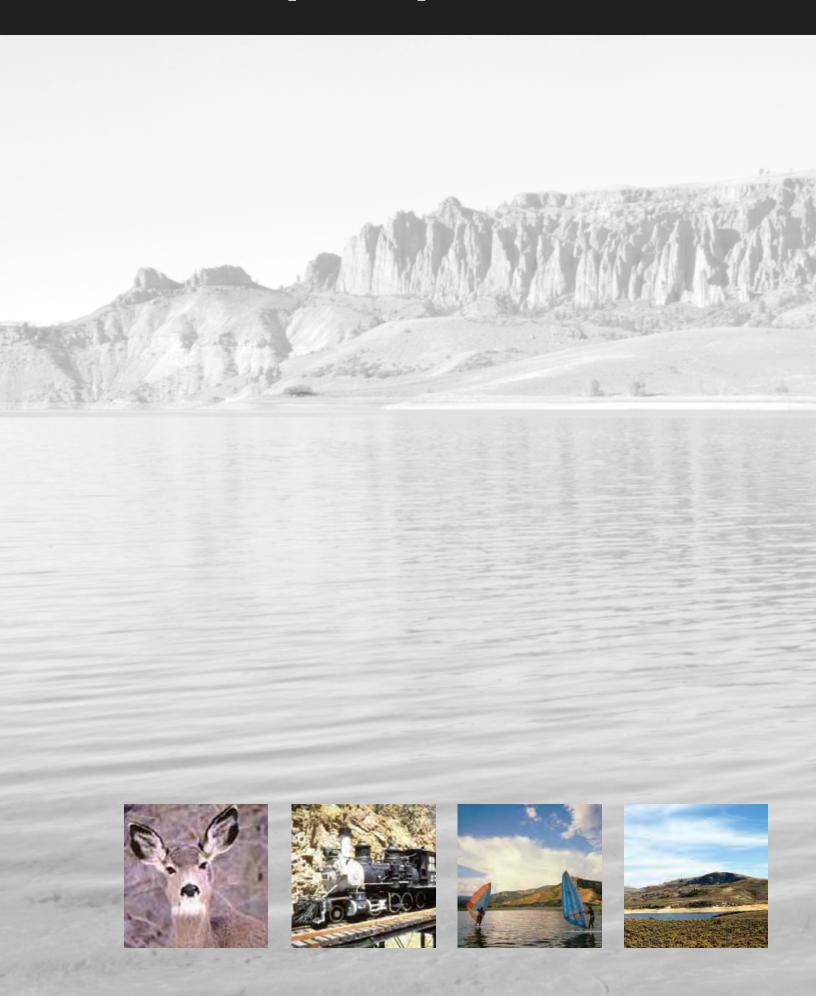
Chapter 1: Purpose of and Need for Action



PURPOSE OF AND NEED FOR ACTION

Introduction, and Brief Description of Curecanti National Recreation Area

The area administered as Curecanti National Recreation Area (NRA) is located in Gunnison and Montrose Counties in southwestern Colorado along the Gunnison River, as shown on the Regional Overview map. It is approximately 40 miles long from east to west, and is comprised of 41,790 acres of federal lands and waters. The NRA provides recreational opportunities in a spectacular geological setting, amidst a variety of natural, cultural, and scenic resources.

Today, primary visitor access to the NRA is via US Highway 50, which transects the NRA in a general east-west orientation. The nearest major towns are Gunnison, located on US 50 about five miles east of the NRA; and Montrose, west of the NRA, located on US 50 about twenty miles from the Cimarron visitor center. The NRA can also be accessed via Colorado State Highway 92, which enters from the northwest and continues along the northern edge of the NRA, until it terminates at US 50 near Blue Mesa Dam; and via Colorado State Highway 149, which enters from the southeast, ending at US 50, on the east side of Blue Mesa Reservoir. These roads are shown on all fold-out maps.

In addition to the three major highways entering the NRA, there is a network of Bureau of Reclamation (Reclamation), National Park Service (NPS), Bureau of Land Management (BLM), US Forest Service (USFS), and county roads within and/or surrounding the NRA, most of which are open to public use. This highway and road system serves regional and local traffic. In addition, utility access roads exist for the primary purpose of serving Western Area Power Administration's (Western) system of electric transmission lines. Also, some access to private property occurs on private roads and drives

that preexisted the NRA (i.e., grandfathered use), or that have since been permitted by the administering federal agency.

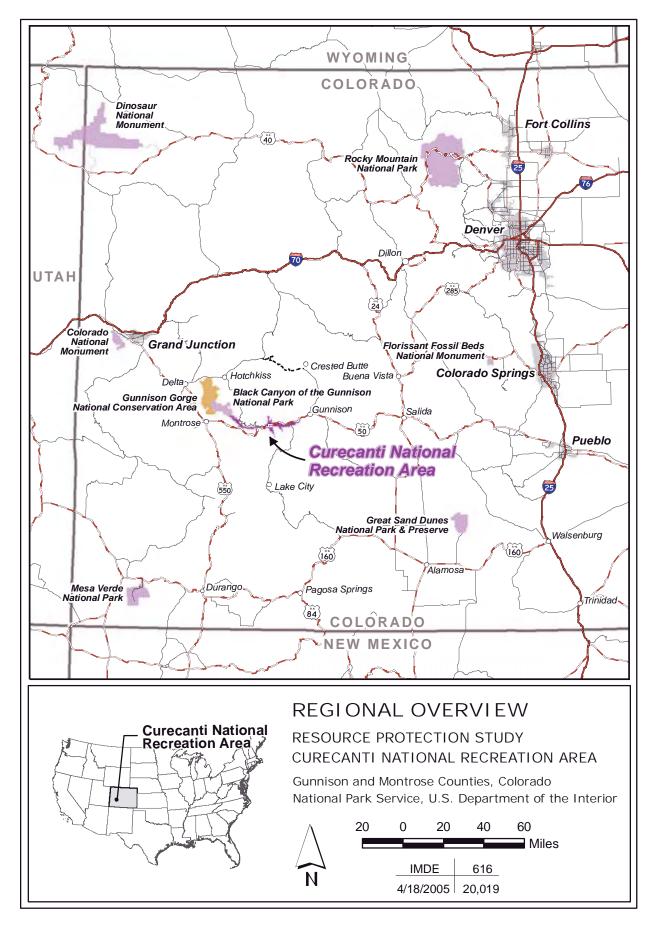
CO 92 and US 50 (east of CO 92 intersection) are part of the West Elk Loop, designated by the Colorado Department of Transportation (CDOT) as a state scenic and historic byway. The scenic byway program is a collaborative effort to help recognize, preserve, and enhance selected roads throughout the United States, due to their scenic and/or historic values.

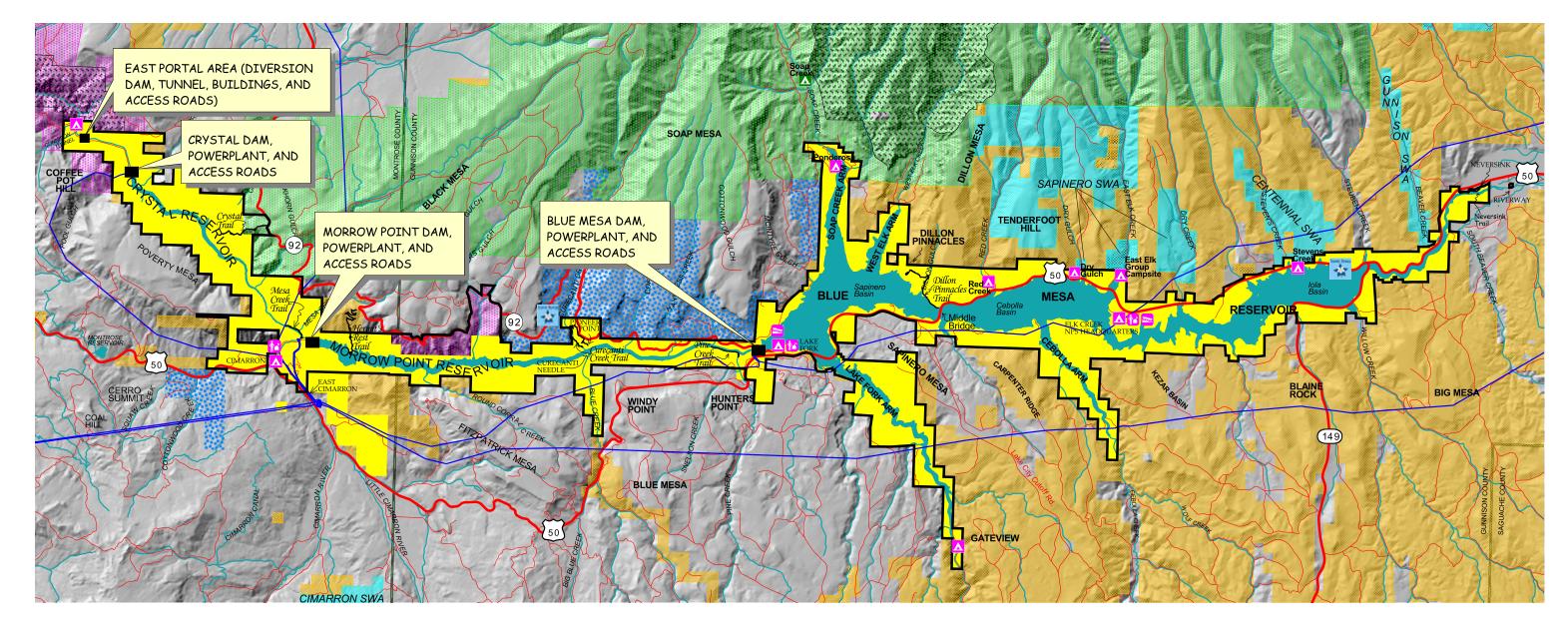
There are no active railroads present within or adjacent to the NRA. However, the Denver and Rio Grande Railroad historically provided both freight and passenger service between Gunnison and Montrose, as well as between Sapinero and Lake City. Both narrow-gauge lines began service in the 1880's. The Lake City line was abandoned in the mid-1930s, while the Gunnison-to-Montrose line was abandoned in the late 1940s.

