area; hang gliders and paragliders launch on adjacent Bureau of Land Management lands, and sometimes illegally land on NPS land in Curecanti NRA. Motorized access at Blue Mesa is allowed below the high-water line and along designated routes as specified in the 2010 Curecanti NRA motorized vehicle access plan. Natural soundscapes are affected by motorized access, boating on Blue Mesa Reservoir, and nearby development.

RELATIONSHIP TO OTHER LAWS, PLANS, AND POLICIES

The following sections describe the laws, regulations, plans and studies, and polices and guidelines pertain to and help inform this plan.

Laws

The Wilderness Act of 1964 (Public Law 88-577, 16 United States Code [USC] §§ 1131-1136, as amended): This act defined wilderness and established the National Wilderness Preservation System. It also established the act's primary statutory mandate to preserve wilderness character, as well as specifying the public purposes of wilderness and prohibited uses in wilderness.

1976 Black Canyon of the Gunnison Wilderness Legislation (Public Law 94-567): Designated 11,180 acres of wilderness.

1999 Black Canyon of the Gunnison National Park Enabling Legislation (Public Law 106-76): Established Black Canyon of the Gunnison NP.

1999 Black Canyon of the Gunnison Wilderness Addition (Public Law 106-76): Added 4,419 acres to the Black Canyon of the Gunnison Wilderness.

Regulations

36 CFR Chapter 1, National Park System: Regulations that govern the administration of the national park system are established in 36 CFR Chapter 1, Parts 1–199. The regulations that are most pertinent to resource protection and visitor use management are included in Part 2 (resource protection, public use and recreation), Part 3 (boating and water use activities), Part 4 (vehicles and traffic safety) and Part 5 (commercial and private operations).

36 CFR Chapter 1, Part 7, Special Regulations: Special regulations are established for Curecanti NRA in Section 7.51 and for Black Canyon of the Gunnison NP are in Section 7.53.

Superintendent's Compendium: The superintendent's compendium (NPS 2019) is a list of designations, closures, permit requirements, and other restrictions imposed under the discretion of the park superintendent under 36 CFR. Park managers would continue to use the superintendent's compendium to implement limitations or closures, as necessary, to protect resources, wilderness character, and backcountry.

Plans and Studies

This Wilderness and Backcountry Management Plan is part of the planning portfolio for Black Canyon of the Gunnison NP and Curecanti NRA. A park planning portfolio is the collection of planning documents that guides decision making and satisfies law and policy. The planning portfolio creates a logical, trackable guide for park management actions. This Wilderness and Backcountry Management Plan addresses visitor use, management zoning, and the protection of wilderness character and resources within the wilderness and backcountry. Other documents within the planning portfolio directly related to this planning effort are briefly described below.

The National Parks and Recreation Act of 1978 (54 USC 100502) requires the preparation and timely revision of general management plans for each unit of the national park system. Pursuant to Director's Order 2: Park Planning (DO-2), each park must have a plan or series of plans that address the following four statutory requirements identified in 54 USC 100502:

1. Measures for the preservation of the area's resources

2. Indications of types and general intensities of development (including visitor circulation and transportation patterns, systems, and modes) associated with public enjoyment and use of the area, including general locations, timing of implementation, and anticipated costs
3. Identification of an implementation commitment for visitor carrying capacities for all areas of the unit
4. Indications of potential modifications to the external boundaries of the unit and the reasons therefore

This Wilderness and Backcountry Management Plan fulfills a park planning priority for long-term direction related to resource preservation and visitor access in wilderness and other backcountry lands at Black Canyon of the Gunnison NP and Curecanti NRA. The plan helps the National Park Service better meet the general management plan statutory requirements of 54 USC 100502 and policy requirements of DO-2, specifically the requirement to address visitor capacities and identify measures for preservation of resources. Planning for frontcountry areas of these units, management zoning updates, new trail actions, and on-water use at Curecanti NRA will be addressed in future implementation-level planning efforts.

1993 Black Canyon of the Gunnison National Monument Resource Management Plan

The specific management objectives identified in the Black Canyon of the Gunnison NP resource management plan (NPS 1993) for the stewardship of park natural resources are, “to conserve the park’s ecological communities, geological resources, and scenic qualities, and to the degree possible, to restore areas disturbed by past human activities to the natural conditions existing before disturbance. The concept of maintaining and perpetuating ecosystems rather than protecting and preserving individual features or favored species is, and must remain, a distinguishing aspect of natural resource management.”

1997 General Management Plan

The Black Canyon of the Gunnison NP and Curecanti NRA general management plan was completed in 1997 and outlined management prescriptions to articulate how lands within the parks would be managed into the future. The management prescriptions direct administration of various geographic areas of the two units, addressing visitor opportunities, access, natural resources, cultural resources, facilities, and maintenance issues.

2006 Fire Management Plan

In 2006, the National Park Service developed a fire management plan for Black Canyon of the Gunnison NP and Curecanti NRA. The plan established fire management units and directed that fire management within each unit would be based on natural landscape conditions rather than on agency or other land management or ownership boundaries. Fire and fire management prescriptions would be allowed to cross Black Canyon of the Gunnison NP and Curecanti NRA boundaries with the adjacent US Forest Service (USFS) and Bureau of Land Management (BLM) lands when agreed to by both parties, as well as some designated adjacent private lands. Whenever possible, the National Park Service, Bureau of Land Management, and US Forest Service would coordinate fire management actions. In addition, wildland fire use would be permitted in fire management units identified for managed wildland fire.

2008 Curecanti NRA Resource Protection Study

The *Curecanti NRA Resource Protection Study/Environmental Impact Statement* was completed in 2008; it was prepared by the National Park Service in cooperation with the US Bureau of Reclamation. The study concluded with a recommendation that Congress legislatively establish Curecanti as a national recreation area with a new legislated boundary that includes approximately 10,040 acres of additional adjacent lands that are currently managed by other federal and state agencies (e.g., Bureau of Land Management, US Forest Service, Colorado Division of Wildlife, Colorado State Land Board). The 1965 memorandum of agreement between the Bureau of Reclamation and the National Park Service would be revised accordingly. Further, the Bureau of Reclamation would operate and maintain the dams, reservoirs, associated power plants and transmission lines, access roads, and related facilities within Curecanti. The new Curecanti legislation would designate the National Park Service to manage the natural, cultural, and recreational resources, visitor use and education, and associated facilities. Another recommendation is for Congress to authorize the National Park Service to work in partnership with private landowners in a designated Conservation Opportunity Area surrounding Curecanti and employ various management tools in the service of resource conservation.

2010 Curecanti National Recreation Area Motorized Vehicle Access Plan/Environmental Assessment

The 2010 *Curecanti National Recreation Area Motorized Vehicle Access Plan/Environmental Assessment* provides guidance for the management of motorized vehicle access consistent with the purposes and operational needs of the recreation area. The plan authorizes motorized vehicle use only in areas designated as open, including routes and areas above and below the high-water line of Blue Mesa Reservoir. It preserves traditional access in areas above the high-water line by making a minor amendment to the 1997 general management plan for the creation of a semiprimitive/motorized zone. The relationship between this plan and the motorized vehicle access plan/environmental assessment is that this Wilderness and Backcountry Management Plan would authorize bicycle use on routes authorized for use by off-highway vehicles in Curecanti NRA.

2013 Foundation Documents

The 2013 foundation documents for Black Canyon of the Gunnison NP (NPS 2013b) and Curecanti NRA (NPS 2013c) provide the underlying principles that guided the development of this plan. They identify what is most important about the park and recreation area (including purpose and significance), note special mandates and administrative commitments that affect management of the parks, and identify fundamental resources and values within the two units. Wilderness is specifically identified as a fundamental resource and value for Black Canyon of the Gunnison NP. This plan was designed to be consistent with the two units' purpose and significance and the protection of fundamental resources and values.

2013 Curecanti National Recreation Area Commercial Services Strategy

The 2013 *Curecanti National Recreation Area Commercial Services Strategy* (NPS 2013a) provided a snapshot of existing commercial services, assessed visitor needs and identified potential new services and activities to enhance visitor experience and opportunities. The document included criteria for determining whether a service is necessary and/or appropriate to occur within Curecanti NRA and defined commercial service management zones. Necessary and appropriate criteria are the

benchmarks that the National Park Service uses to inform decisions on whether a commercial service may be authorized to operate within a park unit. The strategy provides guidance for future decisions regarding commercial services.

2014 Long Range Interpretive Plan

The *Long Range Interpretive Plan* for Black Canyon of the Gunnison NP and Curecanti NRA (NPS, 2014) is a 5- to 10-year plan, serving as the backbone for comprehensive interpretive planning and identifies existing and desired future conditions for interpretation, education, and technology in both units. This plan outlines management goals for the interpretation and education program related to visitor experience and partnerships, resource protection and education, and management and organization. Several recommendations are presented, which are organized by location and subject, and then further separated into tier one and tier two. Tier one includes items that should be completed within the next one to five years and tier two are items that may be started earlier but are carried out on a longer-term basis. In 2021 an update to the *Long Range Interpretive Plan* was completed. That update provides information on what has been accomplished from the 2014 plan and provides a brief framework of ongoing projects and future needs.

2016 Integrated Pest Management Plan

The integrated pest management plan is an integrated and effective strategy for managing terrestrial invasive exotic plants and animal pests while considering environmental impacts associated with integrated pest management. The plan outlines management strategies and alternatives for the prevention and control of identified pests throughout both parks. The plan focuses on terrestrial invasive exotic plant species and rodent and insect pests in or near buildings or other park infrastructure. Integrated pest management is a strategy designed to be more effective at controlling pests than traditional approaches by considering all available pest control techniques and choosing the best technique based on effectiveness, environmental impacts, and operational efficiency. With respect to invasive exotic plants and some animal pests, the plan will outline management strategies based on the principles of integrated pest management that address the use of some or all of the following techniques: mechanical, cultural, chemical, and biological control and prevention.

Minimum Requirements Analysis – Policies and Guidelines

The Wilderness Act defines the purpose of wilderness, including the mandate to preserve wilderness character, and establishes the prohibition of certain uses, except when one or more of those uses are determined to be necessary for the administration of the area for the purpose of wilderness (54 USC Section 100101 et seq).

National Park Service *Management Policies 2006* (Section 6.3.5) and *Director's Order 41* (Section 6.4) require a documented minimum requirements analysis for all proposed actions that may involve a prohibited use. A minimum requirements analysis is a two-step process that documents (1) the determination as to whether a proposed management action is necessary for the administration of the area as wilderness, and (2) if necessary, determines the minimum management action to apply (method or tool) that causes the least amount of impact the wilderness character. Examples of proposed actions that require a minimum requirements analysis include installing scientific monitoring and research devices, use of motorized equipment for trail maintenance, landing of helicopters, and recreational developments (trails, bridges, signs, etc.). The analysis process is vital to making informed wilderness stewardship decisions and helps ensure compliance with the

Wilderness Act by determining the minimum requirements for the administration of the area for wilderness. The National Park Service will continue to follow applicable guidance for minimum requirements analysis in wilderness.

INTEGRATING VISITOR USE MANAGEMENT PLANNING INTO THE WILDERNESS AND BACKCOUNTRY MANAGEMENT PLAN

Visitor use management is the proactive and adaptive process of planning for and managing characteristics of visitor use and its physical and social setting, using a variety of strategies and tools to sustain desired resource conditions and visitor experience. The National Park Service, along with five other federal land management agencies, is an active participant in the Interagency Visitor Use Management Council (IVUMC), which established a visitor use management framework to provide cohesive guidance for managing visitor use on federal lands and waters. This plan integrated key steps from the visitor use management framework to develop a long-term strategy for managing visitor use within the project area (figure 5).

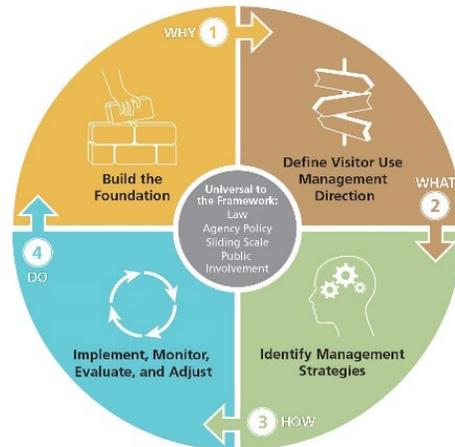


Figure 5. Overview of the Visitor Use Management Process

Specifically, measures/indicators, standards/thresholds, and visitor capacity and associated monitoring protocols were developed for the two units' wilderness and backcountry lands. See the monitoring strategy in chapter 5 and the visitor capacity identification in chapter 6. Additional information on the Interagency Visitor Use Management Council and the guidance that was applied can be found at www.visitorusemanagement.nps.gov. Proposed visitor use management strategies that have the potential to impact visitor use and experience were analyzed in the Part 2: Environmental Assessment.

Proactively planning for visitor use maximizes the ability of agencies to encourage access and protect resources and values. In this plan, visitor use refers to human presence in an area for recreational purposes including education, interpretation, inspiration, and physical and mental health. Visitor use goes beyond the types of activities that people engage in at parks. Visitor use also includes the amount, timing, and distribution of visitor activities and behaviors.

CHAPTER 2: GENERAL MANAGEMENT DIRECTION

INTRODUCTION

This chapter outlines the proposed future management direction for the wilderness and backcountry of Black Canyon of the Gunnison NP and backcountry at Curecanti NRA. The 1997 general management plan provides high-level guidance on how both park units will be managed. This chapter supplements the general management plan and answers the question “what are we managing for?” regarding visitor use management and resource protection in wilderness and backcountry lands. This includes updated descriptions of management zoning and desired conditions. Additionally, this chapter introduces other plan components that provide general direction for wilderness and backcountry management, including the climbing management plan, monitoring strategy, visitor capacity identification, commercial service analysis, and guidelines for managing scientific and research activities in wilderness. Each of these subjects is presented in greater detail in subsequent chapters and appendixes of this plan.

MANAGEMENT ZONES AND DESIRED CONDITIONS

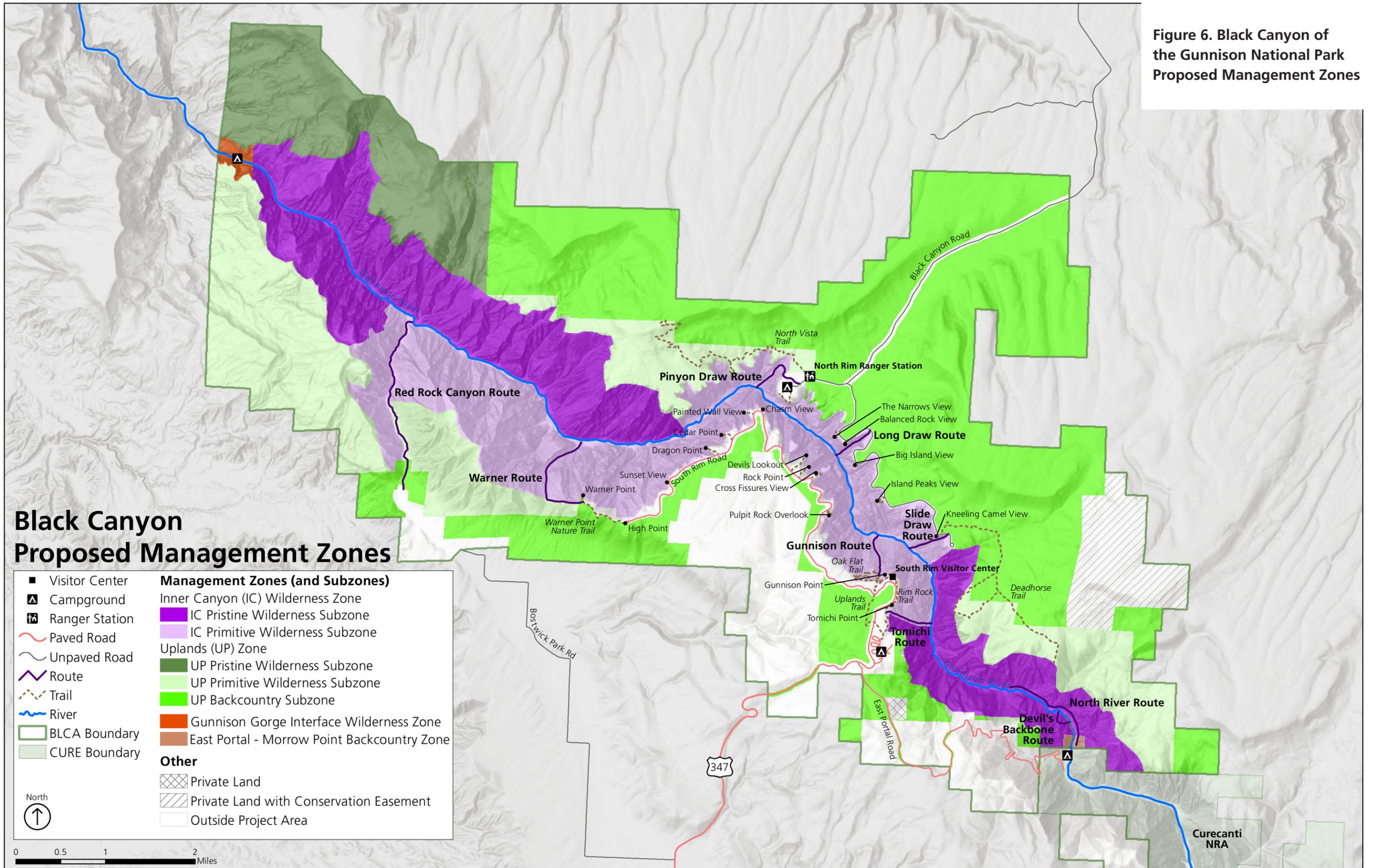
This chapter proposes updated management zones to provide direction for how different areas of Black Canyon of the Gunnison NP and Curecanti NRA wilderness and backcountry would be managed in the future. Management zoning is the method used by the National Park Service to identify and describe the appropriate variety of resource conditions and visitor experiences to be achieved and maintained in different areas of a park unit. Descriptions of desired conditions for wilderness and backcountry and definitions for visitor opportunities and management approaches have been developed to maintain or improve conditions in each wilderness and backcountry management zone between the two units. Desired conditions are aspirational statements that describe resource conditions, visitor experiences and opportunities, and facilities and services that an agency strives to achieve and maintain in a particular area. Management zones provide predictable expectations for wilderness character and backcountry conditions. The National Park Service would take different management actions in different zones to achieve and maintain desired conditions.

Five management zones have been proposed for the two units: three for wilderness and backcountry lands of Black Canyon of the Gunnison NP and two for backcountry lands in Curecanti NRA (see table 1 and figures 6 and 7). Within the proposed management zones for Black Canyon of the Gunnison NP, five subzones were identified to more effectively guide management of uplands and inner canyon areas—four subzones that are within wilderness and one subzone for backcountry lands. A small area within the southeastern portion of Black Canyon of the Gunnison NP is zoned and managed to meet the desired conditions for the East Portal–Morrow Point backcountry zone; however, most of this proposed management zone falls within Curecanti NRA. This is the only case where a management zone spans both units.

Table 1. Proposed Wilderness and Backcountry Management Zones for Black Canyon of the Gunnison National Park and Curecanti National Recreation Area

| National Park System Unit | Management Zones | Subzones |
|---|---|--|
| Black Canyon of the Gunnison National Park (NP) | Inner Canyon Wilderness Zone | <ul style="list-style-type: none"> • Inner Canyon Primitive Wilderness Subzone • Inner Canyon Pristine Wilderness Subzone |
| Black Canyon of the Gunnison NP | Uplands Zone | <ul style="list-style-type: none"> • Uplands Backcountry Subzone • Uplands Primitive Wilderness Subzone • Uplands Pristine Wilderness Subzone |
| Black Canyon of the Gunnison NP | Gunnison Gorge Interface Wilderness Zone | Not applicable (no subzones defined) |
| Black Canyon of the Gunnison NP | East Portal–Morrow Point Backcountry Zone | Not applicable (no subzones defined) |
| Curecanti National Recreation Area (NRA) | East Portal-Morrow Point Backcountry Zone | Not applicable (no subzones defined) |
| Curecanti NRA | Blue Mesa Backcountry Zone | Not applicable (no subzones defined) |

Figure 6. Black Canyon of the Gunnison National Park Proposed Management Zones



Black Canyon Proposed Management Zones

| | |
|--|---|
| <ul style="list-style-type: none"> ■ Visitor Center ▲ Campground 🚒 Ranger Station — Paved Road ~ Unpaved Road — Route ⋯ Trail ~ River ▭ BLMCA Boundary ▭ CURE Boundary | <p>Management Zones (and Subzones)</p> <ul style="list-style-type: none"> Inner Canyon (IC) Wilderness Zone IC Pristine Wilderness Subzone IC Primitive Wilderness Subzone Uplands (UP) Zone UP Pristine Wilderness Subzone UP Primitive Wilderness Subzone UP Backcountry Subzone Gunnison Gorge Interface Wilderness Zone East Portal - Morrow Point Backcountry Zone |
| <p>Other</p> <ul style="list-style-type: none"> ▨ Private Land ▨ Private Land with Conservation Easement □ Outside Project Area | |

0 0.5 1 2 Miles

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PROPOSED WILDERNESS AND BACKCOUNTRY ZONING FOR BLACK CANYON OF THE GUNNISON NATIONAL PARK

Four management zones are proposed for the backcountry and designated wilderness at Black Canyon of the Gunnison NP (figure 6): the inner canyon wilderness zone, the uplands zone, the Gunnison Gorge interface wilderness zone, and a small portion of the East Portal–Morrow Point backcountry zone. These four zones are distinct due to factors that vary in different areas of the park, such as geography/geology, resource sensitivity, and level of multi-agency coordination that is appropriate. These factors determined the geographic boundaries of the proposed zones and subzones.

Wilderness lands within the proposed uplands zone and inner canyon wilderness zone are further subdivided into separate “primitive” and “pristine” subzones. Generally, the distinction is that areas within pristine subzones feature a wild, rugged, untamed landscape and are isolated and especially challenging to access because of the geography and terrain. These distinctions necessitate subtle differences in management. Therefore, different desired conditions have been described for each proposed subzone (below). Although areas that fall within pristine subzones tend to be wilder and more isolated, the preservation and protection of wilderness character is vitally important within both primitive wilderness and pristine wilderness subzones.

The East Portal–Morrow Point backcountry zone falls predominantly within Curecanti NRA, except for the easternmost portion of Black Canyon of the Gunnison NP. Therefore, the East Portal–Morrow Point zone is described below under the heading “Proposed Backcountry Management Zoning for Curecanti National Recreation Area.”

Inner Canyon Wilderness Zone

The inner canyon wilderness zone includes the canyon rims, canyon walls, and the canyon floor including the Gunnison River.

The principal desired conditions for the inner canyon wilderness zone would be wild, natural, and rugged. The zone is remote and provides for adventure. The experience would be challenging, and visitors would need to be self-reliant and equipped with wilderness skills. Wilderness qualities are protected and improved, including the untrammelled character, the natural quality, the undeveloped character, and opportunities for solitude or primitive and unconfined recreation.

Two subzones have been proposed and would be applied to more effectively manage the inner canyon wilderness zone: the primitive wilderness and pristine wilderness subzones described herein.

Inner Canyon Primitive Wilderness Subzone. The desired conditions described for this subzone would be unspoiled and uncrowded. There are opportunities for solitude and reduced recreational facilities to improve primitive and unconfined recreation, self-reliance, and natural qualities. In the inner canyon primitive wilderness subzone, the natural qualities of the canyon floor and opportunities for solitude are improved by designated campsites given that visitors camp exclusively at these sites. There are no maintained or marked trails into the inner canyon. Instead, there are “wilderness routes,” or unmarked scrambles to the river.

Inner Canyon Pristine Wilderness Subzone. The desired conditions described for this subzone are untamed, isolated, pure, and free. Visitors would need to be independent and skilled to safely access the subzone, and the area would foster people’s connection to wild places. The subzone is kept wild

and untrammled. There are opportunities for solitude and primitive, unconfined recreation; those individuals who enter and view from overlooks are inspired to value wild places.

Uplands Zone

The desired conditions for the upland wilderness zone would be wild, natural, expansive, peaceful, and adventuresome; the experience would be one of solitude. Objectives for wilderness quality would be to accept trammeling for the long-term benefits to the natural quality, such as controlling invasive species. Also, maintain and improve the undeveloped qualities, protect opportunities for solitude, and enhance opportunities for primitive recreation.

Three subzones have been developed and would be applied to more effectively manage the uplands zone. These subzones are the uplands primitive wilderness, uplands pristine wilderness, and uplands backcountry described herein.

Uplands Primitive Wilderness Subzone. The desired conditions for the uplands primitive wilderness subzone would be described as remote yet approachable. There are opportunities for solitude, maintained expansive natural views, and reduced impacts of invasive plants and livestock grazing.

Uplands Pristine Wilderness Subzone. The desired conditions for the uplands pristine wilderness subzone are described as untamed, isolated, and free. Visitors would need to be independent and skilled to safely access the subzone and the area would foster people's connection to wild places. Objectives would include maintaining wildness, improving naturalness, preserving outstanding opportunities for solitude and primitive and unconfined recreation, providing opportunities for self-reliance and adventure, and inspiring those individuals who enter and those individuals who view wilderness from overlooks to value wild places.

Uplands Backcountry Subzone. The desired conditions for the uplands backcountry subzone would be described as untamed and isolated; visitors would need to be skilled to safely access the subzone and the area would foster people's connection to wild places. Consistent with desired conditions for this subzone, the wildness is maintained, with improved naturalness and outstanding opportunities for self-reliance and adventure. There are minimal recreational developments and those individuals who enter and view the area from overlooks are inspired to value wild places. The subzone would be managed similarly to the uplands wilderness subzone without the legal and policy requirements of wilderness.

Gunnison Gorge Interface Wilderness Zone

The Gunnison Gorge interface wilderness zone encompasses both inner canyon and uplands along the western boundary of Black Canyon of the Gunnison NP, adjacent to the Gunnison Gorge Wilderness within the BLM-managed Gunnison Gorge National Conservation Area. This zone provides access to Black Canyon of the Gunnison NP from the Gunnison Gorge National Conservation Area.

Black Canyon opens slightly and is less deep within the rugged Gunnison Gorge. River morphology becomes more amenable to rafting, which becomes more feasible and common from a point 1 mile within Black Canyon of the Gunnison NP. All lands within the Gunnison Gorge interface wilderness zone are designated wilderness.

Desired conditions for the Gunnison Gorge interface wilderness zone would be wild, natural, rugged, remote, challenging, unspoiled, and uncrowded. The visitor experience would be challenging and adventurous; the visitor experience also would provide for a variety of opportunities that may involve self-reliance and use of wilderness skills. The wilderness qualities would be maintained and improved, including the untrammelled character, the natural quality, the undeveloped character, and opportunities for solitude. The National Park Service and Bureau of Land Management would continue to coordinate activities to meet these desired conditions.

PROPOSED BACKCOUNTRY ZONING FOR CURECANTI NATIONAL RECREATION AREA

Two management zones are proposed for the backcountry of Curecanti NRA (figure 7). There is no designated wilderness in either of these zones, and no areas have been assessed as eligible for the National Wilderness Preservation System. Thus, this proposed backcountry zone is not subject to NPS policy for wilderness stewardship.

East Portal–Morrow Point Backcountry Zone

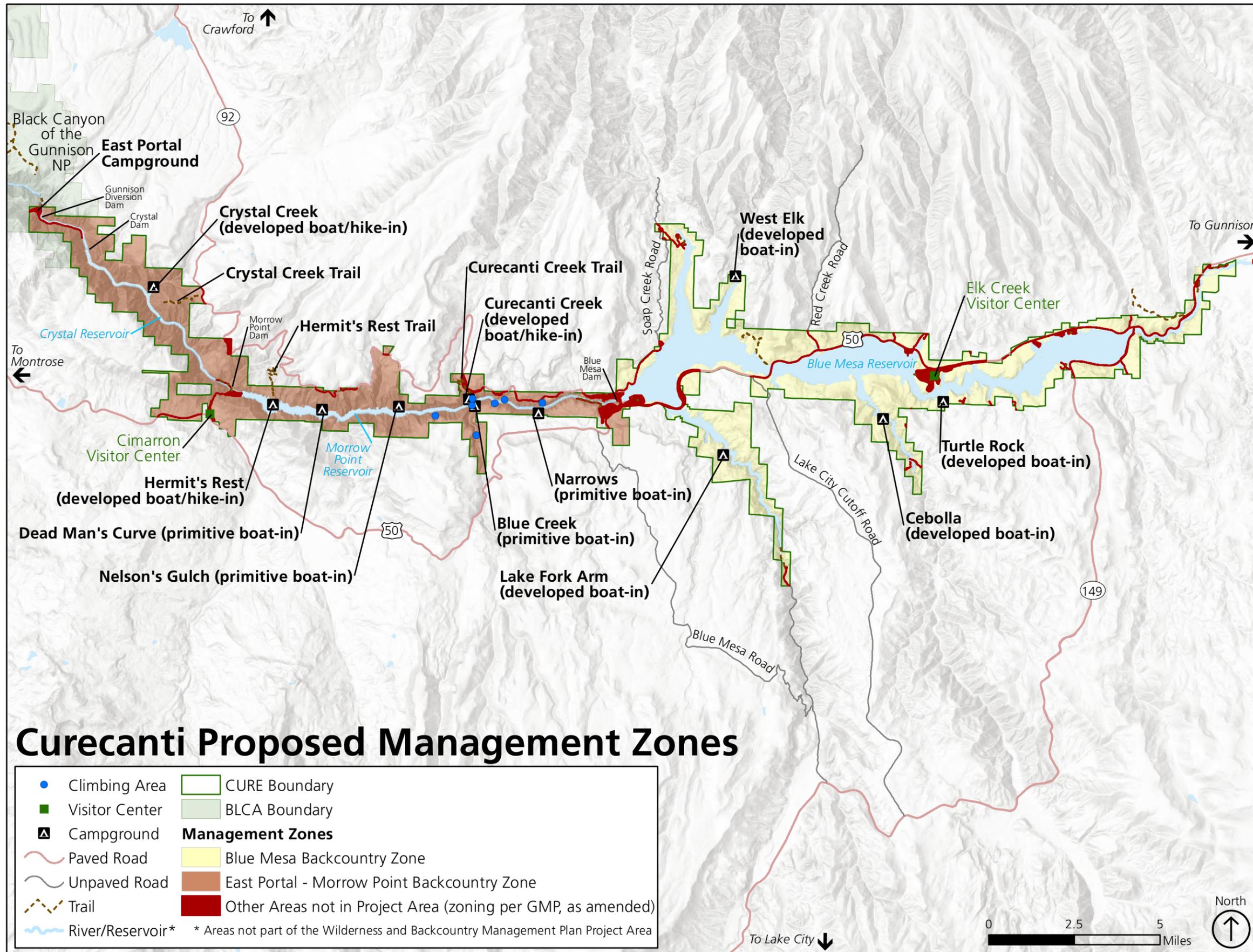
This zone includes the backcountry undeveloped areas in Curecanti NRA from Blue Mesa Dam to the boundary with Black Canyon of the Gunnison NP.

The desired conditions for the East Portal–Morrow Point backcountry zone would be remote, uncrowded, natural, scenic, peaceful, relaxing, rugged, and secluded. Backcountry qualities are maintained and improved, including the natural qualities, keeping nonrecreational development to a minimum, and recognizing and enhancing unique and remote backcountry experiences while protecting solitude, consistent with the desired conditions for this backcountry zone. Common visitor activities for this zone include hiking, fishing, boating, camping, climbing, wildlife viewing, ice climbing, snowshoeing, and cross-country skiing.

Blue Mesa Backcountry Zone

This zone includes the land between the eastern Curecanti NRA boundary near Neversink, west to Blue Mesa Dam. The desired conditions for this zone would be remote, uncrowded, natural, expansive, and open. Backcountry qualities are protected and improved, including the natural qualities, keeping nonrecreational development to a minimum, and enhancing land-based recreational opportunities. Common visitor activities for this zone include the same as those in the East Portal–Morrow Point backcountry zone such as hiking, fishing, boating, camping, climbing, wildlife viewing, ice climbing, ice fishing, snowshoeing, and cross-country skiing.

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Curecanti Proposed Management Zones

| | |
|--------------------|---|
| ● Climbing Area | □ CURE Boundary |
| ■ Visitor Center | □ BLCA Boundary |
| ▲ Campground | Management Zones |
| — Paved Road | ■ Blue Mesa Backcountry Zone |
| — Unpaved Road | ■ East Portal - Morrow Point Backcountry Zone |
| - - - Trail | ■ Other Areas not in Project Area (zoning per GMP, as amended) |
| ~ River/Reservoir* | * Areas not part of the Wilderness and Backcountry Management Plan Project Area |

Figure 7. Curecanti National Recreation Area Proposed Management Zones

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GENERAL MANAGEMENT DIRECTION COMPONENTS

General management direction for the wilderness and backcountry of Black Canyon of the Gunnison NP and Curecanti NRA is described in greater depth in subsequent chapters in part 1 of this document, including direction related to climbing, monitoring, visitor capacities, commercial services, and scientific and research activities in wilderness.

See chapter 4, part 1, for the climbing management plan: a clearly defined set of information and guidelines for climbers and NPS managers that will maintain the fundamental resources and values of Black Canyon of the Gunnison NP and Curecanti NRA, while providing for recreational climbing activities. The climbing management plan addresses both Black Canyon of the Gunnison NP and Curecanti NRA.

See chapter 5, part 1, for the monitoring strategy: a strategy to evaluate whether desired conditions are being achieved and maintained. This chapter identifies measures, standards, and appropriate management strategies for monitoring wilderness character in Black Canyon of the Gunnison NP and the resource and experiential conditions of the backcountry zones within Curecanti NRA.

See chapter 6, part 1, for the visitor capacity identification: this analysis identifies the maximum amounts and types of use that all visitor use areas within the wilderness and backcountry of Black Canyon of the Gunnison NP and Curecanti NRA can accommodate while achieving and maintaining desired conditions. This chapter meets legal requirements to identify visitor capacities and implementation strategies under the 1978 National Parks and Recreation Act.

See chapter 7, part 1, for the commercial service analysis: the necessary and appropriate analysis identifies commercial visitor services that are necessary and/or appropriate for public use and enjoyment of backcountry or wilderness lands and are consistent to the highest practicable degree with the preservation and conservation of resources and values of Black Canyon of the Gunnison NP and Curecanti NRA. For activities that are necessary to realize the wilderness purposes within Black Canyon of the Gunnison Wilderness, an evaluation of the minimum amount of commercial services that are necessary to achieve these purposes, known as an extent necessary determination (END) for commercial services in wilderness, was conducted. Documentation of this analysis is included in chapter 7, satisfying requirements of the Wilderness Act of 1964 and NPS *Director's Order 41 Wilderness Stewardship*.

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CHAPTER 3: MANAGEMENT STRATEGIES

INTRODUCTION

This chapter identifies management strategies and actions that will be used to achieve and maintain the desired conditions (see chapter 2) related to visitor use and resource protection and to resolve issues described in chapter 1. The chapter begins with management strategies and actions that are taken at a parkwide programmatic level, and then presents strategies and actions by management zone. Specific actions with the potential to cause environmental impacts are included and analyzed in Part 2: Environmental Assessment.

Actions in this plan and subsequent implementation plans would take years to accomplish and updates would be needed. Future funding needs for actions would be evaluated on a case-by-case basis; however, there is no guarantee that the actions proposed in this plan would be funded. The National Park Service will continue to look for creative and diverse funding opportunities and implementation of proposed actions are subject to available funding. Budget restrictions, requirements for additional data or regulatory compliance, and competing national park system priorities may prevent implementation of some actions.

GENERAL STRATEGIES ACROSS ALL WILDERNESS AND BACKCOUNTRY LANDS

A Spectrum of Opportunities and Experiences

The proposed actions and strategies lay out a comprehensive approach to wilderness and backcountry management that is based on maintaining or improving wilderness and backcountry qualities in Black Canyon of the Gunnison NP and to maintain or improve backcountry qualities in Curecanti NRA. Between the backcountry and wilderness lands in both units, the National Park Service intentionally provides and makes available for visitors a spectrum of appropriate wilderness and backcountry opportunities. Management zones (see chapter 2) identify desired conditions and management for different areas throughout both units. At one end of the spectrum, the inner canyon wilderness zone of Black Canyon of the Gunnison NP would be managed to be wild, natural, rugged, remote, and provide adventure and the experience of self-reliance. At the other end of the spectrum, the Blue Mesa backcountry zone at Curecanti would be managed to be uncrowded, natural, expansive, and open. The Blue Mesa backcountry zone also would offer a variety of recreational opportunities supported by trails, campsites, and other appropriate backcountry facilities.

The National Park Service is committed to providing access to programs, facilities, and experiences for people of all abilities. Achieving accessibility in outdoor environments presents challenges and constraints posed by natural terrain and other factors. Where opportunities exist, the National Park Service would evaluate and carry out strategies to increase access to wilderness and backcountry experiences. For example, as existing trails and trail infrastructure are modified, or new trails are developed, the National Park Service would implement appropriate accessibility improvements to the extent practicable. The National Park Service would improve trailhead signage to include information about the trail conditions and difficulty (e.g., trail length, surface type, tread width, running slope, and cross slope) that would enable visitors of all abilities to make informed decisions about which trails to use. Improvements would also be made to web-based social media, printed media, and visitor center resources regarding opportunities for persons with disabilities. Where physical access to wilderness or backcountry may not be possible because of terrain or other factors,

the National Park Service would consider strategies to provide accessibility via programmatic means. These strategies could include immersive multimedia virtual tours or audio and video recordings.

Enhanced Public Understanding of Wilderness Character and Backcountry Values

A goal of the plan is to enhance public understanding of the relevance of wilderness character and backcountry values and opportunities, with an objective to provide public information to promote backcountry skills and Leave No Trace outdoor ethics. Disseminating public information may include wayside exhibits, signs, bulletin boards, publications (including the park newspaper), lesson plans as part of a suite of curriculum-based education programming available for teachers to select, inclusion as part of the Advanced Junior Ranger Program already in existence, and perhaps as a featured annual event.

Black Canyon of the Gunnison NP presents an opportunity that is unusual in that the drive-by and walk-up viewpoints along both the North and South Rims provide visitors with the ability to view wilderness that may be otherwise inaccessible to them. This platform, or “outside looking in” ability, can be an opportunity to inspire visitors about wild places and introduce them to wilderness through wayside exhibits along the rim as well as in self-guiding booklets and ranger-led programs.

Careful placement of wilderness signs on trails and routes at the boundary just outside wilderness gives visitors notice they are entering a special place—unique and different. The signs inform visitors that permits are required to access the wilderness. The wooden Black Canyon of the Gunnison Wilderness boundary signs provide a photo opportunity for that nonimpact souvenir so many people seek. Per NPS *Management Policies 2006* 6.3.10.4, any signage or other markers in wilderness would be minimal, designed to harmonize with the surrounding landscape, and used only as necessary to protect wilderness resources or support visitor safety, such as those identifying routes and distances.

Currently, information about wilderness skills and Leave No Trace outdoor ethics is provided as part of the wilderness use permit process through ranger-led safety briefings, wilderness brochures, bulletin boards, and videos. This plan contains a management framework to monitor wilderness character and take action if conditions change (see Chapter 5: Monitoring Strategy). Many management strategies informed by monitoring involve visitor education. For example, if human-bear interactions become a problem, the first course of action would be to provide visitors with more information about how to avoid encounters. Updating and delivering current information to visitors is an important management tool to protect wilderness character.

As in most education efforts, park staff must first be informed about what wilderness means, what the parameters of park wilderness are, and how wilderness use would be managed. Wilderness education would be incorporated into annual training for new employees and continuing wilderness education encouraged for all employees. Increasing wilderness awareness—where it is, why it matters, what the benefits are, and how to take care of it—among employees and the public would be improved by this diversity of education and interpretive efforts.

There are a handful of climbing routes in the wilderness and backcountry that have inappropriate or offensive common names that are not official names endorsed by the National Park Service. The National Park Service will work with the climbing community to increase awareness of inappropriate or offensive names and will consider replacement names.

Visitor-Created Trail Restoration

In response to a growing number of visitor-created trails, also called informal trails or social trails, the need for a programmatic restoration strategy was identified. Visitor-created trails often have safety and/or resource concerns. Tools, techniques, and actions for evaluating and restoring visitor-created trails are described in appendix C. Each tool or technique is evaluated for its appropriateness in wilderness.

MANAGEMENT STRATEGIES BY ZONES: BLACK CANYON OF THE GUNNISON NATIONAL PARK

Inner Canyon Wilderness Zone (and Subzones)

To maintain and enhance existing opportunities for solitude for hikers, anglers, backcountry campers, climbers, and kayakers, the existing wilderness use permit system laid out in the 1993 resource management plan for the inner canyon wilderness zone would be updated to achieve desired resource and experiential conditions. See the visitor capacity identification in chapter 6 for updated strategies related to managing amounts and types of use. Visitor experience and resource conditions would be monitored (see monitoring strategy in chapter 5) and if there are significant changes, adjustments to the wilderness use permit system may be warranted. Park staff will evaluate using an online permit system in the future through Recreation.gov. Self-reliance, challenge, and adventure would continue to be valued, and routes would be maintained with minor adjustments and rerouting to mitigate specific erosion problems. Within the inner canyon wilderness zone, there are no official trails (except Oak Flat Trail), and new trails would not be constructed. Pets would continue to be prohibited. A requirement for visitors to store their food and trash in rodent- and bear-proof containers would be implemented to keep wildlife from becoming dependent on humans. No livestock use would be allowed in the inner canyon wilderness zone.

The primary difference in the management of the inner canyon pristine wilderness subzone and the inner canyon primitive wilderness subzone would be the management of overnight use and climbing. Campsites would be designated in the inner primitive wilderness subzone and would not be designated in the inner canyon pristine wilderness subzone. Visitors would have the freedom to choose a camping spot in the pristine subzone, would be encouraged to camp on durable surfaces and stay no more than one night, and would be provided with information about Leave No Trace principles. Overnight visitors may arrive 2 hours before sunset and must leave 2 hours after sunrise and may only camp one night per trip at a particular site. Campsites would be monitored and maintained to ensure that natural qualities are maintained or improved and to provide solitude by ensuring adequate distance between campsites.

In the inner canyon primitive wilderness subzone, natural qualities and self-reliance would be further improved by phased implementation of a pack-it-in/pack-it-out system using personal human waste pack-out bags for storage and transport in conjunction with increased visitor information (such as Leave No Trace principles). The National Park Service would evaluate retrofitting, replacing, or removing pit toilets over time from routes with lower traffic first, such as Warner Route. Transition options could include locking the toilet, providing waste bags, and monitoring conditions. Communication of waste management in the inner canyon should be included as part of any potential future online permit system. The National Park Service would also provide sufficient advance notice and post information on the websites and backcountry interpretive boards regarding removal of pit toilets and switch to pack-it-in/pack-it-out system. The National

Park Service would stock personal human waste pack-out system bags for sale at the South Rim Visitor Center.

New or replacement fixed anchors or equipment for climbing may be authorized in the inner canyon primitive wilderness subzone, subject to a minimum requirements analysis but not in the inner canyon pristine wilderness subzone. Motorized drills would not be allowed in either wilderness subzone. The impacts of fixed anchors and equipment and access routes on wilderness character would be monitored; management may be adjusted if warranted by a change in conditions (see Chapter 4: Climbing Management Plan). Raptor nesting activities would continue to be monitored and seasonal closures would be implemented to protect active nesting sites (ledges and alcoves in canyon walls).

To maintain and improve natural qualities in the inner canyon wilderness zone, tamarisk and other invasive plants or small trees would continue to be monitored, and management actions, subject to a minimum requirements analysis, may be enacted to reduce infestation and/or establishment. Tamarisk management is described in the 2016 integrated pest management plan. Management of wildland fires in the inner canyon wilderness zone would be continued to meet resource objectives and future fire management plans would focus on further enhancement of wilderness character. Baseline soundscape and night sky data would be collected and conditions monitored. To maintain and improve the untrammeled quality, Black Canyon staff would follow the minimum requirements analysis process to ensure that administration of the wilderness seeks to minimize mechanized activities, including the use of chainsaws and landing of helicopters (violations of Section 4 (c) of the Wilderness Act), and to minimize manipulation of the natural environment. Black Canyon would also enhance guidelines for research and scientific installations in wilderness that would be consistent with the preservation and management of wilderness (see appendix D). Scientific installations also violate Section 4 (c) of the Wilderness Act and would only be considered if found necessary to meet minimum requirements for the administration of the area for the purpose of the Wilderness Act.

Paragliding, hang gliding, and BASE jumping (parachuting from fixed objects) would continue to be prohibited pursuant to 36 CFR. The raptor nesting activities would continue to be monitored and seasonal closures would be implemented to protect active nesting sites (ledges and alcoves in canyon walls).

Uplands Zone (and Subzones)

To emphasize restoration of natural qualities, the uplands zone would be the focus of the most active and intensive program of invasive plant removal and native plant/habitat restoration. The National Park Service is committed to ongoing collaboration with the Bureau of Land Management regarding management of grazing permits to ensure the maintenance and enhancement of natural, untrammeled, and undeveloped qualities of wilderness. Unnecessary facilities and structures would be removed, including livestock structures and installations that are unused. Additional fencing, which violates Section 4 (c) of the Wilderness Act and would diminish the undeveloped quality of wilderness, may be necessary to improve natural qualities by discouraging trespass grazing. Boundary fencing between the NPS uplands zone (pristine or primitive wilderness subzones) and BLM lands may be considered if trespass grazing impacts increase.

The park would continue to engage with other agencies and nongovernmental organizations to monitor and improve the habitat for Gunnison sage-grouse, a threatened species under the

Endangered Species Act. Colorado Parks and Wildlife would continue conducting wildlife research in the park. The National Park Service would continue to manage elk and also would emphasize protection of wilderness character (e.g., scrutiny of radio collaring).

The uplands zone (wilderness and nonwilderness) would remain relatively free of recreational development, with freedom to hike, cross-country ski, and camp with a wilderness use permit (at least 0.5 mile away from trails, roads, and any other developed areas). There would be no designated campsites or toilet facilities. Visitors would be expected to follow appropriate Leave No Trace guidance for human waste (using personal human waste pack-out bags for storage and transport) and for minimum impact camping. Outstanding opportunities for solitude would be maintained by monitoring wilderness character and making management adjustments possible if change occurs.

The main difference between the uplands primitive wilderness and the uplands pristine wilderness subzones would be presence of trails. The uplands primitive wilderness subzone has existing trails, a few signs, and more trails could be added in the future, while the pristine wilderness subzone has no trails and would remain trail-less and without signs. Horse use would continue to be allowed on Deadhorse Trail. Pets would not be allowed in the uplands zone—whether wilderness or backcountry subzones.

In the wilderness, Black Canyon of the Gunnison NP staff would follow the minimum requirements analysis process to minimize mechanized activities, including the use of chainsaws and landing of helicopters. The park would also implement guidelines for research and scientific installations in wilderness that would be consistent with the preservation and management of wilderness (see appendix D).

Baseline soundscape and night sky data would be collected, and conditions monitored in the uplands zone. To protect the Class I air quality around Black Canyon of the Gunnison Wilderness, an air monitoring station would be established near but outside the wilderness area.

Gunnison Gorge Interface Wilderness Zone

The National Park Service and the Bureau of Land Management currently cooperate on management of this area, and this cooperation would continue. The National Park Service would continue to coordinate with the Bureau of Land Management for consistent management to achieve desired resource protection, visitor experiences, and to preserve and improve wilderness character.

MANAGEMENT STRATEGIES BY ZONES: CURECANTI NATIONAL RECREATION AREA

East Portal–Morrow Point Backcountry Zone

Visitors would continue to enjoy a peaceful setting for hiking, camping, fishing, hunting, canoeing, kayaking, climbing, and viewing this extraordinary and remote canyon segment below Blue Mesa Dam to include Morrow Point and Crystal reservoirs and East Portal. Horse use, bicycling, and motorized use of trails would continue to not be allowed in the East Portal–Morrow Point backcountry zone. Leashed pets would be allowed on trails. Backcountry campsites would be maintained and made available on a first-come, first-served basis. Signs in the backcountry would be kept to the minimum necessary for route finding and would be small and wood-routed to fit with the environment.

Managers would continue present treatments and would likely increase efforts to remove invasive plant species while restoring native habitat, per the 2016 integrated pest management plan. Rare and/or sensitive plant species would continue to be monitored and managed in consultation with other federal and state agencies. Baseline soundscape and night sky data would be collected, and conditions would be monitored in the East Portal–Morrow Point zone. To protect natural qualities and the remote experience provided visitors using this backcountry zone, key indicators and measures would be monitored and potential management strategies would be implemented if conditions change (see monitoring strategy in chapter 5).

Raptors would continue to be monitored and seasonal closures (March 15–July 15) implemented to protect active nests (ledges and alcoves in the canyon walls and on other geologic exposures).

Paragliding, hang gliding, and BASE jumping would continue to be prohibited pursuant to 36 CFR 2.17 (Aircraft and Air Delivery).

Blue Mesa Backcountry Zone

Visitors would continue to enjoy hiking, horseback riding, camping, off-highway motorized access in designated areas, and hunting and fishing with valid state licenses. Horse use occurs and is allowed in areas below the high-water line of Blue Mesa Reservoir where motor vehicles are also permitted (per the 2010 motorized vehicle access plan). Any areas closed to motor vehicle access are also closed to horse access. In the past, horseback riding along the shore of the Soap Creek Arm of Blue Mesa Reservoir has been determined an appropriate visitor use and authorized under a commercial use authorization (CUA). In the future, any land acquired by the National Park Service would be evaluated for potential expansion of backcountry horse use. Some lands may be suitable.

Leashed pets would be allowed on trails. Motorized use would continue to be allowed on designated routes and shore areas identified in the *Curecanti National Recreation Area Motorized Vehicle Access Plan/Environmental Assessment*. Bicycles and horses would continue to be allowed in the same areas as the off-highway vehicles.

Boat-in camping along the shoreline would continue, both at developed campsites and elsewhere in the backcountry. Signs in the backcountry would be kept to the minimum necessary for route finding and would be small and wood-routed to fit with the environment.

Managers would continue to increase efforts to remove invasive plants and restore natural habitat, per the integrated pest management plan. Rare and sensitive plant species would continue to be monitored and managed in consultation with other federal and state agencies. The National Park Service is committed to ongoing collaboration with the Bureau of Land Management with respect to management of livestock grazing permits to ensure the enhancement of the natural qualities of the backcountry. The National Park Service would continue to engage with appropriate agencies and nongovernmental organizations to monitor and improve the habitat for the Gunnison sage-grouse, a threatened species under the Endangered Species Act and other wildlife species and their habitat. Baseline soundscape and night sky data would be collected, and conditions monitored in the Blue Mesa backcountry zone. To protect natural qualities and the backcountry experience in this zone, a few key indicators and measures would be monitored, and possible management adjustments enacted should conditions change (see Chapter 5: Monitoring Strategy).

Emergency landing of paragliders and hang gliders launching from nearby BLM land would continue, but there would be no need to provide a permanent landing site within NPS-managed lands because use is prohibited pursuant to 36 CFR 2.17 (Aircraft and Air Delivery).

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CHAPTER 4: CLIMBING MANAGEMENT PLAN

Climbing Ethics

The Black Canyon has long been established as a traditional area where bolts are kept to a minimum, if used at all. The Black is one of the last refuges for a wilderness experience. Just because a route cannot be done today without bolts doesn't mean that someone won't be able to do it tomorrow. Clean climbing is often possible; try spending just a little more time to find a secure placement that will not permanently scar the rock. Everyone venturing into the canyon should give their best effort to climb routes as cleanly and quietly as possible.

—Black Canyon Rock Climbs by Robbie Williams

INTRODUCTION

Black Canyon of the Gunnison NP is a destination that offers vast opportunities to expert rock climbers in designated wilderness. Located in southwest Colorado, the park includes part of a deep, steep-walled canyon carved through Precambrian rock by the Gunnison River.

The canyon is extremely deep and narrow. The depth of the canyon at Warner Point (the deepest section of the canyon) is 2,722 feet. The Painted Wall is the tallest vertical wall in the State of Colorado with a height of 2,250 feet. In the area of the North and south Chasm Walls, where most of the climbing activity takes place, the depth of the canyon is 1,820 feet. The canyon is at its narrowest point in the Chasm View area, with a rim-to-rim distance of 1,100 feet.

Black Canyon of the Gunnison NP is not a place for the beginning climber. Of the known 145 climbs, eight are rated at 5.8, and of these eight only four have good information available and see regular ascents. Twenty-one climbs have a rating of 5.9; five of these are aid routes, and only six of them see any significant climbing activity. The other 117 climbs have ratings between 5.10 and 5.13 (the highest grade being 5.15), and many require aid. All climbs within the Black Canyon are multipitch traditional routes located in remote areas within the canyon.

Peak climbing season at the Black Canyon of the Gunnison NP begins in late April and runs through the early part of June and then from mid-September through late October.

Along the Gunnison River upstream from Black Canyon of the Gunnison NP lies Curecanti NRA, which comprises a series of three reservoirs along the once wild river. Although the reservoirs of Curecanti NRA are generally a destination for water-based recreation, the area also offers ample opportunities for other recreating, including climbing. While this part of the canyon is not as steep or deep as the national park, there are many cliffs along the banks of the reservoirs that provide climbing opportunities. The Curecanti Needle, a distinct granite rock formation rising 700 feet from the canyon floor, provides a unique challenge for those attempting to climb its near-vertical walls. In the winter, a number of ice climbs form in this canyon, including Chipeta Ice Falls.

This plan provides general guidance for managing climbing at Black Canyon of the Gunnison NP and Curecanti NRA.

GOALS AND OBJECTIVES OF THE CLIMBING MANAGEMENT PLAN

The goals of this climbing management plan are as follows:

1. Preserve the fundamental resources and values found in the Black Canyon of the Gunnison NP, and Curecanti NRA, while providing for recreational climbing activities.
2. Set forth a clearly defined set of guidelines for climbers and NPS managers that would allow for preservation of wilderness character in Black Canyon of the Gunnison Wilderness.
3. Properly administer requests to install new fixed anchors and equipment or replace old fixed anchors and equipment in accordance with NPS policies and guidelines.
4. Provide information and guidance for education of climbers visiting Black Canyon of the Gunnison NP and Curecanti NRA.

TOPICS COVERED

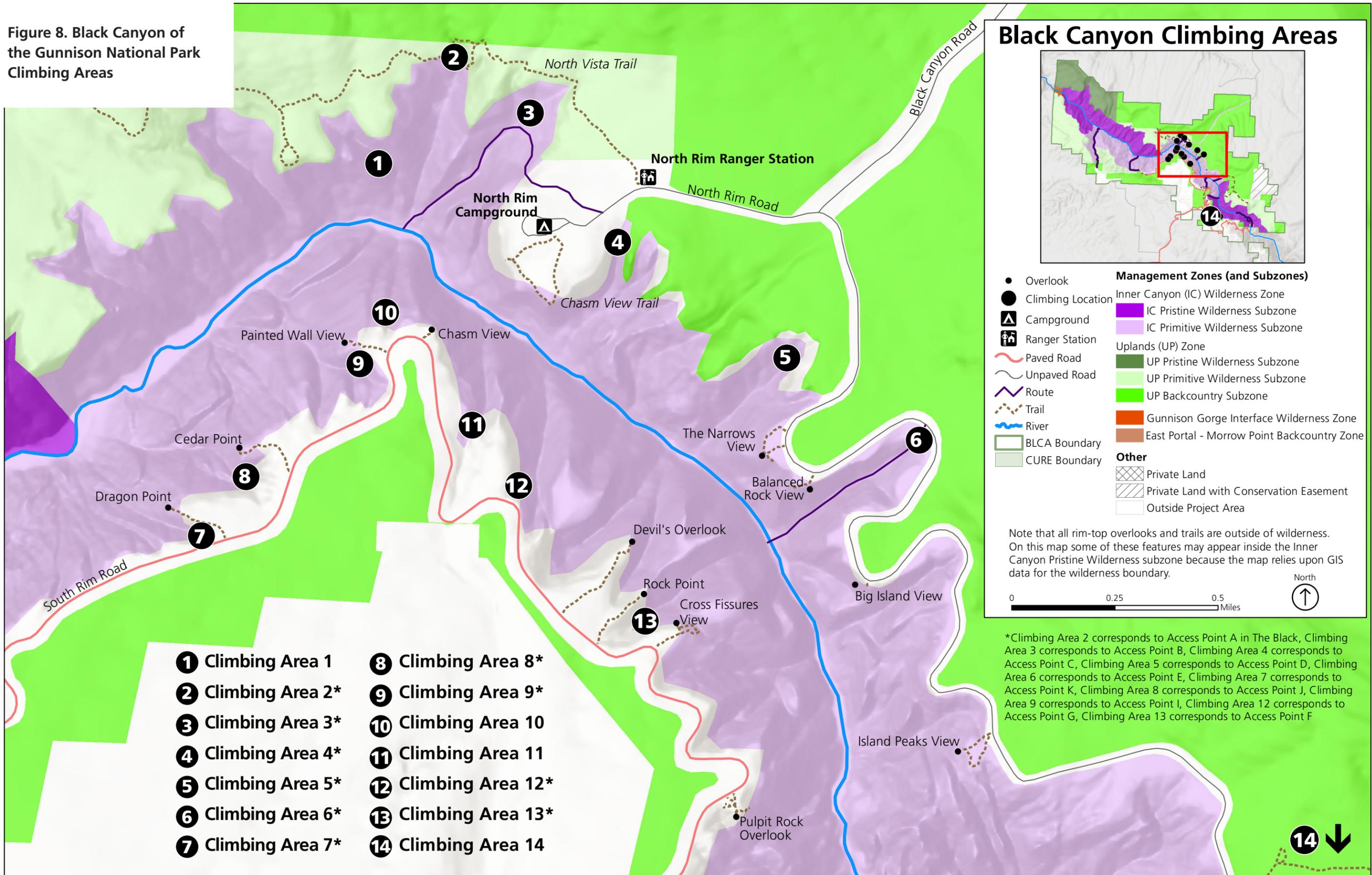
The topics covered in this climbing management plan are as follows:

1. Wilderness Use Permit
2. Fixed Anchors and Equipment
3. Fixed Rope
4. Development of New Routes
5. Development of Approach Trails
6. Rock Alteration
7. Vegetation Alteration
8. Human Waste
9. Gear Caches
10. Bouldering
11. High Lines and Slacklines
12. Climbing Activities Directly Affecting Developed Overlooks and/or Trails
13. Commercial Use Authorizations
14. Rescue Considerations
15. Seasonal Raptor Closures
16. Ongoing Monitoring and Management

1. Wilderness Use Permit

- Climbing areas within Black Canyon of the Gunnison NP are located within the Black Canyon of the Gunnison Wilderness, designated in 1976 (figure 8). Wilderness use permits are required by all visitors traveling into the inner canyon of Black Canyon of the Gunnison NP for day use, overnight use, fishing, and climbing.
- Climbing areas within Curecanti National Recreation Area are located within the backcountry but not within wilderness, and a wilderness use permit is not required (figure 9).

Figure 8. Black Canyon of the Gunnison National Park Climbing Areas



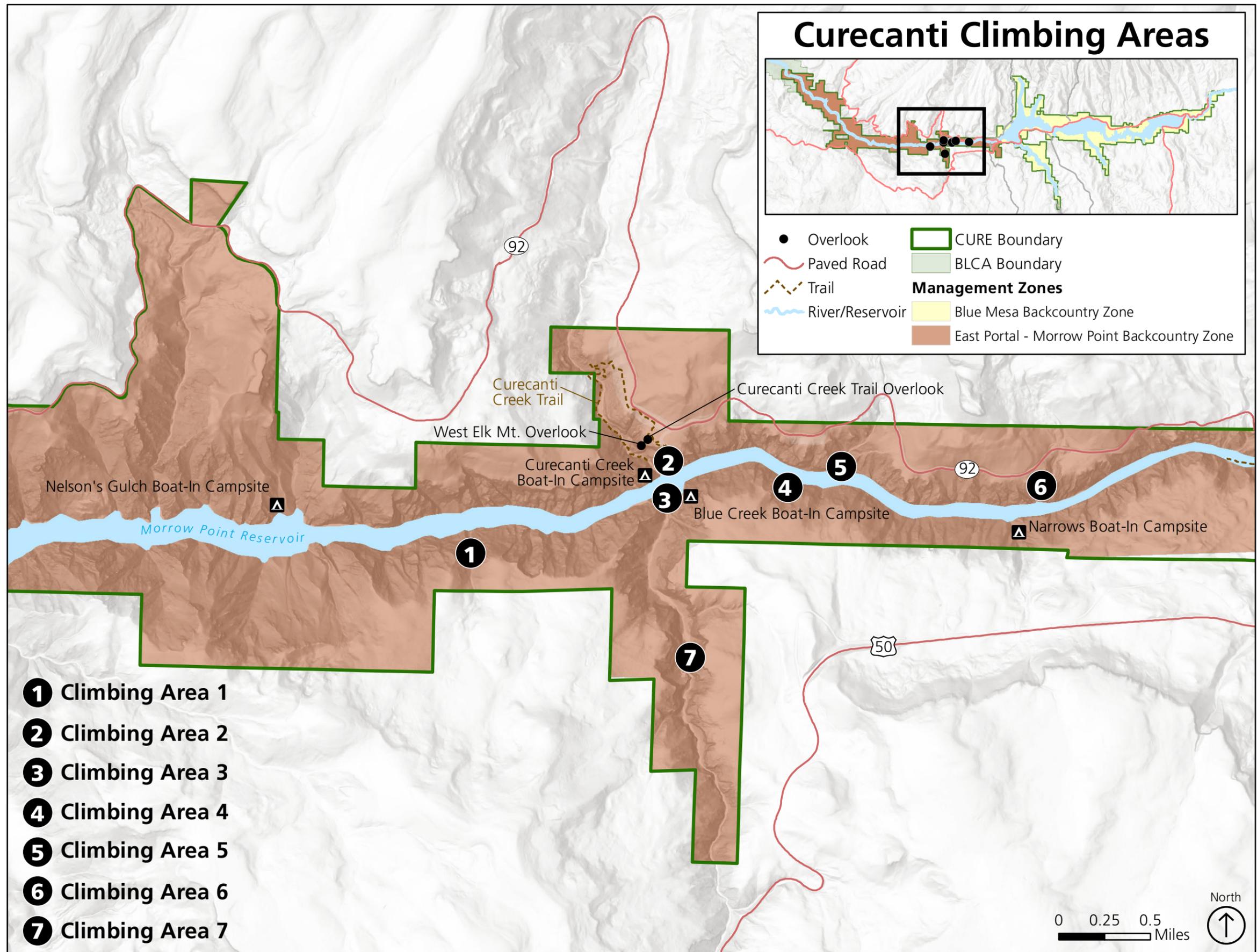


Figure 9. Curecanti National Recreation Area Climbing Areas

2. Fixed Anchors and Equipment

- The occasional placement of a fixed anchor or fixed equipment for belay, rappel, or protection purposes does not necessarily impair the future enjoyment of wilderness, nor violate the Wilderness Act provided its placement is in accordance with the NPS [Director's Order 41](#), which requires authorization to do so, and Reference Manual 41 (NPS 2022) which outlines the authorization process. However, climbing practices with the least adverse impact on wilderness character would always be the preferred choice.
- All fixed anchor or equipment requests will be evaluated through a minimum requirements analysis process to determine if they are necessary to administer the area for the purpose of wilderness.
- The use of motorized equipment (e.g., power drills, power winches) is prohibited pursuant to the Wilderness Act and NPS Resource Protection, Public Use and Recreation regulations established in 36 CFR 2.12 – Audio Disturbance (applies to wilderness in Black Canyon of the Gunnison NP).
- “Clean climbing” techniques should be the norm in wilderness and backcountry. This involves the use of temporary equipment and anchors that can be placed and removed without altering the environment (e.g., slings, cams, nuts, chocks, and stoppers).

