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Black Canyon

General Management Plan

Black Canyon of the Gunnison National Monument and Curecanti National Recreation Area

w/ FONSI 12/1/97

Prepared by the staffs of Black Canyon of the Gunnison National Monument, Curecanti National Recreation Area, and the Rocky Mountain Support Office

September 1997

ON MICROFILM

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GENERAL MANAGEMENT PLAN/ ENVIRONMENTAL ASSESSMENT CURECANTI NATIONAL RECREATION AREA AND BLACK CANYON OF THE GUNNISON NATIONAL MONUMENT

The National Park Service is preparing a general management plan to provide Black Canyon of the Gunnison National Monument and Curecanti National Recreation Area with a long-range management program. The plan sets forth a management concept for each park; establishes a role for each park within the context of regional trends and plans conservation, recreation, transportation, economic development, and regional issues; and identifies the conditions necessary to resolve issues and achieve management. The primary objective for park management is to guide the protection and preservation of the natural and cultural environments while permitting ecological processes to continue with a minimum of human disturbance. The plan also considers a variety of recreational and interpretive visitor experiences that enhance the enjoyment and understanding of the park resources. Major long-range issues addressed in the plan and environmental assessment set objectives for resource protection, visitor use and experience, and park operations. The plan establishes the necessary first steps in addressing desired ecological and social conditions and capacities for the park. Alternatives are broad and strategic in nature, requiring additional site-specific environmental analysis to be completed at the time of conceptual design. Such future development would require an environmental document, either an environmental assessment (EA) or an environmental impact statement (EIS).

PROPOSAL

Alternative B, the National Park Service proposal, describes an alternative with a balanced mix of recreational experiences, capitalizing on the unique aspects that each park brings to those experiences.

The proposal for Curecanti National Recreation Area emphasizes both natural and cultural resource experiences for visitors. Appropriately developed areas would support a range of diverse recreational opportunities.

The Black Canyon of the Gunnison National Monument proposal emphasizes a variety of human experiences in a rugged canyon environment. It would provide developed areas on the South Rim and less developed areas on the North Rim. A variety of educational and recreational experiences would also be provided to protect and enhance the wilderness values of the monument.

ALTERNATIVES

Four alternatives have been considered for each park. Alternatives provide for distinctly different levels of use, visitor orientation to resources, and visitor service. All alternatives consider a broad strategic management scheme for the park. Alternative A describes the no-action alternative, in other words, what happens if existing management continues. Alternative B, the proposal, describes a balanced mix of recreational experiences, capitalizing on the unique aspects that each park brings to those experiences. Alternative C describes a situation that provides for more primitive recreational experiences, encouraging visitors to seek more developed recreational experiences in other areas outside the park boundaries. Alternative D provides for more developed recreational experiences within the parks while protecting sensitive resources.

PUBLIC INVOLVEMENT

The environmental assessment was made available for public review and comment during a 2½ month period ending October 31, 1996. During this period, 13 responses were received. Refer to the *Summary of Public Involvement and Comment* for additional details.

CONCLUSION

The analysis of the proposal has shown that the proposal will not have a significant effect on the environment. Negative environmental impacts that could occur are minor and tempor - n effect. There are no unmitigated adverse impacts on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the National Register of Historic Places, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, cumulative effects, or elements of precedence were identified. Implementation of the action will not violate any federal, state, or local law.

Based on the foregoing, it has been determined that an EIS is not required for this project and thus will not be prepared.

Approved:

Regional Director, Intermountain Region

12/1/97
Date

GENERAL MANAGEMENT PLAN

Black Canyon of the Gunnison National Monument
Curecanti National Recreation Area
Montrose and Gunnison Counties, Colorado

This general management plan (GMP) provides the National Park Service with a long-range management program for the continued protection of the unique resources found within Black Canyon of the Gunnison National Monument (Black Canyon) and Curecanti National Recreation Area (Curecanti).

The plan sets forth a management concept for each park; establishes a role for each park within the context of regional trends and plans for conservation, recreation, transportation, economic development, and regional issues; and identifies the conditions necessary to resolve issues and achieve management goals. The primary objective for park management is to guide the protection and preservation of the natural and cultural environments while permitting ecological processes to continue with a minimum of human disturbance. The plan also considers a variety of recreational and interpretive visitor experiences that enhance the enjoyment and understanding of the park resources.

Within this context, the purpose of this document is to provide a framework and broad, general direction for park management. Primary emphasis is placed on providing guidance for the parks' long-term needs. The plan also establishes the necessary first steps in addressing desired ecological and social conditions and capacities for the park. Proposals for future actions undergo environmental compliance either prior to or as part of a design process or during the development of specific resource management and visitor service plans. Combinations of management prescriptions establish the complete strategy for management of lands within the boundary.

The plan considers a broad strategic management scheme for the park. This does not preclude development options and partnerships outside park boundaries as long as these proposals are supportive and consistent with the park's chosen management direction. Alternative sites within the park boundaries for visitor contact, maintenance, and administration will be evaluated when proposals are presented. Partnerships with other agencies and local entities could also be explored to minimize cost, reduce impacts on resources, and provide consolidated services to the public.

Sheridan Steele

Superintendent

Black Canyon of the Gunnison National Monument

Curecanti National Recreation Area

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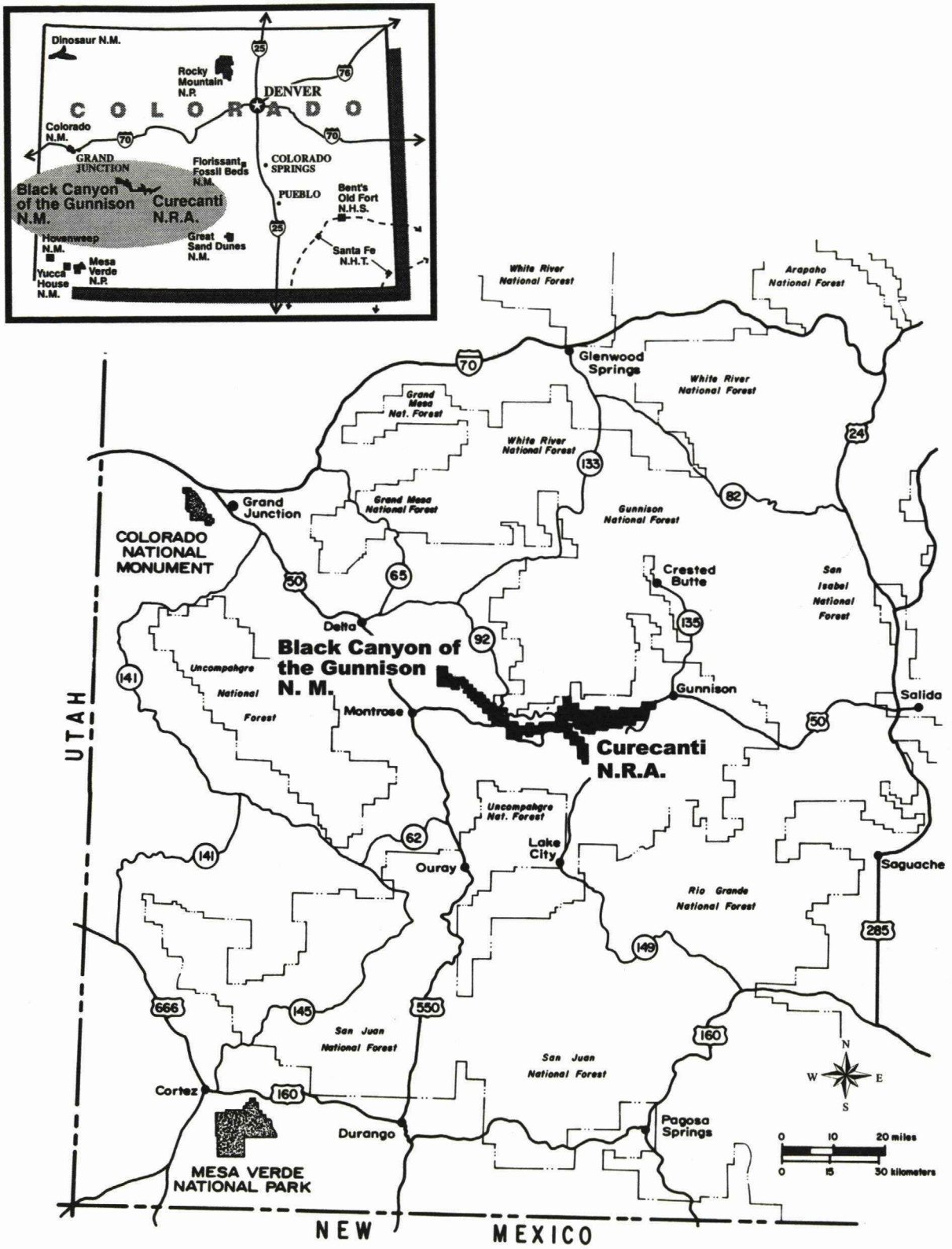
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Vicinity Map

Black Canyon of the Gunnison National Monument and Curecanti National Recreation Area

Colorado

U. S. Department of the Interior - National Park Service

PURPOSE AND NEED

INTRODUCTION

Curecanti National Recreation Area and Black Canyon of the Gunnison National Monument are directly adjacent to one another and are linked ecologically as part of the larger Gunnison River Basin ecosystem. Yet each park has a very different purpose. Together, these park units contribute different resources and spectrums of recreational opportunities for the tourism that exists in the larger Grand Junction-Montrose-Delta-Gunnison-North Fork area.

The region in which the parks lie is one of great elevation ranges (see Vicinity Map). Both parks are common to the Gunnison River with elevations from 6,500 feet above sea level in Black Canyon, rising above 14,000 feet on mountain peaks visible within 30 miles. The parks are approximately 250 miles southwest of Denver.

Black Canyon of the Gunnison has a unique and spectacular landscape that was formed slowly by the action of water and rock scouring down through hard Proterozoic crystalline rock. No other canyon in North America combines the narrow opening, sheer walls, and startling depths offered by the Black Canyon of the Gunnison. The park shares its eastern boundary with Curecanti National Recreation Area.

Curecanti National Recreation Area is composed of three reservoirs named for corresponding dams on the Gunnison River. The Bureau of Reclamation has the primary management responsibilities for the Aspinall Unit facilities. Panoramic mesas, fjord-like reservoirs, and deep, steep, and narrow canyons abound. Blue Mesa Reservoir is Colorado's largest body of water and is the largest Kokanee Salmon fishery in the United States. Morrow Point Reservoir is the beginning of the Black Canyon of the Gunnison, and below, Crystal Reservoir is the site of the Gunnison Diversion Tunnel, a National Historic Civil Engineering Landmark. Recently discovered dinosaur fossils, a 5,000-acre archeological district, a narrow-gauge train, and traces of 6,000-year-old dwellings further enhance the offerings of Curecanti.

This plan sets forth the basic management philosophy for both parks, managed as one integral unit, and provides strategies for addressing issues and management objectives. This document includes measures for the preservation of the area's resources, indications of the types and general intensities of development (including visitor circulation and transportation patterns, systems, and modes) associated with public enjoyment and use of each area, and the first steps in identifying visitor carrying capacities for both units.

THE PLANNING PROCESS

The planning process builds upon the logic established for national parks, starting with the national park system and all other applicable laws, regulations, and policies. The foundation of the plan rests on three common components—the vision, the specific objectives, and management prescriptions.

The vision is a short narrative that describes the park's desired future

condition. It is meant to stand the test of time and reflect the park's purpose and significance. It expresses the management philosophy for the park and what the park is to be like in the future.

Specific objectives capture the essence of the vision, providing clarity and priorities. These objectives are issue-, resource-, or geographic-specific. They may include products to be produced or conditions to be attained or maintained. As a whole, objectives are interrelated and interdependent on one another. The specific objectives provide a basis for allocating resources and define management regions in the park.

Management prescriptions can be either geographically or programmatically based, or a combination of both. Geographic prescriptions describe characteristics of the management region for which they were developed and define the outputs, activities, and projects for that region. Programmatic prescriptions are not tied to a specific management region. They address resource goals in the context of a large area, such as air quality. The rationale for defining regional boundary delineations is included in the planning document.

Management prescriptions for each region are based on the character and condition of the resource involved. They are not only tied to local or park-wide needs but also take into consideration factors beyond park boundaries. A common theme provides a foundation for the plan, while prescriptions define strategies to meet objectives compatible with the theme.

The plan provides general or strategic guidance and is not detailed, specific, or highly technical in nature. Highly technical environmental analysis is to be done when funds become available to begin design of facilities, if prescribed by the management plan, when site-specific impacts can be addressed. Prior to implementation, all undertakings (including mitigation measures) will be subject to Section 106 review and compliance in consultation with the State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation (ACHP).

THE NATIONAL PARK SYSTEM

The national park system represents a collection of our national heritage and includes many of the nation's most outstanding and significant natural, cultural, historic, and recreational resources. Each unit contains resources and values that makes it something special—even nationally significant. Black Canyon of the Gunnison and Curecanti are two such units, each filling a particular niche in the system. The "niche" filled by each park is defined by its park purpose.

The National Park Service's purpose of conserving resources—whether they be natural, cultural, historic, or recreational—recognizes the importance of preservation as an active management tool. This preservation principal respects both natural and human relationships and emphasizes the value of maintaining land for the purpose of preserving natural ecosystems, historic significance, and outstanding recreational opportunities.

Balanced against the protection and preservation of these resources is the

value of public enjoyment by present and future generations. Human use often can threaten the very resources that the National Park Service is tasked to protect. Many public debates have revolved around the balancing of these two National Park Service purposes. Whether it is telling a story or distributing use carefully to protect resources, the Service uses the principles of human and natural management to accomplish its mission. But at the very least, "these areas derive increased national dignity and recognition of their superb environmental quality through their inclusion jointly with each other in one national park system managed for the benefit and inspiration of all people." (16 USC 1a-1;1970)

MANAGEMENT ASSESSMENT

In 1993, each unit conducted a three-day management assessment workshop (Black Canyon in August and Curecanti in October) with participants from the parks' staffs, the regional office, other agencies, and the public. This process began by looking at each park's legislation in an effort to clearly define its purpose and significance. The next step identified management objectives, which are broad, conceptual descriptions of what the park could be like relative to resource management, visitor services, human resources, and partnerships. Applicable management objectives derived during the management assessment were used to help define more specific objectives for this plan.

Black Canyon Of The Gunnison National Monument

Park Purpose

The reason or reasons for which Black Canyon of the Gunnison National Monument was set aside as a part of the national park system is called its *park purpose*. Purpose statements are based upon legislation, legislative history, and historic trends.

The purpose statements below reflect the legislative intent for the monument. Other legislation affecting management of the monument includes the 1916 Organic Act (and as amended by the act of March 27, 1978), the National Environmental Policy Act, the National Historic Preservation Act, the Wilderness Act, the Archeological Resources Protection Act, and the Endangered Species Act.

The purpose of the Black Canyon of the Gunnison National Monument is to provide for:

- preservation and protection of the spectacular gorges and scenic values.
- protection of natural, cultural, and scientific resources and items of educational interest.
- educational, scientific, and interpretive opportunities.
- preservation of the integrity and characteristics of lands designated as wilderness.
- opportunities for public use and enjoyment of these resources in a manner that will leave them unimpaired for future generations.
- management of monument resources as an integral part of the Gunnison River Basin.

Park Significance

Significance is summarized in statements that capture the essence of Black Canyon's importance to our natural and cultural heritage. Significance statements are not an inventory of significant resources but rather describe the importance or distinctiveness of the aggregate of resources in the park. The following are the significance statements developed for the park through the management assessment process.

- The dynamic evolution of the Black Canyon, involving the forces of heat, pressure, and water action, has created one of the world's premier wild canyons, because of its sheer cliffs, depth, and narrowness, as it towers over the rapidly falling river. It is a visual attraction that draws hundreds of thousands of visitors each year.
- Clean air and panoramic views pale the influence of humans and give a feeling of what once was throughout the west.
- It's the view.
- The monument contains a diversity of plant and animal species, several of which are rare, endangered, or unique to the area. Natural resources provide an unaltered baseline from which to measure changes in regional and global conditions.
- The writing is on the wall. Without opening a book, one can go back over 1.7 billion years of geologic history as these vertical walls tell their story.
- Black Canyon is the centerpiece of geologic diversity in a relatively small area, reflecting 1.7 billion years of geologic evolution.
- The inner canyon wilderness is truly a wild, foreboding place.
- Tourism is a leading industry in the Gunnison Basin. Centrally located in the basin, Black Canyon is an accessible destination that serves many visitors annually and directly contributes to the local economy.
- The establishment of Black Canyon as a unit of the national park system is a symbol of community pride.
- Its position along the Gunnison River combined with its values make BLCA an integral part of ecosystem management of the Gunnison River Basin.
- At every turn, nook, and cranny, Black Canyon affords the opportunity for visitors to discover new vistas of nature and self.
- Black Canyon is a superlative example of continuing river erosion that is accessible to and understandable by the public.
- The combination of depth and narrowness makes Black Canyon a one of a kind setting in North America.
- The sheer size of the canyon creates an experience where you feel the dominance of nature over people.
- The steep gradient of the Gunnison River and the depth and narrowness of the Black Canyon is a physical barrier to the migration of fish, plants, and animals. This has resulted in a diverse group of isolated biological communities that provide unique opportunities for scientific study, for example, evolution of plants and animals, impacts of migration barriers, and so on.
- The park's canyons and backcountry areas are quiet places where the sounds of nature create an experience for visitors that last a lifetime. You can hear the river flow and the wind in the trees. At times the river talks.
- You can go into the wilderness and experience primal America and bring back a sense of adventure and discovery.
- The canyon is a great place for scientific discovery and environmental education. It is a living classroom providing unique insights into geology, water and wind erosion, air quality, wildlife habitat, and cultural history.
- The magnificence of the canyon—its spectacular depth and color—defy description.

- It touches the emotion, imagination, and spirit. And a river runs through it!
- People can enjoy the canyon through a variety of recreational experiences that include sight-seeing, fishing, hiking, climbing, kayaking, photography, wildlife watching, meditation, and solitude.

Curecanti National Recreation Area

Park Purpose

The reason or reasons for which Curecanti was set aside as a part of the national park system is called its *park purpose*. Purpose statements are based upon legislation, legislative history, and historic trends. Curecanti is currently being administered by the NPS based on a number of cooperative agreements and legal mandates. Curecanti has not yet been authorized by specific legislation as a separate unit of the national park system.

The specific legal mandates for Curecanti National Recreation Area include the Colorado River Storage Project (CRSP) Act and a memorandum of agreement between the Bureau of Reclamation and the National Park Service. The statements below reflect the purposes and mandates for Curecanti.

Purposes

- To conserve the scenery, natural, historic, and archeological resources, and wildlife of Curecanti National Recreation Area.
- To provide for public use and enjoyment in such a way as to ensure visitor safety and resource preservation or conservation by establishing and maintaining facilities and providing protective and interpretive services.

Mandates

- To manage the lands, waters, and activities of Curecanti National Recreation Area in such a way that it does not interfere with the purposes of the Colorado River Storage Project Act and other Bureau of Reclamation agreements affecting the operation of the Aspinall Unit.
- To mitigate the loss of fish and wildlife resources as a result of the Colorado River Storage Project.

Other legislation affecting the management of Curecanti National Recreation Area includes the 1916 Organic Act (and as amended by the act of March 27, 1978), the National Environmental Policy Act, the National Historic Preservation Act, the Archeological Resources Protection Act, and the Endangered Species Act.

Park Significance

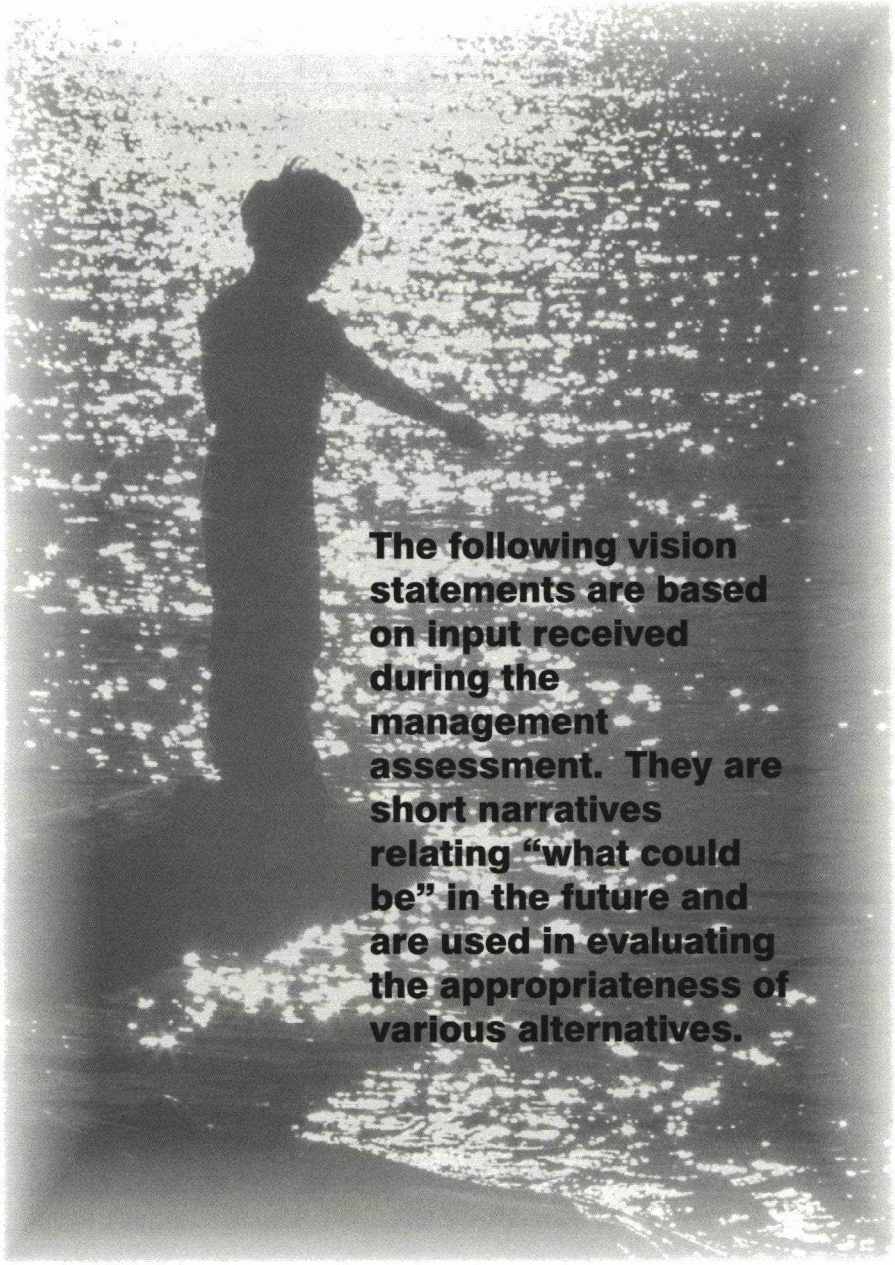
Significance is summarized in statements that capture the essence of Curecanti's importance to our natural and cultural heritage. Significance statements are not an inventory of significant resources but rather describe the importance or distinctiveness of the aggregate of resources in the park. The following are the significance statements developed for the park through the management assessment process.