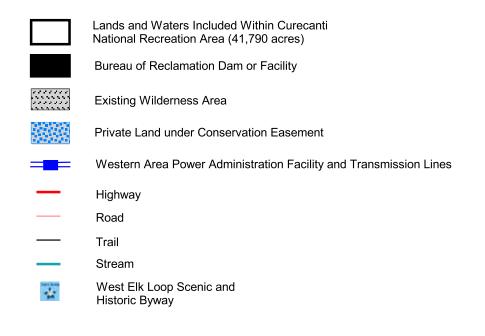


Soap Creek arm of Blue Mesa Reservoir is representative of the spectacular geological setting of Curecanti NRA for land- and water-based recreation

Curecanti NRA includes three reservoirs, named for corresponding dams on the Gunnison River: Blue Mesa Dam and Reservoir; Morrow Point Dam and Reservoir; and Crystal Dam and Reservoir, as shown on the Existing Conditions map. These three dams and reservoirs make up the Wayne N. Aspinall Storage Unit (Aspinall Unit), named after the Colorado congressman instrumental in implementing the project. The Aspinall Unit is one of the four main units of the Colorado River Storage Project (CRSP) that was authorized by Congress in 1956. The other









NPS Visitor Center

NPS Campground

EXISTING CONDITIONS

RESOURCE PROTECTION STUDY CURECANTI NATIONAL RECREATION AREA

Gunnison and Montrose Counties, Colorado

National Park Service
U.S. Department of the Interior



IMDE 616 5/01/2008 20,020-A

NPS Disclaimer information: Property boundaries shown on this map are intended for study purposes only, and are not intended to be definitive regarding land ownership. County and agency land records will be used to verify ownership and definitively locate property lines and boundaries.



large dams in this project include Navajo Dam in New Mexico, Flaming Gorge Dam in Utah, and Glen Canyon Dam in Arizona. A primary purpose of this project is to provide storage of water for beneficial consumptive use by the Upper Colorado River Basin states of Colorado, Wyoming, New Mexico and Utah.

The CRSP Act provides for public recreational facilities, and fish and wildlife propagation facilities in connection with the CRSP. Section 8 of the Act states, "In connection with the development of the Colorado River storage project and the participating projects, the Secretary [of the Interior] is authorized and directed to investigate, plan, construct, operate, and maintain (1) public recreational facilities on lands withdrawn or acquired for the development of said project or of said participating projects, to conserve the scenery, the natural, historic, and archeologic objects, and the wildlife on said lands, and to provide for public use and enjoyment of the same and of the water areas created by these projects by such means as are consistent with the primary purposes of said projects; and (2) facilities to mitigate losses of, and improve conditions for, the propagation of fish and wildlife. The Secretary of the Interior is authorized to acquire lands and to withdraw public lands from entry or other disposition under the public land laws necessary for the construction, operation, and maintenance of the facilities herein provided, and to dispose of them to Federal, State, and local governmental agencies by lease, transfer, exchange, or conveyance upon such terms and conditions as will best promote their development and operation in the public interest. All costs incurred pursuant to this section shall be nonreimbursable and nonreturnable" (70 Stat. 110; 43 U.S.C. § 620(g)).

In 1958, the Bureau of Reclamation (Reclamation) and the National Park Service (NPS) jointly made a request to the Secretary of the Interior for NPS to be given the responsibility for carrying out Section 8, "except, of course, as it relates to provision number (2) concerning fish and wildlife." The Secretary of the Interior, Fred A. Seaton, approved the request. (Memorandum dated

February 17, 1958, from Conrad L. Wirth, Director, NPS, to Secretary of the Interior; Subject: Designation of Responsibility for Carrying Out the Provisions of Section 8, Public Law 485, Colorado River Storage Project and Participating Projects; concurred by Alfred R. Golze, Commissioner of Reclamation, on March 12, 1958; approved by Fred A. Seaton, Secretary of the Interior, on April 21, 1958.)

In 1965, pursuant to the Secretary's delegation, congressional authority at 16 U.S.C. § 17j-2(b), and a Memorandum of Agreement (MOA) with Reclamation, NPS began managing recreation and certain other resources within the Aspinall Unit. Over time, the area became known as Curecanti National Recreation Area. Under the MOA, Reclamation has overall responsibility for the Aspinall Unit, including operating and maintaining the dams, reservoirs, associated power plants, and related facilities. Since 1977, Western Area Power Administration (Western) has operated and maintained the power transmission system and has marketed the power generated at the Aspinall Unit. NPS manages the natural and cultural resources, recreational opportunities, and associated facilities on and adjacent to the reservoirs within the NRA.

The existing NRA has a federal government boundary around it, most of which is Reclamation land that was withdrawn or acquired for project purposes, but some of which is recently acquired NPS land. The NRA has not been officially designated by Congress as a National Recreation Area, although it is recognized as such in federal legislation pertaining to it. Thus, the NRA has no legislated boundary. For this reason, throughout this document, the term "boundary," when used in reference to the existing NRA, should be interpreted as an informal descriptor, and not as an official line authorized by Congress. Lands which comprise the current NRA are shown on the Existing Conditions map.

In 1978, Reclamation lands in the East Portal area were added to the NRA, whereas NPS agreed to manage said lands pursuant to the 1965 MOA. This addition, as part of the Uncompahgre Project, is subject to Federal Reclamation laws (Act of June 17, 1902, 32 Stat. 388, and Acts amendatory thereof or supplementary thereto), but not the CRSP Act of 1956. The Crystal Dam Access Road, however, which runs through the area, is covered under the CRSP Act of 1956, since it replaced the prior East Portal access road as part of the Crystal Dam construction. Recreational use and fish and wildlife enhancement of non-CRSP lands are covered by Public Law 89-72, as amended by Title XXVIII of Public Law 106-575.

Purpose of the Study

This Curecanti NRA Resource Protection Study (RPS) is being conducted in response to Section II of the Black Canyon of the Gunnison National Park and Gunnison Gorge National Conservation Area Act of 1999 (Public Law 106-76). Key sections of that legislation appear in Appendix C. Section II states that the Secretary of the Interior, acting through the Director of the National Park Service, shall conduct a study concerning land protection and open space within and adjacent to the area administered as the Curecanti National Recreation Area. More specifically, Section II states that the purpose of the study is to:

- Assess the natural, cultural, recreational, and scenic resource value and character of the land within and surrounding Curecanti NRA (including open vistas, wildlife habitat, and other public benefits);
- Identify practicable alternatives that protect the resource value and character of the land within and surrounding the Curecanti National Recreation Area;
- Recommend a variety of economically feasible and viable tools to achieve the purposes described in paragraphs (1) and (2); and

• Estimate the costs of implementing the approaches recommended by the study.

The Act authorizing this study instructs the Secretary of the Interior to submit a report to Congress that:

- Contains the findings of the study;
- Makes recommendations to Congress with respect to the findings of the study; and
- Makes recommendations to Congress regarding action that may be taken with respect to the land described in the report.

As a component of the RPS, an environmental impact statement (EIS) is being prepared by NPS, with Reclamation as a cooperating agency. The required Report to Congress, or Report, will be sent to Congress after the EIS process is completed. This process will conclude with a Record of Decision (ROD) that documents the National Park Service's selected alternative. The ROD will be released no sooner than 30 days following the release date of this Final RPS/EIS, which is the date that the Environmental Protection Agency's Notice of Availability appears in the Federal Register. The Report will be coauthored by NPS and Reclamation. NPS, as the lead agency, will then submit the Report to the Secretary of the Interior, who will in turn submit it to Congress. The Report will summarize the study's findings and make recommendations. Implementation of those recommendations will then depend on congressional action. The Final RPS/EIS and the Record of Decision will accompany the Report. If the Record of Decision finds that Congress should pass new legislation for the NRA, the Report will identify issues to be addressed in that new legislation. In other words, the Secretary of the Interior will make the recommendation to Congress, based on recommendations developed by NPS and Reclamation.

In evaluating the congressional requirements and as a result of the public involvement process, NPS has summarized some important considerations relating to this study.

First, what this study is about:

- Finding ways that will allow NPS to work more effectively in partnership with neighboring private landowners and others to conserve the natural, cultural, recreational, and scenic resources and character of the land within and surrounding Curecanti NRA.
- As the study evolved, it became clear that it should evaluate whether or not to recommend to Congress that the NRA be formally established, with a legislated boundary; what changes should be made to the boundary; and what agency or agencies should be responsible for managing the NRA.

And second, what this study is not about:

- Making recommendations pertaining to water rights. It was the intent of the "Black Canyon of the Gunnison National Park and Gunnison Gorge National Conservation Area Act of 1999," hence the intent of this Resource Protection Study authorized by Section 11 of that act, that it not create an express or implied reservation of water for any purpose; that nothing affect any water rights in existence, including any water rights held by the United States; and that any new water rights be established in accordance with the procedural and substantive requirements of the laws of the State of Colorado. Thus, water rights is a legal issue, and will not be addressed in this study, other than to state that water rights would be specifically addressed as a condition of any future sale and/or exchange of property that may occur pursuant to the recommendations of this study.
- Operations of Reclamation projects.
- Infringing on the rights of landowners.
- Making any recommendation that would use condemnation or other tools not in partnership and cooperation with private landowners.

NEED FOR THE STUDY

Many issues and concerns resulted in the need for this study. Although a 1997 General Management Plan (GMP) was prepared for the NRA (NPS 1997), it focused on management of resources within the NRA and did not evaluate resource values in areas surrounding Curecanti, which is now the requirement of the legislative mandate for this study.