Definitions

Fixed Anchors and Equipment — For the scope of this document, fixed anchors and equipment shall be deemed a bolt, piton, or other hardware intentionally placed that requires permanent alteration of the environment (Reference Manual 41, NPS 2022). Authorization for new fixed equipment or replacement of old fixed equipment varies by park unit.

Removable Equipment — Temporary equipment and anchors that can be placed and removed without altering the environment (e.g., slings, cams, nuts, chocks, and stoppers).

Black Canyon of the Gunnison National Park — Within federally designated wilderness in the national park system, all new fixed equipment placements or replacements require authorization.

Requests for placing new fixed anchors or equipment or replacing old fixed anchors or equipment in wilderness requires a written application from the requestor (e.g., climbing party) and a written authorization or special use permit from the National Park Service, per the following requirements:

- a) An application, submitted in writing, for authorization to place new fixed equipment or replace old fixed equipment must include the following
 - Applicant's name
 - Address
 - Contact phone number
 - Location of the proposed new fixed anchors or equipment
 - Estimated number of new fixed equipment (e.g., anchors and bolts) or replacement fixed equipment needed before the first ascent
 - Brief description of why the applicant feels a fixed equipment is warranted at the proposed site

- b) Applications would be accepted in person or by US Postal Service mail to the Visitor and Resource Protection Office, Attn: Climbing Staff. 102 Elk Creek, Gunnison, CO 81230. They may also be accepted through park e-mail (cure_info@nps.gov). Include “FIXED EQUIPMENT AUTHORIZATION APPLICATION” in the subject line.
- c) The placement of multiple new fixed anchors or equipment to be used primarily to aid in the ascent of an otherwise unclimbable section of rock (e.g., bolt ladders) is prohibited within Black Canyon of the Gunnison Wilderness.
- d) New fixed anchors or equipment may only be authorized in the development of new climbing routes and only in sections of the route that have no rock features adequate for the placement of removable equipment.
- e) The use of a power drill to install a fixed anchor (i.e., use of motorized equipment) is a prohibited use in wilderness and would not be authorized to facilitate the placement of new fixed equipment or the replacement of old fixed equipment in the Black Canyon of the Gunnison Wilderness.

Curecanti National Recreation Area — Requests for placing new fixed equipment or replacing old, fixed equipment within Curecanti National Recreation Area require authorization and follow the written application process stated above for Black Canyon of the Gunnison NP. However, fixed equipment may be placed using motorized (power) drills within the boundaries of Curecanti NRA.

A written application from the requestor and a written authorization or special use permit from the National Park Service for placing new equipment or replacing old, fixed equipment in Curecanti NRA must include the following information:

- Applicant’s name
- Address
- Contact phone number
- Location of the proposed new fixed equipment or replacement
- Estimated number of new fixed equipment (e.g., anchors and bolts) or replacement fixed equipment needed prior to first ascent
- Brief description of why the applicant feels a fixed equipment is warranted at the proposed site

Applications would be accepted in person or by US Postal Service mail to the Visitor and Resource Protection Office, Attn: Climbing Staff. 102 Elk Creek, Gunnison, CO 81230. They may also be accepted through park e-mail (cure_info@nps.gov). Include “FIXED EQUIPMENT AUTHORIZATION APPLICATION” in the subject line.

National Park Service Management Responsibilities

Because of the inherent risks associated with rock climbing and scrambling at Black Canyon of the Gunnison NP and Curecanti NRA, it is important for the climbing management staff to maintain specialized climbing skills and safe and secure climbing practices. NPS staff may place and maintain fixed equipment for administrative and emergency purposes outlined below:

1. Adhere to safety requirements and expectations included in the parks’ Climbing Patrol Standard Operating Guidelines and the Job Hazard Analysis for climbing patrols and search and rescue response.

2. In wilderness, install fixed equipment, if necessary, per a minimum requirements analysis, as required by NPS policy and the Wilderness Act. In backcountry, install fixed equipment in the most minimal way possible with the least impact to resources. Fixed equipment deemed unsafe, adversely impacting resources, and/or not meeting modern hardware requirements could be replaced by NPS staff as needed, following these same requirements.²
3. Incorporate clean climbing and Leave No Trace practices highlighted in this plan. This involves the use of temporary equipment and anchors that can be placed and removed without altering the environment (e.g., slings, webbing, cams, nuts, chocks, and stoppers).
4. Properly evaluate and administer climber requests for the placement of new fixed equipment and/or the replacement of old fixed equipment.

Criteria for Authorizing Placements of New Fixed Equipment

The National Park Service would consider authorizing new fixed equipment within the Black Canyon of the Gunnison Wilderness after conducting a minimum requirements analysis that considers the following data:

- Current wilderness character impacts because of climbing activity observed at Black Canyon of the Gunnison NP
- Historical climbing activity
- Current climbing activity
- New fixed anchors or equipment placement data over the last five years
- Current climbing route concentrations
- Opportunity for new routes within wilderness

The new fixed anchors or equipment authorizations for the Black Canyon of the Gunnison Wilderness and Curecanti NRA is dependent on the following:

- Continued monitoring and annual new fixed equipment counts would be conducted by park climbing staff.
- Fixed anchors or equipment would remain within an indicating standard (i.e., maximum) of zero new fixed equipment placements annually without preauthorization. The indicating standard has been identified using first ascent data, historical and current fixed equipment placement data, and current observed impacts on wilderness character.
- All new fixed equipment placements should meet the fixed equipment requirements set forth in this Climbing Management Plan.
- New authorized fixed equipment within the boundaries of the Black Canyon of the Gunnison Wilderness and Curecanti NRA should be constructed using hardware that has been painted a color similar to the natural rock color.
- Webbing and slings used to replace worn materials in existing anchors and equipment would be of a natural color, similar to the color of the rock or vegetation in the surrounding area.
- Fixed equipment placement for the purpose of fixed equipment stations (e.g., fixed rappel anchors) would be kept to a minimum.

² The National Park Service retains administrative discretion to replace fixed equipment deemed unsafe; that adversely impacts resources; and/or does not meet modern hardware requirements.

- Fixed equipment would meet modern hardware standards (e.g., diameter and length believed adequate for rock conditions at the placement site).
- Fixed equipment – pitons specifically – should consider the following recommendations:
 - The placement and removal of pitons does permanent damage to the rock. Pitons would only be used when any other reasonably safe means of protecting the climbing party is nonexistent.
 - When pitons are used in the development of a new route that would be expected to receive regular traffic in the future, it is recommended that the pitons be left fixed to reduce future damage to the rock.
 - When a rock feature exists that would allow for another means of protection other than pitons and the climbing party simply does not possess the needed type of equipment, the climbing party should retreat from the route and obtain the necessary equipment.
- Chains used in the construction of authorized fixed equipment would be kept to a minimal length to avoid visual impacts.

Replacing Old or Unsafe Fixed Equipment

Some fixed anchors or equipment on climbing routes at Black Canyon of the Gunnison NP and Curecanti NRA is old, unsafe, and does not otherwise meet modern climbing safety standards. To support climbing safety ethics in wilderness and backcountry lands, NPS staff would continue to be responsible to determine the safety of fixed equipment and when to replace unsafe anchors.

To replace old or unsafe fixed equipment, the requestor (e.g., climbing party) would need to obtain written authorization from the National Park Service before replacing an anchor/equipment or maintaining the existing climbing route. Similar to the process outlined for placing new fixed equipment, approval for replacing old or unsafe fixed equipment on a one for one basis would require the following information:

- Applicant's name
- Address
- Contact phone number
- Specific location of the proposed replacement equipment
- Brief description of why the applicant feels a replacement fixed equipment is warranted

Applications would be accepted in person or by US Postal Service mail to the Visitor and Resource Protection Office, Attn: Climbing Staff, 102 Elk Creek, Gunnison, CO 81230. They may also be accepted through park e-mail (cure_info@nps.gov). Include "UPDATE EXISTING ROUTE" in the subject line.

3. Fixed Rope

Definition: For the scope of this document, fixed rope is that which is placed to aid in the ascent or descent of a route and remains in place when the climbing party is not on the route.

The placement of fixed rope for the purpose of retreating from and returning to a climb may be allowed under the following conditions:

- The climbing party is actively attempting to climb the route.
- The placement does not exceed a period of 14 days.

- The climbing party remains in the park during the 14-day period.

4. Development of New Routes

Definition: For the scope of this document, a new route shall be deemed any route ascending previously unclimbed terrain.

Preauthorization is required and it is strongly recommended that climbers planning the development of a new route discuss their plans with park staff before undertaking the application for authorization process for the development of the route. Refer to Section 2 (Fixed Anchors and Equipment) for detailed requirements.

For new routes that require fixed equipment, climbers need to follow the authorization process outlined in Section 2 of this plan (Fixed Anchors and Equipment). After obtaining authorization, the climber who received authorization would submit a topo and/or route description of the new route that includes name and contact phone number as well as the number and location of new fixed equipment to the park within 30 days of completion of a new route (i.e., first ascent). Black Canyon of the Gunnison NP would receive topo maps/route descriptions at the following locations:

- Visitor and Resource Protection Office (102 Elk Creek, Gunnison, CO 81230)
- Via park e-mail: cure_info@nps.gov Include “ATTENTION CLIMBING STAFF - NEW ROUTE TOPO in the subject line.
- Via US Postal Service:
National Park Service
Attn: Climbing Staff
102 Elk Creek
Gunnison, CO 81230

5. Development of Approach Trails

The intentional development of approach trails and the use of cairns or any other materials to mark approach trails is prohibited. Climbers would use Leave No Trace practices and take every precaution available to ensure that the wilderness remains in a natural state. The seven Leave No Trace principles provide a framework of minimum impact practices for anyone visiting the Black Canyon of the Gunnison Wilderness at Black Canyon of the Gunnison NP and backcountry lands at Curecanti NRA. Each principle covers a specific topic and provides detailed information for minimizing impacts. Climbers should be prepared to encounter an arduous descent into the inner canyon of the Black Canyon of the Gunnison NP and should have a good understanding of natural features to locate the beginning of specific climbing routes. Each of the following principles covers a specific topic and detailed information for minimizing impacts on each topic can be found at <https://lnt.org/>.

- Plan Ahead and Prepare
- Travel and Camp on Durable Surfaces
- Dispose of Waste Properly
- Leave What You Find
- Minimize Campfire Impacts³
- Respect Wildlife

³ Campfires are not allowed in wilderness at Black Canyon of the Gunnison NP.

- Be Considerate of Other Visitors

6. Rock Alteration

Definition: For the scope of this document, rock alteration would be deemed any removal of rock from its natural position, drilling, chipping, or gluing of holds.

The removal of rock from its natural position would be allowed only when the rock to be removed poses a significant risk to the climbing party or a future climbing party and the climber can positively ensure no other people are below. Because of unpredictable fall lines that are created by multiple impacts with the wall, removing rock from a route is extremely dangerous to other canyon users below and should only be used when significant risk is imminent.

Chipping or the gluing on of holds is strictly prohibited.

7. Vegetation Alteration

Definition: For the scope of this document, vegetation alteration would be deemed any removal of vegetation from its natural position, destruction, or damage of vegetation.

- a) Removal of vegetation from the base of climbs or belay ledges is prohibited.
- b) The removal of vegetation from cracks to allow the crack to become more climbable is prohibited.
- c) When using trees as temporary natural anchors/equipment, padding would be placed in between the rope and bark surface to prevent damage to the tree. Ropes, webbing, slings, or other temporary protection that use trees as a natural anchor would need to be removed immediately after use.

8. Human Waste

Parties climbing routes expected to be completed in one day (no bivouac) shall have available to them a personal human waste pack out system (either a commercial waste alleviation gel bag or improvised unit), which would allow them the capability of removing their solid human waste from the wilderness or backcountry.

Parties climbing routes expected to take longer than one day would have in their possession during the climb, a container sufficient to contain human waste without the possibility of leakage or breakage, and such container and its contents would be removed from the park upon completion of the climb.

9. Gear Caches

Definition: For the scope of this document, a gear cache would be deemed any supply of gear left unattended in the wilderness or backcountry for future use or the future use of another climbing party (excluding fixed ropes).

The caching of climbing equipment at or near the base of a climb would be allowed for a period not to exceed 24 hours (36 CFR 2.22(a) (2) - Property).

10. Bouldering

For the scope of this document, bouldering is a climbing activity on rock formations unroped and within a safe distance of the ground that requires the use of specialized equipment (e.g., rock climbing shoes and crash pad). Opportunities for bouldering in Black Canyon of the Gunnison Wilderness and Curecanti NRA backcountry are rare because of steep canyon terrain.

11. Highlines and Slacklines

Definition: For the scope of this document, a highline or slackline shall be deemed any rope, webbing, or other material tensioned horizontally between two points for the purpose of walking or travel suspended above the ground.

Highlines spanning any portion of the canyon require a special use permit and would follow the same authorization process outlined in Section 2 of this plan. Slacklines are prohibited in all areas of Black Canyon of the Gunnison NP and Curecanti NRA, including campgrounds.

12. Climbing/Rappelling Activities Directly Affecting Developed Overlooks and/or Trails

Any climbing activity that directly affects visitor use of developed overlooks and/or trails requires a special use permit. Activities involving visible ropes on or near overlooks would be discouraged and require the requestor (e.g., climbing party) to obtain a special use permit from the National Park Service to authorize the climbing or rappelling activity.

13. Commercial Use Authorizations

A commercial use authorization (CUA) allows an individual, group, company, or other for-profit entity to provide commercial visitor services within a national park unit. CUAs are required if an operator provides goods or services to park visitors that: (1) take place at least in part on property managed by the NPS; (2) use park resources; and (3) are for the purpose of monetary gain or profit.

Per the guidance included in the Black Canyon of the Gunnison NP and Curecanti NRA Wilderness and Backcountry Management Plan, guided climbing would be provided through a CUA. One guide shall be required for up to two clients. Group size shall be limited to four people, inclusive of the guide. Operating terms and conditions under a CUA (e.g., routes, group sizes, and temporal restrictions) may be updated by the National Park Service for resource protection, health and safety purposes, or incorporation of climbing management best practices. All CUA clients and guides are required to obtain a wilderness or backcountry use permit and are subject to daily visitor capacities on climbing access routes where applicable. A CUA does not exempt the holder or clients from NPS entrance or camping fee requirements nor does it grant automatic access to areas under a managed access system.

14. Rescue Considerations

Section 8.2.5.3, Search and Rescue, of National Park Service *Management Policies 2006* states: “To provide for the protection and safety of park visitors, the Service would make reasonable efforts to search for lost persons, and to rescue sick, injured, or stranded persons. This responsibility may be fulfilled by Service staff or by qualified search-and-rescue organizations or agencies that are capable of responding to life-threatening emergencies pursuant to the terms of a formal agreement.

Deceased persons would be evacuated unless the level of risk to the rescue party is found to be unacceptably high.”

Consistent with this policy, park staff would undertake rescue operations for those in need, unless it is deemed that the risk would be too great to rescue personnel. The park would seek additional resources to assist at any time if the incident commander believes it is in the best interest of the park, safety of employees and visitors, and/or the injured or stranded party. Activating outside resources adds to the response time, but in cases must be done to safely respond to some situations. Efforts would be made to provide necessary treatment and services to the sick, injured, and stranded consistent with the policy above and the resources available to provide assistance. In all cases, the safety and well-being of rescue personnel and the public would be of utmost importance.

Being overdue simply because a climbing party underestimated the time required to complete a route does not warrant initiation of a rescue operation. Be aware that cell phone reception and transmission is generally not available within the canyon or along the rim in either NPS unit. Rangers may attempt to contact climbers that appear to be having difficulty. In such instances, the climber should raise one arm if the individual does not require assistance and both arms if assistance is requested.

15. Seasonal Raptor Closures

Black Canyon of the Gunnison National Park. From March 15 through July 15, the following areas may be closed to all public use each year:

North Rim: Serpent Point and adjacent walls within 0.5 mile, including the area above the listed wall(s) from the canyon edge extending for 50 feet away from the canyon. Climbing routes included in this closure are Southern Arete, West Arete, Forrest Walker, Journey through Mirkwood, Stratosfear and Dragon, Climb Bold or Fly, and Northern Arete.

South Rim: The following routes upstream from Echo Canyon, including the top of the walls 50 feet away from the rim edge: Me, Myself & My Ego, Kill ‘Em All, The Black Buttruss, and Deadman’s Walk. Climbing routes which are located near any newly established or newly discovered cliff nesting raptor nests may be temporarily closed to protect nesting raptors per the raptor nest standard operating procedure.

Curecanti National Recreation Area. From March 15 through July 15, the following areas may be closed to all public use each year:

The Curecanti Needle and adjacent walls within 0.5 mile, including the landscape portions above the canyon wall(s) extending 50 feet from the rim edge. Developed trails and overlooks are excluded. Climbing routes along the north side of US Hwy 50, 0.5 mile east and west of mile marker 149. Climbing routes that are located near any newly established or newly discovered cliff nesting raptor nests may be temporarily closed to protect nesting raptors per the raptor nest standard operating procedure.

16. Ongoing Monitoring and Management

The Black Canyon of the Gunnison NP and Curecanti NRA Wilderness and Backcountry Management Plan establishes indicators, measures, and standards that would be monitored for the preservation of wilderness and backcountry resources. They include measures such as number of visitor encounters, impacts on soils and vegetation by user-created trails, concentrations of toilet

paper and human waste, and number of new climbing fixed anchors or equipment per year. If standards for these measures are exceeded, the plan has established a suite of possible management actions that include education, enforcement, and possible adjustments to measures, standards, and regulations. The Black Canyon of the Gunnison NP and Curecanti NRA Wilderness and Backcountry Management Plan would be revisited to ensure that it protects park resources and preserves desired visitor experiences.

Decisions regarding the establishment of new regulations or revision of existing regulations would be made by the Superintendent after consulting with park staff that, at a minimum, would include a representative for the park climbing ranger staff, wilderness staff, visitor and resource protection division, and resource management division. New regulations would be established through the superintendent's compendium or when required, through a formal rulemaking process.

The superintendent's decision would be made available to the public within 45 days via postings at park visitor centers and on the park website.

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CHAPTER 5: MONITORING STRATEGY

Table 2 below identifies measures, standards, and appropriate management strategies for monitoring five qualities of wilderness character in Black Canyon of the Gunnison NP and the resource and experiential conditions of the backcountry zones within Curecanti NRA. For Black Canyon of the Gunnison NP the wilderness character monitoring is consistent with the *Keeping it Wild 2: An Updated Interagency Strategy to Monitor Trends in Wilderness Character Across the National Wilderness Preservation System* (Landres et al. 2015). The strategy below reflects the current and potential future monitoring of wilderness character and backcountry desired conditions but does not reflect the wilderness character baseline assessment. Changes to the monitoring strategy may be made as more information is made available, including the release of the *Wilderness Character Monitoring Technical Guide* (Landres et al. 2020). Monitoring will also occur at Curecanti NRA. For management consistency, the interdisciplinary team identified the need to use similar terminology across the units. Given that there is no wilderness at Curecanti NRA, this monitoring is not connected to wilderness character; however, similar measures were used for consistency and comparability. At the end of this chapter, potential future monitoring tables include monitoring components for Black Canyon of the Gunnison NP and Curecanti NRA. In the future, if park staffing allows for an increase in monitoring, park management may refer to these tables to identify next steps to increase monitoring. Measures for different zones are combined into the same row when the standard/threshold is the same and separate when the standard/threshold is different. In this monitoring strategy, a group refers to two or more individuals who are recreating with one another.

Some key terms within this monitoring strategy are as follows:

- *Indicators.* Indicators are distinct and important components under each monitoring question. There is more than one indicator for nearly all monitoring questions. For wilderness character monitoring, each wilderness agency is responsible for reporting the trend in indicators.
- *Measures.* Measures are the specific elements under each indicator for which data are collected to assess trend in an indicator. In general, measures are human-caused threats to the indicator. Each agency is responsible for determining how its measures will be selected (that is, whether by a national or regional team, or by each wilderness, or other management unit). Examples of measures for each indicator are given in the sections that describe each quality in detail.

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BLACK CANYON OF THE GUNNISON NATIONAL PARK

Table 2. Measures, Standards, and Management Strategies for Black Canyon of the Gunnison National Park

Natural Quality

| Wilderness Character Quality | Indicator | Measure Topic | Measures ⁴ | What Does it Evaluate? | Assigned Management Zone | Recommended Standard | Appropriate Management Strategies |
|------------------------------|---------------|--|---|---|----------------------------------|---|---|
| Natural | Air and water | Extent and magnitude of human-caused change in water quality | Existing quality of park water bodies based on state water quality standards established by the Clean Water Act | Threats to aquatic life and human health based on physical and chemical numeric and table value standards | Inner Canyon Wilderness, Uplands | Quality will not exceed numeric and table value standards as set by state water quality standards | <ul style="list-style-type: none"> • Work internally and with public and private entities to avoid, whenever possible, the pollution of park waters by human activities occurring within and outside of parks. |
| Natural | Plants | Abundance, distribution, or number of known nonindigenous and invasive species | Number of nonindigenous plant species. Percent cover of invasive plant species on monitoring routes and transects | Area and extent of initial invasion and spread over time | Inner Canyon Wilderness, Uplands | ≥ 5% decrease in area affected by invasive plant species | <ul style="list-style-type: none"> • Increased education that focuses on preventing nonnative species invasion. • Perform noxious weed control. • Limit invasive species vectors and pathways. • Implement boat inspections during departure. |
| Natural | Animals | Abundance, distribution, or number of known nonindigenous and invasive species | Number of nonindigenous animal species | Area and extent of initial invasion and spread over time | Inner Canyon Wilderness, Uplands | 0 new nonindigenous aquatic and/or terrestrial animal species | <ul style="list-style-type: none"> • Increased education that focuses on preventing nonnative species invasion. • Limit disturbance to habitats to limit invasion by nonnative animals. • Limit invasive species vectors and pathways. • Implement boat inspections during departure. |
| Natural | Plants | Number of acres of authorized grazing allotments inside wilderness | Number of acres of authorized grazing allotments inside wilderness | Amount of grazing occurring on National Park Service (NPS) lands | Uplands | No increase in grazed acres | <ul style="list-style-type: none"> • Continue to work with Bureau of Land Management (BLM) and US Forest Service (USFS) grazing managers and permittees. • Develop grazing memorandums of understanding (MOUs). • Fence allotments as appropriate to better manage the grazing that occurs. • Evaluate proposed land acquisitions for grazed acres. |

⁴ Refer to the NPS Wilderness Character Monitoring Technical Guide.

| Wilderness Character Quality | Indicator | Measure Topic | Measures ⁴ | What Does it Evaluate? | Assigned Management Zone | Recommended Standard | Appropriate Management Strategies |
|------------------------------|-----------|--|---|---|----------------------------------|--|---|
| Natural | Plants | Abundance, distribution, or number of known extirpated indigenous plant species | Number of extirpated indigenous plant species over time | Extent of plant species extirpations over time | Inner Canyon Wilderness, Uplands | 0 new extirpations | <ul style="list-style-type: none"> Increased education that focuses on species conservation and biodiversity. Monitor rare, threatened, endangered species of concern. Preserve or restore habitat. Mitigate changes in conditions for species and habitat. |
| Natural | Animals | Abundance, distribution, or number of known extirpated indigenous animal species | Number of extirpated indigenous animal species over time | Extent of animal species extirpations over time | Inner Canyon Wilderness, Uplands | 0 new extirpations | <p>Same as above, i.e.:</p> <ul style="list-style-type: none"> Increased education that focuses on species conservation and biodiversity. Monitor rare, threatened, endangered species of concern. Preserve or restore habitat. Mitigate changes in conditions for species and habitat. |
| Natural | Plants | Abundance, distribution, or number of known extirpated indigenous plant species | Number of indigenous plant species that are listed as threatened and endangered, sensitive, rare, or of concern over time | Population declines of plant species over time | Inner Canyon Wilderness, Uplands | 0 new listed plant species | <p>Same as above, i.e.:</p> <ul style="list-style-type: none"> Increased education that focuses on species conservation and biodiversity. Monitor rare, threatened, endangered species of concern. Preserve or restore habitat. Mitigate changes in conditions for species and habitat. |
| Natural | Animals | Abundance, distribution, or number of known extirpated indigenous animal species | Number of indigenous animal species that are listed as threatened and endangered, sensitive, or of concern | Population declines of animal species over time | Inner Canyon Wilderness, Uplands | 0 new listed animal species | <p>Same as above, i.e.:</p> <ul style="list-style-type: none"> Increased education that focuses on species conservation and biodiversity. Monitor rare, threatened, endangered species of concern. Preserve or restore habitat. Mitigate changes in conditions for species and habitat. |
| Natural | Animals | Change in demography or composition of animal communities | Regional changes in landbird species populations in pinyon-juniper habitat over time | Declines or increases in landbird species populations | Inner Canyon Wilderness, Uplands | 0 new landbird species population declines | <ul style="list-style-type: none"> Monitor landbird species populations in pinyon-juniper habitat. Evaluate and mitigate effects of fire management on pinyon-juniper woodlands. Preserve and restore pinyon-juniper habitat. Mitigate changes in conditions of pinyon-juniper habitat and landbird species. |

Solitude or Primitive and Unconfined Recreation Quality

| Wilderness Character Quality | Indicator | Measure Topic | Measures | What Does it Evaluate? | Assigned Management Zone | Recommended Standard | Appropriate Management Strategies |
|---|---|--|---|---|--------------------------|--|---|
| Solitude or primitive and unconfined recreation | Remoteness from sights and sounds of human activity inside wilderness | User encounters (encounter rate) | Number of encounters with individuals from other groups per day based on wilderness entry and patrol logs | Opportunities for solitude, percentage of time the encounter rate indicator is exceeded | Uplands | Not exceed site specific encounter rate standards listed below for 85% of patrols: North Vista – 30 Deadhorse – 30 Oak Flat – 30 | <ul style="list-style-type: none"> • Increase patrols to measure encounter rates on upland routes. • Use trail counter to determine overall use. • Require permits for overnight upland use. • Manage the timing and location of use to distribute visitors so that encounter rates are not exceeded. • Reevaluate daily capacities if encounter rates are exceeded. |
| Solitude or primitive and unconfined recreation | Remoteness from sights and sounds of human activity inside wilderness | User encounters (encounter rates) | Number of encounters with individuals from other parties per day based on wilderness entry and patrol encounter rates | Opportunities for solitude, percentage of time the encounter rate indicator is exceeded | Inner Canyon Wilderness | Not exceed site-specific encounter rate standards listed below for 85% of patrols: Red Rock Canyon – 10 Warner – 15 Gunnison –11 Tomichi – 6 Pinyon Draw – 15 Long Draw – 5 Slide Draw – 7 East Portal (North River and Devil’s Backbone) – 10 | Same as above (for the uplands zone), i.e.: <ul style="list-style-type: none"> • Increase patrols to measure encounter rates on upland routes. • Use trail counter to determine overall use. • Require permits for overnight upland use. • Manage the timing and location of use to distribute visitors so that encounter rates are not exceeded. • Reevaluate daily capacities if encounter rates are exceeded. |
| Solitude or primitive and unconfined recreation | Remoteness from sights and sounds of human activity inside wilderness | Amount of visitor use in inner canyon wilderness | Number of day and overnight users counted from wilderness use permits per access route | Daily wilderness access route permit maximums | Inner Canyon Wilderness | Not to exceed route-specific daily visitor capacities listed below for 85% of days: Red Rock Canyon – 15 Warner – 23 Gunnison – 15 Tomichi – 9 Pinyon Draw – 23 Long Draw – 8 | <ul style="list-style-type: none"> • Increase patrols to identify where and how route capacities are exceeded. • Educate public and modify permit system to manage and distribute use as needed. • Reevaluate maximum permit allocations to ensure desired conditions are being maintained. • Update commercial use authorization (CUA) permit conditions as per Climbing Management Plan. |

| Wilderness Character Quality | Indicator | Measure Topic | Measures | What Does it Evaluate? | Assigned Management Zone | Recommended Standard | Appropriate Management Strategies |
|---|---|--|--|--|----------------------------------|---|---|
| | | | | | | Slide Draw – 11 East Portal (North River and Devil’s Backbone) – 16 Other dry and ice climbing areas route specific capacities as identified in Chapter 6: Visitor Capacity | |
| Solitude or primitive and unconfined recreation | Remoteness from sights and sounds of human activity inside wilderness | Night sky quality | Sky quality measure | Intrusion of human influence | All | On a clear, new moon night, at the Water Tank Site zenith brightness will be: sky quality measure – 21.33 (based on our readings/data since the year 2000) | <ul style="list-style-type: none"> Educate visitors about celestial bodies and constellations. Educate and increase outreach on low impact lighting. Establish partnerships with external entities to encourage low impact lighting. |
| Solitude or primitive and unconfined recreation | Remoteness from sights and sounds of human activity inside wilderness | Night sky quality | Visible stars–camera | Intrusion of human influence | All | On a clear, new moon night, at the Water Tank Site visitors will be able to see at least 90% of stars compared to an absolute natural sky (suggested measure would be ALR ≤ 0.5250). | <p>Same as above (for sky quality measure), i.e.:</p> <ul style="list-style-type: none"> Educate visitors about celestial bodies and constellations. Educate and increase outreach on low impact lighting. Establish partnerships with external entities to encourage low impact lighting. |
| Solitude or primitive and unconfined recreation | Management restrictions on visitor behavior | Type and extent of management restrictions (permits, designated campsites, reservations, lottery for permit, food storage, human waste management, wildlife closures, bolting) | Type and number of management restrictions | Management influence on visitor behavior | Inner Canyon Wilderness, Uplands | 0 new restrictions without prior minimum requirements analysis (MRA) approval | <ul style="list-style-type: none"> Use MRA process for all proposed restrictions and ensure all new restrictions result in no net long-term degradation of quality. Clearly establish role and function of park Wilderness and Backcountry Committee, to provide guidance for management restrictions. Increase management enforcement and accountability. Use MRA process for all proposed restrictions and ensure all new restrictions result in no net long-term degradation of quality. |

| Wilderness Character Quality | Indicator | Measure Topic | Measures | What Does it Evaluate? | Assigned Management Zone | Recommended Standard | Appropriate Management Strategies |
|---|--|---|--|---------------------------------------|----------------------------------|--|---|
| | | | | | | | <ul style="list-style-type: none"> • Increase enforcement of human waste and litter regulations. • Implement pack-it-out strategy. • Consider other options for retrofitting, replacing, or removal of pit toilets. • Implement wildlife-proof food storage options such as bear barrels. |
| Solitude or primitive and unconfined recreation | Facilities that decrease self-reliant recreation | Type and number of agency-provided recreation facilities (toilets, trails, campsites, signs, routes, climbing infrastructure such as ropes/lines/rappels/Tyroleans/belays/chains) | Type and number of agency-provided recreation facilities | Recreational facilities in wilderness | Inner Canyon Wilderness, Uplands | <p>0 new recreational facilities/installations without prior MRA approval</p> <p>0 recreational facilities/installations within pristine subzone</p> | <ul style="list-style-type: none"> • Increase management enforcement and accountability. • Use MRA process for all proposed facilities and ensure all new facilities result in no net long-term degradation of quality. • Clearly establish role and function of park Wilderness and Backcountry Committee, to provide guidance for recreation facilities. • Increase enforcement of human waste and litter regulations. • Implement pack-it-out strategy. • Consider other options for retrofitting, replacing, or removal of pit toilets. |
| Solitude or primitive and unconfined recreation | Facilities that decrease self-reliant recreation | Number of new fixed equipment | Number of new fixed equipment per year | Intrusion of fixed equipment | Inner Canyon Wilderness | <p>0 new equipment without preauthorization in the inner canyon primitive subzone.</p> <p>0 new equipment in the inner canyon pristine subzone</p> | <ul style="list-style-type: none"> • Increase/modify education about clean climbing practices and leverage the climbing management plan to do so. • Complete and update fixed equipment inventory and develop tracking strategy for authorization of new fixed equipment or replacement of fixed equipment as per Climbing Management Plan. • Update commercial use authorization (CUA) conditions as per Climbing Management Plan. |

Undeveloped Quality

| Wilderness Character Quality | Indicator | Measure Topic | Measures | What Does it Evaluate? | Assigned Management Zone | Recommended Standard | Appropriate Management Strategies |
|------------------------------|--|--|---|--|----------------------------------|--|---|
| Undeveloped | Presence of nonrecreational structures, installations, and developments | Unauthorized (user-created) physical developments (Stock ponds, fences, irrigation ditches, etc.) | Number of unauthorized (user-created) nonrecreational structures, installations, and developments | Unauthorized disturbances with vegetation trampling and loss, soil compaction, erosion, spread of invasives, habitat fragmentation | Inner Canyon Wilderness, Uplands | 0 increase in newly discovered unauthorized developments | <ul style="list-style-type: none"> • Increase communication with neighbors and grazing allotment (BLM or USFS) managers. • Focus public education on NPS resource protection regulations. • Improve signage outside of wilderness. • Educate new law enforcement personnel and other NPS staff on specific resource threats through training. • Increase frequency of patrols. • Mark/fence park boundaries. • Attempt to return to original condition by removing/restoring inappropriate structures. • Take legal actions (e.g., SURPA) when appropriate. |
| Undeveloped | Presence of nonrecreational structures, installations, and developments | Authorized physical developments (stock ponds, fences, irrigation ditches, etc.) | Number of authorized nonrecreational structures, installations, and developments | Authorized disturbances with vegetation trampling and loss, soil compaction, erosion, spread of invasives, habitat fragmentation | Inner Canyon Wilderness, Uplands | 0 new authorized without MRA approval | <ul style="list-style-type: none"> • Coordinate through MOU with BLM to ensure all proposed grazing-related developments receive NPS review and approval. • Track removal of obsolete developments to improve wilderness quality. • Limit and regulate any new installations using established MRA process. • Improve staff education. |
| Undeveloped | Use of motor vehicles, motorized equipment, mechanical transport and landing of aircraft | Type and amount of administrative and nonemergency use of motor vehicles, motorized equipment, mechanical transport, or landing of aircraft, such as helicopter use for research, chainsaw use, battery-operated drill, ATV use for grazing management | Number of occurrences of authorized administrative and nonemergency use of motor vehicles, motorized equipment, mechanical transport or landing of aircraft | Use of nonemergency mechanized transport or motorized equipment | Inner Canyon Wilderness, Uplands | ≤ 3 occurrences per year approved with MRA review | <ul style="list-style-type: none"> • Conduct annual planning to determine what occurrences will/will not occur. • Implement MRA review process to insure appropriate approvals. Ensure that all occurrences result in no net long term decrease to wilderness character. • Provide staff training for use of nonmechanized tools/equipment. |

| Wilderness Character Quality | Indicator | Measure Topic | Measures | What Does it Evaluate? | Assigned Management Zone | Recommended Standard | Appropriate Management Strategies |
|------------------------------|---|--|---|---|----------------------------------|--|---|
| | | | | | | | <ul style="list-style-type: none"> • Purchase nonmechanized tools/equipment for NPS use. |
| Undeveloped | Use of motor vehicles, motorized equipment, mechanical transport, or landing of aircraft | Type and amount of emergency use of motor vehicles, motorized equipment, mechanical transport or landing of aircraft (includes helicopter and wheeled-litter use for rescue in wilderness) | Number of emergency uses of motor vehicles, motorized equipment, or mechanical transport | Use of emergency Mechanized, motorized equipment or transport equipment | Inner Canyon Wilderness, Uplands | No more than 50% increase in occurrences over 5-year average | <ul style="list-style-type: none"> • Attend trainings for nonmechanized rescue techniques. • Increase PSAR efforts. • Purchase additional SAR equipment. |
| Undeveloped | Use of motor vehicles, motorized equipment, or mechanical transport, or landing of aircraft | Type and amount of unauthorized use of motor vehicles, motorized equipment, or mechanical transport (includes bulldozers for stock pond improvement, motorcycle use and mountain biking, ATV use by grazing permittees to manage adjacent lands, etc.) | Number of unauthorized uses of motor vehicles, motorized equipment, or mechanical transport | Disturbances through mechanized, motorized use | Inner Canyon Wilderness, Uplands | 0 unauthorized motor vehicle, motorized equipment, or mechanical transport | <ul style="list-style-type: none"> • Educate staff to communicate uses to law enforcement personnel. • Improve signage outside of wilderness. • Employ monitoring systems. • Increase patrols. • Coordinate reporting information and public education with BLM about use of mechanized travel on NPS lands. • Evaluate termination of access routes on adjacent lands to better protect wilderness lands from encroachment of unauthorized uses. |

Untrammeled Quality

| Wilderness Character Quality | Indicator | Measure Topic | Measures | What Does it Evaluate? | Assigned Management Zone | Recommended Standard | Appropriate Management Strategies |
|------------------------------|--|--|--|--|----------------------------------|--|---|
| Untrammeled | Actions not authorized by the federal land manager that intentionally manipulate the biophysical environment | Number of unauthorized actions include incidents of trash/litter, improper food storage, cairns, dogs, collecting, vandalism, fire rings, human/dog waste, trail flagging/marking, | number of warnings, citations, and case incident reports indicating incidents of unauthorized collecting | Resource disturbance, damage, and extraction | Inner Canyon Wilderness, Uplands | ≤ 5 percent increase in violations over the 5-year average | <ul style="list-style-type: none"> • Focus on public education on NPS resource protection regulations. • Educate new law enforcement personnel and other NPS staff on specific resource threats through training. • Increase frequency of patrols. |

| Wilderness Character Quality | Indicator | Measure Topic | Measures | What Does it Evaluate? | Assigned Management Zone | Recommended Standard | Appropriate Management Strategies |
|------------------------------|--|---|---|---|----------------------------------|---|--|
| | | furniture/structures, poaching, hazing, etc. | | | | | |
| Untrammeled | Actions authorized by the federal land manager that intentionally manipulate the biophysical environment | Number of lakes and other water bodies stocked with fish | Number of lakes and streams/rivers stocked with fish Number of fish stocked per body of water Species of fish stocked | Introduction and maintenance of native and nonnative fish populations | Inner Canyon Wilderness | 0 stocking within the wilderness | <ul style="list-style-type: none"> Focus education on sport, nonnative fisheries management outside of wilderness. Coordinate with state and federal hatcheries and fishery managers. Update aquatic inventories of fish species, macroinvertebrates, periphyton to determine presence/absence of native fish species and aquatic invasive species. |
| Untrammeled | Actions authorized by the federal land manager that intentionally manipulate the biophysical environment | Natural fire starts that received a suppression response | Percent of natural fire starts that received a suppression response | Fire suppression actions | Inner Canyon Wilderness, Uplands | < 25 percent of starts receive a suppression response | <ul style="list-style-type: none"> Develop wilderness fire response strategies in Fire Management Plan. |
| Untrammeled | Actions authorized by the federal land manager that intentionally manipulate the biophysical environment | Number of actions to manage plants, animals, pathogens, soil, water, or fire. | Number of actions to control invasive plants and/or, insect pests, monitor plants, wildlife, water, and other processes, restore native plants, conduct research, manipulate fuels/fire, etc. | Impacts of actions on wilderness qualities | Inner Canyon Wilderness, Uplands | < 10 percent increase in actions each 5-year reporting period | <ul style="list-style-type: none"> Focus staff education on minimizing actions and MRA requirement for all actions in wilderness. Focus education on Leave No Trace principles. Continue to permit research as needed to monitor wilderness character. Manage invasive species to promote and restore native plant communities. |
| Untrammeled | Actions authorized by the federal land manager that intentionally manipulate the biophysical environment | Number of new authorized actions affecting biophysical resources | Number of projects affecting biophysical resources | Depending on objectives (e.g., NCPN Big Rivers and Uplands monitoring, Public Safety (SAR)) | Inner Canyon Wilderness, Uplands | 0 new projects without MRA and Scientific Permit and Research Collection Permit (SRCP) approval | <ul style="list-style-type: none"> Be alert to new actions and resource conditions. Continue to permit research as needed to monitor wilderness character. |

Other Features of Value Quality (See Table 4. Potential Future Measures, Standards, and Management Strategies for Black Canyon of the Gunnison National Park)

CURECANTI NATIONAL RECREATION AREA

Table 3. Measures, Standards, and Management Strategies for Curecanti National Recreation Area

| Measure Topic | Specific* Measures | What Does it Evaluate? | Assigned Management Zone EPMP = East Portal-Morrow Point Backcountry Zone Blue Mesa = Blue Mesa Backcountry Zone | Recommended Standard | Appropriate Management Strategies |
|---|---|---|--|--|--|
| Extent and magnitude of human-caused change in water quality | Existing quality of park water bodies based on state water quality standards established by the Clean Water Act | Threats to aquatic life and human health based on physical and chemical numeric and table value standards | EPMP, Blue Mesa | Quality will not exceed numeric and table value standards as set by State water quality standards | <ul style="list-style-type: none"> • Work internally and with public and private entities to avoid, whenever possible, the pollution of park waters by human activities occurring within and outside of parks. |
| Abundance, distribution, or number of known nonindigenous and invasive species | Documentation of area affected by nonindigenous and invasive plant and animal species and number of documented animal species known to inhabit the park | Area and extent of initial invasion and spread over time | EPMP, Blue Mesa | <p>≥ 5% decrease in area affected by noxious weed species</p> <p>0 new nonindigenous aquatic and/or terrestrial animal species</p> | <ul style="list-style-type: none"> • Increased education that focuses on preventing nonnative species invasion. • Perform noxious weed control. • Limit disturbance to habitats to limit invasion by nonnative animals. • Limit invasive species vectors and pathways. • Implement boat inspections during departure. |
| Number of acres of authorized grazing allotments and number of animal unit months (AUMs) of actual use inside backcountry | Number of acres of authorized grazing allotments and number of AUMs per allotment | Amount of grazing occurring on NPS lands | EPMP, Blue Mesa | No increase in grazed acres or AUMs except as authorized through land acquisitions | <ul style="list-style-type: none"> • Continue to work with BLM and USFS grazing managers and permittees. • Evaluate any proposed grazing developments on NPS lands. • Develop grazing MOUs. • Fence allotments as appropriate to better manage the grazing that occurs. • Evaluate proposed land acquisitions for grazed acres. |
| Number and severity of human-caused disturbances to cultural resources | Number of reported incidents of human-caused disturbances to cultural resources | Impact of humans on specific cultural resources | EPMP, Blue Mesa | 0 reported incidents of human-caused disturbances to cultural resources | <ul style="list-style-type: none"> • Improve staff education. • Increase patrols. |
| Incidences of collecting (plants, seeds, shed antlers, paleo, rocks, archeo), measured currently in the number of enforcement actions related to collecting | Number of warnings, citations, and case incident reports indicating incidents of unauthorized collecting | Resource disturbance and extraction | EPMP, Blue Mesa | ≤5 percent increase in violations over the 5-year average | <ul style="list-style-type: none"> • Focus on public education on NPS resource protection regulations. • Educate new law enforcement personnel and other NPS staff on specific resource threats through training. • Maintain patrols and coordination with mutual agencies. |

| Measure Topic | Specific* Measures | What Does it Evaluate? | Assigned Management Zone EPMP = East Portal-Morrow Point Backcountry Zone Blue Mesa = Blue Mesa Backcountry Zone | Recommended Standard | Appropriate Management Strategies |
|--|--|---|--|---|--|
| Incidences of poaching/hazing/shed hunting measured currently in the number of enforcement actions | Number of warnings, citations, and case incident reports indicating incidents of poaching/hazing/shed hunting | Visitor behavior, disturbance to wildlife populations and habitat | EPMP, Blue Mesa | ≤5 percent increase in violations over the 5-year average | <ul style="list-style-type: none"> • Focus on public education on NPS resource protection regulations. • Educate new law enforcement personnel and other NPS staff on specific resource threats through training. • Increase frequency of patrols. • Maintain patrols and coordination with mutual agencies. |
| Remoteness from sights and sounds of human activity in backcountry | Sky quality measure | Night sky quality | EPMP, Blue Mesa | On a clear, new moon night, at CURE location site zenith brightness will be: sky quality measure – 21.33 (based on reading/data since the year 2000) | <ul style="list-style-type: none"> • Educate visitors about celestial bodies and constellations. • Educate and increase outreach on low impact lighting. • Establish partnerships with external entities to encourage low impact lighting. |
| Dark Skies Remoteness from sights and sounds of human activity in backcountry | Visible stars–camera | Night Sky Quality | EPMP, Blue Mesa | On a clear, new moon night at CURE location site visitors will be able to see at least 90% of stars compared to an absolute natural sky [suggested measure would be $ALR \leq 0.5250$] | Same as above (for sky quality measure) <ul style="list-style-type: none"> • Educate visitors about celestial bodies and constellations. • Educate and increase outreach on low impact lighting. • Establish partnerships with external entities to encourage low impact lighting. |
| Number of new fixed equipment | Number of new fixed equipment per year | Intrusion of fixed equipment | EPMP, Blue Mesa | 0 new bolts without preauthorization | <ul style="list-style-type: none"> • Increase/modify education about clean climbing practices, leveraging the climbing management plan. |
| Number and severity of natural disturbances to cultural resources | Number of natural disturbances to cultural resources observed during established routine monitoring schedule rated “poor” according to the Intermountain Region Site Condition Assessment Form | Damages caused by natural disturbances for each property | EPMP, Blue Mesa | ≤10% of sites are in poor condition | <ul style="list-style-type: none"> • Consult State Historic Preservation Office (SHPO) for appropriate actions. • Implement appropriate erosion control. • Use appropriate techniques to revegetate sites. |

POTENTIAL FUTURE MONITORING AT BLACK CANYON OF THE GUNNISON NATIONAL PARK

Table 4. Potential Future Measures, Standards, and Management Strategies for Black Canyon of the Gunnison National Park

Natural Quality

| Wilderness Character Quality | Indicator | Measure Topic | Measures | What Does it Evaluate? | Assigned Management Zone | Recommended Standard | Appropriate Management Strategies |
|------------------------------|-----------|---|--|---|--------------------------|---|--|
| Natural | Plants | Change in composition of rare plant populations | Hanging garden Sullivantia (<i>Sullivantia hapemanii</i> var. <i>purpusii</i>) density on Warner Route reach | Change in population size and density, and trends in habitat composition and health | Inner Canyon Wilderness | ≤15% decline of population size/density over the span of 10 years | <ul style="list-style-type: none"> Look at long-term target communities such as ephemeral pools, hanging gardens, cliff habitats. Control noxious weeds, decrease human disturbance, increase seep/spring monitoring, consider vegetation restoration. |

Solitude or Primitive and Unconfined Recreation Quality

| Wilderness Character Quality (natural, solitude or primitive and unconfined recreation, undeveloped, and untrammled) | Indicator | Measure Topic | Measures | What Does it Evaluate? | Assigned Management Zone (Inner Canyon Wilderness or Uplands applies to all subzones, unless otherwise specified) | Recommended Standard | Appropriate Management Strategies |
|--|---|--|---|---|---|--|---|
| Solitude or primitive and unconfined recreation | Remoteness from sights and sounds of human activity inside wilderness | Number and condition of campsites (including number and presence of informal campsites in the uplands) | Number of new sites and expansion of existing sites as determined through campsite assessment | Vegetation impacts, soil compaction, spread of invasives, erosion | Inner Canyon Pristine, Uplands Primitive | 0 new sites, 0 expansion of existing sites | <ul style="list-style-type: none"> Increase education on low impact practices and leverage the climbing management plan to do so. Improve delineation of existing sites in the inner canyon primitive wilderness subzone. Designation of sites in the inner canyon primitive wilderness subzone. Increase patrols and enforcement of restriction on out of bounds camping. Increase patrols and enforcement of low impact practices. Rehabilitate to limit changes to resource condition. Monitor site conditions and reevaluate use levels. |
| | | | Number of evidences of informal campsites (e.g., presence of fire rings, trampled vegetation, litter, human waste, bare soil) | | Inner Canyon Pristine, Uplands | 0 evidence of campsites | |
| Solitude or Primitive and Unconfined Recreation | Remoteness from sights and sounds of human activity inside wilderness | Condition of designated trails/routes | Trail/route width and depth (using established methods e.g., Cole or Marion) | Vegetation impacts, soil compaction, erosion | Inner Canyon Wilderness, Uplands | Increase in trail width or depth of ≤50% over baseline condition | <ul style="list-style-type: none"> Rehabilitate to limit changes to resource condition. Monitor trail conditions and reevaluate use |

| Wilderness Character Quality (natural, solitude or primitive and unconfined recreation, undeveloped, and untrammled) | Indicator | Measure Topic | Measures | What Does it Evaluate? | Assigned Management Zone (Inner Canyon Wilderness or Uplands applies to all subzones, unless otherwise specified) | Recommended Standard | Appropriate Management Strategies |
|--|---|--|--|---|---|--|--|
| | | | | | | | levels. |
| Solitude or primitive and unconfined recreation | Remoteness from sights and sounds of human activity inside wilderness | Number of climbing routes, access trails, and concentration of routes | Number of new climbing routes Number of new access trails to same area Density of climbing routes per linear mile | Trends suggesting changes to routes or increasing numbers of routes which could result in vegetation trampling, increasing use levels, soil compaction, and erosion | Inner Canyon Wilderness, Uplands | ≤ 7 new climbing routes per year in IC primitive 0 new identifiable access trails to the same area Concentration of climbing routes ≤ four per linear mile of the canyon rim | Same as above (for the measuring topic Condition of designated trails/routes). <ul style="list-style-type: none"> Rehabilitate to limit changes to resource condition. Monitor conditions and reevaluate use levels. |
| Solitude or primitive and unconfined recreation | Remoteness from sights and sounds of human activity inside wilderness | Area of wilderness affected by access or travel routes that are inside wilderness, including informal trails | Length and area affected by existing and new trails and routes; number of informal routes leaving 1 mile of designated route; number and type of sensitive physical, biological, and social resources potentially effected | Potential effects to physical, biological, and social resources from use of travel routes | Inner Canyon Wilderness, Uplands | ≤1 informal route leaving 1 mile of designated route | <ul style="list-style-type: none"> Evaluate new access routes on a case-by-case basis to determine area of influence, affected resources, encounter rate indicators, etc. Determine future use of new access based on evaluation. Apply management restrictions as necessary to protect sensitive species. Rehabilitate and educate. |
| Solitude or primitive and Unconfined recreation | Remoteness from sights and sounds of human activity inside wilderness | Night sky quality | CCT per light bulb rating | Intrusion of human influence | All | 99% of park lighting is =<2700K, unless not available | <ul style="list-style-type: none"> Educate and increase outreach on low impact lighting. Establish partnerships with external entities to encourage low impact lighting. |
| Solitude or primitive and unconfined recreation | Remoteness from sights and sounds of human activity inside wilderness | Site specific illuminance | Light pollution averaged over the wilderness | Intrusion of human influence | All | 100% of park lighting is shielded and no lights are continuously operating throughout the night. | <ul style="list-style-type: none"> Educate and increase outreach on low impact lighting. Establish partnerships with external entities to encourage low impact lighting. |
| Solitude or primitive unconfined recreation | Remoteness from sights and sounds of people inside the wilderness | Site specific illuminance | Lumens cap per light bulb rating | Intrusion of human influence | BLCA-All zones | lumens cap <250 lumens for task lighting | <ul style="list-style-type: none"> Educate visitors about celestial bodies and constellations. Educate and increase outreach on low impact lighting. Establish partnerships with external entities to encourage low impact lighting Install existing and new light bulbs as necessary. |

| Wilderness Character Quality (natural, solitude or primitive and unconfined recreation, undeveloped, and untrammled) | Indicator | Measure Topic | Measures | What Does it Evaluate? | Assigned Management Zone (Inner Canyon Wilderness or Uplands applies to all subzones, unless otherwise specified) | Recommended Standard | Appropriate Management Strategies |
|--|---|---|--|------------------------------|---|---|---|
| Solitude or primitive and unconfined recreation | Remoteness from sights and sounds of human activity inside wilderness | Extent and nature of intrusions on the natural soundscape | Noise pollution averaged over the wilderness | Intrusion of human influence | Inner Canyon Wilderness, Uplands | Increase in measured noise pollution of $\leq B\%$ above baseline. (Standard will be developed in the future) | <ul style="list-style-type: none"> • Use signs outside of wilderness, website, and social media encouraging visitors to not use cell phones, play music, or talk loudly when entering the quiet place. • Add communications to website and other outlets about the importance of the natural soundscape. • Continue to minimize noise generated by park management activities by strictly regulating NPS and commercial administrative use of noise producing machinery, including aircraft and motor vehicles. • Work with neighbors including the Montrose Airport to raise awareness for the values of natural sounds and quiet and the impacts that air traffic and other modern activities may have on the park's acoustic environment. • Coordinate management with Federal Aviation Administration Flight Standards District Offices (FAA FSDO) at the local level. • Educate staff on identifying and reporting low-level flights. • Work with the FAA and the NPS Natural Sounds and Night Skies Division (NSNSD) to develop an air management agreement in accordance with National Parks Air Tour Management Act, as amended. |

Undeveloped Quality

| Wilderness Character Quality | Indicator | Measure Topic | Measures | What Does it Evaluate? | Assigned Management Zone | Recommended Standard | Appropriate Management Strategies |
|------------------------------|---|---|--|-------------------------------------|---|--|--|
| Undeveloped | Presence of nonrecreational structures, installations, and developments | Index of authorized research plots and survey markers | Number of new permanent, nonboundary research/survey/cadastral markers | New installations within wilderness | Inner Canyon Wilderness, Uplands, Primitive | 0 new markers without prior minimum requirements analysis (MRA) approval | <ul style="list-style-type: none"> Remove all temporary markers at end of project. Increase management oversight by park personnel. Manage number allowed through MRA process. Ensure that all new markers result in no net long term decrease to wilderness character. |

Other Features of Value Quality

| Wilderness Character Quality | Indicator | Measure Topic | Measures | What Does it Evaluate? | Assigned Management Zone | Recommended Standard | Appropriate Management Strategies |
|------------------------------|--|--|--|--|--------------------------|---|--|
| Other features of value | Loss of statutorily protected cultural resources | Number and severity of human-caused disturbances to cultural resources | Number of reported incidents of human-caused disturbances to cultural resources | Impact of humans on specific cultural resources | All | 0 reported incidents of human-caused disturbances to cultural resources | <ul style="list-style-type: none"> Improve staff and public education. Increase patrols. |
| Other features of value | Loss of statutorily protected cultural resources | Number and severity of natural disturbances to cultural resources | Number of natural disturbances to cultural resources observed during established routine monitoring schedule rated "poor" according to the Intermountain Region Site Condition Assessment Form | Damages caused by natural disturbances for each property | All | ≤10% of sites are in poor condition | <ul style="list-style-type: none"> Consult SHPO for appropriate actions. Implement appropriate erosion control. Use appropriate techniques to revegetate sites. |

POTENTIAL FUTURE MONITORING AT CURECANTI NATIONAL RECREATION AREA

Table 5. Potential Future Measures, Standards, and Management Strategies for Curecanti National Recreation Area

| Measure Topic | <u>SPECIFIC</u> * Measures | What Does it Evaluate? | Assigned Management Zone EPMP = East Portal-Morrow Point Backcountry Zone Blue Mesa = Blue Mesa Backcountry Zone | Recommended Standard | Appropriate Management Strategies |
|--|--|---|--|---|--|
| Incidences of improper food and trash storage (evaluating compliance w/proper storage) | Number of warnings, citations, and case incident reports indicating incidents of improper food and trash storage, including wildlife "reward" reports | Visitor-wildlife behavior issues | EPMP, Blue Mesa | ≤ 5% noncompliance | <ul style="list-style-type: none"> Focus visitor and staff education on incident prevention. Provide appropriate food storage and trash containers for all zones. Increase law enforcement staff patrols and walk-throughs in campgrounds during high visitor encounter times. Mitigate wildlife concerns by developing relevant/targeted SOPs. |
| Area of backcountry affected by access or travel routes that are inside backcountry, including informal trails and climbing route development. | Length and area affected by existing and new trails, routes, and climbing routes; number of informal routes leaving off of 1 mile of designated route; number of new climbing routes; number and type of sensitive physical, biological, and social resources potentially impacted | Potential effects to physical, biological, and social resources from use of travel routes | EPMP | ≤ 1 informal route that affects soils or vegetation leaving off of 1 mile of designated route | <ul style="list-style-type: none"> Evaluate new access routes to determine area of influence, affected resources, encounter rate standards, etc. Determine future use of new access based on evaluation. Increase education of climbing ethics, leveraging the climbing management plan. Monitor new climbing routes using the permit process outlined in the climbing management plan to maintain an appropriate concentration of climbing routes in the area of a proposed route. Apply management restrictions as necessary to protect sensitive species. Rehabilitate and educate. Evaluate 2016 integrated pest management plan and adjust as appropriate. |
| Refuse | Number of observations of refuse left behind (e.g., refuse, trash, gear, human and pet waste) | Effectiveness of pack-it-out message | EPMP, Blue Mesa | <5% noncompliance | <ul style="list-style-type: none"> Increase enforcement of human waste and litter regulations. Phase in required pack-in and pack-it-out waste management policy in backcountry lands. Consider other options for retrofitting, replacing, or removing pit toilets. |
| Overnight use levels | Percent of increase in the number of overnight users | Number of overnight users | EPMP, Blue Mesa | No more than a 10% increase in the number of overnight stays | <ul style="list-style-type: none"> Implement trail registers at all trails leading to overnight use areas in EPM. Track overnight use through backcountry use permits. |
| Number of visitor contacts (encounter rates) | Number of encounters with individuals from other groups per day based on backcountry | Opportunities for solitude; percentage of time the encounter rate indicator is | EPMP | No more than 10 people encountered every 2 hours along designated trails with 15% of | <ul style="list-style-type: none"> Review trail counter data once counters are in place and manage as necessary. Increase educational messaging about time of day if there is congestion during certain times |

| Measure Topic | SPECIFIC* Measures | What Does it Evaluate? | Assigned Management Zone EPMP = East Portal-Morrow Point Backcountry Zone Blue Mesa = Blue Mesa Backcountry Zone | Recommended Standard | Appropriate Management Strategies |
|---|---|--|--|---|---|
| | patrol encounter rates | exceeded | | observations allowed to exceed the encounter levels without violating the threshold (Crystal Creek, Hermit's Rest, Curecanti Creek) | <p>of the day.</p> <ul style="list-style-type: none"> • Consider permit system in the future. • Actively manage available parking near trailheads for these three trails. |
| Index of unauthorized (user-created) physical development (stock ponds, fences, irrigation ditches, motocross trail construction, etc.) | Number of incidents reporting newly discovered unauthorized physical developments | Unauthorized disturbances with vegetation trampling and loss, soil compaction, erosion, spread of invasives, habitat fragmentation | EPMP, Blue Mesa | No increase in newly discovered unauthorized developments above established baseline | <ul style="list-style-type: none"> • Increase communication with neighbors and grazing allotment (BLM or USFS) managers. • Focus public education on NPS resource protection regulations. • Improve signage outside of wilderness. • Educate new law enforcement personnel and other NPS staff on specific resource threats through training. • Increase number of patrols. • Mark/fence park boundaries. • Attempt to return to original condition by removing/ restoring inappropriate structures. • Take legal actions when appropriate. |

CHAPTER 6: VISITOR CAPACITY IDENTIFICATION

PROCESS OVERVIEW

The approach for identifying visitor capacities is based on the visitor use management framework and associated publications and is consistent with the literature and best practices on this topic. Visitor capacity is the maximum amount and types of visitor use that an area can accommodate while achieving and maintaining the desired resource conditions and visitor experiences that are consistent with the purposes for which the area was established (Interagency Visitor Use Management Council [IVUMC] 2016, 2019a). The visitor capacities were identified using best practices and examples from other plans and projects across the National Park Service. Based on these best practices, the planning team used the following guidelines to identify capacity:

1. Determine the analysis area.
2. Review existing direction and knowledge.
3. Identify the limiting attribute(s).
4. Identify visitor capacity and implementation strategies.