- The evolution of life in the Gunnison Basin and its ultimate dependence on water is illustrated and interpreted at Curecanti. Evidence of the impact that water has had on past settlements and developments abounds in the area's geology and history.
- The three dams of the Aspinall Unit are unique in concept and construction. The dams were conceived in the 1950's and built during the 1960's and 70's to provide irrigation, flood control, hydroelectric power, and recreation. The three-dam complex also allows flexible water management of upstream water resources for recreation and irrigation while providing exchange water to the Uncompahgre Valley through the Gunnison Tunnel, a 6-mile, hand-dug tunnel

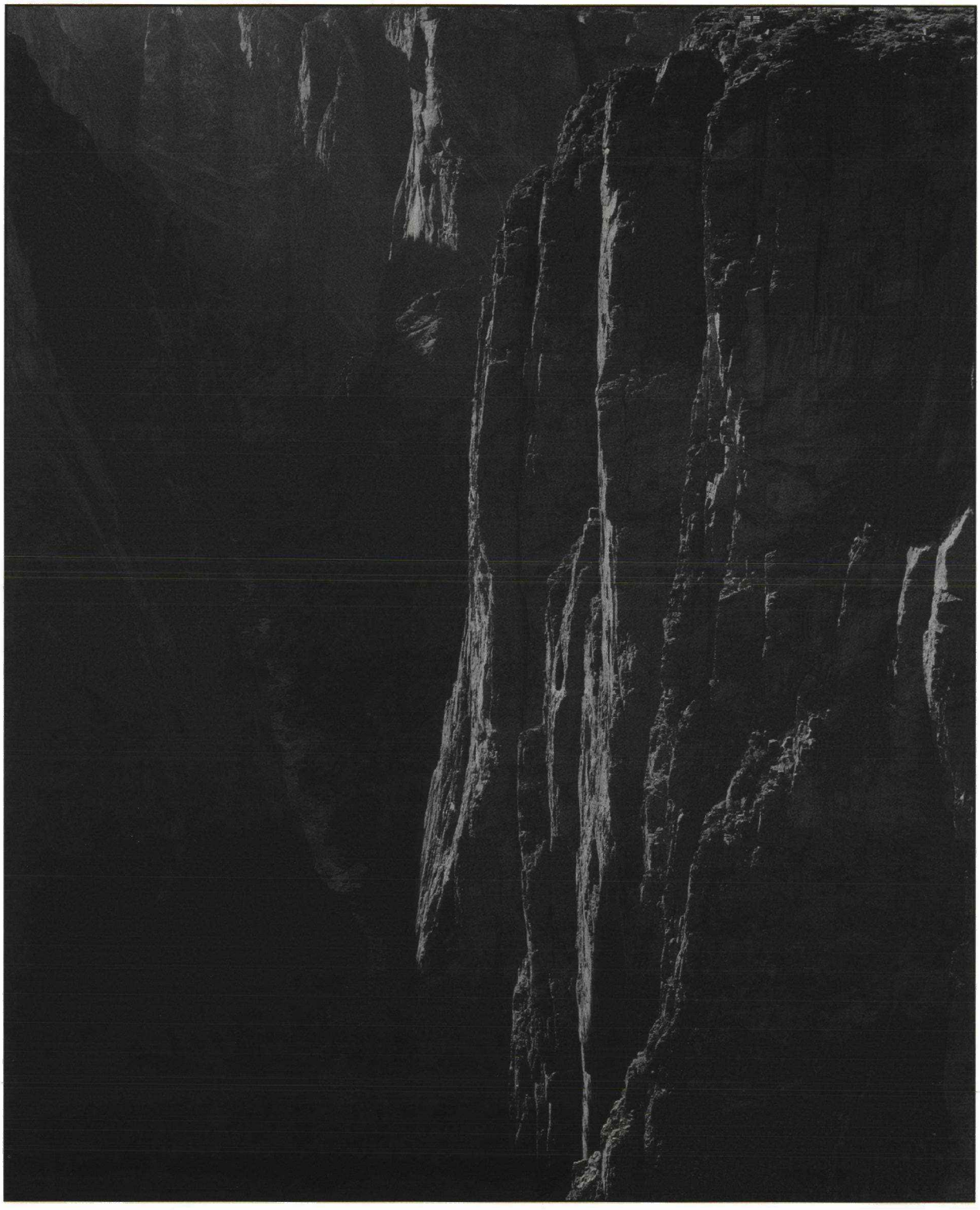
built in the early 1900s, which is recognized as a National Civil Engineering Landmark.

- The quality of water in the Gunnison River has been identified as a natural treasure. The headwaters of this river flow into Blue Mesa Reservoir and from there travel continually westward.
- Blue Mesa Reservoir is one of the largest high-altitude bodies of water in the United States. It provides an exciting diversity of water recreation treating windsurfers, sailboaters, and water-skiers. The three reservoirs provide one of the best cold-water fisheries in Colorado, attracting enthusiasts from throughout the nation and offering a diversity of game fish.
- The rock formations and canyons of Curecanti, which include the upper reaches of the Black Canyon of the Gunnison, tell a story of geologic change that occurred over the course of 2 billion years. Violent volcanic activity and erosion are today revealed in the inspiring pinnacles, cliffs, and mesas of the recreation area.
- The scenic values of the canyon, the needles, the pinnacles, and the reservoirs provide dramatic contrast, which causes visitors to slow down, pause, and reflect on the diversity of the landscape and its spaciousness. Hiking provides the opportunity to explore and enjoy these pristine and remote lands.
- Curecanti National Recreation Area provides habitat essential for the long-term viability of elk, deer, and bighorn sheep. This affords visitors the opportunity to view and enjoy these animals in their natural habitat.
- Curecanti National Recreation Area provides feeding and roosting opportunities and protects existing and potential breeding habitat for endangered species, such as the bald eagle and peregrine falcon. Other species of concern dependent on Curecanti resources include golden eagle, great blue heron, Gunnison sage grouse, and numerous other migratory birds.
- Curecanti provides one of the best cold-water fishing opportunities in the nation. This is due primarily to the unique spawning Kokanee salmon run occurring in Blue Mesa. The Morrow Point and Crystal Reservoirs' trout fisheries routinely attract fishing enthusiasts from throughout the nation because of the high-quality trout fishing and uniqueness of the canyon environment.
- Habitat within and adjacent to Curecanti National Recreation Area provides the opportunity to reintroduce and establish breeding populations of native Colorado River cutthroat trout.
- Exposures of the Morrison Formation contain fossil evidence of the Mesozoic Era, during which dinosaurs and associated fauna occupied this region. Much more recent fossil evidence suggests that musk ox, cave lions, and cheetah roamed Blue Mesa during the Pleistocene ice ages.
- The prehistoric and historic stories of human culture in the Curecanti area are recorded in the traces and tracks left by Native Americans, miners, railroaders, and ranchers. These signs document not only the human struggles to survive but also how changing human value systems, economic, social, and technological changes, and the importance of water have shaped the use and character of the land and its people. Cultural history contains archeological examples of some of the oldest villages found in North America, predating the building of the pyramids. The narrow-gauge railroad exhibited in Cimarron graphically portrays the story of technology's effects of shaping people and using land; the agony and difficulties of building track in narrow canyons in winter where the sun seldom shined; of taking the hard way instead of the easy trail. The finest examples of the railroad are on exhibit at Cimarron.

Visions for Resources, Interpretation, and Recreation



The following vision statements are based on input received during the management assessment. They are short narratives relating "what could be" in the future and are used in evaluating the appropriateness of various alternatives.



North Rim, Black Canyon of the Gunnison National Monument
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Black Canyon of the Gunnison National Monument

The spectacular canyon and adjacent uplands known as the Black Canyon of the Gunnison is a special place that touches mind and soul and offers a variety of opportunities to enjoy and contemplate one of nature's foremost scenic wonders. A place where quiet is enhanced by sounds provided by nature—where the continuous roar of the river rushing amidst boulders and over falls attests to the power of the Gunnison to carve out a canyon over 2,000 feet deep. Although upstream dams have partially regulated the Gunnison, it is managed to exemplify a wild river, with flows mirroring natural levels, where the water is unpolluted, and the exceptional recreational, scenic, and educational values of the system are protected. Highly regarded and appreciated for its clean air and panoramic vistas, the rural and undeveloped nature of the landscape adds a pristine appearance that promotes opportunities for discovery and enlightenment. The canyon is, indeed, a living classroom.

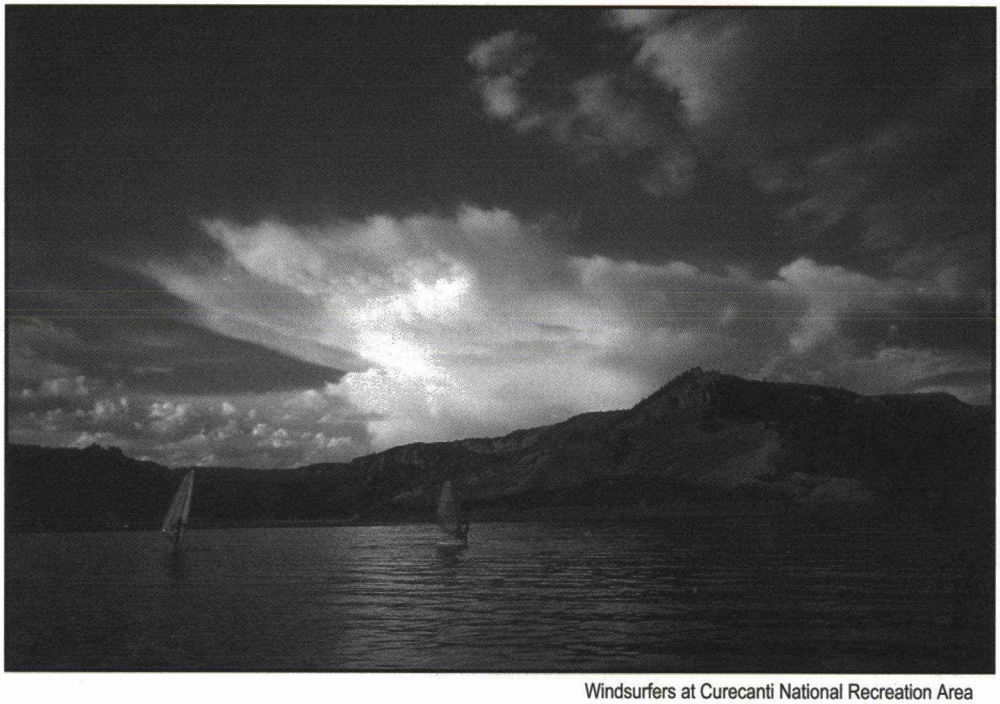
For those seeking to expand and expound on the resources and values found in the wilderness and front country, exceptional interpretive opportunities and media are available. A wide variety of activities and challenges includes sight-seeing, hiking, fishing, wilderness backpacking, climbing, and white-water boating. Developed areas and facilities offer modest amounts of visitor conveniences in some areas, which provide a good balance when compared to the primitive opportunities found throughout the monument.

The National Park Service manages the river, canyon, and uplands as a part of the larger Gunnison Basin. Partnerships with a variety of local, state, and federal agencies as well as private organizations help align goals that aggressively protect the natural and cultural resources of the region, including riverine resources, wildlife, superb air quality and visibility, and maintenance of a rural viewscape. This in turn maintains a high quality of life for our neighbors. Additionally, partnerships assist in coordinating a variety of high-quality services that meet our visitors' needs as well as those of the people in nearby communities.

Our children's children will be able to learn from and enjoy the canyon as we have because the canyon is used in ways that are sustainable, leaving the resources unimpaired. Our canyon memories and experiences do indeed last a lifetime.

Curecanti National Recreation Area

Water. Water is a simple compound with important physical properties but its value evolves with generations. Water shaped and carved the land in the Gunnison country for eons. Meltwaters caused rushing streams with tremendous mudslides. Dinosaurs fell. Apatosaur and Diplodocus bones would fossilize. The stark, sagebrush-covered mesas of mud and sandstones would receive little rain. Erosion would slow and life would survive in an arid climate.



Windsurfers at Curecanti National Recreation Area

Left alone, the Gunnison River would continue to meander and carve. The river would provide a ribbon of life for cottonwoods and willows, native trout, and migrating birds. People would hunt, people would gather, people would cook in rock-lined hearths. Descendants would be remembered in place names—Chipeta, Sapinero, Curicata.

Later, people would explore, migrate, and engineer. The river would present what would seem to be a natural path to the West, a trail for a railroad. Cattle, sheep, market goods, and people would be transported by a tiny train on a narrow railbed. Communities would grow, tied by the train. The West would grow, and agriculture would expand in the warm desert with enough water. The high, rugged, dry landscape would not be interrupted by a narrow green thread, but by three large reservoirs. Blue Mesa would be the largest reservoir in Colorado, storing water for agriculture and power generation. Morrow Point, the first reservoir in the Black Canyon would be formed behind a thin arch, double curvature, concrete dam containing a massive power generating plant.



Lisa Lvnch

A third reservoir—Crystal—would be held by a dam built for the purpose of regulating downstream river flows.
The reservoirs would interrupt terrestrial migration paths and create flatwater surfaces for migrating waterfowl. The reservoirs and surrounding land would attract hundreds of thousands of visitors. Soon a million people would find the area to relax and pursue a lifestyle of water-based recreation. Sweeping vistas, clear water, and a new refuge for now threatened and endangered species defines the territory called Curecanti National Recreation Area.

The present definition should endure. New uses, new values, new technology will come, yet history will be preserved and told. Decisions will be made by people for the good of future generations. Clear water and sweeping vistas, abundant wildlife, and a harsh, arid ecosystem, balanced by ribbon-like riparian life zones brought generations of people to the area. These values are timeless and fragile. Curecanti will continue to provide refuge and recreation for all future generations.

SPECIFIC OBJECTIVES

Specific objectives further refine the management objectives completed during the 1993 management assessment workshops. They provide clarity and priorities. These objectives are resource-, geographic-, or issue-specific. They may include products to be produced or conditions to be attained or maintained. As a whole, objectives are interrelated and interdependent. The specific objectives provide a basis for allocating resources and define management regions in the park.

Black Canyon of the Gunnison National Monument

The following resource-, geographic-, and issue-specific objectives apply to Black Canyon of the Gunnison National Monument.

Prime Resource

Prime resource lands are defined as those resources that made a direct contribution to establishing the park as a unit of the national park system and are related to the park's purpose and significance. Other lands within the monument are also important to protecting and supporting the prime resource, but are not considered to be the prime resource.

Prime resource lands for the monument are those lands from the canyon edge to the Gunnison River below, mostly known as the Inner Canyon. The Inner Canyon and the majority of the westernmost upland, consisting of 11,180 acres, is wilderness designated under Public Law 94-567 (October 20, 1976). These lands are managed as part of the National Wilderness Preservation System, designated by Congress and legally protected as wilderness in perpetuity. The Wilderness Act defines wilderness as follows: "generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable." Wilderness areas are managed for the use and enjoyment of the American people in such manner as will leave the areas unimpaired for future use and enjoyment as wilderness. Management includes the protection of these areas, the preservation of their wilderness character, and the gathering and dissemination of information regarding their use and enjoyment as wilderness. Public purposes of wilderness include recreation, scenic preservation, scientific study, education, conservation, and historical use.

Resource-Specific Objectives

- *AIR* — Perpetuate and preserve outstanding air quality in the monument, which reflects its critical importance to visitor enjoyment, human health, scenic vistas, and the preservation of natural systems and cultural resources consistent with the aims of a designated Class I airshed.

Conditions to be attained:

1) Facilities and activities within parks are in compliance with Clean Air Act requirements, including state and local regulations.
2) Information and tools needed to document air quality conditions have been acquired.
3) A strategy to use available information to remedy existing and prevent future air pollution effects on park resources and values has been developed.

■ *CULTURAL RESOURCES* — Protect, preserve, and develop cultural resources for public enjoyment, interpretation, and scientific research.

Conditions to be attained:

1) Cultural sites—archeological and historic—have been inventoried and documented; significant sites are preserved including Civilian Conservation Corps (CCC) components—North Rim Road and Pulpit Rock and Dragon Point overlooks.
2) An understanding of the significance of the pre-history of the area has been attained and communicated to the public.
3) A strategy has been developed that helps define and interpret the importance of exploration, settlement, and development of the region, including its mining and agricultural history.
4) In concert with Curecanti National Recreation Area, the Bureau of Reclamation, and the Uncompahgre Valley Water Users Association, a strategy has been developed to identify and interpret the significance of water development in the west and its subsequent impacts on the Black Canyon.
5) The importance of local support for the establishment of the canyon as a component of the national park system and subsequent expansion and creation of the Black Canyon of the Gunnison Wilderness has been identified and highlighted.

■ *INTERPRETATION* — Interpretation objectives are integrated and linked with the resource management program.

Conditions to be attained:

1) The interpretive program connects the visitor to the park's resources, builds a local and national constituency, and gains public support, which in turn meets the objective of protecting park resources.
2) An outreach component of the program provides vital information to protect resources and gain public support through schools, organizations, and partnerships.

■ *PALEONTOLOGICAL RESOURCES* — Protect and preserve paleontological resources, including both organic and mineralized remains in body or trace form, for public enjoyment, interpretation, and scientific research.

Conditions to be attained:

1) The extent of paleontological resources has been identified, inventoried, and protected.
2) Through interpretive opportunities, the public gains an understanding of the significance of the paleontological resources and the role they play as a component of the park's geological/ zoological story.

■ *SCENIC VALUES AND SOUND* — Maintain a full spectrum of tangible and intangible attributes for which the national monument was established. Park areas contain various tangible natural and cultural features such as animals, plants, waters, geologic features, historic buildings and monuments, and archeological sites. They also have intangible qualities such as natural quiet, solitude, space, scenery, scenic vistas, a sense of history, sounds of nature, and clear night skies that are important components of visitor use and enjoyment.

Conditions to be attained:

1) A strategy has been developed that protects viewsheds, allowing them to remain generally natural and undeveloped as seen from within the monument and Vernal Mesa.
2) Development that will be seen from within the park is done in a sensitive way, minimally impacting the visitor experience of a wild canyon setting and blending with the natural landscape.
3) Management for viewsheds that are critical to providing quality experiences for park

visitors is cooperatively coordinated with adjacent land management agencies, county planning entities, private landowners, and transportation agencies.

4) A strategy has been developed to protect the viewshed along the scenic approaches to the monument (Highway 50 to the South Rim entrance and Crawford to North Rim boundary), emphasizing the importance of retaining the rural characteristics of the area along these routes.

5) Outstanding natural sound quality, night lighting, and air pollution are improved over 1993 levels.

■ *SOILS/GEOLOGY* — Seek to understand and preserve natural erosion processes as they relate to the monument and the formation of the canyon.

Conditions to be attained:

1) Accelerated erosion resulting from visitor use and/or management activities has been minimized or prevented.

2) Continued research pertinent to the geologic processes that created the canyon and adjacent landscapes is encouraged.

■ *VEGETATION* — Perpetuate native plant life as part of natural ecosystems.

Conditions to be attained:

1) The spread of noxious weeds is prevented.

2) Habitat for threatened and endangered species is protected.

3) Permit livestock is managed per the principals of sustainability; incidence of livestock trespass is eliminated by the use of fencing, or where feasible, by alternative controls; where fencing is not erected, resource impacts are identified and monitored to minimize such impacts.

4) Prescribed fire is used to mimic natural fire effects in certain areas.

5) Natural (pre-dam) river corridor vegetation has been restored and is maintained.

6) Impacts of visitor use are minimized.

7) Significant vegetation communities (e.g., old growth stands) have been identified and are protected.

8) Natural vegetation communities extending across park boundaries are enhanced through common efforts with other entities, minimizing habitat fragmentation in the region.

■ *WATER* — Manage and protect water resources and aquatic ecosystems to maintain, rehabilitate, and perpetuate their inherent natural integrity in coordination with the state and other federal agencies.

Conditions to be attained:

1) The Gunnison River's flows and flow regime are protected, consistent with the Colorado River Storage Project Act and Colorado water law, ensuring sufficient and permanent water flows that mimic a natural flow regime to the extent possible.

2) The extent of springs and seeps have been identified and protected.

3) Water quality is maintained at highest level possible, with the assistance of Curecanti National Recreation Area, consistent with the Clean Water Act (33 USC 1251 et seq.) and other applicable federal, state, and local laws and regulations.

4) Water quality for the world-class trout fisheries is maintained.

5) Other water users and agencies assist in achieving goals through recognition of common benefits and support to reach mutually agreed-upon goals.

■ *WILDLIFE* — Perpetuate native animal life as part of the natural ecosystem in consultation with federal and state agencies.

Conditions to be attained:

1) Endangered and threatened species are protected and the Service has accomplished its role in recovery of threatened and endangered species found at the monument.
2) Habitat fragmentation has been minimized.
3) Native Colorado River fish have been restored and/or are de-listed.
4) Habitat for native and non-native fish is maintained.
5) Fishery and wildlife inventories have been completed and species are monitored to the point that changes in population trends or characteristics can be identified and/or managed.

■ *VISITOR USE* — Develop a strategy to determine the appropriate levels of visitor use and experience and alternative strategies for maintaining the diversity of quality visitor experiences consistent with Black Canyon of the Gunnison NM's purposes and significance.

Conditions to be attained:

1) A strategy has been developed with public input to guide the park in ensuring a quality visitor experience, resource preservation, and development consistent with the noncrowded and pristine nature of the park and maintaining the ability of visitors to have a high-risk adventure experience in the wilderness.
2) Wilderness areas are properly monitored for resource impacts and visitor use.
3) A strategy to determine and establish a carrying capacity that protects resources and provides a range of experiences has been developed.
4) Recreational uses have been evaluated and are permitted when such use is otherwise compatible with park and NPS management objectives and regulations.
5) Professional emergency services are provided year-round to park visitors either directly by park staff and/or through innovative cooperation.

■ *COMMERCIAL SERVICES* — Identify the optimum level of commercial services to be provided and their complementary role in accomplishment of the park mission. Commercial services include anything offered to the public or private individuals in which park resources are used and that results in compensation of any kind to an individual, organization, or corporation. Compensation may be "for profit" or "nonprofit" under local, state, or federal law.

Conditions to be attained:

1) A commercial services plan has been completed to provide long-term strategic guidance for management of commercial services.
2) Consistent with the Concessions Policy Act of 1965, the commercial services plan evaluates, through the planning process, those services that are necessary and appropriate for present and future visitors to the park.
3) The commercial services plan identifies:
    - commercial services and facilities that are necessary and appropriate
    - levels of services and facilities essential to serve visitors
    - types of facilities necessary to support commercial services
    - appropriate areas for facilities that serve visitors
4) The type of commercial facilities and services that would complement quality and diverse visitor experiences and resource conservation have been determined.

■ *FACILITIES* — Provide facilities and services that are attractive, safe, accessible, and of high-quality design,

adhering to a common architectural theme. Such facilities should be located to minimize their impact on the surrounding landscape and resources.

Conditions to be attained:

1) Development that will be seen from within the park is done in a sensitive way, corresponds to a common architectural theme while blending with the natural landscape, and minimally impacts the visitor experience of a wild canyon setting.
2) Facilities have been designed and located to protect resources while minimizing impacts to those resources, attract visitors while meeting basic visitor needs, orient and educate the public while enhancing visitor enjoyment, and provide information on the park and surrounding areas.
3) East Portal facilities are compatible with the common architectural theme of Black Canyon.
4) Road and parking systems are efficient and safe, accommodating moderate growth and consistent with resource management and visitor experience objectives.
5) The park and surrounding lands have a coordinated and comprehensive trail system that connects the Inner Canyon and uplands with significant features and resources.
6) A strategy has been developed to establish access through Red Rock Canyon.
7) Facilities and programs are available for visitors with disabilities.
8) Water is available in locations on both rims to meet basic visitor, resource protection, and operational needs.
9) Visitor/interpretive facilities complement experiences of visitors who are emotionally touched by their canyon visit.
10) Activities and support facilities are coordinated with entities outside of park boundaries.
11) Facilities serving various functions have been efficiently organized and do not conflict with land use.
12) Maintenance and administration facilities are organized in a fashion that protects resources and meets visitor needs.

Geographic-Specific Objectives

■ *PANORAMIC VIEWS* — Preserve the natural setting that allows the Black Canyon to be seen within the larger regional context.

Conditions to be attained:

1) Visitors are allowed to see and access the area for the larger panoramic views.
2) To support visitor access and a quality visitor experience, minimal development is done.
3) Air quality for a Class I airshed is maintained for long-distance views (to the San Juans, Grand Mesa, West Elks, Uncompahgre Valley, etc.), which are important parts of the Black Canyon geologic and human history stories.

■ *CANYON BACKDROP* — Preserve and protect the wild setting within which the Black Canyon exists.

Conditions to be attained:

1) Visitors can access the area for recreation purposes while the park maintains a wild setting.
2) Development is done in a sensitive way, with minimal impacts to visitor experience of a wild canyon setting, and blends with the natural landscape.
3) Scenic easements are managed to perpetuate the natural resources and maintain a wild setting to the greatest degree possible.

■ *CLIFF TOP* — Provide visitors with a variety of recreational viewing opportunities to experience the depths of the INNER CANYON.

Condition to be attained:

1) Development is done in a sensitive way, protecting resources from visitor-use

impacts, minimally impacts visitor experience of a wild canyon setting, and blends with the natural landscape.

- *CLIFFS AND INNER CANYON* — Provide for visitor enjoyment of park resources, consistent with the management of the area for wilderness values.

Conditions to be attained:

1) Development is limited in accordance with wilderness values.
2) Visitors have a wilderness experience offering solitude and minimal contact with other people.
3) Traditional climbing activities that use low-impact techniques and equipment are supported through a climbing management plan.
4) A strategy has been developed to identify acceptable limits of impacts, monitor backcountry use levels and resource conditions, and take prompt corrective action when unacceptable action and impacts occur.

- *THE RIVER* — Provide for visitor enjoyment of park resources, consistent with the management of the area for wilderness values.

Conditions to be attained:

1) Development is limited in accordance with wilderness values.
2) Visitors experience the river in a wilderness setting that offers solitude, the natural sounds of a wild river, and minimal contact with other people.
3) The river flow and regime are managed (in concert with other entities) to closely approximate natural conditions and systems to the extent possible, consistent with the CRSP Act and Colorado water law.
4) A strategy has been developed to identify acceptable limits of change, monitor backcountry use levels and resource conditions, and take prompt corrective measures when unacceptable actions or impacts occur.