Beginning in the early 1900s and into the late 1960s, Reclamation withdrew public lands along the Gunnison River for several proposed or potential Reclamation projects. During this time period, additional withdrawals were made

along the river for potential power-generation sites. These withdrawals closed these lands to entry under the U.S. mining laws and various disposition laws in order to keep them available for reclamation and power purposes.

After the Curecanti (now Aspinall) Unit was authorized for construction in 1956, Reclamation began acquiring private lands necessary for the construction, operation, and maintenance of the Aspinall Unit. Additional lands and land interests in the vicinity of the Aspinall Unit were subsequently also withdrawn or acquired to mitigate the loss of wildlife habitat and stream fisheries resulting from construction of the Unit. With the

exception of those mitigation lands, the lands considered necessary for Reclamation projects were withdrawn or acquired for general Reclamation project purposes. However, during this process of land withdrawal and acquisition, little or no consideration was given to the potential for expanding land-based recreational opportunities that might be associated with an emerging NRA. This study now provides the platform for that consideration.

Over the past 50 years, it has become apparent that natural, cultural, recreational, and scenic resources beyond the current NRA should be evaluated for conservation and possible inclusion within a legislated boundary for Curecanti NRA. Many of these resources have the potential to provide enhanced recreational opportunities for the visitor. Scenic resources surrounding the current NRA are contributing factors to visitor enjoyment.

Development on private lands surrounding the NRA is on the increase. Local and regional concerns exist regarding the potential for sprawling development related to primary and secondary homes, particularly given the ongoing population growth and increase in assessed land values in many mountain communities. Compared to other mountain communities, particularly in the vicinity of NPS areas and ski resort communities, the area surrounding Curecanti has seen only minimal development. However, if additional development occurs near Curecanti without concern for the cumulative impacts to natural and cultural resources and to the magnificent natural vistas that contribute so much to the attractiveness of this area, the national significance of the NRA could be diminished.

Because of the presence of three reservoirs within the recreation area, and because the NRA included relatively little upland beyond the shores of the three reservoirs, the NRA's focus has been primarily on the provision of water-based recreation opportunities. However, surrounding the NRA, opportunities exist for land-based recreation to a greater extent than already provided within the NRA. Some of those opportunities can be found on land already administered by other

government agencies, including the Bureau of Land Management (BLM), Colorado Division of Wildlife (CDOW), and the U.S. Forest Service (USFS). Potential opportunities exist on private land surrounding the NRA. There is a need to evaluate these existing and potential recreation and interpretive opportunities that would contribute to the NRA's purpose and that would provide visitors to the NRA with a more diverse experience, adding to their understanding, appreciation, and enjoyment of area resources. One of the goals of this study is to consult with neighboring agencies to determine if some of these opportunities are appropriate to include within an expanded NRA; and to provide an avenue for the National Park Service to work cooperatively with private landowners to realize this potential.

In addition to the above issues, there are a few specific items that this study and its implementation should address. These include: (I) mitigation of boundary issues and inadvertent private encroachment onto the NRA, based on inaccurate or incomplete land surveys (examples exist near Sapinero, Lake Fork Cove, and East Cimarron); and (2) legislative clarification of the responsibilities of NPS in administering certain resources in the NRA. Important decisions must also be made regarding how to conserve lands and resources adjacent to the NRA in cooperation and partnership with landowners, counties, and other federal and state agencies.

FOUNDATION FOR THE STUDY

The management of units within the national park system is guided by agency-wide and unit-specific laws, regulations, and policies; and includes the development of purpose, significance, mission, and goal statements for each NPS unit. At Curecanti NRA, management is also guided by Reclamation laws, regulations, policies, purpose, significance, mission, and goals. Understanding this guidance has been fundamental to conducting this study. Laws, policies, and regulations that guide the management of specific resources within the NRA are listed later in this chapter under

"Impact Topics," in the Environmental Consequences chapter by impact topic, and in Appendix C. Also included in Appendix C is the 1965 MOA between NPS and Reclamation.

NATIONAL RECREATION AREA SPECIAL MANDATES

In addition to agency-wide laws, regulations, and policies that govern the management of NPS areas, most NPS units have special mandates that must be followed, such as the unit's enabling legislation, and agreements with other agencies. Because of the manner by which Curecanti NRA was created, and the prior existence on site of the Bureau of Reclamation, the most important special mandate that influences NPS management at the NRA is the recognition of, and adherence to, Reclamation's own agency-wide and project-specific mandates.

In general, Reclamation's mission is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public. (A more detailed description of Reclamation Project Purpose, Significance, Mission, and Goals, appears later in this chapter, under the subheading of "Reclamation Special Mandates."). To accomplish that mission, Reclamation must have administrative jurisdiction of its lands, land interests, water and water interests, and facilities necessary to fulfill and protect the authorized purposes of its respective projects. Other users and uses may be allowed on Reclamation-administered lands as long as they are compatible or consistent with a project's primary purposes or the purpose for which Reclamation obtained the lands or land interests.

Most of the lands within the current NRA, and some adjacent lands, consist of public lands that Reclamation has withdrawn from other uses, and private lands acquired by Reclamation, all for the operation and management of the Aspinall Unit of the CRSP and the Uncompander Project. These lands and facilities are shown on the Existing

Conditions map. NPS manages recreation and certain other resources on Reclamation lands and land interests shown within the NRA in accordance with the 1965 Memorandum of Agreement between Reclamation and NPS.

NRA PURPOSE

The NRA purpose statement is the most fundamental criterion against which the appropriateness of all the study's recommendations is tested. Although Curecanti NRA is not officially designated by Congress as a National Recreation Area, the basic purpose of the area is interpreted from the 1965 Memorandum of Agreement between NPS and Reclamation, as well as from Section 8 of the CRSP Act and P.L. 89-72, as amended. Confirmed in the 1997 General Management Plan for the NRA, the purpose of Curecanti NRA is:

- To conserve the scenery, natural and cultural resources, and wildlife of Curecanti NRA
- To manage the lands, waters, fish and wildlife, and recreational activities of Curecanti NRA by means that are consistent with Reclamation law, as amended and supplemented, including the purposes of the CRSP Act and the Uncompanding Project, and Reclamation agreements affecting the operation of the Aspinall Unit and the Uncompanding Project
- To provide for public understanding, use, and enjoyment in such a way as to ensure resource conservation and visitor safety by establishing and maintaining facilities and providing protective and interpretive services.

NRA SIGNIFICANCE

Significance statements capture the essence of a NPS unit's importance to the nation's natural and cultural heritage, and recognize the importance of the unique recreational and scenic resources in the area. Understanding

significance will help decision-makers determine those lands adjacent to Curecanti NRA that will provide significant resources and opportunities for public understanding and enjoyment, and that will help conserve area resources critical to fulfilling the unit's purpose.

 Water resources, including three reservoirs that provide a variety of recreational opportunities in a spectacular geological setting

The element of water has created majestic landforms at Curecanti, provided for the evolution of life since prehistoric times, and now provides a variety of recreational opportunities. Three dams unique in concept and construction were built between 1962 and 1976 to provide water storage, flood control, hydroelectric power, and other purposes. Thus, three reservoirs were created, which have provided for public recreation in keeping with Section 8 of the Colorado River Storage Project Act.

The highest reservoir, Blue Mesa, is the largest in Colorado and one of the largest high-altitude bodies of water in the United States. It provides an exciting diversity of water recreation, in a spectacular geological setting of pinnacles, bluffs, and mesas. The lower two reservoirs, Morrow Point and Crystal, are in the upper reaches of the Black Canyon of the Gunnison - one of the world's premier steepwalled canyons. The remarkably clear water of the three reservoirs provides one of the best cold-water fisheries in Colorado, attracting enthusiasts from throughout the nation and offering a diversity of game fish.

 Geological, paleontological, and other natural resources, including abundant wildlife and fisheries

The rock formations and canyons of Curecanti tell a story of violent volcanic activity, erosion, and geologic change that has occurred over the course of 2 billion years. The scenic resources of the canyons, the needles, the pinnacles, the cliffs, the mesas, and the reservoirs provide dramatic contrast, offering visitors an opportunity to pause and reflect on the diversity of the landscape and its spaciousness.

Exposures of the Morrison Formation contain fossil evidence of the Mesozoic Era. Dinosaur bones have been found; and there is evidence that musk ox, cave lions, and cheetah roamed Blue Mesa during the ice ages.

Today, Curecanti protects existing and potential breeding habitat for numerous sensitive species, such as the bald eagle and peregrine falcon. The NRA provides critical winter range for elk, deer, and bighorn. Blue Mesa Reservoir is Colorado's largest body of water, and is the largest kokanee salmon fishery in the United States. Pristine tributaries provide an opportunity to reintroduce and establish breeding populations of native Colorado River cutthroat trout.

• 10,000-year continuum of human culture

The stories of human culture in the Curecanti area are recorded in the traces left by American Indians, miners, railroaders, ranchers, and dam builders. Archeological finds date back to some of the oldest villages found in North America, predating the pyramids. These signs document not only the human struggles to survive, but also how changes in human value systems, economies, society, technology, and the importance of water have shaped the use of the land and the character of its people.

NRA MISSION

The mission of Curecanti NRA is to conserve, protect, and interpret the nationally significant and diverse natural, cultural, and scenic resources of Curecanti, balanced with the provision of outstanding recreational opportunities, and consistent with the purposes of the CRSP Act and other applicable laws, and to manage the area as a part of the greater riverine ecosystem, coordinating with other land-management agencies.

NRA MISSION GOALS

Mission Goals for Curecanti NRA include the following.