A general overview of the analysis and evaluation process used to identify visitor capacity under these four guidelines is provided below. Additional narrative further below describes the visitor capacity identification process in greater detail and presents findings for both Black Canyon of the Gunnison NP and for Curecanti NRA. This analysis is organized according to these four guidelines.

The amount, timing, distribution, and types of visitor use throughout Black Canyon of the Gunnison NP and Curecanti NRA influence both resource conditions and visitor experiences. The sliding scale of analysis is used to ensure the investment of time, money, and other resources for identifying visitor capacity is commensurate with the complexity of the project and the consequences of the decision. The sliding scale focuses on four criteria: issue uncertainty, impact risk, stakeholder involvement, and level of controversy/potential for litigation (IVUMC 2016). For Black Canyon of the Gunnison NP, resource conditions and visitor use were well documented and plan actions would not substantially alter resources or visitor experience; however, there was a moderate level of controversy related to commercially guided climbing in wilderness and stakeholder interest in climbing management. Therefore, the visitor capacities for Black Canyon of the Gunnison NP are on the moderate end of the sliding scale of analysis. The criteria evaluation is similar for Curecanti NRA; however, given that there is no wilderness within this recreation area, impact risk, stakeholder involvement and level of controversy are all slightly lower, therefore the sliding location is moderate-low.

This analysis is informed by existing data, guidance, and best professional management judgment. The data used in the analysis was the most recent available at the time of writing. Visitor capacities have been identified based upon the best available information and will be reviewed and updated as future planning occurs. Future trails on newly acquired land are excluded from this planning effort. Visitor capacities in frontcountry areas will be addressed in subsequent planning efforts.

To fulfill the requirements of the 1978 National Parks and Recreation Act (54 USC 100502), visitor capacity identifications are legally required for all park lands that are within the scope of this planning effort (IVUMC 2016). Together, the areas described in guideline 1 (Determine the Analysis Areas) comprise the visitor use areas within the scope of the plan for Black Canyon of the Gunnison

NP and Curecanti NRA. Future monitoring of visitor use levels and indicators will inform the National Park Service if use levels are at or near visitor capacities. As capacities are approached, related potential management strategies outlined in this plan would be implemented or additional management actions could be identified (see Chapter 5: Monitoring Strategy).

1. Determine the Analysis Area

Analysis areas were identified as destinations where use is occurring within the geographic scope of this plan. This includes destinations in the wilderness and backcountry lands of Black Canyon of the Gunnison NP and backcountry lands of Curecanti NRA. *Reference Manual 41: Wilderness Stewardship* (NPS 2022) provides definitions for wilderness and backcountry. Designated wilderness is federal land designated by Congress as wilderness and a component of the National Wilderness Preservation System where the National Park Service is required to manage according to the Wilderness Act of 1964. Backcountry refers to primitive, undeveloped portions of parks. Backcountry is not the same as wilderness. Rather, it refers to a general condition of land that may include wilderness. Management of the wilderness portions of the parks require different administrative practices than backcountry because the Wilderness Act and NPS management policies impose additional conditions and constraints. More detailed analysis was completed where higher levels of use are currently or are projected to cause impacts on natural and cultural resources, and visitor experiences that are related directly to desired conditions. For each analysis area, a detailed analysis has been conducted to identify the visitor capacities. The analysis areas are presented within the management zones of the two units because desired conditions vary by zone. Refer to guideline 1 for Black Canyon of the Gunnison NP and Curecanti NRA for a list of the analysis areas within this analysis.

2. Review Existing Direction and Knowledge

This guideline of the visitor capacity process involves a review of existing direction and knowledge. The 1993 *Resource Management Plan for Black Canyon of the Gunnison National Monument* (the national monument became a national park in 1999); the 1997 general management plan for Black Canyon of the Gunnison NP and Curecanti NRA; the 2010 *Curecanti National Recreation Area Motorized Vehicle Access Plan/Environmental Assessment*; and the 2013 *Foundation Document, Black Canyon of the Gunnison National Park* (NPS 2013b) all provided important overarching guidance for managing the amounts, timing, distribution, and types of use throughout the park and recreation area, including providing some description of desired visitor experiences, resource conditions, and appropriate support facilities. Visitor capacities (previously referred to as daily use limits) were initially identified for the “big 7” routes⁵ and one climbing area in the 1993 resource management plan and have been updated to include climbers. Black Canyon of the Gunnison NP has been managing to these capacities, monitoring conditions, and conditions remain acceptable. Visitor capacities for seven of the inner canyon routes are carried forward here with further rationale. As part of the current planning effort, visitor capacities were identified for the additional analysis areas within the scope of the wilderness and backcountry management plan. Visitor capacities have not been previously identified for the backcountry lands of Curecanti NRA. In addition, this plan

5. The big 7 routes are Pinyon Draw (formerly known as S.O.B. Draw), Long Draw, Slide Draw, Red Rock Canyon, Warner, Tomichi, and Gunnison. The daily use limits identified in the resource management plan were Slide Draw (15 people), Long Draw (5 people), Pinyon Draw (20 people), Tomichi Route (15 people), Gunnison Route (15 people), Red Rock Canyon (20 people), and Warner Route (0 people for daily use, 20 people for overnight use).

supplements the previous guidance by developing more specific visitor use management direction, including indicators, thresholds, and visitor capacity for the areas included in the scope of the plan.

Wilderness use permits are required for all Black Canyon of the Gunnison Wilderness inner canyon areas for day and overnight use. Visitors obtain permits at the South Rim Visitor Center or the North Rim Ranger Station; there are permit self-registration kiosks when these facilities are closed. Permits are free, obtained on the day of activity, distributed on a first-come, first-served basis, and allow for a maximum amount of use for each route. The routes that currently have capacities, as identified in the 1993 resource management plan, are Pinyon Draw, Long Draw, Slide Draw, Red Rock Canyon, Warner, Gunnison, and Tomichi.

The planning team developed desired conditions, indicators, and thresholds, with particular attention to conditions and values that must be protected and are most related to visitor use levels. The amount, timing, and distribution of visitor use at the park and recreation area influence both resource conditions and visitor experiences. The majority of visitation to the park and recreation area occurs between May and October.

Data sources used to identify the visitor capacity include the NPS Visitor Use Statistics, which can be located online at <https://irma.nps.gov/Stats/Reports/National> (NPS 2018). Additional sources include the Black Canyon of the Gunnison NP wilderness use permit system, wilderness entry forms completed by NPS staff, Curecanti NRA backcountry use permit system, and CUA reporting.

In addition, the no-action and action alternative contained in part 2 were assessed for the primary differences related to the amounts, timing, distribution, and types of use. The primary difference for visitor-use issues between the alternatives would have little impact on the amounts and types of visitor use that can be accommodated in the analysis areas. Therefore, the visitor capacity would remain consistent across the alternatives. In the analysis, a climbing party refers to two individuals, given that climbers typically climb with a partner. Other user group parties may refer to two or more individuals, as noted.

Special use permits are available at both park units for weddings, memorials, or other gatherings that occur in established overlooks, utilizing existing parking areas, and with no ground disturbance. The number of event attendees will not exceed the designated number of people and vehicles at these overlooks. No more than three permits will be issued for a particular overlook per week. The permit authorizes the use of the overlooks and not the nearby trails. At Black Canyon of the Gunnison NP, the permits are available for up to 15 people at Narrows, Balanced Rock, Big Island, Island Peaks, Cross Fissures, Rock Point, Devils, Gunnison Point, Painted Wall, Cedar Point, and Dragon Point; for up to 20 people at North Chasm View, Tomichi, Sunset View, and Pulpit Rock; and up to 40 people at Kneeling Camel. At Curecanti NRA, the permits are available for up to 20 people at Pioneer Point and the East Portal Picnic Shelter and up to 40 people at Hermit's Rest. During these events, the park reserves four parking spaces for the general public. The permits manage use in the frontcountry, thus not within any of the analysis areas, but may impact management of wilderness or backcountry. Special use permit information included here to provide background on use levels across the landscape; however, they are not further discussed because the frontcountry is out of scope for this project.

Hunting is permitted in certain areas within Curecanti NRA, though very little use occurs in the backcountry. Hunters must possess a valid Colorado State Hunting License and be a minimum of 100 yards away from any road, trail, campground, picnic area, facility, or other developed area to discharge a weapon. For more information visit

<https://www.nps.gov/cure/planyourvisit/hunting.htm>. This use is not included in the visitor capacity but could be evaluated in the future if use increased.

Further information such as desired conditions, current conditions, and use levels specific to each analysis area are provided in the guideline 2 section for Black Canyon of the Gunnison NP and Curecanti NRA below.

3. Identify the Limiting Attribute

This step requires identification of the limiting attribute(s) that most constrain the analysis area's ability to accommodate visitor use. The limiting or constraining attribute(s) may vary across the analysis area and is described under each key analysis area. This is an important step given that an analysis area could experience a variety of needs regarding the best tools for providing quality experiences and protecting resources.

4. Identify Visitor Capacity and Implementation Strategies

To identify the appropriate amount of use at key areas, outputs from previous steps were reviewed to understand current conditions compared to goals and objectives for the area. This analysis, in combination with understanding visitation data collected annually by NPS staff to track levels of visitor use parkwide and by area, informed the identification of visitor capacities for each analysis area. Visitor capacities include all user groups (i.e., hikers, climbers, anglers, equestrians), both day and overnight users, commercial and general public use, and apply to all seasons. Management strategies and actions have been identified to implement the visitor capacity. Not all strategies would be implemented immediately; rather, implementation would occur as conditions change and thresholds are approached or exceeded. Those strategies are labeled as related potential management strategies. Commercial allocation is the process of distributing visitor capacity among a variety of uses to achieve or maintain desired conditions. Commercial allocations were identified for those areas where commercial use has the potential to monopolize recreational use at the expense of the general public within Black Canyon of the Gunnison NP. Though some commercial use does occur at Curecanti NRA, it is a negligible portion of total use; therefore, the National Park Service did not identify an allocation within this plan. The National Park Service would continue to monitor commercial services and if demand were to increase in the future, further evaluation and planning would be completed.

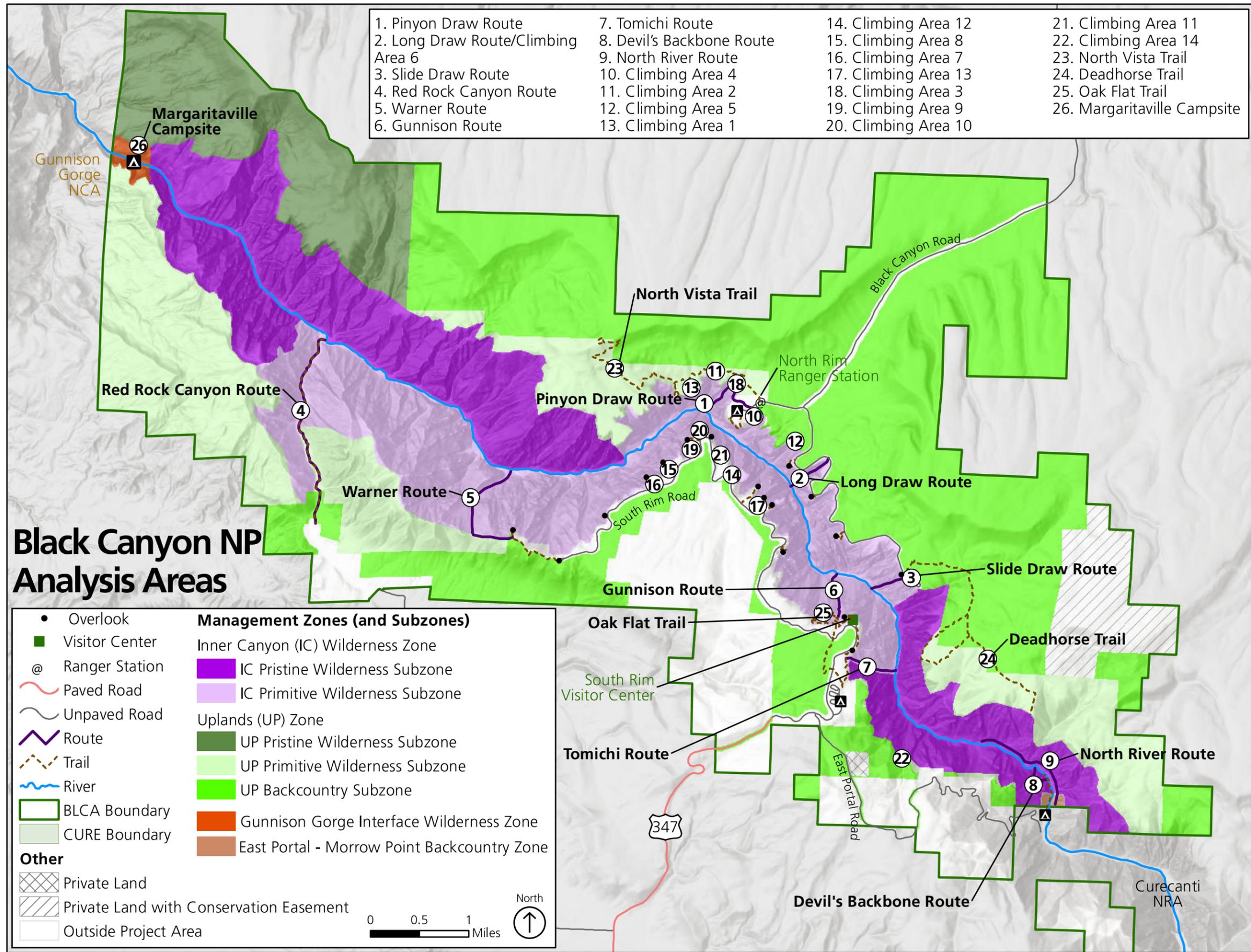
VISITOR CAPACITY FOR BLACK CANYON OF THE GUNNISON NATIONAL PARK

The visitor capacity identification process (guidelines 1–4) at Black Canyon of the Gunnison NP is presented in the following sections. The visitor capacity identification process for Curecanti NRA follows later in this chapter. For each unit, the first section (guideline 1) outlines the analysis areas. The next section (guideline 2) summarizes existing direction and knowledge for each analysis area. The following sections of the analysis (guideline 3 identifies the limiting attribute and guideline 4 identifies visitor capacity and implementation strategies) have been consolidated because the limiting attribute and management strategies are similar amongst analysis area types. If the reader wishes to examine an individual analysis area, we suggest locating the header for that analysis area within guidelines 2, 3, and 4.

Guideline 1: Determine the Analysis Areas for Black Canyon of the Gunnison National Park

At Black Canyon of the Gunnison NP, the analysis areas are within the inner canyon primitive and pristine wilderness subzones, the uplands primitive wilderness subzone, the uplands backcountry subzone, and Gunnison Gorge interface wilderness zone on the far west boundary of park (figure 10). These analysis areas include hiking routes, climbing areas, trails, and a campsite. Visitor capacity for frontcountry areas of Black Canyon of the Gunnison NP will be addressed in future planning processes.

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- | | | | |
|------------------------------------|---------------------------|----------------------|-----------------------------|
| 1. Pinyon Draw Route | 7. Tomichi Route | 14. Climbing Area 12 | 21. Climbing Area 11 |
| 2. Long Draw Route/Climbing Area 6 | 8. Devil's Backbone Route | 15. Climbing Area 8 | 22. Climbing Area 14 |
| 3. Slide Draw Route | 9. North River Route | 16. Climbing Area 7 | 23. North Vista Trail |
| 4. Red Rock Canyon Route | 10. Climbing Area 4 | 17. Climbing Area 13 | 24. Deadhorse Trail |
| 5. Warner Route | 11. Climbing Area 2 | 18. Climbing Area 3 | 25. Oak Flat Trail |
| 6. Gunnison Route | 12. Climbing Area 5 | 19. Climbing Area 9 | 26. Margaritaville Campsite |
| | 13. Climbing Area 1 | 20. Climbing Area 10 | |

Figure 10. Black Canyon of the Gunnison National Park Analysis Areas

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Inner Canyon Hiking Routes: Inner Canyon Primitive Wilderness Subzone

North Rim

1. Pinyon Draw Route
2. Long Draw Route
3. Slide Draw Route

South Rim

4. Red Rock Canyon Route
5. Warner Route
6. Gunnison Route
7. Tomichi Route

Inner Canyon Hiking Routes: Inner Canyon Pristine Wilderness Subzone

East Portal

8. Devil's Backbone Route
9. North River Route

Inner Canyon Climbing Areas: Inner Canyon Primitive Wilderness Subzone

Beyond the formal routes, there are also several gullies/climbing areas used by rock climbers within the inner canyon. All are dry climbing areas except those noted as ice climbs. They include the following:

North Rim

10. BLCA Climbing Area 4 (Cruise Gully)
11. BLCA Climbing Area 2 (Guppy Gully)
12. BLCA Climbing Area 5
13. BLCA Climbing Area 1

South Rim

14. BLCA Climbing Area 12 (Chillumstone Gully)
15. BLCA Climbing Area 8 (Cedar Point Gully)
16. BLCA Climbing Area 7 (Dragon Point Gully)
17. BLCA Climbing Area 13 (Echo Canyon Gully)
18. BLCA Climbing Area 13 (Rock Point Gully)
19. BLCA Climbing Area 9
20. BLCA Climbing Area 10 (Alimony Gully)

21. BLCA Climbing Area 11 (Headquarters ice climb)

Inner Canyon Climbing Areas: Inner Canyon Pristine Wilderness Subzone

South Rim

22. BLCA Climbing Area 14 (Shadow Fax ice climb)

Trails: Uplands Primitive Wilderness and Uplands Backcountry Subzones

Within the uplands primitive wilderness and uplands backcountry subzones, visitors predominantly use two trails. These analysis areas are within both wilderness and backcountry zones, therefore desired conditions for both zones were considered in the analysis. These trails did not have capacities identified in prior planning guidance. These trails are as follows:

23. North Vista Trail

24. Deadhorse Trail

Trails: Inner Canyon Primitive Wilderness Subzone

There is also a trail on the South Rim of the canyon within the inner canyon primitive wilderness subzone. This trail did not have a capacity established in prior planning guidance.

25. Oak Flat Trail

Margaritaville Campsite: Gunnison Gorge Interface Wilderness Zone

The Gunnison Gorge interface wilderness zone includes the Margaritaville campsite, which is the primary location of visitor access and use on the west side of the park. Visitors access the campsite by hiking or boating from Chukar Trail in the BLM-managed Gunnison Gorge National Conservation area.

26. Margaritaville Campsite

Guideline 2: Review Existing Direction and Knowledge for Black Canyon of the Gunnison National Park

Inner Canyon Hiking Routes: Inner Canyon Primitive Wilderness Subzone

The inner canyon wilderness zone includes the canyon rims, canyon walls, and the canyon floor including the Gunnison River.

The principal desired conditions for the inner canyon wilderness zone would be wild, natural, and rugged. The zone is remote and provides for adventure. The experience would be challenging, and the visitor would need to be self-reliant and equipped with wilderness skills. Wilderness qualities are protected and improved, including the untrammelled character, the natural quality, the undeveloped character, and opportunities for solitude and primitive or unconfined recreation.

Most of the visitor use takes place in the primitive wilderness subzone. The desired conditions described for this subzone would be unspoiled and uncrowded. There are opportunities for solitude and reduced recreational facilities to improve primitive and unconfined recreation, self-reliance, and natural qualities. In the inner canyon primitive wilderness subzone, the natural qualities of the canyon floor and opportunities for solitude are improved by designated campsites because visitors

camp exclusively at these sites. There are no maintained or marked trails into the inner canyon. Instead, there are wilderness routes, or unmarked scrambles to the river.

North Rim — Routes on the North Rim are accessed by Black Canyon Road. The North Rim is closed to vehicles in the winter. From west to east, the hiking routes in the North Rim in the inner canyon primitive wilderness subzone are (1) Pinyon Draw, (2) Long Draw, and (3) Slide Draw.

1. Pinyon Draw

This route is suggested for the first time North Rim inner canyon hiker. Visitor parking is available in the pull through near the campground registration board, or at the North Rim Ranger Station. The route begins east of the campground kiosk just off of the road to the campground. The route has short ledges to climb (8–12 ft/3 m). On average, visitors take 2 hours to descend and 3 hours to ascend the 3.5-mile round-trip route. Six campsites are located downstream a short distance. A wilderness use permit is required for both day and overnight use. This route provides an opportunity for visitors to access the Gunnison River.

Pinyon Draw is the most popular route on the North Rim. Visitor use is seasonally concentrated between April and October (figure 11). Between 2014 and 2018, day visitor use at this route was typically higher from May to July with overnight use experiencing higher use levels in June and July. Between 2014 and 2018, there was high variation in day and overnight use at this route. Day visitors were generally the predominant use group at this route however overnight use has steadily increased from 35 overnight visitors in 2014 to 306 in 2018. Visitation to Pinyon Draw Route has increased over the past five years, with close to half of visitation as overnight use in 2018 (figure 12). In 2018, May and June were the busiest months, with 147 and 222 total visitors, respectively. Climbers also use this route. Climbing areas are accessed at various points down the route and at the bottom of the Pinyon Draw Route. Downstream of the bottom is about 2 miles of climbing walls. In the past five years an average of 300 climbers have departed from Pinyon Draw each year (wilderness use permits). One commercially guided climbing party uses a route off Pinyon Draw each year.

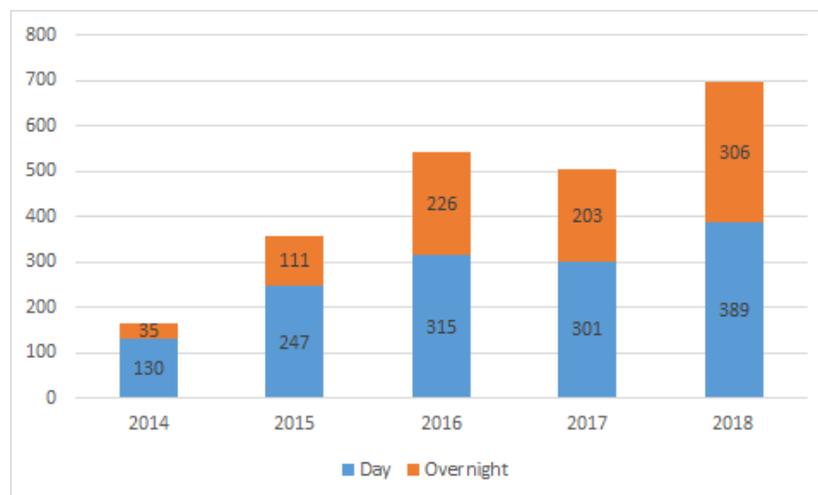


Figure 11. Visitor Use Levels at Pinyon Draw Between 2014 and 2018

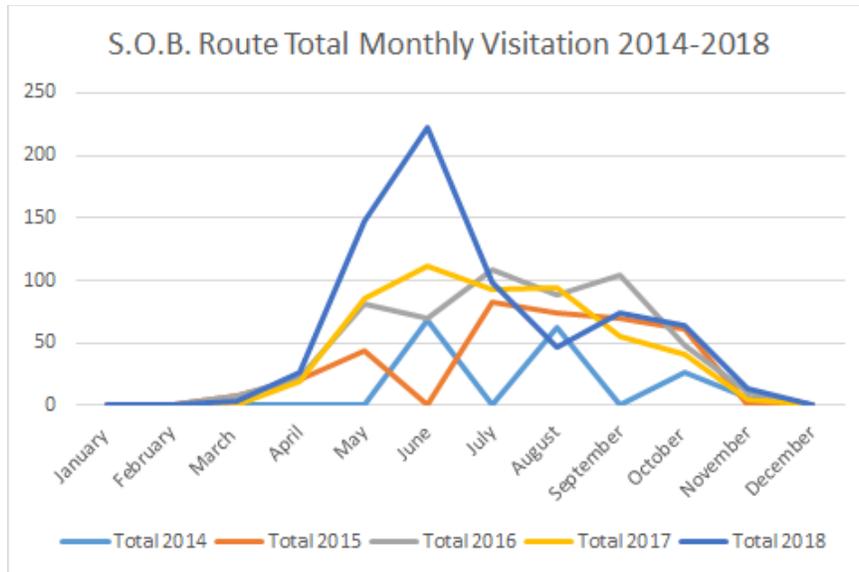


Figure 12. Pinyon Draw Route Total Monthly Visitation Between 2014 and 2018

2. Long Draw

Formerly called Devil’s Slide, Long Draw brings the hiker into one of the narrowest parts of the canyon where canyon walls tower above the swiftly moving Gunnison River. Visitors park at Balanced Rock Overlook, then walk northeast to the bend in the road. The descent begins at the road. This route provides visitors the opportunity to access the river within a short hiking distance (1 mile). The route has short ledges to climb (8–12 ft/3 m). On average, visitors take 1.5 hours to descend and 3 hours to ascend this 2-mile round-trip route. One campsite is located at the bottom of this route. A wilderness use permit is required for day and overnight use.

Visitor use is seasonally concentrated between May and October. Between 2014 and 2018, day visitors significantly increased at this route jumping from around 30 annual visitors in previous years to an average of 130 annual day use visitors. Day visitors are the predominant use group at this route (figure 13). Climbers also use this route. Climbers access Long Draw climbing areas via the Long Draw hiking route. In the past five years a range of 15–30 climbers have departed from Long Draw each year (wilderness use permits). The busiest months in 2018, June and September, there were 42 and 22 total visitors, respectively (figure 14).

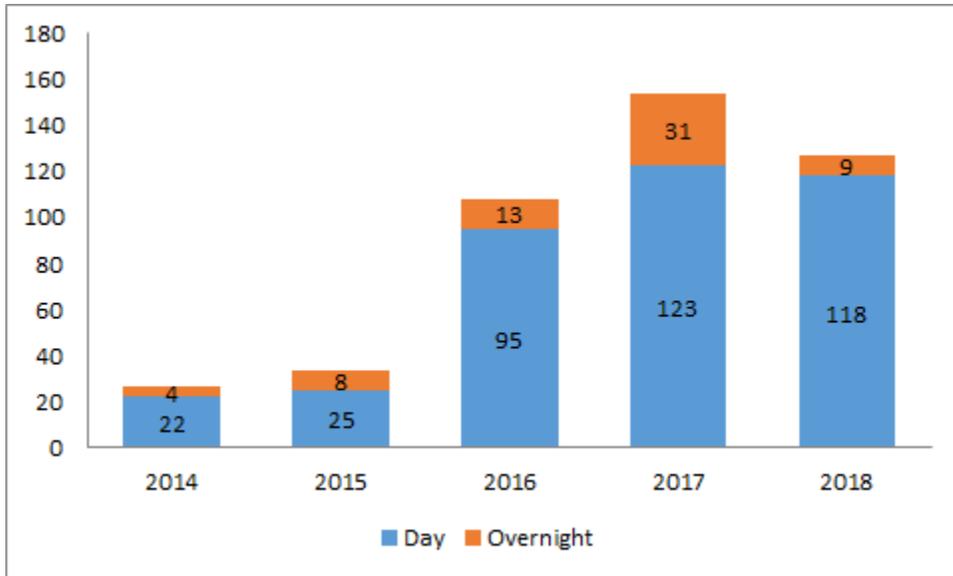


Figure 13. Visitor Use Levels at Long Draw Between 2014 and 2018

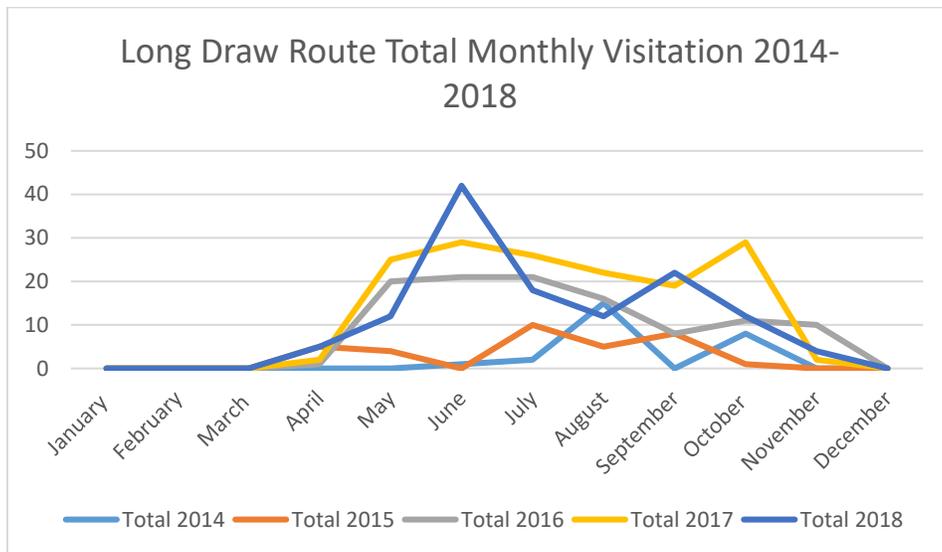


Figure 14. Long Draw Route Total Monthly Visitation Between 2014 and 2018

3. Slide Draw Route

This route is extremely steep and the most potentially dangerous due to loose rock and poor footing. Slide Draw requires a 30-foot climb down to start the route. Visitors park at Kneeling Camel View, then walk east until they reach the head of the draw. Visitors can follow the draw to the river. On average, visitors take 1.5 hours to descend and 4 hours to ascend this 2-mile round-trip route. Two campsites are located at the river. A wilderness use permit is required for day and overnight use.

Visitor use is seasonally concentrated between May and October. Between 2014 and 2018, overnight visitor use significantly increased at this route jumping from 2 to 3 annual overnight visitors in previous years to 37 overnight visitors by 2018. Since 2016, overnight visitors have become the predominant use group at this route (figure 15). In 2018, June was the busiest month, with 23 total visitors (figure 16).

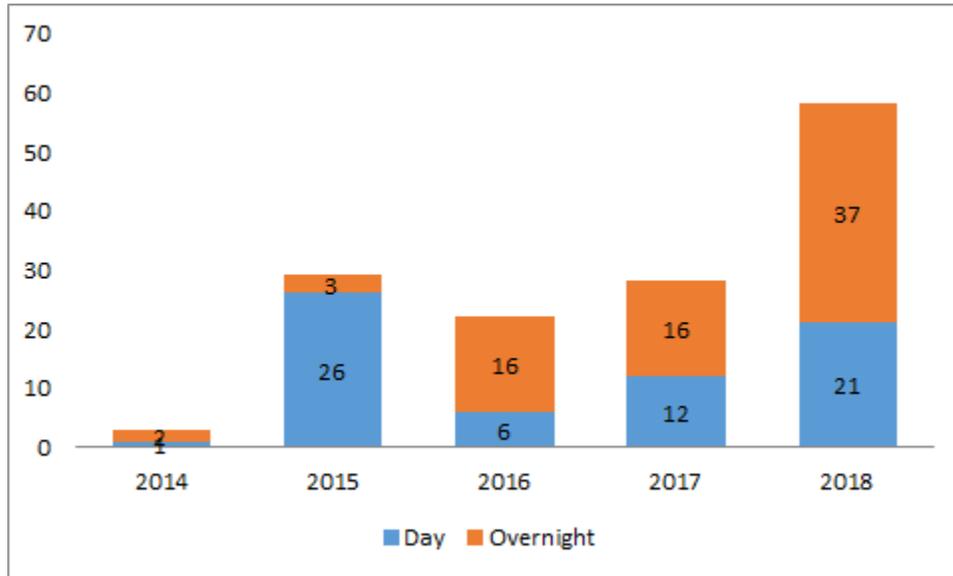


Figure 15. Visitor Use Levels on the Slide Draw Route Between 2014 and 2018

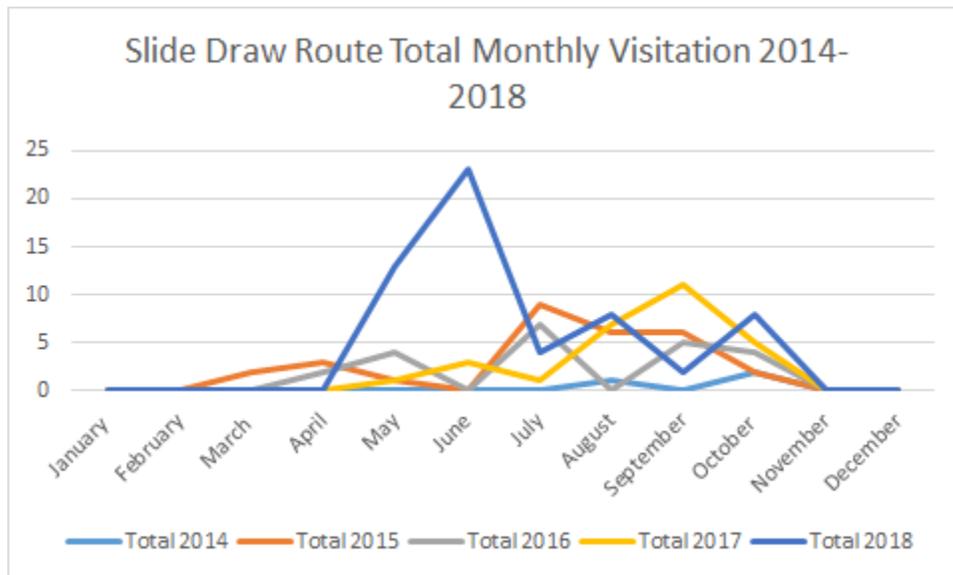


Figure 16. Slide Draw Route Total Monthly Visitation Between 2014 and 2018

South Rim — Most routes to the South Rim are accessed by South Rim Drive. From west to east, the routes in the South Rim inner canyon wilderness zone are (4) Red Rock Canyon Route (accessed by

Bostwick Park Road with valid wilderness use permit), (5) Warner Route, (6) Gunnison Route, and (7) Tomichi Route.

4. Red Rock Canyon Route

The Red Rock Canyon area serves as a popular destination for anglers from June to late July. The route is 3.4 miles long one-way and a more gradual alternative into the canyon compared to the significantly steeper routes accessed from the South or North Rims of the canyon. The area is open to visitors from mid-May to early October. This trailhead is accessed from a small parking lot. Hikers walk through a cattle grazing allotment for the first mile on a two-track dirt road, then follow the hiking route into the canyon. Upon approaching the Gunnison River, three campsites are available. A wilderness use permit is required for day and overnight use. Because access to this route travels through a permitted grazing allotment, permits are only available through a reservation lottery system and the maximum group size is four people.

Overnight visitors are the predominant use group for this route. From 2016 to 2018, overnight groups visiting from May through September generally consisted of six to eight users per day. Day use visitor levels remained in the three to four people range between 2014 and 2018 (figure 17). Information was not collected for the Red Rock Canyon Route in 2015. June and August were the busiest months in 2018, with 66 and 62 total visitors, respectively (figure 18).

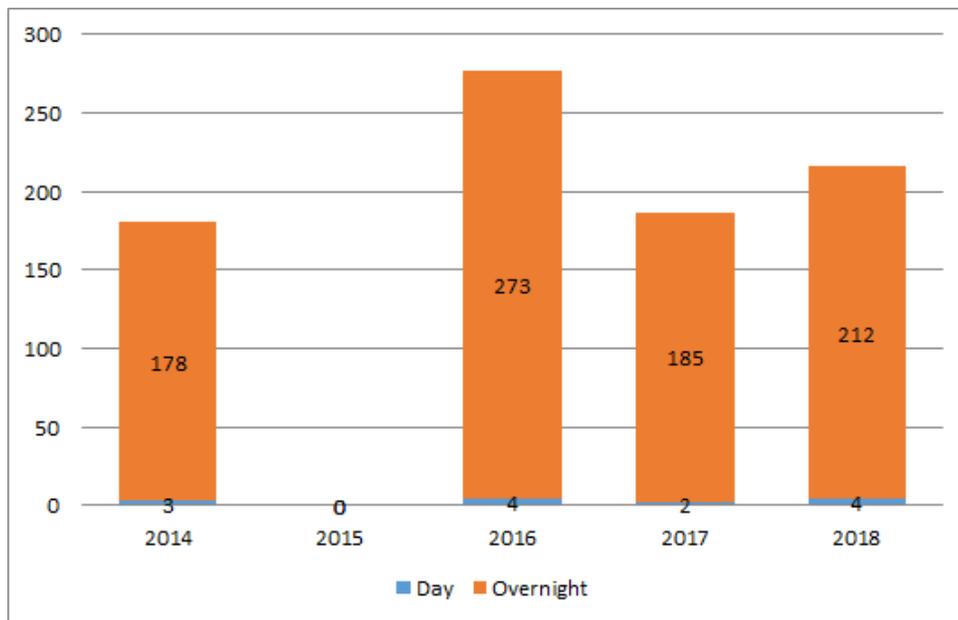


Figure 17. Visitor Use Levels on the Red Rock Canyon Route Between 2014 and 2018

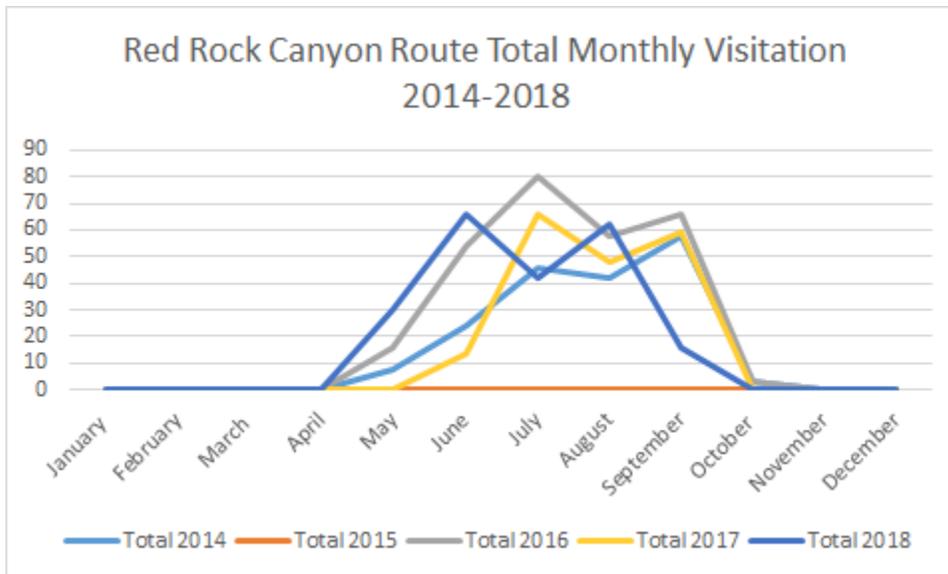


Figure 18. Red Rock Canyon Route Total Monthly Visitation Between 2014 and 2018

5. Warner Route

This is the longest route into the canyon and overnight travel is quite popular. On average, visitors take 2 to 2.5 hours to descend and 4 hours to ascend this 5.5-mile round-trip route. Five campsites and a pit toilet are located up and downstream. A wilderness use permit is required for day and overnight use.

Visitor use is seasonally concentrated between May and September with almost 90% of total annual use occurring in this 5-month period. Between 2014 and 2018, overnight visitor use in April and October was typically a third of the number of overnight visitors during peak season. With that said, overnight visitors during this shoulder season have almost quintupled from less than 10 monthly visitors in 2014 to almost 50 monthly visitors in both months by the end of 2018. Between 2014 and 2018, annual overnight visitor use tripled along this route reaching almost 700 overnight visits by the end of 2018 (figure 19). June was the busiest month in 2018, with 255 total visitors (figure 20).

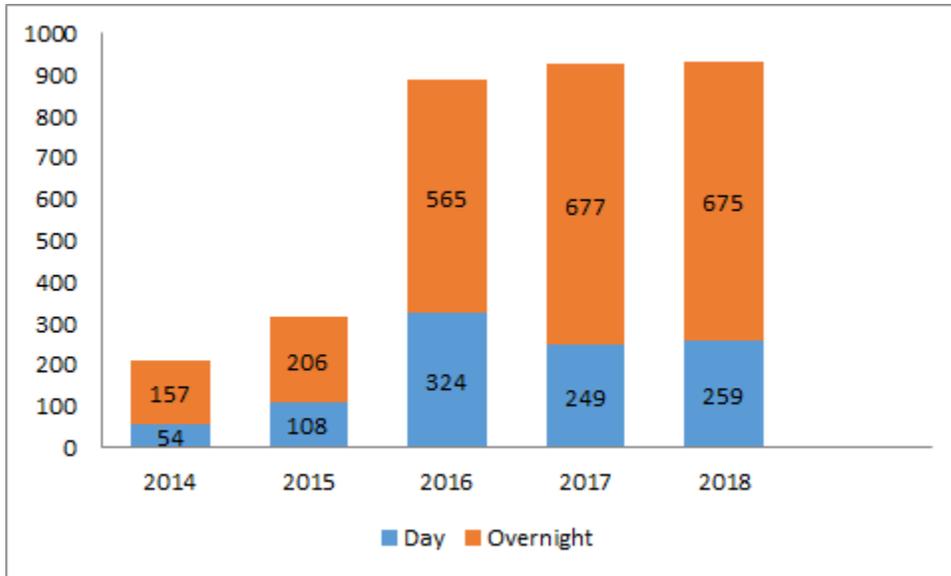


Figure 19. Visitor Use Levels on the Warner Route Between 2014 and 2018

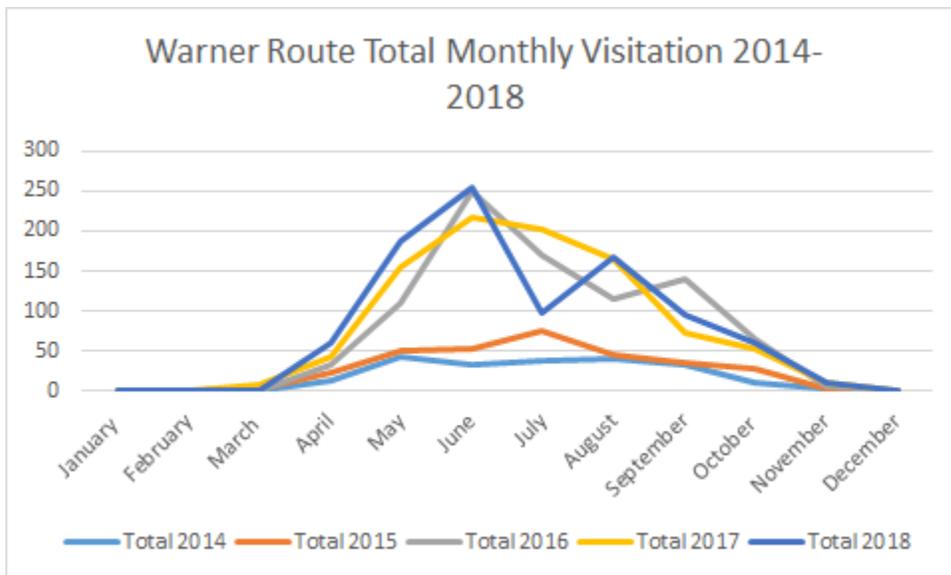


Figure 20. Warner Route Total Monthly Visitation Between 2014 and 2018

6. Gunnison Route

Gunnison Route is the most popular route into the bottom of the canyon. This route is recommended to visitors attempting their first inner canyon hike. An 80-foot chain is located one-third of the way down. This route begins at the South Rim Visitor Center. On average, visitors take 1.5 hours to descend and 2 hours to ascend this 2-mile round-trip route. Three campsites and a pit toilet are located a short distance upstream. A wilderness use permit is required for day and overnight use.

Visitor use is seasonally concentrated between May and September with between 70 and 80% of total annual use occurring in this 5-month period. Day visitors are the predominant user of this route. Between 2014 and 2018, overall visitor use has increased approximately 60% along this route. Annual overnight use has more than doubled in this area from 112 overnight visits in 2014 to 270 in 2018 (figure 21). May to August were the busiest months in 2018 and there were between 400 and 450 total visitors during those months (figure 22).

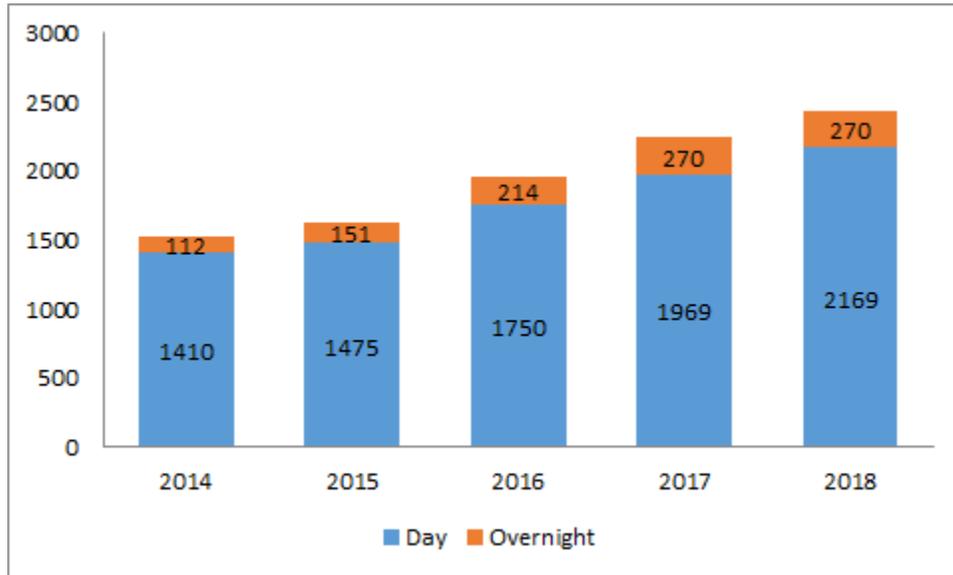


Figure 21. Visitor Use Levels on the Gunnison Route Between 2014 and 2018

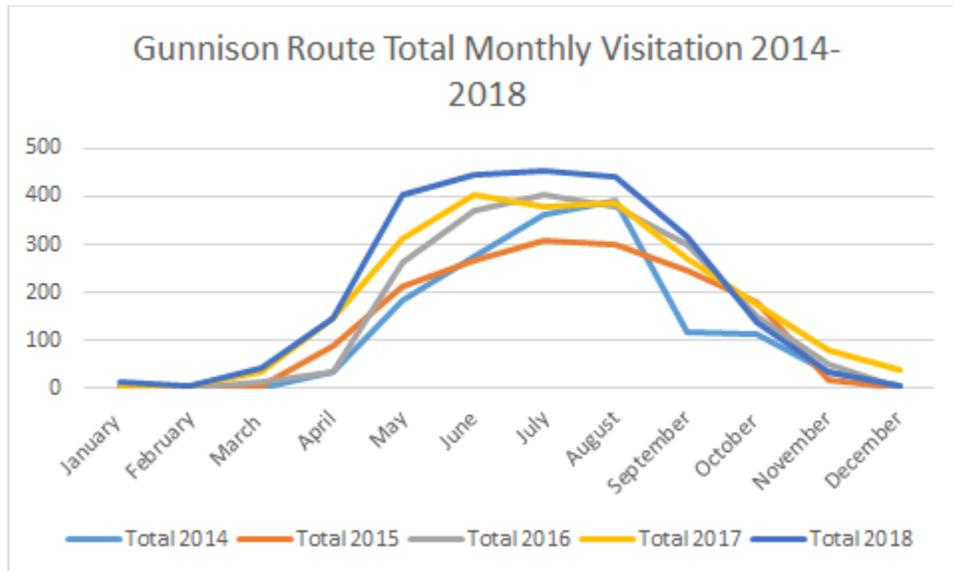


Figure 22. Gunnison Route Total Monthly Visitation Between 2014 and 2018

7. Tomichi Route

This route is considered the steepest South Rim route and is very difficult. The entire length is loose rock and receives full sun exposure. Visitors use the parking area near the South Rim Campground or at Tomichi Overlook. On average, visitors take 1.5 hours to descend and 4.5 hours to ascend this 2-mile round-trip route. Two campsites are located at the bottom of this route. A wilderness use permit is required for day and overnight use.

Visitor use is seasonally concentrated between May and September and it predominantly day use (figure 23). Between 2014 and 2018, day visitor use significantly increased at this route from under 100 day users in 2014 to over 300 day users by the end of 2018. Similarly, since 2014, overnight visitors have steadily increased tenfold from 5 to 50 by the end of 2018. June and August were the busiest months in 2018, with 91 total visitors (figure 24).

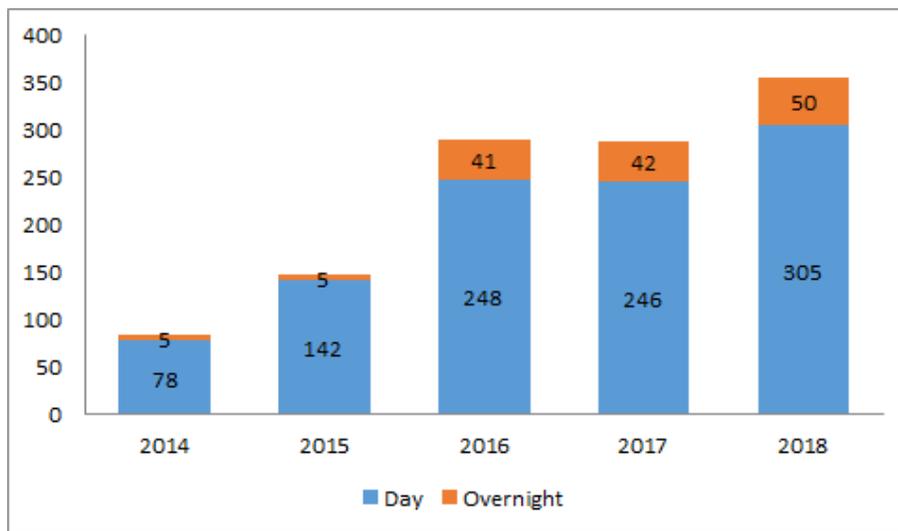


Figure 23. Visitor Use Levels on the Tomichi Route Between 2014 and 2018

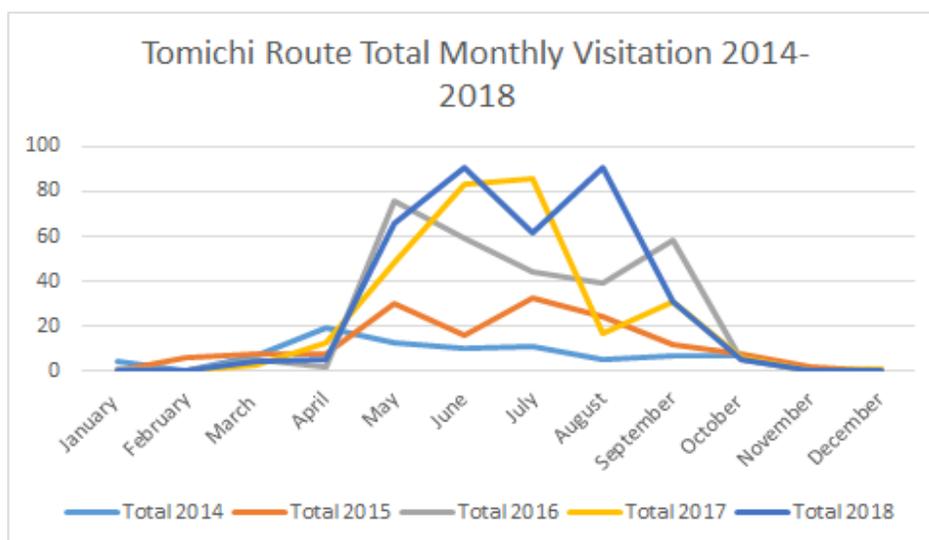


Figure 24. Tomichi Route Total Monthly Visitation Between 2014 and 2018

Inner Canyon Hiking Routes: Inner Canyon Pristine Wilderness Subzone

The East Portal routes are within the inner canyon pristine wilderness subzone. The desired conditions described for this subzone are untamed, isolated, pure, and free. Visitors would need to be independent and skilled to safely access the subzone, and the area would foster people's connection to wild places. The zone is kept wild and untrammled; there are opportunities for solitude and primitive, unconfined recreation. Individuals who enter and view from overlooks are inspired to value wild places.

East Portal — The East Portal routes are accessed by driving down East Portal Road to the East Portal campground or day use areas (both in Curecanti NRA) and walking downstream from there. A short distance downstream from the East Portal campground, visitors cross into Black Canyon of the Gunnison NP; about 0.25 mile further downstream, visitors cross into the Black Canyon of the Gunnison Wilderness. Devil's Backbone Route is on the south side of the Gunnison River and North River Route is on the north side.

8. Devil's Backbone and 9. North River Routes

The East Portal routes (Devil's Backbone and North River) are located within the inner canyon pristine wilderness subzone. The desired conditions for this subzone are described above. The Devil's Backbone Route is about 1.5 miles in length and has a challenging 400-foot scramble on a ridgeline. Both routes are mostly used by anglers moving downstream. Only anglers who can float or wade across the Gunnison River or nonmotorized boaters can access and use the North River Route. There is a small boat launch at the registration board that provides a good landing for boating across the river for the North River Route. Once across the river, visitors can hike nearly 2 miles downriver to the cliff at Flat Rock Rapid. There is only one low ridge to scramble over at Deadhorse Gulch. At times, the routes can be underwater due to high-water flows.

Wilderness use permits record the amount of overnight use at the East Portal routes. Overnight use is concentrated between the months of June and October (figure 25). There was an average of 30 overnight users per year between 2014 and 2018. However, overnight use jumped from 16 visitors in 2017 to 66 in 2018 (figure 26). July and September were the busiest months in 2018, with 24 and 33 total visitors, respectively. These routes have historically had low visitation, but use is rising. Park managers typically observe 8 to 10 anglers per day at the East Portal routes. Visitor encounter rates are recorded on a park wilderness entry form by park staff and volunteers. For the Devil's Backbone and North River Routes, the average encounter rate between 2015 and 2019 was three people/hour.

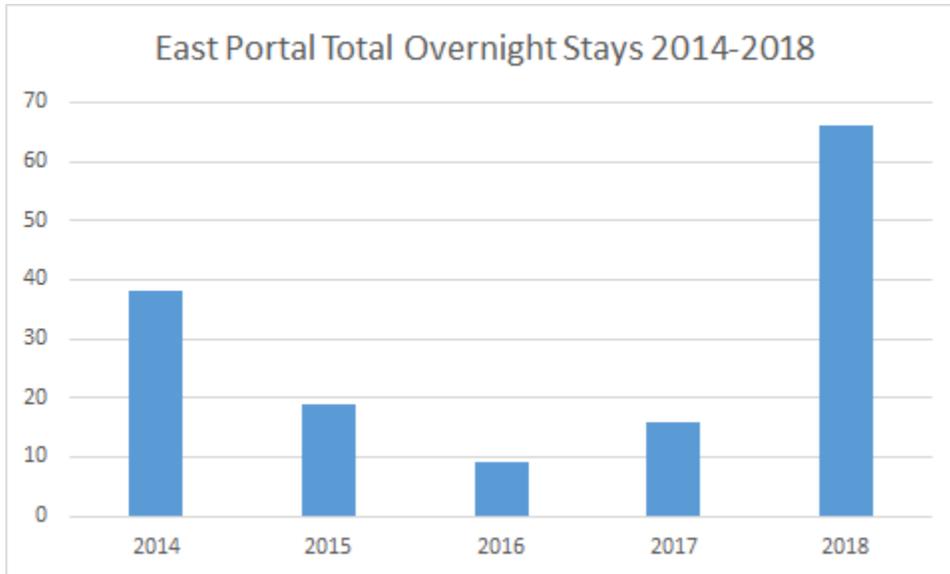


Figure 25. East Portal Total Overnight Stays Between 2014 and 2018

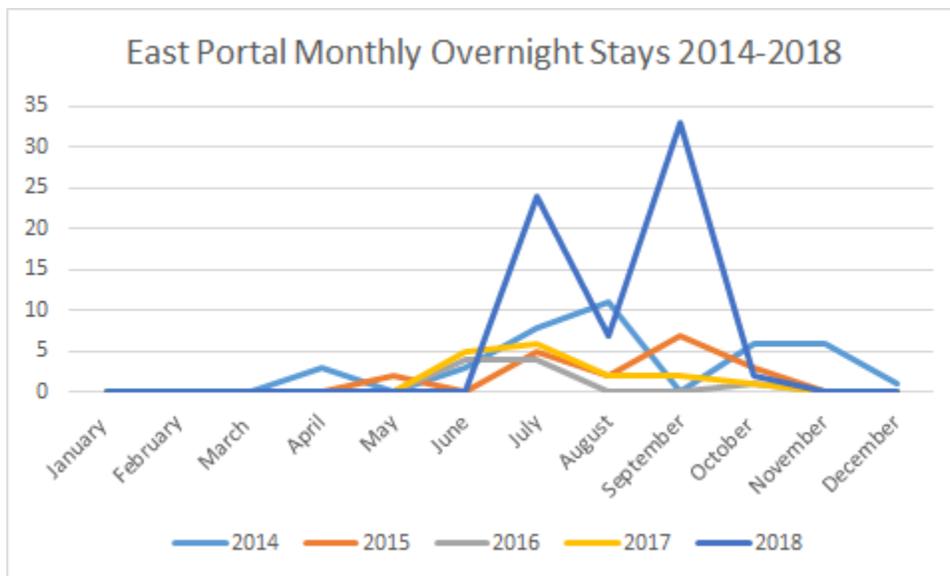


Figure 26. East Portal Monthly Overnight Stays Between 2014 and 2018

Inner Canyon Climbing Areas: Inner Canyon Primitive Wilderness Subzone and Inner Canyon Pristine Wilderness Subzone

Black Canyon of the Gunnison NP is a destination that offers vast opportunities to expert rock climbers. Peak climbing season at the Black Canyon begins in late April and runs through the early part of June and then from mid-September through late October. Detailed climbing information for Black Canyon climbs is often difficult to obtain or nonexistent. A few guidebooks are available about climbing in the Black Canyon. Information from the guidebooks in conjunction with staff knowledge and monitoring have been used to understand the current condition of the climbing areas. Climbing parties typically consist of two individuals.

North Rim

10. BLCA Climbing Area 4 (Cruise Gully)
11. BLCA Climbing Area 2 (Guppy Gully)
12. BLCA Climbing Area 5
13. BLCA Climbing Area 1

BLCA Climbing Area 4 (Cruise Gully) is accessed by rappelling into the gully off Black Canyon Road halfway between the North Rim ranger station and the campground. Of the climbing areas in the park, Cruise Gully is by far the most heavily used, with 6 to 10 general public climbing parties/day during peak climbing season in the spring and fall. In 2019, there were 270 climbers in May and 169 climbers in June (wilderness use permit data). On weekends during peak climbing season in 2019, there were between 15 and 30 climbers at Cruise Gully per day. There are approximately 60 climbing routes accessed from Cruise Gully, including some of the easiest routes in the canyon. There are about 30 commercial guided climbing parties at Cruise Gully per year.

BLCA Climbing Area 2 is accessed by rappelling into the gully off the North Vista Trail. It is described as a challenging area to access and sees 10 to 15 public climbing groups per year and up to one commercially guided party. BLCA Climbing Area 5 is near the Narrows Overlook off of North Rim Drive and is used by 10 to 20 climbing parties per year. BLCA Climbing Area 1 is accessed off North Vista Trail and because of challenging and obscure features sees very little use, i.e., zero to one climbing party per year.

South Rim

14. BLCA Climbing Area 12 (Chillumstone Gully)
15. BLCA Climbing Area 8 (Cedar Point Gully)
16. BLCA Climbing Area 7 (Dragon Point Gully)
17. BLCA Climbing Area 13 (Echo Canyon Gully)
18. BLCA Climbing Area 3 (Rock Point Gully)
19. BLCA Climbing Area 9
20. BLCA Climbing Area 10 (Alimony Gully)
21. BLCA Climbing Area 11 (Headquarters ice climb)
22. BLCA Climbing Area 14 (Shadow Fax ice climb)

BLCA Climbing Area 12 is accessed to the west of Devil's Overlook. The routes start about a quarter of the way up from the river. There are typically 4 to 6 climbing parties in both the spring and the fall (8 to 12 total parties per year). One commercially guided climb occurs every two to three years. BLCA Climbing Area 8 departs at Cedar Point Overlook and requires bushwhacking and downclimbing to access the climbing routes. The routes are very challenging and complicated and see approximately five parties annually. BLCA Climbing Area 7 is near Dragon Point off South Rim Drive and is very challenging with about five parties annually. BLCA Climbing Area 13 is accessed just to the east of Rock Point Overlook. The area received more use in the early 2000s but now sees a

climbing group once every five years due to nesting raptor closures.⁶ BLCA Climbing Area 3 was identified in a climbing guidebook (as access point B) but according to park staff is a very obscure and challenging area that sees little to no use. BLCA Climbing Area 9 is accessed near the Painted Wall Overlook and requires scrambling into the gully to begin rappel. Approximately five climbing parties use this area per year. BLCA Climbing Area 10 is near Alimony Wall to the west of Painted Wall Overlook and sees between 8 and 10 climbing parties/year.

The ice climbing areas at Black Canyon of the Gunnison NP do not form every year, depending on conditions. BLCA Climbing Area 11 is accessed near the Chasm View Overlook and periodically forms where drainage meets the canyon rim. Because ice has not formed in the past four years, there have been no ice climbers.

Inner Canyon Climbing Areas: Inner Canyon Pristine Wilderness Subzone

One of the ice climbing areas on the South Rim of the canyon within the inner canyon pristine wilderness subzone. Desired conditions for this subzone are described above.

South Rim

22. BLCA Climbing Area 14 (Shadow Fax ice climb)

BLCA Climbing Area 14 is off East Portal Road and has two to four ice climbing parties per year. The ice formation does not form every year.