- *THE WAY IN* — Provide visitors non-technical or non-mechanized access to the CLIFFS AND INNER CANYON and THE RIVER using natural topography.

Conditions to be attained:

1) Development is limited in accordance with wilderness values.
2) Visitors have a wilderness experience along these access routes—an experience that is associated with solitude, minimal contact with other people, and non-technical or non-mechanized access.
3) A strategy has been developed to identify acceptable limits of use, monitor backcountry use levels and resource conditions, and take prompt corrective measures when unacceptable actions or impacts occur.

Issue-Specific Objectives

- *FUTURE DEVELOPMENT SURROUNDING THE PARK* — Cooperatively guide the appropriate development of lands surrounding the park so that they do not adversely affect the park environment. Parks contain both tangible and intangible resources. Tangible natural and cultural features include animals, plants, waters, geologic features, historic buildings and monuments, and archeological sites. Intangible qualities include natural quiet, solitude, space, scenery, scenic vistas, a sense of history, sounds of nature, and clear night skies. These attributes are important both to the conservation of resources and to their use and enjoyment by the public. Two areas could potentially negatively impact the park environment from inappropriate

development of surrounding lands—water quality and aesthetics.

Conditions to be attained:

1) A strategy for a local community baseline information system has been developed to provide a better understanding of the physical and ecological processes that shape and contribute to the evolution of Black Canyon and the Gunnison Basin.
2) Viewsheds remain generally natural as seen from within the park.
3) A cooperative strategy for appropriate private land development adjacent to Black Canyon and on access routes leading into the park has been developed with land management agencies, private landowners, county planning entities, and transportation agencies, so that impacts to water quality and aesthetic quality of the park experience have been reduced.
4) Criteria and appropriate GIS data are provided to county planning commissions which identify critical viewshed and other elements necessary to protect park resources and values. This criteria is designed to help protect the semi-primitive character and setting of the park.

Curecanti National Recreation Area

The following resource-, geographic-, and issue-specific objectives apply to Curecanti National Recreation Area.

Prime Resource

Prime resource lands are defined as those resources that made a direct contribution to establishing the park as a unit of the national park system and are related to the park's purpose and significance. Other lands within the park are also important to protecting and supporting the prime resource, but are not considered to be the prime resource.

Water is considered to be the primary resource of the national recreation area. Fresh water is a particularly important and sensitive ecosystem component. Its physical availability and quality are critical determinants not only of aquatic resources but of a park's overall natural resource conditions. Surface water and groundwater are important in determining site suitability and uses, while also serving as important transport mechanisms. Depending upon watershed characteristics and the hydrologic cycle, water often connects park resources to resources outside park boundaries. Water may thus deliver pollutants generated by activities outside park boundaries to park waters, or transport pollutants generated within the park to waters outside its boundaries. Similarly, impacts on aquatic ecosystems due to alterations of natural populations or environments will cross park boundaries via the aquatic environment.

Resource-Specific Objectives

- *VEGETATION* — Perpetuate native plant life as part of natural ecosystems.

Conditions to be attained:

1) The spread of noxious weeds is controlled.
2) Habitat for candidate endangered species is protected or enhanced.
3) Trespass livestock and their impacts on resources have been identified, mitigated, and managed.

- *WILDLIFE* — Perpetuate native wildlife as an integral part of the natural ecosystems.

Conditions to be attained:

1) Endangered and threatened species are protected.

2) Habitat fragmentation of bighorn sheep and other large ungulate range is quantified.

3) Park works cooperatively with other agencies to develop plans to identify and mitigate causes and impacts of habitat fragmentation.

4) Facility development does not adversely impact sensitive wildlife and vegetative habitat.

5) Prescribed fire is used, where appropriate, to improve forage and escape terrain for bighorn sheep.

6) Strategies for prevention of the spread of domestic sheep diseases to bighorn sheep populations have been developed and are implemented.

7) Strategies are cooperatively developed with other agencies to protect the Gunnison sage grouse and its associated habitat.

- *WILDLIFE AND FISHERIES* — Maintain and restore aquatic terrestrial habitats to protect their ecological and aesthetic character and dependent animal and plant communities.

Conditions to be attained:

1) Harvesting of species will not decrease or conflict with the opportunity for the public to view wildlife in its natural environment.

2) There are opportunities to improve aquatic habitat for reintroduction of cutthroat trout, and reintroduction is pursued with appropriate consultation with other agencies.

3) The quality sport fishery is maintained.

- *WILDLIFE* — Manage populations of prairie dogs to minimize a human health hazard and provide for adequate public education.

Condition to be attained:

1) Prairie dog habitat is modified to reduce the potential for plague.

- *WILDLIFE* — Allow hunting and trapping of game species where such use is specifically authorized and not in conflict with other recreational uses.

Condition to be attained:

1) Harvesting of game species is monitored so that it does not derogate resource values, cause undue safety hazards for the visiting public, or interfere with non-hunting visitation and is consistent with the memorandum of agreement (MOA) with the Bureau of Reclamation (BOR), Colorado Division of Wildlife (CDOW) laws and policies, the primary purposes of the park, and the Colorado River Storage Project (CRSP).

- *WATER* — Manage water resources and aquatic ecosystems to maintain, rehabilitate, and perpetuate its inherent integrity in coordination with the state and other federal agencies and consistent with the Clean Water Act (33 USC 1251 et seq.).

Conditions to be attained:

1) There is an opportunity to enhance viable populations of sensitive or native species.

2) Water quality is maintained at its present high level. A water quality resource plan is complete and identifies monitoring protocols and actions to be taken in the case of degradation.

3) Groundwater quality is maintained at its present high level.

- *AIR* — Perpetuate Class II air quality in parks because of its critical importance to visitor enjoyment, human health, scenic vistas, and the preservation of natural systems and cultural resources.

Conditions to be attained:

1) Facilities and activities within parks are in compliance with Clean Air Act requirements, including state and local regulations.
2) Information to document air quality conditions has been acquired.
3) A strategy to use available information to remedy existing and prevent future air pollution effects on park resources and values has been developed.

■ *SCENIC* — Maintain a full spectrum of tangible and intangible attributes for which the national recreation area was established. Parks contain various tangible natural and cultural features such as animals, plants, waters, geologic features, historic buildings and monuments, and archeological sites. They also have intangible qualities such as natural quiet, solitude, space, scenery, scenic vistas, a sense of history, sounds of nature, and clear night skies that are important components of visitor use and enjoyment.

Conditions to be attained:

1) Internal—viewsheds remain generally natural and undeveloped as seen from within the park.
2) External—management for viewsheds that are critical to providing quality recreational experiences for park visitors is cooperatively coordinated with adjacent land management agencies, county planning entities, private landowners, and transportation agencies.
3) Park development and park facilities do not derogate viewsheds or other scenic qualities.

■ *PALEONTOLOGICAL RESOURCES* — Identify, protect, and preserve paleontological resources, including both organic and mineralized remains in body or trace form, for interpretation, education, and scientific research.

Conditions to be attained:

1) The extent of these resources is identified, inventoried, and protected.
2) Interpretation of paleontological resources is provided without endangering the resource.
3) The integrity of paleontological resources from effects of human use and fluctuating reservoir levels is maintained.

■ *CULTURAL RESOURCES* — Identify, preserve, and where appropriate, enhance cultural resources for public enjoyment, interpretation, education, and scientific research.

Conditions to be attained:

1) Cultural sites are inventoried and documented; significant sites are preserved.
2) An integrated research strategy has been developed that allows effective and efficient allocation of people and resources.
3) Interpretation of archeological resources is provided without endangering the resource.
4) A long-range management scheme for preservation and interpretation of narrow-gauge railroad artifacts at Cimarron has been developed.

■ *VISITOR USE AND LANDS* — Determine the appropriate levels of visitor use and experience and alternative strategies for maintaining the diversity of quality visitor experiences consistent with Curecanti NRA's purposes and significance.

Conditions to be attained:

1) A plan has been developed with public input to guide the park in ensuring a quality visitor experience, resource conservation, and development of only those facilities deemed necessary and appropriate.

2) Professional emergency services are provided year-round to park visitors either directly by park staff and/or through innovative cooperation.

■ *INTERPRETATION* — Determine the level of government and private sector educational services, using state-of-the-art methodologies to enhance the visitor's experience and provide educational and interpretive programs.

Conditions to be attained:

1) Park continues to serve as a center for outreach programs with school systems, developing seminars and curriculums.

2) Educational programming is provided year around at existing park facilities using appropriate natural and cultural park themes.

■ *COMMERCIAL SERVICES* — Identify the optimum level of commercial services to be provided and their complementary role in accomplishment of the park mission. Commercial services include anything offered to the public or private individuals, in which park resources are used and that results in compensation of any kind to an individual, organization, or corporation. Compensation may be "for profit" or "non-profit" under local, state, or federal law.

Conditions to be attained:

1) A commercial services plan has been completed to provide long-term strategic guidance for management of commercial services.

2) Consistent with the Concessions Policy Act of 1965, the commercial services plan evaluates, through the planning process, those services that are necessary and appropriate for present and future visitors to the park.

3) The commercial services plan identifies:

- commercial services and facilities that are necessary and appropriate
- levels of services and facilities essential to serve visitors
- types of facilities necessary to support commercial services
- appropriate areas for facilities that serve visitors

4) The type of commercial facilities and services that would complement quality and diverse visitor experiences and resource conservation have been determined.

■ *FACILITIES* — Provide facilities and services that are attractive, safe, accessible, and of high-quality design that are located to minimize their impact on the surrounding landscape and resources.

Conditions to be attained:

1) The recreation area has appropriately designed and situated visitor facilities, including exhibits that are sensitive to the surrounding environment and readily accessible to all populations.

2) Facilities, including employee housing, commercial service operations, and equipment are appropriate, sufficient, and properly maintained for the park mission and visitor use.

3) State highway maintenance is accomplished in a coordinated and cooperative manner as consistent as possible with NPS policies and the protection of resources.

4) A strategy has been developed to complement and support the Regional Transportation Plan as it relates to Highways 50, 149, and 92 (not including four-lane highway development) and the construction of bicycle paths along these routes.

5) Facilities serving various functions are efficiently organized and do not conflict with land use.

6) Maintenance and administration facilities are organized in a fashion that protects resources and meets visitor needs.

Geographic-Specific Objectives

■ *RIPARIAN RIVERINE* — Preserve natural riverine processes and aquatic habitat, its functions, and its natural and beneficial values while maintaining the area as an active outdoor classroom for park visitors.

Conditions to be attained:

1) Natural succession processes that provide for shifts in organism abundance and distribution when there are changes in the rates and locations of beach-building and erosion from the river are evident.
2) Habitat and species diversity are monitored and maintained.
3) A strategy has been developed to determine the level of day use facilities that would complement a quality visitor experience and resource conservation.
4) Hunting policy considering safety conflicts with the day use area is determined in cooperation with the Colorado Division of Wildlife.
5) Wayside exhibits relating trails, information, and natural processes of the area and an outreach education area are provided.
6) Coordination with BOR and other agencies continues, defining strategies to meet target reservoir elevation levels while considering interagency objectives. The pool target elevation level is met—flooding and ice jamming are minimized.

■ *GUNNISON RIVER CANYON* — Determine level of day use facilities at Wilson's Landing. Determine level of development of roadside pulloffs.

Conditions to be attained:

1) A plan has been developed that determines the level of day use facilities that would complement a quality visitor experience and resource conservation.
2) A plan has been developed that determines the amount of roadside pull offs necessary to complement a scenic driving experience, provide a quality visitor experience, and provide for interpretation of the park's resources.

■ *BLUE MESA* — Determine the appropriate levels of visitor use, experience, the reservoir's carrying capacity, reservoir levels, and alternative strategies for maintaining the diversity of quality visitor experiences consistent with Curecanti NRA's purposes and significance.

Conditions to be attained:

1) The carrying capacity and the public's perception of what constitutes a quality visitor experience on Blue Mesa (numbers of boats, any use conflicts such as fishermen/jet skiers/water-skiers/windsurfers) has been determined and evaluated in light of resource management and visitor use criteria.
2) The appropriate levels of additional launch and/or marina facilities, if any, and their location(s) have been determined.
3) Reservoir elevations are cooperatively maintained at appropriate levels throughout the year consistent with quality recreational experiences and protection of natural and cultural resources.

■ *BLUE MESA* — Develop a cooperative approach with adjacent land management agencies, private landowners, and other federal, state, and local agencies to protect viewsheds seen from Blue Mesa that are critical to providing quality recreational experiences.

Conditions to be attained:

1) Viewsheds remain generally natural and undeveloped as seen from the reservoir.
2) Viewsheds that are critical to providing quality recreational experiences for park visitors are protected from inappropriate development.

3) Appropriate developments are aesthetic, blend into the surrounding landscape, complement the natural scenery, and have a minimal impact on the affected environment.

■ *LAKE ARMS* — Provide a diversity of recreational experiences appropriate to the lake arms.

Conditions to be attained:

1) Obtain public perceptions of appropriate levels and types of use, considering both the human experience and resources.
2) Recreation activities are consistent with desired visitor experiences in the lake arms.
3) Backcountry campsites (boat in and hiking) are located and managed to minimize impact to park resources and provide a quality experience.

■ *LAKE ARMS* — Develop a cooperative approach with adjacent land management agencies, private landowners, and other federal, state, and local agencies to protect viewsheds seen from the lake arms that are critical to providing quality recreational experiences.

Conditions to be attained:

1) Viewsheds remain natural and undeveloped as seen from the reservoir.
2) Viewsheds that are critical to providing quality recreational experiences for park visitors are protected from inappropriate development.

■ *INNER CANYON* — Provide a diversity of recreational experiences appropriate to the inner canyon.

Conditions to be attained:

1) Appropriate flatwater recreation activities are consistent with desired visitor experiences in the inner canyon.
2) Commercial services for the backcountry are consistent with the commercial services management plan, ensuring quality visitor experience in a secluded primitive environment.
3) Solitude is maintained for a secluded backcountry experience.
4) Backcountry campsites are located and managed to minimize impact to park resources, consistent with a quality visitor experience.
5) Hiking trails are located and maintained to provide safe visitor access, consistent with resource management principles.

■ *CANYON RIM* — Develop a cooperative approach with adjacent land management agencies, private landowners, and other federal, state, and local agencies to protect viewsheds seen from the canyon rim to protect resources and enhance interpretive opportunities that are critical to providing quality visitor experiences.

Conditions to be attained:

1) Viewsheds remain generally natural and undeveloped.
2) Waysides are provided to interpret the resource and provide orientation for visitors.

Issue-Specific Objectives

■ *FUTURE DEVELOPMENT SURROUNDING THE PARK* — Parks contain both tangible and intangible resources. Tangible natural and cultural features include animals, plants, waters, geologic features, paleontological resources, historic buildings and monuments, and archeological sites. Intangible qualities include natural quiet, solitude, space, scenery, scenic vistas, a sense of history, sounds of nature, and clear night skies. These attributes are important both to the conservation of

resources and to their use and enjoyment by the public. There are two areas of special concern that could be impacted by inappropriate development of surrounding lands—water quality and aesthetics.

Conditions to be attained:

1) A strategy for a local community baseline information system has been developed to provide a better understanding of the physical and ecological processes that shape and contribute to the evolution of Curecanti and the Gunnison Basin.

2) Viewsheds remain generally natural and undeveloped as seen from within the park.

3) A cooperative strategy for any appropriate private land development adjacent to Curecanti has been developed with land management agencies, private landowners, county planning entities, and transportation agencies so that water quality and aesthetic quality of the park experience are not adversely impacted.

4) Criteria and appropriate GIS data is provided to county planning commissions which identify critical viewshed and other elements necessary to protect park resources and values. This criteria is designed to help protect the semi-primitive character and setting of the park.

ECOLOGICAL SYSTEM-SPECIFIC OBJECTIVES

These objectives, in contrast to those listed for each park, view both parks in the larger context of the region of which they are a part. The parks are viewed without regard to administrative boundaries. As with the specific objectives listed above they can be resource-, geographic-, or issue-specific, however the issue in most cases will determine the region of the ecosystem.

The extent of the ecosystem should include those resources, issues, and items that influence park resources or are influenced by park resources or park management activities. As a whole, objectives are interrelated and interdependent. The specific objectives provide a basis for allocating resources and define the partners for cooperative management efforts. Such efforts are increasingly important as agencies, counties, communities, and other entities have greater impacts on each other and their environments through growth, planning, and other actions. Cooperative efforts assist in recognizing and addressing concerns and areas of mutual benefit and are invaluable to the planning process.

- *ECO: SOCIOLOGICAL* — The overall objective is to manage both parks in the context of their socioeconomic setting. The parks should continue to expand partnerships (federal, state, local, private) to exchange information, to ensure protection of natural and cultural features and resources, and to develop a complete and consistent visitor information package and a variety of information distribution points and programs. The parks will work with other entities involved with tourism industries to focus, emphasize, and coordinate recreational and interpretive opportunities in marketing what the parks offer in the wider regional context.

Conditions to be attained:

1) Parks are engaged in a partnership with other entities to provide information to regional visitors and to facilitate protection of resources.

2) Infrastructure and commercial activities are coordinated with entities outside of park boundaries.

3) Socioeconomic ecosystem stakeholders have a good understanding of visitor characteristics.

4) Long- and short-term recreation use and tourism goals, including use levels and growth, accommodations, and infrastructure, are coordinated between federal, state, and private entities.

5) Effective communications have been established with other entities, the public, and special interests.

■ *ECO: WATER* — The overall goal is to manage and protect the regional water resources and aquatic ecosystems to maintain, rehabilitate, and perpetuate their inherent natural integrity in western Colorado in coordination with state and other federal agencies.

Conditions to be attained:

1) The Gunnison River's flows and flow regime have been protected ensuring sufficient and permanent water flows that mimic a natural flow regime to the extent possible consistent with the CRSP Act and Colorado water law.

2) Water quality is maintained at the highest level possible, consistent with the Clean Water Act (33 USC 1251 et seq.) and other applicable federal, state, and local laws and regulations.

3) Other water users and agencies assist in achieving goals through recognition of common benefits and support to reach mutually agreed- upon goals.

4) Interpretive programming is in place that addresses park and regional issues in the context of the Gunnison River Basin ecosystem.

5) The park staff is able to inform visitors about resource issues on surrounding lands, and surrounding land management agencies are able to communicate park resource issues to their visitors.

6) Both parks are managed as part of the larger Gunnison River Basin ecosystem.

7) The hydrologic environment (including flow, flow regime, aquatic life, riparian vegetation, and visitor experience) is managed, in concert with other management agencies and interests, to maintain natural hydrologic systems from the headwaters to the Colorado River.

8) Interpretive programming is active in addressing regional river resource issues, in the context of the Gunnison River Basin ecosystem.

9) Research is facilitated in cooperation with other entities.

10) An adequate database to support management decisions is in place.

The boundary for this ecosystem is defined as the Gunnison River Drainage, from the headwaters to the confluence with the Colorado River.

■ *ECO: AIR* — The park staff will work with federal, state, and local agencies and groups to perpetuate and preserve outstanding air quality in and surrounding the parks, including the benefits to visitor enjoyment, human health, scenic vistas, and the preservation of the designated Class I and II airsheds.

Conditions to be attained:

1) In a cooperative effort, parks work to ensure that facilities and activities within and adjacent to the parks are in compliance with Clean Air Act requirements, including state and local regulations.

2) Parks obtain and use the necessary tools to gather and gain information in a cooperative effort to document air quality conditions for the region.

3) Parks assist in an effort to develop a strategy and to use available information to remedy existing and prevent future air pollution effects on regional air quality.

4) Parks assist in the protection of the regional Class I and II air quality areas and long-range visibility resources.

5) The boundary is defined by the continental divide, the Colorado-New Mexico state line, the Colorado-Utah state line, and the Colorado-Wyoming state line. The region assessed by the Grand Canyon Visibility Transport Commission is a more accurate representation of the airshed for the parks. The NPS works with the other agencies and states within this larger region to protect air resources.

■ *ECO: HISTORY* — The park staff works with other federal, state, local, and private entities to maintain and preserve the resources and stories that capture the geologic history and human experience associated with the Gunnison River. Through these resources and the stories that they tell we can draw a bridge of understanding between present-day people and the natural and cultural resources found here.

Conditions to be attained:

1) Sites associated with the human stories are preserved, and the stories are shared through various cooperative efforts that best carry their message.

2) The story of water is told in a comprehensive manner in cooperation with public and private entities to present the epic nature of the events preserved. All parts of the narrative are shared in the Gunnison Basin and related in the context of water development in the West.

3) Partnerships are developed as needed to impart the cultures of historic and prehistoric people indigenous to the basin.

4) Exploration and settlement of the region has been revealed from the earliest arrivals through present-day people. Characters out of the past that brought mining, railroads, agriculture, and the CCC have been brought to life as they fit into the Curecanti and Black Canyon scene.

■ *ECO: LAND* — The overall goal is to manage and protect the regional land-based ecosystems and to maintain, rehabilitate, and perpetuate their inherent natural integrity in western Colorado, in coordination with state and other federal agencies.

Conditions to be attained:

1) Landscapes and their interdependent resources are managed in a manner that does not derogate or cause irretrievable damage to such resources.

2) Wildlife habitat and associated migration corridors are managed in a manner that sustains wildlife populations consistent with applicable federal, state, and local laws and regulations.

3) Vegetation is maintained to perpetuate biological diversity of communities, and emphasis is placed on natural vegetation while alien or noxious weed species are controlled cooperatively with assistance from county weed districts.

4) Grazing is managed in a manner consistent with NPS policies and guidelines, with particular emphasis on the perpetuation of wildlife and associated habitat and the protection of riparian and riverine areas.

5) Other land management entities and agencies assist in achieving goals through recognition of common benefits and support to reach mutually agreed-upon goals.

6) Interpretive programming is in place that addresses park and regional resource issues in the context of the Gunnison Basin ecosystem.

7) The park staff is able to inform visitors about resource issues on surrounding lands, and surrounding land management agencies are able to communicate park resource issues to their visitors.

8) Curecanti is managed as part of the larger Gunnison Basin ecosystem.

9) Interpretive programming is active in addressing regional land-based resource issues, in the context of the Gunnison Basin ecosystem.

10) Research is facilitated in cooperation with other entities.

11) An adequate database to support management decisions is in place.

The boundary for this ecosystem is defined as the Gunnison Basin, from the headwaters to the confluence with the Colorado River.

VISITOR EXPERIENCE AND THE PARK ENVIRONMENT

Beyond the resource management plan that identifies specific needs relative to individual program areas, such as natural and cultural resources, an overall resource management strategy to protect park resources needs to be developed. This would enable the park to begin monitoring conditions and ensure that goals related to resource management and visitor use can be achieved. The development of the Resource Opportunity Area concept is the first step in incrementally moving the park unit toward the goal of addressing "carrying capacity."

Parks are composites of a variety of important natural and cultural resources. People value parks for many sorts of reasons—inspirational, educational, aesthetic, recreational, scientific, spiritual, and economic, among others. Significant differences relating to resource values and visitor use usually exist within different areas of a park. The uniqueness of these various areas and their relationship to one another as well as to lands beyond the park boundary, influence visitor use and management of the park. Therefore, describing a set of alternatives and the park's affected environment (and ultimately assessing impacts) requires one to identify and categorize the resource values of a park. These pieces of the park are called resource opportunity areas (ROAs) and can extend beyond the boundaries of the park. The evaluation of these areas requires the involvement of public and private interests in the area. The ROAs are referenced in the environmental consequences section to describe how park resources and visitor experience may be affected.

There are six areas in Black Canyon named for their contribution to the way human beings use park resources and for the resources contained within them—panoramic views, canyon backdrop, cliff top, cliffs and the inner canyon, the river, and the way in.

There are six areas in Curecanti named for their contribution to the way human beings use park resources and for the resources contained within them—riparian riverine, Gunnison River canyon, Blue Mesa, lake arms, canyon rim, and the inner canyon.