- The natural, cultural, and scenic resources of the NRA are known, and its conditions are assessed. A process is in place to detect changes. High quality scientific, historic, and archeological information is available to guide management actions. Efforts are made to conserve resources beyond NRA boundaries when authorized by Congress and agreed upon by landowners, and through cooperative efforts with neighboring landmanagement agencies. Management actions, including mitigation. restoration, and maintenance, seek to preserve natural processes, cultural resources, and important scenic resources in perpetuity, while allowing compatible public use.
- The NRA is a leader in providing high quality, safe, diverse, and appropriate recreational opportunities that serve all population groups. Efforts are made to work cooperatively with neighbors (private landowners and government agencies) to provide a seamless recreational experience compatible with resource conservation goals and objectives. NRA staff provides educational opportunities that inform, inspire, and promote stewardship.
- The staff fosters support by encouraging the general public to actively participate

- in the conservation and use of the NRA and to understand issues through outreach, educational seminars, partnerships, and volunteer experiences.
- The staff strives to increase organizational efficiencies by: facilitating excellent communications among and within divisions; developing and retaining high-quality staff that know and support the NRA mission; supporting and encouraging work across division lines and valuing the work of all employees; and providing incentives to have employees work safely, efficiently, and economically.
- Necessary and appropriate facilities are provided to support NRA operations and visitor needs. Area assets are improved, and a preventative maintenance program is in place to maintain them in good condition.

NRA INTERPRETIVE THEMES

Interpretive themes are the fundamental stories that can be told about area resources, and that can give the visitor a better understanding of the national significance of the NRA. The primary interpretive themes are as follows.

- The rock formations within Curecanti NRA document 1.7 billion years of the geologic processes that have created this landscape, with the Morrison formation providing fossil evidence of some of the region's earliest plant and animal inhabitants.
- The traces, tracks, and artifacts of American Indians, miners, railroaders, explorers, and ranchers preserved in the NRA, document not only the human struggles to survive, but also how changing human value systems, technology, and the importance of water have shaped the use and character of the land and its people.
- The three reservoirs, the semiarid, sagebrush-covered mesas, the

Gunnison River, and the steep walls of the Black Canyon, provide a crucial habitat for a diversity of plant species and resident and migratory animal species. The viewsheds, including the dark night sky of the NRA, are recognized as primary resources; and management actively pursues the preservation of their quality.

 The three reservoirs of the Aspinall Unit, located within Curecanti NRA, embody the major uses of managed water—water storage, flood control, hydroelectric power, and recreation.

RECLAMATION SPECIAL MANDATES

RECLAMATION PROJECT BACKGROUND AND PURPOSE

Facilities, lands, land interests, and water for two constructed and operating Reclamation projects, the Uncompangre Project and the Aspinall Unit of the CRSP, are present within and immediately adjacent to the NRA. Reclamation law provides for the operation, maintenance, and replacement of project facilities in order to meet Reclamation's mission and its projects' primary purposes. Reclamation law also provides for the use of Reclamation lands and water areas for outdoor recreation, fish and wildlife enhancement, and other resource-related activities, in a manner that is consistent, or compatible with, primary project purposes. NPS currently administers recreational use and certain other resources on Reclamation lands within the NRA pursuant to Reclamation law and a 1965 MOA with Reclamation.

Most of the lands within the existing NRA, and some of the lands adjacent to but outside of the NRA, are Reclamation lands. These are lands withdrawn or acquired for, and available to, Reclamation and its managing partners, as necessary, for the construction, operation, maintenance, and replacement of facilities for Reclamation projects. Public lands along the Gunnison River were being withdrawn for

water and power purposes from the early 1900s up to the late 1960s. Private lands in the area have been acquired for Reclamation purposes from the mid-1900s to the early 2000s.

Reclamation law, including PL 89-72 as amended by Title XXVIII of PL 102-575, allows recreation and other uses on Reclamation project lands and water areas so long as such uses are compatible and coordinated with a project's primary purposes. Another Federal agency may administer Reclamation lands and water areas for recreation, fish and wildlife enhancement, and other resource management, protection, and enhancement, where those lands are included, or proposed for inclusion, in an NRA. Reclamation may enter into agreements for such administration upon such terms and conditions as will best promote the development and operation of such lands or facilities in the public interest for recreation, fish and wildlife enhancement, and resource protection and enhancement purposes while protecting Reclamation interests. NPS currently administers recreational use and certain other resources on Reclamation lands within the NRA. All lands within the NRA that are not Reclamation withdrawn lands are managed by NPS, some under agreement with other agencies.

Uncompange Project

The Uncompander Project (originally called the Gunnison Project) was authorized by the Secretary of the Interior on March 14, 1903, pursuant to the Reclamation Act of 1902. Construction of the initial project began in 1904 and was completed in 1912. Rehabilitation of the project and construction of the Taylor Park Dam were approved by President Roosevelt on November 6, 1935. Taylor Park Dam was completed in 1937 (PWRS 1981).

Project features include Taylor Park Dam and Reservoir, the Gunnison Tunnel, seven diversion dams, 128 miles of canals, 438 miles of laterals, and 216 miles of drains. Gunnison River water is diverted at East Portal through the Gunnison Tunnel to the Uncompandere Valley (PWRS 1981). Water from Taylor Park Reservoir passes through the Aspinall Unit to the Gunnison Diversion Dam at East Portal.

The Uncompander Project provides about 650,000 acre-feet of water annually from the Gunnison and Uncompander Rivers to the Uncompander Valley for agricultural irrigation on about 80,000 acres of land. Since 1970, about 343,000 acre-feet of project water has been diverted annually from the Gunnison River at East Portal. The 15-year average for agricultural crops from the Uncompander Project is \$20 million per year.

The Uncompangre Valley Water Users
Association and the Tri-County Water
Conservation District have an exchange
agreement whereby up to 20,000 acre-feet of
Gunnison River water from the Uncompangre
Project may be exchanged annually for
municipal and industrial purposes at
Montrose for an equal credit of Uncompangre
River water from Ridgway Reservoir. About
8,500 acre feet are currently being exchanged
annually under this agreement.

Aspinall Unit, Colorado River Storage Project

The construction, operation, and maintenance of the Colorado River Storage Project, including the Aspinall Unit (originally the Curecanti Unit), was authorized by the CRSP Act of April 11, 1956 (P.L. 84-485). Section 1 of that act states that the CRSP was for "... . the purposes, among others, of regulating the flow of the Colorado River, storing water for beneficial consumptive use, making it possible for the States of the Upper Basin to utilize, consistently with the provisions of the Colorado River Compact, the apportionments made to, and among them, in the Colorado River Basin Compact and the Upper Colorado River Basin Compact, respectively, providing for the reclamation of arid and semiarid land, for the control of floods, and for the generation of hydroelectric power, as an incident to the foregoing purposes . . ."

Section 8 of the CRSP Act of 1956 provides the authority and some direction for public recreational facilities and fish and wildlife propagation facilities in connection with the CRSP. The provisions of Section 8 are described in the opening section of this chapter on Introduction, and Brief Description of Curecanti National Recreation Area.

Construction of the Aspinall Unit commenced in 1962 with the start of Blue Mesa Dam, which was completed in 1966. Morrow Point Dam was begun in 1963 and completed in 1968. Power generation began at Blue Mesa in September 1967 and at Morrow Point in December 1970. Construction on Crystal Dam began in 1973 and was completed in 1976. Crystal began power generation in July 1978.

Recreational opportunities on Reclamation lands within and adjacent to the NRA include, but are not necessarily limited to, camping, boating, stream and reservoir fishing, hunting, picnicking, hiking, sightseeing, and wildlife viewing. Recreation development for the Aspinall Unit was included in the initial planning for the unit. Initial development on Blue Mesa Reservoir included facilities at the Iola site, the Elk Creek site, and the Lake Fork site. NPS has subsequently constructed additional recreational sites at East Portal: at various points along US Highway 50 and State Highway 92; at Cimarron; in the Neversink area; at Gateview, Soap Creek, and other locations on the arms of Blue Mesa Reservoir; and at other various points along the Gunnison River and Crystal and Morrow Point Reservoirs. Additional opportunities for recreation within the Gunnison Basin are provided by lands and land interests acquired by Reclamation for wildlife and stream-fishing mitigation related to the Aspinall Unit, and which were transferred to, and are managed for, such purposes by other agencies.

Reclamation has several agreements and contracts which tie Aspinall Unit water rights and management to other water uses in the Colorado River Basin. In addition to the various treaties and river compacts previously mentioned, Reclamation has a subordination agreement whereby 60,000 acre-feet of Aspinall water rights are available for beneficial consumptive use in the Gunnison Basin upstream from Crystal Dam. Also, Reclamation has sold 500 acre feet of Aspinall

Unit water to the Upper Gunnison Basin Water Conservancy District for its use.