Trails: Uplands Primitive Wilderness and Uplands Backcountry Subzones

The trails on the North Rim in the uplands zone include the North Vista Trail and Deadhorse Trail. These trails are within both the uplands primitive wilderness and uplands backcountry subzones.

The desired conditions for the uplands primitive wilderness subzone would be described as remote yet approachable. There are opportunities for solitude, maintained expansive natural views, and reduced impacts of invasive plants and livestock grazing. The desired conditions for the uplands backcountry subzone would be described as untamed and isolated; visitors would need to be skilled to safely access the subzone and the area would foster people's connection to wild places. Consistent with desired conditions for this subzone, the wilderness is maintained, with improved naturalness and outstanding opportunities for self-reliance and adventure. There are minimal recreational developments and those individuals who enter and view the area from overlooks are inspired to value wild places. The subzone backcountry would be managed similarly to the uplands wilderness subzone without the legal and policy requirements of wilderness.

6. Black Canyon of the Gunnison NP has annual closures March 15 through July 15 to protect nesting raptors, which impacts several climbing routes. For more information visit <https://www.nps.gov/blca/planyourvisit/climbingclosures.htm>.

23. North Vista Trail

The North Vista Trail has two primary destinations. The hike to Exclamation Point is a moderately difficult 3-mile round-trip hike whereas the hike to Green Mountain is a strenuous 7-mile round-trip hike. The North Vista Trail provides spectacular scenic views and birding in the park. The trail departs from the North Rim Ranger Station. The trail passes through an area of sage and oak brush as well as a pinyon-juniper forest along the canyon's rim. Several overlooks offer views of Pinyon Draw and the inner canyon. Exclamation Point has some of the best inner-canyon views. Near Green Mountain there are panoramic vistas of the San Juan Mountains, the West Elks, Grand Mesa, Uncompahgre Plateau, and an aerial perspective of the Black Canyon. A trail counter at the North Vista Trail (captures outbound and inbound traffic) recorded approximately 382 people in July, 635 in August, and 300 in September of 2019. Park staff have observed up to 50 people per day on busy weekends and 5 to 10 people at viewpoints at one time. The average encounter rate on the North Vista Trail was 5 people/hour, according to 2016–2019 wilderness entry form data collected by park staff and volunteers.

24. Deadhorse Trail

The Deadhorse Trail is 5 miles round trip and rated as easy to moderate difficulty. The trail provides views of Deadhorse Gulch and East Portal and birding opportunities. The trail begins at the old ranger station east of the Kneeling Camel Overlook. Along the trail there is a stock pond fed by a spring and views from the canyon's rim. The Deadhorse Trail is the only area open to general public recreational horseback riding in Black Canyon of the Gunnison NP. There are typically only equestrian users once or twice per year. No permit is required, and horses must be trailered to the trailhead at Kneeling Camel Overlook. Hiking use is more common and there are about two to three hiking parties per week according to park management.

The average encounter rate on the Deadhorse trail was one person/hour, according to 2016–2018 wilderness entry form data.

Trails: Inner Canyon Primitive Wilderness Subzone

25. Oak Flat Trail

Oak Flat Trail is on the South Rim of the canyon and is a strenuous 2-mile round-trip trail that takes an hour to complete on average. Desired conditions for this subzone are described above. The trail provides the opportunity for visitors to explore below the rim without the challenge of hiking to the river. The trail is narrow in places and traverses some steep slopes. The trail begins near the South Rim Visitor Center and descends through a grove of aspen, a thicket of Gambel oak, and a forest of Douglas fir. Some soil erosion, exposed tree roots, and visitor-created trails have been observed along the trail. Though it is a loop trail, the out and back portions of the trail are relatively close to and downhill from one another.

The trail is very popular given its closeness to the South Rim Visitor Center. The Gunnison Route is also accessed from the trail; about a 0.25 mile of the trail is also used by those who are bound for the Gunnison Route. During patrols, park staff on average observe approximately 5 people per hour on the trail and 15 people while completing the loop in about an hour. Daily use level is approximated to about 80 people per day (NPS observational data). The majority of trail users park at the South Rim Visitor Center parking lot and it effectively meters and temporally disperses use on the trail. The lot, which has 50 spaces including 2 handicap and 7 bus/RV spaces, is also used by visitors bound to other destinations aside from the Oak Flat Trail.

Margaritaville Campsite: Gunnison Gorge Interface Wilderness Zone

The Gunnison Gorge interface wilderness zone encompasses both inner canyon and uplands along the western boundary of Black Canyon of the Gunnison NP, adjacent to the Gunnison Gorge Wilderness within the BLM-managed Gunnison Gorge National Conservation Area. This zone provides access to Black Canyon of the Gunnison NP from the Gunnison Gorge National Conservation Area.

Black Canyon opens slightly and is less deep within the rugged Gunnison Gorge; river morphology becomes more amenable to rafting, which becomes more feasible and common from a point 1 mile within Black Canyon of the Gunnison NP. All lands within the Gunnison Gorge Wilderness Zone are designated wilderness.

Desired conditions for the zone would be wild, natural, rugged, remote, challenging, unspoiled, and uncrowded. The visitor experience would be challenging and adventurous; a variety of opportunities exist that may involve self-reliance and use of wilderness skills. The wilderness qualities would be maintained and improved, including the untrammelled character, the natural quality, the undeveloped character, and opportunities for solitude or primitive and unconfined recreation. The National Park Service and Bureau of Land Management would continue to coordinate activities to meet these desired conditions.

26. Margaritaville Campsite

About 350 acres of the interface zone, adjacent to the Gunnison Gorge Wilderness within the BLM-managed Gunnison Gorge National Conservation Area, is jointly managed with the Bureau of Land Management. Visitor capacity for the Gunnison Gorge interface wilderness zone was analyzed for this campsite because this is the primary area for visitor use west of the inner canyon and uplands zones. Visitors access the campsite by hiking or, in some rare cases, nonmotorized boating upstream from the bottom of Chukar Trail in the BLM-managed Gunnison Gorge National Conservation Area.

Chukar Trail is the most heavily used trail in the Gunnison Gorge National Conservation Area, and a four-wheel drive vehicle with good clearance is recommended for travel to the trailhead. During the boating season, kayakers, rafters, and anglers use the 1-mile trail to carry down boats and gear for day and overnight trips and at peak times it can be quite crowded. However, in the off-season there are far fewer visitors. The sandy-beached Margaritaville campsite is opposite a rapid just before you get cliffed out and can go no farther upstream.⁷

During the 2016 season, a trail register recorded 63 visitors, 57 of whom fished at the Margaritaville campsite. In 2017, 26 visitors, 20 of whom fished were recorded. In 2018, 57 visitors (36 of whom fished) and in 2019, 30 visitors (19 of whom fished) were recorded (BLM register sheets). Given that completing the trail register and noting a destination is voluntary, these figures are likely underreporting actual visitation. The majority of use occurs between April and October and visitors stay at the campsites for one to two nights. There are two sites, Margaritaville lower and upper, that can accommodate up to eight people. One site may be used by boaters, who are permitted to stay for one night, and both sites may be used by hike-in users, who are permitted to stay for up to two nights. Some commercially guided use may occur in the Gunnison Gorge interface wilderness zone, including at Margaritaville campsite. The commercial use would originate in the BLM-managed

7. <https://www.wilderness.net/printFactSheet.cfm?WID=227>

Gunnison Gorge Wilderness and operate under commercial use permits authorized by the Bureau of Land Management. Commercial use includes guided fishing groups of three to four people who hike into the campsite. No reliable data are available for commercial use, but the Bureau of Land Management and the National Park Service believe it is a very small component of overall use.

Park staff have observed impacts from visitor use and litter, including human-made rock structures, firepits, clotheslines, dog waste, loss of native vegetation, and introduction of invasive species.

Guideline 3: Identify the Limiting Attribute(s) for Black Canyon of the Gunnison National Park

The limiting attributes across the analysis areas for Black Canyon of the Gunnison NP are all related to the desired conditions and wilderness qualities for solitude, with further detail described below.

Inner Canyon Hiking Routes — The feature that most constrains the ability of the inner canyon hiking routes to accommodate visitor use is the visitor experience related to the wilderness quality of solitude or primitive and unconfined recreation. As described in the 2013 foundation document (NPS 2013b), the demanding landscape of the Black Canyon of the Gunnison Wilderness provides unparalleled opportunities to realize a high degree of self-reliance, profound quiet, intense challenge, and a fundamental solitude difficult to find in our world today. The relevant desired conditions described for the inner canyon primitive wilderness subzone are uncrowded and an environment that provides for solitude. The relevant desired conditions for the inner canyon pristine wilderness subzone are isolated, free, independent, and fosters people's connection to wild places. To achieve and maintain desired conditions for solitude or a primitive and unconfined type of recreation in the inner canyon wilderness, encounter rates should not exceed site-specific standards for 85% of patrols. The site-specific encounter rate standards are 10 for Red Rock Canyon Route, 15 for Warner Route, 11 for Gunnison Route, 6 for Tomichi Route, 15 for Pinyon Draw Route, 5 for Long Draw Route, 7 for Slide Draw Route, and 10 for the East Portal routes. Overnight use is also constrained by the limited amount of space at the bottom of each route. An additional limiting attribute for all routes in the inner canyon is the constraint of physical space along the route and at the river shoreline. Because all routes are out and back, there are multiple encounters with other groups. User groups, including hikers, boaters, anglers, and climbers, all use the same route. Collectively, the visitor experience for solitude, encounter rate thresholds, space for camping, and multiple user groups constrain the inner canyon routes' ability to accommodate use.

Inner Canyon Climbing Areas — The climbing areas and gullies are also within the inner canyon primitive wilderness subzone, and the visitor experience for solitude or primitive and unconfined recreation is the limiting attribute. There is limited physical space on the climbing routes and a fixed number of rappel areas for climbers to use to access routes. The climbing routes are extremely challenging due to the terrain and topography, and most are only accessible by very advanced and experienced climbers. Ice climbing routes are especially limited by the size of the ice formation, especially in the inner canyon pristine wilderness subzone. Collectively, the visitor experience for solitude or primitive and unconfined recreation as well as physical space and safety concerns constrain this area's ability to accommodate visitor use.

Trails — The limiting attribute is the visitor experience related to the wilderness quality for solitude for the trails in the uplands primitive wilderness and uplands backcountry subzones. Given that the North Vista and Deadhorse Trails traverse both wilderness and backcountry zones, but are analyzed and managed as one analysis area, applying desired conditions for solitude in the wilderness zones preclude large group sizes and frequent encounters. The relevant uplands primitive wilderness subzone desired conditions are described as remote and approachable, an environment that provides opportunities for solitude, and that maintains expansive natural views. Similarly, Oak Flat Trail is within the inner canyon primitive wilderness subzone and the experience for wild, natural, rugged, and solitude as described by the desired conditions most constrain the trail's ability to accommodate use. Encounter rates should not exceed site-specific standards for 85% of patrols. The site-specific encounter rate standards are 30 for North Vista, 30 for Deadhorse, and 8 for Oak Flat Trail. The encounter rate standards reflect the desired conditions for the respective zones as well as the time it takes to patrol each trail. The upland trails are more easily accessible than the inner canyon but remain in the wilderness. These trails are generally flat, wide, and can accommodate more use. Opportunities for solitude remain essential to the visitor experience and encounters with other groups or visitors impact these opportunities. Therefore, the opportunity for solitude most constrains the trails' ability to accommodate visitor use.

Margaritaville Campsite — The relevant desired conditions for the Margaritaville campsite, within the Gunnison Gorge interface wilderness zone, are described as wild, natural, rugged, remote, challenging, unspoiled, and uncrowded. The visitor experience, specifically the remote and uncrowded aspects described by the desired conditions, constrain the campsite's ability to accommodate visitor use.

Guideline 4: Identify Visitor Capacity for Black Canyon of the Gunnison National Park

For Black Canyon of the Gunnison NP, visitor capacities are most frequently expressed as people in one day. For the ice climbing areas, visitor capacity is expressed as party at one time. Here, a party is defined as two people.

The following visitor capacities are based on an assessment of desired conditions and existing conditions in relation to amounts and types of use in guideline 2, noting the limiting attributes described in guideline 3, and are protective of the wilderness character and other desired conditions (table 6). Visitor capacities are inclusive of the general public and commercial use. Commercial allocation is described in detail below. The route and trail capacities in this plan consider the encounter rate standards for identifying an appropriate people in one day capacity that is protective of desired conditions and wilderness qualities.

Visitor capacities will be monitored as described in the monitoring strategy in chapter 5, and if associated thresholds/standards are exceeded, potential management strategies would be implemented to ensure that capacities are not exceeded.

The visitor capacities have been identified based on the best available information and are to be continuously reevaluated and updated with future planning efforts as informed by monitoring information. Certain analysis areas have more detailed monitoring and existing conditions information than others, however management decisions were made based on the sliding scale approach. Park staff is committed to continuously monitoring the conditions of these sites and reevaluating the capacity analysis as more information is available.

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Table 6. Visitor Capacities for Black Canyon of the Gunnison National Park

Inner Canyon Hiking Routes

| ID | Analysis Area | Visitor Capacity | Management Strategies |
|----|---------------|--|---|
| 1 | Pinyon Draw | <p>Current use levels at Pinyon Draw, 23 people in one day (PIOD), are achieving and maintaining the wild, natural, and rugged desired conditions for the inner canyon primitive wilderness subzone. Opportunities for solitude are key to the visitor experience, consistent with wilderness character for this area, and inform the amount of use this route can accommodate, in addition to the finite number of campsites and multiple user groups. The wilderness use permit system will not change with implementation of the plan. Therefore, use levels are to be maintained at 23 PIOD. The associated strategies are required to implement the visitor capacity.</p> | <p>Continue implementing the wilderness use permit system for day and overnight use to manage the timing and location of use and distribute visitors so that encounter rates are not exceeded. If capacities for the inner canyon routes are exceeded, management strategies include increasing patrols to ensure compliance with the permit system and reevaluating and reducing capacities if encounter rate standards are exceeded.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> • Explore an online permitting system through Recreation.gov. • Visitor education on low-impact trail use. • Interpretive signage on access trails starting in the frontcountry for sensitive resources/restoration purposes. |
| 2 | Long Draw | <p>Current use levels at Long Draw, eight PIOD, are achieving and maintaining the wild, natural, and rugged desired conditions for the inner canyon primitive wilderness subzone. Opportunities for solitude are key to the visitor experience, consistent with wilderness character for this area, and inform the amount of use this route can accommodate, in addition to the finite number of campsites and multiple user groups. The wilderness use permit system will not change with implementation of the plan. Therefore, use levels are to be maintained at eight PIOD. The associated strategies are required to implement the visitor capacity.</p> | <p>Continue implementing the wilderness use permit system for day and overnight use to manage the timing and location of use and distribute visitors so that encounter rates are not exceeded. If capacities for the inner canyon routes are exceeded, management strategies include increasing patrols to ensure compliance with the permit system and reevaluating and reducing capacities if encounter rate standards are exceeded.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> • Explore an online permitting system such as Recreation.gov. • Visitor education on low-impact trail use. |

| ID | Analysis Area | Visitor Capacity | Management Strategies |
|----|------------------|--|---|
| | | | <ul style="list-style-type: none"> • Interpretive signage on access trails starting in the frontcountry for sensitive resources/restoration purposes. |
| 3 | Slide Draw | <p>Current use levels at Slide Draw, 11 PIOD, are achieving and maintaining the wild, natural, and rugged desired conditions for the inner canyon primitive wilderness subzone. Opportunities for solitude are key to the visitor experience, consistent with wilderness character for this area, and inform the amount of use this route can accommodate, in addition to the finite number of campsites and multiple user groups. The wilderness use permit system will not change with implementation of the plan. Therefore, use levels are to be maintained at 11 PIOD. The associated strategies are required to implement the visitor capacity.</p> | <p>Continue implementing the wilderness use permit system for day and overnight use to manage the timing and location of use and distribute visitors so that encounter rates are not exceeded. If capacities for the inner canyon routes are exceeded, management strategies include increasing patrols to ensure compliance with the permit system and reevaluating and reducing capacities if encounter rate standards are exceeded.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> • Explore an online permitting system through Recreation.gov. • Visitor education on low-impact trail use. • Interpretive signage on access trails starting in the frontcountry for sensitive resources/restoration purposes. |
| 4 | Red Rock Canyon* | <p>Current use levels at Red Rock Canyon, 15 PIOD, are achieving and maintaining the wild, natural, and rugged desired conditions for the inner canyon primitive wilderness subzone. Opportunities for solitude are key to the visitor experience, consistent with wilderness character for this area, and inform the amount of use this route can accommodate, in addition to the finite number of campsites (three sites) and multiple user groups. The wilderness use permit system will not change with implementation of the plan. Therefore, use levels are to be maintained at 15 PIOD and 12 people for overnight use. The associated strategies are required to implement the visitor capacity.</p> | <p>Continue implementing the wilderness use permit system for day and overnight use to manage the timing and location of use and distribute visitors so that encounter rates are not exceeded. If capacities for the inner canyon routes are exceeded, management strategies include increasing patrols to ensure compliance with the permit system and reevaluating and reducing capacities if encounter rate standards are exceeded.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> • Explore an online permitting and lottery system such as Recreation.gov. • Visitor education on low-impact trail use. |

| ID | Analysis Area | Visitor Capacity | Management Strategies |
|----|---------------|---|---|
| | | | <ul style="list-style-type: none"> Interpretive signage on access trails starting in the frontcountry for sensitive resources/restoration purposes. |
| 5 | Warner | <p>Current use levels at Warner, 23 PIOD, are achieving and maintaining the wild, natural, and rugged desired conditions for the inner canyon primitive wilderness subzone. Opportunities for solitude are key to the visitor experience, consistent with wilderness character for this area, and inform the amount of use this route can accommodate, in addition to the finite number of campsites and multiple user groups. The wilderness use permit system will not change with implementation of the plan. Therefore, use levels are to be maintained at 23 PIOD. The associated strategies are required to implement the visitor capacity.</p> | <p>Continue implementing the wilderness use permit system for day and overnight use to manage the timing and location of use and distribute visitors so that encounter rates are not exceeded. If capacities for the inner canyon routes are exceeded, management strategies include increasing patrols to ensure compliance with the permit system and reevaluating and reducing capacities if encounter rate standards are exceeded.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> Explore an online permitting system through Recreation.gov. Visitor education on low-impact trail use. Interpretive signage on access trails starting in the frontcountry for sensitive resources/restoration purposes. |
| 6 | Gunnison | <p>Current use levels at Gunnison, 15 PIOD, are achieving and maintaining the wild, natural, and rugged desired conditions for the inner canyon primitive wilderness subzone. Opportunities for solitude are key to the visitor experience, consistent with wilderness character for this area, and inform the amount of use this route can accommodate, in addition to the finite number of campsites and multiple user groups. The wilderness use permit system will not change with implementation of the plan. Therefore, use levels are to be maintained at 15 PIOD. The associated strategies are required to implement the visitor capacity.</p> | <p>Continue implementing the wilderness use permit system for day and overnight use to manage the timing and location of use and distribute visitors so that encounter rates are not exceeded. If capacities for the inner canyon routes are exceeded, management strategies include increasing patrols to ensure compliance with the permit system and reevaluating and reducing capacities if encounter rate standards are exceeded. Issue permits for Gunnison Route on the South Rim on an in-person basis only (not all members of the party need be present) during peak season to ensure one permit per person or group not to exceed 15 total PIOD is issued.</p> |

| ID | Analysis Area | Visitor Capacity | Management Strategies |
|-----|---|--|---|
| | | | <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> • Explore an online permitting system through Recreation.gov. • Visitor education on low-impact trail use. • Interpretive signage on access trails starting in the frontcountry for sensitive resources/restoration purposes. |
| 7 | Tomichi | <p>Current use levels at Tomichi, nine PIOD, are achieving and maintaining the wild, natural, and rugged desired conditions for the inner canyon primitive wilderness subzone. Opportunities for solitude are key to the visitor experience, consistent with wilderness character for this area, and inform the amount of use this route can accommodate, in addition to the finite number of campsites and multiple user groups. The wilderness use permit system will not change with implementation of the plan. Therefore, use levels are to be maintained at nine PIOD. The associated strategies are required to implement the visitor capacity.</p> | <p>Continue implementing the wilderness use permit system for day and overnight use to manage the timing and location of use and distribute visitors so that encounter rates are not exceeded. If capacities for the inner canyon routes are exceeded, management strategies include increasing patrols to ensure compliance with the permit system and reevaluating and reducing capacities if encounter rate standards are exceeded. Issue permits for the South Rim on an in-person basis only to ensure one permit per person is issued.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> • Explore an online permitting system through Recreation.gov. • Visitor education on low-impact trail use. • Interpretive signage on access trails starting in the frontcountry for sensitive resources/restoration purposes. |
| 8-9 | East Portal Routes (North River and Devil’s Backbone) | <p>Current use levels at the East Portal routes, approximately eight PIOD at either route, are achieving and maintaining the untamed, isolated, pure, and free desired conditions for the inner canyon primitive wilderness subzone. Opportunities for solitude are key to the visitor experience, consistent with wilderness character for this area, and inform the amount of use this route can accommodate, in addition to the finite number of campsites and multiple user groups. Therefore, use levels are to be maintained at 16 PIOD.</p> | <p>Continued use of the wilderness use permit system for overnight use and manage the timing and location of use to distribute visitors so that encounter rates are not exceeded.</p> <p><i>Related potential management strategies:</i></p> |

| ID | Analysis Area | Visitor Capacity | Management Strategies |
|----|---------------|---|---|
| | | The associated strategies are required to implement the visitor capacity. | <ul style="list-style-type: none"> Increasing patrols to ensure compliance with the permit system. Evaluate requiring permits for day use. Stipulating a number of people per permit (for permits obtained before the visitor center opens). Visitor education on low-impact trail use. Interpretive signage on the trail outside wilderness for sensitive resources/restoration purposes. Reevaluating and reducing capacities if encounter rate standards are exceeded. |

Inner Canyon Climbing Areas⁸

| ID | Analysis Area | Visitor Capacity | Management Strategies |
|----|-------------------------------------|---|---|
| 10 | BLCA Climbing Area 4 (Cruise Gully) | Current use levels, 15–30 climbers per day on peak weekend days, are maintaining the wild, natural, and rugged desired conditions for the inner canyon primitive wilderness subzone. Opportunities for solitude are key to the visitor experience, consistent with wilderness character for this area, and inform the amount of use this route can accommodate, in addition to limited space on the wall and safety concerns associated with climbing. Therefore, use levels are to be maintained at 20 PIOD.** The associated strategies are required to implement the visitor capacity. | <p>Continued use of the wilderness use permit system and managing the timing and location of use to distribute climbers with the white board at the North Rim Ranger Station.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> Increasing patrols to ensure compliance with the wilderness use permit system. |
| 11 | BLCA Climbing Area 2 (Guppy Gully) | This climbing area sees very little use, ranging from 10 to 15 climbing parties per year. These use levels are achieving the wild, natural, and rugged desired conditions for the inner canyon primitive wilderness subzone. However, the technical challenge to access this route, the physical space on the wall, safety | Continued use of the wilderness use permit system and managing the timing and location of use to distribute |

⁸ All inner canyon use of the main routes is managed with the wilderness use permit system, including hikers, boaters, anglers, and climbers. The National Park Service manages climbing via the wilderness use permit system, with the total number of visitors in the canyon occasionally exceeding the daily use limits for the seven major inner canyon routes (ID 1-7 in table 4), for instance on peak weekend days. Some climbers may leave the main hiking routes to access climbing areas where there are no hiking opportunities due to steep terrain, but most climbing occurs from established routes with daily use limits managed by the wilderness use permit system.

| ID | Analysis Area | Visitor Capacity | Management Strategies |
|----|--|---|---|
| | | <p>concerns, and the key visitor experience for solitude, consistent with wilderness character for this area informs the amount of use this climbing area can accommodate. Therefore, there is opportunity to increase use levels to four PIOD*** or two climbing parties. The associated strategies are required to implement the visitor capacity.</p> | <p>climbers with the white board at the North Rim Ranger Station.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> Increasing patrols to ensure compliance with the wilderness use permit system. |
| 12 | BLCA Climbing Area 5 | <p>This climbing area sees very little use, ranging from 10 to 20 climbing parties per year. These use levels are achieving the wild, natural, and rugged desired conditions for the inner canyon primitive wilderness subzone. However, the technical challenge to access this route, the physical space on the wall, safety concerns, and the key visitor experience for solitude, consistent with wilderness character for this area informs the amount of use this climbing area can accommodate. Therefore, there is opportunity to increase use levels to four PIOD*** or two climbing parties. The associated strategies are required to implement the visitor capacity.</p> | <p>Continued use of the wilderness use permit system and managing the timing and location of use to distribute climbers with the white board at the North Rim Ranger Station.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> Increasing patrols to ensure compliance with the wilderness use permit system. |
| 13 | BLCA Climbing Area 1 | <p>This climbing area sees very little use, ranging from 0 to 20 climbing parties per year. These use levels are achieving the wild, natural, and rugged desired conditions for the inner canyon primitive wilderness subzone. However, the technical challenge to access this route, the physical space on the wall, safety concerns, and the key visitor experience for solitude, consistent with wilderness character for this area informs the amount of use this climbing area can accommodate. Therefore, there is opportunity to increase use levels to four PIOD*** or two climbing parties. The associated strategies are required to implement the visitor capacity.</p> | <p>Continued use of the wilderness use permit system and managing the timing and location of use to distribute climbers with the white board at the North Rim Ranger Station.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> Increasing patrols to ensure compliance with the wilderness use permit system. |
| 14 | BLCA Climbing Area 12 (Chillumstone Gully) | <p>This climbing area sees very little use, ranging from 8 to 12 climbing parties per year. These use levels are achieving the wild, natural, and rugged desired conditions for the inner canyon primitive wilderness subzone. However, the technical challenge to access this route, the physical space on the wall, safety concerns, and the key visitor experience for solitude, consistent with wilderness character for this area informs the amount of use this climbing area can accommodate. Therefore, there is opportunity to increase use levels to four PIOD*** or two climbing parties. The associated strategies are required to implement the visitor capacity.</p> | <p>Continued use of the wilderness use permit system and managing the timing and location of use to distribute climbers with the white board at the North Rim Ranger Station.</p> <p><i>Related potential management strategies:</i></p> |

| ID | Analysis Area | Visitor Capacity | Management Strategies |
|----|---|---|---|
| | | | <ul style="list-style-type: none"> Increasing patrols to ensure compliance with the wilderness use permit system. |
| 15 | BLCA Climbing Area 8 (Cedar Point Gully) | This climbing area sees very little use, approximately five climbing parties per year. These use levels are achieving the wild, natural, and rugged desired conditions for the inner canyon primitive wilderness subzone. However, the technical challenge to access this route, the physical space on the wall, safety concerns, and the key visitor experience for solitude, consistent with wilderness character for this area informs the amount of use this climbing area can accommodate. Therefore, there is opportunity to increase use levels to four PIOD*** or two climbing parties. The associated strategies are required to implement the visitor capacity. | <p>Continued use of the wilderness use permit system and managing the timing and location of use to distribute climbers with the white board at the North Rim Ranger Station.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> Increasing patrols to ensure compliance with the wilderness use permit system. |
| 16 | BLCA Climbing Area 7 (Dragon Point Gully) | This climbing area sees very little use, approximately five climbing parties per year. These use levels are achieving the wild, natural, and rugged desired conditions for the inner canyon primitive wilderness subzone. However, the technical challenge to access this route, the physical space on the wall, safety concerns, and the key visitor experience for solitude, consistent with wilderness character for this area informs the amount of use this climbing area can accommodate. Therefore, there is opportunity to increase use levels to four PIOD*** or two climbing parties. The associated strategies are required to implement the visitor capacity. | <p>Continued use of the wilderness use permit system and managing the timing and location of use to distribute climbers with the white board at the North Rim Ranger Station.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> Increasing patrols to ensure compliance with the wilderness use permit system. |
| 17 | BLCA Climbing Area 13 (Echo Canyon Gully) | This climbing area sees very little use, about one climbing party every five years. These use levels are achieving the wild, natural, and rugged desired conditions for the inner canyon primitive wilderness subzone. However, the technical challenge to access this route, the physical space on the wall, safety concerns, and the key visitor experience for solitude, consistent with wilderness character for this area informs the amount of use this climbing area can accommodate. Therefore, there is opportunity to increase use levels to four PIOD*** or two climbing parties. The associated strategies are required to implement the visitor capacity. | <p>Continued use of the wilderness use permit system and managing the timing and location of use to distribute climbers with the white board at the North Rim Ranger Station.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> Increasing patrols to ensure compliance with the wilderness use permit system. |
| 18 | BLCA Climbing Area 3 (Rock | This climbing area sees very little use, approximately zero to one climbing party per year. These use levels are achieving the wild, natural, and rugged desired conditions for the inner canyon primitive wilderness subzone. | Continued use of the wilderness use permit system and managing the timing and location of use to distribute |

| ID | Analysis Area | Visitor Capacity | Management Strategies |
|----|---------------------------------------|---|---|
| | Point Gully) | However, the technical challenge to access this route, the physical space on the wall, safety concerns, and the key visitor experience for solitude, consistent with wilderness character for this area informs the amount of use this climbing area can accommodate. Therefore, there is opportunity to increase use levels to four PIOD*** or two climbing parties. The associated strategies are required to implement the visitor capacity. | <p>climbers with the white board at the North Rim Ranger Station.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> Increasing patrols to ensure compliance with the wilderness use permit system. |
| 19 | BLCA Climbing Area 9 | This climbing area sees very little use, approximately five climbing parties per year. These use levels are achieving the wild, natural, and rugged desired conditions for inner canyon primitive wilderness subzone. However, the technical challenge to access this route, the physical space on the wall, safety concerns, and the key visitor experience for solitude, consistent with wilderness character for this area informs the amount of use this climbing area can accommodate. Therefore, there is opportunity to increase use levels to four PIOD*** or two climbing parties. The associated strategies are required to implement the visitor capacity. | <p>Continued use of the wilderness use permit system and managing the timing and location of use to distribute climbers with the white board at the North Rim Ranger Station.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> Increasing patrols to ensure compliance with the wilderness use permit system. |
| 20 | BLCA Climbing Area 10 (Alimony Gully) | This climbing area sees very little use, approximately 8–10 climbing parties per year. These use levels achieving the wild, natural, and rugged desired conditions for the inner canyon primitive wilderness subzone. However, the technical challenge to access this route, the physical space on the wall, safety concerns, and the key visitor experience for solitude, consistent with wilderness character for this area informs the amount of use this climbing area can accommodate. Therefore, there is opportunity to increase use levels to four PIOD*** or two climbing parties. The associated strategies are required to implement the visitor capacity. | <p>Continued use of the wilderness use permit system and managing the timing and location of use to distribute climbers with the white board at the North Rim Ranger Station.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> Increasing patrols to ensure compliance with the wilderness use permit system. |

*Access into Red Rock Canyon is available through a permit-based lottery system only. Reservations are required. Maximum group size is four people and up to three consecutive user days (two nights). There is a maximum of 12 people per day in the canyon, or three groups, whichever fills first. Park regulations and Leave No Trace principles apply to all areas associated with access to Red Rock Canyon, whether public or private land.

**For BLCA Climbing Area 4 (Cruise Gully), the most popular climbing area in the canyon, park staff desire to maintain current use levels for a typical day. This means that for a handful of the busiest days out of the year, where visitation reaches more than 20 PIOD, management action will be taken to decrease use levels to maintain desired experiences and resource conditions.

***Park staff identified the opportunity to increase use levels at these infrequently used climbing gullies. These areas can accommodate more use while maintaining desired experiences and resource conditions because they are spread out, see extremely low use, and seldom have climbers at more than a handful of gullies at one time. Because of the topography of the canyon and gully formations, climbers on these various routes and hikers on the hiking routes are seldom aware of one another.

Ice Climbing Areas

| ID | Analysis Area | Visitor Capacity | Management Strategies |
|----|--|---|--|
| 21 | BLCA Climbing Area 11 (Headquarters ice climb) | Use levels at the ice climbing areas currently range between zero to four climbing parties per year, dependent upon if the ice forms. This level of use is achieving the wild, natural, and rugged desired conditions for the inner canyon primitive wilderness subzone. The limiting attributes for dry climbing, including technical challenge, physical space, and experience for solitude, consistent with the wilderness character for this area, inform the amount of use these ice climbing areas can accommodate. The ice climbing areas are further constrained by the size of the ice formation. Therefore, there is opportunity to increase use levels to one party at a time. The associated strategies are required to implement the visitor capacity. | <p>Continued use of the wilderness use permit system and managing the timing and location of use to distribute climbers with the white board at the North Rim Ranger Station.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> • Increasing patrols to ensure compliance with the permit system. • As mentioned in guideline 2, ice climbs may or may not form every winter. If new ice climbing areas were to form in the future, they would be managed similarly to those described in this plan. |
| 22 | BLCA Climbing Area 14 (Shadow Fax ice climb) | Use levels at the ice climbing areas are currently two to four climbing parties per year, dependent on ice formation. This level of use is achieving and maintaining the untamed, isolated, pure, and free desired conditions for the inner canyon primitive wilderness subzone. The limiting attributes for dry climbing, including technical challenge, physical space, and experience for solitude, consistent with the wilderness character for this area, inform the amount of use these ice climbing areas can accommodate. The ice climbing areas are further constrained by the size of the ice formation. Therefore, there is opportunity to increase use levels to one party at a time. The associated strategies are required to implement the visitor capacity. | <p>Continued use of the wilderness use permit system and managing the timing and location of use to distribute climbers with the white board at the North Rim Ranger Station.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> • Increasing patrols to ensure compliance with the permit system. • As mentioned in guideline 2, ice climbs may or may not form every winter. If new ice climbing areas were to form in the future, they would be managed similarly to those described in this plan. |

Trails

| ID | Analysis Area | Visitor Capacity | Management Strategies |
|----|-------------------|---|--|
| 23 | North Vista Trail | Current use levels at North Vista Trail, up to 50 PIOD on busy weekends, are achieving and maintaining the remote, approachable, untamed, and isolated desired conditions for the uplands primitive wilderness and backcountry subzones. Opportunities for solitude are key to the visitor experience and inform the amount of use this trail can accommodate. Therefore, use levels are to be maintained at 50 PIOD. The associated strategies are required to implement the visitor capacity. | <p>Monitor use levels with patrols and trail counters. Restore visitor-created trails and any other resource impacts on natural conditions.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> • Increase patrols. • Manage the timing and location of visitor use to disperse visitation. This could involve access permits, which would be further evaluated at that time. |
| 24 | Dead Horse Trail | Current use levels at Dead Horse trail, approximately three hiking parties per week and one or two equestrian users per year, are achieving and maintaining the remote, approachable, untamed, and isolated desired conditions for the uplands primitive wilderness and backcountry subzones. Opportunities for solitude are key to the visitor experience and inform the amount of use this trail can accommodate. Therefore, there is opportunity to increase use levels to 20 PIOD. The associated strategies are required to implement the visitor capacity. | <p>Monitor use levels with patrols and trail counters. Restore visitor-created trails and any other resource impacts on natural conditions.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> • Increase patrols. • Manage the timing and location of visitor use to disperse visitation. This could involve access permits, which would be further evaluated at that time. |
| 25 | Oak Flat Trail | Current use levels at Oak Flat trail, approximately 80 PIOD, are achieving the wild, natural, and rugged desired conditions for the inner canyon primitive wilderness subzone. However, at any higher level of use, there would be fewer opportunities for solitude and unacceptable resource damage. Opportunities for solitude are key to the visitor experience and inform the amount of use this trail can accommodate. Encounters on the trail are not to exceed eight people for 85% of patrols. Therefore, use levels are to be maintained at 80 PIOD. This daily capacity maintains appropriate visitor encounters across a typical 10-hour summer day. The associated strategies are required to implement the visitor capacity. | <p>Monitor use levels with patrols and trail counters. Restore visitor-created trails and any other resource impacts on natural conditions. Provide additional trip planning information, such as encouraging trail use during nonpeak hours and alternative hiking opportunities. Update trail messaging to emphasize that the trail is in designated wilderness and the associated desired conditions. This includes updates to the trail description in digital and printed materials as well as physical messaging/signage near the trail outside wilderness.</p> <p><i>Related potential management strategies:</i></p> |

| ID | Analysis Area | Visitor Capacity | Management Strategies |
|----|---------------|------------------|---|
| | | | <ul style="list-style-type: none"> • Increase patrols. • Station a trail ambassador at Oak Flat Trail to assist with visitor use management such as informing visitors of alternative nearby hiking opportunities. • Manage the timing and location of visitor use to disperse visitation. This could involve access permits, which would be further evaluated at that time. |

Gunnison Gorge Interface Zone Campsite

| ID | Analysis Area | Visitor Capacity | Management Strategies |
|----|-------------------------|---|--|
| 26 | Margaritaville campsite | <p>Use levels at the campsite have fluctuated between 30 and 60 visitors per year over the past three years, with 30 visitors in 2019. This level of use is achieving the wild, natural, rugged, remote, challenging, unspoiled, and uncrowded desired conditions for the Gunnison Gorge interface wilderness subzone. Opportunities for solitude, consistent with wilderness character for this area, inform how much use can be accommodated at this campsite. Therefore, there is opportunity to increase use levels to 16 PIOD. The associated strategies are required to implement the visitor capacity.</p> | <p>Monitor site conditions including ground disturbance and other visitor-related impacts. All users (including those accessing the Margaritaville campsite) entering the Gunnison Gorge National Conservation Area on Chukar Trail pay their entrance fee at the BLM Chukar trailhead kiosk. Overnight users (public and commercial) then register for available campsites on a first-come, first-served basis at the bottom of Chukar Trail at the Chukar boat launch register. Continue joint management with the Bureau of Land Management and increase NPS involvement with managing any commercial use that may occur in the Gunnison Gorge interface wilderness zone.</p> |

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Commercial Allocation

Commercial allocation is the process of distributing visitor capacity among a variety of uses to achieve or maintain desired conditions. The extent to which commercial services are necessary in the Black Canyon of the Gunnison Wilderness to realize the purposes for which this wilderness was established is documented in chapter 7, in the Extent Necessary Determination.

Commercially Guided Use in the Inner Canyon Primitive Wilderness Subzone — The only commercially guided activity that occurs in the inner canyon wilderness zone is climbing. Commercially guided climbing groups may also camp as a part of their trip. As noted in guideline 2, guided climbing primarily occurs at Pinyon Draw and BLCA Climbing Area 4 (Cruise Gully) (the majority taking place at Cruise Gully). Some guided climbing parties also camp at the bottom of the Pinyon Draw Route. As shown in figure 27, from 2011 to 2018, guided climbing consisted of an average of 1.6% of total climbing in the inner canyon. In 2018, guided climbing consisted of 2.1% of total climbing and 1.2% of total visitation at Pinyon Draw and Cruise Gully. Guided climbing in 2018 was 0.2% of the proposed capacity for Pinyon and Cruise, calculated using the maximum amount of visitors on those routes from April to October because that is the primary climbing season. Park staff have identified the opportunity to increase commercial use to 3% of total climbing use. This would effectively distribute commercial and public use and maintain the desired resource and experiential conditions. Management strategies include using the wilderness use permit system and using CUAs to manage commercial use. As a potential management strategy if commercial use approaches the 3% allocation, the CUA terms and conditions will be updated to reflect maximum number of guided climbs allowed under each CUA. If guided climbing begins to monopolize the public’s ability to access the canyon, the National Park Service will adjust the commercial allocation and/or consider alternative management tools or authorities.

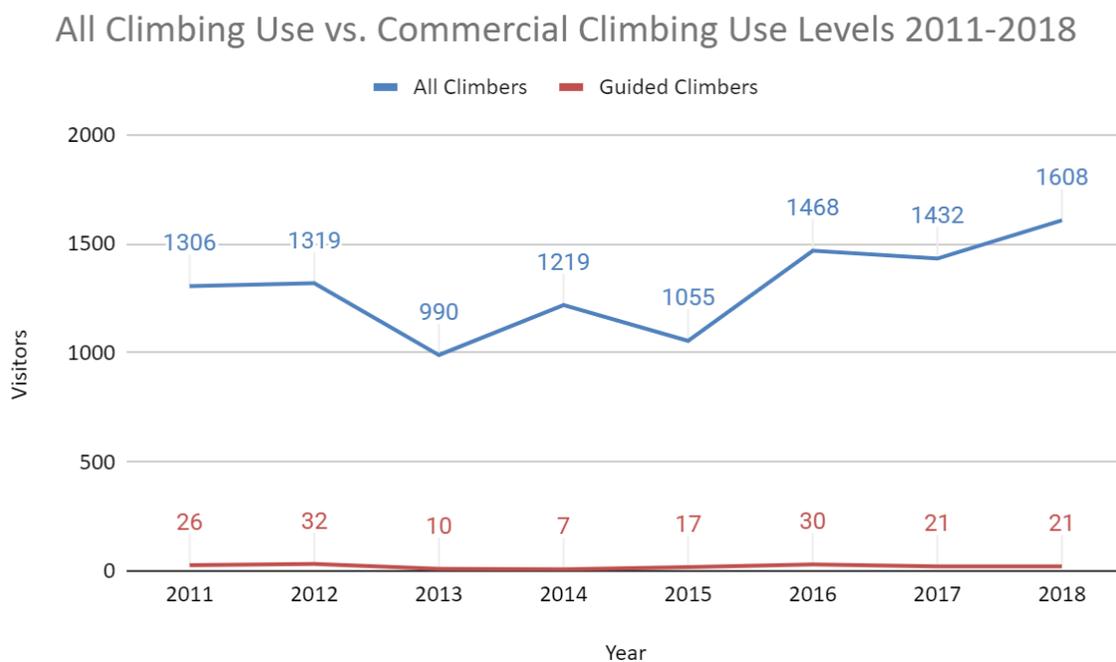


Figure 27. Public Climbing Use versus Commercial Climbing Use, 2011–2018. Sources: Black Canyon of the Gunnison National Park Wilderness Use Permits and Commercial Use Authorizations

Commercially Guided Use in the Uplands Zone — There are currently no commercially guided activities in the uplands zone. As evaluated in chapter 7, interpretive day hiking and camping/overnight use are appropriate activities in the uplands zone. Locations for commercial use would be evaluated on a case-by-case basis. Based on current use levels and to be consistent with climbing, commercial allocation for interpretive day hiking and camping/overnight use will be established at 3% each of total annual hikers and total annual overnight users. Should monitoring suggest that commercially guided activities exceed this allocation, park staff will adjust monitoring to a more frequent basis (i.e., monthly) to ensure that commercial use does not monopolize a recreational opportunity for the general public.

Commercially Guided Use in the Gunnison Gorge Interface Wilderness Zone — As noted in guideline 2, NPS and BLM staff have anecdotally reported that the commercial services primarily provide guided services for fishing, hiking and overnight use of the Margaritaville campsite, with rare occurrences of river-running. Given that known current commercial use of the zone is relatively low at this time, the interdisciplinary team identified a need to collaborate further with BLM staff to jointly manage this area of the park. Increased NPS involvement in the management of commercial use in this zone will allow park staff to better understand use—both commercial and public—of this area.

There is potential that commercially guided groups could adversely impact noncommercial visitors' experience of wilderness by degrading the opportunities for solitude or undeveloped and natural qualities. At this time, commercially guided groups should not exceed 4 people per group and primary use of this zone should remain for public use. As monitoring of commercial use within the zone increases and more data become available, the park may update the commercial allocation for the Gunnison Gorge interface wilderness zone. Commercial service providers should encourage Leave No Trace principles to ensure desired conditions for the Margaritaville campsite may be achieved and wilderness character is preserved.

VISITOR CAPACITY FOR CURECANTI NATIONAL RECREATION AREA

The visitor capacity identification process (guidelines 1–4) for Curecanti NRA is presented in the following sections. The first section (guideline 1) outlines the analysis areas. The next section (guideline 2) summarizes existing direction and knowledge for each analysis area. The following sections of the analysis (guideline 3 identifies the limiting attribute and guideline 4 identifies visitor capacity and implementation strategies) have been consolidated because the limiting attribute and management strategies are similar amongst analysis area types. If the reader wishes to examine an individual analysis area, we suggest locating the header for that analysis area within guidelines 2, 3, and 4.

Guideline 1: Determine the Analysis Areas for Curecanti National Recreation Area

At Curecanti National Recreation Area the analysis areas are within the East Portal-Morrow Point backcountry zone and the Blue Mesa backcountry zone (figure 28). Visitor capacity for Curecanti NRA frontcountry zones and reservoir/river use will be addressed in future planning processes. Boat-in campsites are present in both backcountry zones. Developed boat-in sites have some amenities such as vault toilets, tables, and fire grates. Primitive boat-in sites do not have any amenities. Each individual campsite can accommodate between four and six people.

East Portal–Morrow Point Zone

Within the East Portal-Morrow Point backcountry zone, the analysis areas consist of trails, campsites, and climbing areas. The analysis areas are as follows:

Trails

1. Crystal Creek
2. Hermit's Rest
3. Curecanti Creek

Campsites

4. Curecanti Creek (developed boat-in)
5. Hermit's Rest (developed boat-in)
6. Crystal Creek (developed boat-in)
7. Dead Man's Curve (primitive boat-in)
8. Nelson's Gulch (primitive boat-in)
9. Blue Creek (primitive boat-in)
10. The Narrows (primitive boat-in)

Climbing Areas

11. CURE Climbing Area 3 (Curecanti Needle)
12. CURE Climbing Area 2 (Pioneer Point)
13. CURE Climbing Area 7 (Blue Creek Canyon ice climb)
14. CURE Climbing Area 5 (Chipeta Falls ice climb)
15. CURE Climbing Area 4 (ice climb)
16. CURE Climbing Area 6 (Practice Slab ice climb)
17. CURE Climbing Area 1 (Curecanti Monster ice climb)

Blue Mesa Backcountry Zone

Within the Blue Mesa backcountry zone, the analysis areas are comprised of campsites and dispersed backcountry camping. The analysis areas are as follows:

Campsites

18. Lake Fork Arm (developed boat-in)
19. Cebolla Creek (developed boat-in)
20. Turtle Rock (developed boat-in)
21. West Elk (developed boat-in)

Dispersed Backcountry Camping — Dispersed backcountry camping is allowed in certain locations along the shore of the Blue Mesa Reservoir, West Elk Arm, Lake Fork Arm, and Cebolla Arm. See figure 28 for a map of backcountry camping locations.

22. Dispersed backcountry camping

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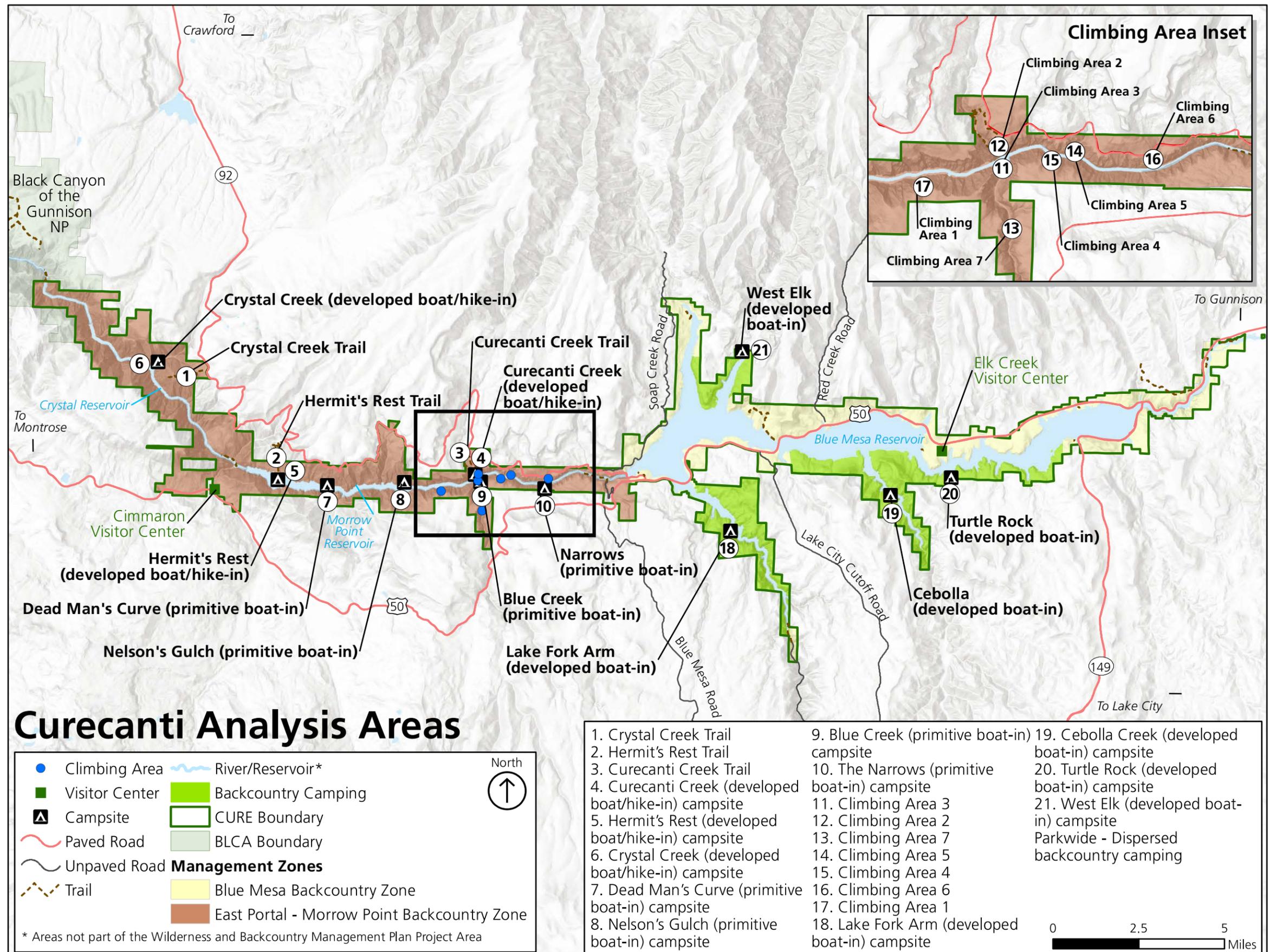


Figure 28. Curecanti National Recreation Area Analysis Areas

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Guideline 2: Review Existing Direction for Curecanti National Recreation Area

East Portal–Morrow Point Backcountry Zone

This zone includes the backcountry undeveloped areas in Curecanti NRA from the shared boundary with Black Canyon of the Gunnison NP to the Blue Mesa Dam. The desired conditions for the East Portal–Morrow Point backcountry zone would be remote, uncrowded, natural, scenic, peaceful, relaxing, rugged, and secluded. Backcountry qualities are maintained and improved, including the natural qualities, keeping nonrecreational development to a minimum and recognizing and enhancing unique and remote backcountry experiences while protecting solitude, consistent with the desired conditions for this backcountry zone. Common visitor activities for this zone include hiking, fishing, boating, camping, climbing, wildlife viewing, ice climbing, snowshoeing, and cross-country skiing. Some commercial services do operate in the backcountry near Morrow Point Reservoir including hunting, walk-and-wade fishing, interpretive day hiking, and river running.

Trails

1. Crystal Creek

Crystal Creek Trail is off Highway 92, 24 miles from its junction with Highway 50 on the north shore of the reservoir. The trail is 5 miles round trip (about 2 hours) and begins at 8,900 feet above sea level. It is rated as a moderately strenuous difficulty. The trail winds through abundant wildflowers, Gambel oak, aspens, conifers and a recovering burn area. It is ideal for spring or fall hiking and ends at an overlook 1,800 feet above Crystal Reservoir. It is a slightly easier trail than Hermit's Rest Trail because it does not go into the canyon. The trail does not provide access to the water but offers scenic vistas.

According to park managers, Crystal Creek Trail experiences use levels similar to Hermit's Rest Trail, described below, with 20 to 40 hikers per month. This trail is likely underused. There are no known resource concerns, however adjacent cattle allotments nearby pose a threat of invasive species introduction.

2. Hermit's Rest

Hermit's Rest Trail, on the north shore of the reservoir, is off Highway 92, 17 miles west from its junction with Highway 50. It is 6 miles round trip (about 3 hours) and rated as very strenuous. The elevation change is 1,800 feet and there is little shade. The trail zigzags through oak, pine, juniper, and fir, and descends to the wooded camp and picnic sites on the shores of Morrow Point Reservoir. Campsites with picnic tables, fire grates, and toilets exist at the end of the trail. The campsites are also accessible by boat.

The trail is most frequently used between the months of May and September, with little use during the winter months (less than 10 people per month in the winter months). Peak summer months saw 20–40 hikers per month between 2016 and 2018 (2016–2018 Curecanti NRA hiking logs). Rangers encountered eight people within a 4-hour time period on a summer weekday (NPS observational data). There are no known resource impacts.

3. Curecanti Creek

Curecanti Creek trail begins at the Pioneer Point Overlook on the north shore of the reservoir, off Highway 92. It is 4 miles round trip and rated as strenuous. The elevation change is 900 feet and

visitors are advised to allow 2 to 3 hours for the hike. The trail descends from the rim of the Upper Black Canyon of the Gunnison, following Curecanti Creek to Morrow Point Reservoir. On the other side of the reservoir, the Curecanti Needle, a 700-foot granite spire towers above the trail's end. The Curecanti Needle sees some rock-climbing use, but the use is very low (8–10 parties/year). There is one campsite near the end the trail and one at the end of the trail. The campsite at the end of the trail is accessible by boat as well. This trail is also used to access the dry and ice climbing areas, described in more detail below.

Curecanti Creek is considered the busiest backcountry trail at Curecanti NRA. Trail counter data, available for the months of May through October, reveal that the trail is frequently used in the summer months, with use peaking in the month of August with an average of 100 visitors per month between 2016 and 2019. Average visitation in May was 25 people, 50 people in June and September, 75 people in July, and less than 25 in October (2016–2019 Curecanti NRA hiking logs). Rangers encountered 24 people within a 2.5-hour time period on a summer weekday (NPS observational data). There are resource impacts on the trail such as soil erosion, the spread of invasive plants, and visitor-created trails. A handful of people (approximately 5 to 10 per year) use the trail during the winter for snowshoeing or cross-country skiing.

Campsites — Morrow Point Reservoir boaters are required to fill out a backcountry use permit, which are available at Pine Creek trailhead. Visitors can stay in boat-in and backcountry camp sites up to 14 consecutive nights, and a total of 30 days during the calendar year.

4. Curecanti Creek (developed boat-in/hike-in)

There is one site near the end of Curecanti Creek Trail, accessible by hikers, and one campsite at the end of the trail that is accessible by hand-carried craft from the Morrow Point Reservoir at the Pine Creek Trail. The sites are surrounded by steep cliffs at the bottom of Curecanti Creek trail, just north of the Curecanti Needle. The boat-in site is also accessible by hikers from the trail and has a vault toilet. According to hiking logs for Curecanti Creek trail, approximately 2% of trail users camp overnight at Curecanti Creek campsites. Camping occurs between the months of May and September. Information recorded on backcountry use permits captured between 1 and 6 overnight boater groups per month from May through September in 2016 and 2018 at the Curecanti Creek campsite (2016 and 2018 Curecanti NRA backcountry use permits).

5. Hermit's Rest (developed boat-in/hike-in)

The Hermit's Rest campsite is accessible by hand-carried craft from the Morrow Point Reservoir via the Pine Creek Trail. The site is at the bottom of Hermit's Rest Trail, approximately 1 mile east of Morrow Point Dam. The site is also accessible by hikers from the trail. There are seven sites with a vault toilet. Information recorded on backcountry use permits captured between 2 and 16 overnight boater groups per month from June-September in 2016 and 2018 at the Hermit's Rest campsite (2016 and 2018 Curecanti NRA backcountry use permits).

6. Crystal Creek (developed boat-in/hike in)

The Crystal Creek campsite is accessible by hand-carried craft from the Crystal Reservoir at the Mesa Creek Trail trailhead at Cimarron immediately west of Morrow Point Dam. The campsite is in a secluded cove at the mouth of Crystal Creek, approximately 4 miles from the put in. There is one site with a vault toilet. According to park staff, there are approximately 2 to 3 parties/month or 12 to 18/year, predominantly in the warmer summer months (NPS observational data).

7. Dead Man's Curve (primitive boat-in)

The Dead Man's Curve campsite is accessible by hand-carried craft from the Morrow Point Reservoir at the Pine Creek Trail. There is one primitive site with no amenities. Information recorded on backcountry use permits captured three overnight boater groups in June and four boater groups in August of 2018 at the Dead Man's campsite (2018 Curecanti NRA backcountry use permits).

8. Nelson's Gulch (primitive boat-in)

The Nelson's Gulch campsite is accessible by hand-carried craft from the Morrow Point Reservoir at the Pine Creek Trail. There is one primitive site with no amenities. Information recorded on backcountry use permits captured one to three overnight boater groups per month from May through September in 2016 and 2018 at the Nelson's Gulch campsite (2016 and 2018 Curecanti NRA backcountry use permits).

9. Blue Creek (primitive boat-in)

The Blue Creek campsite is accessible by hand-carried craft from the Morrow Point Reservoir via the Pine Creek Trail. There is one primitive site with no amenities. Information recorded on backcountry use permits captured between one and five overnight boater groups per month from May to September in 2016 and 2018 at Blue Creek campsite (2016 and 2018 Curecanti NRA backcountry use permits).

10. The Narrows (primitive boat-in)

The Narrows campsite is accessible by hand-carried craft from the Morrow Point Reservoir at the Pine Creek Trail. There is one primitive site with no amenities. Backcountry use permits recorded one overnight boater group in September of 2018 at the Narrows campsite (Curecanti NRA backcountry use permits).

Climbing Areas

11. CURE Climbing Area 3 (Curecanti Needle)

CURE Climbing Area 3 (the Curecanti Needle) provides access to three climbing routes and is approximately 5 miles downriver from Blue Mesa Dam at the dual confluences of East Fork of Little Blue Creek on the southern side and Curecanti Creek on the northern side. The Needle is easily visible from the Pioneer Point Overlook, on the Black Mesa Road and from the Morrow Point boat tour. To access the climbing area, visitors park at Pioneer Point and hike down Curecanti Creek trail, then cross the reservoir from the south side. The site is challenging to access and there are approximately 8 to 10 climbing parties/year. The site is closed between March 15 and July 15 for raptor nesting.

12. CURE Climbing Area 2

CURE Climbing Area 2 (Pioneer Point) provides access to two climbing routes and is located on the North Rim across from the CURE Climbing Area 3. Climbers can rappel into the area from the overlook or access it from the Curecanti Creek Trail. There are some visitor-created trails in the area and there are also some visible bolts and hooks. The area is also closed between March 15 and July 15 for the protection of nesting raptors. There are approximately four to six climbing parties/year.

13. CURE Climbing Area 7 (ice climbing)

CURE Climbing Area 7 (Blue Creek Canyon) ice formation is located down the drainage from the Old Highway 50 pullout at mile marker 124. It is a hike steep down the drainage to the river bottom and there are multiple stream crossings. The ice forms every few years. Approximately two climbing parties climb in this area per year when it does form.

14. CURE Climbing Area 5 (ice climbing)

CURE Climbing Area 5 (Chipeta Falls) ice formation is located off CO 92 about 4.5 miles west of the Blue Mesa Dam at the curve at Corral Creek. It is on the north side of the Morrow Point Reservoir. It forms fairly consistently every winter and is the most popular ice climb at Curecanti NRA. There are approximately 20 climbing parties per year.

15. CURE Climbing Area 4 (ice climbing)

CURE Climbing Area 4 ice formations are directly across from Chipeta on the south side of Morrow Point Reservoir. It can be accessed off Highway 50 or from the Curecanti Creek Trail and hiking up the drainage to the ice formation. This area sees very low to no use some years.

16. CURE Climbing Area 6 (Practice Slab ice climb)

CURE Climbing Area 6 (Practice Slabs) ice formation is located off Highway 92 on the south side of the Morrow Point Reservoir near the boundary for the Blue Mesa backcountry zone. There are approximately 10 to 15 parties per year.

17. CURE Climbing Area 1 (Curecanti Monster ice climb)

The CURE Climbing Area 1 ice formation is located west of Gunnison off a pullout on the north side of Highway 50 at mile marker 124 (the same access point as the Blue Creek Canyon Climbing Area 7 climb). This access may change in the future due to a construction project underway on Highway 50 at the time of writing. Accessing the ice formation is difficult because visitors must cross Blue Creek and hike along the rim, and this can take more than 2 hours. Visitors either snowshoe or ski in to access this ice climbing area. There is very low use here (few to no visitors per season) due to the long and difficult access.

Blue Mesa Backcountry Zone

This zone includes the land between the eastern Curecanti NRA boundary, near Neversink, and west to Blue Mesa Dam. The desired conditions for this zone would be remote, uncrowded, natural, expansive, and open. Backcountry qualities are protected and improved, including the natural qualities, keeping nonrecreational development to a minimum, and enhancing land-based recreational opportunities.

Common visitor activities for this zone include the same as those in the East Portal–Morrow Point backcountry zone such as hiking, fishing, boating, camping, climbing, wildlife viewing, ice climbing, ice fishing, snowshoeing, and cross-country skiing. Some commercial services do operate in the backcountry including horseback riding, hiking and driving tours, hunting, and educational tours such as birding.

Campsites — Visitors can stay in boat-in and backcountry camp sites up to 14 consecutive nights, and a total of 30 days during the calendar year.

18. Lake Fork Arm (developed boat-in)

The Lake Fork Arm boat-in campsite is located on the Lake Fork Arm of the Blue Mesa Reservoir 30 minutes southeast of the Lake Fork Marina. The site is located near a secluded cove, shaded by spruce and fir trees. There are two sites, vault toilets, tables, and fire grates. Lake Fork Arm campsite is used fairly often Thursday through Monday in the summer season, with approximately 24 overnight visits per month from June to August.