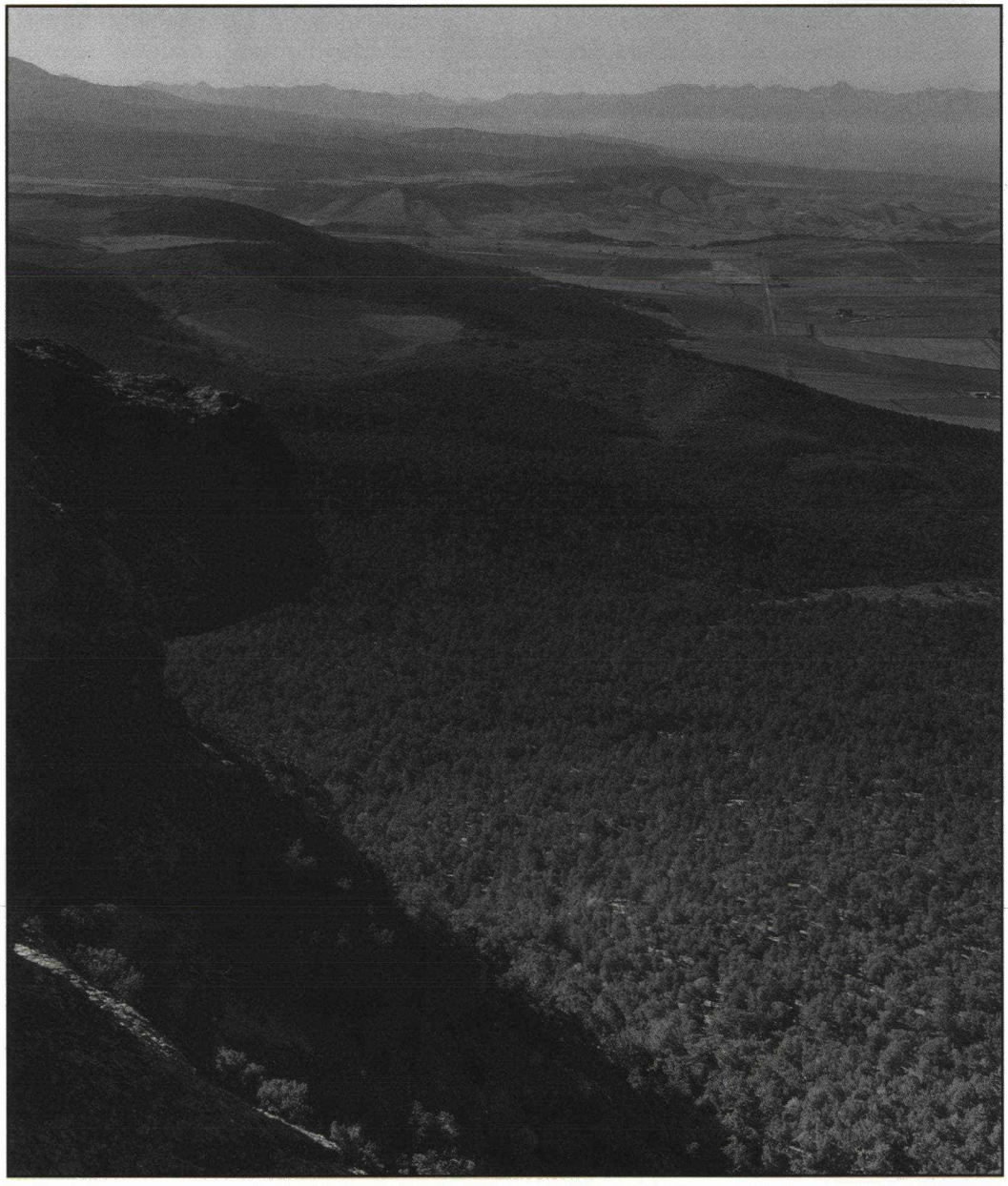
ROAs are important to incrementally plan for the protection of park resources from visitor overuse. They illustrate how visitors might relate to and use park resources. They also provide the basis for understanding visitor experiences available within a park. At the same time, the physical resource attributes and visitor experiences are related to each park's purpose and significance.

ROAs identify sensitive resources, where damage may occur from overuse. By identifying important resources and visitor experiences, the first steps needed to define carrying capacity and protect park resources from overuse are completed. Future VERP planning (Visitor Experience and Resource Protection) will eventually define

carrying capacities needed to protect resources.

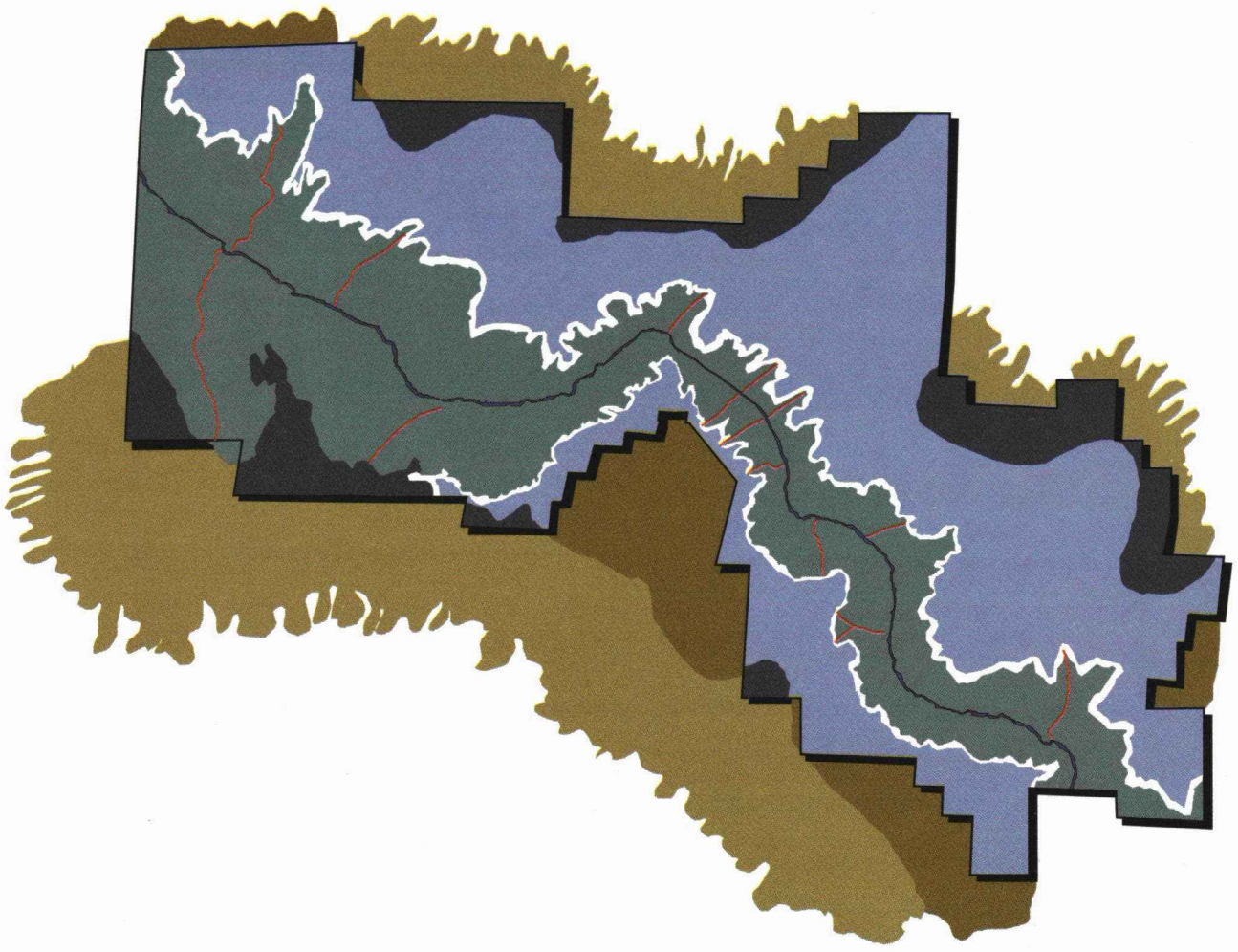
Along with the specific objectives for each area, ROAs provide the rationale and basis for land allocation decisions. Each resource opportunity area includes a brief description of the following:

- Outstanding examples of natural, scenic, geological, ecological, floral, faunal, and recreational values for which the park was established.
- Populations of rare plants and animals that are particularly vulnerable because of their small population sizes and genetic isolation. Habitat necessary for the survival or reintroduction of federal- or state-recognized threatened or endangered species or candidate species being considered for listing.
- Resources that are unusually sensitive to human use.
- Major known archaeological or important historical resources.



Overlooking Bostwick Park from Warner Point Trail, Black Canyon of the Gunnison National Monument

©David Halpern



the river

panoramic vista (inside the monument)

panoramic vista (outside the monument)

canyon backdrop (inside the monument)

canyon backdrop (outside the monument)

cliff top

cliffs and inner canyon

the way in

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1 0 miles

Resource Opportunity Areas

Black Canyon of the Gunnison National Monument

United States Department of the Interior
National Park Service

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Black Canyon of the Gunnison National Monument

Panoramic Vistas ROA

The panoramic vistas ROA contains areas within the monument that offer the most distant views and sweeping landscapes that extend beyond the park boundary. Examples include areas atop Green Mountain and along portions of the Warner Nature Trail. Views are generally characterized as being unobstructed (in some cases up to 360 degrees) and include distances of a few miles up to about 100 miles.

In addition to its impressive views, this ROA allows the canyon to be viewed in its regional context. In this way it is easier to understand the importance of managing the area as a component of other larger ecosystems. The value of the Class I air quality is magnified on days when visibility allows viewing targets at distances of 60 to 100 miles. Also, the interpretive story is more complete when the San Juan and West Elk ranges, which figure prominently in Black Canyon's geologic story, can be viewed from within this ROA.

Mixed vegetative cover includes areas of pinyon/juniper woodland and mosaics of mountain scrub and sagebrush.

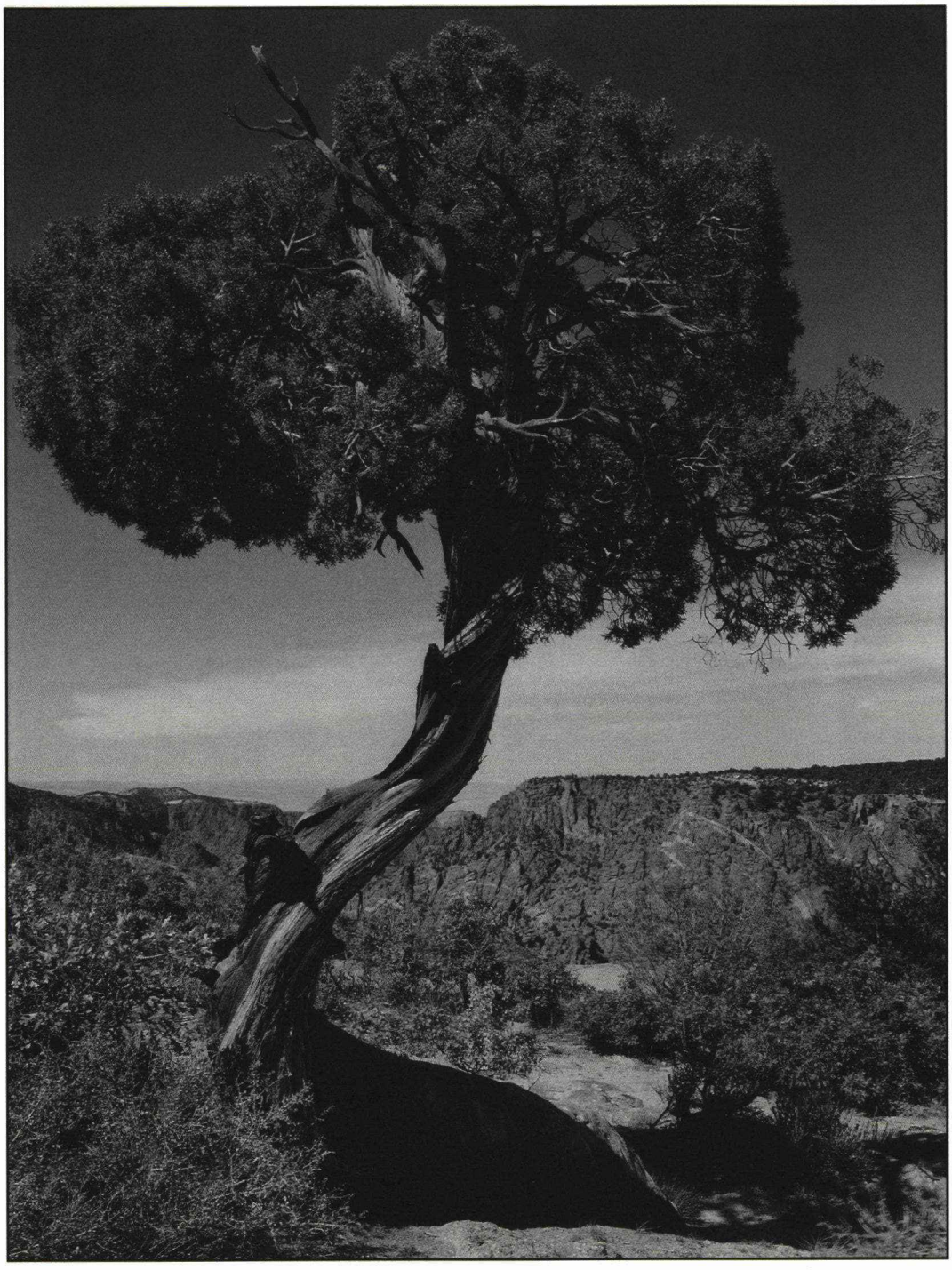
Most of the higher ridges found within the monument occur within this zone. Also, topography that slopes away from the canyon, which is typical due to the nature of the Gunnison Uplift in which the canyon was formed, permits views not possible closer to the canyon's rim. Soils tend to be more fully developed, having eroded from softer, overlying sandstones.

As development along ridgelines would be immediately visible and evident, this ROA is extremely sensitive in terms of protecting the natural and primitive views now possible from the canyon. Current development is minimal and includes only closed primitive roads, limited fencing, and activities that occur on some private lands (many of which the NPS has acquired as scenic easement).

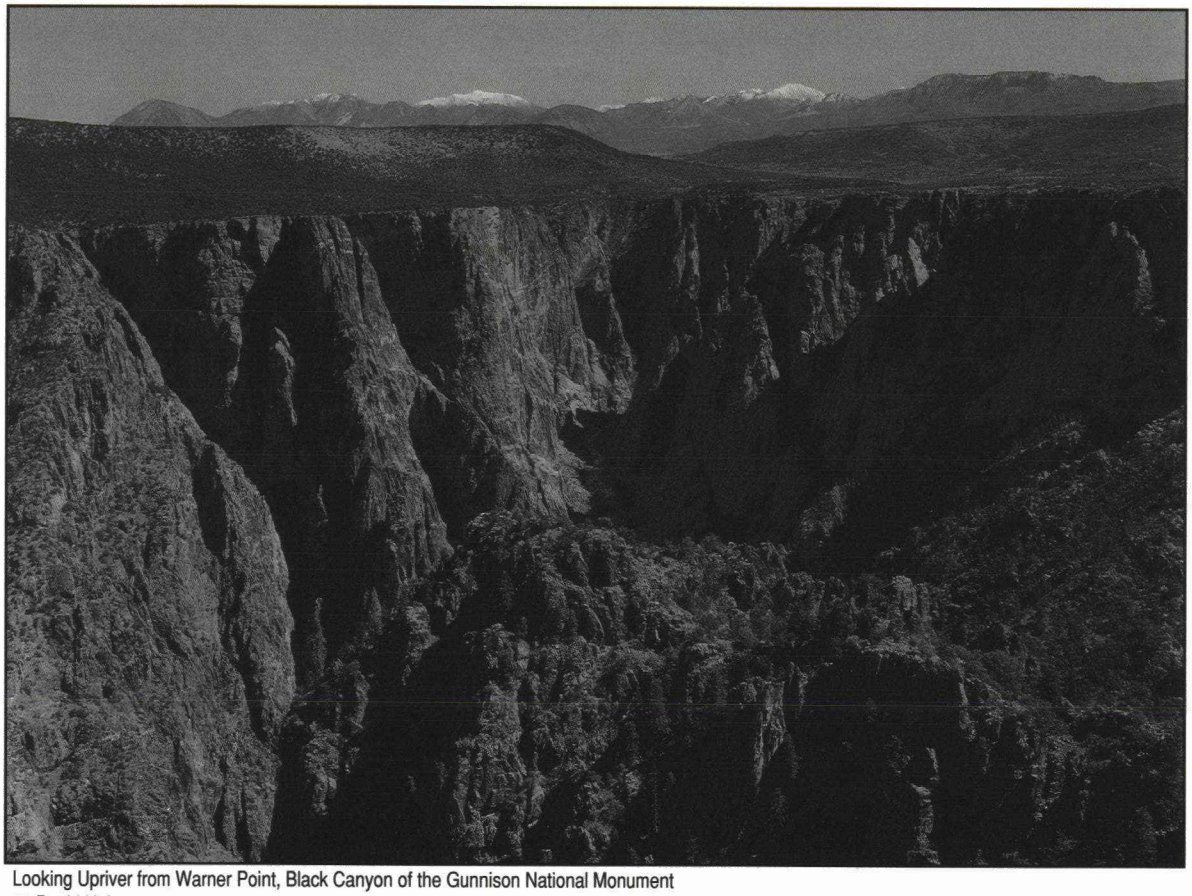
Highlights of Exceptional Resources

Resources of special significance that occur within the panoramic vistas ROA include:

- Wildlife viewing opportunities—especially larger mammals including mule deer, elk, and bighorn sheep.
- Recreational opportunities—for those willing to exert some effort (but less than required for inner canyon hiking), some of the most spectacular distant and panoramic views are available.
- Interpretive opportunities—understanding the values and concepts of ecosystem management, including the canyon's high-quality Class I airshed.
- Rural Colorado landscape—the distant views enhance the understanding and appreciation of the vastness of wildlands and rural cultural landscape that compose much of western Colorado.



"Everyone's Favorite Tree" on Dragon Point, Black Canyon of the Gunnison National Monument
© David Halpern



Looking Upriver from Warner Point, Black Canyon of the Gunnison National Monument
© *David Halpern*

The Canyon Backdrop ROA

This ROA is the scenic background in which the canyon is viewed. It includes both gentle and steep slopes that form the prominent viewscape as seen from the opposite rim. Examples include the side of Fruitland Mesa on the North Rim, and Vernal Mesa on the South Rim. Views from either rim are greatly enhanced because of the primitive, natural setting created by the canyon backdrop.

Mixed vegetative cover is found throughout this zone. Areas of sagebrush are intermixed with large clusters of mountain scrub, while other areas are dominated by old growth pinyon/juniper woodland. The seasons are highlighted by the color changes that occur throughout this zone, especially during early autumn.

Sedimentary rocks that overlay the older and harder Precambrian-aged rocks of the inner canyon help complete the monument's geologic story. These rocks tell of times long ago, of vast oceans and shallow seas, of mountain-building and erosion, that set the stage for carving out this magnificent gorge. The rocks within the canyon backdrop are more easily eroded than inner canyon rocks. Not only is soil depth greater here, disturbances in this area can accelerate erosion.

This ROA also contains the bulk of development that has already occurred within the monument. Roads and visitor and support facilities are all found here. It is important to realize that not only do these developments provide basic services and amenities for those visiting the canyon and the means for maintaining the area, they are also a component of the view as seen from the opposite, and in some cases the same rim. This ROA is, therefore, one of the most sensitive zones because it is a primary component of most canyon views.

Highlights of Exceptional Resources

Resources of special significance that occur within the canyon backdrop ROA include:

- Wildlife viewing opportunities—rich in a variety of species including mule deer, marmots, squirrels, chipmunks, porcupine, bobcat, fox, bear, mountain lion, and a variety of birdlife.
- Recreational opportunities—less physically demanding trails that provide significant panoramic views, opportunities to explore away from the rim, and developed campsites.
- Cultural resources—areas within this zone have been identified as being seasonally used by American Indians both during historic and prehistoric times; the North Rim Road was an important CCC project of the early 1930s.
- Rural Colorado landscape—the area is a reminder of the natural and primitive nature that at one time composed much of the West.

The Cliff Top ROA

The cliff top ROA is the area most visitors experience and remember while sight-seeing at the Black Canyon of the Gunnison. This is the area of the monument that hugs the canyon rim and may vary in width from 5 to 200 feet to the edge. Some of the overlooks are protected by railings to permit viewing right up against the edge—still, some visitors are reluctant to stand this close even with the railings in place. Other, less well-defined overlooks lack railings, drawing more adventuresome souls to the very edge in an effort to maximize the view.

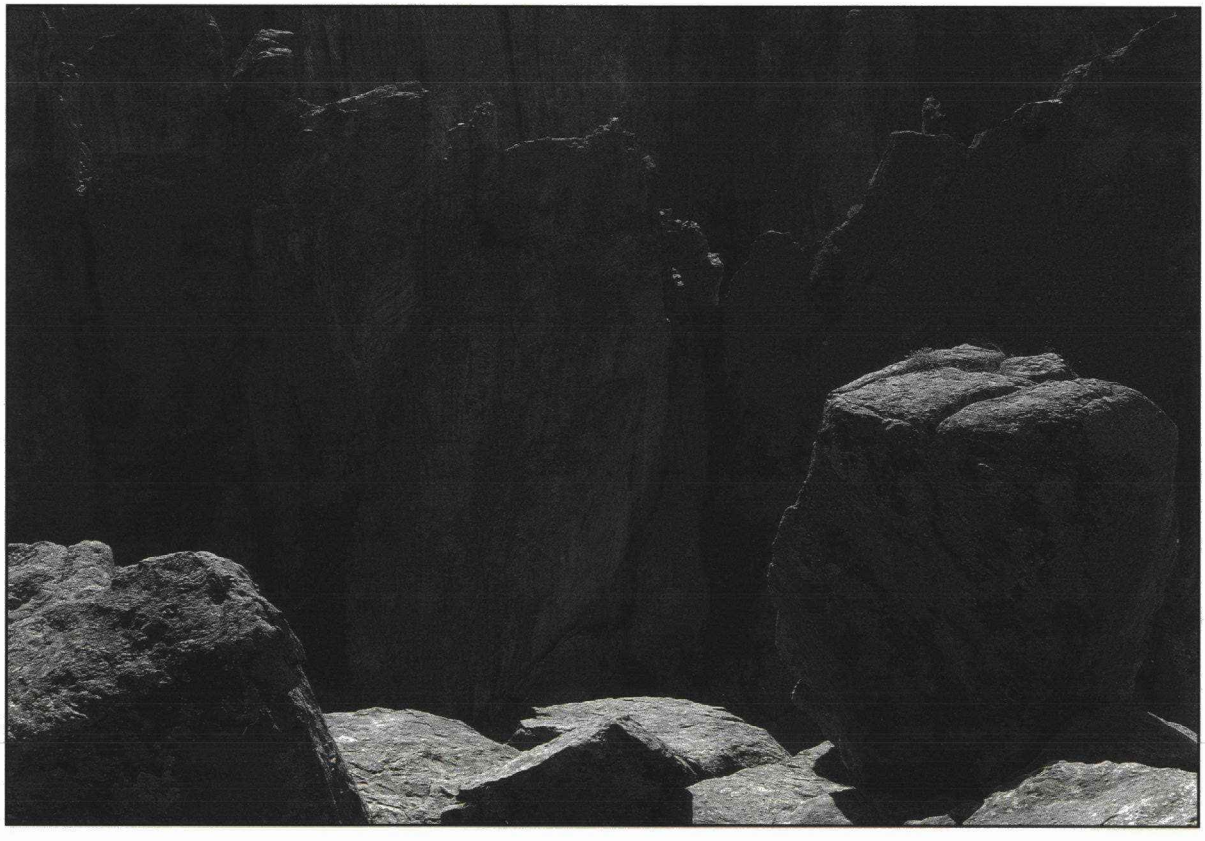
Viewing the canyon for the first time along the drive in, visitors are surprised that such an abrupt void even exists. This adds to the excitement for visitors as they stand weak-kneed and with a sometimes queasy stomach peering into the vast chasm below. The fact that the canyon is in many places deeper than it is wide adds to this sense of wonder and awe.

Much of the cliff top ROA is composed of exposed bedrock, including fins of pegmatite that serve as overlooks that loom over the canyon depths. Scattered clumps of mountain scrub, with occasional pinyon or juniper trees, add interest to the bedrock. Visible from the cliff top ROA are the different environments found just below the rim, including groves of Douglas fir, which suggest a wetter climate.

Highlights of Exceptional Resources

Resources of special significance that occur within the cliff top ROA include:

- Wildlife viewing opportunities—especially chipmunk, squirrel, marmot, swifts, swallows, and soaring birds of prey.
- Recreational opportunities—this is the primary sight-seeing zone, offering some of the easiest access to view the canyon. Excellent photo points along short, easy trails are readily available. This is also where visitors began to explore the idea of inner canyon travel.
- Interpretive opportunities—because this is where the greatest number of visitors experience the resource "up close and personal," it is also a good place to provide interpretive information and contacts. Their focus is on the canyon.
- Cultural resources—both Pulpit Rock and Dragon Point have overlook construction dating to the CCC work of the early 1930s, and are therefore important as historical resources.
- Scale—it is difficult for some visitors to understand the scale involved in viewing the canyon. Humans seem humbled upon realizing the immensity of what they are looking at.
- Expletives—"It's the view!"