RECLAMATION PROJECT SIGNIFICANCE

- The Aspinall Unit and the Uncompangre Project play important roles in meeting local, regional, national, and international water allocation and management needs and requirements within the Colorado River basin. The CRSP provides water for the beneficial consumptive use of Upper Colorado River Basin states, while helping manage waters of the Colorado River Basin to meet the terms and conditions of a treaty between the United States and Mexico and several interstate Colorado River compacts. The Uncompangre Project provides water for the reclamation of about 80,000 acres of arid and semiarid lands in the Uncompangre Valley, with a current annual crop value of about \$20 million.
- The Aspinall Unit, as part of the CRSP, helps regulate the flow of the Colorado River; stores water for the beneficial consumptive use by the Upper Basin states of their various Colorado Rivercompact water apportionments; reclaims arid and semiarid land; helps control floods; and generates hydroelectric power.
- The Aspinall Unit reservoirs are a very valuable hydroelectric generation asset for the western United States. CRSP generating units are scheduled to follow customer load-requirements, including peak-demand periods, as closely as possible, utilizing available generation capacity and water within environmental restrictions. Glen Canyon, the largest CRSP-generating resource, is scheduled to follow peak demands, but often cannot quickly follow peaking schedules due to environmental ramping restrictions. The Aspinall Unit generation units,

- particularly Morrow Point and Blue Mesa, are scheduled to skim the peak off whatever Glen Canyon is unable to follow. While releases from Morrow Point and Blue Mesa fluctuate to meet peak-load demands, Crystal Dam and power plant operate to stabilize Gunnison River flows to benefit the downstream environment, which includes the Black Canyon of the Gunnison National Park.
- Reclamation projects, lands, and water areas within, and adjacent to, the NRA, provide a portion of the agricultural and recreational economic base for Delta, Gunnison, and Montrose counties, and the gateway communities of Montrose and Gunnison.
- Reclamation lands and water areas were the initial basis for the NRA, and they provide a large majority of the basis for both the current and proposed NRAs.
- Reclamation lands and water areas
 within and adjacent to the NRA provide
 many opportunities for outdoor
 recreation. These opportunities
 include, but are not necessarily
 limited to, fishing, boating, hunting,
 wildlife watching, hiking, camping,
 horseback riding, historic and cultural
 interpretation, cross-country skiing,
 wildlife viewing, and sightseeing.
- Reclamation land and water areas within and adjacent to the current NRA provide many opportunities for fish and wildlife enhancement. The reservoirs and river segments in the NRA provide a significant cold water fishery. Undeveloped lands provide year-round and/or seasonal habitat for numerous wildlife species, including the Gunnison Sage-grouse, Gunnison's prairie dog, elk, mule deer, big horn sheep, bald eagle, peregrine falcon, to name a few. Some lands were acquired by Reclamation, using Section 8 money to meet the purpose of wildlife mitigation for the Aspinall Unit. Some of these lands, such as the

area near Neversink, are still within the NRA, while others were transferred to CDOW to be managed as a part of the State Wildlife System.

RECLAMATION MISSION

Reclamation's mission is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

RECLAMATION GOALS

- withdraw, acquire, and retain sufficient lands and land interests to meet authorized and planned purposes of the respective Reclamation projects, and to effectively construct, operate, maintain, replace, and enhance (if, and when, necessary) those projects, as well as the purposes for which the lands were acquired.
- Retain administrative jurisdiction over all Reclamation lands and land interests, water and water interests, and facilities, including unrestricted access to the same, to accomplish its mission and to construct, operate, maintain, replace, and protect project facilities, purposes, resources, and operations.
- Retain Reclamation facilities, lands, and land interests, and the ability to use same for project purposes until such time as Reclamation determines such facilities, lands, and land interests are no longer necessary for project purposes. Then Reclamation may dispose of or transfer such lands or land interests in a manner best suited to a given parcel or facility.
- Provide for public recreation facilities to conserve the scenery, the natural, historic, and archeologic objects, and the wildlife on Reclamation lands and to provide for the public enjoyment of said lands and water areas created by Reclamation projects

- by such means as are consistent with the primary purposes of said projects. The provision for such facilities, conservation, and uses are generally made through a management agreement with another Federal, State, or local agency.
- Manage and operate CRSP dams, reservoirs, and power plants to meet project purposes, and international, national, regional, and local needs and requirements for water apportionments and management, including water quantity and hydroelectric power generation.
- To the fullest extent possible, keep the administrative jurisdiction for recreation and other resource management on a contiguous block of Reclamation lands with one agency.
- Coordinate the use and management of Reclamation lands, land interests, water and water interests, facilities, and associated resources with its managing partners, adjacent land-management agencies, and local entities through upto-date management agreements and periodic coordination meetings.

WESTERN AREA POWER
ADMINISTRATION (DEPARTMENT OF
ENERGY) SPECIAL MANDATES

BACKGROUND AND PURPOSE

One of the stated purposes of the Colorado River Storage Project (CRSP), passed by Congress on April 11, 1956, was "for the generation of hydroelectric power." The Secretary of the Interior was instructed to construct, operate, and maintain Colorado River storage units (dams, reservoirs, power plants, transmission facilities and appurtenant works) at Curecanti (subsequently designated the Wayne N. Aspinall Storage Unit on October 3, 1980), Flaming Gorge, Navajo and Glen Canyon.

The responsibility for transmission and marketing of power was subsequently passed to the Secretary of Energy, per Section 302 of the Department of Energy (DOE) Organization Act of 1977. This act transferred "all functions of the Secretary of the Interior under Section 5 of the Flood Control Act of 1944, and all other functions of the Secretary of the Interior . . . with respect to the power marketing functions of the Bureau of Reclamation, including the construction, operation, and maintenance of transmission lines and attendant facilities." This section of the act goes on to state that the power marketing functions shall be exercised by the Secretary of Energy acting through a separate and distinct administration within the department.

Previously, the Flood Control Act of 1944 authorized the Secretary of the Interior to construct or acquire necessary transmission lines and related facilities to deliver power generated from Corps of Engineers water projects. Also, the Reclamation Acts of 1902 and 1939 serve as further authority for the power marketing / transmission role carried out by Western Area Power Administration (Western).

WESTERN'S MISSION

Western markets and delivers reliable, costbased hydroelectric power and related services within a 15-state region of the central and western U.S. It is one of four power marketing administrations within the U.S. Department of Energy, whose role is to market and transmit electricity from multi-use water projects. Its transmission system carries electricity from 57 power plants operated by the Bureau of Reclamation, U.S. Army Corps of Engineers and the International Boundary and Water Commission. Together, these plants have an installed capacity of 10,395 megawatts.

WESTERN'S GOALS

Western's mandate is to assure the continuous and uninterrupted supply of energy from the

Curecanti/Aspinall project to its distribution partners. It therefore needs to construct, operate, and maintain, and have ready access to, its existing transmission corridors / facilities. In addition, future demand and changing technologies may require the establishment of new corridors / rights-of-way within the boundaries of Curecanti NRA.

STUDY PROCESS

This study was initiated during the spring of 2000 to begin to fulfill the requirements of Public Law 106-76. Important steps in the study process included data collection and analysis; determination of the study area; alternatives development, including resource conservation and management tools and the estimated costs of implementing the study recommendations; and impact analysis.

PUBLIC AND AGENCY INVOLVEMENT

The Curecanti NRA Resource Protection Study officially began on May 3, 2000, when a Notice of Intent (NOI) to prepare an EIS for the RPS appeared in the Federal Register. Throughout the study, NPS has conducted public and agency scoping meetings, produced three newsletters, made information available on the NRA's website, and held many meetings and workshops with agencies, American Indian Tribes, private landowners and other stakeholders, elected officials, and the general public to address the requirements of the legislative mandate to complete the Resource Protection Study. Following is a brief summary of these activities since the project began. A more complete summary is included in the Consultation and Coordination chapter.

- Public and agency scoping spring 2000
- Citizens' photo assessment fall 2000
- Study team and agency work sessions
 fall 2000 through spring 2001

- Publication of three newsletters with invitations to comment – spring 2001 through fall 2003
- Recreational Opportunities Workshop
 winter 2002
- Joint Agency Management Effort (JAME) – formerly known as Joint Agency Management Area (JAMA) – spring 2002 to present
- Publication of Toolbox of Incentives for Resource Conservation and Curecanti: Great Scenery, Outstanding Resources and Good Neighbors – spring 2003
- Meetings and contacts with neighboring landowners – spring 2003 to present
- Development of preliminary alternatives summer 2003
- Impacts assessed, alternatives evaluated, and proposed action identified, in consultation with staff and neighboring agencies – fall 2003
- Draft RPS/EIS released summer 2007.

NPS has met with local, state, tribal, and federal agencies and officials, including elected representatives, to keep them informed of the study's progress and to obtain their input and guidance throughout this process.

DATA COLLECTION AND ANALYSIS

"Assess the natural, cultural, recreational and scenic resource value and character of the land within and surrounding Curecanti NRA (including open vistas, wildlife habitat, and other public benefits)"

Public Law 106-76

A data-gathering and analysis process was initiated to "assess the natural, cultural, recreational and scenic resource value and character of the land within and surrounding

Curecanti NRA (including open vistas, wildlife habitat, and other public benefits)" as required by Public Law 106-76. A complete description of these resources appears in the Affected Environment chapter.

Data were collected from local, state, and federal agencies and groups with land stewardship responsibilities on lands surrounding Curecanti NRA, or generated by staff through computer modeling and public workshops. Over 25 categories of data were considered during the course of the study:

- Access Issues
- 2. Archeological/Historical (Cultural) Sites
- 3. Areas of Critical Environmental Concern
- 4. Boundary/Survey Markers
- 5. Cottonwood Regeneration/Heron Rookery
- 6. Cultural Landscapes
- 7. Development within Study Area, but Outside the NRA
- 8. Fisheries, Including Sensitive Species
- 9. Floodplains/Wetlands/Riparian/Springs
- 10. General Development/Existing Conditions within the NRA
- II. Geology and Geological Hazards
- 12. Grazing Allotments
- 13. Hazardous Materials
- 14. Hunting Restricted Areas
- 15. Logging/Woodcutting
- 16. Minerals/Oil and Gas
- 17. Ownership/Land Status/Withdrawn Lands/Conservation Easements
- 18. Paleontological Sites
- 19. Reclamation Facilities
- 20. Recreational Opportunity Areas
- 21. Sensitive Species

- 22. Soils, Including Prime and Unique Farmlands, and Lands of Statewide Importance
- 23. Unique Geological Features
- 24. Vegetation
- 25. Viewsheds
- 26. Watersheds and Water Quality
- 27. Wildlife Habitat.

Natural and Cultural Resources Data

Natural and cultural resources data were readily available from local, state, and federal agencies and other groups. In addition to descriptions of these resources in the Affected Environment chapter of this document, maps of the resources are available at the NRA for inspection.