19. Cebolla Creek (developed boat-in)

The Cebolla Creek boat-in campsite is located on the Cebolla Arm of the Blue Mesa Reservoir and is about 1 hour from both the Lake Fork and Elk Creek Marina. The site is surrounded by cottonwood trees, Gambel oak, juniper, sagebrush, tree snags and rocky cliffs. There are two sites, vault toilets, tables, and fire grates. Cebolla Creek campsite is used fairly often Thursday through Monday in the summer season, with approximately 24 overnight visits per month from June to August.

20. Turtle Rock (developed boat-in)

The Turtle Rock boat-in campsite is located on the south shore of the Blue Mesa Reservoir 10 minutes east of Elk Creek Marina. The site is especially popular with canoers and other hand-carried craft because of the closeness to Elk Creek. There are three sites with vault toilets, tables, and fire grates. Turtle Rock campsite is infrequently used, with approximately 10 overnight visits per season.

21. West Elk (developed boat-in)

The West Elk boat-in campsite is located on the West Elk Arm of the Blue Mesa Reservoir and is about 1 hour from both the Lake Fork and Elk Creek Marina. The site is located next to the inlet of West Elk Creek, where remnants of sawmill and homesteading operations still stand. There are two sites with vault toilets, tables, and fire grates. West Elk campsite is infrequently used, with approximately 10 overnight visits per season.

22. Dispersed Backcountry Camping

Backcountry camping is allowed along the south shore of Blue Mesa Reservoir, and on Red Creek Island, except within 0.5 mile of any developed area, bridge, maintained public road or other boat-in/backcountry campsite. Access to camping is only possible by boat and limited to a visit of 14 consecutive nights and a total limit of 30 days during the calendar year. Overnight boat camping is not allowed within the main channel of Iola, Cebolla and Sapinero basins, or within 0.5 mile of any developed area. Park managers estimate there are an average of 500 backcountry campers per year between 2015 and 2018. There are 10 beaches where boaters can beach when water levels are low. Similar to the boat-in campsites, when a boat is already beached, other boaters frequently will not beach and camp there, but rather proceed to find another site. When the Blue Mesa Reservoir water level is high, a substantial portion of the camping area is underwater and thus unusable.

Guideline 3: Identify the Limiting Attribute(s) for Curecanti National Recreation Area

East Portal–Morrow Point Backcountry Zone

Trails — The visitor experience for remote, uncrowded, scenic, peaceful, relaxing, rugged, and secluded conditions most limit the trails' ability to accommodate use. These desired conditions

preclude large groups and frequent encounters. This applies for Crystal Creek Trail, Hermit's Rest Trail, and Curecanti Creek Trail in the East Portal-Morrow Point backcountry zone. Encounter rates should not exceed site-specific standards for 85% of patrols. The site-specific encounter rate standards are 10 for Crystal Creek, Hermit's Rest, and Curecanti Creek Trail.

Campsites — The seven campsites in the East Portal-Morrow Point backcountry zone are all constrained to accommodate more use by the visitor experience for remote and uncrowded conditions in the backcountry. Many of the campsites are also constrained by the physical beaching space along the shoreline by which boaters can access the campsite. There is only space for a few boats to pull up along the shore and this constrains the campsites' ability to accommodate use. These campsites include Crystal Creek, Dead Man's Curve, Nelson's Gulch, Blue Creek, and the Narrows. At these sites, when boaters see boats already beached on the shore, they frequently choose not to camp there and proceed to a different site. Given that Hermit's Rest and Curecanti Creek campsites are also accessible by trail, the backcountry experience for remote and uncrowded desired conditions most constrain their ability to accommodate use.

Climbing Areas — For the dry climbing, the attributes that limit the areas' ability to accommodate use are the physical space on the wall, the challenge to access the routes, and related safety concerns. For ice climbing, the limiting attributes are the physical space on the ice formation as well as the challenge to access the routes. Physical space, safety concerns, and the visitor experience for remote, uncrowded, and secluded conditions in the backcountry collectively constrain the climbing areas' ability to accommodate use.

Blue Mesa Backcountry Zone

Campsites — The attribute that most constrains use at the Blue Mesa boat in campsites is the visitor experience for remote and uncrowded desired backcountry conditions. Like the campsites in the East Portal-Morrow Point backcountry zone, the physical beaching space along the shoreline by which boaters can access the campsite further constrains the campsites' ability to accommodate use.

Dispersed Backcountry Camping — The limiting attribute for dispersed backcountry camping is the visitor experience for remote, uncrowded, natural, expansive, and open conditions. In addition, when the reservoir water level is high, space to camp is substantially reduced, further constraining use.

Guideline 4: Identify Visitor Capacity and Implementation Strategies for Curecanti National Recreation Area

East Portal-Morrow Point Backcountry Zone

The following visitor capacities have been identified based on a full and reasoned analysis noting the limiting attributes described in guideline 3 and are protective of the desired resource and experiential conditions for the East Portal-Morrow Point backcountry zone (table 7). The trail capacities in this plan take into account the encounter rate standards for identifying an appropriate people in one day capacity protective of desired conditions.

Table 7. Visitor Capacities for the East Portal-Morrow Point Backcountry Zone

Trails

| ID | Analysis Area | Visitor Capacity | Management Strategies |
|----|-----------------------|---|---|
| 1 | Crystal Creek Trail | Current use levels at Crystal Creek trail, approximately 20-40 hikers per month or 2-4 people in one day (PIOD), are achieving the remote, uncrowded, natural, scenic, peaceful, relaxing, rugged, and secluded desired conditions for the East Portal–Morrow Point backcountry zone. Opportunities for remote, uncrowded, peaceful, and secluded experiences are key to the visitor experience and constrain this trail’s ability to accommodate use. Therefore, there is opportunity to increase use levels to 50 PIOD. The associated strategies are required to implement the visitor capacity. | <p>Monitor encounter rates and trail conditions.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> • Manage the timing and location of visitor use to disperse visitation. This could involve access permits, which would be further evaluated at that time. |
| 2 | Hermit’s Rest Trail | Current use levels at Hermit’s Rest trail, approximately 20-40 hikers per month or 2-4 PIOD, are achieving the remote, uncrowded, natural, scenic, peaceful, relaxing, rugged, and secluded desired conditions for the East Portal–Morrow Point backcountry zone. Opportunities for remote, uncrowded, peaceful, and secluded experiences are key to the visitor experience and constrain this trail’s ability to accommodate use. Therefore, there is opportunity to increase use levels to 30 PIOD. The associated strategies are required to implement the visitor capacity. | <p>Monitor encounter rates and trail conditions.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> • Manage the timing and location of visitor use to disperse visitation. This could involve access permits, which would be further evaluated at that time. |
| 3 | Curecanti Creek Trail | Current use levels at Curecanti Creek trail, up to 100 visitors during busy summer months and 50 PIOD, are maintaining the remote, uncrowded, natural, scenic, peaceful, relaxing, rugged, and secluded desired conditions for the East Portal–Morrow Point backcountry zone. Opportunities for remote, uncrowded, peaceful, and secluded experiences are key to the visitor experience and constrain this trail’s ability to accommodate use. Therefore, use levels are to be maintained at 50 PIOD. The associated strategies are required to implement the visitor capacity. | <p>Monitor encounter rates and trail conditions.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> • Manage the timing and location of visitor use to disperse visitation. This could involve access permits, which would be further evaluated at that time. |

Campsites

| ID | Analysis Area | Visitor Capacity | Management Strategies |
|----|---------------------------|--|--|
| 4 | Curecanti Creek Campsite | Current use levels at the Curecanti Creek campsite are approximately 1-6 parties per month. These use levels are achieving the remote, uncrowded, natural, scenic, peaceful, relaxing, rugged, and secluded desired conditions for the East Portal-Morrow Point backcountry zone. Opportunities for remote, uncrowded, peaceful, and secluded experiences are key to the visitor experience and constrain this trail's ability to accommodate use. Therefore, there is opportunity to increase use levels to one party per day.* The associated strategies are required to implement the visitor capacity. | Continue use of backcountry use permits and monitoring of site conditions. |
| 5 | Hermit's Rest Campsite | Current use levels at the Hermit's Rest campsite range from 2-16 parties per month. These use levels are achieving the remote, uncrowded, natural, scenic, peaceful, relaxing, rugged, and secluded desired conditions for the East Portal-Morrow Point backcountry zone. Opportunities for remote, uncrowded, peaceful, and secluded experiences are key to the visitor experience and constrain this trail's ability to accommodate use. Therefore, there is opportunity to increase use levels to one party per day.* The associated strategies are required to implement the visitor capacity. | Continue use of backcountry use permits and monitoring of site conditions. |
| 6 | Crystal Creek Campsite | Current use levels at the Crystal Creek campsite are approximately 2-3 parties per month. These use levels are achieving the remote, uncrowded, natural, scenic, peaceful, relaxing, rugged, and secluded desired conditions for the East Portal-Morrow Point backcountry zone. Opportunities for remote, uncrowded, peaceful, and secluded experiences are key to the visitor experience and constrain these campsites' ability to accommodate use, in addition to the physical beaching space along the shoreline by which boaters access the site. Therefore, there is opportunity to increase use levels to one party per day. The associated strategies are required to implement the visitor capacity. | Continue use of backcountry use permits and monitoring of site conditions. |
| 7 | Dead Man's Curve Campsite | Current use levels at the Dead Man's Curve campsite are approximately 3-4 parties per month. These use levels are achieving the remote, uncrowded, natural, scenic, peaceful, relaxing, rugged, and secluded desired conditions | Continue use of backcountry use permits and monitoring of site conditions. |

| ID | Analysis Area | Visitor Capacity | Management Strategies |
|----|-------------------------|--|--|
| | | <p>for the East Portal-Morrow Point backcountry zone. Opportunities for remote, uncrowded, peaceful, and secluded experiences are key to the visitor experience and constrain these campsites' ability to accommodate use, in addition to the physical beaching space along the shoreline by which boaters access the site. Therefore, there is opportunity to increase use levels to one party per day. The associated strategies are required to implement the visitor capacity.</p> | |
| 8 | Nelson's Gulch Campsite | <p>Current use levels at the Nelson's Gulch campsite are approximately 1-3 parties per month. These use levels are achieving the remote, uncrowded, natural, scenic, peaceful, relaxing, rugged, and secluded desired conditions for the East Portal-Morrow Point backcountry zone. Opportunities for remote, uncrowded, peaceful, and secluded experiences are key to the visitor experience and constrain these campsites' ability to accommodate use, in addition to the physical beaching space along the shoreline by which boaters access the site. Therefore, there is opportunity to increase use levels to one party per day. The associated strategies are required to implement the visitor capacity.</p> | Continue use of backcountry use permits and monitoring of site conditions. |
| 9 | Blue Creek Campsite | <p>Current use levels at the Blue Creek campsite range from 1-5 parties per month. These use levels are achieving the remote, uncrowded, natural, scenic, peaceful, relaxing, rugged, and secluded desired conditions for the East Portal-Morrow Point backcountry zone. Opportunities for remote, uncrowded, peaceful, and secluded experiences are key to the visitor experience and constrain these campsites' ability to accommodate use, in addition to the physical beaching space along the shoreline by which boaters access the site. Therefore, there is opportunity to increase use levels to one party per day. The associated strategies are required to implement the visitor capacity.</p> | Continue use of backcountry use permits and monitoring of site conditions. |
| 10 | The Narrows Campsite | <p>Current use levels at the Narrows campsite are approximately 1 party per month. These use levels are achieving the remote, uncrowded, natural, scenic, peaceful, relaxing, rugged, and secluded desired conditions for the East Portal-Morrow Point backcountry zone. Opportunities for remote, uncrowded, peaceful, and secluded experiences are key to the visitor experience and constrain these campsites' ability to accommodate use, in addition to the physical beaching space along the shoreline by which boaters access the site. Therefore, there is opportunity to increase use levels</p> | Continue use of backcountry use permits and monitoring of site conditions. |

| ID | Analysis Area | Visitor Capacity | Management Strategies |
|----|---------------|---|-----------------------|
| | | to one party per day. The associated strategies are required to implement the visitor capacity. | |

*Boat camping parties typically consist of two to four people because the sites are accessed via boats and due to the size of the campsites.

Climbing Areas

| ID | Analysis Area | Visitor Capacity | Management Strategies |
|----|----------------------------------|---|---|
| 11 | CURE Climbing Area 3 | Current use levels are approximately 8-10 climbing parties per year. These use levels are achieving the remote, uncrowded, natural, scenic, peaceful, relaxing, rugged, and secluded desired conditions for the East Portal-Morrow Point backcountry zone. Visitor opportunities for remote, uncrowded, and secluded conditions in the backcountry collectively constrain the climbing areas' ability to accommodate use, in addition to physical space and safety concerns. Therefore, there is opportunity to increase use levels to one party* at a time and a maximum of two parties per day. The associated strategies are required to implement the visitor capacity. | <p>Monitor resource conditions and use levels.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> • Develop educational information for visitors. • Consider backcountry use permits for climbers. |
| 12 | Pioneer Point | Current use levels at Pioneer Point range are approximately 4-6 climbing parties per year. These use levels are achieving the remote, uncrowded, natural, scenic, peaceful, relaxing, rugged, and secluded desired conditions for the East Portal-Morrow Point backcountry zone. Visitor opportunities for remote, uncrowded, and secluded conditions in the backcountry collectively constrain the climbing areas' ability to accommodate use, in addition to physical space and safety concerns. Therefore, there is opportunity to increase use levels to one party* at a time and a maximum of two parties per day. The associated strategies are required to implement the visitor capacity. | <p>Monitor resource conditions and use levels.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> • Develop educational information for visitors. • Consider backcountry use permits for climbers. |
| 13 | CURE Climbing Area 7 (Ice Climb) | Current use levels at this ice climb are approximately 2 climbing parties per year. These use levels are achieving the remote, uncrowded, natural, scenic, peaceful, relaxing, rugged, and secluded desired conditions for the East Portal-Morrow Point backcountry zone. Visitor opportunities for remote, uncrowded, and secluded conditions in the backcountry collectively | <p>Monitor resource conditions and use levels.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> • Develop educational information for visitors. |

| ID | Analysis Area | Visitor Capacity | Management Strategies |
|----|----------------------------------|--|---|
| | | constrain the ice climbing areas' ability to accommodate use, in addition to physical space and safety concerns. Therefore, there is opportunity to increase use levels to one party at a time. The associated strategies are required to implement the visitor capacity. | <ul style="list-style-type: none"> Consider backcountry use permits for climbers. |
| 14 | CURE Climbing Area 5 (Ice Climb) | Current use levels at this ice climb are approximately 20 climbing parties per year. These use levels are achieving the remote, uncrowded, natural, scenic, peaceful, relaxing, rugged, and secluded desired conditions for the East Portal-Morrow Point backcountry zone. Visitor opportunities for remote, uncrowded, and secluded conditions in the backcountry collectively constrain the ice climbing areas' ability to accommodate use, in addition to physical space and safety concerns. Therefore, there is opportunity to increase use levels to one party at a time. The associated strategies are required to implement the visitor capacity. | <p>Monitor resource conditions and use levels.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> Develop educational information for visitors. Consider backcountry use permits for climbers. |
| 15 | CURE Climbing Area 4 (Ice Climb) | Current use levels at this ice climb are up to one climbing party per year. These use levels are achieving the remote, uncrowded, natural, scenic, peaceful, relaxing, rugged, and secluded desired conditions for the East Portal-Morrow Point backcountry zone. Visitor opportunities for remote, uncrowded, and secluded conditions in the backcountry collectively constrain the ice climbing areas' ability to accommodate use, in addition to physical space and safety concerns. Therefore, there is opportunity to increase use levels to one party at a time. The associated strategies are required to implement the visitor capacity. | <p>Monitor resource conditions and use levels.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> Develop educational information for visitors. Consider backcountry use permits for climbers. |
| 16 | CURE Climbing Area 6 (Ice Climb) | Current use levels at this ice climb are approximately 10-15 climbing parties per year. These use levels are achieving the remote, uncrowded, natural, scenic, peaceful, relaxing, rugged, and secluded desired conditions for the East Portal-Morrow Point backcountry zone. Visitor opportunities for remote, uncrowded, and secluded conditions in the backcountry collectively constrain the ice climbing areas' ability to accommodate use, in addition to physical space and safety concerns. Therefore, there is opportunity to increase use levels to one party at a time. The associated strategies are required to implement the visitor capacity. | <p>Monitor resource conditions and use levels.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> Develop educational information for visitors. Consider backcountry use permits for climbers. |
| 17 | CURE Climbing Area | Current use levels at this ice climb are up to one party per year. These use levels are achieving the remote, uncrowded, natural, scenic, peaceful, | Monitor resource conditions and use levels. |

| ID | Analysis Area | Visitor Capacity | Management Strategies |
|----|---------------|---|--|
| | 1 (Ice Climb) | relaxing, rugged, and secluded desired conditions for the East Portal-Morrow Point backcountry zone. Visitor opportunities for remote, uncrowded, and secluded conditions in the backcountry collectively constrain the ice climbing areas' ability to accommodate use, in addition to physical space and safety concerns. Therefore, there is opportunity to increase use levels to one party at a time. The associated strategies are required to implement the visitor capacity. | <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> • Develop educational information for visitors. • Consider backcountry use permits for climbers. |

*One climbing party consists of two people.

Blue Mesa Backcountry Zone

The following visitor capacities have been identified based on a full and reasoned analysis noting the limiting attributes described in guideline 3 and are protective of the desired resource and experiential conditions for the Blue Mesa backcountry zone (table 8).

The visitor capacities have been identified based on the best available information and are to be continuously reevaluated and updated with future planning efforts as informed by monitoring information. Certain analysis areas have more detailed monitoring and existing conditions information than others; however, management decisions were made based on the sliding scale approach. Park staff is committed to continuously monitoring the conditions of these sites and reevaluating the capacity analysis as more information is available.

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Table 8. Visitor Capacities for the Blue Mesa Backcountry Zone

Campsites

| ID | Analysis Area | Visitor Capacity | Management Strategies |
|----|------------------------|--|---|
| 18 | Lake Fork Arm Campsite | Current use levels at Lake Fork Arm campsite, approximately 24 parties per month, are maintaining the remote, uncrowded, natural, expansive, and open desired conditions for the Blue Mesa backcountry zone. Opportunities for remote and uncrowded conditions are key to the visitor experience and constrain the campsites' ability to accommodate use, in addition to the physical beaching space along the shoreline by which boaters access the site. Therefore, use levels are to be maintained at one party per day. The associated strategies are required to implement the visitor capacity. | <p>Monitor site conditions and backcountry camping use level information collected at the aquatic invasive species stations.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> • Consider backcountry use permits for campsites. |
| 19 | Cebolla Creek Campsite | Current use levels at Cebolla Creek campsite, approximately 24 parties per month, are maintaining the remote, uncrowded, natural, expansive, and open desired conditions for the Blue Mesa backcountry zone. Opportunities for remote and uncrowded conditions are key to the visitor experience and constrain the campsites' ability to accommodate use, in addition to the physical beaching space along the shoreline by which boaters access the site. Therefore, use levels are to be maintained at one party per day. The associated strategies are required to implement the visitor capacity. | <p>Monitor site conditions and backcountry camping use level information collected at the aquatic invasive species stations.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> • Consider backcountry use permits for campsites. |
| 20 | Turtle Rock Campsite | Current use levels at Turtle Rock campsite, approximately 10 parties per year, are achieving the remote, uncrowded, natural, expansive, and open desired conditions for the Blue Mesa backcountry zone. Opportunities for remote and uncrowded conditions are key to the visitor experience and constrain the campsites' ability to accommodate use, in addition to the physical beaching space along the shoreline by which boaters access the site. Therefore, there is opportunity to increase use levels to one party per day. The associated strategies are required to implement the visitor capacity. | <p>Monitor site conditions and backcountry camping use level information collected at the aquatic invasive species stations.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> • Consider backcountry use permits for campsites. |

| ID | Analysis Area | Visitor Capacity | Management Strategies |
|----|-------------------------------|---|---|
| 21 | West Elk Campsite | Current use levels at West Elk campsite, approximately 10 parties per year, are achieving the remote, uncrowded, natural, expansive, and open desired conditions for the Blue Mesa backcountry zone. Opportunities for remote and uncrowded conditions are key to the visitor experience and constrain the campsites' ability to accommodate use, in addition to the physical beaching space along the shoreline by which boaters access the site. Therefore, there is opportunity to increase use levels to one party per day. The associated strategies are required to implement the visitor capacity. | <p>Monitor site conditions and backcountry camping use level information collected at the aquatic invasive species stations.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> • Consider backcountry use permits for campsites. |
| 22 | Dispersed Backcountry Camping | Current use levels in the dispersed backcountry camping areas, an estimated 500 campers per year, are achieving the remote, uncrowded, natural, expansive, and open desired conditions for the Blue Mesa backcountry zone. Opportunities for remote and uncrowded conditions are key to the visitor experience and constrain the area's ability to accommodate use, in combination with the fluctuating shore size with high water levels. Therefore, there is opportunity to increase use levels to 10 parties per day.* The associated strategies are required to implement the visitor capacity. | <p>Monitor backcountry camping use level information collected at the aquatic invasive species stations.</p> <p><i>Related potential management strategies:</i></p> <ul style="list-style-type: none"> • Consider backcountry use permits for campsites. |

*This capacity has been identified based on the 10 beaches where boaters can beach and camp when the water level is low. When the Blue Mesa Reservoir water level is high, a substantial portion of the camping area is underwater and unusable and thus the capacity will be reduced.

CHAPTER 7: COMMERCIAL SERVICE ANALYSIS

INTRODUCTION

The National Park Service is authorized by specific laws, regulations, and policies to consider and authorize commercial visitor services, leasing and special park uses within areas under NPS jurisdiction. A summary of the requirements that must be met for each of these authorities is described below.

Commercial visitor services, through concession contracts or CUAs, must be consistent to the highest degree practicable with the preservation and conservation of park resources, values, and wilderness character (if applicable). Commercial visitor services must be evaluated to determine whether they are necessary and/or appropriate, applying the guidance of NPS concession management laws, regulations, policies, and the goals and objectives of this Wilderness and Backcountry Management Plan. As the plan provides management direction for areas of both parks that are wilderness or backcountry, this chapter evaluates whether commercial visitor services may or may not be necessary and/or appropriate within the project scope. Specifically, the analysis includes an evaluation of activities that may occur within the backcountry or wilderness of the following management zones:

- Black Canyon of the Gunnison National Park (Black Canyon of the Gunnison NP)
 - Inner canyon wilderness zone (primitive wilderness and pristine wilderness subzones)
 - Uplands zone (primitive wilderness, pristine wilderness, and backcountry subzones)
 - Gunnison Gorge interface wilderness zone
- Curecanti National Recreation Area (Curecanti NRA)
 - Blue Mesa backcountry zone
 - East Portal–Morrow Point backcountry zone

It is not within the scope of this project to evaluate activities that may be provided through commercial visitor services in areas that are not backcountry or wilderness in Black Canyon of the Gunnison NP and Curecanti NRA. The National Park Service uses the term backcountry to refer to primitive, undeveloped portions of parks and it is not the same as wilderness. Rather, it refers to a general condition of land that may include wilderness. As a result, this analysis does not include a necessary and appropriate analysis for marina services or food and beverage services because they occur in areas outside of this project's scope.

In 2013, Curecanti NRA developed a commercial services strategy (NPS 2013a) to guide management of commercial visitor services. The plan identified five commercial services “zones:” Gunnison River, Blue Mesa, Morrow Point, Crystal Reservoir, and East Portal; the strategy did not address any commercial services within Black Canyon of the Gunnison NP. While the 2013 document addressed commercial visitor services, the analysis primarily focused on frontcountry services such as marinas, food and beverage, and internet services. Therefore, this necessary and appropriate analysis, focusing primarily on backcountry lands within Curecanti NRA, supplements the findings from the commercial services strategy (NPS 2013a). In addition, this analysis amends the five commercial services “zones” into two zones: Blue Mesa and East Portal–Morrow Point. These management zones are consistent with the zoning scheme of the Wilderness and Backcountry Management Plan as identified in chapter 2.

STATUTORY, REGULATORY, AND POLICY FRAMEWORK

Commercial visitor services within units of the National Park System are governed by the 1998 Concessions Management Improvement Act (Public Law 105-391). The 1998 Concessions Management Act, as it is commonly referred to, requires that commercial visitor facilities and services “...be limited to those that are necessary and/or appropriate for public use and enjoyment. . .” of the national park area in which they are located, “...and that are consistent to the highest practicable degree with the preservation and conservation of the area.”

To implement legal requirements, the National Park Service has a set of policies that guide agency operations. These policies are an indispensable tool to help NPS employees manage parks responsibly and make rational, well-informed decisions. Chapter 10 of NPS *Management Policies 2006* provides management guidance specific to commercial visitor services. “The National Park Service will provide, through the use of concession contracts, commercial visitor services within the parks that are necessary and appropriate for visitor use and enjoyment. Concession operations will be consistent with the protection of park resources and values and demonstrate sound environmental management and stewardship” (NPS *Management Policies 2006*, chapter 10).

The prohibited uses established in the Wilderness Act of 1964 Section 4(c) includes Commercial Enterprise. However, the special provisions established in the Wilderness Act Section 4(d)(5) allows that commercial services may be performed within wilderness areas to the extent necessary for activities which are proper for realizing the recreation or other purposes of wilderness.

Additional guidance regarding commercial services in wilderness is provided in NPS Director’s Order 41 (7.3 Commercial Services) which states that parks “must make a documented determination of the types and amounts of commercial services necessary to realize wilderness purposes (recreational, scenic, scientific, educational, conservation and historical).” This determination is referred to as the extent necessary determination (END).

OVERVIEW OF NATIONAL PARK SERVICE COMMERCIAL VISITOR SERVICES

Commercial visitor services are defined as any activity or service that occurs in a park for which compensation is made. By law, all commercial visitor services must be authorized in writing by the park superintendent. The two most common mechanisms for delivering commercial services are concessions contracts and CUAs.

Concession Contracts

A concession contract is a binding written agreement between the secretary of the interior (or authorized delegate) and a concessioner that authorizes a concessioner to provide certain visitor services within a park under specified terms and conditions. Concession contracts are issued only when commercial activities and services are determined to be *necessary and appropriate*. There are three types of concession contracts: Category I, II, or III. The type of contract is informed by whether construction and/or capital improvements are allowed on park lands, the assignment of lands or buildings to a concessioner, and requirement of maintenance responsibilities for assigned NPS assets.

Commercial Use Authorizations

A CUA allows an individual, group, company, or other for-profit entity to conduct commercial activities and provide specific visitor services within a national park unit. Authorizations are issued only when commercial activities and services are determined to be an *appropriate* use of the park; will have minimal impact on park resources and values; and are consistent with the park purpose, management policies, and regulations.

CUAs are limited to gross receipts of \$25,000 or less and can be assigned to an area inside the park. The term of authorization is a maximum of two years. Authorizations contain operating conditions and/or stipulations and may designate use such as defining routes and number of user days. Monitoring of all commercial activities is essential to ensure that business operations are conducted in a safe, fair, and reputable manner consistent with the mission of the park. Monitoring is also essential to ensure compliance with resource protection conditions stated in the permit. Where carrying capacities exist in parks to manage use, monitoring ensures compliance.

Necessary and Appropriate Criteria

Necessary and appropriate criteria help parks determine which commercial visitor services will enhance the visitor experience without negatively impacting the park or its ability to carry out its mission. They allow a park to identify which services may be considered for a CUA or a concession contract. The determination that a service is necessary and appropriate may change over time. An operation once considered necessary for visitor enjoyment can become redundant because of availability of similar out-of-park services. Likewise, an operation once considered appropriate might have unintended impacts on park resources and/or achieving desired conditions.

Appropriate

Appropriate criteria help to answer the question, “Can the park authorize this service without compromising the reason it is a unit of the national park system?” These criteria provide insight into the critical components of the park and visitor service, while also describing the potential negative impacts of commercial services the park must prevent. All commercial services—whether a CUA or concession contract—must meet *all* appropriate criteria to operate in the park. Conversely, a park unit is not required to add a commercial visitor service if that service meets the appropriate criteria.

Appropriate criteria are as follows:

- Consistent with the park purpose and significance
- Consistent with laws, regulations, and policies
- Does not compromise public health and safety
- Does not cause unacceptable impacts on park resources or values
- Does not unduly conflict with other park uses and activities
- Does not exclude the general public from participating in limited recreational opportunities

Necessary

Necessary criteria help to answer the question, “Why is this service important for the park?” These criteria describe how a commercial service could enhance the visitor experience and further the goals and mission of the park. Necessary criteria are unique to NPS concession contracts: while CUAs do not need to meet any necessary criteria, concession contracts must meet *at least one* necessary criterion to operate in the park.

Necessary criteria include the following:

- Enhances visitor understanding and appreciation of a park’s purpose and significance
- Enhances visitor experiences consistent with the park’s purpose and significance
- Assists the National Park Service in managing visitor use and educating park visitors
- Provides an essential service or facility not available within a reasonable distance from the park

Commercial Services in Wilderness

In the Black Canyon of the Gunnison Wilderness, commercial visitor services must also be evaluated and authorized pursuant to the Wilderness Act of 1964 (Public Law 88-577), Special Provisions, Section 4(d)(5), which provides that “commercial services may be performed within the wilderness areas designated by this act to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the area.” The extent necessary determination may be found on page 134 of this planning document and builds on findings of the necessary and appropriate analysis. Only activities that were found to be necessary and appropriate may be carried forward for analysis in wilderness.

In wilderness, the word necessary is interpreted to mean a service that is important to realize wilderness purposes and achieve objectives for visitor use and enjoyment of wilderness in such a manner that desired conditions for wilderness character are achieved and that wilderness character is preserved. The extent necessary determination, included in this chapter, identifies commercial activities that achieve the following:

- Are proper for realizing the purposes of wilderness described in the Wilderness Act as recreation, scenic, scientific, educational, conservation, and historical use
- Protect and enhance desired conditions for preserving wilderness character (the principal mandate of the Wilderness Act)
- Fulfill the application of minimum requirements analysis if the first two criteria are met

EXISTING MANAGEMENT GUIDANCE

In addition to law and policy, park management direction is informed by decisions documented in current management plans and associated compliance documents. These plans set broad boundaries for the types of commercial activities that may occur within park boundaries. Commercial visitor services at Black Canyon of the Gunnison NP and Curecanti NRA must conform with prior management decision in park planning documents. The existing park management principles are described below.

Fundamental Resources and Values/Other Important Resources and Values

Fundamental resources and values are those features, systems, processes, experiences, stories, scenes, sounds, smells, or other attributes determined to warrant primary consideration during planning and management processes because they are essential to achieving the purpose of the park and maintaining its significance. Other important resources and values are not fundamental to the purpose of the park and may be unrelated to park significance but are important to consider in planning processes. Both park units completed a foundation document in 2013 that identified

fundamental resources and values and other important resources and values. To operate within Black Canyon of the Gunnison NP or Curecanti NRA, commercial visitor services must not negatively impact fundamental resources and values and other important resources and values. Examples of values that are relevant to the evaluation of commercial visitor services are presented below.

- Black Canyon of the Gunnison NP
 - Recreation: Visitors experience Black Canyon of the Gunnison NP and its ruggedness through recreational activities such as sightseeing, photography, hiking, climbing, fishing, kayaking, Nordic skiing, and snowshoeing.
 - Wilderness: The demanding landscape of the Black Canyon of the Gunnison Wilderness provides unparalleled opportunities to realize a high degree of self-reliance, profound quiet, intense challenge, and a fundamental solitude difficult to find in our world today.
- Curecanti NRA
 - Recreation: Curecanti NRA was established with the primary purpose of providing for recreation in, on, and around its three reservoirs and the river that connects them.
 - Scenic views: The viewshed of Curecanti NRA enhances recreation and offers opportunities to view an expansive western landscape, including iconic features such as the Upper Black Canyon of the Gunnison, Dillon Pinnacles, Curecanti Needle, and Blue Mesa Reservoir.

Management Zones

Black Canyon of the Gunnison National Park

The 1997 general management plan for Black Canyon of the Gunnison NP identified management zones. The zone descriptions in the 1997 general management plan do not provide specific guidance on commercial visitor services; however, appropriate kinds of activities and facilities are described for each zone. The Wilderness and Backcountry Management Plan establishes new management zoning for wilderness and backcountry portions of the two park units. Within Black Canyon of the Gunnison NP, these zones include the inner canyon wilderness zone, the uplands zone, and the Gunnison Gorge interface wilderness zone (refer to chapter 2). This chapter presents an analysis and determinations of commercial services according to the necessary and appropriate criteria for these three management zones in Black Canyon of the Gunnison NP.

Curecanti National Recreation Area

The 2013 *Curecanti National Recreation Area Commercial Services Strategy* (NPS 2013a) provided a general overview of possible commercial services within Curecanti NRA, but the plan focused on frontcountry opportunities. For example, the 2013 Commercial Service Strategy evaluated potential commercial visitor services on the reservoirs and within developed areas such as campgrounds, visitor centers, and parking areas. The 2013 analysis assessed activities such as marina services, food and beverage services, Wi-Fi, and boat launching.

The 2013 commercial services strategy for Curecanti NRA identified five specific commercial services “zones” that serve as a guide for operating commercial visitor services within park boundaries. Topography and accessibility naturally limit the provision of commercial visitor services

in the western portions of the park. As a result, the commercial services strategy found that opportunities for commercial visitor services decreased from east to west within Curecanti NRA.

This Wilderness and Backcountry Management Plan establishes new management zones for Curecanti NRA: the Blue Mesa backcountry zone and the East Portal–Morrow Point Zone. This chapter presents an analysis and determinations of commercial visitor services according to the necessary and appropriate criteria for these two management zones in Curecanti NRA.

Findings from the 2013 commercial services strategy for the frontcountry areas of the park remain intact for current management. Although the reservoirs (Blue Mesa, Morrow Point, and Crystal Reservoir) are considered frontcountry, park staff identified a need to conduct a necessary and appropriate analysis for fishing and river-running within Curecanti NRA because these activities interface with backcountry management. Therefore, these recreational activities were considered within this analysis.

EVALUATION OF COMMERCIAL SERVICES

The following evaluation of Black Canyon of the Gunnison NP and Curecanti NRA current commercial services and potential new services are based on an analysis of relevant laws and policies, input from the public and stakeholders in past planning efforts, and input from park staff. The analysis focuses on commercial visitor services within the project area, or the backcountry and wilderness areas of the parks, unless otherwise requested by park staff. All commercial visitor services need to be consistent with the zoning for which the activity or service will take place and should be managed so that use levels do not exceed established thresholds (see chapter 5). Commercial visitor services must be allocated within the appropriate visitor capacities, where indicators do not approach thresholds (see chapters 5 and 6).

During the earlier planning process, the interdisciplinary team prohibited commercial services within the inner canyon wilderness zone of Black Canyon of the Gunnison NP. The reasons for this prohibition were to maintain and improve opportunities for challenge, self-reliance, and adventure. In addition, it was believed that allowing commercial services would diminish opportunities and monopolize limited access for visitors seeking to hike, camp, and fish within the zone. When shared with the public, this decision garnered objections from the public and stakeholders. As outlined in chapter 1 of this document, the planning effort was suspended and then terminated.

While the previous analysis evaluated commercial services within the pristine and primitive subzones of the inner canyon wilderness zone in conjunction, this updated analysis evaluates each activity by subzone. The updated analysis of commercial services in Black Canyon of the Gunnison NP found that some commercial services, such as hiking, overnight use, and climbing, are necessary for realizing the recreational purpose of wilderness within the primitive subzone; however, commercial services did not meet the necessary and appropriate criteria for the pristine subzone.

Park management allowed guided commercial climbing within the inner canyon primitive wilderness subzone to better inform management decisions in this planning effort. Through this effort, data collection regarding visitor use indicates that commercial services, particularly guided climbing, can be provided in a manner that does not conflict with public use of the inner canyon primitive wilderness subzone. The activity requires specialized equipment, such as ropes, anchors, harnesses, and carabiners, has special safety concerns, resource concerns, and can provide introductory experiences for visitors. Commercial services within the inner canyon primitive wilderness subzone

will be provided in a manner that achieves desired conditions and ensures wilderness character is preserved through monitoring and management strategies.

Under 36 CFR 4.30 and NPS *Management Policies 2006*, the use of a bicycle is allowed on park roads and in parking areas that are otherwise open for motor vehicle use by the general public. Per the superintendent's compendium, bicycle use is permitted on park roads and parking areas. E-bikes are allowed in Black Canyon of the Gunnison NP where traditional bicycles are allowed. Because roads and parking areas are generally outside the scope of this planning effort, this activity is not evaluated as a potential commercial visitor service.

Educational trips or tours that have environmental education as their primary purpose occur in backcountry and wilderness and may include other proper activities such as hiking, climbing, or camping. These tours provide visitors with opportunities to discover other purposes of wilderness such as the recreational, conservation, and historical purposes. In addition, education is one of the purposes of wilderness identified in the Wilderness Act of 1964.

Nonprofit organizations may conduct commercial activities on NPS-managed lands or waters. A nonprofit organization is an entity that has been determined by the Internal Revenue Service to be exempt from federal income taxation as a nonprofit organization under the Internal Revenue Code.

In accordance with the 1998 Act, a nonprofit organization is not required to obtain a CUA to conduct commercial activities in a park area unless the nonprofit organization derives taxable income from the activity. Under 36 CFR § 5.3, however, nonprofits must have a permit, contract, or other written agreement to conduct business in a park area.

Notably, the 1998 Act does not prohibit the National Park Service from issuing nonprofit organizations CUAs. The National Park Service prefers to issue CUAs to nonprofit organizations instead of special use permits to track commercial activities in parks through use of the annual CUA report.

If a nonprofit organization desires to commercially operate and refuses to apply for a CUA, it must submit a certified written statement under penalty of perjury to the park superintendent that it will derive no taxable income from its activities in the park area and, if requested, further substantiate this statement to the satisfaction of the National Park Service by providing proof of nonprofit status. The National Park Service may consider this information and issue the nonprofit a special use permit instead. The National Park Service must include in the special use permit the same terms and conditions that would be required under a CUA, including liability insurance requirements and may recover "all costs of providing necessary services associated with" the special use permit under 54 USC § 103104.

EVALUATION OF COMMERCIAL SERVICES FOR BLACK CANYON OF THE GUNNISON NATIONAL PARK

Through the use of concession contracts or CUAs, the National Park Service provides commercial visitor services that are necessary and appropriate for public use and enjoyment. Commercial services are consistent to the highest practicable degree with the preservation and conservation of resources and values of the park.

Current Concession Contracts

As of 2019, there are no concession contracts that operate in Black Canyon of the Gunnison NP.

Current Commercial Use Authorizations

In 2019, there were 12 CUAs providing opportunities for climbing, camping, driving and hiking tours, and birding tours throughout Black Canyon of the Gunnison NP. Of these 12 CUAs, 9 occur within backcountry and/or wilderness and 3 occur in the frontcountry zones and are therefore outside the scope of this analysis. Only the activities of climbing and camping occur in wilderness zones, while educational tours occur in backcountry (in addition to frontcountry) management zones; therefore, these activities are within the scope of the wilderness backcountry management plan. Climbing and camping occur within the inner canyon wilderness zone, and educational birding tours occur along the canyon rims. For this analysis and appendix, hiking and educational tours are evaluated as one activity termed *interpretive day hiking* because they are mutually inclusive. For instance, guided hiking tours would likely include an educational component, while educational tours often require hiking on trails to overlooks or areas with outstanding flora, fauna, or geology.

Currently, the park is not issuing CUAs for bus tours entering the park.

Inner Canyon Wilderness Zone (Primitive Wilderness Subzone and Pristine Wilderness Subzone)

Existing Commercial Services

Climbing — Technical rock climbing is an appropriate activity in this zone provided it is done in compliance with existing laws, policies, and regulations. There is currently some guided climbing through CUAs composing a small percentage of the total climbing activity (see table 9).

Table 9: Annual Guided Commercial Climbers, Total Climbers, and Total Visitation to Inner Canyon Wilderness Zone, Black Canyon of the Gunnison National Park

| Year | Guided Commercial Climbers | All Climbers | Percent of Total Climbers | Inner Canyon Visitation | Percent of Total Visitation |
|------|----------------------------|--------------|---------------------------|-------------------------|-----------------------------|
| 2014 | 7 | 1,219 | 0.57% | 2,961 | 0.24% |
| 2015 | 17 | 1,055 | 1.61% | 3,517 | 0.48% |
| 2016 | 30 | 1,468 | 2.04% | 3,988 | 0.75% |
| 2017 | 21 | 1,432 | 1.47% | 5,658 | 0.37% |
| 2018 | 21 | 1,608 | 1.31% | 6,292 | 0.33% |

Guided commercial climbing occurs within the inner canyon primitive wilderness subzone of the inner canyon wilderness zone but is not allowed in the inner canyon pristine wilderness subzone. Climbers, both public and those with a commercial guide, generally use the same trail access routes within the park's required wilderness use permit system to access climbing routes. Guided commercial climbing may help reduce incidences of permanent equipment installations for recreation through education and provides an opportunity for guides to encourage Leave No Trace practices.

The first two appropriate criteria determine if climbing as a general activity, both by public users and those with a commercial guide, is appropriate within the park. Climbing is consistent with the park purpose and significance because it requires specialized skill and self-reliance, while providing visitors with exceptional opportunities for primitive and unconfined recreational experience in the rugged inner canyon wilderness. In addition, climbing is congruent with enabling legislation that Black Canyon of the Gunnison NP shall provide for educational and recreational opportunities.

Guided climbing may potentially provide for enhanced safety of less experienced climbers by allowing these climbers to be supported by a guide. Because guided commercial climbers would be required to obtain wilderness use permits, for which there are maximum daily amounts, the activity would have minimal additional impacts on park resources and values. While allowing guided climbing may conflict with other recreational activities due to the competition for wilderness use permits, the wilderness backcountry management plan proposes a commercial allocation as an annual percentage of total climbers (see Extent Necessary Determination, later in this chapter), the public would still be allowed to access the area and may continue to engage in climbing opportunities in surrounding areas of the park. Because of the geography of the canyon, climbers are often isolated from other groups and have opportunities to experience solitude. Therefore, climbing meets all the appropriate criteria and can be authorized as a commercial service.

Additionally, guided commercial climbing contributes to visitor understanding and appreciation of the park's and wilderness's purpose and significance by allowing visitors to experience the unique topography and recreational opportunities offered by the canyon. For similar reasons, guided commercial climbing may also enhance the visitor experience, thereby meeting two of the necessary criteria.

To ensure that guided commercial climbing does not monopolize the limited recreational opportunity, this plan established a commercial allocation as part of the visitor capacity analysis (see chapter 6). Park staff and management will continue to monitor guided climbing within the inner canyon wilderness zone to balance commercial guided trips against general public access to the canyon.

Camping and Overnight Use — Camping and overnight use meet the majority of the appropriate criteria because the activity is consistent with the purposes and values for which the park was established and applicable laws, regulations and policies. However, the daily limit on wilderness use permits indicate that camping and overnight use through a commercial visitor service could monopolize a recreational opportunity at the expense of the general public, particularly because there are a limited number of designated campsites within this zone. Therefore, overnight camping use, except when paired with climbing, will not be authorized as a commercial visitor service at this time.

In recent years, park staff have noted that some commercial providers who offer guided climbing also include opportunities for camping within the inner canyon wilderness zone or in the frontcountry campsites. Climbing often requires more equipment and time to set up and, in most cases, only one climber may ascend at a time; therefore, pairing the activity with overnight use allows commercial guides to maximize their time with visitors. Because of the commercial allocation associated with commercial visitor services that offer climbing, the planning team determined that overnight use may be allowed through commercial providers authorized to provide guided climbing. The commercial allocation will ensure a balance between commercial and general public use of campsites in inner canyon wilderness.

Potential New Commercial Services

During the evaluation of commercial visitor services within the inner canyon wilderness zone, the interdisciplinary team determined climbing (and associated camping) to be the only recreational activity that may be offered through commercial visitor services. The other activities evaluated were found to be inappropriate, with the rationale provided in the following section.

Inappropriate Commercial Visitor Services

As a part of this planning effort, park staff evaluated potential commercial visitor services in Black Canyon of the Gunnison NP. Within the inner canyon wilderness zone, the following activities were analyzed and found to be inappropriate commercial visitor services: river-running, fishing, interpretive day hiking, stand-alone camping and overnight use, horseback riding, and off-road vehicle use.

River-Running — River-running includes nonmotorized and on-water recreational activities such as kayaking, canoeing, stand-up paddle boarding, and packrafting to name a few. These activities are currently not offered as a commercial visitor service within Black Canyon of the Gunnison NP. The activity is consistent with the enabling legislation as well as the park purpose and significance to provide unique recreational opportunities. Currently, kayaking is available for users of all skill levels,

but advanced and experienced skills are required due to inherent risks. The Gunnison River includes Class V rapids with sections that are un-runnable and this activity is deemed extremely hazardous by park staff due to dangerous portages and waterfalls. Consequently, providing this recreational activity as a commercial visitor service would likely compromise public health and safety. River-running failed to meet all “appropriate” criteria and will not be authorized as a commercial visitor service at this time.

Fishing — Fishing is currently not offered through a commercial visitor service within the inner canyon wilderness zone of Black Canyon of the Gunnison NP. This commercial services analysis evaluates the activity as a potential commercial visitor service.

Fishing in the inner canyon wilderness zone of Black Canyon of the Gunnison NP allows visitors to experience the park’s purpose and significance and is consistent with existing laws, policies, and regulations. The Gunnison River has been designated as a Gold Medal water and Wild Trout water by the state wildlife commission. The 2021 superintendent’s compendium states that fishing is authorized within the park in accordance with federal and state law. Guided fishing may provide visitors with an opportunity to travel down the canyon to the river with an experienced guide and could potentially limit the number of unacceptable impacts on park resources through guide enforcement of regulations. However, visitors who would participate in guided fishing would access the canyon from the same trail access points that are managed by the park’s current wilderness use permit system. Guided fishing excursions would require permit acquisition and therefore would likely monopolize the opportunity for the general public to hike the canyon because the river is primarily accessed from a select few routes, in contrast to climbing, which may cause visitor conflict. In addition, other sections of the river are designated Gold Medal Water ([Colorado Parks and Wildlife](#)), allowing visitors to achieve this unique experience in other areas of the park. As a result, fishing failed to meet the “appropriate” criteria and is not able to be authorized as a commercial use within the inner canyon wilderness zone of Black Canyon of the Gunnison NP.

Interpretive Day Hiking — While interpretive day hikes are consistent with the purposes and values for which the park was established and is consistent with applicable laws, regulations and policies, this activity is found to be inappropriate as a commercial service within the inner canyon wilderness zone. Due to the wilderness use permit system required for all day use and overnight users in the inner canyon wilderness zone, interpretive day hiking via a commercial service would likely monopolize recreational opportunities at the expense of the general public. The number of permits available per day is limited and they are available on a first-come, first-serve basis. For these reasons, the National Park Service has determined that interpretive day hiking does not meet all the criteria for “appropriate” as described in the “Necessary and Appropriate Criteria” section and will not be authorized as a commercial visitor service at this time.

Horseback Riding — This activity is consistent with the purpose and values for which the park was established and associated laws, regulations, and policies. However, the terrain of the inner canyon wilderness zone is extremely steep with loose rocks within the rock gullies and drainages and there are no official trails designed for pack and saddle stock. Therefore, allowing horseback riding in this zone would compromise public health and safety. In addition, park staff noted concerns regarding impacts on trails and resources within this zone from horse use. The National Park Service has determined that horseback riding does not meet all the “appropriate” criteria as described in the “Necessary and Appropriate Criteria” section and will not be authorized as a commercial visitor service at this time.

Off-Road Vehicle Use — Off-road vehicle use on designated trails and areas is not consistent with applicable laws, regulations, or policies because the Wilderness Act of 1964, Section 4(c), states that the use of motorized vehicles and bicycles in wilderness is prohibited. The National Park Service has determined that off-road vehicle use does not meet the criteria for “appropriate” as described in the “Necessary and Appropriate Criteria” section.

Uplands Zone (Primitive Wilderness, Pristine Wilderness, and Backcountry Subzones)

Existing Commercial Services

There are currently no commercial visitor services provided in the uplands zone.

Potential New Commercial Services

Interpretive Day Hiking — Interpretation and day hiking are consistent with applicable laws, regulations, policies, and is in line with the purpose and values for which the park was established. This activity would provide visitors with opportunities for a unique visitor experience and would be unlikely to have significant impacts on park resources. Guides that lead interpretive day hikes would likely provide informative experiences for visitors about the unique natural resources of the park. Therefore, interpretive day hiking meets all criteria for appropriate. Furthermore, this activity contributes to visitor understanding of the park’s purpose, can enhance the visitor experience, and can provide education to visitors; therefore, interpretive day hiking meets three of the criteria for “necessary.” This activity meets necessary and appropriate criteria and park staff may consider opportunities to provide this activity through commercial visitor services. To ensure resource protection, park staff may consider a maximum group size and other constraints on when or where these services occur to comply with visitor capacities established for upland trails in wilderness and backcountry for commercial visitor services.

Camping/Overnight Use — Camping and overnight use is consistent with applicable laws, regulations, policies, and is in line with the purpose and values for which the park was established. This activity provides visitors with a unique experience for overnight use in wilderness and would have minimal impacts on park resources. Therefore, camping and overnight use meets all the appropriate criteria. Furthermore, camping and overnight use contributes to visitor understanding of the park’s purpose, can enhance the visitor experience, can provide education to visitors, and can implement mitigations for resource protection; therefore, this commercial visitor service meets three of the necessary criteria. This activity adequately meets the criteria for necessary and appropriate and therefore could be considered as a potential commercial visitor service in the uplands zone.

Inappropriate Commercial Visitor Services

Within the uplands zone, the following activities were found to be inappropriate commercial visitor services: climbing, fishing, river-running, horseback riding, and off-road vehicle use. Opportunities for climbing, fishing, and river-running do not exist in the uplands terrain.

Climbing — While climbing is congruent with existing laws, regulations, and policies and is consistent with park purpose and significance, allowing climbing to occur in the uplands zone would likely compromise public health and safety due to the nature of the topography and geology. NPS staff noted that the rock formations in this area of the park are unsafe to climb because of the rock composition; therefore, climbing failed to meet all of the “appropriate” criteria and will not be authorized as a commercial visitor service at this time.

Fishing — Within the uplands zone, there are no feasible access points for visitors to reach the Gunnison River to engage in fishing. In addition, there are no water sources or features that can support this activity. Therefore, this activity was not further evaluated under the necessary and appropriate criteria.

River-running — The uplands zone does not provide any visitor access to the Gunnison River and there are no water sources or features that can support this activity. Therefore, the zone does not support river-running, and the activity was not evaluated under the necessary and appropriate criteria.

Horseback riding — Horseback riding in the uplands zone is consistent with existing laws, regulations, and policies and contributes to the park purpose and significance. However, there is currently one trail—Dead Horse Trail—that allows equestrian use. While horseback riding is appropriate for the general public, there is only one trail and providing horseback riding through commercial visitor services may monopolize the opportunity for the general public to participate in this activity. Recently, the park purchased additional land from a conservation easement; these lands will be zoned in a future planning effort. Park staff identified a need to conduct a resource assessment and vegetation study to determine if horseback riding would cause unacceptable impacts on park resources or values. Therefore, horseback riding failed to meet the “appropriate” criteria and will not be authorized as a commercial visitor service at this time.

Off-Road Vehicle Use on Designated Trails/Areas — Off-road vehicle use within the park does not comply with applicable laws, regulations, and policies. The use of motorized vehicles in wilderness is prohibited; therefore, off-road vehicles did not meet the appropriate criteria and will not be authorized as a commercial visitor service at this time.

Gunnison Gorge Interface Wilderness Zone

Existing Commercial Services

Currently, there are no existing commercial services that are managed by the National Park Service within the boundaries of the Gunnison Gorge interface wilderness zone; however, there are commercial services administered by the Bureau of Land Management that occasionally enter this zone. The Bureau of Land Management administers the Gunnison Gorge National Conservation Area, which surrounds the western boundary of Black Canyon of the Gunnison NP. The Gunnison Gorge National Conservation Area was designated in 1999 and includes the Gunnison Gorge Wilderness.

The *Gunnison Gorge National Conservation Area: Approved Resource Management Plan and Record of Decision* (BLM 2004) provides desired conditions for management units within the Gunnison Gorge National Conservation Area located outside Black Canyon of the Gunnison NP. Specifically, the Gunnison Gorge Wilderness is managed as a primitive, nonmotorized and nonmechanized, remote, unmodified natural environment while providing visitors an opportunity to pursue Gold-Medal trout fishing, river-running, hiking, camping, and wildlife watching. In addition, the 2004 resource management plan states that the Bureau of Land Management and National Park Service will jointly manage approximately 1,500 acres of land, including 350 acres in Black Canyon of the Gunnison NP. This land includes the Chukar Recreation Site (Bureau of Land Management) and the Margaritaville campsite (Black Canyon of the Gunnison NP).

The Bureau of Land Management allows river-running, camping, and fishing, through commercial visitor services in the Gunnison Gorge Wilderness. The Bureau of Land Management authorizes special recreation permits to businesses, organizations, and individuals to allow the use of specific public land and related waters for commercial, competitive, and organized group use. As of 2019, the Bureau of Land Management authorized eight commercial operators to provide river-running, fishing, and overnight use under special recreation permits. Per the BLM 2004 Gunnison Gorge National Conservation Area resource management plan, the Bureau of Land Management and National Park Service have an agreement to cooperatively manage commercial visitor services across agency lands. There are currently commercial raft and float-fishing and hiking/wading shore fishing visitor services that start trips within the BLM-managed wilderness, travel upstream to Black Canyon to fish and camp, then return downstream to Gunnison Gorge. These visitor services are managed within BLM permit limits and the number of sites at the Margaritaville campsite, which is located within the Gunnison Gorge interface wilderness zone of Black Canyon of the Gunnison NP. Margaritaville includes two campsites that may be used by hikers and boaters. Recently, BLM staff have noted that commercial use in this zone occurs infrequently.

Within this cooperative management zone, current commercial services would continue and begin their trips at the designated sites located on BLM land, and the Bureau of Land Management would manage the permits. The National Park Service and Bureau of Land Management would jointly manage river recreation, blending regulations between the agencies for consistency for visitor enjoyment, resource protection, and preserving wilderness character.

Potential New Commercial Services

Interpretive Day Hiking — Interpretive day hikes are consistent with applicable laws, regulations, policies, and may help achieve the purpose and values for which the park was established. This activity may provide visitors with opportunities for a unique visitor experience and would likely have minimal impacts on park resources. Interpretive day hikes would provide educational experiences for visitors about the unique resources of the park unit, such as, but not limited to, the geologic features and outstanding wildlife. This activity meets all of the appropriate criteria. Furthermore, interpretive day hiking contributes to visitor understanding of the park's purpose, can enhance the visitor experience, and can provide education to visitors through guide interpretation; therefore, this commercial visitor service meets three of the necessary criteria. Interpretive day hiking was found to be necessary and appropriate, and the park may consider opportunities to provide this activity through commercial visitor services in the Gunnison Gorge interface wilderness zone.

Inappropriate Services

Horseback Riding — While horseback riding is consistent with applicable laws, regulations, and policies and is congruent with park purpose and significance, allowing this activity may compromise public health and safety due to the steep terrain and absence of trails or routes designed for pack and saddle stock use in the Gunnison Gorge interface wilderness zone. In addition, park staff expressed concerns regarding potential impacts on trails and vegetation from horse use. Therefore, horseback riding failed to meet the “appropriate” criteria and will not be authorized as a commercial visitor service at this time.

Climbing — While climbing is consistent with existing laws, regulations, and policies and helps achieve park purpose and significance, allowing this activity may compromise public health and safety due to the topography of the Gunnison Gorge interface wilderness zone. The terrain is extremely steep and rugged. Park staff noted that the rock formations in this area of the park are

unsafe to climb because of the rock composition; therefore, climbing failed to meet the “appropriate” criteria and will not be authorized as a commercial visitor service at this time.

Off-Road Vehicle Use — Off-road vehicle use, does not meet the applicable laws, regulations, and policies for the Gunnison Gorge interface wilderness zone. It does not plan for desired future conditions for resources and, therefore, it is not further evaluated against the necessary and appropriate criteria.

EVALUATION OF COMMERCIAL SERVICES FOR CURECANTI NATIONAL RECREATION AREA

Current Concession Contracts

The National Park Service maintains one concession contract with Elk Creek Marina, LLC, in Curecanti NRA. The concessioner provides services such as marina services, watercraft rental, lodging cabins, operation of a restaurant, and guided fishing services on Blue Mesa and Morrow Point reservoirs. Current operations run by the concessioner occur within the frontcountry of Curecanti and on Morrow Point reservoir; therefore, these services are not within the scope of the wilderness backcountry management plan.

Current Commercial Use Authorizations

As of 2019, there were 33 CUA services providing a wide range of recreational opportunities within Curecanti NRA. The services provided include, but are not limited to, fishing, hiking, hunting, standup paddleboard tours, kayaking, SCUBA instruction, and horseback riding. All CUA operators originate and terminate outside park boundaries.

The majority of commercial visitor services within Curecanti NRA operate within the frontcountry, primarily on the reservoirs. Almost all (32 of 33) CUAs may operate within the Blue Mesa Reservoir and frontcountry area. Of these 32 CUAs, nine also operate within the Crystal/Morrow Point Reservoirs and frontcountry. One CUA operates at Morrow Point Reservoir only. This commercial services analysis focuses on activities that may be offered within the backcountry lands of Curecanti NRA; therefore, these commercial visitors services are excluded from this analysis.

Blue Mesa Backcountry Zone

Existing Commercial Services

Current commercial visitor services provided in the *backcountry* of the Blue Mesa backcountry zone include horseback riding, hiking and driving tours, hunting, and educational tours such as birding. In addition, commercial fishing and river-running services are provided on the Blue Mesa Reservoir and on the Gunnison River. This and other reservoirs are not within the project area of the Wilderness and Backcountry Management Plan, and therefore are not within the scope of this commercial services analysis.

Potential New Commercial Services

The following activities have been determined to be appropriate within the Blue Mesa backcountry zone and therefore may be considered for commercial visitor services: climbing, camping, and off-road vehicle use on designated trails. Potential commercial services within this zone would support goals of protecting and enhancing resources, including qualities of naturalness and remoteness.

Climbing — Climbing within the Blue Mesa backcountry zone is consistent with the purpose of Curecanti NRA to provide for public use and enjoyment and associated legal mandates. Climbing through a commercial visitor service is unlikely to compromise public health or safety and does not unduly conflict with other recreational activities within the park. When managed per the direction in the updated climbing management plan, climbing is likely to have minimal impacts on park resources and values. The activity does not threaten public opportunity to recreate within the park.

Climbing provides a unique opportunity for visitors to see the rock formations and canyons of Curecanti NRA, which tell a story of geologic change that occurred over 2 billion years. The scenic values of the canyon influence visitors to pause and reflect on the landscape's unique qualities. Therefore, climbing meets all the appropriate criteria and at least one of the necessary criteria by enhancing visitor understanding of the park and educating park visitors. Therefore, the National Park Service may consider climbing as a potential commercial visitor service in this zone.

Camping/Overnight Use — Camping and overnight use within Curecanti NRA is harmonious with the park purpose and significance to provide for public use and enjoyment. Camping through a commercial visitor service operation at designated campsites would likely have minimal impacts on park resources and would not compromise public health and safety. Camping and overnight use would enhance visitor understanding of the park purpose and significance through guided interpretation and education of Curecanti's history and geology.

The Blue Mesa backcountry zone contains few designated campsites in relatively small areas. While the activity would be unlikely to conflict with other park uses or exclude the general public, park staff have noted that a better understanding of current use of these sites is necessary before allowing commercial operators to provide overnight use or camping opportunities. If a determination is made that commercially guided overnight use would not exclude the general public, the activity would meet all of the appropriate criteria and one of the necessary criteria. The National Park Service may consider providing this activity as a commercial visitor service.

Off-Road Vehicles — Off-road vehicle use on designated trails was evaluated in Curecanti National Recreation Area's Motorized Vehicle Access Plan (2010). The recreational activity within NPS units is governed by Executive Order 11644 and must be in accordance with 36 CFR 4.10(b). Associated laws, policies, and regulations must be followed to ensure the recreational activity is consistent with park purpose and significance, does not compromise public health and safety, and would likely result in minimal impacts on park resources. Because off-road vehicles have designated trails, the activity does not conflict with other uses and commercially guided off-road vehicles would be unlikely to exclude the general public from participation. Off-road vehicle designated trails may provide visitors with the opportunity to experience the unique landscapes and history of Curecanti NRA, therefore enhancing the visitor experience consistent with park purpose and significance. Off-road vehicle use was found to be necessary and appropriate within the Blue Mesa backcountry zone and the National Park Service may consider providing this activity as a commercial visitor service.

Inappropriate Services

None of the recreational activities evaluated above were found to be inappropriate in the Blue Mesa backcountry zone. Emerging and current commercial visitor service will be considered and evaluated by NPS staff as applicable.

East Portal-Morrow Point Backcountry Zone

Existing Commercial Services

Current commercial services that operate within the East Portal–Morrow Point backcountry zone in the Curecanti NRA include hunting, walk-and-wade fishing, interpretive day hiking, and river-running. However, these services occur primarily within the backcountry near Morrow Point and not within East Portal or Crystal Reservoir.