Devil's Lookout, Black Canyon of the Gunnison National Monument
© *David Halpern*

Cliffs and Inner Canyon ROA

The cliffs and inner canyon ROA represents the core of what is the Black Canyon of the Gunnison. Wallace Hansen wrote of the characteristics of the canyon, "*no other canyon in North America combines the depth, narrowness, sheerness, and somber countenance of the Black Canyon of the Gunnison.*" The dark walls of the canyon, composed of metamorphic rocks of gneiss and schist, helped inspire its name.

Small groves and individual trees and shrubs cling tenaciously to nooks and ledges, while finns and dikes of granitic rock add interest and contrast to otherwise foreboding walls. Islands of rock, long-ago separated from the primary canyon walls, stand like sentries above the Gunnison River.

The river makes its presence known on a continuing basis, evident by the constant sights and sounds as it churns and roars above, around, and below boulders, some the size of small houses.

Unlike at the cliff top, access here is extremely difficult. The highest vertical cliff in Colorado, at 2,280 feet, lies beneath Serpent Point. This portion of the Painted Wall, along with the Chasm Wall just upstream, presents challenges to world-class rock climbers. The East Portal Road, an exception to the above, winds among the cliff edges as a reminder of the development and delivery of water to a thirsty Uncompahgre Valley. The road was instrumental in supporting the construction of the Gunnison Tunnel and later Crystal Dam, both upstream of the monument boundary.

Highlights of Exceptional Resources

Resources of special significance that occur within the cliffs and inner canyon ROA include:

- Fauna—eyries of the endangered peregrine falcon and bald eagle are protected among the sheer cliffs.
- Flora—The Black Canyon gilia, a rare plant of the region, is known to grow among the vertical cracks of Precambrian metamorphic rock. Seeps and small hanging gardens cling to walls above the river. Relict plant communities are protected on and among islands of rock within the confines of the inner canyon.
- Recreational opportunities—world-class technical rock climbing is popular during the late spring and early fall—wilderness adventure and solitude.
- Cultural resources—the Gunnison Tunnel, just upstream of the monument boundary, is listed as a National Engineering Landmark. The importance of the tunnel leading to water development and settlement of the Uncompahgre Valley cannot be overstated.



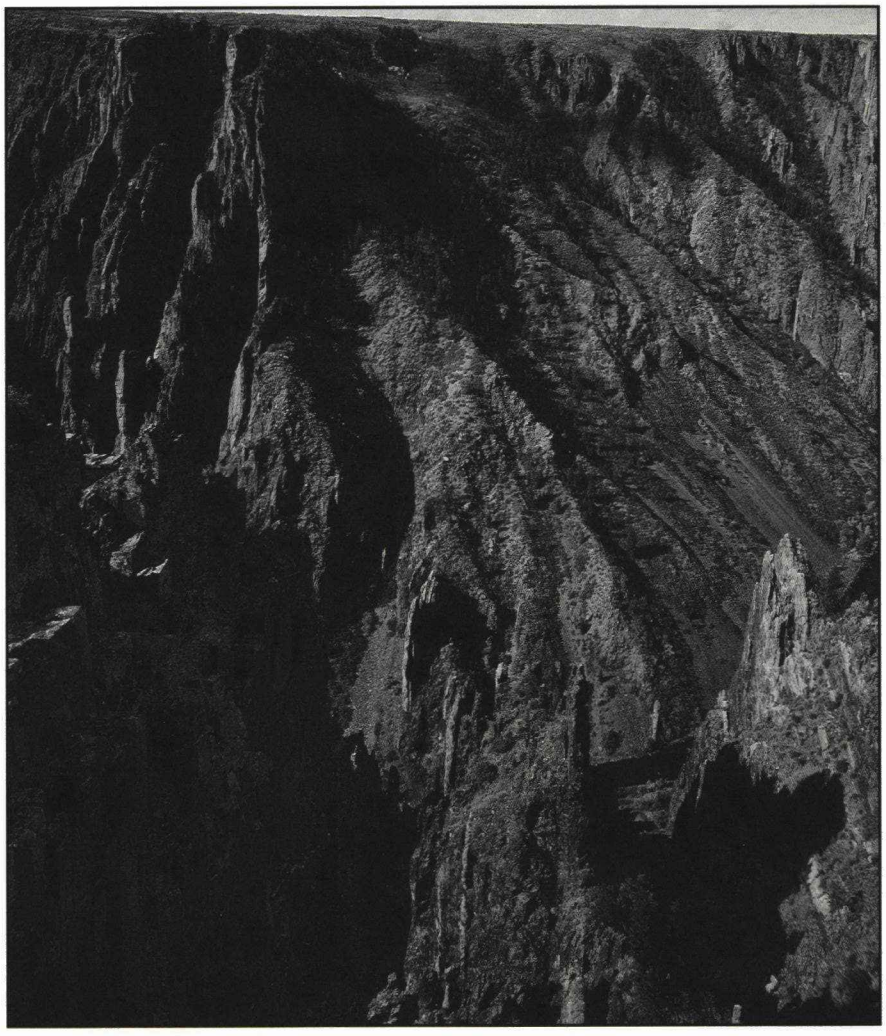
Painted Wall Overlook, Black Canyon of the Gunnison National Monument
© *David Halpern*

The Way In ROA

This ROA consists primarily of the inner canyon access routes. Some of these routes are specially identified and recommended to those visitors wishing to hike to the river and include such graphic names as SOB Draw and Slide Draw. Most of these routes are really scrambles down very steep tributaries, and all require visitors to be in excellent physical condition and have a sense of adventure. There are other drainages that are not identified or recommended, but are possible ways to reach the river. Some of these may require technical climbing skills and some climbing equipment to negotiate safely. Loose rock and scree are common on most routes.

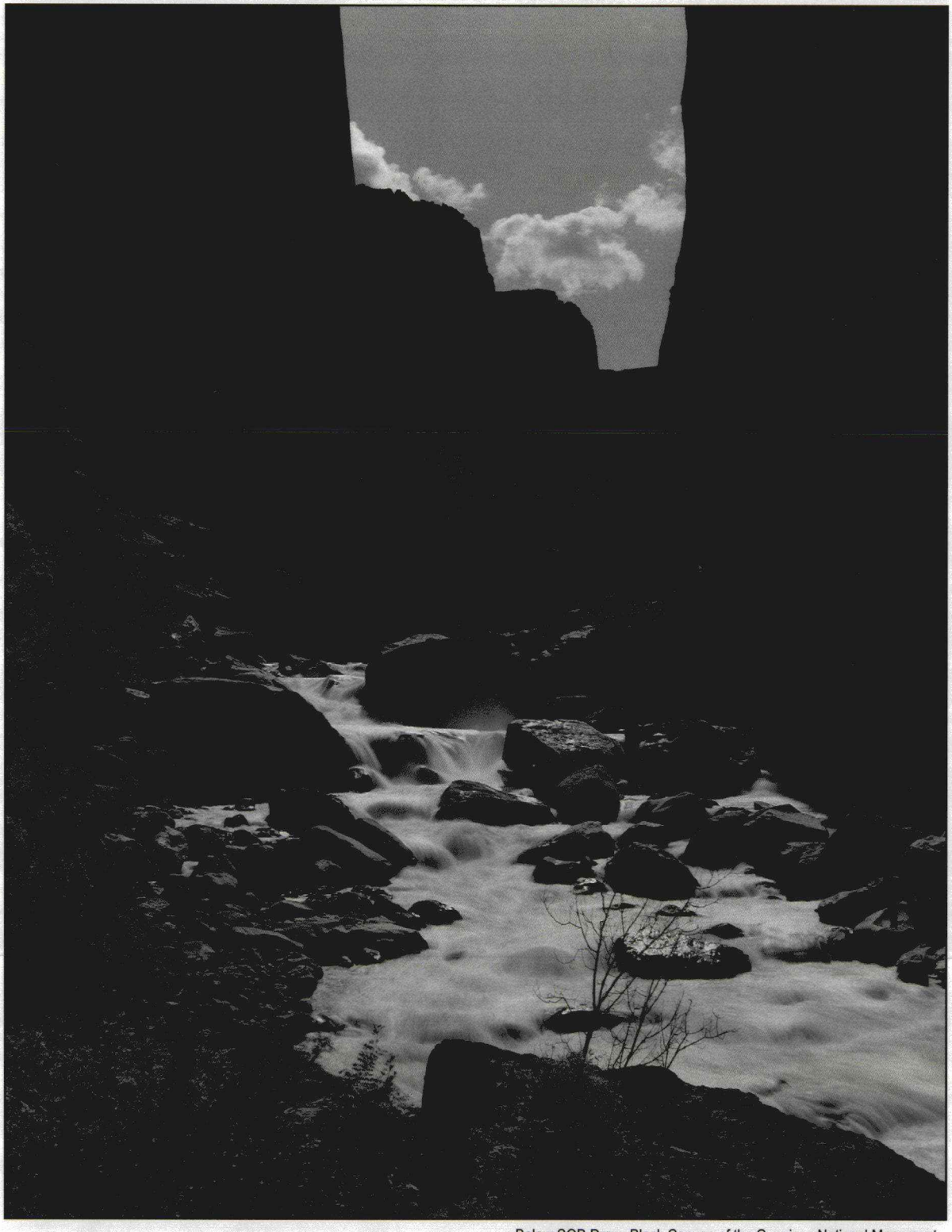
Vegetation along the routes is quite a bit different than found in the cliff top ROA, and differs from North Rim to South Rim. Douglas fir and a few aspen prefer the shadier and moister environments found along the South Rim routes, but box elder, Gamble oak, and poison ivy are also regularly encountered here and along the North Rim routes. Vegetation generally provides good shade, especially in the upper reaches of the route. Most routes lack running water (except Red Rock Canyon).

Opportunities for solitude and isolation are generally available, especially on some of the lesser used routes. Quiet is the rule, except for the sound of the river, which is regularly heard (and seen) along the hike in. For whatever reason folks are hiking to the river, they are usually focused on one thing—getting there.



Kneeling Camel Overlook, Black Canyon of the Gunnison National Monument
© *David Halpern*

The level of difficulty is high due to the steepness of the routes and the presence of boulders and loose rock, which at times must be negotiated. Rescue activities for the monument are generally concentrated in this ROA, because hikers that become fatigued or injured will sometimes require assistance.



Below SOB Draw, Black Canyon of the Gunnison National Monument
© David Halpern

Highlights of Exceptional Resources

Resources of special significance that occur within the way in ROA include:

- Wildlife viewing opportunities—especially chipmunk, squirrel, birdlife, and occasional mule deer.
- Recreational opportunities—visitors who wish to challenge their hiking abilities and those seeking additional adventure will select this zone. Opportunities for solitude and quiet abound. Excellent photo points are available to those who wish to seek them out.
- Scale—those that use the way in can truly get a sense of the place through the challenges offered by the canyon. The average descent on most routes is 1,800 feet—to sense one's human frailty within the immensity of the canyon is truly a humbling experience.

The River ROA

If the cliffs and inner canyon ROA constitutes the core of the monument, the river ROA is its heart and soul. The river brings life to the inner canyon—over the millennia it has provided power and cutting materials needed to carve out the gorge; it serves as an agent to replenish and cleanse aquatic systems and supports a variety of riparian plant and animal life; it is also what makes the inner canyon such a special place to visit.

Historic flows varied from a late summer trickle to spring floods in excess of 25,000 cfs (cubic feet per second). Construction of three upstream dams—the Aspinall Unit—altered flows to achieve objectives of water storage, flood control, recreation, and hydroelectric power.

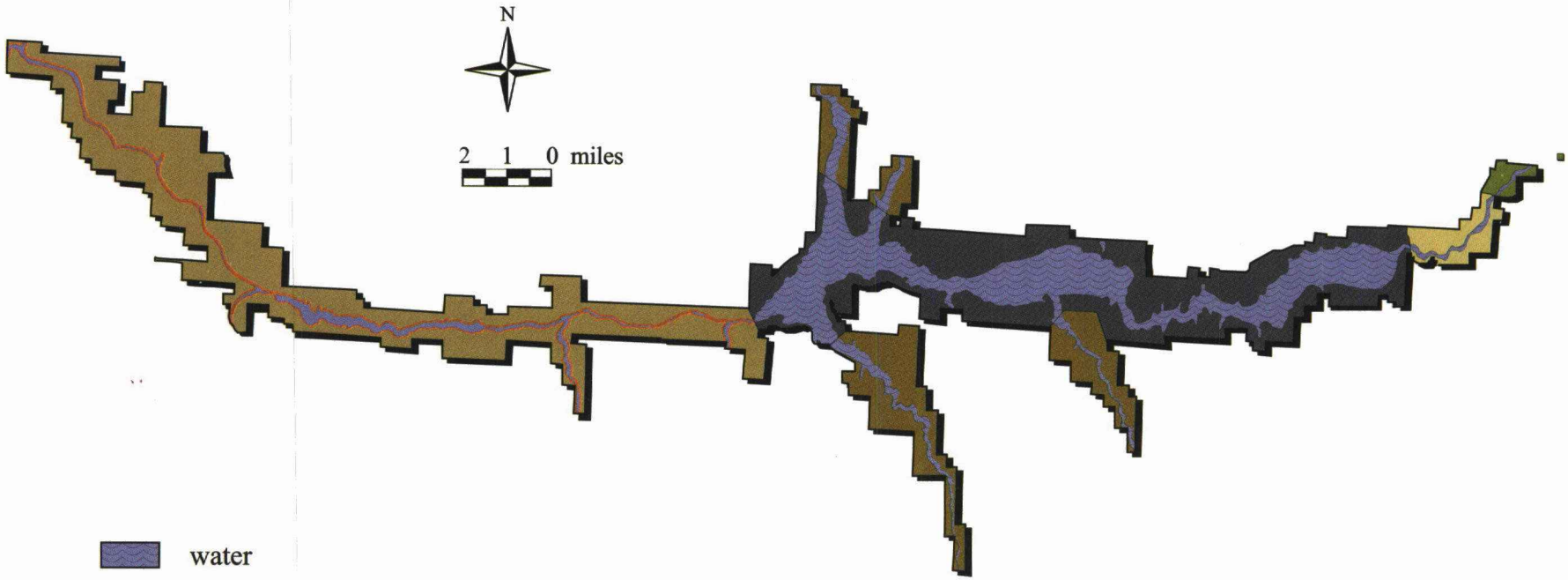
Streamside environments are frequently lush with riparian vegetation. Because the river is fed through penstocks near the base of Crystal Dam, water temperatures remain cold year around. Small aquatic creatures thrive in the streambed. These and other insects form a base for the food chain that supports a Gold Medal trout fishery. Seasonal flow variations enhance the riverine environment, cleansing streambed soils and maintaining river channels that might otherwise be choked by a variety of sediments and erosional debris.

The river is inviting to the human spirit. The roar of the river as it descends along its average gradient of 95 feet per mile soothes the soul. For some, it presents the challenge of catching trophy-sized rainbow or German brown trout using a light-weight rod and a hand-tied fly. Others are challenged by the river's extremes, choosing the kayak as the vehicle to propel themselves through and along its wild turbulence.

Highlights of Exceptional Resources

Resources of special significance that occur within the river ROA include:

- Flora and fauna—river otter, ringtail cat, a variety of birdlife, and a variety of aquatic life including a Gold Medal trout fishery.
- Water resources—the Gunnison River is the major tributary to the Colorado River within Colorado and contains endangered fish downstream as well as a superb trout fishery.
- Recreational opportunities—although river flows and riverside topography can greatly limit inner canyon hiking, hiking and camping do occur in this area. Wilderness solitude is a part of this experience. Fishing, and to a lesser extent, kayaking, are popular activities.
- Wild and scenic—the Gunnison within and downstream of the monument is eligible for Wild and Scenic River designation due to the outstanding natural values found here.



water

resource opportunity areas

Gunnison River Canyon (includes water)

inner canyon (includes water)

Blue Mesa (includes water)

lake arms (includes water)

riparian riverine (includes water)

canyon rim

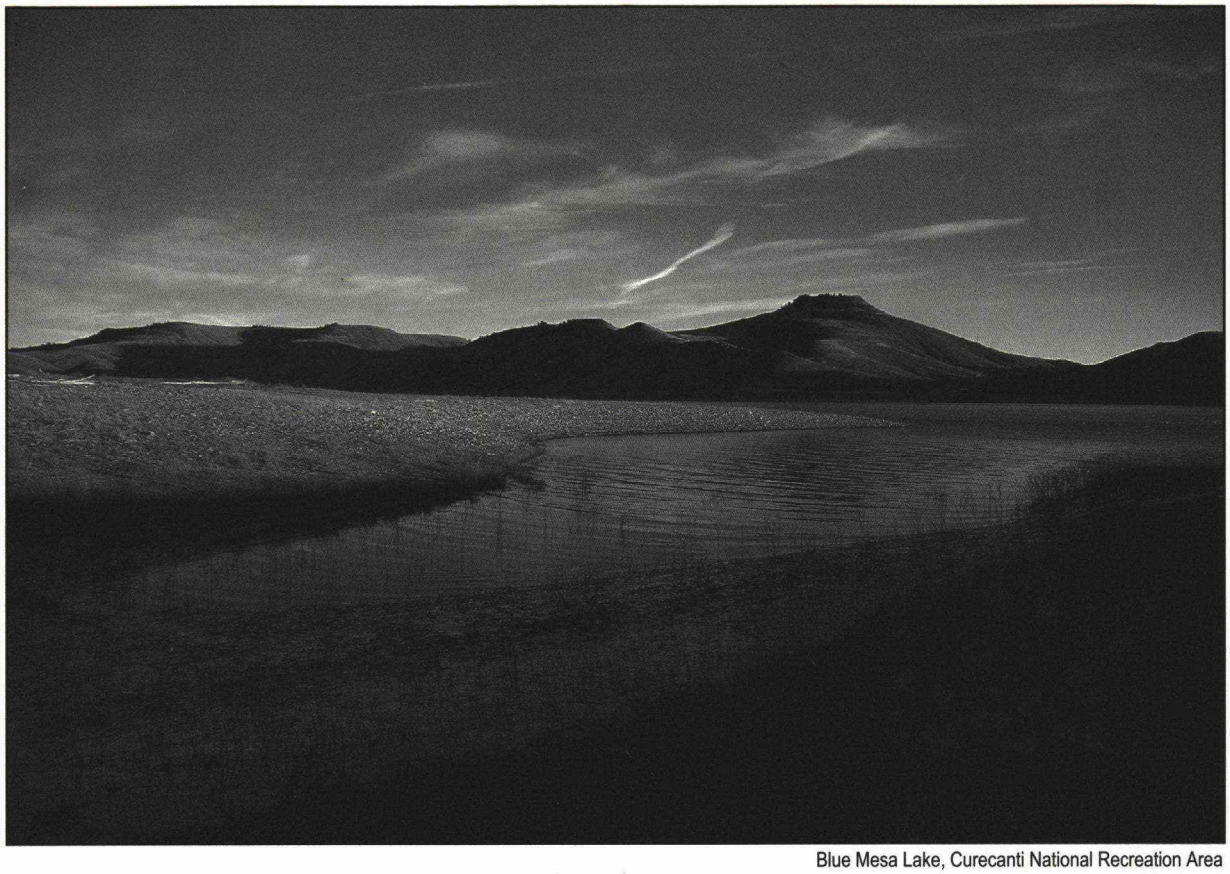
Resource Opportunity Areas

Curecanti National Recreation Area

United States Department of the Interior
National Park Service

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Blue Mesa Lake, Curecanti National Recreation Area
Lisa Lynch

Curecanti National Recreation Area

Resource Opportunity Areas

Resource opportunity areas (ROAs) are geographic delineations of national recreation area components that contain similarities of character and resource values. Although there may be some characteristics shared among ROAs, other characteristics will be unique to one ROA. The six ROAs identified within Curecanti National Recreation Area are:

- Gunnison River Canyon
- Riparian Riverine
- Blue Mesa
- Lake Arms
- The Inner Canyon
- Canyon Rim

Riparian Riverine ROA

This ROA comprises the primary wetland and riverine environment found within Curecanti National Recreation Area. Within this area, the free-flowing Gunnison River cuts and meanders, demonstrating the forces of nature as it has for a millennium across this floodplain. The area is easily accessible to all visitors because a variety of trails provide access. Picnic facilities and rest rooms are available at the Cooper Ranch and Neversink day use areas. The vegetation is associated with riparian and meadow environments and includes

cottonwoods, some more than 100 years old.

This ROA serves as a corridor between the Gunnison River Canyon and the entrance to Blue Mesa Reservoir. This linkage is important for several species of wildlife and the environment is significantly different than that surrounding Blue Mesa.

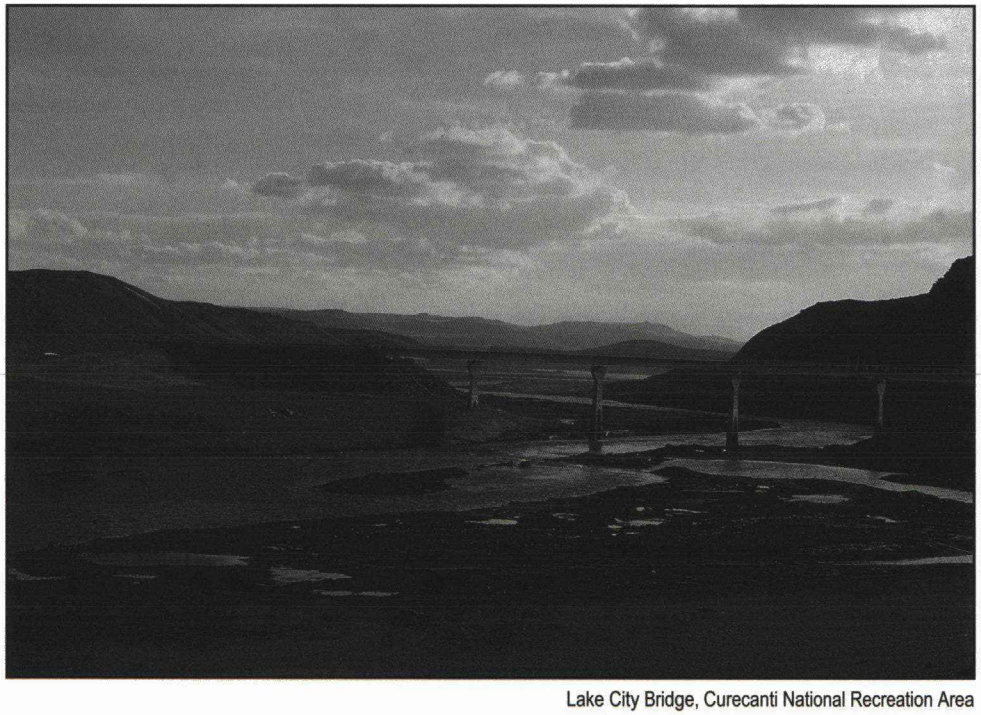


Slough at Neversink. Curecanti National Recreation Area

Highlights of Superlative Resources

Resources of special significance that occur within the riparian riverine ROA include:

- Wildlife viewing opportunities—rich in a variety of species including bald eagle, moose, river otter, mule deer, great blue heron, and a variety of birds.
- Recreational opportunities—less physically demanding trails that provide significant panoramic views, opportunities to explore away from the highway, and superlative opportunities for trout fishing.
- Cultural resources—areas within this zone have been identified as being seasonally used by American Indians both during historic and prehistoric times.
- Rural Colorado landscape—the area is a reminder of the agricultural use that occurred in this area prior to the creation of Curecanti National Recreation Area.



Lake City Bridge, Curecanti National Recreation Area

Gunnison River Canyon ROA

The Gunnison River Canyon ROA is that segment within the National Recreation Area that provides the visitor with a transition between the riparian riverine and Blue Mesa ROAs. Here U.S. Highway 50 winds its way through the canyon cut by the Gunnison River where it once flowed freely and unimpounded through this reach. For most of the year, the Gunnison River still flows through this ROA. However, during July and August, Blue Mesa Reservoir reaches its peak elevation and this free-flowing stretch of river becomes a flat body of water, accessible by boat to recreationalists enjoying Blue Mesa. Although adjacent to the highway, the canyon walls provide sharp contrast to the rolling high desert and flat mesas that are more characteristic of Blue Mesa. Excellent fishing opportunities are provided here where Beaver Creek enters the Gunnison River.

Development consists of a picnic area at Beaver Creek and a pullout at Wilson's Landing. Views are primarily confined to the river canyon itself up to the point where Steuben Creek enters the canyon at the junction of U.S. Highway 50 and Colorado Highway 149.

Highlights of Superlative Resources

Resources of special significance that occur within the Gunnison River Canyon ROA include:

- Wildlife viewing opportunities—including mule deer, bald and golden eagles, great blue heron, and numerous species of waterfowl.
- Recreational opportunities—including fishing from both the shore and water, birding, and for those willing to exert some effort, rock climbing routes are frequently used in this area. Winter activities include ice fishing and ice skating. Some float trips (rafts, canoes and kayaks) continue past Riverway and takeout in the Gunnison River Canyon.
- Interpretive opportunities—provided through panel displays at Beaver Creek.