Recreational Resources Data

Public comments on recreational opportunities were solicited via newsletters; and public and NRA staff workshops were conducted during the course of the study to determine what recreational opportunities were available locally, which existing and potentially new opportunities would be compatible with NRA purposes, and where new opportunities could be developed. Recreational opportunities were categorized into the following categories: appropriate, maybe appropriate, not appropriate, and other. Determination of appropriate recreational activities was influenced by the NRA's purpose, significance, and mission (identified earlier in this chapter); and by chapter 8 in NPS Management Policies 2006 (see excerpts in Appendix C).

In addition, whatever recreational activities are allowed in the NRA, now and in the future, must also conform to Reclamation Law, as amended and supplemented.

Comments from newsletters and workshops that centered on recreational opportunities and locations included the following:

 Preserve the natural, cultural, and scenic resources, while providing for recreation

- Provide for longer and more connecting trails
- Provide trail access to Curecanti Needle
- Provide for more access to and nonmotorized use of Crystal and Morrow Point Reservoirs
- Provide more access for backcountry camping opportunities in the Soap Mesa and Dillon Pinnacles areas
- Provide for more nonmotorized visitor use on the south side of Cebolla and Iola Basins
- Provide for more motorized access to Black Mesa, along with more parking along CO 92
- Keep facilities development to a minimum
- Provide "seamless" recreational opportunities, regardless of which agency manages the land
- Respect private property regarding all proposed actions, especially for public recreational access and use
- The idea of being able to go horseback riding regardless of boundaries is attractive.

Some examples of areas that appear to have strong potential for expanded land-based recreational opportunities include:

- Vicinity of Soap Mesa provides unique opportunities for future upland recreation, including a potential trail to scenic overlooks
- Vicinity of Windy Point offers unique scenic and recreation opportunities, with overlooks into Blue Creek Canyon, Morrow Point Reservoir, the Curecanti Needle, and Chipeta Falls; trail access to these overlooks would provide year-around opportunities for hiking and cross-country skiing
- Sapinero Mesa offers potential opportunities for a hiking trail with scenic overlooks

- Vicinity of the south side of Blue Mesa Reservoir from Cebolla Creek to Willow Creek for hiking and nonmotorized biking, fishing access, and hang gliding (Willow Creek area only)
- Vicinity of Curecanti Creek below CO
 92 for fishing access
- Vicinity between the Lake City Bridge and Riverway to provide a future hiking and nonmotorized biking trail linkage to the City of Gunnison
- In general, opportunities for longer and more connecting trails throughout the NRA and connections to trails on neighboring agency lands.

Management action for implementing ideas for expanding recreational opportunities in the NRA would be addressed in future planning documents (such as a revised general management plan, commercial services plan, or implementation plan) following congressional action, if any, resulting from recommendations in this study. A more complete discussion of identified recreational, interpretive, and educational opportunities appears in the Affected Environment chapter.

Scenic Resources Data

A computer-generated viewshed was created that shows what can be seen from US Highway 50 (US 50), CO 92, and CO 149, and from the centerline of Blue Mesa Reservoir and its arms (see Computer Generated Viewshed Map). Viewsheds visible within three miles of identified viewpoints were considered most critical to the study.

A photo assessment workshop was conducted with Gunnison- and Montrose-area residents to determine those scenic vistas and other resource attributes that are important to them. This workshop resulted in nearly 300 photographs taken by the workshop participants that illustrated examples of development thought to be appropriate, as well as inappropriate; and natural, cultural, scenic, and recreational resources surrounding the NRA that should be considered for conservation.

Photographs were grouped into the following categories.

- Category 1: Views considered by respondents as most scenic from the highways around Curecanti, including US 50, CO 92, CO 149, and side roads in the vicinity of Blue Mesa Reservoir -75 photos (27%)
- Category 2: Areas considered by respondents as most appropriate and/or least appropriate for future development - 35 photos (12%)
- Category 3: Buildings or other structures considered by respondents as acceptable or unacceptable on the basis of visual intrusion or other factors 39 photos (14%)
- Category 4: Critical resources or areas considered by respondents as important to conserve, such as landforms, vegetation, wetlands, or wildlife habitat 44 photos (16%)
- *Category 5*: Areas considered by respondents as important to preserve for recreational use 47 photos (17%)
- Category 6: Photos submitted by respondents that they felt best represented Gunnison and Montrose Counties' image in the Curecanti area -17 photos (6%)
- Category 7: Any other issues, areas, or contexts - 24 photos (8%).

Through this photo exercise, citizens identified examples of unique geological, as well as visually attractive, features, and suggested places within and outside the present NRA that merit conservation. Such sites included the following.

- North side of US 50, between Dry Creek and Red Creek, containing West Elk Breccia rock formation (ancient volcanic mudflow)
- Outcroppings of the Morrison formation, known elsewhere to contain dinosaur fossils
- Soap Creek Cliffs

- Dillon Pinnacles
- Curecanti Needle
- Curecanti Creek at Hairpin Curve on CO 92.



Photo workshop participants took photos in and surrounding Curecanti NRA, such as this cabin under the Acceptable Development Category (Category 3)

Study Area Determination

The base map for the study consists of a geographical area extending approximately 30 miles north to south and 40 miles east to west, with Curecanti NRA centered on the map. The study area, which surrounds the NRA, is included within this base map, and was determined by analysis of natural, cultural, scenic, and recreational data for the region. The study area was established by overlaying various geographic information system (GIS) Mylar data maps onto a base map, and including the most important resource areas. The study area was introduced to the public and governmental agencies in the first newsletter for the project, issued in the spring of 2001.

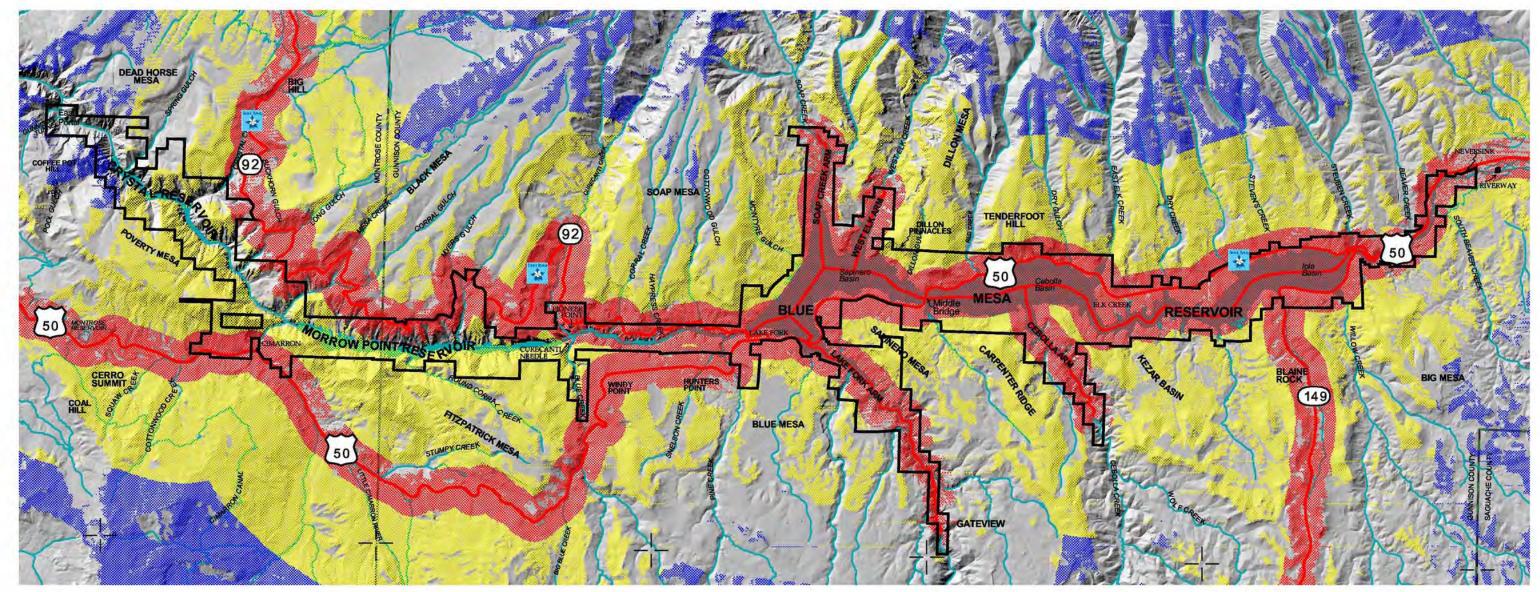
The important resources used to establish the study area were derived from the more extensive data list collected early in the data collection process, which is shown earlier in this section on Data Collection and Analysis. The criteria for determining important resources were based on input from public scoping meetings, input from Curecanti staff, interpretation of the legislative mandates authorizing the study, and explanations of data categories provided by sources of

the data. Resource data, primarily in the form of computerized maps, were collected from the following major sources: wildlife habitat information from the Colorado Division of Wildlife (CDOW); threatened and/or imperiled species from the Colorado Natural Heritage Program; archeological and historic sites from the Colorado State Historical Society; and viewsheds from digital elevation models. Information on recreation opportunities was obtained from the public, as described earlier in this section on Data Collection and Analysis.

The important resources are listed below, alphabetically, in no particular order of importance:

- Archeological and historic sites: Four categories of data were collected that include both archeological and historic sites: (1) individual archeological sites;
 (2) archeological linear features;
 (3) sections that contain archeological sites; and (4) archeological site areas
- Bighorn sheep and pronghorn winteruse areas: pronghorn winter range, bighorn sheep overall range
- Elk winter-use areas: severe-winter range, winter concentration area, production area
- Gunnison Sage-grouse range or use areas: leks, nesting areas, brood areas, critical winter range; severe-winter range
- Raptor range or use areas: peregrine falcon active nesting sites; golden eagle nesting sites; bald eagle roost sites; bald eagle winter concentration area
- Sensitive species: Potential conservation areas of outstanding significance, very high significance, high significance, and moderate significance
- Viewsheds: Map generated from computer modeling showing land visible from major highways and centerlines of Blue Mesa Reservoir and its arms.