Potential New Commercial Services

Climbing — Climbing within the East Portal–Morrow Point backcountry zone is in accordance with legal mandates and helps achieve park significance to provide an array of recreational opportunities. Climbing through a commercial service would be unlikely to compromise public health and safety would likely result in minimal impacts on park resources. However, park management may identify specific areas where climbing is or is not allowed within the zone to ensure these criteria are met. Because Curecanti NRA does not require permits to access the climbing routes, park staff have noted more dispersion of users and therefore minimal visitor conflict across activities. Guided climbing provides for visitor safety and has potential to enhance visitor understanding of the park’s purpose and significance through guide interpretation and education. The activity meets all appropriate criteria and one of the necessary criteria and the National Park Service may consider providing this activity as a commercial visitor service.

Inappropriate Services

The following section evaluates the potential for commercial visitor services in the backcountry lands of Crystal Reservoir and East Portal, both located within the East Portal-Morrow Point backcountry zone.

River-Running — Because of unpredictable and swift water releases into Crystal Reservoir, public safety would be compromised for river-running activities. Therefore, river-running did not meet the appropriate criteria and will not be authorized as a commercial visitor service at Crystal Reservoir at this time.

At East Portal, river-running was not found to meet the appropriate criteria because an allowance of commercial visitor services may prevent the general public from recreating in this area due to limited space for boat launching and the size of the area to accommodate visitors and vehicles. Therefore, river-running will not be authorized as a commercial visitor service at East Portal at this time.

Interpretive Day Hiking — While interpretive day hiking is consistent with park purpose and significance and harmonious with the park’s laws policies, and regulations, interpretive services are available on a self-guided basis for Crystal Reservoir and East Portal. East Portal cannot accommodate commercial visitor services. Access is limited because vehicles over 22 feet are not allowed to use the road that leads to East Portal. The facilities at East Portal are limited in space, creating maneuverability concerns at the parking locations. In addition, vehicles used for commercial services may occupy the limited parking spaces available and thus prevent the general public from recreating in this area. Therefore, this activity does not meet the necessary and/or appropriate criteria and will not be authorized as a commercial visitor service at Crystal Reservoir or East Portal at this time.

Options for educational experiences are available within a reasonable distance from the park. Water resource, dam facility, and geologic education are accessible at Cimarron, which has identical dam

engineering design and has coarse grain metamorphic and igneous rocks. In addition, the Cimarron fault is a significant geologic feature. Historic features are available in Montrose to commercial tours, including the Montrose County Historical Museum, the Uncompahgre Valley Water Users Association building, and the Museum of the Mountain West.

Camping/Overnight Use — Overnight use in the East Portal-Morrow Point backcountry zone is consistent with park purpose and significance and Curecanti’s laws, policies, and regulations. However, due to the limited number of campsites available within the East Portal–Morrow Point backcountry zone, commercially guided overnight use may exclude the general public from participating in the activity. The National Park Service determined that camping and overnight use failed to meet all the appropriate criteria and will not be authorized as a commercial visitor service at this time.

Off-Road Vehicles — In the East Portal-Morrow Point backcountry zone, there are no trails or areas for off-road vehicle use. In addition, this activity does not plan for desired conditions for natural and cultural resources and visitor experience. Therefore, this activity failed to meet all appropriate criteria and will not be authorized as a commercial visitor service within the East Portal–Morrow Point backcountry zone at this time.

Fishing — Fishing was determined to be an inappropriate activity at Crystal Reservoir because of the potential of the dam flows to compromise public health and safety. Therefore, the necessary and appropriate analysis for the activity of fishing applies to the East Portal area within the East Portal–Morrow Point backcountry zone.

The following section provides the rationale for why commercially guided fishing will not be authorized as a commercial visitor service at East Portal at this time.

In 2013, Colorado Parks and Wildlife identified the presence of the whirling disease parasite in the Gunnison River within the East Portal area. As a result, park staff determined that guided fishing in East Portal compromised public health and safety and was not allowed. Recent findings determined that the whirling disease parasite is no longer a threat to the Gunnison River; consequently, park staff identified the need to evaluate fishing as a potential commercial visitor service.

Fishing is consistent with the park’s purpose and significance to provide recreational opportunities on three high-altitude reservoirs. Although East Portal lies within the boundary of Curecanti NRA, access is provided through Black Canyon of the Gunnison NP. Because of the shared boundary with Black Canyon of the Gunnison NP and its proximity to wilderness, East Portal serves as a gateway to wilderness. Desired conditions for East Portal–Morrow Point backcountry zone are in chapter 2 of the Wilderness and Backcountry Management Plan. The National Park Service manages East Portal in such a way to provide visitors with a transitional experience to wilderness that is more rugged and remote than other areas of Curecanti NRA. Current activities available to the public within the East Portal area include camping, hiking, and walk-and-wade fishing. Providing fishing through a commercial visitor service may negatively impact wilderness character qualities of nearby lands and may limit the general public’s ability to visit the area due to limited parking, access, and amount of space at East Portal. In addition, a similar guided fishing experience may be provided through BLM commercial services that operate within the Gunnison Gorge National Conservation Area. As a result, the interdisciplinary team determined that fishing does not meet the appropriate criteria and will not be authorized as a commercial visitor service at East Portal at this time.

EXTENT NECESSARY DETERMINATION FOR COMMERCIAL SERVICES IN BLACK CANYON OF THE GUNNISON WILDERNESS

Introduction

The purpose of this section of the document is to determine the extent to which commercial services are necessary in the Black Canyon of the Gunnison Wilderness to realize the purposes for which this wilderness was established. The evaluation is documented in this chapter through this extent necessary determination (END) and builds on the previous analysis that determined which commercial services are necessary and appropriate. Only the activities that met those criteria in the previous section are evaluated in this section.

The assessment begins with a review of law, policy, and regulation to bring forth the criteria that will be used to measure the extent that commercial services are proper for realizing the purposes of Black Canyon of the Gunnison Wilderness. This chapter identifies those activities that are necessary and proper for realizing the recreational and other authorized purposes of wilderness. Commercial services to support proper activities are evaluated in terms of their ability to preserve wilderness character and achieve desired conditions for wilderness. Finally, any other agency-specific analyses or requirements relative to wilderness planning and commercial services are also added to this decision-making process. The assessment includes a finding of the amount of commercial services that is necessary to achieve the purpose of wilderness. The findings of this analysis are based on the best available information at this time and the park could reevaluate the analysis as more information becomes available or conditions change.

The Wilderness Act and National Park Service Wilderness Policies

The Wilderness Act of 1964 (54 USC Section 100101 et seq) secured for our nation an enduring resource of wilderness. Wilderness areas included in the National Wilderness Preservation System are to be administered for the use and enjoyment of the American people in such a manner as will leave them unimpaired for future use and enjoyment as wilderness, and to ensure that the wilderness character of these areas is preserved.

To achieve these goals, the Wilderness Act (the Act) includes a series of prohibitions related to particular activities in its Prohibition of Certain Uses section (§4 (c)). There are absolute prohibitions on commercial enterprise and permanent roads. General prohibitions, with qualified exceptions on, also exist related to temporary roads, use of motor vehicles, motorized equipment and motorboats, landing of aircraft, mechanical transport, and structures and installations.

The Wilderness Act also includes a special provision regarding commercial services in wilderness. Special Provisions, Section 4(d)(5) states that “Commercial services may be performed within the wilderness areas designated by this Act to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas.” The “purposes” referred to in §4(d)(5) are those enumerated in §4(b), which states that “...wilderness areas shall be devoted to the public purposes of recreational, scenic, scientific, educational, conservation, and historical use.” These purposes are rarely, if ever, discrete; that is, a recreational activity would commonly involve scenic or educational pursuits, or even both.

Definitions of Wilderness Act Terms

The Wilderness Act does not define the terms “activities,” “commercial services,” or “necessary.” When Congress does not include definitions of important terms in a statute, agencies may rely on commonly accepted definitions. The word “activities” is commonly defined as, “a pursuit in which a person is active,”⁹ “a recreational pursuit or pastime,” or “actions taken by a group in order to achieve their aims.”¹⁰ In the wilderness context, it is understood as referring to the recreational or other active pursuits engaged in by wilderness visitors.

The National Park Service has not specifically defined the word “commercial” in regulation or policy, however the term is commonly defined as (1) “[o]f or relating to commerce,” i.e., “[t]he buying and selling of goods, esp. on a large scale: business,” (2) “[e]ngaged in commerce,” (3) “[i]nvolved in work designed or planned for the mass market,” or (4) [h]aving profit as a primary aim.”¹¹ The word “service” is commonly defined as “the organized system of apparatus, appliances, employees, etc., for supplying some accommodation required by the public” or “the performance of any duties or work for another.” For the purposes of this document, a commercial service is one that relates to or is connected with commerce wherein work is performed for another person or entity, and where the primary purpose is the experience of wilderness through services and activities provided for a fee or charge and where the primary effect is that the wilderness experience is guided and shaped through the use of support services provided for a fee or charge.

The National Park Service has not specifically defined the word “necessary” in regulation or policy; however, the word necessary appears in federal statutes. In particular, the US Court of Appeals from the Ninth Circuit specifically declined to interpret the word necessary in Section 4(c) of the Wilderness Act as “requiring a structure of absolute necessity” by the wilderness managing agency before a structure could be authorized in wilderness.¹² Consistent with this judicial interpretation, the extent necessary determination in this analysis does not use the word necessary in an absolutist sense. Rather, the word necessary in relation to commercial services in wilderness is defined to mean a service that is important to achieve objectives for visitor use and enjoyment of wilderness in such a manner that the desired conditions for wilderness character are achieved and wilderness character is hereby preserved.

The language of the Act also contains two distinct, but interrelated standards related to the terms “activities” and “commercial services.” First, the “activities” that may be supported by commercial services must be “proper for realizing the recreational or other wilderness purposes.” Second, “commercial services” in wilderness can only be authorized “to the extent” that they are necessary for activities deemed proper. The US Court of Appeals for the Ninth Circuit has concluded that this language requires agencies to make a specialized finding of necessity for commercial services and to determine the minimum amount of commercial use that can be allowed in wilderness. Thus, both the type (i.e., “proper”) and amount (i.e., “extent”) of commercial support must be addressed in the extent necessary determination analysis.

9. Merriam-Webster’s (online)

10. Oxford Dictionary (online)

11. Webster’s II New College Dictionary 225 (1995); accord Merriam-Webster’s Collegiate Dictionary 230 (2000). See *wilderness Society v. US Fish and Wildlife Service*, 353 F.3d 1051, 1061 (9th Cir. 2003).

12. *Wilderness Watch v. US Fish and Wildlife Service*, 629 F.3d 1024 (9th Cir. 2010), interpreting Section 4(c) of the Wilderness Act, which prohibits structures and installations in wilderness “except as necessary to meet minimum requirements for the administration of the area for the purpose of [the Act].”

Guidance for Evaluating Commercial Services within Wilderness

The NPS *Management Policies 2006* (Section 6.4.4) state that wilderness-oriented commercial services that contribute to public education and visitor enjoyment of wilderness values or that provide opportunities for primitive and unconfined types of recreation may be authorized if the activities conform to NPS concessions management policies as stated in Chapter 10 of the NPS *Management Policies 2006* and the Wilderness Act, and if they are consistent with the park's wilderness management objectives. Commercial services must be consistent with the application of the minimum requirement concept and with the parks' management plans. This analysis does not evaluate commercial enterprise within wilderness. Commercial enterprise is exclusive from commercial services and is defined as any use or activity for the purpose of, or having the effect of, the generation of revenue through sale of products or services or by other means, or the marketing of a product, individual, or business.

NPS Director's Order 41 (Section 7.3): *Wilderness Stewardship* requires the agency to analyze and document a determination that establishes the types and amount of commercial services that are necessary to realize wilderness purposes (recreational, scenic, scientific, educational, conservation, and historical). This END analysis satisfies that requirement.

Commercial filming is defined in 43 CFR 5.12 as "film, electronic, magnetic, digital, or other recording of a moving image by a person, business, or other entity for a market audience with the intent of generating income. Examples include, but are not limited to, feature film, videography, television broadcast, or documentary, or other similar projects." In January 2021, the US District Court for the District of Columbia included a decision in *Price v. Barr* determining that permit and fee requirements applying to commercial filming are unconstitutional. Therefore, the National Park Service currently does not issue permits for commercial filming. Filming activities in wilderness may be granted as a special park use, as long as they do not violate the provisions of the Wilderness Act such as installations, motor vehicles or equipment, or any type of mechanical transport. If commercial filming in wilderness areas is justified, impacts on visitor experience should be minimized and the least amount of wilderness area used.

In this END, qualitative aspects of public education and visitor enjoyment of wilderness values and wilderness character are considered, including the role of particular wilderness-appropriate visitor activities in achieving desired conditions for wilderness character and objectives for visitor use and enjoyment; the particular attributes of these activities that necessitate commercial support; the regulatory framework for those activities that ensures that wilderness character can be preserved while promoting opportunities for visitor use and enjoyment; and the manner in which commercially supported visitor use is accommodated within the wilderness standards that have been established for overall visitor use (see chapter 5 for wilderness indicators and standards).

By considering these variables in relation to one another and in relation to the objectives of the particular management zones identified in the Wilderness and Backcountry Management Plan, a conclusion is reached about the level of commercial support that may be provided under each zone such that wilderness character is preserved. The extent necessary determination for commercial services in wilderness varies by zone and may result in the allowance of commercial services in some zones but not others because the desired conditions for visitor experiences, resource conditions, and wilderness character vary by zone. If new uses are proposed in the future, they would be analyzed through these filters, including the desired conditions for the zones identified in the plan.

Relationship to the Wilderness and Backcountry Management Plan

The END was prepared using an interdisciplinary approach that included wilderness management experts, commercial services staff, and other resource and visitor use specialists. Through the process of preparing this END, the National Park Service considered both the potential short-term and long-term effects of commercial service activities in Black Canyon of the Gunnison Wilderness.

The extent necessary determination for commercial services in Black Canyon of the Gunnison Wilderness was a key decision needed to inform the overall wilderness planning process. The process identified key elements of wilderness character, defined desired conditions for these elements, analyzed impacts in determining the overall amount of use appropriate in wilderness, and finally determined the proportion of this use that may be supported by commercial visitor services while ensuring the preservation of wilderness character.

The determination of the extent necessary for commercial visitor services is closely related to the identification of visitor capacity, or the maximum amounts and types of use appropriate in the wilderness zones. Chapter 6: Visitor Capacity Identification provides an explanation of visitor capacity and the amounts and types of visitor use that are considered in the Wilderness and Backcountry Management Plan. This END provides further explanation of the process and outcomes of determining commercial allocation of visitor capacity in wilderness. The framework for identifying visitor capacity and the extent of commercial services necessary in the Black Canyon of the Gunnison Wilderness included the establishment of measures and standards to identify and monitor visitor use and its effects on wilderness character (see Chapter 5: Monitoring Strategy). Effective visitor use management ensures that wilderness character is preserved by limiting change to identified standards.

As with other aspects of visitor use management planning, the strategies in the Wilderness and Backcountry Management Plan for Black Canyon of the Gunnison NP preserve wilderness character by emphasizing wilderness character qualities. Preservation of resource conditions, management strategies, and visitor capacities, including the extent of support by commercial services, are common elements to both of the alternatives described in part 2 of this plan. The management plan alternatives preserve wilderness character, as required by the Act, while offering a reasonable range of choices about the future of the wilderness as required by the National Environmental Policy Act (NEPA).

Purposes for which Black Canyon of the Gunnison Wilderness Was Established

The Black Canyon of the Gunnison Wilderness was established in 1976 for recreational and educational purposes and to protect and enhance the wilderness values. Public Law 94-567 (October 20, 1976) designated 11,180 acres as wilderness to be managed under the National Wilderness Preservation System. Public Law 106-76 (1999) expanded the boundary of the national park and designated an additional 4,419 acres of the Black Canyon of the Gunnison Wilderness. Today, the park includes 30,750 acres of which 15,599 (approximately 50%) are designated wilderness.

Over the last 2 million years, the Gunnison River slowly carved through Precambrian gneiss to form the deepest narrow canyon in the United States. While the canyon itself is 53 miles long, a remarkably scenic 14-mile stretch is designated as wilderness from rim to rim and sits within Black Canyon of the Gunnison NP. At some areas, the river meanders 2,400 feet below the rim of the canyon, surrounded by dryland forest of pinyon and juniper. The purposes of this wilderness for the

public include recreation, scenic preservation, scientific study, education, conservation, and historical use.

The Wilderness and Backcountry Management Plan proposes that backcountry and wilderness lands within Black Canyon of the Gunnison NP be divided into three management zones: inner canyon wilderness zone, uplands zone, and Gunnison Gorge interface wilderness zone. Of these management zones, only the uplands zone encompasses land that is not wilderness. For the purposes of this analysis, commercial services are only analyzed for the wilderness portion of the uplands zone and not the backcountry lands. (i.e., this analysis does not pertain to the uplands backcountry subzone; please refer to the “Evaluation of Commercial Services” under the necessary and appropriate criteria earlier in this chapter for relevant analysis of the uplands backcountry subzone.)

Each of these three management zones contain wilderness lands with different desired conditions, as described in chapter 2 of this plan. Furthermore, the inner canyon and uplands management zones have delineated subzones that are managed differently. Therefore, it is possible that a commercial visitor service may meet the extent necessary test in one management zone or subzone but not another.

EXTENT NECESSARY DETERMINATION FOR COMMERCIAL SERVICES IN WILDERNESS

Part I: Activities That Are Proper for Realizing the Recreational or Other Purposes of Wilderness

For a commercial service to meet the extent necessary test, the service or activity must be determined proper for realizing wilderness purposes. Any activity that occurs in designated wilderness must first be of a type that does not violate the prohibitions of §4(c) on the use of motor vehicles, motorized equipment or motorboats, the landing of aircraft, other forms of mechanical transport, and no structure or installation of structures. NPS *Management Policies* 6.4.3 (Recreation Use Management in Wilderness) states that recreational uses in wilderness will be of a nature that accomplishes the following:

- Enables the areas to retain their primeval character and influence
- Protects and preserves natural conditions
- Leaves the imprint of man’s work substantially unnoticeable
- Provides outstanding opportunities for solitude or primitive and unconfined types of recreation
- Preserves wilderness in an unimpaired condition

The activities identified as proper for realizing the recreational or other purposes of wilderness should contribute to achieving and maintaining desired conditions for wilderness. For the desired conditions of each management zone within Black Canyon of the Gunnison Wilderness, please refer to chapter 2. Desired conditions within wilderness parallel those stated in the Wilderness Act as it identifies the qualities of wilderness character. Refer to *Keeping it Wild 2: An Updated Interagency Strategy to Monitor Trends in Wilderness Character Across the National Wilderness Preservation System* (Landres et al. 2015) and *Reference Manual 41: Wilderness Stewardship* (wilderness definitions, NPS 2022) for definitions of wilderness character qualities.

As analyzed above in the Necessary and Appropriate Analysis section of this chapter, activities that are proper in wilderness must first be deemed necessary and/or appropriate within the park unit. Therefore, this END evaluates the following recreational activities in management zones with designated wilderness: guided interpretive day hiking, guided camping/overnight use, guided climbing, guided river-running, and guided fishing.

Interpretive day hiking does not include educational trips or tours, which were discussed previously in the Evaluation of Commercial Services section. Table 10 illustrates the activities that were found to meet the extent necessary determination within Black Canyon of the Gunnison Wilderness. The rationale and analysis of each activity within the wilderness zones, along with the extent necessary determination, may be found in subsequent sections.

Table 10: Activities that Meet the Extent Necessary Determination

| Activity | Inner Canyon – Pristine | Inner Canyon – Primitive | Uplands | Gunnison Gorge Interface Wilderness |
|-------------------------|-------------------------|--------------------------|---------|-------------------------------------|
| Interpretive day hiking | No | No | Yes | Yes |
| Overnight use/camping | No | Yes (conditional) | Yes | Yes |
| Climbing | No | Yes | No | No |
| River-running | No | No | No | Yes |
| Fishing | No | No | No | Yes |

Interpretive Day Hiking — Interpretive day hiking from a frontcountry location into and out of wilderness without spending the night is an activity that occurs within wilderness and contributes to the recreational purpose of wilderness. The activity contributes to visitors’ opportunities to experience the park’s fundamental resources and values including recreation, the Gunnison River, native plant and wildlife communities, wilderness character, and spectacular views. In addition, guided day hiking includes an interpretive component that allows visitors to learn about the interpretive themes and fundamental resources of the park.

Commercially guided interpretive day hiking is inclusive of other visitor activities such as guided photography, birding, and botany tours. Guided photography, birding, and botany tours occasionally occur within wilderness areas and help realize the educational and scenic purpose by educating visitors on photography techniques, such as setting and lighting, natural plant communities, invasive species, and bird habitats and ecosystems. These activities, when provided through a commercial service, often require the guides to lead visitors to primary locations throughout the park via hiking trails.

The park provides visitors with opportunities to hike on trails both within and outside designated wilderness. Interpretive day hiking is proper for realizing the purposes of wilderness in the uplands and Gunnison Gorge interface wilderness zones. The inner canyon wilderness zone is steep and provides opportunities for strenuous hiking that requires experience, skill, and successful preparation. A wilderness use permit is required for all use in the inner canyon (both day and overnight) and for overnight use of wilderness in the uplands, including, cross-country use, technical

climbing, and all river use. However, the permit is not required for established hiking trails such as Oak Flat Trail, North Vista Trail, and Deadhorse Trail.

Within the uplands zone, which contains areas of wilderness, visitors may hike in designated wilderness along the North Vista Trail and Deadhorse Trail. Along these trails, visitors may experience native plant communities such as sage, oak brush, and pinyon-juniper forests. Along the South Rim of the park, the Oak Flat Trail provides access to wilderness and is primarily within wilderness. The Gunnison Gorge interface wilderness zone provides opportunities for guided interpretive day hiking along the Gunnison River depending on water level. Commercially guided interpretive day hiking does not occur within the inner canyon wilderness zone.

Overnight Use/Camping — Overnight camping is a traditional wilderness activity that is integral to multi-day trips typically involving hiking or climbing. The ability, and sometimes the necessity, to spend multiple days traveling and camping without encountering other people or infrastructure is a defining feature of wilderness and is a representation of the undeveloped character and the area's ability to provide solitude, or primitive and unconfined recreation. Camping allows visitors to experience wilderness character and contributes to achieving desired conditions to provide a range of recreation opportunities.

Overnight use is allowed throughout Black Canyon of the Gunnison Wilderness and the Wilderness and Backcountry Management Plan proposes to continue to allow this use; however, campsites would not be designated in the inner canyon pristine wilderness subzone. The activity is subject to terms and conditions that include stay length, party size, requirements to follow Leave No Trace principles and practices, campfire prohibitions, type of substrate allowed for camping (bare ground), distance from streams, and prohibits modifying campsites with rock structures and fire rings. These limitations ensure that these activities remain compatible with wilderness character, i.e., do not lead to unacceptable impacts on resources or social conditions. In addition, overnight camping is limited by the Wilderness Act prohibition on motor vehicles and mechanical transport, by applicable federal regulations (36 CFR). Overnight use may be managed by a maximum daily amount of visitors to maintain desired conditions for solitude in wilderness.

Types of commercial services that may support overnight use/camping are guide services that help visitors find appropriate locations for these activities and provide local knowledge and education about wilderness resources.

This combination effectively manages overnight camping experiences in a manner compatible with a wilderness setting and which contrasts with frontcountry environments. Subject to the requirements and limitations discussed above, overnight camping experiences are considered activities that are proper for realizing the recreational and other purposes of wilderness.

Climbing — Black Canyon of the Gunnison Wilderness is a destination that offers vast opportunities to expert rock climbers. This recreational activity has been occurring in the park for more than 50 years. Mountaineering activities including technical rock climbing are proper activities in wilderness provided they are done in a manner compliant with existing park law, regulations, policy, and guidance (see Chapter 4: Climbing Management Plan) and in accordance with NPS Director's Order 41, Section 7.2 (Climbing). There are some specialized considerations that rock climbers must follow (i.e., the proper use of fixed anchors and equipment) to ensure they do not degrade wilderness character. Climbers are encouraged to adopt Leave No Trace principles and practices for all climbing activities.

Technical rock climbing is permitted in areas of Black Canyon of the Gunnison National Park primitive wilderness subzone and is prohibited in the pristine wilderness subzone and may be prohibited in areas that are temporarily closed to access due to resource impacts. Technical rock climbing is subject to limitations that include party size, daily route use limits, and park-specific climbing requirements (see Chapter 4: Climbing Management Plan).

Types of commercial services that may directly support technical rock climbing are guide services that assist visitors in finding appropriate locations for these activities and provide specialized equipment and/or technical skill development. This activity could be supported by way of hiking-based support. Stock-based support is unlikely due to the steep terrain and absence of trails or routes designed for pack and saddle stock use within the inner canyon.

Section 4(c) of the Wilderness Act states “... there shall be no temporary road, no use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechanical transport, and no structure or installation within any such area.” Per the Climbing Management Plan, there are allowances for climbing installations in wilderness within Black Canyon of the Gunnison National Park.

River-Running — River-running, which may include nonmotorized kayaking, canoeing, pack-rafting, or stand-up paddle boarding, is an appropriate wilderness activity. This activity is limited in the wilderness due to the challenging whitewater conditions and the difficulty of accessing the river with the necessary gear. The stretch of the Gunnison River within the park is for experienced and well-equipped kayakers; much of the river is not suitable for rafting. The rapids are considered Class V with very technical paddling required and numerous difficult and dangerous portages. Wilderness regulations apply, meaning that all visitors who want to participate in river-running must obtain a wilderness use permit. Commercially guided river-running currently occurs in the Gunnison Gorge interface wilderness zone and is managed by a permit authorized by the Bureau of Land Management.

In recent years, park staff have noticed an increase in the activity of packrafting within the inner canyon wilderness zone via the Warner Route. Packrafting involves the use of a small, lightweight, and compact inflatable boat that visitors may carry in their backpack to access a remote body of water. This emerging use falls under the category of river-running and is evaluated in conjunction with nonmotorized kayaking, canoeing, stand-up paddle boarding, and other activities.

There is currently some river-running in the Gunnison Gorge interface wilderness zone and the inner canyon wilderness zone, with access provided via Chukar Trail on Bureau of Land Management land and user-created trails, which are not included in the visitor capacity analysis. Therefore, it is unlikely there would be conflict of commercial use monopolizing public use. However, when this commercial activity was analyzed through the wilderness filter, it was determined that guided river-running is not necessary for realizing the purposes of wilderness or for protecting and enhancing the desired conditions for wilderness character for the inner canyon wilderness zone. To maintain and improve opportunities for challenge, self-reliance, and adventure that are integral to the wilderness character of the wilderness, commercially guided river-running will not be authorized in the inner canyon wilderness zone.

Visitors to Black Canyon of the Gunnison NP may participate in commercially guided river-running only within the Gunnison Gorge interface wilderness zone through commercial services authorized under a BLM permit. Commercially guided services were found to meet the extent necessary determination analysis within this zone because the zone’s location on the interface with the BLM-

administered Gunnison Gorge National Conservation Area necessitates different desired conditions for visitor experience than other zones within the park. As identified in the *Gunnison Gorge National Conservation Area: Approved Resource Management Plan and Record of Decision* (BLM 2004), the Gunnison Gorge Wilderness “will be managed to deliver benefits by providing opportunities for visitors to engage in a variety of activities” . Because of the proximity of the two wilderness areas (Gunnison Gorge Wilderness and Black Canyon of the Gunnison Wilderness) and a shared boundary, the desired conditions for visitor experience within the Gunnison Gorge interface wilderness zone would be challenging, adventurous, and provide for a variety of opportunities, which may involve self-reliance and use of wilderness skills. Commercial services will be monitored by park staff to ensure they are aligned with and preserving wilderness character and qualities in coordination with BLM management of the permit.

Fishing — The Gunnison River within the national park is designated as a Gold Medal Water and Wild Trout River by Colorado Parks and Wildlife. Consequently, fishing has been a popular activity throughout the park’s history. Fishing is an activity that is proper within wilderness and contributes to achieving desired conditions to provide a range of recreation opportunities.

Visitors who participate in freshwater fishing on the Gunnison River are subject to all laws and regulations established by the park and Colorado Parks and Wildlife. Anglers are required to use artificial flies or lures only and are prohibited from using bait; all rainbow trout are catch and release; catch limits for brown trout are four per daily bag and eight total in possession; and all anglers are required to carry a valid Colorado fishing license. Controlled flows of clean water provide habitat for the species-rich aquatic life that entice adventurous anglers to the canyon bottom for unparalleled fly-fishing experiences.

Within Black Canyon of the Gunnison NP, fishing is permitted in most areas of the wilderness along the Gunnison River, with the exception of a limited number of areas that are temporarily closed due to resource impacts, and subject to site-specific fishing regulations. In addition, visitors who fish are subject to applicable federal regulations (36 CFR) and by the identified visitor capacities described in “Chapter 6: Visitor Capacity Identification.” While there is not an identified capacity allocation for anglers, they are included in the maximum number of visitors per day who may access the inner canyon wilderness zone.

Activities Considered but Dismissed from Analysis

The following activities were not analyzed in the extent necessary determination: mountain biking, off-highway vehicle use, and ice climbing. The activities of mountain biking and off-highway vehicle use violate the Wilderness Act and therefore are not proper for realizing the purposes of wilderness. While ice climbing occasionally occurs in the park during winter months, park staff have determined that the low frequency of the activity does not warrant consideration to authorize as a commercial visitor services. In addition, some of the premier ice climbing locations are located within a short distance from Black Canyon of the Gunnison NP. Therefore, visitors seeking opportunities for guided ice climbing may find this activity at nearby locations more suitable.

Part II: Aspects of Wilderness Activities that May Necessitate Commercial Support

The extent to which these forms of commercial service support are necessary depends on several factors. This END analysis considers what the park seeks in terms of self-reliant experiences as opposed to novice or introductory experiences, and the range of social and environmental conditions that can be provided while preserving wilderness character. This determination

represents a comparative and qualitative analysis of the relevant wilderness factors and determines whether commercial services are necessary and if so, the amount of commercial services that are necessary.

To be conducted safely and in a manner that preserves wilderness character, wilderness activities often require specialized skills, knowledge, or equipment. For example, rock climbing involves technical skills that are necessary for navigation, safety practices, environmental factors, and special equipment. Wilderness visitors vary in their ability to conduct these more specialized or technical wilderness activities. Therefore, when parks choose to provide opportunities for these types of visitor activities, some level of commercial support may be necessary.

Specialized Skills or Knowledge

For some wilderness visitors, the need for, or lack of, specialized skills or knowledge can be a barrier to engaging in that activity. A commercial service may support a visitor activity by providing or teaching the skills or knowledge that are needed to engage in a proper wilderness activity. This may take the form of guiding in which the outfitter/guide provides the necessary skills or knowledge to the individual or group that is participating in the activity. It may also take an instructional form in which the outfitter/guide teaches an individual or group the necessary skills or knowledge so that they may independently participate in the activity in the future. In the latter case, the level of instruction may range from basic or introductory wilderness skills and knowledge to advanced technical skills and knowledge. Guides and instructors are also able to provide local knowledge that can make a wilderness trip safer and more rewarding for visitors who are unfamiliar with a wilderness area.

Specialized Equipment or Services

Wilderness activities may require specialized equipment or services that cannot be provided by all wilderness visitors who wish to engage in a certain activity. Regarding specialized equipment, the expense, care, or space required for that equipment may be too great for some wilderness visitors to provide without support from a commercial service provider. Visitors may wish to try out an activity before making the financial commitment to purchase equipment. Some visitor trips may require services, such as the transporting of equipment or supplies that cannot be provided without commercial support. For each activity that has been determined to be proper for the recreational or other purposes of wilderness, the analysis will discuss the specialized equipment or services that may necessitate commercial support.

Special Safety Concerns

Wilderness activities may involve special safety concerns that cannot be managed by all wilderness visitors without commercial support. The National Park Service does not attempt to eliminate the risks inherent in wilderness travel or those associated with participation in wilderness activities. However, for some visitors, a commercial provider may be a necessary means of managing those inherent risks or may be a means to acquire the requisite knowledge to manage those risks independently in the future. For each activity that has been determined to be proper for the recreational or other purposes of wilderness, the analysis will discuss the special safety concerns that may necessitate commercial support.

Special Resource Concerns

Wilderness activities may involve the potential for impacts on wilderness resources and character. A commercial service provider with proper training and education may be a means to ensure that

activities are conducted in appropriate locations and in a manner that mitigates or minimizes resource impacts. For each activity that has been determined to be proper for the recreational or other purposes of wilderness, the analysis will discuss the special resource concerns that may necessitate commercial support.

Other Contributions that Support Wilderness Purposes

Commercial services most often support wilderness visitors in their recreational activities, but they may also independently or cooperatively support scenic, scientific, educational, historic, or conservation objectives.

Introductory Experiences

Commercial service providers can support visitors who lack the experience or confidence to attempt a wilderness adventure on their own. These types of trips can introduce a diverse public to a variety of ways to experience their public lands. Commercially guided or supported trips can allow visitors to build confidence and lead to more self-reliant wilderness trips in the future. This can relate to a range of activities, such as climbing, hiking, and overnight experiences. Introducing novice visitors to their publicly owned wilderness can provide rewarding experiences, build support for long-term wilderness preservation and enhance wilderness education.

Part III: Commercial Services that Are Necessary for Each Proper Activity

This section uses the categories provided in Part II to analyze the aspects of activities identified as proper in Part I that may necessitate commercial support to achieve wilderness purposes. A conclusion regarding the necessity for commercial services is made for each activity within each wilderness management zone in Black Canyon of the Gunnison National Park. The use of commercial services in wilderness will only be permitted when it allows visitors to use and enjoy wilderness in a manner that is consistent with the preservation of wilderness and its associated desired conditions. The amount and extent of commercial services that will be allowed in each management zone is addressed in Part IV.

Interpretive Day Hiking

Specialized skills for this activity may include wayfinding, orienteering, wilderness first aid, map-reading, Leave No Trace practices, proper waste disposal, and leadership. The activity may require proficiency in using equipment such as a compass or global positioning system (GPS) unit. Safety concerns associated with hiking in Black Canyon of the Gunnison Wilderness are steep terrain, weather conditions, dehydration, and wildlife encounters. Resource concerns may include erosion or damage to vegetation. Introductory experiences and guided trips may lead to a better understanding of wilderness character, purposes, and values. Such experiences provided through a commercial service may provide visitors with the knowledge to appropriately experience their public lands. As described in Part I, interpretive day hiking is a proper activity for realizing the purposes of wilderness. The skills, equipment, safety, and resource concerns described above may prevent some visitors from experiencing and learning about wilderness character.

As stated above, commercially guided interpretive day hiking was not found to be necessary and/or appropriate in the inner canyon wilderness zone because inner-canyon hiking requires obtaining a wilderness use permit, and interpretive day hiking via a commercial service could potentially monopolize recreational opportunities at the expense of the general public. However, commercially

guided interpretive day hiking is necessary for realizing the purposes of wilderness in the Gunnison Gorge interface wilderness zone and the uplands zone.

Overnight Use/Camping

Specialized skills and knowledge for this activity may include wayfinding, orienteering, the use of overnight equipment, campsite selection, food preparation and appropriate food storage in wilderness, wilderness first aid, map reading, sanitation and waste disposal, and Leave No Trace practices. This activity requires a tent, cooking equipment, food storage solutions, and occasionally, water purification equipment. Commercially guided camping can improve visitors' understanding of wilderness character, educate visitors about the purposes and values of wilderness, and enhance the public's experience within public lands. The use of commercially guided overnight use/camping will allow visitors the opportunity to experience solitude, connect with nature, and practice self-reliance in a manner that is consistent with the preservation of wilderness and its associated desired conditions.

Commercially guided overnight use and camping will achieve the purpose of wilderness in the inner canyon wilderness zone, uplands zone, and the Gunnison Gorge interface wilderness zone. However, within the inner canyon wilderness zone, the activity will only be provided through commercial services in conjunction with climbing. More detail may be found in Part IV of this extent necessary determination.

Climbing

Rock climbing in the Black Canyon of the Gunnison Wilderness occurs within the inner canyon primitive wilderness subzone. This activity requires specialized skills and knowledge such as route finding, orienteering, knowledge of hazards, and an understanding of natural conditions. All visitors who participate in climbing must be compliant with the Climbing Management Plan and the Wilderness Act of 1964. Special equipment required for this activity includes ropes, climbing equipment, and aids. There are various safety concerns associated with this activity including the steep terrain and rock environment of the inner canyon, weather conditions, loose rocks, and wildlife encounters. Commercially guided climbing trips can improve visitors' understanding of wilderness character, help the public build confidence in their climbing skills, and enhance the public's experience within public lands.

The use of commercial support services will allow visitors to use and enjoy wilderness in a manner that is safe and consistent with the preservation of wilderness and its associated desired conditions. Through this analysis, the National Park Service determined that commercial services are deemed necessary for climbing within the inner canyon primitive wilderness subzone; however, the activity of commercially guided climbing was not found to be necessary and/or appropriate in the Gunnison Gorge interface wilderness zone, the uplands zone, or the inner canyon pristine wilderness subzone. Therefore, commercially guided climbing will only be authorized in the inner canyon primitive wilderness subzone.

River-Running

While this service has been deemed proper for achieving one of the purposes of wilderness, the activity was not found to be necessary and/or appropriate within the inner canyon wilderness zone or the uplands zone due to safety concerns and lack of access to water, respectively. Currently, commercially guided river-running occasionally occurs within the Gunnison Gorge interface wilderness zone and is authorized under a Bureau of Land Management permit. The Bureau of Land

Management manages the Gunnison Gorge National Conservation Area, which borders Black Canyon of the Gunnison National Park and the Gunnison Gorge interface wilderness zone. Therefore, because the service is available within a reasonable distance from the park and occasionally occurs within the Gunnison Gorge interface wilderness zone, these operations will continue, and the Bureau of Land Management will authorize and administer any commercially guided river-running in the zone.

Fishing

The activity of commercially guided fishing was not found to be necessary and/or appropriate within the inner canyon wilderness zone because the activity requires obtaining a wilderness use permit and, therefore, may monopolize a recreational opportunity for the public (see above). In addition, the activity was not deemed necessary and/or appropriate in the uplands zone because this zone does not include the Gunnison River or a significant body of water.

Commercially guided fishing has been identified as a proper activity for achieving the purposes of wilderness within the Gunnison Gorge interface wilderness zone and on neighboring BLM waters. Currently, commercially guided fishing occasionally occurs along the Gunnison River within this zone of the park. Types of commercial services that may directly support fishing are guide services based on assisting visitors in finding appropriate locations for angling and providing specialized equipment and/or technical skill development. This activity could be supported by way of hiking-based or rafting-based support. The Bureau of Land Management will continue to administer commercial services under a BLM permit. Commercially guided fishing will not be offered through the National Park Service.

Part IV: Extent of Commercial Services Determined Necessary for Each Proper Activity in Wilderness

This section evaluates each proper activity in conjunction with the desired conditions and visitor capacities to determine the extent of commercial services that are proper throughout each zone. Chapter 6: Visitor Capacity Identification determined the visitor capacity for the management zones, which was used to inform the commercial allocation for each proper activity. A conclusion is reached about the amount of overall level of use that may be commercially supported.

Current use levels for each activity do not necessitate daily monitoring. Park staff monitor commercial visitor services on an annual basis by reviewing wilderness use permits and commercial service required reports. This monitoring of commercial use will continue annually to determine if any adjustments are necessary through a potential management strategy. All commercially guided activities will operate in a manner that is consistent with preserving wilderness character and policy.

Climbing

Commercially guided rock climbing primarily occurs within the inner canyon primitive wilderness subzone at Pinyon Draw and BLCA Climbing Area 4 (Cruise Gully) (the majority taking place at Cruise Gully) as stated in Chapter 6: Visitor Capacity Identification. The National Park Service identified the commercial allocation for climbing in Chapter 6: Visitor Capacity Identification. The commercial allocation of climbing will be 3% of total climbers (total climbers include commercial and public use). The park will manage the commercial allocation through wilderness use permits and appropriate commercial service authority. Should monitoring suggest that commercially guided climbing exceeds this allocation, park staff will adjust monitoring to a more frequent basis (i.e.,

monthly) to ensure that commercial use does not monopolize a recreational opportunity for the general public. Based on the current levels of use, the park reasonably assumes this amount of commercial allocation would effectively distribute commercial and public use while achieving and maintaining desired conditions.

NPS Director's Order 41, Section 7.2 (climbing) states "any climbing use or related activity must be restricted or prohibited when its occurrence, continuation, or expansion would result in unacceptable impacts on wilderness resources or character or interfere significantly with the experience of other park visitors." Specific guidelines and regulations for commercially guided climbing in wilderness can be found in Chapter 4: Climbing Management Plan. As stated in chapter 4, group size for commercially guided climbing must not exceed four people, including the guide.

Interpretive Day Hiking

Commercially guided interpretive day hiking does not currently occur in the inner canyon wilderness zone or the uplands zone. As stated in Chapter 7: Necessary and Appropriate Analysis, the activity will not be authorized as a commercial visitor service in the inner canyon wilderness zone because commercial operators would compete with the public for wilderness use permits. The park will allow commercially guided interpretive day hiking in the uplands zone and will evaluate locations on a case-by-case basis for this zone. Based on current use levels in each zone and to be consistent with climbing and overnight use, commercial allocation for interpretive day hiking will be established at 3% of annual hikers. Commercially guided interpretive day hiking would be a new activity in the uplands zone. Based on current commercial use in the Gunnison Gorge interface wilderness zone, the park reasonably assumes a similar trend of use in the uplands zone. Should monitoring suggest that commercially guided interpretive day hiking exceeds this allocation, park staff will adjust monitoring to a more frequent basis (i.e., monthly) to ensure that commercial use does not monopolize a recreational opportunity for the general public.

The Bureau of Land Management will continue to manage commercial use that originates outside of the park within the Gunnison Gorge National Conservation Area and enters the Gunnison Gorge interface wilderness zone. NPS staff will work closely with BLM staff to ensure commercial use on park lands is in alignment with NPS management of wilderness and desired conditions for this zone. Commercially guided interpretive day hiking occurs in conjunction with other commercially provided activities such as fishing, river-running, and overnight use. See section below for commercial allocation in the Gunnison Gorge interface wilderness zone.

Camping/Overnight Use

Commercially guided camping and overnight use is an appropriate activity in the Gunnison Gorge interface wilderness zone and the uplands zone. In the inner canyon wilderness zone, these activities will only be allowed in conjunction with commercially guided climbing.

Commercially guided overnight use occurs at the Margaritaville campsite within the Gunnison Gorge interface wilderness zone. Visitors access the campsite via the Chukar Trail from the Gunnison Gorge National Conservation Area, which is managed by the Bureau of Land Management. Commercially guided overnight use in the inner canyon wilderness zone occurs in conjunction with climbing and is authorized by the wilderness use permit system. Commercially guided overnight use would be a new activity in the uplands zone. Based on the commercial use from the Gunnison Gorge interface wilderness and the inner canyon wilderness zones, the park reasonably assumes a similar trend of use in the uplands zone. The park will evaluate potential

locations for commercial use in the uplands zone as requests are submitted and commercial service providers would be subject to wilderness use permit requirements.

Based on current use levels in these zones, the park does not anticipate that the allowance of commercial services in these management zones will monopolize use. Based on current use levels in each overnight use area and for consistency with climbing and overnight use, the commercial allocation for overnight use is established at 3% of total annual overnight users in the uplands zone. See section below for commercial allocation in the Gunnison Gorge interface wilderness zone.

River-Running

Commercially guided river-running is an activity proper for achieving the purpose of wilderness in the Gunnison Gorge interface wilderness zone. The Gunnison Gorge interface wilderness zone is adjacent to the Gunnison Gorge Wilderness within the BLM-managed Gunnison Gorge National Conservation Area. The Bureau of Land Management manages permits for commercial river-running, fishing, hiking, and camping/overnight use that originate in the national conservation area and enter the Gunnison Gorge interface wilderness zone. Given the nature of the commercially provided trips in this zone, visitors may participate in more than one of these activities during their trip. Please refer to the section titled “Commercial Allocation for Activities in the Gunnison Gorge Interface Wilderness Zone” below for more information. As previously stated, commercially guided river-running will not be offered in the inner canyon wilderness zone or the uplands zone.

Fishing

Commercially guided fishing is an activity proper for achieving the purpose of wilderness in the Gunnison Gorge interface wilderness zone. Commercially guided fishing is offered along the Gunnison River in the BLM-managed national conservation area and into the park. As previously stated, commercially guided fishing will not be offered in the inner canyon wilderness zone or the uplands zone as the activity does not align with desired conditions for this zone to maintain wilderness character.

The Bureau of Land Management manages permits for river-running, fishing, hiking and camping/overnight use that originate in the BLM-managed national conservation area and enter the Gunnison Gorge interface wilderness zone. The Bureau of Land Management will continue to administer commercial use within the park and an MOU may be established to ensure commercial service providers are abiding with NPS management of wilderness. The National Park Service will monitor activity within this zone and work closely with the Bureau of Land Management to ensure that commercial use does not monopolize noncommercial use of this area of the Gunnison Gorge interface wilderness zone (see following section).

Commercial Allocation for Activities in the Gunnison Gorge Interface Wilderness Zone

Primary visitor use of the Gunnison Gorge interface wilderness zone—both commercial and public—occurs at the Margaritaville campsite. Current monitoring efforts by Bureau of Land Management staff suggest that commercial and public use of Chukar Trail to access Gunnison Gorge interface wilderness zone is relatively low. In recent years, there are no known instances of commercial overnight use at Margaritaville campsites within the national park. However, eight commercial outfitters are authorized to use the campsites if needed. During the planning process, visitor capacity for the Margaritaville campsite was identified as 16 PIOD (see Chapter 6: Visitor Capacity). Given the desired condition for a visitor experience that is challenging, adventurous, and provides for a diversity of opportunities which may involve self-reliance and use of wilderness skills,

managing commercial use in the campsites promotes opportunities for visitors to experience solitude and other wilderness qualities. There is potential that commercially guided groups could adversely impact noncommercial visitors' experience of wilderness by degrading the opportunities for solitude or undeveloped and natural qualities.

Park and BLM staff have anecdotally reported that the commercial services primarily provide guided services for fishing, hiking, and overnight use of the campsite, with rare occurrences of river-running. Given that current commercial use of the zone is relatively low at this time, the interdisciplinary team identified a need to collaborate further with Bureau of Land Management staff to jointly manage this area of the park. Increased NPS involvement in the management of commercial use in this zone will allow park staff to better understand use—both commercial and public—of this area. At this time, commercially guided groups should not exceed four people per group and primary use of this zone should remain public. As monitoring of commercial use within the zone increases and more data become available, the park may establish a commercial allocation for the Gunnison Gorge interface wilderness zone. Commercial service providers should encourage Leave No Trace principles to ensure desired conditions for the Margaritaville campsite may be achieved and wilderness character is preserved.

PART TWO

ENVIRONMENTAL ASSESSMENT



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CHAPTER 1: PURPOSE AND NEED

PLANNING AREA

Part 2 of the wilderness and backcountry management plan (“Environmental Assessment”) was prepared to analyze impacts of wilderness and backcountry plan elements with potential to significantly affect the human environment in Black Canyon of the Gunnison National Park (Black Canyon of the Gunnison NP) and Curecanti National Recreation Area (Curecanti NRA). The purpose and need for the plan, scope of the analysis, and relevant environmental issues and associated impact topics are outlined below. Those plan elements that do not have the potential to significantly affect the environment are not presented nor analyzed as a part of this environmental assessment.

The planning area is the designated wilderness (approximately 15,599 acres) and undeveloped backcountry of Black Canyon of the Gunnison National Park (approximately 10,370 acres) and the land-based backcountry lands and resources at Curecanti National Recreation Area (approximately 30,330 acres). Developed, or frontcountry, areas at both units are excluded from this plan. These areas include roads, visitor centers, marinas and boat ramps, parking lots, scenic overlooks with associated turnouts and trails, picnic areas, and a 100-foot buffer zone around the frontcountry and developed areas. The backcountry includes some campsites, which are addressed in this plan. This plan does not address water-based recreation on the reservoirs. See part 1, chapter 1 for more details about the planning area and appendix B for a list of areas and facilities not included in the scope of this planning effort.

PURPOSE

The purpose of the wilderness and backcountry management plan is to accomplish the following:

- Provide an integrated framework for decision making for the stewardship of designated wilderness and backcountry lands of Black Canyon of the Gunnison National Park and the backcountry lands of Curecanti National Recreation Area.
- Balance the demands of visitor activities to protect resources and wilderness character.
- Provide long-term direction to preserve wilderness and backcountry resources while offering a spectrum of visitor opportunities across both units.
- Identify resource indicators and measures to monitor changes in condition as well as visitor capacities in fulfillment of legal requirements (1978 National Parks and Recreation Act).

A detailed description of the purpose and need for the plan is located in part 1, chapter 1.

NEED

The wilderness and backcountry plan is needed because underlying trends such as increasing visitation, if not addressed in planning and management strategies, could result in the establishment of incompatible uses and entrenched harmful practices, which in turn could impact natural resources, high-quality visitor opportunities, wilderness character and backcountry conditions. More specifically, the plan is needed to address the following key planning issues:

- The lack of a current comprehensive management framework for wilderness and backcountry lands
- Increasing frontcountry visitation and its effect on wilderness/backcountry resources, such as soundscape and viewshed impacts, inner canyon and upland hiking access, and fishing and climbing access
- Lack of consistent management of overnight use (e.g., formalized camping and availability of campsites)
- The lack of a formal climbing management plan
- Increased public interest in backcountry and wilderness recreation opportunities
- Changes in types of use and emerging uses on the Gunnison River in Black Canyon of the Gunnison NP
- Lack of consistent commercial services guidance for wilderness and backcountry lands
- Lack of measures/indicators, standards/thresholds, visitor capacities, and monitoring guidance and protocols for wilderness and backcountry lands

CHAPTER 2: MANAGEMENT ALTERNATIVES

INTRODUCTION

This chapter analyzes two alternatives, i.e., Alternative A: No Action and Alternative B: NPS Proposed Action and Preferred Alternative. These two alternatives are summarized in the following text.

Under alternative A, the National Park Service would continue current wilderness and backcountry management direction provided by the 1997 general management plan. As the no-action alternative, the analysis of alternative A provides a benchmark to compare what would happen to the environment if current management were to continue versus what would happen to the environment if the preferred alternative is selected for implementation.

The general management direction and management strategies described in part 1 of this wilderness and backcountry management plan correspond to alternative B, the NPS preferred alternative. Alternative B proposes a comprehensive plan that would maintain or improve wilderness and backcountry conditions in Black Canyon of the Gunnison NP and Curecanti NRA. To accomplish this objective, the plan would update management zones and corresponding desired conditions to provide a spectrum of wilderness and backcountry opportunities; enhance public understanding of wilderness character and backcountry values; and restore, preserve, and enhance wilderness character and backcountry resources.

In addition to summarizing the two alternatives, this chapter also describes mitigation measures. The impacts of implementing each alternative are discussed in part 2, Chapter 3: Affected Environment and Environmental Consequences. One alternative that was considered during the planning process but was not carried forward for detailed analysis in the environmental assessment is described in appendix F.

ALTERNATIVES

Table 1 outlines the proposed management strategies and actions included in alternative B that have the potential to significantly affect the human environment, including park resources and visitor experiences. These strategies and actions are grouped by management topic. Current, ongoing management strategies and actions for these topics are also presented in the column for “Alternative A: No Action.” Other management strategies and actions under these alternatives do not have the potential to significantly affect the human environment and therefore are not described in this environmental assessment. Any prohibited uses per the Wilderness Act (16 United States Code [USC] 1131) that are needed to implement the plan would be evaluated and documented through a minimum requirements analysis before taking those actions.

Table 1. Alternatives Comparison Matrix

| Management Topic | Corresponding Unit | Alternative A: No Action | Alternative B: NPS Proposed Action and Preferred Alternative |
|-------------------|---------------------------------|---|--|
| Management Zoning | Black Canyon of the Gunnison NP | Existing zoning from the 1997 general management plan would continue to guide management of | Under the preferred alternative, new, updated management zoning and desired conditions would guide |

| Management Topic | Corresponding Unit | Alternative A: No Action | Alternative B: NPS Proposed Action and Preferred Alternative |
|------------------|--------------------|---|--|
| | and Curecanti NRA | <p>backcountry and wilderness lands at Black Canyon of the Gunnison NP and backcountry at Curecanti NRA. The 1997 general management plan refers to these management zones as “management prescriptions.”</p> <p>Management prescriptions for Black Canyon of the Gunnison NP include</p> <ul style="list-style-type: none"> • Developed (outside the project area) • Motorized Rural (outside the project area) • Semiprimitive • Protected Resource Area • Primitive (encompasses the majority of the wilderness and backcountry planning area) • Scenic Easement (outside the project area) • Private Inholding (outside the project area) <p>Management prescriptions for Curecanti NRA include:</p> <ul style="list-style-type: none"> • Motorized Rural • Semiprimitive • Protected Resource Area | <p>management of wilderness and backcountry at Black Canyon of the Gunnison NP and backcountry at Curecanti NRA. (For maps and detailed description of proposed management zoning and desired conditions, see part 1, chapter 2).</p> <p>At Black Canyon of the Gunnison NP, the zoning changes would entail differentiation of wilderness versus backcountry as well as unique management guidance for the inner canyon versus the uplands. Subzones would also be delineated based on factors such as geology/terrain and resource sensitivity in those areas. Zoning would be updated from one large zone (Primitive) to three zones and five subzones (listed below).</p> <p>At Curecanti NRA, the zoning changes would entail differentiating between the eastern and western portions of the recreation area. The eastern portion would be managed for open and secluded desired conditions while the western portion of the recreation area would be remote and rugged. Zoning for the backcountry would be updated from Semiprimitive and Protected Resource Area (management prescriptions from the 1997 general management plan) to the East Portal–Morrow Point backcountry zone and Blue Mesa backcountry zone.</p> <p>Proposed management zones and subzones for Black Canyon of the Gunnison NP are as follows:</p> <ul style="list-style-type: none"> • Inner Canyon Wilderness Zone <ul style="list-style-type: none"> ○ Inner Canyon Primitive Wilderness Subzone ○ Inner Canyon Pristine Wilderness Subzone • Uplands Zone <ul style="list-style-type: none"> ○ Uplands Backcountry Subzone ○ Uplands Primitive Wilderness Subzone |

| Management Topic | Corresponding Unit | Alternative A: No Action | Alternative B: NPS Proposed Action and Preferred Alternative |
|------------------------------|---------------------------------|--|---|
| | | | <ul style="list-style-type: none"> ○ Uplands Pristine Wilderness Subzone • Gunnison Gorge Interface Wilderness Zone <p>Proposed management zones for Curecanti NRA include</p> <ul style="list-style-type: none"> • East-Portal Morrow Point Backcountry Zone • Blue Mesa Backcountry Zone <p>(Refer to appendix B for a list of areas outside the wilderness and backcountry management planning area and associated management zoning.)</p> |
| Wilderness Use Permit System | Black Canyon of the Gunnison NP | <p>The current access permit system, with a maximum number of people per day at each route (access point), would be continued along with a set of measures and standards for adaptively managing the system.</p> <ul style="list-style-type: none"> • Overnight use at East Portal routes is managed as a part of the wilderness use permit system to manage the timing and location of use and to distribute visitors so that encounter rates are not exceeded. • Issue permits for the South Rim Gunnison Route on an in-person basis only (not all members of the party need be present) during peak season to ensure one permit per person is issued. • Regulate the number of new climbing routes using the permit process that assesses concentration of routes in the area of proposed new route. • Continue requiring permits for overnight North Rim uplands use. | Continue current management. In the future, the National Park Service may evaluate an online permitting system through Recreation.gov. |

| Management Topic | Corresponding Unit | Alternative A: No Action | Alternative B: NPS Proposed Action and Preferred Alternative |
|-------------------------------|---|---|---|
| Backcountry Use Permit System | Curecanti NRA | The National Park Service would continue the use of backcountry use permits to monitor use of campsites along the shore of Morrow Point Reservoir. | The National Park Service would continue current management. If use levels were to increase in the future, the National Park Service could manage additional backcountry locations such as trails, campsites, and climbing areas using backcountry use permits. |
| Climbing Management | Black Canyon of the Gunnison NP and Curecanti NRA | The National Park Service would continue to operate under the guidance of its interim climbing management plan for Black Canyon of the Gunnison NP and Curecanti NRA. The guidance in this unofficial (not formally adopted) plan is outdated and does not provide a clearly defined set of guidelines for climbers and NPS managers to administer requests to install new fixed equipment or replace old fixed equipment in accordance with NPS policies and guidelines. The National Park Service would continue to enforce seasonal closures in climbing areas every spring and summer (typically March through July) for the protection of nesting raptors. | <p>The National Park Service would adopt a climbing management plan (see part 1, chapter 4) that provides clear information and guidelines for climbers and NPS managers to maintain the fundamental resources and values of Black Canyon of the Gunnison NP and Curecanti NRA, while providing for recreational climbing activities. The climbing management plan details the application process for requesting placement of new fixed anchors or equipment, as well as replacement of fixed anchors or equipment at both park units, and criteria the National Park Service would use for authorizing fixed equipment. The National Park Service would evaluate requests for new fixed equipment within the Black Canyon of the Gunnison Wilderness by conducting a minimum requirements analysis (MRA). Actions and strategies that have the potential to impact park resources (and thus are analyzed in this environmental assessment) include</p> <ul style="list-style-type: none"> • Requirement for climbers to submit a written application for authorization to install new fixed equipment or replace old fixed equipment before the first ascent. • Continue to enforce seasonal closures in climbing areas every spring and summer (typically March through July) for the protection of nesting raptors. |
| Campsite Management | Black Canyon of the Gunnison NP | <p>Inner Canyon Campsites</p> <ul style="list-style-type: none"> • Existing campsites at the bottom of the inner canyon routes (Red Rock, Warner, Gunnison, Tomichi, Pinyon Draw, Long Draw, Slide Draw) are undesignated; however, | <p>Inner Canyon Primitive Wilderness Subzone Campsites (corresponding to Inner Canyon Campsites in alternative A)</p> <ul style="list-style-type: none"> • Campsites in the proposed inner canyon primitive wilderness subzone would be designated to minimize |

| Management Topic | Corresponding Unit | Alternative A: No Action | Alternative B: NPS Proposed Action and Preferred Alternative |
|------------------|--------------------|--|--|
| | | <p>certain areas are repeatedly used and disturbed. These campsites would remain undesignated and would continue to be operated on a first-come, first-served basis.</p> <p>Inner Canyon East Portal Campsites</p> <ul style="list-style-type: none"> Campsites at the bottom of the East Portal routes would remain undesignated and first-come, first served. | <p>resource impacts from overnight use. Campsites would be monitored and managed to ensure that natural qualities are maintained or improved and to provide solitude by ensuring adequate distance between campsites. The National Park Service would better delineate campsites, which could involve moving rocks and brush from the surroundings. This would be done using nonmechanized hand tools such as shovels, rakes, pruners, and saws. The National Park Service would rehabilitate areas that have been affected by use and would restore "unendorsed/undesignated campsites" to natural conditions. The National Park Service would include the location of wilderness campsites on maps for overnight campers and provide better instructions to visitors about how to find campsites. To minimize impacts on the wilderness character quality of primitive and unconfined recreation, the National Park Service would not assign individual sites to visitors in this subzone. Visitors would be able to choose which site they wanted based on what is available when they arrive on site.</p> <p>Inner Canyon Pristine Wilderness Subzone Campsites (corresponding to East Portal Campsites in alternative A):</p> <ul style="list-style-type: none"> The National Park Service would continue to allow wilderness camping in the proposed inner canyon pristine wilderness subzone and sites would remain undesignated and available on a first-come, first-served basis. However, the National Park Service would encourage visitors to camp no longer than one night maximum in one spot as one way of educating visitors about Leave No Trace principles. |

| Management Topic | Corresponding Unit | Alternative A: No Action | Alternative B: NPS Proposed Action and Preferred Alternative |
|--|---|--|---|
| Inner Canyon Waste Management | Black Canyon of the Gunnison NP | The National Park Service would retain the existing pit toilets at the bottom of Gunnison and Warner routes and continue to encourage visitors to pack-in and pack-out waste at these routes as well as the other routes. | The National Park Service would retain the existing pit toilets at the bottom of Gunnison and Warner Routes and would phase in a required pack-in and pack-out waste management policy on other routes into wilderness in the inner canyon. In the future, the National Park Service would consider other options for retrofitting, replacing, or removing the pit toilets. The National Park Service would also provide sufficient notice and post information on the websites and backcountry interpretive boards regarding removal of pit toilets and the switch to pack-out requirements. |
| Visitor-Created Trail Restoration | Black Canyon of the Gunnison NP and Curecanti NRA | The National Park Service would continue to restore visitor-created trails to natural conditions using a variety of techniques. Techniques include vertical mulch/dead planting, soil preparation, revegetation, physical barriers, education, and enforcement. These techniques may involve nonmechanized hand tools (shovels, rakers, pruners, saws, rock bars, etc.), rock/plant litter, wire/fencing, posts, or stakes. Only natural materials would be used in the wilderness. Wheelbarrows may be used in the backcountry only (see appendix C for more details). | No change from current management |
| Removal of Unnecessary Facilities and Structures | Black Canyon of the Gunnison NP | The National Park Service would continue to remove unnecessary facilities and structures at both units (wilderness and backcountry), such as fencing and stock ponds, on a site-specific basis. Mechanized equipment would be needed to remove larger infrastructure (such as stock ponds, which usually involves a front-end loader tractor to remove the dam and recontour back to natural conditions). Within wilderness, use of mechanized equipment would be evaluated, documented, and implemented, if appropriate, through a minimum requirements analysis (MRA) process. Fence removal would involve hand tools. | The National Park Service would continue to remove unnecessary facilities and structures at both units but would expand the types of structures removed to include irrigation systems, two-track roads, and livestock trailing routes. Underground water infrastructure would be removed with motorized equipment such as a front-end loader tractor. Livestock trailing restoration would involve similar techniques and methods as visitor-created trail restoration. Restoration would likely employ hand tools, vertical mulch/dead planting, soil preparation, revegetation, and physical barriers (natural materials). Two-track road restoration methods would be similar to livestock trailing; however, restoration may require motorized equipment such |

| Management Topic | Corresponding Unit | Alternative A: No Action | Alternative B: NPS Proposed Action and Preferred Alternative |
|---|---|---|---|
| | | All disruptive actions would be implemented outside sensitive times for wildlife, such as breeding. | as tractors to remove culverts, recontour soils, and return to natural drainage. For any prohibited uses in wilderness, these actions would be evaluated, documented, and implemented if, appropriate, using an MRA process. All disruptive actions would continue to be implemented outside sensitive times for wildlife, such as breeding. |
| Measures, Standards, and Visitor Capacities | Black Canyon of the Gunnison NP and Curecanti NRA | The 1993 Black Canyon of the Gunnison NP (then a national monument) resource management plan and the 2010 Curecanti NRA motorized vehicle access plan would continue to provide guidance for monitoring and managing use levels. The 1993 resource management plan identified resource issues (natural and cultural resources), prioritized associated studies and monitoring projects, and identified backcountry use limits for seven inner canyon routes and one climbing area at Black Canyon of the Gunnison NP (refer to part 1, chapter 6, for more information about resource management plan daily use limits). The 2010 motorized vehicle access plan describes monitoring all areas of Curecanti NRA by law enforcement rangers, traffic counters to monitor vehicle use and visitation, and condition assessments of routes and cultural sites. | Measures (i.e., indicators), standards (i.e., thresholds), and visitor capacities would be established for the wilderness and backcountry, using the Interagency Wilderness Character Monitoring guidance and the Interagency Visitor Use Management Council Framework and Guidebooks (Landres et al. 2015; IVUMC 2016, 2019a, 2019b). Standards/indicators measure conditions that are related to visitor use, and monitoring is conducted to track those conditions over time. The results of monitoring are used to inform and select strategies to be used by park managers to not exceed the maximum amount of visitor use that can be accommodated for a site (visitor capacity). Twenty-six analysis areas were identified for Black Canyon of the Gunnison NP and 21 were identified for Curecanti NRA. The standards to be monitored at Black Canyon of the Gunnison NP and Curecanti NRA are described in part 1, chapter 5. Visitor capacities are described in part 1, chapter 6. |
| Commercial Services | Black Canyon of the Gunnison NP and Curecanti NRA | Commercial services under current management would continue to provide guided services, including guided climbing within the inner canyon, guided hiking and overnight use in wilderness in the westernmost portion of Black Canyon of the Gunnison NP (administered by Bureau of Land Management), and guided horseback riding in Curecanti NRA. A wilderness use permit is required for guided climbing within the inner canyon. | The National Park Service would continue to provide existing commercial services within Black Canyon of the Gunnison National Park and Curecanti National Recreation Area. A commercial services analysis was conducted and deemed that other commercial services, such as guided climbing in Curecanti NRA and guided overnight use in the proposed uplands zone of Black Canyon of the Gunnison NP may be permitted on a case-by-case basis. In addition, a commercial allocation was identified for commercial services in Black Canyon of the Gunnison NP to ensure that guided services do not monopolize |

| Management Topic | Corresponding Unit | Alternative A: No Action | Alternative B: NPS Proposed Action and Preferred Alternative |
|------------------|--------------------|--------------------------|--|
| | | | opportunities for the public to access the parks for recreation. In the Gunnison Gorge interface wilderness zone, commercial group size would be reduced from 12 to 4, including guides, to ensure desired conditions for visitors to experience solitude are being maintained and achieved. |

MITIGATION MEASURES AND BEST PRACTICES COMMON TO BOTH ALTERNATIVES

Congress charged the National Park Service with managing the lands under federal government stewardship “in such manner and by such means as will leave them unimpaired for the enjoyment of future generations” (NPS Organic Act, 54 USC Section 100101 et seq). As a result, the National Park Service routinely evaluates and implements mitigation measures whenever conditions are present that could adversely affect national park system resources. To ensure that implementation of the wilderness and backcountry management plan protects natural and cultural resources unimpaired for future generations and provides for a high-quality visitor experience, a consistent set of mitigation measures and best management practices that align with federal regulations and NPS *Management Policies 2006* would be applied to all management actions. The National Park Service has generated a list of mitigation measures, as well as general best management practices, for key topic areas related to this plan.