Blue Mesa ROA

The Blue Mesa ROA provides the visitor with some of the most premier flatwater recreational opportunities in the United States. Here U.S. Highway 50 winds its way along the shores of Blue Mesa for approximately 22 miles. Blue Mesa Dam, which lies at the westernmost point of the reservoir, is an earthen structure that impounds the water of Blue Mesa Reservoir. The Blue Mesa ROA is the area most visitors experience while visiting Curecanti National Recreation Area. The area provides some of the best Kokanee salmon fishing in the United States as well as excellent opportunities for sailboarding, waterskiing, and sightseeing.

The vastness of the high desert landscape, high plateaus, and mesas unfolds and the visitor can sense the immense amount of open space that surrounds them. Numerous tributaries that provide the visitor with outstanding opportunities for fishing and hiking flow into Blue Mesa. The Dillon Pinnacles, one of the most outstanding geologic features in the recreation area, rise up from the lakeshore and provide visitors with one of the most breathtaking vistas in the region.

This ROA also includes the bulk of the development that has occurred within the national recreation area. Major visitor support facilities that include visitor centers, developed campgrounds, marinas, and park administrative and

housing facilities are all found here. It is important to remember that developments serve as means to provide basic visitor services and to maintain the area.

Highlights of Superlative Resources

Resources of special significance that occur within the Blue Mesa ROA include:

- Wildlife viewing opportunities—including mule deer, elk, bighorn sheep, bald and golden eagles, sage grouse, great blue heron, and numerous species of waterfowl.
- Recreational opportunities—including fishing from both the shore and water and ice fishing in winter—birding, waterskiing, sailboarding, hiking, and camping in the summer—ice skating, cross country skiing, snowshoeing, and snowmobiling in the winter.
- Interpretive opportunities are provided through evening programs, environmental education in indoor and outdoor classrooms as well as slide programs, panel displays, and hands-on displays in visitor centers.
- Cultural resources—areas in this zone contain the Curecanti National Archeological District.



Willow Creek, Curecanti National Recreation Area

The Lake Arms ROA

The lake arms ROA contains areas within the national recreation area on Blue Mesa Reservoir that offer the visitor a recreational opportunity that seems more serene and uncrowded than that of the main body of Blue Mesa. Here, most of the drainages that previously flowed to the Gunnison River now terminate in arms such as Soap Creek, Cebolla, and Lake Fork. The visitor is more in touch with the surrounding landscape and geology because of the narrowness of these lake arms. This area provides the visitor the opportunity to escape the oftentimes crowded main body of Blue Mesa and enjoy the vistas and resources in a less crowded setting. Unmatched vistas sweeping up into the West Elk Wilderness and the narrow, canyon-like environment of the Lake Fork are afforded the visitor who takes the time to enjoy these areas of Blue Mesa. Some cultural resources can also be reached via the lake arms that provide the visitor with the opportunity to experience the pioneer history that is much a part of this landscape.

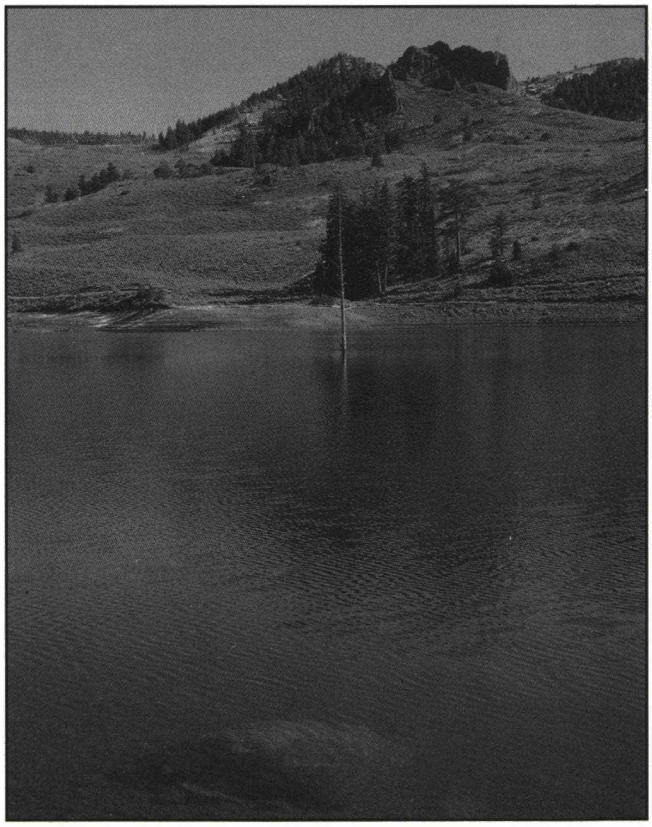
Mixed vegetative cover provides biological diversity for the area and includes wetlands and riparian communities along the river and its tributaries, mosaics of mountain scrub and high desert sagebrush along the lakeshore and surrounding mesas, and mixed stands of Douglas fir and aspen amid the canyons and along the rim.

As development along ridgelines would be evident from Blue Mesa, this ROA is extremely sensitive in terms of protecting the natural and primitive views still possible from the reservoir. Current development is minimal and includes only closed primitive roads, limited fencing, and activities that occur on some private lands adjacent to the park boundary.

Highlights of Superlative Resources

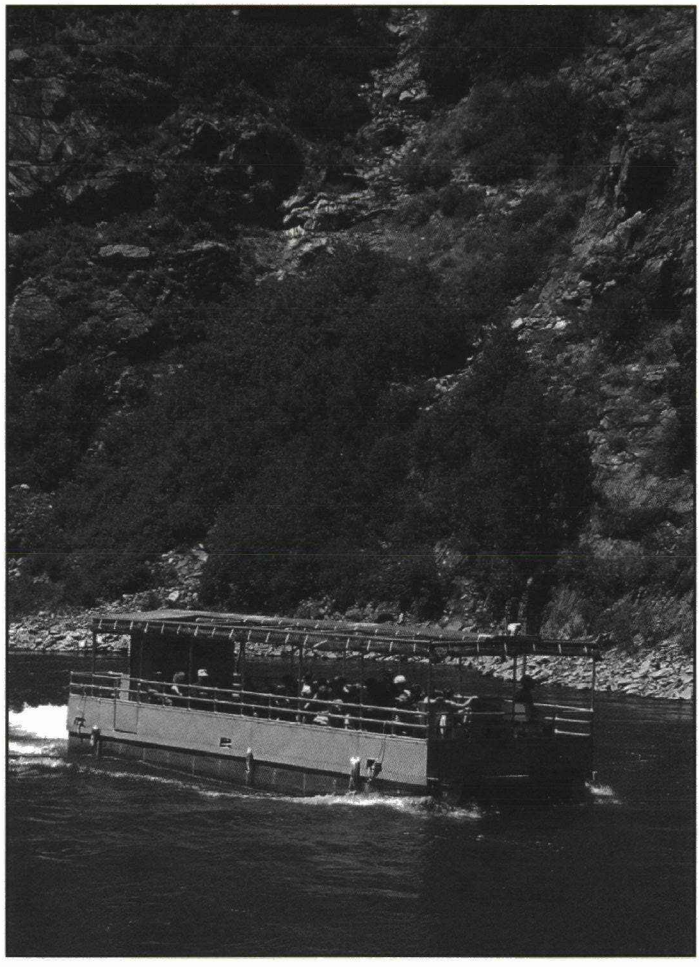
Resources of special significance that occur within the lake arms ROA include:

- Wildlife viewing opportunities—especially larger mammals, including mule deer, elk, pronghorn, moose, and bighorn sheep.
- Recreational opportunities—for those willing to exert some effort (but less than required for inner canyon hiking), some of the most spectacular distant and panoramic views are available from Blue Mesa.
- Interpretive opportunities—understanding the values and concepts of ecosystem management and the importance of maintaining unimpaired vistas and viewsheds.



Soda Creek Arm, Curecanti National Recreation Area
Lisa Lynch

- Colorado landscape—the panoramic views enhance the understanding and appreciation of the vastness of the surrounding landscape that comprises much of western Colorado.



Tour Boat on Morrow Point Lake, Curecanti National Recreation Area
Joanie Budzileni

The Inner Canyon ROA

The inner canyon ROA is the area least used to experience the superlative recreational, natural, and cultural resources of Curecanti National Recreation Area. The area offers the visitor who seeks to spend some time and expend some effort one of the most uncrowded and remote settings in the national recreation area.

For the most part, there is no road access into the inner canyon. The exceptions occur at East Portal and Cimarron. In order to experience the majority of the inner canyon, visitors must hike to destination points within the canyon. Other alternatives include hiking the Pine Creek Trail and the old railroad grade below Blue Mesa Dam and taking the guided boat tour on Morrow Point Reservoir or portaging boat and gear down trails at Morrow Point and Crystal.

Although the dams and reservoirs themselves tell an important story of water development in the West, the remoteness of the setting provides the visitor with one of the most primitive opportunities in the national recreation area.

Highlights of Superlative Resources

Resources of special significance that occur within the inner canyon ROA include:

- Wildlife viewing opportunities—these include mule deer, bear, and soaring birds of prey.
- Recreational opportunities—include hiking, camping, fishing, and sightseeing.
- Interpretive opportunities—boat tours and interpretive panels that explain the natural resources of the area and water development in the West.
- Cultural resources—glimpses of railroading history and water development in the West are provided.

The Canyon Rim ROA

The canyon rim ROA is the area most visitors use to experience the views into Morrow Point and Crystal Reservoirs. It is also the only exposure many visitors have to the geologic wonder of the Black Canyon of the Gunnison. The canyon rim ROA provides visitors with views of two of the three dams that now impound the Gunnison River. The vistas along the canyon rim provide visitors with spectacular views of the San Juan Mountains to the south and the Grand Mesa area to the west.

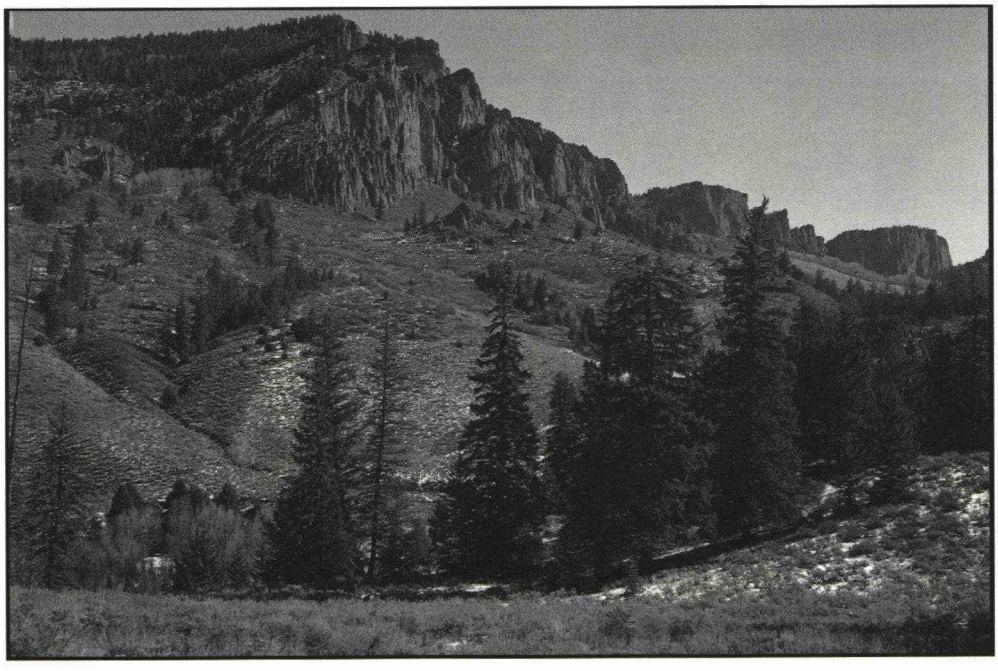
Much of the canyon rim ROA is adjacent to Highways 50 on the south and 92 to the north. Much of the area is bordered by private land that blocks access, however, a few trails along the rim and into the canyon are available. Although there are opportunities for cross-country travel, visitors need to be aware of landownership and respect the rights of landowners (property lines are not always well marked).

Visible from the canyon rim ROA above Morrow Point Reservoir is a representative community of the different environments found just below the rim, including mixed stands of aspen and Douglas fir as well as one of the only accessible stands of pinyon juniper visible from the north rim.

Highlights of Superlative Resources

Resources of special significance that occur within the canyon rim ROA include:

- Wildlife viewing opportunities—especially chipmunk, squirrel, marmot, mule deer, swifts, swallows, and soaring birds of prey.
- Recreational opportunities—this is the primary sight-seeing zone of the canyon rim and inner canyon, offering some of the easiest access to view the canyon. Excellent photo points along short, easy trails are readily available. This is also where visitors began to explore the idea of inner canyon travel.
- Interpretive opportunities—several seasonal ranger walks and snowshoe tours.



Soap Creek Road, Curecanti National Recreation Area
Lisa Lynch

MANAGEMENT PRESCRIPTIONS

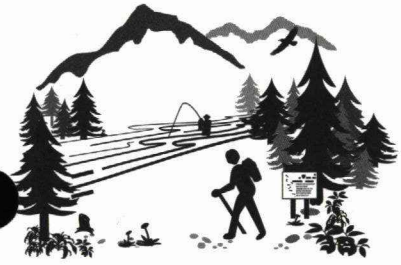
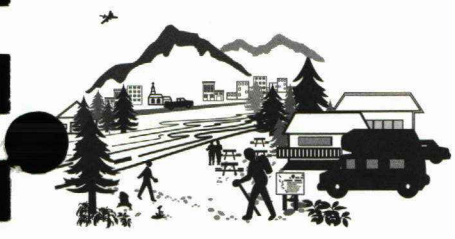
Management prescriptions denote how blocks of land within the park will be managed in the future. These are strategic in nature and are established through the general management planning process. They set a *broad framework* for the human use of parklands, providing for a variety of visitor experiences, *ever mindful of the Service's commitment to preserve parklands for future generations.*

Management prescriptions (known as prescriptions) are common to all alternatives and provide direction for specific areas of land within a park. Prescriptions articulate management for an area of land considering visitor experience, access, natural resources, cultural resources, facilities, and maintenance. Prescriptions combined in different ways identify the alternatives and are shown on each alternative's map as well as being described in the text.

Each alternative represents a different theme for management and is based on the purpose, significance, and management objectives outlined in the park's statement for management. The prescriptions consider the capability of lands used to support identified uses as described within each resource opportunity area. They provide a framework for further site-specific planning and management decisions on the use and the protection of resources. Prescriptions have been tailored for use in Curecanti NRA and Black Canyon NM.

The prescription concept includes four land-based (primitive, semi-primitive nonmotorized, motorized rural, and developed), three water-based (semi-primitive free-flowing flatwater, semi-primitive flatwater, and flatwater), and two special (scenic easements and protected resource area) management prescription areas. The following table summarizes *land-based prescriptions* based on setting, experience, and activities.

Table 1. Land-Based Prescriptions

	Setting	Experience	Activities
PRIMITIVE 	• Natura- appearing landscape • Encounters with others are infrequent • No facilities unless required to protect resources • No motorized access	• Isolation from sights & sounds of man • Feeling of closeness with nature • Opportunity to experience solitude, tranquility, & quiet • High degree of challenge, self reliance, & risk • Knowledge & use of outdoor survival & wilderness skills • Infrequent encounters with humans	• Primitive camping • Fishing • Nature observation • Hiking • Climbing • Kayaking
SEMI PRIMITIVE 	• Predominantly natural-appearing landscape • More frequent encounters with others than in primitive setting • Evidence of facilities that blend with surroundings may be present • Evidence of human occupation	• Predominantly isolated from sights & sounds of man • Opportunity to experience solitude, tranquility, & quiet • Interaction with nature predominates • Knowledge & use of outdoor recreation, survival, & wilderness skills • Occasional encounters with other humans	• Semi-primitive camping • Fishing • Nature observation • Hiking
MOTORIZED RURAL 	• Predominantly natural-appearing landscape with small-scale modifications • Encounters with others & vehicles are expected • Service facilities present • Evidence of human occupation	• Limited opportunity to experience solitude, tranquility, & quiet • Knowledge & use of outdoor survival & wilderness skills is not essential • Encounters with other humans & vehicles expected	• Semi-primitive camping from boats & vehicles • Fishing • Nature observation • Hiking • Interpretive activities
DEVELOPED 	• Predominantly modified landscape with facilities to provide for major visitor services in a substantially modified environment with a natural-appearing backdrop • Constant encounters with others & vehicles • Area shows definite signs of human occupation • Motorized access	• Sights & sounds of man are dominant • Limited opportunity to experience solitude, tranquility, & quiet • No knowledge & use of outdoor survival & wilderness skills necessary • Near constant encounters with other humans & vehicles	• Developed camping • Park tours • Interpretive activities • Bus tours/recreation • Vehicles • Fishing

Land-Based Prescriptions

Specific guidance for each area is described using the following six categories: visitor experience, access, natural resource management, cultural resource management, facilities, and maintenance.

Primitive

Management provides wilderness experiences. Challenge and adventure for visitors are high and are in an environment free of human influence and alteration. Natural processes and conditions would be perpetuated. The setting is composed of an unaltered natural landscape. Encounters with other people are infrequent, and there are no facilities present unless essential to protect resources or provide for visitor safety and well-being. There is no motorized access.

Visitor Experience. The primitive area provides abundant opportunities to experience the backcountry wilderness in solitude. It is reserved for hiking, fishing, nature observation, climbing, kayaking, and primitive camping. Off-site interpretation and education are stressed.

Generally visitors are isolated from human sights and sounds. Visitors can experience a feeling of closeness with nature and there is the opportunity to experience solitude, tranquillity, and quiet because encounters with others are few. A high degree of challenge, self-reliance, and risk is prevalent for visitors to this area, and knowledge and use of outdoor survival and wilderness skills are highly recommended.

Evidence of recreational use is generally not readily apparent except along trails, access routes, and backcountry campsites. Resource manipulation is kept to a minimum, but some resource management actions may be required to reduce the impacts of visitor use. A limited number of interpretive exhibits or signs may be needed to meet objectives of protecting the resource. Rules and regulations are explained to visitors before they enter the wilderness.

Management helps to ensure an experience in an untrammeled, primeval environment. Evidence of other visitors is also small, and there is a sense of being immersed in a natural landscape, without comforts and conveniences. Visitors commit to a high level of time and energy.

Access. Access is difficult. The area within designated wilderness is roadless, and visitors may travel cross country or on low-standard trails that provide connections over ridge lines, to the canyon rim and to the river. Discovery and adventure are the order of the day.

Public access is by foot, except for trails also designated for horseback use. Within the wilderness, aircraft use is only permitted for emergencies and necessary administrative functions. Aircraft and vehicle use within the primitive prescription area but outside of wilderness is limited to emergencies and administrative functions.

Natural Resource Management. The natural environment is preserved to the maximum extent possible while accommodating low-density backcountry use. Naturally occurring species are maintained or reestablished, and

populations of sensitive species are protected and augmented. The introduction of nonnative species is prevented to the extent possible, and attempts are made to eliminate introduced species before they became established. The NPS maintains close control over resource-damaging activities.

Monitoring is carried out regularly, and mitigating measures (revegetation, species augmentation, and reintroduction of extirpated species) is done as needed. Uses are controlled or dispersed if necessary to protect resources. A backcountry permit system is implemented if resources or solitude is threatened.

Cultural Resource Management. Cultural resources selected to illustrate interpretive themes and those listed on or eligible for listing on the National Register of Historic Places would receive stabilization. A cultural resource management plan would be prepared to guide management decisions and address the treatment of individual sites. Coordination and consultation with the State Historic Preservation Officer would be part of the process.

Facilities. No developments are allowed, and there are only minimum modifications to the natural environment. Rustic signs, cairns, and primitive trails may be present. No facilities are present in this zone. Additional facilities are provided only if they are essential to protect resources. Designated camping may be required in some areas to protect resources, but no developed campsites are allowed.

Maintenance. Maintenance activities serve to protect resources and restore areas disturbed by human activities. There is no recurring maintenance. Power tools are not allowed unless the superintendent determines that such tools are necessary to respond to a life- or resource-threatening emergency.

Semi-Primitive Nonmotorized

Management accommodates visitors wishing to experience each park's superlative natural and cultural resources by foot or horse. Inter-party and NPS contacts are less frequent than those in developed or rural motorized prescriptions and opportunities for solitude are less limited in this area than in others. Contacts are less frequent during midweek and off-season periods, when opportunities for solitude and seclusion would be greater.

The landscape setting appears predominantly natural, although evidence of facilities that blend with surroundings may be present. Encounters with other people are occasional and there is some evidence of human use. There is no motorized access.

Challenge ranges from low to high according to visitors' abilities. Moderate to extensive resource management activity is required to mitigate impacts associated with visitor use levels. Naturalness would be emphasized, but some human alterations and intrusions would be evident.

Visitor Experience. This area brings the visitor in direct contact with many of the park's natural and cultural resources. The natural character of the semi-primitive nonmotorized area is maintained while providing interpretation and trail and cross-country access for large numbers of visitors. This area

provides a sense of being immersed in a natural landscape and feels somewhat distant from most comforts and conveniences. The only facilities present are unpaved trails and rustic camping facilities.

A variety of on-site interpretive media is used to present the primary park themes and provide orientation and information. Interpretation and information are provided by rangers within Black Canyon. A permit system could be implemented for camping and use in both trailed and cross-country areas.

Curecanti Only. Hunting and trapping are allowed, but are regulated by state law and special NPS directives.

Access. Access ranges from easy to difficult. This area is roadless, although some dirt road remnants exist. Access is by low- to high-standard trails or no trails.

Public access is limited to foot traffic or horse. No bicycles or motorized vehicles are permitted. Aircraft use is allowed only in emergency situations. Horse use is confined to designated trails.

Black Canyon Only. Horse traffic is prohibited on the South Rim and allowed on designated trails on the North Rim.

Natural Resource Management. The natural environment along and away from the trail corridor is maintained to the extent possible with resource manipulation kept to a minimum. Emphasis is placed on minimizing human impacts on sensitive environments, habitats, and species. Unavoidable human impacts within Curecanti would be confined to resistant and less-sensitive environments, avoiding such areas as wetlands, riparian, and highly scenic areas where vistas and viewsheds could be impaired. Unavoidable human impacts within Black Canyon would be confined to resistant and less-sensitive environments, avoiding areas identified as highly scenic environments. Management would reduce or minimize the impacts of nonrecreational uses. Resources and uses would be carefully monitored, and if impairment occurred, mitigating actions such as temporary closures, revegetation, or restrictions on uses would be implemented as required.

Cultural Resource Management. Resources or sites that are designated as part of the Curecanti National Archeological District would be accessible to the extent that no degradation to sites occurred. Other resources or sites that are designated as outstanding cultural features might be restored. Sites could be stabilized or restored to protect the integrity of the resource. Other features designated as outstanding cultural features or listed or eligible for listing on the National Register of Historic Places could be stabilized or restored. To guide management decisions for resources in this area, a cultural resource management plan (CRMP) would be prepared to address treatment of individual sites. Coordination with appropriate NPS staff and the State Historic Preservation Officer would be part of the process.

Facilities. Only limited development is provided—major facilities would not be allowed. The primary development would be day use trail systems (low- to high- standard) leading to destination areas or points of special interest and rustic campgrounds. Campground

facilities could include fire grates, picnic tables, and vault toilets.

Maintenance. Activities include maintaining trails, campgrounds, and interpretive facilities, and resource protection. Hardening of sites could occur as well as the restoration of areas disturbed by human activity. Facilities to provide for the convenience of visitors and their safety would be maintained to lesser standards than those found in the developed area of the park.

Motorized Rural

Management provides for vehicle access along unpaved roads, which gives a sense of remoteness. Although the area is predominantly natural, sights and sounds of human activity are occasionally encountered. This prescription provides a vehicular alternative to the highly structured experiences in the developed area and the backcountry. It also provides access to water and boating experiences in the semi-primitive motorized flatwater, semi-primitive nonmotorized, flatwater, and free-flowing flatwater areas. The types of visitor activities to be accommodated include but are not limited to camping opportunities, wayside interpretive exhibits, interpretation along trails, and access to hiking trails. Opportunities for more solitude than experienced in the developed areas could be expected except on peak season weekends. Human interaction and contacts with NPS staff could be moderately frequent during these times and infrequent during the off season. Visitor challenge would be low due to the presence of roads and motorized vehicles. A moderate amount of resource manipulation would be required to mitigate impacts associated with moderate human use levels. Natural conditions would be maintained as much as possible, however, some human intervention and alteration would be evident along roads, at trailheads, and in camping areas. Support facilities such as picnic tables, fire grates, vault toilets, and contact stations may be provided.