A compilation of this resource information is illustrated on the map entitled Important



EXPLANATION OF MAP

This computer generated map shows land areas that can be seen from various locations, or vantage points, within the National Recreation Area. The computer used digital elevation data to determine what can be seen (also known as the "viewshed") from vantage points along the centerline of major highways, Blue Mesa Reservoir, and the reservoir's arms. The area highlighted in red shows the viewshed from vantage points up to 1/2 mile out; the area highlighted in yellow shows the viewshed from 1/2 mile to 3 miles from the vantage points; and the area highlighted in dark blue shows the viewshed from 3 miles out and beyond.

Lands and Waters Included Within Curecanti
National Recreation Area (41,790 acres)

Visible from point of origin up to 1/2 mile

Visible from 1/2 mile to 3 miles

Visible beyond 3 miles

Vantage points from which the viewshed was created, along the center line of US 50, CO 92, and CO 149; and the middle of Blue Mesa Reservoir and its four major arms: Soap Creek, Lake Fork, West Elk, and Cebolla

Stream

West Elk Loop Scenic and Historic Byway

COMPUTER GENERATED VIEWSHED OF LAND WITHIN AND SURROUNDING CURECANTI

RESOURCE PROTECTION STUDY
CURECANTI NATIONAL RECREATION AREA

Gunnison and Montrose Counties, Colorado

National Park Service U.S. Department of the Interior



IMDE 616 11/28/2006 20,022 NPS Disclaimer information: Property boundaries shown on this map are intended for study purposes only, and are not intended to be definitive regarding land ownership.County and agency land records will be used to verify ownership and definitively locate property lines and boundaries.

Resources Surrounding Curecanti. The various shades of blue represent different levels of concentrations of one or more resources, with weightings assigned to the importance of the resources. The darker the color, the greater number of resources present, and/or the greater the relative importance of the resource. The general locations of critical resources and recreation opportunities are described in the white boxes on the map. The method used to determine the weighted analysis is described below.

The data analysis for the study was initiated using a traditional map, grease pencil, and a mylar overlay technique inspired by Ian L. McHarg's book "Design with Nature." Spatial resource data that were selected for analysis are identified above. Following production of draft mylar maps, and using the computerized resource data, a weighted analysis was initiated using the GIS as an analytical tool to provide a compilation of all the resource data on one map, with reduced bias and spatial error. "Weights" were assigned by NRA staff to the various mapped, resource categories based on their relative value, or importance, on a scale of 1 to 5, with 5 being most significant. As an example, an archeological site that has been listed on the National Register of Historic Places (NRHP) may receive a weighted value of 5, while an archeological site that is determined not eligible for listing to the NRHP may receive a value of I. Mapped resource categories were then stacked, and their weighted values were added together with the aid of the GIS.

Results of the analysis showed cumulative scores for all of the weighted data. Relatively high scores represent areas with multiple resource occurrences, and the highest scores represent areas with multiple resource occurrences that possess relatively greater resource significance. It is interesting to note that the preponderance of high scores center on the Curecanti area. This analysis helped to determine where NPS should focus its attention on resource conservation outside the existing NRA.

ALTERNATIVES DEVELOPMENT AND IMPACTS ASSESSMENT

"Identify practicable alternatives that protect the resource value and character of the land within and surrounding Curecanti NRA"

Public Law 106-76

In response to the second requirement of the study's congressional mandate, the study team identified two categories of alternatives to protect the resource value and character of the land: (I) proposed boundary location; and (2) management considerations. The environmental consequences, or impacts, of the actions associated with each alternative were then assessed.

Proposed Boundary Location

Numerous boundary alternatives were considered after data collection and analysis of the data and resource maps; meetings with agency officials, landowners, and the public; and consideration of NPS *Management Policies 2006* pertaining to boundary adjustments. In addition, the concept of a Conservation Opportunity Area (COA) was created. This is an area that would be designated by Congress within which NPS would be authorized to use various landowner incentives (comprising a *toolbox*) to partner with neighbors to conserve resources.

For purposes of this study, and found throughout the text, primarily with reference to Alternative 2 – the Proposed Action, the term "proposed lands" refers to 34,420 acres of land outside the existing NRA that is considered important for resource conservation, public recreation, and scenic values, in keeping with NRA goals and objectives. The proposed lands include:

 Public lands to be transferred from other agencies to NPS to be included within the proposed NRA boundary immediately upon recommended passage of legislation that would establish the NRA (10,120 acres); 2. Private lands that are recommended to be included within the COA, outside the proposed NRA boundary (24,300 acres).

In addition, there are certain lands within the existing NRA that were identified as having the potential to be deleted from the NRA. They are not included in the "proposed lands," as defined for this study. The potential deletions include 80 acres of USFS land that would immediately be deleted upon passage of NRA legislation, to be managed by USFS as part of the Gunnison National Forest; 800 acres that might eventually be transferred to BLM; and 363 acres that might be exchanged for private lands within the COA, on a willing landowner basis. These 1,243 acres of potential deletions are identified as "tracts" on the Alternative 2 map.

During the process of assessing the environmental consequences of the boundary alternatives, it was decided to retain only two alternatives for in-depth analysis: No Action, and the Proposed Action. The other alternatives were dismissed from further consideration for reasons that are described in the Alternatives chapter of this document.

Management Considerations

Different scenarios for NRA management were considered. These potential management scenarios do not affect the boundary alternatives. This includes management of various sections of the NRA defined by the three reservoirs; and by various agencies, including BLM, Reclamation, NPS, USFS, and Colorado State Parks. BLM, USFS, and Colorado State Parks have all indicated that they are not interested in managing the NRA.

Reclamation manages its facilities, lands, land interests, water and water interests in the area to meet CRSP and Uncompanyer Project purposes, and has contracted with NPS for management of recreation and certain other resources on Reclamation lands within the NRA. NPS desires to continue to manage the natural, cultural, and recreational resources on all of the lands within the NRA. Most of these lands are under the jurisdiction of

Reclamation; but some are under USFS, and some are under NPS.

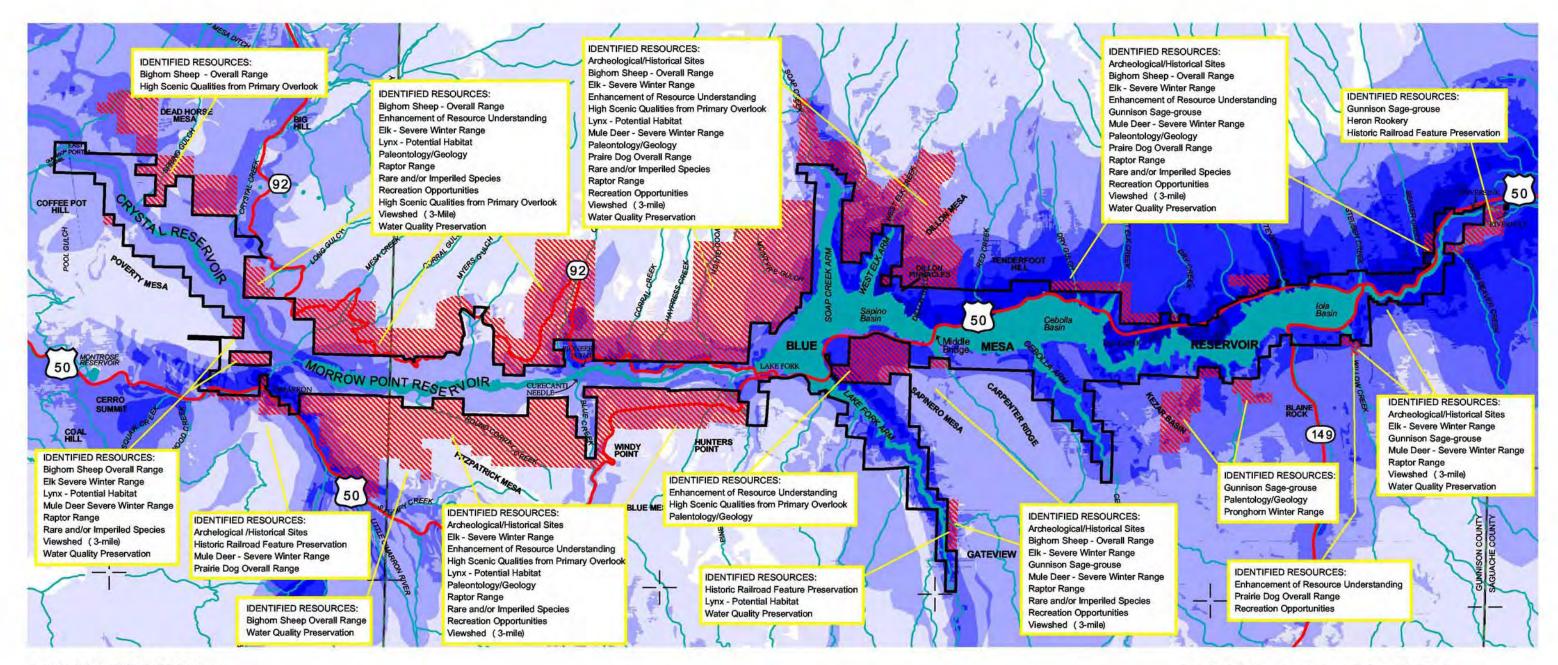
Tools for Resource Conservation and Management

"Recommend a variety of economically feasible and viable tools to achieve resource protection"

Public Law 106-76

NPS worked with other agencies and with Gunnison and Montrose Counties to develop a variety of resource conservation tools that were considered during development of alternatives and integrated into the Proposed Action. NPS has developed two documents (included as appendixes) relating to these suggested methods of resource conservation. They are based upon former Secretary of the Interior Gale Norton's philosophy of the "four Cs": Communication, Consultation, and Cooperation, all in the service of Conservation.