Natural Resources

- To the extent practicable, any project development would avoid dynamic systems such as floodplains and unstable geomorphological features such as alluvial fans, and biological communities such as springs, wetlands, rare community types, and other sensitive resources or species.
- Request and acquire maps of sensitive species habitats, species movement corridors, at-risk species occurrence and habitat, and “watch-lists” for priority invasive species to inform best management practices of natural resources. Potential sources are park files and expertise, IPaC (US Fish and Wildlife Service website for federal at-risk species, critical habitat, migratory birds, wetlands, and potential conservation measures), state Heritage Programs, and other state resource management resources.
- Disturbance to vegetation and ground will be avoided as much as possible and contained to as small a footprint as possible while meeting project objectives. To the greatest extent possible, use paved or already disturbed areas for the staging of equipment and supplies.
- Avoid project development in saturated soils. Wet soils are more likely to be compacted by vehicular traffic.
- Limit site disturbance to approved project limits. Define project limits near sensitive sites (e.g., where nests may exist) prior to restoration using removable flagging or similar methods. Ensure project participants clearly understand project site limits. Avoid operating equipment, staging equipment, and supplies, and walking or disturbing soils, biotic crusts,

natural surfaces, grasses, forbs, shrubs, and other natural materials in areas outside approved project limits.

- All restoration projects would require selection and use of equipment that minimizes damage to natural resources including plants, soils, and geological features.
- Evaluate on-site materials and designs for potential to attract and harm wildlife (e.g., rodents are attracted to irrigation piping).
- Project activities would be assessed for potential establishment and spread of invasive species. Work with park vegetation specialist to identify locations where invasive plants would pose a threat to resources.
- Ensure erosion control measures are in place before beginning project development work. If erosion control products are used, they should be invasive weed and seed free and not hazardous to wildlife. Include specific language in contract specifications regarding use of certified weed and seed free straw or coir bales to reduce probability of weed contamination. Erosion matting and blankets should be selected for performance criteria specific to slope, soils, high intensity precipitation events, biodegradability, or eventual removal.
- Ensure that funding and responsible parties are identified for monitoring, post-project evaluation and treatment of invasive species, as needed.
- Ensure that all borrow materials used in project activities are free of noxious or invasive plants, or properly treated before use or import.
- Ensure all equipment used for project activities is inspected for noxious or invasive species and decontaminated prior to entering the park. If necessary, provide staging areas that include equipment washing stations to exclude invasive plant seeds from entering park and project site.
- The restoration/revegetation design should be compatible with applicable cultural landscape treatments. Where feasible, implement the Society for Ecological Restoration's International Principles and Standards for the Practice of Ecological Restoration.
- Under the supervision of park resource management staff, native plant materials should be used in site restoration activities. If applicable, site restoration contracts should include a) clear requirements for contractors to hire qualified revegetation sub-contractors, and b) clear performance criteria based on desired resource outcomes (e.g., total native plant cover, number of native plant species established). Identify potential revegetation species for early cover establishment that will not inhibit the recruitment of later plantings or naturally seeding species. Species selection should be compatible with surrounding vegetation, and seed sources should be developed early in the planning and design process. Sources would be approved by qualified resource management staff.
- Prior to project development activities, complete hazard tree evaluations within project area and implement mitigations if necessary (i.e., pruning or removal).
- Consult with park fire management program to identify "Fire Wise" practices for site development and operation.
- Stabilize restoration site access as needed to reduce tracking sediment (mud and dirt) onto public roads by vehicles.
- Follow proper installation procedures for any sediment control measures used during project development activities.
- Consider timing operations, both seasonal and temporal, to minimize direct or indirect (e.g., light and noise) disturbance on wildlife during nesting, rearing of young, or other important

seasons. Consult with NPS, USFWS, or state Natural Heritage biologists to avoid sensitive periods.

- Ensure that there are no accumulated attractants, such as trash piles, that would lure habituated wildlife. If garbage receptacles are needed on site, they should be wildlife-proof containers. Provide signs, education, and outreach materials to construction crews regarding food storage and security.
- For new fencing activities, use wildlife-friendly designs to accommodate wildlife movements.

Cultural Resources

- Known archeological sites would be monitored to assess and document the effects of natural processes and human activities on the resources. Archeological resources would be left undisturbed and preserved in a stable condition to prevent degradation and loss of research values unless intervention could be justified based on compelling research, interpretation, site protection, or park development needs. Recovered archeological materials and associated records would be treated in accordance with *NPS Management Policies 2006*, *NPS Museum Handbook*, and 36 CFR Part 79.
- An archeologist who meets the secretary of the interior professional standards would assist facilities crews with compliance monitoring.
- The National Park Service would consult with associated American Indian tribes to ensure tribal perspectives are considered and that project actions are conducted in a way that respects their beliefs, traditions, and other cultural values.
- Should natural processes or human activity in the backcountry unearth previously undiscovered cultural resources, access would be limited in the area of discovery, and a qualified archeologist would be contacted to assess the artifacts and/or site. The National Park Service would consult with the state historic preservation office and the Advisory Council on Historic Preservation, as necessary, according to 36 CFR 800.13.

Visitor Use and Experience

Mitigation measures for visitors would include the following:

- Phase any restoration activities, temporary closures, noise abatement, visual screening, providing information to visitors on the purpose and need for restoration, and directional signage to help visitors avoid restoration activities.
- Implement timely and accurate communication with visitors regarding programs, services, sites, and permitted activities via new releases, visitor contacts, websites and social media, and signage.
- Operating plans for concessions would be revisited annually by NPS staff with concessioners to ensure desired conditions are maintained. Monitoring of the indicators and thresholds could result in changes to the timing, group size, and authorized areas for commercial tour operators.

CHAPTER 3: AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

INTRODUCTION

Consistent with the 2020 Council on Environmental Quality (CEQ) Regulations for Implementing NEPA (40 CFR 1501.9), guidance in Section 4.2.E of the 2015 *NPS NEPA Handbook* and NPS Director's Order 75a: *Civic Engagement and Public Involvement*, the National Park Service used civic engagement and interdisciplinary team discussions to identify important issues to be analyzed in detail in the environmental assessment, and to identify those issues that could be eliminated from further study.

As a result, the National Park Service determined the following issues should be carried forward for detailed analysis in the environmental assessment.

- Visitor Use and Experience
- Wilderness Character
- Vegetation and Soils
- Archeology

The analysis of environmental consequences of the no-action alternative and alternative B focuses on these same issues. The analysis is based on expected changes that each alternative would have on the current conditions of the resources and resource trends. This analysis includes beneficial and adverse impacts that would likely result from implementing any of the alternatives considered in this plan. The analysis also assumes NPS guidelines have been applied (such as the monitoring and best management practices described in appendixes B and C) to protect resources and visitor experiences. Finally, the analysis assumes that prior to the construction of facilities, site-specific environmental analyses, permitting, and consultation will occur (as appropriate), as further feasibility and site design studies are completed.

Additional issues and topics were considered during the development of this plan. See appendix E for brief descriptions of the impact topics discussed during the development process but ultimately dismissed from detailed analysis and the accompanying rationale.

VISITOR USE AND EXPERIENCE

Affected Environment

This section describes the aspects of visitor use and experience that may be affected by the wilderness and backcountry management plan alternatives.

Wilderness and Backcountry Visitor Use Characteristics and Trends

Black Canyon of the Gunnison NP and Curecanti NRA are located in south-central Colorado, a region known for an abundance of scenic, cultural, and year-round recreation opportunities, as well as wildlife, vegetation, and other resources. Curecanti and Black Canyon offer exceptional opportunities for outdoor recreation, wilderness and backcountry experiences, and educational opportunities for residents of the region as well as for travelers and visitors to the area. Visitation at Black Canyon of the Gunnison NP and Curecanti NRA is seasonal, reflecting the concurrent

influences of summer travel patterns and weather conducive to camping, fishing, and other outdoor activities. The majority of visitation takes place between the months of May and September, accounting for 74% and 77% of total annual use at Black Canyon of the Gunnison NP and Curecanti NRA, respectively (National Park Service 2018). Winter use is relatively low with 8% of the total annual visitation at each park occurring from December through March. Current levels of wilderness and backcountry use for both Black Canyon and Curecanti are estimated based on information self-reported by users obtaining wilderness use permits (Black Canyon only) and backcountry use permits issued in Curecanti, entrance permit sales, camping fees, traffic counts, and field observations of park staff.

Currently, management zoning from the 1997 general management plan provides general management direction for wilderness and backcountry at Black Canyon of the Gunnison NP and Curecanti NRA. The general management plan does not provide adequate guidance needed to sustainably manage visitor use, nor does it provide guidance for achieving a range of opportunities and experiences across wilderness and backcountry lands at both units. Continuation of management under the general management plan zones would result in outdated management inconsistent with new and emerging use types and patterns, resulting in adverse impacts on resources and the visitor experience.

Curecanti National Recreation Area

Based on the number of backcountry use permits issued annually and staff estimations, backcountry use at Curecanti NRA accounts for a small percentage of total annual visitor use and much of that is linked to water-based activity. Backcountry use in the national recreation area consists primarily of hiking, camping, rock/ice climbing, and visitors seeking solitude. Most visitors access the Curecanti backcountry by boat and use the shoreline for fishing, picnicking, swimming, and camping. Natural soundscapes are affected by traffic on the major highways through Curecanti NRA, boating on Blue Mesa Reservoir, and nearby development. Visitor use throughout the Curecanti NRA backcountry is described below by use type.

Hiking — Hiking opportunities in the backcountry are available on the western side of the recreation area. The trails experience low to moderate use, are moderate to strenuous difficulty, and range from 4 to 6 miles round trip.

Camping — Several backcountry boat-in campsites exist on all three reservoirs. Some campsites are developed and have amenities such as pit toilets, tables, and fire grates, while others are primitive and do not have any amenities. Most boat-in sites are secluded and receive moderate use in the summer months. Backcountry camping is allowed along the south shore of Blue Mesa Reservoir, and on Red Creek Island, except within a 0.5 mile of any developed area, bridge, maintained public road or other boat-in/backcountry campsite. Access to camping is only possible by boat and limited to a visit of 14 consecutive nights, and a total limit of 30 days during the calendar year. Overnight boat camping is not allowed within the main channel of Iola, Cebolla, and Sapinero basins, or within 0.5 mile of any developed area. Recreation area managers estimate there are an average of 500 backcountry campers per year. Backcountry campsites close to Crystal and Morrow Point Reservoirs are available on a first-come, first-served basis. Visitors must obtain a backcountry use permit to use the campsites on Morrow Point Reservoir.

Climbing — Some climbing occurs in the Gunnison River Canyon of the Blue Mesa area as well as ice climbing in a handful of locations. It is challenging to access climbing areas such as the Curecanti Needle and Pioneer Point, and there are just a handful climbing parties per year (approximately 4-

10). A climbing party is defined as at least two or more climbers. Ice climbing formations form in various stream/drainage areas, and do not form every winter.

Black Canyon of the Gunnison National Park

Backcountry and wilderness use comprises approximately 4% of annual recreation use at Black Canyon of the Gunnison NP (estimated using NPS use statistics, wilderness use permit data, and staff observations) (NPS 2018). Day users, other than climbers, including those visitors accessing the established wilderness in the uplands portion of Black Canyon, account for approximately 50% of the wilderness and backcountry use. Rock climbing represents 30% of inner canyon wilderness use, with modest overnight and multiday visitor use in the uplands portion of the park, accounting for the remaining 20% of wilderness use. Backcountry and wilderness use in the park is more seasonally concentrated than is overall use. Approximately 25% to 30% of total wilderness use occurs during July, and 75% to 80% of total annual use occurs in the four-month period of June through September. In part, weather is a major factor influencing seasonal use, as climbing, camping, and hiking use in the inner canyon increases with longer days and warmer weather. Visitor use in wilderness and backcountry lands of Black Canyon of the Gunnison NP is described by geographic area.

Inner Canyon Use — The narrow, nearly vertical walls of the inner canyon, with many faces in excess of 1,800 vertical feet, draw advanced-skill climbers, and inspire awe from visitors peering in from the rim. The canyon area below the rim comprises approximately half of the Black Canyon of the Gunnison Wilderness. Ledges on the canyon walls support nests of peregrine falcon, raven, and canyon wren among other wildlife species and attract bird watchers to the canyon walls. The Gunnison River supports rich aquatic life that attracts anglers to the canyon bottom for unparalleled fly-fishing experiences, particularly during the annual stonefly hatch. A wilderness use permit must be obtained to enter the wilderness. The wilderness use permit system manages all day use and overnight use within wilderness at Black Canyon.

Hikers and campers are also drawn to the canyon bottom. There are nine inner canyon routes. Most of the hiking routes into the canyon are steep, mostly rocky, have few signs, and are lightly maintained. First-come, first-served campsites are available at the bottom of most inner canyon routes. Fires are not permitted. Two pit toilets serve users of popular hiking routes. Human waste proliferation represents a management concern; therefore, visitors are encouraged to use pack-in and pack-out waste management. Overall, the canyon environment is primarily influenced by natural forces, showing little visual influence of humans.

Rock climbing opportunities within the inner canyon are technically challenging and require advanced skill. Black Canyon has long been established as a traditional area where use of fixed climbing equipment, such as bolts and anchors, is minimized. Most climbing parties consist of two to four members and are private users. Commercially guided climbing opportunities are available for those less familiar with the canyon or unaccompanied by a support party. The majority of climbing at Black Canyon takes place on the North Rim of the canyon. There are seasonal closures in climbing areas every spring and summer (typically March through July) for the protection of nesting raptors. The closure area includes Serpent Point and adjacent walls within 0.5 mile, including the area above the wall from the canyon edge extending 50 feet away from the canyon. Climbing routes included in this closure are East Arete, Southern Arete, West Arete, Forrest Walker, Journey through Mirkwood, Stratosfear, and The Dragon. Seasonal closures of climbing areas for protection of nesting raptors

continues to adversely impact visitor use and experience due to the temporary restriction of access to those areas. However, alternative climbing areas are open to climbers during that period.

Uplands Use — The uplands of Black Canyon include pinyon-juniper woodlands and open stands of Gambel oak and mountain big sagebrush providing habitat for many avian species, small mammals, elk, and mule deer. Hiking opportunities exist in the wilderness and backcountry upland areas. There are vast vistas and viewpoints during the day and clear, wide open night skies. Trails on the North Rim receive moderate to high use, and Oak Flat Trail on the South Rim is frequently used.

Gunnison Gorge Interface Use — The western portion of Black Canyon of the Gunnison NP is adjacent to the BLM-managed Gunnison Gorge National Conservation Area, providing additional recreation opportunities to visitors. The majority of visitor use in this portion of the park takes place at the Margaritaville campsite. Approximately 30-60 visitors use the campsite each year.

Ongoing and Planned Actions

As park visitation and trail use are expected to rise in the coming years, matching population growth in the surrounding region, increased congestion and crowding are expected to occur. Ongoing and planned projects will also impact future conditions. Ongoing implementation of the integrated pest management plan via mechanical and chemical methods to reduce impacts of and threats from invasive plants to native plant communities and other natural and cultural resources at Black Canyon of the Gunnison NP and Curecanti NRA helps to maintain and enhance the native plant and wildlife communities in both units. Maintenance activities for the restoration and rehabilitation of existing trails in the parks are also planned. Ongoing management actions to improve native plant and wildlife communities and improve trail conditions would result in some temporary disturbances to visitor use, such as closure of trails and areas for the duration of management activities; but once completed, would result in beneficial impacts on visitor use.

There are several active grazing allotments within or directly adjacent to the boundary of Black Canyon of the Gunnison NP and Curecanti NRA. The livestock are present periodically in most of the allotments, depending on the individual permit conditions under which the permittee operates. Grazing activities may result in occasional cattle and sheep sightings by visitors. Livestock management utility terrain vehicles (UTVs) may be active in the area on roads not open to public UTV use. Evidence of grazing may be present, such as trailing, livestock excrement and associated smells; visitors are instructed to keep gates closed; and there are periodic closures to visitor access. Livestock grazing may have both beneficial and adverse impacts on visitor use and experience. Some visitors may appreciate the opportunity to see livestock during their trip and learning about and adhering with management practices for livestock. Others may view livestock as a human-introduced modification to the natural landscape and find the smells and visitor regulations burdensome and detrimental to their experience. Closure periods adversely impact the visitor experience by preventing access to these areas.

Visitor-created trail restoration and removal of unnecessary facilities and structures would continue to take place in the wilderness and backcountry lands of both units. These activities result in temporary disturbances to visitor uses, such as closed areas and visual/auditory impacts for the duration of management activities. Once completed, these activities benefit visitor experience through enhanced resource conditions and natural landscapes.

At Curecanti NRA, backcountry campsites near Crystal and Morrow Point Reservoirs would continue to be available on a first-come, first-served basis, and the National Park Service would

continue to use backcountry use permits to monitor use of campsites along the shore of Morrow Point Reservoir. While first-come, first-served campsites have a beneficial impact on the visitor experience for spontaneity and flexibility for visitors who prefer to arrive unscheduled to their destination, if visitors arrive to find their desired campsite or all campsites occupied, this may result in adverse impacts on the visitor experience. The voluntary backcountry use permit system has beneficial impacts on the visitor experience and safety by providing a record for NPS personnel to aid visitors should anything go awry during their trip.

At Black Canyon of the Gunnison NP, park staff would continue to use the wilderness use permit as a management strategy. The wilderness use permit system allows visitors to experience the magnificent inner canyon and other areas of wilderness while improving the National Park Service's ability to manage crowding and congestion. The permit system helps prevent visitor frustration resulting from the inability to access or participate in a specific recreation experience in the inner canyon because of congestion. However, the permit system may negatively affect visitors who prefer to arrive unscheduled to their destination. Some visitors may also be inconvenienced by having to obtain a permit, which would reduce spontaneity and flexibility in visiting the inner canyon. It would also require planning and knowledge to access the experience, which may prevent those who are less-experienced visitors to wilderness.

Impacts on Visitor Use and Experience

Alternative A: No-Action Alternative

Under the no-action alternative, visitor use and experience would remain the same as described in the affected environment. The current impacts on and trends in visitor use and experience would continue to occur.

Alternative B: Action Alternative – NPS Preferred Alternative

Under the preferred alternative, new wilderness and backcountry zones and associated desired conditions for wilderness and backcountry at Black Canyon of the Gunnison NP and for backcountry lands of Curecanti NRA would provide updated management direction for visitor use and experience across these landscapes. The new zones would offer a spectrum of wilderness and backcountry opportunities throughout both units, providing full consideration and inclusion of equitable, accessible, and inclusive experiences and related activities that support a diverse range of visitor interests and preferences. The types of facilities and services appropriate to support this range of opportunities and activities would be clearly identified, with intentional consideration of each zone's resource sensitivities and skill levels required. The clearly defined backcountry and wilderness zones would provide for a range of opportunities, which would enhance visitor use and diverse experiences.

In the future, the National Park Service may consider using an online permitting system for the wilderness use permits, such as Recreation.gov. Converting the permit system from in-person to online would have both beneficial and adverse impacts on visitor use and experience. Depending on the parameters of the online system, it could allow for visitors to plan ahead and secure their permit prior to arrival, which would be an improvement from the current system. However, an entirely online system could also disadvantage visitors who do not plan sufficiently or would prefer to obtain a permit in-person, visitors who do not have internet access, or visitors who attempt to obtain a permit within the park where there is no cellular or mobile phone service.

Under the preferred alternative, measures, standards, and visitor capacities have been identified to monitor resource conditions and visitor experiences, and to identify the maximum amounts and types of use that an area can accommodate while achieving and maintaining the desired resource conditions and visitor experiences that are consistent with the purposes for which the area was established (see part 1, chapters 5 and 6). Over the course of monitoring, if thresholds are consistently being exceeded and desired conditions are not being met, the National Park Service would implement management actions to modify amounts and types of use to achieve desired conditions. For some areas, where current use levels are so far below the identified capacity, the National Park Service will conduct future planning and compliance to identify strategies to manage use levels should amounts and types of use begin to exceed thresholds and compromise desired conditions. This iterative practice of monitoring, implementing potential management strategies, and then continuing to monitor to gauge the effectiveness of those actions allows park managers to maximize benefits for visitors while achieving and maintaining desired conditions for resources and visitor experiences in a dynamic setting. This iterative framework for managing amounts and types of use has a beneficial impact on visitor use and experience by protecting resources and providing for sustainable visitor experiences. If, in the future, indicators related to amounts and types of visitor use begin approaching thresholds and additional management strategies and compliance need to be implemented, there could be adverse impacts on visitor use and experience because of reduced opportunities for spontaneous recreation.

A commercial allocation was also identified for locations in wilderness within Black Canyon of the Gunnison NP. Allocation is the process of distributing visitor capacity among a variety of uses to achieve or maintain desired conditions. Identifying an allocation for commercial use prevents commercial use from monopolizing recreation use at the expense of the general public. Because the commercial allocations, at 3% of total use, have been established well above the current commercial use levels, this has a beneficial impact on visitor use and experience by maintaining access for both commercial users and public use. In addition, the commercial allocation would benefit visitor experience by providing introductory opportunities for visitors who may not engage in the activity otherwise. While new commercial services may be provided in the future, they would be managed to maintain desired conditions and would be evaluated on a case-by-case basis if there is expressed interest for commercial use in the park. The reduction in commercial group size from 12 to 4 within the Gunnison Gorge interface wilderness zone would benefit visitor experience because it would help ensure that commercial use does not monopolize recreational opportunities for the public and help ensure that desired conditions are being maintained. Simultaneously, this reduction in group size would adversely impact visitor use by reducing opportunities for commercially guided services within this zone.

Under the preferred alternative, a climbing management plan would be adopted. This plan would require climbers to submit a written application for new or replacement fixed equipment requests and a written authorization or special use permit would be issued before the first ascent. Requiring climbers to submit an application and obtain approval before their first ascent has both beneficial and adverse impacts on visitor use and experience. By actively managing the amount of fixed equipment on rock climbing features, the resources will be better preserved for sustainable climbing into the future and authorized fixed equipment placements will have been thought through and safely placed/located. However, visitors may also be inconvenienced by the requirement to apply in advance, and there is the possibility their desired equipment placement will be denied. These requirements may adversely impact climbers who prefer to climb spontaneously, with the ability to install fixed equipment in an unrestrained manner.

Under the preferred alternative, campsites in the proposed inner canyon primitive wilderness subzone of Black Canyon would be designated and identifiable on maps to minimize resource impacts from overnight use. Though sites would not be assigned to visitors, this action may impact visitor use and access by eliminating the opportunity for visitors to find and create their own site. Conversely, there may also be beneficial impacts on visitor use and experience because some visitors may appreciate the convenience of a designated site. Within the inner canyon pristine wilderness subzone, campsites would remain undesignated; however, the National Park Service would encourage visitors to camp no more than one night in a particular spot to minimize impacts on vegetation, soil, and habitat, which may inconvenience multi-day users to who will have to pack up and set up a new camp spot for each night of their trip. This would also benefit visitor use by resulting in enhanced resource conditions for visitors to enjoy while recreating. Under the action alternative, over time the National Park Service would phase in the requirement for visitors to use pack-in and pack-out waste management, possibly retrofitting, replacing, or entirely removing the existing pit toilets in the future. The pack-in and pack-out waste management policy may adversely impact visitors by requiring visitors to pack out their waste, which may be considered a burden to some visitors. The beneficial effect to visitor experience would be improved resource quality and reduced waste in the canyon. Under the preferred alternative, the National Park Service would expand the removal of unnecessary facilities and structures to include irrigation systems, two-track roads, and livestock trailing routes. Because the techniques and methods for removal are the same, the impact to visitor use and experience would not change, unless the amount and frequency of the projects were to increase.

Under the preferred alternative, if use levels were to increase within the backcountry of Curecanti NRA in the future, the National Park Service could manage additional backcountry locations such as trails, campsites, and climbing areas using backcountry use permits. A permit system would improve the ability to manage crowding and congestion and prevents visitor frustration over being able to access a recreation experience in the backcountry. However, the permit system may negatively affect visitors who prefer to arrive unscheduled to their destination. Visitors may also be inconvenienced by having to obtain a permit, which would reduce spontaneity and flexibility in visiting the backcountry. It would also require planning and knowledge to access the experience, which may prevent those who are less-experienced visitors to backcountry.

Implementing the preferred alternative would result in more active management of visitor use, including regulations such as a commercial allocation, fixed equipment preauthorization, campsite use, and pack-in, pack-out waste management policy. In the context of ongoing and planned actions at Black Canyon of the Gunnison NP and Curecanti NRA, such as the wilderness use permit system and livestock grazing closures, these actions would adversely impact visitor use and experience because of the additional regulations resulting in reduced opportunities for spontaneous recreation. Increases in park visitation and trail use and livestock grazing would continue to impact wilderness and backcountry experiences for some visitors. Conversely, the active management strategies included as part of this plan—along with integrated pest management, trail maintenance, restoration of visitor-created trails, and removal of unnecessary facilities and structures—will help to ensure that the desired conditions for resources and visitor experiences are sustained into the future.

BLACK CANYON OF THE GUNNISON WILDERNESS CHARACTER

Affected Environment

Wilderness character is a holistic concept, and managers have identified five distinct yet interrelated qualities of wilderness character that derive from the language in the Wilderness Act. These five qualities are: natural, untrammeled, undeveloped, solitude or primitive and unconfined recreation, and other features of value. There is no designated wilderness in Curecanti NRA. Approximately 50% of Black Canyon of the Gunnison National Park (15,599 acres) is designated wilderness. In accordance with NPS policy, the National Park Service manages this area to preserve its wilderness character. The park's 2013 foundation document (NPS 2013b) identifies the Black Canyon of the Gunnison Wilderness as a fundamental resource and value—i.e., one of the attributes that is essential to achieving the purpose of the park and maintain its significance.

Wilderness lands in the national park include steep, nearly vertical canyon walls cut by the Gunnison River, which constantly moves sediments and carves through the volcanic, metamorphic, sedimentary and Precambrian crystalline rock. Ledges on the canyon walls support nests of peregrine falcons, common ravens, and canyon wrens, among other wildlife species. Rocky Mountain bighorn sheep forage above and below the rim, and the adjacent uplands support American black bear, elk, mule deer, and coyote, in addition to several raptor and passerine bird species. The riparian habitat of the inner canyon supports American dipper, aquatic insects, larvae, and fish eggs; controlled flows of water provide habitat for stoneflies such as the giant salmonfly and rainbow trout. Between the high, steep, narrow walls of the canyon, the continuous roar of the river, accentuated by the wind, predominates. The duration of sunlight to the canyon bottom is relatively short. This deep, narrow canyon environment is primarily influenced by natural forces (except that flows and sediment transport are altered by upstream dams) and shows little visual influence of modern humanity. Vertical separation within the canyon offers isolation and remoteness while protecting habitats and ecological systems.

The wilderness sections of the uplands within Black Canyon of the Gunnison NP, include woodlands characterized by pinyon pine, Douglas-fir, and juniper (*Juniperus* spp.). Open stands of Gambel oak, Utah serviceberry, and big sagebrush provide habitat for the Gunnison sage-grouse, red-tailed hawks, turkey vultures, common ravens, great horned owls, a variety of passerine birds and small mammals, and American black bear, elk, and mule deer. Expansive vistas during the day are exchanged for wide open, star-filled night skies.

The overall untrammeled quality of the Black Canyon of the Gunnison Wilderness is presently good with an increasing trend to take management actions in the face of climate change that would degrade the untrammeled quality through actions such as invasive species removal or wildland fire mitigation. In visitor use areas the untrammeled quality is diminished because actions are required to control invasive plants, cleanup waste, and maintain/restore native plants. There are some actions taken by the National Park Service to improve the natural condition, including monitoring elk, controlling nonnative plants, and responding to wildfires. The uplands have experienced some authorized and unauthorized use of motorized transport and equipment in wilderness, which detract from the untrammeled character. Black Canyon of the Gunnison NP applies the minimum requirements analysis process to administrative actions. These types of management actions slightly diminish the untrammeled quality.

The overall natural quality of Black Canyon of the Gunnison Wilderness is good and the trend is stable for some indicators and downward for others. Ecosystems are protected and improved through programs like invasive plant removal. There are several native plant and animal communities, including species that are proposed or listed as threatened or endangered, sensitive, or of concern. Authorized livestock grazing in the uplands alters the composition of natural communities and stocked nonnative fish species occupy wilderness waters. The water quality is good, as is regional air quality. Black Canyon of the Gunnison NP is adjacent to other federally managed land and relatively undeveloped private land, providing a larger protected landscape that connects critical wildlife habitat.

The Black Canyon of the Gunnison Wilderness is relatively undeveloped overall. The undeveloped quality of the canyon is good and is not likely to change or may even be improved over time as unnecessary structures are removed. Trend is primarily stable. This wilderness quality is degraded by settings that reduce the undeveloped nature of the wilderness, such as signs of modern civilization in or adjacent to the wilderness area, and facilities that are provided by the agency or created by users. A few structures diminish the undeveloped quality, including fences to exclude cattle, stock ponds, a radio repeater, abandoned roads (mostly unpaved two-tracks), an irrigation ditch, and other structures related to livestock grazing. There is occasional use of chainsaws and motorized vehicles for vegetation and wildlife management in the uplands, and helicopters in the rugged terrain of the inner canyon for emergency rescues and resource management. Unauthorized uses including motorized vehicle trespass are also a concern. The rugged terrain of the inner canyon has precluded most past and current developments.

There are many opportunities for solitude or primitive and unconfined recreation in the inner canyon and the uplands. Trends associated with solitude and primitive or unconfined recreation are stable for some measures and downward for others. Rugged and primitive routes provide visitors access to the inner canyon. Hiking routes into the canyon are constrained by steep terrain and colluvial slopes; they are mostly rocky, some with highly eroded gullies, have few signs, and are lightly maintained. Managed access provides increased opportunities for solitude by managing the number of people on each route at any given time. Increased demand for wilderness use permits and more days where permit slots are full may reduce opportunities for solitude and the presence of visitor created trails and informal campsites may reduce visitor opportunities to experience primitive recreation. That managed access, however, reduces opportunities for unconfined recreation. Recreational installations such as pit toilets and maintained climbing infrastructure such as rappel and Tyrolean lines also diminish this quality. Some aspects such as dark night skies and soundscapes are likely to be diminished over time from increasing regional development and urbanization. For additional detail on visitor experiences in wilderness, see the Visitor Use and Experience section above.

Ongoing and Planned Actions

Ongoing and planned projects will also impact future conditions. Invasive species treatment (mechanical and chemical) as part of implementation of the integrated pest management plan will continue to improve the natural quality of wilderness while degrading the untrammeled quality. Similarly, visitor-created trail restoration activities in wilderness will beneficially impact the natural quality and adversely impact the untrammeled quality. Closures implemented as part of the superintendent's compendium include a seasonal climbing closure for nesting raptors and closures in certain locations for horse use and pets on trails. The closures will continue to have beneficial impacts on the natural quality of wilderness, providing for minimal human-caused impacts on

raptors during breeding and nesting season and adverse impacts on primitive and unconfined recreation, limiting access to some of the park's climbing routes for approximately four to five months. The management of natural fire in all wilderness zones would have beneficial impacts on the natural quality of wilderness through the restoration of ecological processes. Active suppression of natural fires would have adverse impacts on the natural and untrammelled quality of wilderness through the alteration of ecological processes and intentional manipulation of the environment.

The park would continue to manage inner canyon wilderness use with the wilderness use permit system. Actively managing the maximum amount of use in the inner canyon protects the natural quality of the wilderness by preventing adverse impacts on resources from visitor use. While the permit system improves opportunities for solitude and primitive recreation in the inner canyon (by reducing the potential for crowding and congestion), it reduces the unconfined aspect of wilderness character.

Impacts on Wilderness Character

Alternative A: No-Action Alternative

Under the no-action alternative, the condition of wilderness character would remain the same as described in the affected environment. The current impacts on wilderness character and trends would continue to occur.

Zoning from the 1997 general management plan would continue to guide the general management direction for the Black Canyon of the Gunnison Wilderness. The ubiquitous, vague zoning of wilderness, predominantly all within the single "primitive" management prescription, would have adverse impacts on all wilderness character qualities because the management guidance is not specific to the variation of resource sensitivity and visitor use considerations of the uplands and inner canyon wilderness lands.

Alternative B: Action Alternative – NPS Preferred Alternative

Under the preferred alternative, new wilderness zones and associated desired conditions at Black Canyon would provide comprehensive management direction, which would support preservation of wilderness character. The inner canyon wilderness zone (and associated subzones of inner canyon pristine wilderness and inner canyon primitive wilderness) and uplands zone (and associated subzones of uplands primitive wilderness and uplands pristine wilderness) offer a finer level of detail for improved management of wilderness character. Detailed desired conditions for each zone and subzone further describe the extent of actions related to maintaining and improving wilderness character such as invasive plant management, the use of natural fire to achieve management objectives, and the application of the minimum requirements analysis process for activities in wilderness. As discussed under visitor use and experience, measures, standards, and visitor capacities have been identified to monitor resource conditions and visitor experiences and to identify the maximum amounts and types of use that an area can accommodate while achieving and maintaining the desired resource conditions and visitor experiences that are consistent with the purposes for which the area was established. This iterative framework would also have beneficial impacts on wilderness character by monitoring and minimizing impacts from visitor use to resources. Actively managing amounts and types of use would beneficially impact the natural and solitude qualities by ensuring the volume of visitation does not adversely impact resources or

experiences; however, strategies to implement capacities may adversely impact the primitive and unconfined recreation qualities by reducing opportunities for spontaneous and unconfined recreation. Any management strategies considered a prohibited use in wilderness would be subject to the minimum requirements analysis process.

Minor reroutes would be made to existing routes within the inner canyon primitive wilderness subzone. The reroutes would mitigate erosion (subject to the minimum requirements analysis process) thus benefiting the natural quality of wilderness character by improving soils and reducing vegetation loss associated with erosion. The rerouting and restoration work would be temporary and occur over 6–12 months. The presence of trail crews and associated equipment likely would adversely affect visitor solitude for the 8–10 hours per day for the 4-day workweek that a crew typically works. Temporary closures may be necessary during the rerouting activities and could affect primitive and unconfined recreation. In addition, vegetation loss would likely occur within the footprint of the new alignment and soil would be compacted from repeated use along the new route alignment.

The implementation of a pack-in/pack out-policy for human waste removal across all wilderness management zones would have beneficial impacts on the natural and undeveloped qualities of wilderness, encouraging reduction in human waste and associated litter as well as discouraging the future development of facilities within wilderness for the disposal of human waste.

In addition to addressing human waste removal through the pack-in/pack-out policy, the park may also consider the removal of pit toilets within wilderness. Removal, subject to the minimum requirements analysis process, would have beneficial impacts on solitude or primitive and unconfined recreation and the undeveloped qualities of wilderness by removing modern structures and minimizing structures related to visitor use. The physical removal of the structures would have a temporary adverse impact on both above qualities due to actions associated with the removal. This could include temporary use of mechanized equipment and vegetation or soil trampling. These actions would last only weeks to months (depending on the structure being removed) and would occur 8–10 hours per day in a 4-day workweek of a typical crew. Actions would be mitigated following the removal. Mitigation would include naturalizing the site of the pit toilet and any damage to vegetation or soils caused by accessing the site.

As discussed above, a commercial use allocation has been established as part of the visitor capacity within wilderness portions of Black Canyon of the Gunnison National Park. This allocation would have an adverse impact on unconfined recreation because the allocation itself is a confinement on recreation. In addition, if allocation numbers were reached, no additional opportunities would be provided for guided services. However, the allocation, as well as the identified commercial group size limit of four throughout the wilderness, would have a beneficial impact on opportunities for solitude or primitive recreation by ensuring that guided groups do not monopolize the opportunity for visitors to find solitude within wilderness. The commercial allocation ensures that guided services are provided at a level that achieves and maintains the desired conditions of the management zones.

The continuation of the wilderness use permit system would provide beneficial impacts by limiting the total number of visitors in the wilderness at any given time, providing increased opportunities to experience solitude. The permit system would create adverse impacts on primitive and unconfined recreation, reducing opportunities for visitors who prefer spontaneous trips and do not plan sufficiently to obtain a permit, as well as placing limits on the number of visitors who can enter the

wilderness. Actively managing the maximum amount of use in the inner canyon protects the natural quality of the wilderness by preventing adverse impacts on resources from visitor use. Under the preferred alternative, park staff may consider using an online permitting system to manage wilderness use permits in the future. Wilderness use permits are currently obtained before visitors enter wilderness. While converting the permit system from in-person to an online method may have adverse impacts on primitive and unconfined recreation because of the requirement to access permits online, it wouldn't necessarily be a new restriction on visitor behavior but merely a change in the method to obtain a permit. Therefore, impacts on wilderness character would be similar to those under the in-person system.

Within the inner canyon primitive wilderness subzone, the designation of campsites would have an adverse impact to primitive and unconfined recreation by constraining the locations where visitors have the opportunity to camp and reducing opportunities for visitors who prefer to select their campsite location. Campsite designation would have a beneficial impact to the natural qualities by concentrating camping-related impacts and also solitude, by allowing park management to designate sites that are spaced sufficiently apart to allow for visitors to be out of sight and sound of other visitors whenever practical. Encouraging visitors to camp no more than one night per spot in the inner canyon pristine wilderness subzone would have beneficial impacts on the natural quality of wilderness by reducing camping-related resource impacts; this action also adversely impacts unconfined recreation opportunities.

In the uplands primitive wilderness subzone, the removal of unnecessary facilities and structures would have beneficial impacts on the natural quality of wilderness character by returning ecological function of previously disturbed sites through restoration. Removal of these structures, subject to the minimum requirements analysis process, would also have a beneficial impact on the undeveloped qualities of wilderness by removing permanent structures from the wilderness. The act of removal and associated restoration efforts would have temporary adverse effects to the undeveloped and untrammeled qualities of wilderness character through the development of temporary primitive trails to provide access to the structures and the staging, storage of equipment near the site that would be necessary for restoration work or structure removal, and restoration efforts to restore the sites to natural conditions. These temporary impacts would last only weeks to months (depending on the type of structure being removed) and would occur 8–10 hours per day in a 4-day workweek of a typical crew. Actions related to removal and restoration may also have a temporary adverse impact on the solitude quality of wilderness character due to the presence of NPS staff and equipment.

The climbing management plan would be adopted under the preferred alternative. Under this plan, climbers wishing to install new fixed equipment or replace old equipment within the wilderness would be required to submit an application for authorization prior to installing fixed equipment (see Part 1, Chapter 4: Climbing Management Plan). This requirement would have a beneficial impact to the natural quality of wilderness by allowing park managers to review the route placement and access to minimize or avoid potential impacts on natural and cultural resources. This action would have an adverse impact to primitive and unconfined recreation for climbers who prefer to set routes without an application and authorization process.

Ongoing management activities would also impact wilderness character at Black Canyon of the Gunnison NP. Management activities associated with the implementation of the current invasive pest management plan and the restoration of visitor-created trails would degrade the untrammeled quality of wilderness while simultaneously improving the natural quality by supporting ecological systems and processes. Suppression of naturally occurring fire would degrade the natural and

untrammelled qualities of the Black Canyon of the Gunnison Wilderness because human intervention would be interrupting a natural process. Seasonal closures described in the superintendent's compendium would continue to limit areas where horses and/or pets are allowed and enact seasonal climbing closures for the benefit of nesting raptors—actions that restrict visitor behaviors and decrease the opportunity for primitive and unconfined recreation in portions of the wilderness. While some active management strategies outlined in the preferred alternative would constitute trammeling and further limit opportunities for primitive and unconfined recreation in wilderness, the updated management zoning, desired conditions specific to wilderness zones, pack-in/pack-out human waste removal, and climbing management plan would support the natural and undeveloped qualities of the wilderness.

VEGETATION AND SOILS

Affected Environment

Vegetation types occurring within Black Canyon of the Gunnison NP and Curecanti NRA uplands include diverse forest, woodland, shrubland, herbaceous, and sparse types. Currently, the native vegetation within both units is managed under the general management plan (NPS 1997) and related planning documents for research, inventory, monitoring, fire, grazing, nonnative species, restoration, and maintenance. Nonnative plant species are managed according to the park's integrated pest management plan. Naturally occurring slides and rock falls (mass wasting), fires, drought, and insect infestations occur occasionally, and can influence vegetation composition and structure due to loss of cover and potential conversion to different vegetation types.

Biological soil crusts are present on some sites within the park and more rarely in the recreation area. Historically, these soils received little disturbance and helped to stabilize and protect soil surfaces from erosive forces. Currently, however, increased recreational off-trail use and livestock grazing has had widespread disturbance on soil crusts at both units in uplands wilderness and backcountry lands. Intact crusts reduce wind and water erosion, fix atmospheric nitrogen, and contribute to soil organic matter (Eldridge and Green 1994 in Belnap et al. 2001). The biological soil crusts also function as living mulch that retains soil moisture and discourages growth of annual nonnative plant species including cheatgrass (*Bromus tectorum*) (Belnap et al. 2001). Biological soil crusts in the national park occupy the nutrient-poor openings between tree canopies and clumps of vascular plants and hold thin soils over bedrock.

Vegetation and soils of Black Canyon of the Gunnison NP and Curecanti NRA inner canyon and upland woodlands and shrublands are disturbed because of visitor activities. These activities include hiking, hunting, fishing, backpacking, and climbing on established access trails and campsites, as well as cross-country travel. Visitor impacts include localized vegetation removal, soil compaction, root exposure, and pruning, making plants and communities vulnerable to wind and water erosion, nonnative species invasion, and disease.

Areas of Black Canyon of the Gunnison NP where vegetation and soils are most impacted include inner canyon campsites and the uplands along North Vista Trail, Warner Point Nature Trail, Kneeling Camel Overlook, and Red Rock Canyon Route.

Vegetation and soils most affected in Curecanti NRA include Hermit's Rest in the East Portal–Morrow Point zone and along Pine, Mesa, Curecanti, and Crystal Creek Trails. Dillon Pinnacles in the proposed Blue Mesa backcountry zone shows signs of visitors' expanding impacts on vegetation

and soils from trampling, compaction, and erosion-related impacts. Low to moderate levels of off-trail use in both park units reduces vegetation cover, compacts soils, and results in some litter displacement, which exposes soils to wind and water erosion and nonnative species invasion.

Wilderness campsites in the inner canyon at Black Canyon of the Gunnison NP, which are available to permitted visitors on a first-come, first-served basis, are undesignated, with some vegetated areas repeatedly used and disturbed. Vegetation and soils in Curecanti NRA backcountry campsites near Crystal and Morrow Point Reservoirs (East Portal–Morrow Point zone) are also disturbed by seasonally moderate to heavy use. These Curecanti sites, available on a first-come, first-served basis, also receive beneficial maintenance. The backcountry use permits issued to visitors are used to monitor use of campsites on Morrow Point Reservoir. Visitors are encouraged to use pack-in/pack-out waste management on all other routes into the inner canyon.

Current management of the number and timing of visitors under the current wilderness use permit system reduces impacts on vegetation and soils. Nonetheless, repeated use and disturbance of wilderness campsites in the inner canyon of Black Canyon of the Gunnison NP causes adverse effects to vegetation and soils through trampling and expansion of campsite areas. Effects to vegetation and soils from recreational trampling and campsite proliferation occurs at campsites in the Crystal and Morrow Point Reservoir areas (i.e., East Portal–Morrow Point backcountry zone).

The National Park Service currently manages climbing activities under the guidance of an interim (not formally adopted) climbing management plan. Like the impacts noted above for hikers, hunters, backpackers, anglers, etc., climbers' off-trail hiking to and from climbing routes reduces vegetation cover and compacts soils. These activities result in proliferation and expansion of access trails at the top and base of climbing routes.

Similarly, visitor trampling on soils and vegetation from concentrating human waste in the wilderness pit toilet soils (at the base of the Gunnison and Warner Routes) and soils near pit toilets in the backcountry of Curecanti NRA at the base of the Curecanti Creek, Hermit's Rest, and Crystal Creek Trails are noted by the proliferation of access trails and localized erosion near these facilities. Visitor-created trails to the toilets have led to high concentrations of invasive plants, such as cheatgrass, near the toilets. Visitors often dig catholes or open pit latrines for human waste as well. Sometimes human waste is left exposed on the surface and sometimes close to water sources.

Ongoing restoration activities to restore visitor-created trails to natural conditions would also occur under current management (see appendix C for more details).

Ongoing and Planned Actions

In addition to the trends created by naturally occurring events, livestock grazing, and visitor use described above, other ongoing and planned actions have the potential to affect vegetation and soils. Unnecessary facilities and structures at Black Canyon of the Gunnison NP and Curecanti NRA, such as fences, two-track roads, irrigation lines/ditches and stock ponds are being removed. The initial action of continuing to remove facilities and structures would result in trampling, compaction, and temporary erosion-related impacts on vegetation and soils from workers traversing to and from sites. Monitoring of vegetation and implementation of the integrated pest management plan for mechanical and chemical control of invasive species could result in regrowth of native vegetation, reducing competition and restoring native and natural plant communities. Erosion control methods create little to no soil disturbance and most weed control in backcountry and wilderness occurs in

trail corridors and other human-disturbed sites where invasive plant species are generally most prevalent.

Other ongoing actions include continued implementation of the wilderness use permit system to manage visitor use in wilderness. Managing the number and timing of visitors in the inner canyon and other areas within wilderness reduces impacts on vegetation and soils.

Impacts on Vegetation and Soils

Alternative A: No-Action Alternative

Under the no-action alternative, the condition of vegetation and soils would remain the same as described in the affected environment. The current resource threats and impacts would continue to occur.

Alternative B: Action Alternative – NPS Preferred Alternative

Under the preferred alternative, new management zones and subzones are established for wilderness and backcountry lands, and associated desired conditions are identified. This updated management zoning offers guidance for maintaining and improving resource conditions at both units, including native vegetation and soils. Additionally, measures, standards, and visitor capacities have been identified to monitor resource conditions and visitor experiences and to identify the maximum amounts and types of use that each area can accommodate while achieving and maintaining desired resource conditions and visitor experiences consistent with the established purpose of the area (see part 1, chapters 5 and 6). The monitoring framework and identified visitor capacities would have beneficial impacts on vegetation and soils because NPS staff would intentionally monitor resource conditions and take appropriate management strategies to minimize visitor use impacts on these resources.

Under the preferred alternative, the park's wilderness use permit system would continue to be used to manage access, with a maximum number of visitors entering the inner canyon via designated routes, thereby concentrating and reducing visitor use impacts on soils and vegetation.

Under the preferred alternative, designating campsites at Black Canyon of the Gunnison NP in the inner canyon primitive wilderness subzone would have lasting beneficial effects to vegetation by reducing visitors' trampling footprint in condensed use areas from overnight camping impacts. Campsites would be monitored and locations could be adjusted to protect vegetation and provide a rest period for disturbed vegetation. Areas that have been adversely impacted by camping activities, including undesignated campsites, would be rehabilitated and restored to natural conditions. Wilderness campsite locations would be identified on maps, allowing visitors to find these sites more easily. This step would preserve vegetation near use areas by minimizing soil disturbance associated with visitor-created trailing.

The National Park Service would continue to remove unnecessary facilities and structures at both units under the preferred alternative. The removal of irrigation systems, two-track roads, and livestock trailing routes would temporarily expose vegetation and soils to wind and storm-related erosion impacts during restoration activities. Mechanized equipment, such as front-end loaders, would be used for culvert removal and road restoration activities and would dig several feet deep to remove infrastructure, trampling vegetation and compacting soils within these project footprints. Livestock trailing restoration would involve similar techniques and methods as visitor-created trail restoration. Techniques include the use of hand tools, vertical mulch/dead planting, soil preparation,

revegetation, and physical barriers (natural materials). Enduring beneficial impacts on soils and vegetation along these roads and corridors would be expected as these resources return to natural drainage functions and patterns.

Under the preferred alternative, the River North Route campsites in the inner canyon pristine wilderness subzone that are accessed from East Portal would remain undesignated, and therefore the proliferation, expansion, and trampling impacts on soils and vegetation that occur in these areas under current management would continue. Park managers would seek to contain vegetation loss to those few sites and not let it spread or be replaced by invasive species. Visitors would be educated about Leave No Trace principles and encouraged to camp no longer than one night in one spot. There would be no change in campsites at Curecanti NRA. Although vegetation continues to be trampled and denuded at campsites, erosion control and other mitigation measures included in this document would decrease adverse impacts on vegetation.

Under the preferred alternative, the National Park Service would adopt a climbing management plan that provides clear information and guidelines for climbers and NPS managers to maintain park resources, while providing for recreational climbing activities (see part 1, chapter 4). Visitor-created trails created by climbers accessing climbing routes would continue to reduce vegetation cover, compact soils, and result in the proliferation and expansion of access trails at the top and base of climbing routes. To help preserve vegetation, soils, and other resources affected by climbers seeking to install fixed equipment on climbing routes, the climbing management plan includes a requirement for climbers to submit a written application for new or replacement fixed equipment requests and a written authorization or special use permit may be issued before first ascents are made.

Implementing a preauthorization process under the preferred alternative would likely decrease the overall expansion of visitor-created trails, although the authorization of new climbing routes (and some proliferation of visitor-created trails from all user groups) would likely lead to additional visitor-created trails and ongoing recreational impacts on vegetation and soils.

Similarly, visitor-created (social) trails would add to vegetation trampling near rim edges, although mitigation measures included in the plan would lessen these impacts on soils and vegetation. Additionally, the National Park Service would continue to restore visitor-created trails at Black Canyon of the Gunnison NP and Curecanti NRA to natural conditions using various techniques. Some of these activities would have localized adverse impacts on soils and vegetation during the brief season when the restoration takes place, but ultimately, would result in lasting beneficial impacts. These restoration techniques are described in appendix C of the plan and include the following:

- Erosion control mats designed to reinforce soil and support plant growth.
- Removing rock cairns could have temporary effects to vegetation and soils during the restoration season from trampling as workers traverse to and from restoration sites. However, removing cairns would result in lasting benefits to vegetation given that the visual cues for off-trail hiking would be removed.
- Erecting physical barriers to prevent off-trail use would have varying effects, depending on the type of barrier. Barriers and signage made by placing posts in the ground by pounding or digging would temporarily trample vegetation and compact soils. Similarly, barriers using rocks or stones from surrounding areas to erect rock walls would expose soils where these resources are removed. Ultimately these activities would provide a lasting benefit to soils and vegetation from a reduction in off-trail use.

- Covering existing visitor-created trails with rocks or downed vegetation from the surrounding area would have similar adverse effects to soils and vegetation as those described above for erecting physical barriers and signage. Searching for and moving rocks or downed vegetation could cause temporary soil compaction and breakage of vegetation.
- With all techniques, concurrent control of nonnative plant species would have lasting beneficial effects to vegetation and soils.
- Education could be in the form of on-site verbal education, printed materials, or web-based information. With effective delivery, use of visitor-created trails would decrease, resulting in beneficial impacts on vegetation and soils.

The ongoing trend of increased visitor use in the wilderness and backcountry could result in an increase in invasive plant species along trails and near latrines. However, the mechanical and chemical weed control methods outlined in the current integrated pest management plan would reduce competition for native species and allow for the reestablishment of natural plant communities. Desired conditions and related monitoring and active management strategies would also allow resource managers to monitor, mitigate, and/or restore impacted areas. Livestock grazing and trailing creates the same vegetation and soil impacts associated with visitor-created trails and areas of concentrated visitor use, including wind and water erosion, decreased vegetation cover, exposed roots, trampling, and soil compaction. However, the restoration techniques currently used by the National Park Service and additional management actions included in the preferred alternative would continue to mitigate the effects of visitor use and improve the condition of vegetation and soils in the backcountry and wilderness.

ARCHEOLOGICAL RESOURCES

Affected Environment

The Black Canyon of the Gunnison and Upper Gunnison River Basin have been used by humans over at least the last 10,000 years. Evidence of a hunting and gathering lifeway, including lithic scatters, hearth sites, roasting pits, and major quarries have been uncovered in the hills lining the Gunnison River. Long and short-term occupations have been discovered throughout the extent of Curecanti NRA and Black Canyon of the Gunnison NP in areas of less than 20° slopes (personal communication Forest Frost).

Less than 25% of Black Canyon of the Gunnison NP has been surveyed for archeological resources, with most investigations being completed to prepare for park construction projects in the frontcountry (NPS 1994, Firor 1994, NPS 1995, personal communication Forest Frost). At Black Canyon of the Gunnison NP, at least 233 archeological sites have been recorded with at least 58 of those sites determined to need additional research to assess their eligibility for listing in the national register (NPS 2010). The greatest concentration of known archeological resources within Black Canyon of the Gunnison NP is located on the North Rim close to existing hiking and climbing access routes (NPS 1993). Under NPS management policies, cultural resources located within the Black Canyon of the Gunnison Wilderness are also included in wilderness character monitoring (see part 1, chapter 5) and are managed in accordance with the Wilderness Act.

The length of human occupation makes the 5,000-acre Curecanti Archeological District, which was listed on the National Register of Historic Places in 1984, particularly significant for understanding the evolution of hunting and gathering in the region. More recent small-scale surveys and test

excavations have added to the inventory of documented sites, with over 60 sites representing a wide variety of site types identified within the existing archeological district. The 2013 Curecanti NRA foundation document calls out the “association and density of archeological sites” and the “continuum of human occupation” in the area’s significance statements and identifies archeology as a fundamental resource or value that merits primary consideration during planning processes.

Any human activity in areas where there are archeological sites can cause damage to archeological resources. Surface artifacts, sensitive sites, and/or fragile cultural resources are more prone to localized impacts. Anyone traveling in the backcountry or wilderness—including professionals conducting permitted research activities, individual climbers, commercial climbing parties, and NPS staff performing maintenance activities—could contribute to soil compaction or erosion at archeological sites. Surface artifacts are also at risk for trampling or unauthorized collection. Continuation of current backcountry and climbing management would result in potential for impacts on identified archeological sites and artifacts located in the inner canyon near existing climbing routes.

Ongoing and Planned Actions

Individual park actions that include ground disturbance or concentrations of activity could have unintentional impacts on adjacent archeological resources. Trampling, compaction, and erosion-related effects from crews and equipment could occur as part of trail maintenance activities or the removal of unnecessary facilities and structures such as fences, irrigation lines/ditches, and stock ponds.

Archeological surveys, baseline documentation, condition assessments, and monitoring programs have provided beneficial impacts in the form of information related to location, historic context, and studies. Early inventories in Curecanti NRA included survey for the “Cottonwood Reservoir,” proposed in the 1940s, and a limited survey in the early 1960s before dam construction of the Blue Mesa Reservoir. Additional surveys occurred in the mid to late 1970s with a 10-year testing program occupying most of the 1980s as facility improvements continued. A somewhat cursory survey of Black Canyon of the Gunnison NP occurred in the mid-1970s with small project-driven compliance surveys conducted through the years as needed. A program of large-area (more than 20 acres) surveys is currently ongoing. The first site testing in the park since its 1933 founding was in 2016. About 95% of all sites recorded in the national park and national recreation area prior to 2000 have been revisited and the documentation brought up to current standards.

Impacts on Archeological Resources

Alternative A: No-Action Alternative

Under the no-action alternative, current conditions and visitor-related impacts would continue. Visitors to the wilderness and backcountry would continue to create unintentional trails along the canyon rim leading to climbing or hiking routes that have the potential to erode archeological sites and/or trample surface artifacts. Artifact collecting, vandalism, or other forms of site disturbances would likely occur with any unaccompanied visitor activity in the backcountry and wilderness.

Site monitoring and research activities would continue under current management, providing opportunities for NPS staff to gather knowledge about wilderness and backcountry resources, including archeological sites, and to continue documenting changes in site conditions. Federal laws including NHPA and current NPS management practices for identification and management of

cultural resources would continue to provide protection for recorded and undocumented archeological sites on federal lands.

Alternative B: Action Alternative – NPS Preferred Alternative

Under the preferred alternative, new wilderness and backcountry management zones and associated desired conditions at both units would provide up-to-date management guidance for meeting desired resource conditions and experiences across the landscapes. The proposed actions and strategies in these zones focus on maintaining or improving resources, including archeological resources, by careful management of visitor use activities. As discussed under visitor use and experience, measures, standards, and visitor capacities have been identified to monitor resource conditions and visitor experiences and to identify the maximum amounts and types of use that an area can accommodate while achieving and maintaining the desired resource conditions and visitor experiences that are consistent with the purposes for which the area was established. This iterative framework would also have beneficial impacts on archeological resources by monitoring and minimizing impacts from visitor use to these resources.

Adverse impacts related to human impacts described under continuation of current management would also be possible under the preferred alternative. The potential for surface disturbances, inadvertent damage, intentional damage, soil impaction, and trampling of in situ archeological resources would continue. Climbers may inadvertently damage archeological resources and sites within the canyon during their climbs or disturb sites along the rim when trailing into and out of the route. Visitor-created trailing and creation of additional access routes along the canyon rim could lead to exposure or damage of in situ archeological resources. Increased vandalism and artifact collecting may occur as more members of the public access the backcountry and wilderness. Together, these permanent, localized impacts could result in loss of context and integrity for archeological sites at Black Canyon of the Gunnison NP and Curecanti NRA.