Visitor Experience. There would be a sense of remoteness and seclusion, but not of isolation and seclusion from human activity. Visitors would be able to reach undeveloped areas of the park from unpaved roads and stay overnight in rustic campsites. For those who are unable to access more semi-primitive areas of the park, this area would provide an alternative and allow a rural experience without the degree of difficulty found in the semi-primitive areas.

A limited amount of interpretation and education is provided. It is designed to supplement the low-profile signs and interpretive exhibit panels placed in selected locations to provide information, offer limited interpretation of park themes, ensure protection of park resources, and provide for visitor safety.

Access. Access is moderately difficult. No paved roads would be provided and all access would be on gravel surfaced roads. Trails for hiking could originate from this area. Short interpretive trails could allow visitors to discover areas of special interest. Access for physically challenged visitors could be provided in selected areas to provide an opportunity for these visitors to experience representative park settings.

Natural Resource Management. The natural character of lands is preserved to

the extent possible while accommodating moderate visitor use levels. Any apparent effects of visitor use would be mitigated, and disturbed areas that caused significant visual impairment would be restored. The cumulative effects associated with unacceptable levels of visitor use at campsites or in other areas of visitor concentration could be mitigated or prevented by ensuring appropriate levels of visitor use.

Cultural Resource Management. Cultural resources identified to illustrate interpretive themes and those listed or eligible for listing on the National Register of Historic Places or nominated and placed within the Curecanti National Archeological District could receive moderate stabilization. To guide management decisions for resources, a separate cultural resource management plan (CRMP) would be prepared, which would address treatment of individual sites. Coordination and consultation with the State Historic Preservation Officer would be part of the process in developing the CRMP.

Facilities. Only limited development would be provided and few major structures or facilities would be present. Gravel roads, rustic campgrounds, interpretive panels and information signs, unpaved boat-launching facilities, and trailheads are examples of appropriate facilities for this prescription area.

Fire grates, picnic tables, vault toilets, and water could be provided, but no electricity or sewer connections would be available. Size restrictions could be placed on RVs and trailer-campers.

Maintenance. Activities could include maintaining roads and facilities (cleaning, painting, repair, pumpout, etc.), hardening sites, providing for visitor convenience and comfort, protecting resources, and restoring areas disturbed by human activity.

Developed

This management prescription includes all major park development required to serve visitors and meet the needs of management. It encompasses areas where park development and/or intensive use substantially alter the natural environment or the setting of historically significant resources. This is an area where major visitor facilities, including commercial service facilities, provide an experience that is facility dependent (e.g., campgrounds, visitor centers, marinas). The sights and sounds of boats, vehicles, and people predominate as does the experience that is tied to traffic along the major road corridors of the park.

This area would accommodate the highest levels of use in the park. Visitor activities would be fairly structured and directed and involve little challenge. Support services and facilities could be extensive. Visitor contacts and contacts with NPS and concession personnel could be frequent in this area, especially during peak visitor periods. Contacts could be less frequent during the off-peak season but might still be common compared with other management areas. There could be little or no opportunity for solitude. Relatively intensive resource management activity may be required to mitigate impacts associated with high levels of visitor use and development. Although natural processes would be perpetuated wherever possible, a high degree of perturbation and human

intrusion to the natural environment could continue to be evident.

Visitor Experience. This area provides for the primary experience of most visitors, introducing them to many of the park's significant resources and presenting the primary park interpretive themes. Exhibits, films and live presentations, and publications distributed at visitor centers and contact stations would be used to convey an understanding of each park and their natural and cultural resources. Interpretive trails and guided ranger tours would also be used in this area. Other orientation information would assist visitors in planning their stay in the park or region. Campgrounds would be managed under a paid permit system during the peak season.

Access. Access would be easy. This area could contain both surfaced and unsurfaced roads, and all roads could be accessed by two-wheel-drive vehicles. Pedestrian access along low- to high-standard trails could allow for visitor access to a variety of environments. Hardened trails could be provided in areas around visitor centers and in other areas of high use identified to give visitors an overview and better familiarity with park resources. Barrier-free design is provided in selected areas to permit visitors with physical impairments to experience representative park settings.

Natural Resource Management. The natural character of lands within this area is maintained to the greatest extent possible while accommodating high levels of use. Wherever possible and appropriate, previously disturbed areas would be used for new or expanded areas of development. New facilities would be designed and located to blend naturally with the environment and would use principles developed for sustainable resource design.

Vista site modifications may be used to improve views in this area. Visitors would be confined or directed to hardened sites, overlooks, boat ramps, and trails to confine and limit resource impacts. Significant soil and vegetation impacts occurring near high use sites could be mitigated through periodic closures, the use of natural materials to more clearly define use corridors, and increased enforcement techniques. Only native species would be used for revegetation. Landscaping with native species and natural materials, mowing (where appropriate), and selective removal and/or pruning of trees may also be done where appropriate or to enhance visitor safety.

Cultural Resource Management. Resources or sites designated as significant cultural features or nominated to the National Register of Historic Places or included in the Curecanti National Archeological District will be preserved or restored depending on the degree of importance to the visitor's understanding of the purpose of the park or settlement and use of the region. All archeological sites would be protected from degradation.

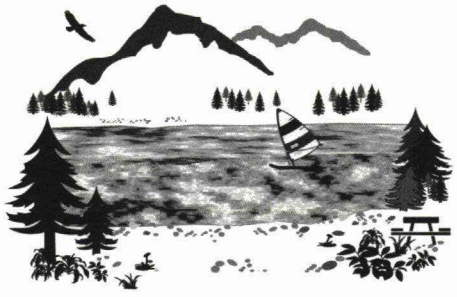
Facilities. Major developments are confined to this area. Existing and potential modifications might include visitor centers, surfaced parking lots, boat-launching facilities, transportation systems, limited service and campgrounds, maintenance facilities, administrative facilities, residential areas, water storage and sewage treatment

facilities as well as various other support facilities.

Maintenance. Maintenance activities could involve maintaining existing facilities (cleaning, painting, crack sealing, chip and sealing, striping, etc.), hardening sites, landscaping, providing for visitor convenience and comfort, protecting resources, irrigating, and restoring areas disturbed by human activities. Roads, buildings, signs, walks, interpretive displays, landscaping, and other facilities would be maintained on a regular basis. Power tools could be used for routine maintenance activities, and heavy equipment could be used for road and utility system repairs, development, and maintenance.

This concludes the section for land-based prescriptions. Table 2 summarizes water-based prescriptions based on setting, experience, and activities.

Table 2. Water-Based Prescriptions

	Setting	Experience	Activities
SEMI-PRIMITIVE FREE-FLOWING FLATWATER 	• Predominantly natural- appearing landscape • Occasional encounters with other watercraft • Evidence of unobtrusive shoreline support facilities for boating & camping • No service facilities • Shoreline may show some evidence of human occupation • No motorized access to the water from the shoreline	• Predominantly isolated from human sights & sounds • Opportunity to experience solitude, tranquility, & quiet • Interaction with nature predominates • Knowledge & use of outdoor recreation survival & wilderness skills • Occasional encounters with other humans or watercraft	• Semi-primitive camping • Small watercraft • Fishing • Nature observation • Hiking
SEMI-PRIMITIVE FLATWATER 	• Predominantly natural-appearing landscape with small-scale modifications • Shoreline service facilities for motorized boating • Frequent encounters with other watercraft • Evidence of human occupation on shoreline • Shoreline accessible by motorized land vehicles	• Limited opportunity to experience solitude, tranquility, & quiet • Knowledge & use of outdoor survival skills is not essential • Frequent encounters with other humans or watercraft	• Semi-primitive camping from boats & vehicles • Park tours • Fishing • Nature observation • Hiking • Watercraft • Sailing
FLATWATER 	• Predominantly modified landscape with facilities to provide for major visitor services in a substantially modified environment with a natural appearing backdrop • Constant encounters with other watercraft • Shoreline evidence of human occupation • Shoreline accessible by motorized land vehicles	• Sights & sounds of humans are dominant • Limited opportunity to experience solitude, tranquility, & quiet • No knowledge & use of outdoor survival & wilderness skills necessary • Near constant encounters with other humans & watercraft	• Designated camping • Park tours • Interpretive activities • Bus tours/ recreation vehicles • Swimming • Fishing • Watercraft • Sailing • Windsurfing • Waterskiing • Scuba diving

Water-Based Prescriptions

Specific guidance for each area is described using the following six categories: visitor experience, access, natural resource management, cultural resource management, facilities, and maintenance. These three prescriptions apply only to Curecanti NRA.

Semi-Primitive Free-Flowing Flatwater

Management accommodates visitors wishing to experience the park's recreational, natural, and cultural resources along the free-flowing portions of the Gunnison and Lake Fork of the Gunnison Rivers. Interparty and NPS contacts are less frequent than in developed, motorized rural, or flatwater areas of the park. The area is primarily natural, however, there is evidence of development and the sites and sounds of people. The types of visitor activities accommodated include motorized and nonmotorized boating and fishing from boat or wading. Visitor challenge would range from low to high depending on the season and area of use. During periods of peak runoff, the recreational challenge could be high for short periods. Natural conditions would be maintained as much as possible, but some human alterations could be visible from the water. Support facilities would be limited and would be focused on boat put-in or take-out points only.

Visitor Experience. There would be a sense of remoteness, but not of isolation and solitude from human activity. The area is day use only and the only facilities provided would be at put-in or take-out locations. Opportunities to view wildlife would be good, especially in those areas not adjacent to development.

Access. Access is easy. Places to launch and retrieve watercraft are not paved, but all are accessible to two-wheel-drive vehicles.

Natural Resource Management. The natural environment along the river corridors is maintained to the extent possible. Resource use would be carefully monitored and use could be temporarily zoned to avoid conflicts with endangered species. Water quality would be monitored to ensure no degradation occurs from recreational use.

Facilities. Development would be adjacent to the area and would be designed to facilitate access and minimize impacts to the resource.

Maintenance. Activities would be limited to maintaining or improving existing facilities and restoring areas adjacent to the area disturbed by human activities or facilities.

Semi-Primitive Flatwater

Management accommodates visitors wishing to experience the park's superlative recreational resources and natural and cultural resources by boat on the surfaces of Morrow Point and Crystal Reservoirs. Interparty and NPS contacts are less frequent than those experienced in developed or motorized rural areas, but more frequent than in semi-primitive nonmotorized areas. Opportunities for solitude are less limited than in developed or motorized rural areas of the park and are enhanced during mid-week or off-season periods when reservoir access is still possible. Challenges range from low to moderate depending on visitors' abilities. Naturalness of the environment would be emphasized,

however, human alterations would be evident.

Visitor Experience. This area brings visitors into direct contact with many of the parks superlative recreational resources and natural and cultural resources. The natural character of semi-primitive motorized flatwater areas is maintained while providing for interpretation and trail access for large numbers of visitors.

The area provides a sense of being immersed in a natural landscape, and feels somewhat distant from most comforts and conveniences. To experience this area, visitors must commit to spending some time and physical exertion. The only facilities present are unpaved trails and boat docks.

A variety of on-site interpretive media could be used, including boat tours to present the primary park themes. A permit system could be implemented to maintain the semi-primitive character of the area and size restrictions on both watercraft and motors could be implemented to reduce impacts to visitors and resources. Special regulations pertaining to fishing could be developed and implemented in cooperation with the Colorado Division of Wildlife (CDOW) in order to protect fisheries.

Access. Access ranges from easy to difficult. The area is entirely roadless, with access by trail.

Public access is limited to foot traffic and motorized and nonmotorized watercraft. No bicycles or vehicles are permitted. Aircraft could be used in emergency situations.

Natural Resource Management. The natural environment along trail corridors is maintained to the extent possible, minimizing human impacts on sensitive environments, habitats, and species. Water quality in this area would be regularly monitored to ensure that no degradation or impairment occurs that could affect species management or resources within or outside the park. Management would minimize the impacts of nonrecreational resources. Resources and uses would be carefully monitored and if impairment was detected, mitigating actions such as closure or restricted use in certain areas would be implemented as required.

Facilities. Only limited development is provided. Boat docks and vault toilets could be provided. Trail systems ranging from low- to high-standard would be provided that lead to destination or launching points.

Maintenance. Activities include maintaining trails, boat docks, and interpretive facilities, providing for visitor comfort, protecting resources, and restoring areas disturbed by human activity. This could be accomplished through the use of a variety of motorized and nonmotorized equipment.

Flatwater

This management prescription includes the surface area of Blue Mesa Reservoir. It encompasses an area of the park where intensive use precludes (for the most part) the visitor from experiencing the sights and sounds of the natural environment without intrusion. The sights and sounds of boats, vehicles, and other people predominate, and the experience includes

activities tied to boating on Blue Mesa Reservoir.

This area would accommodate the highest levels of use and visitor density in the park. Visitor activities are centered around flatwater recreation, with fishing being the primary focus of use. Contacts with other parties, NPS, and CDOW staff would be frequent, especially during the peak summer season. There would be little or no opportunity for solitude. Relatively intensive aquatic resource management might be required to mitigate impacts associated with high levels of visitor use and development. Although natural processes would be perpetuated, major alterations and human intrusions would continue to be evident.

Visitor Experience. This area provides the primary experience for the majority of park visitors. Flatwater activities include fishing, sailing, waterskiing, sailboarding, and sight-seeing in the summer—ice fishing, ice skating, and snowmobiling in the winter. There is limited opportunity for remoteness or seclusion, however, lake arms during certain periods would provide for fewer contacts with other groups. Rustic boat-in campsites, accessible only from Blue Mesa, provide the visitor with a more remote/rustic camping experience than campsites accessible by vehicle. For those unable to access the semi-primitive flatwater areas, this alternative provides a similar experience without the degree of difficulty.

Visitor contacts by park rangers and interpreters are designed to provide safety information and information on park resources as well as ensure compliance with regulations. Safety plans for water and winter activities are developed.

Access. Access would be easy. Access would be by surfaced and unsurfaced roads accessible to two-wheel-drive vehicles. Off-road vehicle use below high waterline could be permitted in areas designated by the superintendent.

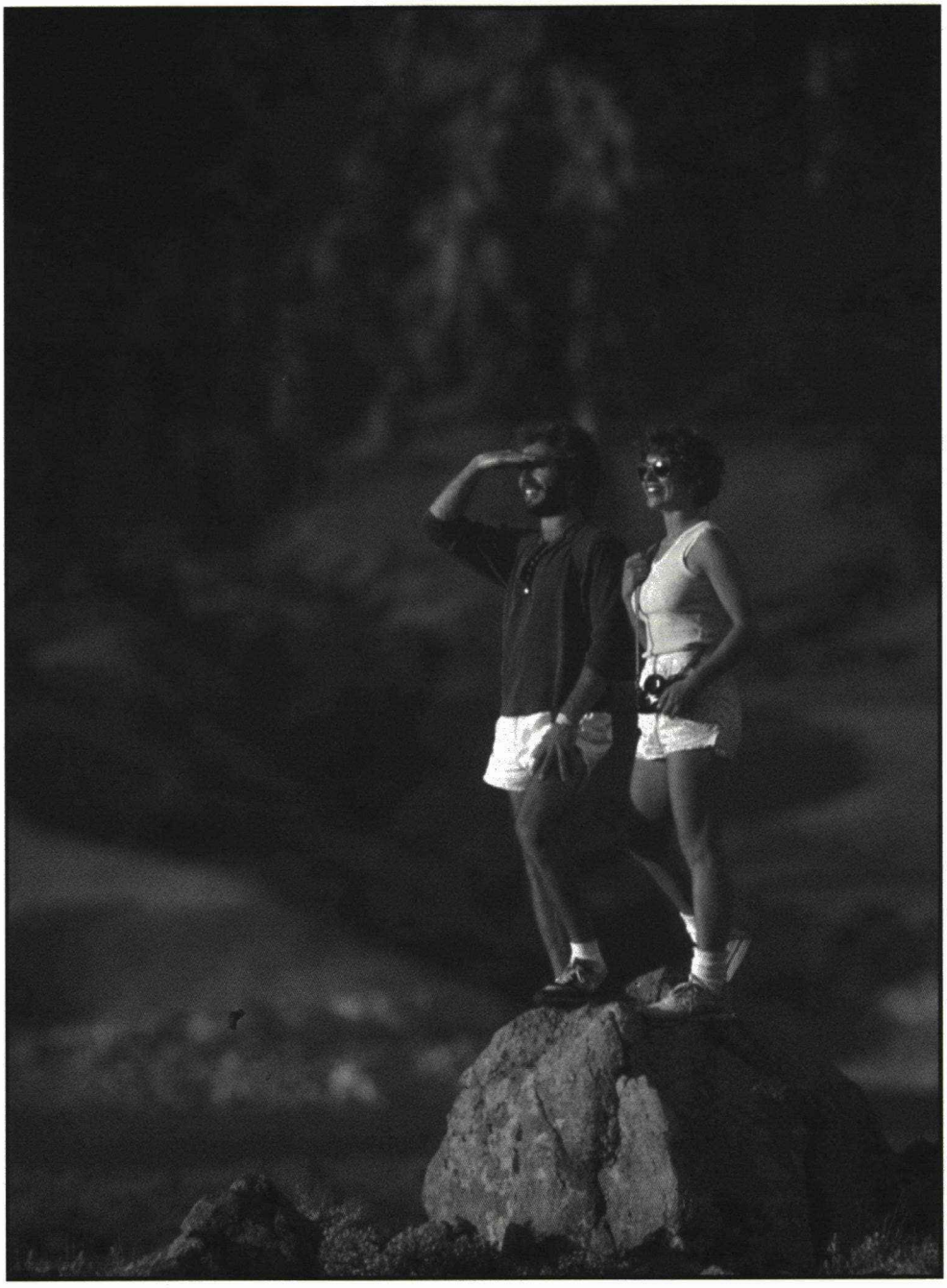
Natural Resource Management. Water quality and quantity would be monitored, and mitigating actions would be taken to prevent the degradation of water quality and/or the aquatic resources. Level of recreational use would be monitored and could be restricted if needed to sustain resource values and systems. Fishery resources would be monitored frequently to determine the health of the resource and its relationship to the overall productivity of the reservoir.

The park would work with the Gunnison County Planning Commission and developers to ensure that development adjacent to the reservoir was sensitive to park resources and did not impact or impair resources on park land. To the extent possible, the park would try and ensure that vista and viewshed impacts were minimized.

Facilities. Developments in this area could include boat docks and floating marinas, breakwaters, and fuel storage facilities.

Maintenance. Maintenance activities would involve maintaining existing facilities and could include the construction of new facilities similar to those described above to accommodate visitor use, administrative use, or to minimize or mitigate resource damage.

This concludes the section for water-based prescriptions. Table 3 summarizes special prescriptions based on setting, experience, and activities.



Special Prescriptions

Protected Resource Areas

This management area could include resources that are recognized as fragile or ecologically or geologically significant, especially for sensitive or endangered wildlife or plant species, paleontological resources, and cultural resources. Strict protection measures would be employed to ensure protection and perpetuation of these resources. Human intrusions would be minimized or not allowed. Visitor experiences, access, natural and cultural resource management, development, and maintenance would be controlled or carried out specifically to ensure the protection of these resources.

Scenic Easement Lands

This management area is composed of the private lands within the monument boundary. The lands are located on the North Rim within the scenic backdrop for the canyon. The property remains in private ownership but the government has purchased a conservation scenic easement to protect the view and natural resources found on these properties. Restrictions imposed on the lands include a list of conditions prohibiting certain uses of the property. These include no subdivision or development of the land, no placement of trailers or mobile homes on the property, no hunting, no pesticide use, no mining, quarrying, or sand and gravel removal, no dumping of trash, and no vegetation clearing that exceeds a one-half acre area. Permitted activities include livestock grazing and maintenance of livestock facilities. Public use of these lands is at the owners' discretion. Management of these lands is primarily to protect the scenic qualities they possess.

Visitor Experience. The scenic quality of these lands enhances the visitor experience and adds to the wild quality of the canyon. Use of the lands by visitors is limited since they remain in private ownership.

Access. The private landowners have access to their property via primitive, unsurfaced roads. Public access to the area is limited and in most cases is not allowed.

Natural Resource Management. The natural environment and the views it provides are maintained to the extent possible within the guidelines of the scenic easement provisions. Noncompatible uses of the land are not permitted under these provisions. Resources and uses would be carefully monitored, and if damage did occur, mitigating actions allowed under the terms of the scenic easement restrictions would be carried out in cooperation with the landowner.

Cultural Resource Management. The Service will work with the owners of the property to preserve and protect any resources or sites designated as outstanding cultural features, consistent with the landowners' desires.

Facilities and Maintenance. Only limited development, and maintenance of development, is allowed under the terms of the scenic easement provisions—major structures and facilities are prohibited. The type of development allowed is related to management of livestock and their use of the area, such as fences, small stock ponds, and primitive access roads. Existing facilities can be maintained but this maintenance must be directed at preserving the existing character of the facility.

Table 3. Special Prescriptions

	Setting	Experience	Activities
PROTECTED RESOURCE 	• Management is geared to protect recognized fragile significant park resources • Visitor experiences, access, natural and cultural resource management, development, and maintenance would be controlled or carried out to ensure protection of resources.	• May be limited by regulation, restrictions, or closure	• Limited to those activities that will not impact resources being protected
SCENIC EASEMENT 	• Setting is managed to be complementary to park objectives for a natural appearance	• Natural-appearing backdrop • No public access or use	• No public activities • Grazing as permitted under legal contract requirements

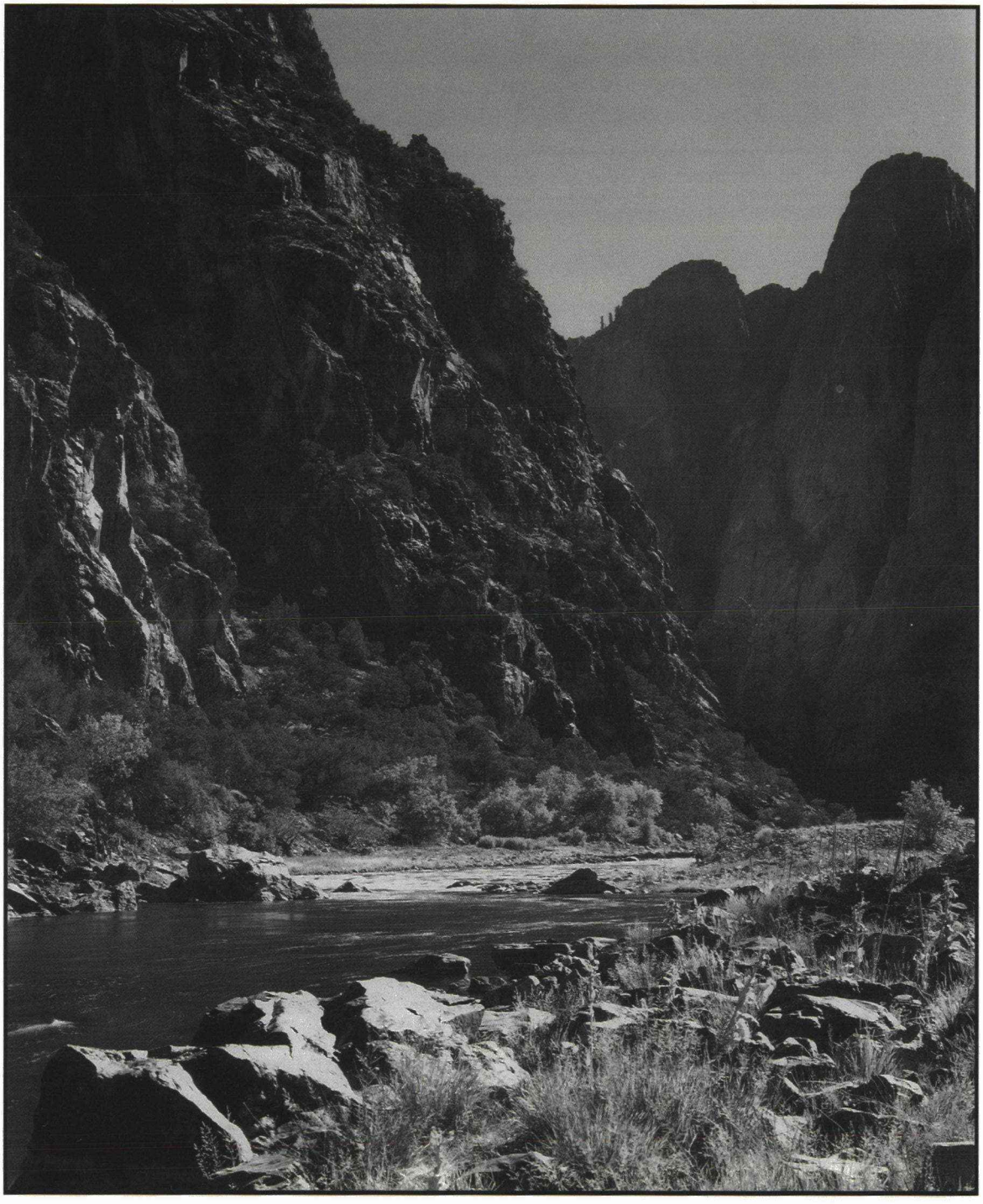
INTRODUCTION

This document represents a new general management plan for Black Canyon of the Gunnison National Monument and Curecanti National Recreation Area. Management prescriptions noted on the next few pages describe the strategy for managing blocks of land within each park. Prescriptions are based largely on resource values.