Under the preferred alternative, the updated climbing management plan included in part 1, chapter 4 would be officially adopted and would guide management of climbing at both park units, including the authorization process for new climbing routes within the inner canyon. Climbers would submit an application for authorization of any new or replacement installation of fixed equipment to the National Park Service before first ascent. Park staff would review the proposed route and fixed equipment locations and document anticipated resource impacts, before submitting recommendations to the superintendent to approve or disapprove the application. While these considerations would focus primarily on preserving the backcountry experience and wilderness character, they could also identify possible impacts on known archeological sites or inner canyon sites with high archeological potential. After obtaining authorization for the proposed route, the climber would then be expected to submit a topographical map and/or route description within 30 days of first ascent so park staff would be able to accurately track the exact location of the established route and installations. Intentional development of approach trails—and cairns or marked approach trails—is prohibited in the climbing management plan, and all backcountry and wilderness users would be directed to use Leave No Trace practices for minimum impact to resources that are found near climbing use areas.

The maximum number of visitors allowed under the proposed visitor capacities—combined with Leave No Trace principles and continued permitting for wilderness users—should ensure limited visitor use impacts on archeological resources found in Black Canyon of the Gunnison Wilderness and in the backcountry of Curecanti NRA. While any adverse impacts on archeological resources are

permanent and could destroy the research potential and integrity of archeological sites within the NRHP-listed district, it is highly unlikely these impacts would affect the overall integrity of the Curecanti Archeological District because of its size (5,000 acres).

The removal of unnecessary facilities and structures—e.g., fences, stock ponds, two-track roads, irrigation lines—could have the potential to damage archeological resources within or adjacent to the project area depending on the equipment needed to remove structures. While any groundbreaking activity, concentrated use, or use of heavy equipment may result in isolated damage to in situ archeological resources, surveys would be conducted and archeological resources avoided and/or protected before implementing actions that involve ground-disturbing activities (e.g., removal of structures). Best practices included in the NPS *Management Policies 2006* and compliance with the National Historic Preservation Act would also limit the permanent, localized effects connected to any removal project.

Some of the management activities included in the preferred alternative have the potential to limit or decrease damage to in situ archeological resources. Under the preferred alternative, campsites would be designated in the Black Canyon inner canyon primitive wilderness subzone through improved delineation of existing campsites and visitor education and instruction on designated campsite locations. Existing “undesigned” campsites would be restored to natural conditions. Designating campsites would concentrate visitation in park-selected locations and guide campers away from any locations prone to erosion, minimizing use-related impacts on possible nearby archeological resources.

Implementation of visitor capacities, visitor use indicators/threshold monitoring, and related management strategies would also minimize impacts on archeological resources. Increased patrols by law enforcement and/or resource management staff, additional visitor education of low-impact trail use, interpretive signage on designated access trails, and continuation of backcountry and wilderness use permits and monitoring would guide use away from known archeological sites and sites with high potential for archeological resources.

As part of the National Park Service’s obligations to protect and preserve cultural resources, resource managers would continue to assess how proposed park actions affect or impact resources eligible for listing in the National Register of Historic Places. Future projects using federal funding—including those resulting from and related to the preferred alternative—will be evaluated on a case-by-case basis to identify the potential for the actions to disturb historic resources. Impacts will then be avoided or mitigated through further planning and consultation. Under NPS management policies, cultural resources located within the Black Canyon of the Gunnison Wilderness are also included in wilderness character monitoring (see part 1, chapter 5) and would continue to be managed in accordance with the Wilderness Act.

CHAPTER 4: COORDINATION AND CONSULTATION

LIST OF AGENCIES AND GROUPS CONSULTED DURING PLAN DEVELOPMENT

Bureau of Land Management, Uncompahgre Field Office and Gunnison Field Office
Bureau of Reclamation, Western Colorado Area Office
Colorado Parks and Wildlife
Colorado State Historic Preservation Office
Crawford State Park
Crested Butte Chamber of Commerce
Greater Montrose Chamber of Commerce
Gunnison Country Chamber of Commerce
Gunnison County, Colorado
Gunnison-Crested Butte Tourism Association
Mesa County Sheriff's Office, Colorado
Montrose County, Colorado
National Parks Conservation Association
US Fish and Wildlife Service
Ute Mountain Ute
Southern Ute
Uintah and Ouray Tribe of Fort Duchesne, Utah

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**APPENDIX A: RELEVANT LEGISLATION FOR BLACK CANYON OF THE
GUNNISON NATIONAL PARK AND FOR BLACK CANYON OF THE
GUNNISON WILDERNESS**

**PUBLIC LAW 94-567 (OCTOBER 20, 1976) DESIGNATES BLACK CANYON OF THE
GUNNISON WILDERNESS**

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Public Law 94-567
94th Congress

An Act

Oct. 20, 1976

[H.R. 13160]

To designate certain lands within units of the National Park System as wilderness; to revise the boundaries of certain of those units; and for other purposes.

| | |
|---|---|
| <p>Wilderness areas. Designation 16 USC 1132 note.</p> | <p><i>Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,</i> That in accordance with section 3(c) of the Wilderness Act (78 Stat. 890; 16 U.S.C. 1132(c)), the following lands are hereby designated as wilderness, and shall be administered by the Secretary of the Interior in accordance with the applicable provisions of the Wilderness Act:</p> |
| <p>Bandelier National Monument, N. Mex.</p> | <p>(a) Bandelier National Monument, New Mexico, wilderness comprising twenty-three thousand two hundred and sixty-seven acres, depicted on a map entitled "Wilderness Plan, Bandelier National Monument, New Mexico", numbered 315-20,014-B and dated May 1976, to be known as the Bandelier Wilderness.</p> |
| <p>Gunnison National Monument, Colo.</p> | <p>(b) Black Canyon of the Gunnison National Monument, Colorado, wilderness comprising eleven thousand one hundred and eighty acres, depicted on a map entitled "Wilderness Plan, Black Canyon of the Gunnison National Monument, Colorado", numbered 144-20,017 and dated May 1973, to be known as the Black Canyon of the Gunnison Wilderness.</p> |
| <p>Chiricahua National Monument, Ariz.</p> | <p>(c) Chiricahua National Monument, Arizona, wilderness comprising nine thousand four hundred and forty acres, and potential wilderness additions comprising two acres, depicted on a map entitled "Wilderness Plan, Chiricahua National Monument, Arizona", numbered 145-20,007-A and dated September 1973, to be known as the Chiricahua National Monument Wilderness.</p> |
| <p>Great Sand Dunes National Monument, Colo.</p> | <p>(d) Great Sand Dunes National Monument, Colorado, wilderness comprising thirty-three thousand four hundred and fifty acres, and potential wilderness additions comprising six hundred and seventy acres, depicted on a map entitled "Wilderness Plan, Great Sand Dunes National Monument, Colorado", numbered 140-20,006-C and dated February 1976, to be known as the Great Sand Dunes Wilderness.</p> |
| <p>Haleakala National Park, Hawaii.</p> | <p>(e) Haleakala National Park, Hawaii, wilderness comprising nineteen thousand two hundred and seventy acres, and potential wilderness additions comprising five thousand five hundred acres, depicted on a map entitled "Wilderness Plan, Haleakala National Park, Hawaii", numbered 162-20,006-A and dated July 1972, to be known as the Haleakala Wilderness.</p> |
| <p>Isle Royale National Park, Mich.</p> | <p>(f) Isle Royale National Park, Michigan, wilderness comprising one hundred and thirty-one thousand eight hundred and eighty acres, and potential wilderness additions comprising two hundred and thirty-one acres, depicted on a map entitled "Wilderness Plan, Isle Royale National Park, Michigan", numbered 139-20,004 and dated December 1974, to be known as the Isle Royale Wilderness.</p> |
| <p>Joshua Tree National Monument, Calif.</p> | <p>(g) Joshua Tree National Monument, California, wilderness comprising four hundred and twenty-nine thousand six hundred and ninety acres, and potential wilderness additions comprising thirty-seven thousand five hundred and fifty acres, depicted on a map entitled</p> |

“Wilderness Plan, Joshua Tree National Monument, California”, numbered 156-20,003-D and dated May 1976, to be known as the Joshua Tree Wilderness.

(h) Mesa Verde National Park, Colorado, wilderness comprising eight thousand one hundred acres, depicted on a map entitled “Wilderness Plan, Mesa Verde National Park, Colorado”, numbered 307-20,007-A and dated September 1972, to be known as the Mesa Verde Wilderness.

**Mesa Verde
National Park,
Colo.**

(i) Pinnacles National Monument, California, wilderness comprising twelve thousand nine hundred and fifty-two acres, and potential wilderness additions comprising nine hundred and ninety acres, depicted on a map entitled “Wilderness Plan, Pinnacles National Monument, California”, numbered 114-20,010-D and dated September 1975, to be known as the Pinnacles Wilderness.

**Pinnacles
National
Monument. Calif.**

(j) Saguaro National Monument, Arizona, wilderness comprising seventy-one thousand four hundred acres, depicted on a map entitled “Wilderness Plan, Saguaro National Monument, Arizona”, numbered 151-20,005-D and dated May 1976, to be known as the Saguaro Wilderness.

**Saguaro National
Monument. Ariz.**

(k) Point Reyes National Seashore, California, wilderness comprising twenty-five thousand three hundred and seventy acres, and potential wilderness additions comprising eight thousand and three acres, depicted on a map entitled “Wilderness Plan, Point Reyes National Seashore”, numbered 612-90,000-B and dated September 1976, to be known as the Point Reyes Wilderness.

**Point Reyes
National
Seashore,
Calif.**

(l) Badlands National Monument, South Dakota, wilderness comprising sixty-four thousand two hundred and fifty acres, depicted on a map entitled “Wilderness Plan, Badlands National Monument, South Dakota”, numbered 137-29,010-B and dated May 1976, to be known as the Badlands Wilderness.

**Badlands
National
Monument,
S. Dak.**

(m) Shenandoah National Park, Virginia, wilderness comprising seventy-nine thousand and nineteen acres, and potential wilderness additions comprising five hundred and sixty acres, depicted on a map entitled “Wilderness Plan, Shenandoah National Park, Virginia”, numbered 134-90,001 and dated June 1975, to be known as the Shenandoah Wilderness.

**Shenandoah
National Park,
Va.**

SEC. 2. A map and description of the boundaries of the areas designated in this Act shall be on file and available for public inspection in the office of the Director of the National Park Service, Department of the Interior, and in the office of the Superintendent of each area designated in the Act. As soon as practicable after this Act takes effect, maps of the wilderness areas and descriptions of their boundaries shall be filed with the Interior and Insular Affairs Committees of the United States Senate and House of Representatives, and such maps and descriptions shall have the same force and effect as if included in this Act: *Provided*, That correction of clerical and typographical errors in such maps and descriptions may be made.

**Map and
description,
public inspection.**

SEC. 3. All lands which represent potential wilderness additions, upon publication in the Federal Register of a notice by the Secretary of the Interior that all uses thereon prohibited by the Wilderness Act have ceased, shall thereby be designated wilderness.

**Publication in
Federal Register.
16 USC 1131 note.**

SEC. 4. The boundaries of the following areas are hereby revised, and those lands depicted on the respective maps as wilderness or as potential wilderness addition are hereby so designated at such time and in such manner as provided for by this Act:

**Boundary
revision.**

**Isle Royale
National Park,
Mich.**

(a) Isle Royale National Park, Michigan:

The Act of March 6, 1942 (56 Stat. 138; 16 U.S.C. 408e-408h), as amended, is further amended as follows:

(1) Insert the letter “(a)” before the second paragraph of the first section, redesignate subparagraphs (a), (b), and (c) of that paragraph as “(1)”, “(2)”, “(3)”, respectively, and add to that section the following new paragraph:

“(b) Gulf Islands. containing approximately six acres, located in section 19 township 68 north, range 31 west, in Keweenaw County, Michigan.”.

16 USC 408g

(2) Amend section 3 to read as follows:

“SEC. 3. The boundaries of the Isle Royale National Park are hereby extended to include any submerged lands within the territorial jurisdiction of the United States within four and one-half miles of the shoreline of Isle Royale and the surrounding Islands, including Passage Island and the Gulf Islands, and the Secretary of the Interior is hereby authorized, in his discretion, to acquire title by donation to any such lands not now owned by the United States, the title to be satisfactory to him.”.

**Pinnacles
National
Monument, Calif.**

(b) Pinnacles National Monument, California:

(1) The boundary is hereby revised by adding the following described lands, totaling approximately one thousand seven hundred and seventeen and nine-tenths acres:

(a) Mount Diablo meridian, township 17 south, range 7 east: Section 1, east half east half, southwest quarter northeast quarter, and northwest quarter southeast quarter; section 12, east half northeast quarter, and northeast quarter southeast quarter; section 13, east half northeast quarter and northeast quarter southeast quarter.

(b) Township 16 south, range 7 east: Section 32, east half.

(c) Township 17 south, range 7 east: Section 4, west half; section 5, east half.

(d) Township 17 south, range 7 east: Section 6, southwest quarter southwest quarter; section 7, northwest quarter north half southwest quarter.

**Publication in
Federal Register.**

(2) The Secretary of the Interior may make minor revisions in the monument boundary from time to time by publication in the Federal Register of a map or other boundary description, but the total area within the monument may not exceed sixteen thousand five hundred acres: *Provided, however,* That lands designated as wilderness pursuant to this Act may not be excluded from the monument. The monument shall hereafter be administered in accordance with the Act of August 25, 1916 (39 Stat. 535; 16 U.S.C. 1 et seq.), as amended and supplemented.

(3) In order to effectuate the purposes of this subsection, the Secretary of the Interior is authorized to acquire by donation, purchase, transfer from any other Federal agency or exchange, lands and interests therein within the area hereafter encompassed by the monument boundary, except that property owned by the State of California or any political subdivision thereof may be acquired only by donation.

**Appropriation
authorization.**

(4) There are authorized to be appropriated, in addition to such sums as may heretofore have been appropriated, not to exceed \$955,000 for the acquisition of lands or interests in lands authorized by this subsection. No funds authorized to be appropriated pursuant to this Act shall be available prior to October 1, 1977.

SEC. 5. (a) The Secretary of Agriculture shall, within two years after the date of enactment of this Act, review, as to its suitability or nonsuitability for preservation as wilderness, the area comprising approximately sixty-two thousand nine hundred and thirty acres located in the Coronado National Forest adjacent to Saguaro National Monument, Arizona, and identified on the map referred to in section 1(j) of this Act as the "Rincon Wilderness Study Area," and shall report his findings to the President. The Secretary of Agriculture shall conduct his review in accordance with the provisions of subsections 3(b) and 3(d) of the Wilderness Act, except that any reference in such subsections to areas in the national forests classified as "primitive" on the effective of that Act shall be deemed to be a reference to the wilderness study area designated by this Act and except that the President shall advise the Congress of his recommendations with respect to this area within two years after the date of enactment of this Act.

**Rincon
Wilderness Study
Area, suitability
review.**
16 USC 1132 note.

**Report to
President.** 16 USC
1132.

(b) The Secretary of Agriculture shall give at least sixty days' advance public notice of any hearing or other public meeting relating to the review provided for by this section.

**Notice and
hearing.**

SEC. 6. The areas designated by this Act as wilderness shall be administered by the Secretary of the Interior in accordance with the applicable provisions of the Wilderness Act governing areas designated by that Act as wilderness areas, except that any reference in such provisions to the effective date of the Wilderness Act shall be deemed to be a reference to the effective date of this Act, and, where appropriate, any reference to the Secretary of Agriculture shall be deemed to be a reference to the Secretary of the Interior.

Administration.

SEC. 7. (a) Section 6(a) of the Act of September 13, 1962 (76 Stat. 538), as amended (16 U.S.C. 459c-6a) is amended by inserting "without impairment of its natural values, in a manner which provides for such recreational, educational, historic preservation, interpretation, and scientific research opportunities as are consistent with, based upon, and supportive of the maximum protection, restoration and preservation of the natural environment with the area" immediately after "shall be administered by the Secretary".

16 USC 459c-6.

(b) Add the following new section 7 and redesignate the existing section 7 as section 8:

16 USC 459c-7.

"SEC. 7. The Secretary shall designate the principal environmental education center within the Seashore as 'The Clem Miller Environmental Education Center,' in commemoration of the vision and leadership which the late Representative Clem Miller gave to the creation and protection of Point Reyes National Seashore."

**The Clem Miller
Environmental
Education
Center,
designation.**
16 USC 459c-6a.

SEC. 8. Notwithstanding any other provision of law, any designation of the lands in the Shoshone National Forest, Wyoming, known as the Whiskey Mountain Area, comprising approximately six thousand four hundred and ninety-seven acres and depicted as the "Whiskey Mountain Area-Glacier Primitive Area" on a map entitled "Proposed Glacier Wilderness and Glacier Primitive Area", dated September 23, 1976, on file in the Office of the Chief, Forest Service, Department of Agriculture, shall be classified as a primitive area until the Secretary of Agriculture or his designee determines otherwise pursuant to classification procedures for national forest primitive areas. Provisions of any other Act designating the Fitzpatrick Wil-

**Whiskey Mountain
Area,
classification as a
primitive area.**

derness in said Forest shall continue to be effective only for the approximately one hundred and ninety-one thousand one hundred and three acres depicted as the “Proposed Glacier Wilderness” on said map.

Approved October 20, 1976.

LEGISLATIVE HISTORY:

HOUSE REPORT No. 94-1427 (Comm. on Interior and Insular Affairs).
SENATE REPORT No. 94-1357 (Comm. on Interior and Insular Affairs).
CONGRESSIONAL RECORD. Vol. 122 (1976):

Sept. 22, considered and passed House.

Oct. 1, considered and passed Senate. amended: House agreed to Senate amendments.

**PUBLIC LAW 106-76 (OCTOBER 21, 1999) REDESIGNATES BLACK CANYON OF THE
GUNNISON NATIONAL MONUMENT AS A NATIONAL PARK AND EXPANDS BLACK
CANYON OF THE GUNNISON WILDERNESS**

Public Law 106-76
106th Congress

An Act

Oct. 21, 1999
[S. 323]

To redesignate the Black Canyon of the Gunnison National Monument as a national park and establish the Gunnison Gorge National Conservation Area, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

Black Canyon of the Gunnison National Park and Gunnison Gorge National Conservation Area Act of 1999. Colorado. 16 USC 410fff note. 16 USC 410fff.

SECTION 1. SHORT TITLE.

This Act may be cited as the "Black Canyon of the Gunnison National Park and Gunnison Gorge National Conservation Area Act of 1999".

SEC. 2. FINDINGS.

Congress finds that—

(1) Black Canyon of the Gunnison National Monument was established for the preservation of its spectacular gorges and additional features of scenic, scientific, and educational interest;

(2) the Black Canyon of the Gunnison and adjacent upland include a variety of unique ecological, geological, scenic, historical, and wildlife components enhanced by the serenity and rural western setting of the area;

(3) the Black Canyon of the Gunnison and adjacent land provide extensive opportunities for educational and recreational activities, and are publicly used for hiking, camping, and fishing, and for wilderness value, including solitude;

(4) adjacent public land downstream of the Black Canyon of the Gunnison National Monument has wilderness value and offers unique geological, paleontological, scientific, educational, and recreational resources;

(5) public land adjacent to the Black Canyon of the Gunnison National Monument contributes to the protection of the wildlife, viewshed, and scenic qualities of the Black Canyon;

(6) some private land adjacent to the Black Canyon of the Gunnison National Monument has exceptional natural and scenic value that would be threatened by future development pressures;

(7) the benefits of designating public and private land surrounding the national monument as a national park include greater long-term protection of the resources and expanded visitor use opportunities; and

(8) land in and adjacent to the Black Canyon of the Gunnison Gorge is—

(A) recognized for offering exceptional multiple use opportunities;

(B) recognized for offering natural, cultural, scenic, wilderness, and recreational resources; and

(C) worthy of additional protection as a national conservation area, and with respect to the Gunnison Gorge itself, as a component of the national wilderness system.

SEC. 3. DEFINITIONS.

16 USC 410fff-1.

In this Act:

(1) **CONSERVATION AREA.**—The term “Conservation Area” means the Gunnison Gorge National Conservation Area, consisting of approximately 57,725 acres surrounding the Gunnison Gorge as depicted on the Map.

(2) **MAP.**—The term “Map” means the map entitled “Black Canyon of the Gunnison National Park and Gunnison Gorge NCA—1/22/99”. The map shall be on file and available for public inspection in the offices of the Department of the Interior.

(3) **PARK.**—The term “Park” means the Black Canyon of the Gunnison National Park established under section 4 and depicted on the Map.

(4) **SECRETARY.**—The term “Secretary” means the Secretary of the Interior.

SEC. 4. ESTABLISHMENT OF BLACK CANYON OF THE GUNNISON NATIONAL PARK.

16 USC 410fff-2.

(a) **ESTABLISHMENT.**—There is hereby established the Black Canyon of the Gunnison National Park in the State of Colorado as generally depicted on the map identified in section 3. The Black Canyon of the Gunnison National Monument is hereby abolished as such, the lands and interests therein are incorporated within and made part of the new Black Canyon of the Gunnison National Park, and any funds available for purposes of the monument shall be available for purposes of the park.

(b) **ADMINISTRATION.**—Upon enactment of this title, the Secretary shall transfer the lands under the jurisdiction of the Bureau of Land Management which are identified on the map for inclusion in the park to the administrative jurisdiction of the National Park Service. The Secretary shall administer the park in accordance with this Act and laws generally applicable to units of the National Park System, including the Act entitled “An Act to establish a National Park Service, and for other purposes”, approved August 25, 1916 (16 U.S.C. 1, 2–4), and the Act entitled “An Act to provide for the preservation of historic American sites, buildings, objects, and antiquities of national significance, and for other purposes, approved August 21, 1935 (16 U.S.C. 461 et seq.).

(c) **MAPS AND LEGAL DESCRIPTION.**—As soon as practicable after the date of the enactment of this Act, the Secretary shall file maps and a legal description of the park with the Committee on Energy and Natural Resources of the United States Senate and the Committee on Resources of the United States House of Representatives. Such maps and legal description shall have the same force and effect as if included in this Act, except that the Secretary may correct clerical and typographical errors in such legal description and maps. The maps and legal description shall be on file and available for public inspection in the appropriate offices of the National Park Service.

(d) **WITHDRAWAL.**—Subject to valid existing rights, all Federal lands within the park are hereby withdrawn from all forms of entry, appropriation, or disposal under the public land laws; from

location, entry, and patent under the mining laws; and from disposition under all laws relating to mineral and geothermal leasing, and all amendments thereto.

(e) **GRAZING.**—(1)(A) Consistent with the requirements of this subsection, including the limitation in paragraph (3), the Secretary shall allow the grazing of livestock within the park to continue where authorized under permits or leases in existence as of the date of the enactment of this Act. Grazing shall be at no more than the current level, and subject to applicable laws and National Park Service regulations.

(B) Nothing in this subsection shall be construed as extending grazing privileges for any party or their assignee in any area of the park where, prior to the date of the enactment of this Act, such use was scheduled to expire according to the terms of a settlement by the United States Claims Court affecting property incorporated into the boundary of the Black Canyon of the Gunnison National Monument.

(C) Nothing in this subsection shall prohibit the Secretary from accepting the voluntary termination of leases or permits for grazing within the park.

(2) Within areas of the park designated as wilderness, the grazing of livestock, where authorized under permits in existence as of the date of the enactment of this Act, shall be permitted to continue subject to such reasonable regulations, policies, and practices as the Secretary deems necessary, consistent with this Act, the Wilderness Act, and other applicable laws and National Park Service regulations.

(3) With respect to the grazing permits and leases referenced in this subsection, the Secretary shall allow grazing to continue, subject to periodic renewal—

(A) with respect to a permit or lease issued to an individual, for the lifetime of the individual who was the holder of the permit or lease on the date of the enactment of this Act; and

(B) with respect to a permit or lease issued to a partnership, corporation, or other legal entity, for a period which shall terminate on the same date that the last permit or lease held under subparagraph (A) terminates, unless the partnership, corporation, or legal entity dissolves or terminates before such time, in which case the permit or lease shall terminate with the partnership, corporation, or legal entity.

16 USC 410fff-3. **SEC. 5. ACQUISITION OF PROPERTY AND MINOR BOUNDARY ADJUSTMENTS.**

(a) **ADDITIONAL ACQUISITIONS.**—

(1) **IN GENERAL.**—The Secretary may acquire land or interests in land depicted on the Map as proposed additions.

(2) **METHOD OF ACQUISITION.**—

(A) **IN GENERAL.**—Land or interests in land may be acquired by—

(i) donation;

(ii) transfer;

(iii) purchase with donated or appropriated funds;

or

(iv) exchange.

(B) **CONSENT.**—No land or interest in land may be acquired without the consent of the owner of the land.

(b) **BOUNDARY REVISION.**—After acquiring land for the Park, the Secretary shall—

(1) revise the boundary of the Park to include newly-acquired land within the boundary; and

(2) administer newly-acquired land subject to applicable laws (including regulations).

(c) **BOUNDARY SURVEY.**—As soon as practicable and subject to the availability of funds the Secretary shall complete an official boundary survey of the Park.

(d) **HUNTING ON PRIVATELY OWNED LANDS.**—

(1) **IN GENERAL.**—The Secretary may permit hunting on privately owned land added to the Park under this Act, subject to limitations, conditions, or regulations that may be prescribed by the Secretary.

(2) **TERMINATION OF AUTHORITY.**—On the date that the Secretary acquires fee ownership of any privately owned land added to the Park under this Act, the authority under paragraph (1) shall terminate with respect to the privately owned land acquired.

SEC. 6. EXPANSION OF THE BLACK CANYON OF THE GUNNISON WILDERNESS.

16 USC 410fff-4,
1132 note.

(a) **EXPANSION OF BLACK CANYON OF THE GUNNISON WILDERNESS.**—The Black Canyon of the Gunnison Wilderness, as established by subsection (b) of the first section of Public Law 94-567 (90 Stat. 2692), is expanded to include the parcel of land depicted on the Map as “Tract A” and consisting of approximately 4,419 acres.

(b) **ADMINISTRATION.**—The Black Canyon of the Gunnison Wilderness shall be administered as a component of the Park.

SEC. 7. ESTABLISHMENT OF THE GUNNISON GORGE NATIONAL CONSERVATION AREA.

16 USC 410fff-5.

(a) **IN GENERAL.**—There is established the Gunnison Gorge National Conservation Area, consisting of approximately 57,725 acres as generally depicted on the Map.

(b) **MANAGEMENT OF CONSERVATION AREA.**—The Secretary, acting through the Director of the Bureau of Land Management, shall manage the Conservation Area to protect the resources of the Conservation Area in accordance with—

(1) this Act;

(2) the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.); and

(3) other applicable provisions of law.

(c) **WITHDRAWAL.**—Subject to valid existing rights, all Federal lands within the Conservation Area are hereby withdrawn from all forms of entry, appropriation or disposal under the public land laws; from location, entry, and patent under the mining laws; and from disposition under all laws relating to mineral and geothermal leasing, and all amendments thereto.

(d) **HUNTING, TRAPPING, AND FISHING.**—

(1) **IN GENERAL.**—The Secretary shall permit hunting, trapping, and fishing within the Conservation Area in accordance with applicable laws (including regulations) of the United States and the State of Colorado.

(2) **EXCEPTION.**—The Secretary, after consultation with the Colorado Division of Wildlife, may issue regulations designating

zones where and establishing periods when no hunting or trapping shall be permitted for reasons concerning—

- (A) public safety;
- (B) administration; or
- (C) public use and enjoyment.

(e) **USE OF MOTORIZED VEHICLES.**—In addition to the use of motorized vehicles on established roadways, the use of motorized vehicles in the Conservation Area shall be allowed to the extent the use is compatible with off-highway vehicle designations as described in the management plan in effect on the date of the enactment of this Act.

(f) **CONSERVATION AREA MANAGEMENT PLAN.**—

Deadline.

(1) **IN GENERAL.**—Not later than 4 years after the date of the enactment of this Act, the Secretary shall—

- (A) develop a comprehensive plan for the long-range protection and management of the Conservation Area; and
- (B) transmit the plan to—
 - (i) the Committee on Energy and Natural Resources of the Senate; and
 - (ii) the Committee on Resources of the House of Representatives.

(2) **CONTENTS OF PLAN.**—The plan—

- (A) shall describe the appropriate uses and management of the Conservation Area in accordance with this Act;
- (B) may incorporate appropriate decisions contained in any management or activity plan for the area completed prior to the date of the enactment of this Act;
- (C) may incorporate appropriate wildlife habitat management plans or other plans prepared for the land within or adjacent to the Conservation Area prior to the date of the enactment of this Act;
- (D) shall be prepared in close consultation with appropriate Federal, State, county, and local agencies; and
- (E) may use information developed prior to the date of the enactment of this Act in studies of the land within or adjacent to the Conservation Area.

(g) **BOUNDARY REVISIONS.**—The Secretary may make revisions to the boundary of the Conservation Area following acquisition of land necessary to accomplish the purposes for which the Conservation Area was designated.

16 USC 410fff-6,
1132 note.

SEC. 8. DESIGNATION OF WILDERNESS WITHIN THE CONSERVATION AREA.

(a) **GUNNISON GORGE WILDERNESS.**—

(1) **IN GENERAL.**—Within the Conservation Area, there is designated as wilderness, and as a component of the National Wilderness Preservation System, the Gunnison Gorge Wilderness, consisting of approximately 17,700 acres, as generally depicted on the Map.

(2) **ADMINISTRATION.**—

(A) **WILDERNESS STUDY AREA EXEMPTION.**—The approximately 300-acre portion of the wilderness study area depicted on the Map for release from section 603 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1782) shall not be subject to section 603(c) of that Act.

(B) INCORPORATION INTO NATIONAL CONSERVATION AREA.—The portion of the wilderness study area described in subparagraph (A) shall be incorporated into the Conservation Area.

(b) ADMINISTRATION.—Subject to valid rights in existence on the date of the enactment of this Act, the wilderness areas designated under this Act shall be administered by the Secretary in accordance with the Wilderness Act (16 U.S.C. 1131 et seq.) except that any reference in such provisions to the effective date of the Wilderness Act shall be deemed to be a reference to the effective date of this Act and any reference to the Secretary of Agriculture shall be deemed to be a reference to the Secretary of the Interior.

(c) STATE RESPONSIBILITY.—As provided in section 4(d)(7) of the Wilderness Act (16 U.S.C. 1133(d)(7)), nothing in this Act or in the Wilderness Act shall affect the jurisdiction or responsibilities of the State of Colorado with respect to wildlife and fish on the public land located in that State.

(d) MAPS AND LEGAL DESCRIPTIONS.—As soon as practicable after the date of the enactment of this section, the Secretary of the Interior shall file a map and a legal description of the Gunnison Gorge Wilderness with the Committee on Energy and Natural Resources of the United States Senate and the Committee on Resources of the United States House of Representatives. This map and description shall have the same force and effect as if included in this Act. The Secretary of the Interior may correct clerical and typographical errors in the map and legal description. The map and legal description shall be on file and available in the office of the Director of the Bureau of Land Management (BLM).

SEC. 9. WITHDRAWAL.

16 USC 410fff-7.

Subject to valid existing rights, the Federal lands identified on the Map as “BLM Withdrawal (Tract B)” (comprising approximately 1,154 acres) are hereby withdrawn from all forms of entry, appropriation or disposal under the public land laws; from location, entry, and patent under the mining laws; and from disposition under all laws relating to mineral and geothermal leasing, and all amendments thereto.

SEC. 10. WATER RIGHTS.

16 USC 410fff-8.

(a) EFFECT ON WATER RIGHTS.—Nothing in this Act shall—

(1) constitute an express or implied reservation of water for any purpose; or

(2) affect any water rights in existence prior to the date of the enactment of this Act, including any water rights held by the United States.

(b) ADDITIONAL WATER RIGHTS.—Any new water right that the Secretary determines is necessary for the purposes of this Act shall be established in accordance with the procedural and substantive requirements of the laws of the State of Colorado.

SEC. 11. STUDY OF LANDS WITHIN AND ADJACENT TO CURECANTI NATIONAL RECREATION AREA.

16 USC 410fff-9.

(a) IN GENERAL.—Not later than 3 years after the date of the enactment of this Act, the Secretary, acting through the Director of the National Park Service, shall conduct a study concerning land protection and open space within and adjacent to the area administered as the Curecanti National Recreation Area.

Deadline.

(b) **PURPOSE OF STUDY.**—The study required to be completed under subsection (a) shall—

(1) assess the natural, cultural, recreational and scenic resource value and character of the land within and surrounding the Curecanti National Recreation Area (including open vistas, wildlife habitat, and other public benefits);

(2) identify practicable alternatives that protect the resource value and character of the land within and surrounding the Curecanti National Recreation Area;

(3) recommend a variety of economically feasible and viable tools to achieve the purposes described in paragraphs (1) and (2); and

(4) estimate the costs of implementing the approaches recommended by the study.

Deadline.

(c) **SUBMISSION OF REPORT.**—Not later than 3 years from the date of the enactment of this Act, the Secretary shall submit a report to Congress that—

(1) contains the findings of the study required by subsection (a);

(2) makes recommendations to Congress with respect to the findings of the study required by subsection (a); and

(3) makes recommendations to Congress regarding action that may be taken with respect to the land described in the report.

(d) **ACQUISITION OF ADDITIONAL LAND AND INTERESTS IN LAND.**—

(1) **IN GENERAL.**—Prior to the completion of the study required by subsection (a), the Secretary may acquire certain private land or interests in land as depicted on the Map entitled “Proposed Additions to the Curecanti National Recreation Area”, dated 01/25/99, totaling approximately 1,065 acres and entitled “Hall and Fitti properties”.

(2) **METHOD OF ACQUISITION.**—

(A) **IN GENERAL.**—Land or an interest in land under paragraph (1) may be acquired by—

(i) donation;

(ii) purchase with donated or appropriated funds;

or

(iii) exchange.

(B) **CONSENT.**—No land or interest in land may be acquired without the consent of the owner of the land.

(C) **BOUNDARY REVISIONS FOLLOWING ACQUISITION.**—Following the acquisition of land under paragraph (1), the Secretary shall—

(i) revise the boundary of the Curecanti National Recreation Area to include newly-acquired land; and

(ii) administer newly-acquired land according to applicable laws (including regulations).

SEC. 12. AUTHORIZATION OF APPROPRIATIONS.

16 USC
410ff-10.

There are authorized to be appropriated such sums as are necessary to carry out this Act.

Approved October 21, 1999.

LEGISLATIVE HISTORY—S. 323:

HOUSE REPORTS: No. 106-307 (Comm. on Resources).

SENATE REPORTS: No. 106-69 (Comm. on Energy and Natural Resources).

CONGRESSIONAL RECORD, Vol. 145 (1999):

July 1, considered and passed Senate.

Sept. 27, considered and passed House, amended.

Oct. 1, Senate concurred in House amendment.

WEEKLY COMPILATION OF PRESIDENTIAL DOCUMENTS, Vol. 35 (1999):

Oct. 21, Presidential statement.



APPENDIX B: AREAS OUTSIDE THE SCOPE OF THE WILDERNESS AND BACKCOUNTRY MANAGEMENT PLAN AND ENVIRONMENTAL ASSESSMENT

The wilderness and backcountry management plan includes proposed management zoning for designated wilderness and undeveloped backcountry lands at Black Canyon of the Gunnison National Park and land-based backcountry lands within Curecanti National Recreation Area. Developed or frontcountry areas at both units—defined as areas including roads, visitor centers, marinas and boat ramps, parking lots, scenic overlooks with associated trails, and picnic areas—are not included within the planning area. For areas outside the scope of this plan, established management zoning from prior planning documents will remain in place. The following tables identify established management zoning for frontcountry areas at both units.

Table B1. Black Canyon of the Gunnison NP Areas Not Part of the Wilderness and Backcountry Management Planning Area

| Frontcountry Area | Management Zoning (Per 1993 General Management Plan) |
|---------------------------|---|
| South Rim | — |
| South Rim Road | Developed |
| South Rim Visitor Center | Developed |
| South Rim Campground | Developed and semiprimitive |
| Warner Point | Semiprimitive |
| High Point | Developed |
| Sunset View | Developed |
| Dragon Point | Developed |
| Cedar Point | Developed |
| Painted Wall View | Developed |
| Chasm View | Developed |
| Devils Lookout | Semiprimitive |
| Rock Point | Semiprimitive |
| Cross Fissures View | Semiprimitive |
| Pulpit Rock Overlook | Developed |
| Gunnison Point | Developed |
| Tomichi Point | Developed |
| Warner Point Nature Trail | Semiprimitive |
| Rim Rock Nature Trail | Semiprimitive |
| Cedar Point Nature Trail | Developed |
| East Portal Road | Developed |

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|--|--|
| Recently Acquired Land (former Sanburg property) | Not applicable (acquired since the general management plan was developed: zoning to be established in subsequent planning efforts) |
| North Rim | — |
| North Rim Road | Motorized |
| North Rim Ranger Station | Motorized |
| North Rim Campground | Motorized |
| Chasm View Trail | Semiprimitive |
| The Narrows View | Semiprimitive |
| Balanced Rock View | Semiprimitive |
| Big Island View | Semiprimitive |
| Island Peaks View | Semiprimitive |
| Kneeling Camel View | Semiprimitive |

Table B2. Curecanti NRA Areas Not Part of the Wilderness and Backcountry Management Planning Area

| Frontcountry Area | Management Zoning (Per 2010 Motorized Vehicle Access Plan, which amended the 1993 general management plan) |
|------------------------------------|--|
| Bay of Chickens (Windsurf Beach) | Developed |
| Beaver Creek Picnic Area | Semiprimitive/nonmotorized |
| Blue Mesa Reservoir | Flatwater |
| Cimarron Campground | Developed |
| Cooper Ranch Picnic Area | Developed |
| Cooper West | Developed |
| Crystal Reservoir | Semiprimitive flatwater |
| Dillon Pinnacles Picnic Area/Trail | Semiprimitive/nonmotorized |
| Dry Creek Picnic Area | Protected resource area |
| Dry Gulch Campground | Motorized |
| East Cimarron Picnic Area | Developed |
| East Elk Creek Campground | Motorized |
| East Portal Campground | Developed and semiprimitive/nonmotorized |
| Elk Creek Campground/Boat Launch | Developed |
| Gateview Campground | Motorized |
| Hermit's Rest Picnic Area | Developed |
| Iola Boat Launch and Picnic Area | Developed |
| Lake City Bridge Picnic Area | Developed |
| Lake Fork Campground/Boat Launch | Developed |
| McIntyre Gulch Picnic Area | Semiprimitive/nonmotorized and motorized |
| Mesa Creek Trail | Semiprimitive/nonmotorized |

| | |
|---|--|
| Morrow Point Reservoir | Semiprimitive flatwater |
| Neversink Picnic Area/Raft/Kayak Launch | Semiprimitive/nonmotorized |
| Old Stevens Picnic Area | Developed |
| Pine Creek Trail | Semiprimitive/nonmotorized |
| Pioneer Point Overlook/Picnic Area | Developed |
| Ponderosa Campground/Boat Launch | Semiprimitive/nonmotorized and motorized |
| Red Creek Campground | Motorized |
| Red Creek Group Campsite | Motorized |
| Riverway Picnic Area/Raft/Kayak Launch | Developed |
| Stevens Creek Campground/Boat Launch | Developed |
| Willow Creek | Developed |
| Wilson's Landing | Developed |

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APPENDIX C: VISITOR-CREATED TRAIL RESTORATION TECHNIQUES

BACKGROUND

This appendix covers the programmatic actions identified to evaluate and restore informal hiking trails throughout wilderness and backcountry lands of Black Canyon of the Gunnison NP and backcountry lands of Curecanti NRA. The park will only be able to programatically complete compliance on areas presurveyed for cultural resources or not involving any potential for ground disturbance. All other work will have require individual compliance with the State Historic Preservation Office (SHPO).

For the purposes of analysis, there are three types of trails in Black Canyon of the Gunnison NP and Curecanti NRA:

1. Routes are unmaintained, natural gullies.
2. Trails are designated and maintained as facility assets.
3. Informal trails (aka social trails) are visitor-created trails; often shortcuts; not promoted; destination questionable; duplicative; destructive to resources; can be unsafe in certain locations.

TOOLS AND TECHNIQUES FOR TRAIL RESTORATION

1. Evaluate Trail Conditions

The following criteria is used to evaluate trails:

- a. Is the trail destructive to resources (natural resources, cultural resources, wilderness character, soils)?
- b. Is the trail useful? Does it lead somewhere we want people to go?
- c. Is the trail redundant or duplicative of another trail? Does it lead to a destination that another trail serves in a sustainable way?
- d. What is the level and type of use?
- e. Is the trail designated by the park? Is it a trail or route?
- f. Does the trail lead to a destination that the park could consider providing as an opportunity?
- g. Are there administrative or safety concerns? Does the trail lead somewhere that is hazardous, or through an area closed to visitor use? Would a trail here result in additional erosion and require maintenance?

2. Select appropriate restoration tools, techniques, and strategies, which include the following:

Vertical mulch/dead planting.

| | |
|-----------|---|
| Materials | Disguise informal trails to discourage further use and define established trail or route by using natural materials such as dead branches and shrubs, fallen trees, driftwood, rocks, and planting dead |
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|-------------------------------|---|
| | sagebrush. Materials may be piled up between 2 existing live shrubs to make a wall. |
| What tools? | Nonmechanized hand tools such as shovels, rakes, pruners, and saws. |
| How would we access? | Vehicle and/or foot travel depending on location |
| How long would activity take? | Two to four hours |
| How many people? | Two people for typical trail width |
| When would this occur? | Anytime to respond to emerging informal trails and prevent further resource damage. |
| Appropriate in wilderness? | Yes |

Soil Preparation. This includes erosion control, reducing compaction, improving soil readiness, moving rocks around, and contouring.

| | |
|-------------------------------|---|
| Materials | Natural soils, rocks, soil amendments, trail crew, seeding and planting vegetation, riprap in larger ditches off trails (to slow down waters/similar to rock dam approach to prevent erosion, allows sediment to pile up), and erosion control mats (straw and coconut fiber, biodegradable (tubes/wattles and flat) |
| What tools? | <ol style="list-style-type: none"> 1. Hand tools <ol style="list-style-type: none"> a. Hand rakes and shovels to rough up the soil surface decrease soil compaction and remove debris and rocks on soil surface b. Soil Pep – weed free soil amendment added to the area to boost organic matter 2. Rock litter 3. Backcountry – toter/track wheelbarrow 4. Metal or wood stakes |
| How would we access? | Area close by that we can deliver rocks to, delivering rocks to the site with vehicles and bobcats and carrying the rocks to the sites |
| How long would activity take? | Two to four hours |
| How many people? | Two to four people |
| When would this occur? | Late summer or early fall before seeding. Some of these issues also arise after rain events. |
| Appropriate in wilderness? | Yes, except for certain materials that may impact the natural quality of wilderness, such as extensive ditching, rebar and metal materials, and logs, lumber, and rock walls. These types of materials would be used in backcountry lands but not wilderness. |

Revegetation.

| | |
|-----------|---|
| Materials | 1. Seeds from native plants in the vicinity |
|-----------|---|

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| | <ol style="list-style-type: none"> 2. Native grass species seed mixes are used in frontcountry areas that require revegetation to stabilize soil. Native grass varieties from the local area are used. 3. Native forbs, shrubs, and trees adjacent to restoration areas reestablish on their own or may be salvaged and replanted on site. Erosion control mats are made from natural coconut or aspen bark fibers and may be installed over seeded areas in windy sites to keep seed on the ground, reduce predation of seed by wildlife, and prevent visitor trampling. |
| What tools? | Hand tools to broadcast seed on the ground by hand or with a handheld seed spreader and lightly rake over seeds to get good soil-to-seed contact. |
| How would we access? | Vehicle and/or foot travel depending on location |
| How long would activity take? | Four hours to one day |
| How many people? | Two to four people |
| When would this occur? | Late summer or early fall |
| Appropriate in wilderness? | Yes |

Physical Barriers.

| | |
|-------------------------------|---|
| Materials | <ol style="list-style-type: none"> 1. Natural materials such as dead branches and shrubs, fallen trees, driftwood, and rocks 2. Temporary fences made of fence posts and wire mesh or 2-foot metal stakes with metal chain. 3. Carsonite posts that include decal signs: "no hiking" "Give plants a chance" or arrows to direct visitors to established trail. |
| What tools? | Hand tools such loppers, fence cutters, saws, shovels, post pounders, and rock bars |
| How would we access? | Vehicle and/or foot travel depending on location |
| How long would activity take? | Four hours to one day |
| How many people? | Two to four people |
| When would this occur? | Anytime of the field season |
| Appropriate in wilderness? | Yes, natural materials are most appropriate for wilderness. |

Preventative National Park Service Presence, Education.

| | |
|-----------|---|
| Materials | <ol style="list-style-type: none"> 1. Additional people (direct contacts with visitors) 2. Publications 3. Signs <ol style="list-style-type: none"> a. Carsonite posts |
|-----------|---|

| | |
|-------------------------------|--|
| | <ul style="list-style-type: none"> b. Road signs outside wilderness in frontcountry and backcountry lands 4. Kiosks at trailheads 5. Programs 6. Wilderness use permits |
| What tools? | Carsonite posts, kiosks |
| How would we access? | <ul style="list-style-type: none"> 1. Vehicle and/or foot travel depending on location 2. Visitors could access info via website, kiosks, interpretation programs |
| How long would activity take? | <ul style="list-style-type: none"> 1. Ongoing interpretation and wilderness use permits 2. Replacement of signs: four hours |
| How many people? | <ul style="list-style-type: none"> 1. Replacing signs: Two to four people 2. Interpretive program: One person |
| When would this occur? | Ongoing |
| Appropriate in wilderness? | <ul style="list-style-type: none"> 1. Large group programs are not appropriate in wilderness 2. Limit installations including signs in wilderness. Signs are right outside the wilderness boundary. 3. Wilderness use permits are used within the wilderness 4. Wilderness rangers and interpretive rangers are appropriate within wilderness. |

Internal reporting and education. This includes proactive identification of social trails before they are established and screening on early detection—before the plants are trampled.

| | |
|-------------------------------|--|
| Materials | Parkwide staff education: Staff and volunteers report informal trails that are reported by visitors who may get lost and trails with increased soil erosion and loss of vegetation. Staff use wilderness entry forms to report these conditions in wilderness. |
| What tools? | 1. Wilderness entry forms 2. Other communication if outside wilderness. |
| How would we access? | See above for NPS presence |
| How long would activity take? | See above for NPS presence |
| How many people? | See above for NPS presence |
| When would this occur? | See above for NPS presence |
| Appropriate in wilderness? | See above for NPS presence |

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APPENDIX D: GUIDELINES FOR MANAGING SCIENTIFIC AND RESEARCH ACTIVITIES IN WILDERNESS

Science and research are important activities at Black Canyon of the Gunnison National Park and its wilderness, providing valuable insight into the cultural and natural history of the canyon and the Colorado Plateau. Wilderness and science share a reciprocal bond. Science often yields important insights that help secure the long-term preservation of wild places for future generations. Conversely, designated wilderness serves to protect vast natural laboratories free from significant modification. Wilderness often provides the best baseline we have for understanding the full range of ecological systems and how they respond to a changing climate. This understanding can include, for example, how changing demography and distribution of plant and animal species, severity and timing of fire, and spread of insect and disease outbreaks are correlated with changing climate conditions.

Wilderness provides unique opportunities and unique challenges with respect to scientific activities and research. Scientific activities may result in some loss to wilderness character, such as through trammeling or development, or loss of natural quality. Managers make careful decisions about how to balance the benefits and impacts of each situation. Sometimes, science and research may have advantages that are uncertain in the present; here too, managers may be faced with difficult decisions to determine whether a scientific activity is necessary and appropriate in wilderness.

The statutory purposes of wilderness include scientific activities, and these activities are encouraged and permitted when consistent with NPS responsibilities to preserve wilderness character.

Except as otherwise provided in this Act, each agency administering any area designated as wilderness shall be responsible for preserving the wilderness character of the area and shall so administer such area for such other purposes for which it may have been established as also to preserve its wilderness character. Except as otherwise provided in this Act, wilderness areas shall be devoted to the public purposes of recreational, scenic, scientific, educational, conservation, and historical use.

Wilderness Act of 1964, Section 4(b)

Scientific activities can greatly benefit the resource but should be thoroughly evaluated. Before granting a research permit, staff should consider (1) how necessary it is that the activity occur in wilderness (could it be done outside of wilderness?), (2) whether the researcher proposes to violate any of the section 4(c) prohibited uses in the Wilderness Act, (3) the impact of the research on wilderness character, (4) if/how the research will benefit the wilderness, and (5) the cumulative effect of all research activities being conducted within the wilderness.

The staff of Black Canyon of the Gunnison National Park is committed to fostering scientific activities consistent with preserving wilderness character. This guidance applies to universities, agencies, partners, and other entities proposing to do research within wilderness, as well as NPS research and scientific activities.

DOCUMENT EXISTING ACTIVITIES

Black Canyon of the Gunnison National Park currently receives approximately 5 to 10 applications for research per year. Unlike some of the larger national parks, this is a relatively modest and manageable number. However, it is important that past, present, and future scientific activities do not cause significant cumulative impacts. The first step will be to inventory current activities and installations and to the extent possible, enter that information into a geographic information system (GIS) database. This tool will enable managers to understand the current extent, spatially, of scientific activities occurring in wilderness. This record will be updated annually to reflect new approved research permits, as well as completed activities and installations that have been removed.

COMMUNICATION

Black Canyon of the Gunnison National Park will provide prospective researchers with current information about doing research in wilderness, including:

- How and why working in wilderness is different.
- Understanding prohibited uses.
- The application and review process.
- Recommendations for fieldwork – for safety and for preserving wilderness character.

RESEARCH PERMIT APPLICATIONS

All scientific investigations in Black Canyon of the Gunnison National Park require the issuance of a Scientific Research and Collecting Permit. Permit applications are completed online and are processed through the Resource Stewardship and Science Office of the park. Prospective investigators are encouraged to contact the research coordinator for additional guidance well in advance of submitting an application. Permit applications undergo careful review to ensure that proposals comply with applicable laws and policies. Any project that proposes any prohibited use in wilderness also requires additional consultation with staff.

The Resource Stewardship and Science staff communicates with each applicant to review their proposal and evaluate the need and methodology for their project. Prohibited uses are allowable only when they constitute a “minimum requirement” toward the preservation of either the wilderness character or some enduring value inherent in it. The process used to determine whether such activity should be permitted is called the minimum requirements analysis. During the first phase of this two-step process, projects are screened to determine if the proposed action is necessary for the purpose of wilderness, whether a backcountry (nonwilderness) site could meet project objectives, whether the project conflicts with long-term wilderness planning, and whether the project can be completed without involving prohibited uses. It is a best practice to complete a minimum requirements analysis for research proposals that may involve a prohibited use prior to securing funding and/or assuming that the proposal will be approved.

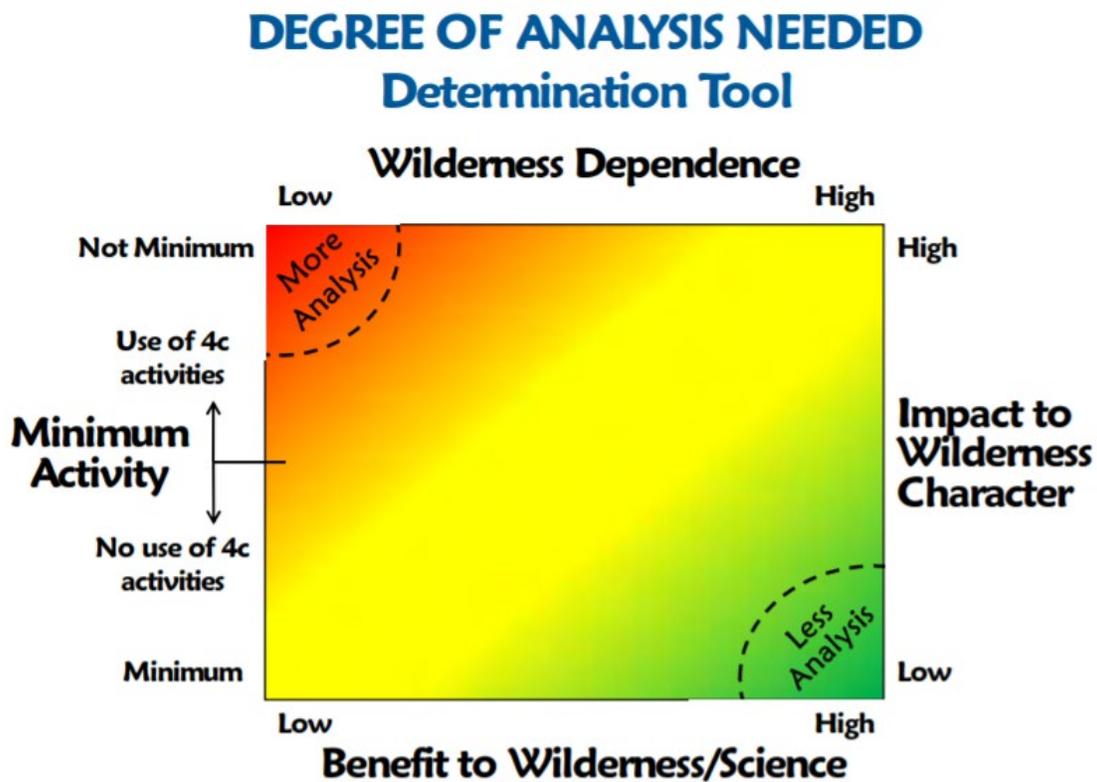
Projects considered compatible with the preservation of one or more of the qualities of wilderness character then move to the second step of the analysis where alternatives are evaluated to determine the “minimum activity” necessary to meet the desired project objectives. When contemplating research projects in designated wilderness, scientists are encouraged to develop and propose

projects with substantial consideration for the preservation of wilderness values and character, and the avoidance of all identified prohibited uses.

If proposals are approved to include temporary nonconforming items such as monitoring equipment, weather gauges, markers, and radio collars, the approved permit will specify a period of time that these items shall remain in wilderness and provide a plan and commitment for removal of these items at the end of that time period.

EVALUATION AND REVISION

An initial screening will be applied to research applications, so that the appropriate level of review and consultation will occur.



Proposals that have high benefit to wilderness and science and low impact to wilderness character will not require extensive review and consultation. Projects that have low benefit to science and wilderness and high impact to wilderness character will involve substantial review and consultation. Such proposals may require the use of a more rigorous evaluation framework that looks in more detail at benefits to wilderness character. Proposed prohibited uses will require a minimum requirements analysis and compliance with the National Environmental Policy Act and National Historic Preservation Act. Through the application process, revisions to the location, methodology, and access may be made to improve the proposal and preserve wilderness character.

MONITORING RESEARCH ACTIVITIES

Park managers will monitor permitted activities to ensure that they remain compliant with wilderness policy. Researchers will be informed of their duties to adhere to wilderness policies once their projects have been approved. Researchers should notify park managers of any alterations to original plans. Any change to the approved project must be evaluated and approved by the park manager before they are implemented. Methodologies for all long-term projects will be reviewed on a regular basis to determine if techniques are available that are more compatible with maintaining wilderness character. Park managers will ensure that agreed upon removal of temporary, nonconforming items will be completed. Approved and completed projects will be added to the park GIS database for research and scientific activities and track cumulative impacts.

SHARING RESULTS

The application of scientific results to wilderness stewardship is crucial in many circumstances or results; however, that value may not be immediately apparent and may prove to be invaluable to wilderness managers at a later date. For example, the results may serve as a basis to inform decisions and plan climate-change-related actions for adaptation, mitigation, and restoration. Such results may also be fundamental in informing decisions about desired conditions.

Research results can take many forms and may or may not always be immediately applicable to wilderness. Examples of applicable results may include, but are not limited to the following:

- Trends in local climate
- Species range, distribution, movements, and potential range shifts in the face of climate change
- Geological and hydrological changes (such as lowering water tables or melting glaciers)
- The presence of invasive species

It is the researcher's responsibility to provide timely presentation of the results to park managers or to provide timely updates of activities and ongoing findings in the case of long-term projects. It is also important that the results be presented to park managers in a way that assists their understanding of how the results may be relevant to management decisions. Researchers should explore opportunities to share results with visitors, the community, universities, other parks and agencies, and a wide array of other interested people.

APPENDIX E: IMPACT TOPICS NOT CARRIED FORWARD IN THE ENVIRONMENTAL ASSESSMENT

Consistent with the 2020 Council on Environmental Quality (CEQ) Regulations for Implementing NEPA (40 CFR 1501.9) and guidance in Section 4.2.E of the 2015 *NPS NEPA Handbook*, the National Park Service used civic engagement and interdisciplinary team discussions to identify important issues to be analyzed in detail in the environmental assessment, and to identify those issues that could be eliminated from further study. This appendix documents those issues and the related impact topics that were considered but then dismissed from further analysis and the reasons why.

SOCIOECONOMICS

Socioeconomics is the social science of how economic activity affects social processes. Based on an evaluation of preliminary impacts related to socioeconomics, it was determined that this impact topic could be dismissed. The alternatives considered would neither change local nor regional land use; impacts on businesses and local economics would likely be minimal.

The NPS proposed action (preferred alternative) identifies a commercial service allocation for guided commercial activities as a component of the visitor capacity identification to meet the extent necessary determination (END) for commercial services in wilderness. The END (see part 1, chapter 7) evaluated the extent of commercial services that are necessary to achieve the recreational purpose of the Black Canyon of the Gunnison Wilderness. The commercial allocation was identified with best available visitor use data.

The identified commercial use allocation allows for a slight increase in commercial services within the inner canyon primitive wilderness subzone (within the Black Canyon of the Gunnison Wilderness); however, the amount of commercial use remains low in comparison to the actual number of annual visitors. These levels of commercial use are expected to have minimal impacts on socioeconomic conditions in the area, and a detailed socioeconomic analysis is not needed to make a reasoned choice between alternatives.

WILDLIFE

Wildlife, including birds, mammals, and reptiles, could be disturbed by restoration activities, the presence of hikers, and noise generated from these activities, which would last approximately 6–12 months during the restoration work periods. However, these impacts are similar to those currently experienced at the park. Adverse impacts of restoration activities, for example, would be mitigated by avoiding important wildlife habitat, controlling erosion using best management practices, and monitoring and controlling nonnative plant species through current vegetation management practices. Park managers would further consider the use of temporary or seasonal visitor use restrictions or area closures to protect sensitive wildlife and habitat from trail use—especially during nesting and breeding season.

Care would be taken to avoid or minimize disturbance of sensitive wildlife species found nesting, hibernating, foraging, or otherwise living in or immediately nearby any worksites. For all restoration activities park staff would apply sustainable practices to minimize potential environmental impacts. Restoration activities would not compete with or dominate natural processes, such as the seasonal migration of wildlife. Therefore, wildlife has been dismissed from detailed analysis.

WETLANDS

Actions associated with this plan are not expected to incur a measurable impact to wetlands, such as the cottonwood riparian woodlands in Curecanti NRA and bottomland mosaic woodlands in both parks. Specific stock ponds that contain native wetland vegetation or important hydrological features would be surveyed and considered for removal in the future through a separate compliance process. Ongoing mitigation efforts would continue to occur at the park to ensure wetlands are protected throughout the execution of this plan. Therefore, wetlands have been dismissed from detailed analysis.

THREATENED AND ENDANGERED RESOURCES

While there is some critical habitat for Gunnison sage-grouse within the project area, recreational activities and plan actions are not expected to affect the viability of this habitat because they would not occur at a large enough scale to impact the dispersal, general movement, or genetic interchange of Gunnison sage-grouse from the Gunnison Basin population. Similarly, river otters are not expected to be affected because the plan does not propose management actions in aquatic environments. Surveying of threatened and endangered species would continue to inform implementation decisions at the park. The removal of grazing infrastructure (fences, two-tracks, etc.) would similarly require additional compliance, where qualified staff would conduct surveys prior to implementation. Rare state-listed plants, such as the Black Canyon gilia, hanging garden Sullivantia, Juniper tumble mustard and Gunnison's milkvetch are within the project area. On the ground surveys would be conducted prior to implementation to ensure the protection of these species, and mitigation measures would be used when, if at all, deemed impossible to avoid impacts on these species. Therefore, threatened and endangered species have been dismissed from detailed analysis.

APPENDIX F: ALTERNATIVE CONSIDERED BUT DISMISSED IN THE ENVIRONMENTAL ASSESSMENT

No commercial services within inner canyon wilderness zone of Black Canyon of the Gunnison National Park: During the initial planning process, the commercial services analysis indicated that commercial services within the proposed inner canyon wilderness zone of Black Canyon of the Gunnison National Park should be prohibited to maintain and improve opportunities for challenge, self-reliance, and adventure. In addition, the NPS planning team at that time believed that allowing commercial services would diminish opportunities and monopolize limited access for visitors seeking to recreate in the inner canyon wilderness zone. The prohibition of commercial services was one component of the preferred alternative identified in the 2011 environmental assessment that has since been terminated.

In the years since, commercially guided rock climbing continued to provide recreational opportunities with an emphasis on visitor safety. During this time, park staff collected data on guided rock climbing to better understand use and potential impacts on resources and to inform this updated planning process. As documented in part 1, chapters 6 and 7, the annual percentage of wilderness use permits that were used by commercial service providers was less than 2% annually. Therefore, the commercial service operations did not monopolize the opportunity for other visitors to participate in recreational activities and still achieved the desired conditions for the zone. The climbing data collected during this period informed the commercial allocation included in part 1, chapter 6 of this plan and ensure that climbers without guides continue to have access to desired routes and gullies.

Similarly, park staff noted that commercially guided climbing did not negatively impact wilderness character within the proposed inner canyon primitive wilderness subzone because this use was sporadic. Therefore, given the visitor safety benefits that guided climbing can provide, and information from updated data collection, the alternative of prohibiting commercially guided climbing in the inner canyon primitive wilderness subzone of Black Canyon of the Gunnison NP was dismissed as it no longer achieves the purpose and need of the plan.



As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historic places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under US administration.

BLCA 144/181585
CURE 616/181586
June 2022