The plan does not preclude development options and partnerships outside park boundaries as long as these proposals are supportive and consistent with each park's chosen management direction. Alternative sites within the park boundaries for visitor contact, maintenance, and administration would be evaluated when proposals are presented. Partnerships with other agencies and local entities would be explored to minimize cost, impacts on resources, and provide consolidated services to the public.

Legislative Proposals

Legislation has been introduced several times over past years, in both the House and Senate, to designate Black Canyon as a National Park, provide enabling legislation for Curecanti National Recreation Area, and heighten protection of the Gunnison Gorge. The management assessment and planning processes that were used in the development of this plan allow sufficient flexibility for expanded interagency involvement in the event legislation is enacted.



Below Warner Point, Black Canyon of the Gunnison National Monument
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Black Canyon of the Gunnison National Monument

The plan emphasizes a variety of human experiences in a rugged canyon environment. It provides developed areas on the South Rim and less-developed areas on the North Rim. Contemplation of one of nature's foremost scenic wonders is provided for on both rims by encouraging most visitors to experience the depth of the canyon from the rims. A variety of other educational and recreational experiences are provided to protect and enhance the wilderness values of the monument.

The plan emphasizes viewing the canyon from the cliff top ROA to give visitors a variety of viewing opportunities for experiencing the canyon in a range of social settings.

Visitors to the South Rim find this area more developed and visited than the North Rim. Ample staff will be available to assist visitors in learning about Black Canyon resources. Visitors to the North Rim find this area less developed and visited. Some staff could be encountered to answer questions about monument resources, but for the most part encounters with park staff is minimal.

Any new public facilities support both recreational viewing and educational activities in Black Canyon's outdoor classroom.

Mutually beneficial partnerships may be encouraged with both educational institutions and the private sector to provide for visitor services and protect park resources. The proposal is consistent with state/area/local plans and programs.

Land Use and Management

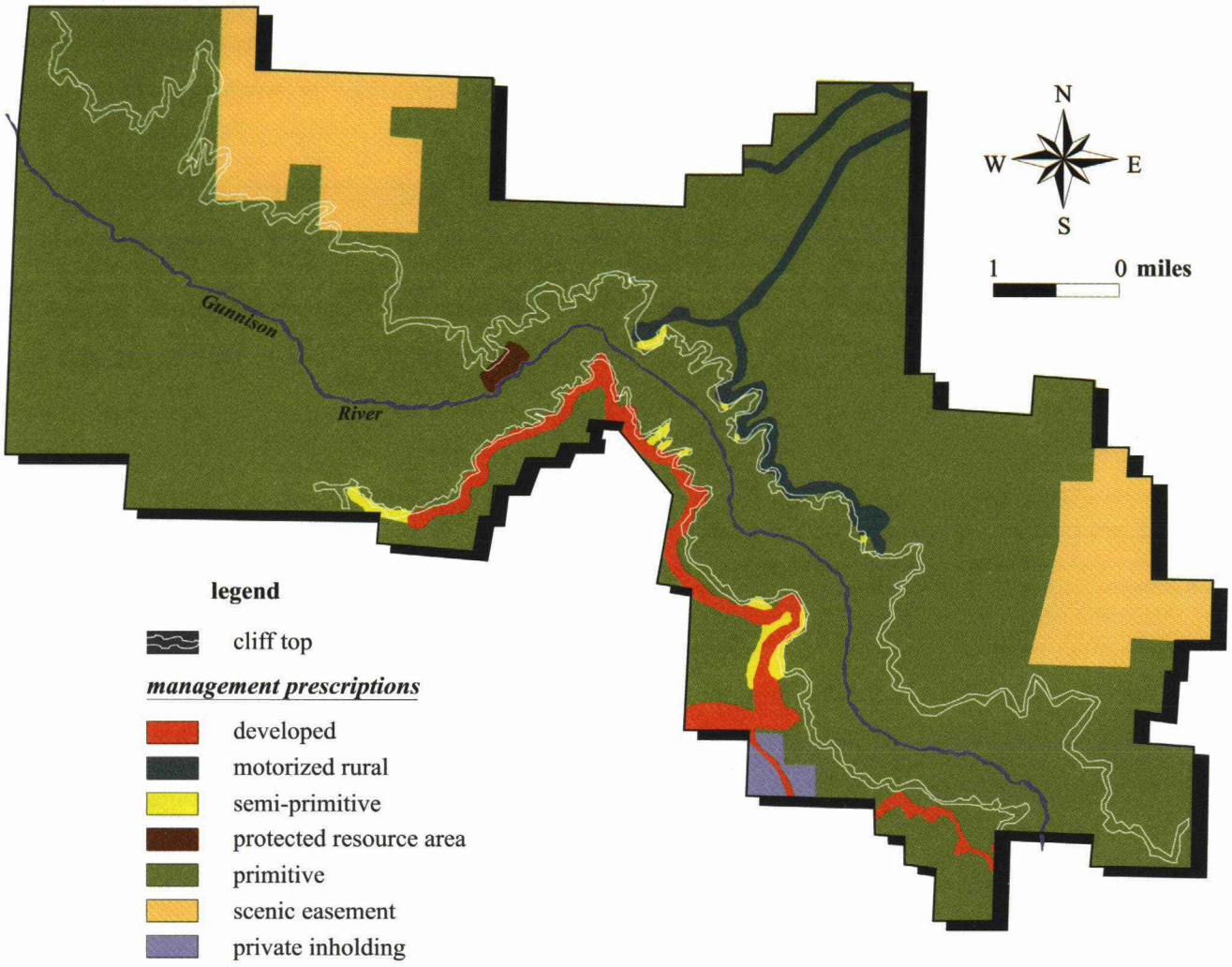
Maintenance of scenic values on surrounding lands is an important ingredient in providing visitors with a feeling of awe as they first view the canyon's depths. The sense of openness created by surrounding lands forms the setting and the basis for the scenic ambiance of the park. Today, that sense of openness continues to enhance visitor enjoyment of the monument's resources.

The North Rim will remain relatively undeveloped and substantially unchanged in the future except for minor improvement in existing facilities. Management of this area will emphasize a variety of backcountry wilderness experiences and encounters with monument resources.

On the South Rim, facilities for viewing the canyon from above will be maintained and improved. A new or upgraded visitor center will provide better visitor orientation of the monument. Partnerships may be sought to provide visitor services and protect monument resources.

In the canyon, use will be monitored to ensure the protection of the wilderness resource. The types of visitor use will be limited to those necessary to maintain the wilderness character.

In the East Portal area, a common architectural theme will be developed to improve and unify the visual appearance of facilities, including roads and signage. This will be coordinated between the monument, Curecanti National Recreation Area, and the Bureau of Reclamation.



- The plan emphasizes a variety of human experiences in a rugged canyon environment. It will provide developed areas on the South Rim and less- developed areas on the North Rim.

- A variety of other educational and recreational experiences will be provided to protect and enhance the wilderness values of the monument.

- The plan emphasizes viewing the canyon from the cliff top resource opportunity area to give visitors a variety of viewing opportunities and enable them to experience the canyon in a range of social settings.

- The South Rim will be more developed and visited than the North Rim. Sufficient staff should be available to assist visitors in learning about the Black Canyon resources.

- Any new public facilities will support both recreational viewing and educational activities in Black Canyon's outdoor classroom.

The Black Canyon Plan

The Canyon Depths

Black Canyon of the Gunnison National Monument

United States Department of the Interior • National Park Service

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Management prescriptions are as follows:

- About 621 acres (3.0%) - Developed MP**
- About 417 acres (2.0%) - Motorized Rural MP
- About 122 acres (0.6%) - Semi-Primitive MP
- About 17,292 acres* (83.3%) - Primitive MP
- About 50 acres (0.2%) - Protected Resource MP
- About 2,144 acres (10.3%) - Scenic Easement MP
- About 120 acres (0.6%) - Private Inholding

*11,180 acres in the park are in wilderness.

** this would provide for expansion of the developed area along roads and additional developed sites on the South Rim.

The plan retains the existing rugged appearance of both the North and South Rims. Long term, however, additional facilities could be placed on the South Rim to support visitor services.

Scenic values inside and adjacent to the monument will continue to be cooperatively evaluated with the Delta and Montrose Planning Commissions and the Bureau of Land Management. Management will encourage local agencies to ensure that any development surrounding the monument be done in a sensitive manner, so that it does not detract from the monument's scenic values.

The NPS may enter into cooperative agreements with counties and other land management agencies to coordinate planning activities related to land uses which might impact park values. Elements to be considered include viewsheds, wildlife and associated habitat, water quality and riparian habitat, aquatic resources, exotic plant species, sediment transport, natural quiet, and night sky.

The plan may broaden partnership strategies to rely on an advisory group of public participants and land management agencies to work cooperatively in developing short- and long-term plans for addressing regional recreation use and resource protection. The possible formation of a friends group may also be explored.

Information exchanges with local organizations—West Elk Scenic Loop Byway, Uncompahgre Conservation Education Alliance, trail committees, Montrose and Delta Visitor Center and Convention Bureaus, et al.—will continue.

Resource Management

A resource management plan (RMP) addressing both cultural and natural resource management was completed in February 1993. The GMP affirms issues addressed by the RMP and introduces some additional strategies. Information on programs addressing resource management issues can be found in the RMP.

Natural Resources. The following are additional strategies that will be employed to address specific objectives set for the park.

- The park would continue to work to meet state and local compliance requirements for clean air as funding permitted. The park would pursue a coordinated program for Class I air monitoring with appropriate federal agencies and the State of Colorado.
- A partial inventory of paleontological resources has been obtained. Inventorying would be completed in partnership with educational institutions as funding permitted.

- A program that encourages continued research to provide a better understanding of the geologic evolution of the Black Canyon would continue.
- A program to control noxious weeds through the least environmentally harmful method would continue.
- A program to identify habitat fragmentation and mitigate its effects would be developed cooperatively with educational institutions and land management agencies.
- A cooperative program with the State of Colorado and the U.S. Fish and Wildlife Service to maintain the trout fishery and delist appropriate native Colorado fish species would continue.
- Cooperative efforts with the Bureau of Reclamation and the State of Colorado to establish a protected flow of the Gunnison River through the monument would continue. Efforts with the USGS and the NBS to establish water quality monitoring would be expanded to include educational institutions.
- A database would be developed to track water related data used to guide management decisions.

Cultural Resources. The following are additional strategies that will be employed to address specific objectives set for the park.

- Cultural resource management would emphasize stabilization and preservation.
- Cultural resource management could also include archeological research and study.
- A new interpretive program would be developed (see Visitor Use and Interpretation).

Visitor Use and Interpretation

A new interpretive program will be developed to communicate the history and prehistory of the monument through a partnership with educational institutions and private groups who could help with research efforts. Interpretive themes will be expanded to preserve significant sites and tell the story of water development in western Colorado.

Possible Facility and Development Changes

Facilities will be improved to meet high-quality standards and reflect a common architectural theme as funding permitted.

The existing visitor center and concession facilities are inadequate. The visitor center does not meet high quality standards. Exhibits are out of date. Space is insufficient for present visitation and it fails to meet a common architectural theme.

The concession building has no foundation and no electrical service. It is inadequate in size for the number of visitors it serves.

The following are some of the possible facility changes.

- new or improved visitor center
- additions to existing parking areas
- components of the old NPS complex near Kneeling Camel would be evaluated for rehabilitation or removal; a group camp could also be established in the same location
- architectural theme enhancements
- new trails
- rehabilitation of North Rim campground
- evaluate concession facility for improvements or relocation
- North Rim housing could be modified or expanded to meet employee needs

Costs for the above improvements will be estimated at the time of project design.

Park Operations and Costs

Ranger operations will be increased to provide additional protection while

serving public use. Additional services and patrols will take place on the South Rim and in the wilderness/backcountry. Staff will receive additional training to respond proactively to emergency situations.

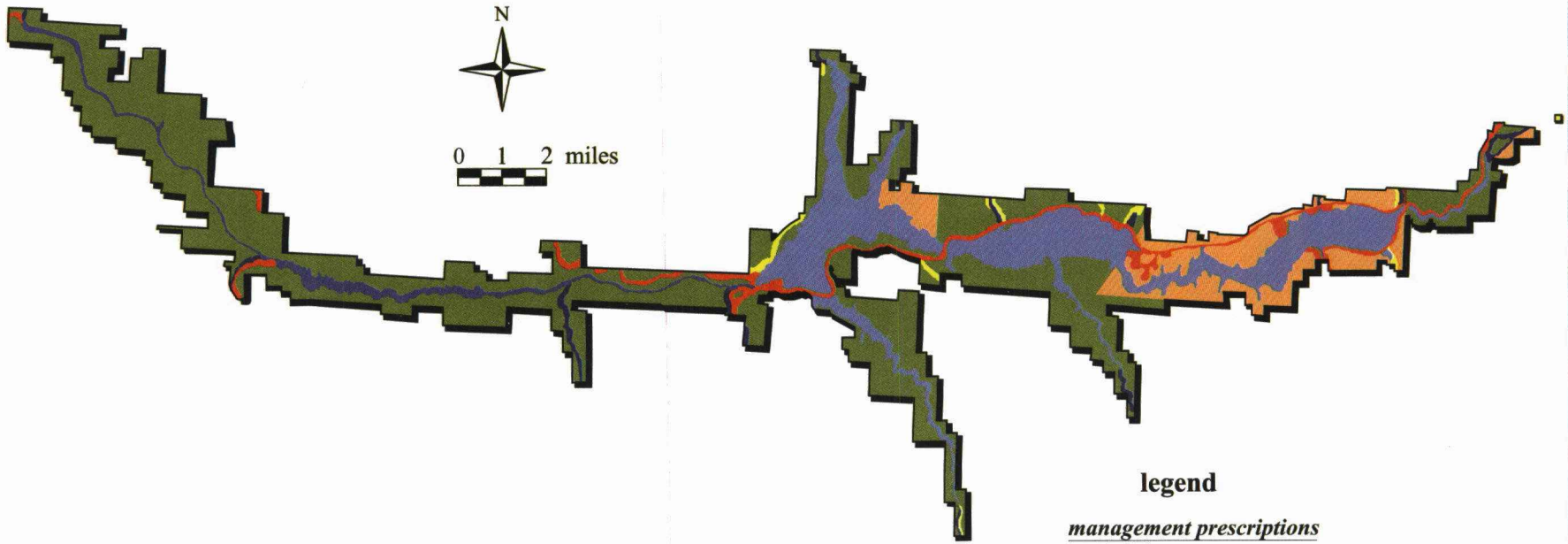
In addition, some increases in park operations will be required to meet the needs created by the emphasis on moderately increasing facilities for viewing the canyon and increased opportunities for education. The greatest needs will occur in the operational areas of facility management (additional facilities to be constructed and maintained) and interpretation and visitor protection (in order to serve an anticipated moderate increase in visitation). Some increases in resource management are anticipated for evaluation of project proposals and potential impacts on natural and cultural resources and to monitor impacts of increased usage.

The estimated range of additional to meet these needs are 1.0 to 1.5 for each of the four programs, or a total of 4 to 6 FTEs. The associated range of additional cost is $120,000 to $200,000. Additional costs that could be incurred from potential development would range between .6 and 4.4 million dollars, depending on partnering opportunities.

Future Plans and Studies

Planning needs will be continually identified on an annual basis. Increased priority will be given to the following plans.

- a visitor experience and resource protection plan, including noise management
- a wildland fire management plan
- a long-range interpretive plan
- a commercial services plan - the plan would establish the necessary and appropriate commercial visitor services to support park operations.
- a wilderness management plan
- an emergency operations plan
- a trail and backcountry management plan
- a river management plan
- a climbing management plan
- A viewshed analysis of sensitive areas around the national monument would be completed to identify areas that are necessary in protecting the semi-primitive character of the park. This analysis would identify those portions of adjacent private lands that could impact the park if development occurred. Cooperative management through scenic easements and agreements with adjoining agencies, such as BLM, would be used to facilitate protection. Acquisition of conservation easements through land trusts or other vehicles may also be appropriate.



legend

management prescriptions

- developed
- motorized rural
- flatwater
- semi-primitive flatwater
- semi-primitive free-flowing flatwater
- semi-primitive
- protected resource area

- The plan emphasizes the significance of both natural and cultural resource experiences for visitors of the recreation area.

- Appropriately developed areas support a range of diverse recreation opportunities, both cultural and natural. These areas integrate visitors into the story of the West by interpreting various advancements contributing to the region's development.

- Use of the Blue Mesa Reservoir emphasizes boating recreation in a more rural environment. The land area surrounding the reservoir within the recreation area may have some additional shoreline development. The lake arms will remain natural and undeveloped. Maintenance and protection projects will continue.

- Use of Morrow Point and Crystal Reservoirs will remain mostly unchanged. The land area surrounding the reservoirs will remain relatively undeveloped. Maintenance and protection projects will continue.

The Curecanti Plan

Providing Natural and Cultural Experiences

Curecanti National Recreation Area

United States Department of the Interior
National Park Service

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Curecanti National Recreation Area

The plan emphasizes both natural and cultural resource experiences for visitors. On the natural resource side, it's experiencing the clear water and sweeping vistas, abundant wildlife in a harsh, arid environment, balanced by ribbon-like riparian life zones that brought generations of people to the area. On the cultural resource side, it's experiencing the same environment that challenged early explorers, settlers, and engineers of the region.

Appropriately developed areas will support a range of diverse recreation opportunities, both cultural and natural. These areas will integrate visitors into the story of the West through the various advancements that contributed to settlement and development.

Land Use and Management

For Blue Mesa, the use of the reservoir will emphasize boating recreation in a rural environment. The land area surrounding the reservoir within the park may have some additional shoreline development. The lake arms will remain natural and undeveloped. Ongoing maintenance and protection projects will continue.

Riverway is the only isolated parcel in the recreation area and close to the city of Gunnison. The area is used primarily for fishing, picnicking, and as a takeout for boaters. It is primarily used by city residents and may be better managed by the city as a park.

A cooperative agreement with federal and state agencies (with input from other public interests) is being developed on establishing and maintaining the appropriate reservoir levels on Blue Mesa Reservoir, in conjunction with establishing desired flow levels for Black Canyon of the Gunnison National Monument.

For Morrow Point and Crystal Reservoirs, use of the reservoirs will remain mostly unchanged. The land area surrounding the reservoir will remain relatively undeveloped and unchanged except for ongoing maintenance and protection projects.

The plan provides for a moderate increase in facilities that support high-quality recreational experiences and activities. Some facilities may be redesigned or added. The plan sets a management tone that emphasizes that diversity of water-based recreational experiences with appropriate levels of development. The total park area is 41,971.04 acres. Management prescriptions are as follows.

- About 2,281 acres (5%)-Developed MP
- About 414 acres (1%) - Motorized Rural MP
- About 9,770 acres (23%) - Flatwater MP
- About 1,100 acres (2.6%) - Semi-Primitive Flatwater MP
- About 514 acres (1%) - Semi-Primitive Free-Flowing Flatwater
- About 23,899 acres (57%) - Semi-Primitive Nonmotorized MP
- About 3,993 acres (10%) - Protected Resource

Where development takes place around the park, the NPS cooperates with agencies to see that development is sensitive to the environment. Viewsheds are maintained in and around the park in

a natural and generally undeveloped condition.

The NPS may enter into cooperative agreements with counties and other land management agencies to coordinate planning activities related to land uses which might impact park values. Elements to be considered include viewsheds, wildlife and associated habitat, water quality and riparian habitat, aquatic resources, exotic plant species, sediment transport, natural quiet, and night sky.

The developed management prescription is restricted to the existing highway right-of-way along Highways 50 and 149 within the boundary of the Curecanti Archeological District.

Resource Management

A resource management plan (RMP) addressing both cultural and natural resource management was completed in February 1995. The GMP affirms issues addressed by the RMP and continues current management. Information on programs addressing resource management issues are discussed in the RMP.

Natural Resources. The following are additional strategies that will be employed to address specific objectives set for the park.

- The new resource management plan sets priorities for resource programs at the park.
- Habitat fragmentation from new developments in bighorn sheep and other large ungulate habitat needs to be identified and mitigated; prevention strategies would be developed with other land management agencies

Cultural Resources. There will be additional programs to expand interpretation of cultural resources.

Visitor Use and Interpretation

Educational programming is provided year-round for visitors and outreach audiences.

Possible Facility and Development Changes

Facilities will be improved to meet high-quality standards and reflect a common architectural theme as funding permitted. The following are some of the possible facility changes.

For the Riparian Riverine Area:

- A multipurpose (bike/hike) path from the east boundary along Highway 50 to Elk Creek and Highway 149 to the boundary south of Iola on the way to Lake City could be constructed.
- Riverway may be transferred to the City of Gunnison.
- Increased formal trail access to the river could be constructed in the Neversink/Coopers Ranch area.
- A formal day use area—toilets, picnic tables, and parking—could be developed in the South Beaver Creek area.

For the Gunnison River Canyon:

- The pull off at Wilson's Landing may be hardened and delineated for day use operations.
- Selected turnouts may be hardened throughout the canyon.
- A boat takeout site might be identified and improvements provided to facilitate egress of rafts, canoes, and kayaks.

For Blue Mesa:

- At Elk Creek, an appropriately designed and located sewage treatment facility may replace the current lagoons.

- A day use area (for picnicking and other activities) may be constructed at the Old Highway 50 area.
- At the Bay of Chickens, a day use area may be constructed and landscaped, providing for picnicking and other recreational activities as appropriate. Adequate parking may also be provided.
- A new launch ramp area has been tentatively identified at Old Stevens. A carrying capacity study must be completed before a determination could be made on the appropriateness of another launch facility.
- At Pine Creek, the access road may be paved to the BOR gate above Blue Mesa dam.
- A new marina could be identified after the completion of a commercial services plan and carrying capacity study for the reservoir.

For the Inner Canyon:

- At the East Portal, the NPS may modify or replace its existing facilities so that they conform to a common architectural theme. This includes water and sewage system replacement.
- There will be no changes at Gateway or on Crystal Reservoir.

For the Canyon Rim:

- At Cimarron, the existing metal buildings may be replaced to conform to the area's architectural theme.

Costs for the above improvements would be estimated at the time of project design.

Park Operations and Costs

Some increases in park operations will be required to meet the needs created by the emphasis on moderately increasing facilities and opportunities for quality water-based recreation. The greatest needs will occur in the operational areas of facility management (additional facilities to be constructed and maintained) and interpretation and visitor protection (in order to serve an anticipated moderate increase in visitation). Some increases in resource management are anticipated for evaluation of project proposals and potential impacts on natural and cultural resources and to monitor impacts of increased usage.

The estimated range of additional FTEs to meet these needs are 1.0 to 1.5 for each of the four programs, or a total of 4 to 6 FTEs. The associated range of additional cost is $120,000 to $200,000. Additional costs that could be incurred from potential development would range between 1.1 and 3.3 million dollars, depending on partnering opportunities.

Future Plans and Studies

Planning needs are continually identified on an annual basis. Increased priority are given to the following plans.

- Prescribed fire management plan would be completed. This plan would be used to establish the appropriate fire management policy.
- A prairie dog plan would be updated to guide management actions.
- A visitor experience and resource protection plan would be developed for the park. The plan would establish development and design capacities for a range of potential resource experience opportunity areas. It would also establish the physical capacity for each reservoir based upon the desired future visitor experience. The first part of the study would determine carrying capacity of Blue Mesa, quality of experience to be provided, and need for future launching and/or other facilities as use increases beyond current capacity.
- A long-range management plan for the preservation and interpretation of the narrow gauge railroad and artifacts at Cimarron need to be completed.
- A commercial services plan would be completed for the park. The plan would

- establish the necessary and appropriate commercial visitor services to support park operations.
- All studies and inventories identified in the RMP need to be completed.
- A viewshed analysis of sensitive areas around the recreation area would be completed to identify areas that are necessary in protecting the semi-primitive character of the park. This analysis would identify those portions of adjacent private lands that could impact the park if inappropriate development occurred. Cooperative management through scenic easements and agreements with adjoining agencies, such as BLM or USFS, would be used to facilitate protection. Acquisition of conservation easements through land trusts or other vehicles may also be appropriate.

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