Toolbox of Incentives for Resource Conservation: A Handbook of Ideas for Neighbors in the Curecanti Area. This toolbox identifies present and potential methods that could be made available to Curecanti area neighbors—private landowners, local communities, and city, county, state, and federal agencies—to work in partnership to manage their lands for more effective resource conservation. It has been developed to help conserve the natural, cultural, recreational, and scenic resources within and surrounding Curecanti. The choice of tools includes acquiring interests in land from willing landowners, such as fee simple, and conservation easements. However, if funding is insufficient to acquire such interests, other tools could be pursued to meet resource conservation goals and objectives (Appendix A).



EXPLANATION OF MAP

This map represents a composite of important and critical resources identified during the Resource Protection Study, such as wildlife (including raptor habitat and rare/imperiled species); known archeological/historical sites and districts; areas of paleontological potential; and viewsheds of predominantly natural landscapes. Areas of potential recreational opportunities are also identified. The map shows that such resources are concentrated within and immediately surrounding the National Recreation Area. The colors represent different levels of concentrations of one or more resources, with weightings assigned to the importance of the resources. The darker the color = the greater number of resources present, and/or the greater the relative importance of one or more resources.

Lands and Waters Included
Within Curecanti National
Recreation Area (41,790 acres)

The Proposed Lands, consisting of public and private land outside the NRA considered important for resource conservation and/or public recreational access, with respect to RPS goals and objectives.

WEIGHTED RESOURCES



IMPORTANT RESOURCES SURROUNDING CURECANTI

RESOURCE PROTECTION STUDY
CURECANTI NATIONAL RECREATION AREA

Gunnison and Montrose Counties, Colorado

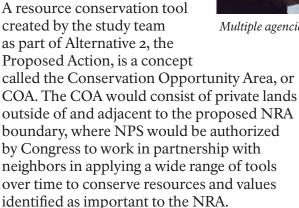
National Park Service
U.S. Department of the Interior



IMDE 616 11/28/2006 20,021 NPS Disclaimer Information: The information contained herein is based upon data collected from a variety of sources. The National Park Service provides these data as a public service and assumes no responsibility for conclusions which others may draw from the use of the data.



Curecanti: Great Scenery, Outstanding Resources, and Good Neighbors. In cooperation with Gunnison and Montrose Counties, NPS produced an eight-page booklet that presents ideas on how agencies and landowners can work together to maintain the outstanding natural, cultural, recreational, and scenic resources in the Curecanti area (Appendix B).



Another partnership tool that arose out of data analysis and alternatives development was a concept called Joint Agency Management Effort, or JAME. The idea was to evaluate resources on the basis of issues that extend beyond the NRA, while recognizing the responsibilities of all surrounding landmanagement agencies. The agencies and entities with which NPS entered into discussions included American Indian Tribes, BLM, Reclamation, CDOW, Colorado Department of Transportation (CDOT), USFS, Western, and Gunnison and Montrose Counties. The agencies decided that working cooperatively to address topics on a thematic basis would make greater sense and would be more effective to accomplish than to jointly administer geographic areas. The JAME is similar to cooperative efforts among agencies in other areas of the country that have been established to address resource management issues of mutual concern. At Curecanti, the



Multiple agencies meet in a partnership effort

agencies agreed to deal with invasive plant species (i.e., weeds) as the first JAME challenge.

COST ESTIMATES

"Estimate the costs of implementing the approaches recommended in the study."

Public Law 106-76

The costs of fully implementing the study's recommendations will be spread over many years into the future, and will depend primarily upon how many private landowners choose to work in partnership with NPS, and which tools for resource conservation are employed. This would occur only after congressional approval of this study's recommendations.

Numerous elements contribute to the total cost of implementing the proposed action. The greatest costs are expected to be incurred during the first ten years following congressional approval of this study, when NPS hopes to apply resource conservation tools to parcels of land considered most important to conserve. Many of the cost elements, such as

a *Land Protection Plan* and boundary surveys and posting, are fairly predictable. However, some elements are quite uncertain, such as the direct costs of acquiring interests in land, since these will depend on the willingness of private landowners to participate in resource conservation efforts, and property values at the time. For these estimates, assumptions have been made regarding interests that might be acquired and future average property values. Due to the many uncertainties of acquiring interests in land, the estimates are presented as a range of costs.

Another factor that would influence the long-term costs to NPS is the degree of conservation partnerships that could develop as a result of implementing the Proposed Action. Examples include gaining assistance through matching grants, the ability to access other agency programs and funding, and the participation of regional and national land trusts and other conservation organizations. Such partnership support could help reduce costs to NPS.

The estimated costs are shown in the Alternatives chapter. Staffing requirements and an implementation strategy for the Proposed Action are also presented.

STUDY OPPORTUNITIES, INTERESTS, AND ISSUES

Following the initiation of the project through the Notice of Intent (NOI), a scoping open house was held in Gunnison to educate the public about the Resource Protection Study, to identify opportunities for resource conservation, and to receive comments and project-related concerns. Written and verbal comments received in response to the scoping process highlighted a variety of issues that the study should address. This type of information sharing continued throughout the study.

Curecanti is important to the local area and its economy; and because of this, people need to work together to maintain the quality of the area around Curecanti. Some people said that the greatest danger to Curecanti and

its environs is sprawl development. Others wanted private development rights and opportunities preserved and more and better facilities on private land or within the NRA.

Many comments were in support of NPS efforts to conserve the viewshed and to provide habitat for wildlife, and for suggested methods by which resources could be better managed and conserved. Some comments were critical of NPS for the way in which it managed its campgrounds, operated its facilities, and managed wildlife.

Some respondents specified recreational uses they wanted to be allowed, as well as uses they wanted to be prohibited. But it was also suggested that the RPS should consider all environmental factors, not only recreational demand and use, and attempt to balance all interests.

Agencies that commented, especially Reclamation, wanted to maintain jurisdiction of, and adequate and continuous access to, their lands, land interests, and facilities (including dams, reservoirs, electric transmission facilities, and associated structures) to ensure safe, effective, and reliable operation and maintenance of the Aspinall Unit and the Uncompander Project. They felt that any recommendations must recognize and ensure conservation of the use of water, lands, and land interests as legally defined for those projects, and that existing agreements among the various agencies and water users must be honored and protected.

IMPACT TOPICS

Impact topics are natural, cultural, economic, social, or operational elements of the environment that could be affected by the range of alternative actions. These topics are used to focus the affected environment and the evaluation of the potential environmental consequences of the actions of each alternative on those topics. Impact topics were identified, based on legislative requirements, executive orders, topics specified in Director's Order 12 and Handbook (NPS 2001a), NPS

Management Policies 2006, agency and public concerns, and resource information specific to the Curecanti NRA.

IMPACT TOPICS CONSIDERED

The impact topics considered for evaluation are listed in Table I. This table includes key regulations or policies for each impact topic. Based on site-specific conditions, a number of the candidate impact topics were dismissed from further consideration. The rationale for dismissing each of these impact topics is provided in the text following the table. Those topics that were retained are described in more detail in the Affected Environment chapter and addressed in the Environmental Consequences chapter, where the impacts of the alternative actions on those topics are assessed in detail.

Four of the elements of the environment that are assessed in detail are traditionally done in EISs. In addition, they are required to be done by this study's enabling legislation. They are the natural, cultural, recreational, and scenic resources.

IMPACT TOPICS DISMISSED FROM FURTHER CONSIDERATION

The following impact topics were dismissed from further detailed analysis in this study. However, they will be revisited in future plans that may result from this study, such as a new or amended general management plan or implementation plan.

Floodplains

Executive Order 11988, "Floodplain Management," requires all federal agencies to avoid construction within the 100-year floodplain unless no other practicable alternative exists. Under NPS *Management Policies 2006* and Director's Order 77-2, Floodplain Management, NPS will strive to preserve floodplain values and minimize hazardous floodplain conditions.

Active floodplains on federal land within the study area are largely within the administrative area controlled by Reclamation for reservoir operations and managed by the NRA, and on other USFS, BLM, Reclamation, or CDOW lands. No federally-initiated development is proposed on any of these federal or private lands that would impact floodplains. Proposed conservation of one small floodplain and riparian area along Willow Creek could occur, but would result in a negligible to minor benefit.

Prime and Unique Farmlands

Prime farmland has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops. Unique farmland is land other than prime farmland that is used for production of specific high-value food and fiber crops such as fruits, vegetables, and nuts. At this time, there are no lands classified as prime or unique farmlands within the study area (NRCS 2004).

Air Quality

No effects to air quality would be expected as a result of actions related to this study. The air quality designation (Class II) of the area would not change as a result of the proposal.

Ecologically Critical Areas or Other Unique Natural Resources

The study area does not contain any designated ecologically critical areas, wild and scenic rivers, or other unique natural resources, as referenced in Title 40, Code of Federal Regulations, \$1508.27. Therefore, there would be no impact to ecologically critical areas or other unique resources that require evaluation.

Energy Requirements and Conservation Potential

The alternatives do not identify actions that would result in the use or conservation of fuels; therefore, this topic was dismissed.

Table I: Impact Topics Retained or Dismissed

Impact Topic	Retain or Dismiss	Primary Relevant Laws, Regulations, or Policies			
Natural Resources					
Water quality	Retain	– Clean Water Act – Executive Order 12088 – NPS <i>Management Policies 2006</i>			
Geology and paleontology	Retain	- NPS <i>Management Policies 2006</i> - NPS-77, Natural Resources Management Guidelines.			
Vegetation, including wetlands	Retain	 Clean Water Act Rivers and Harbors Act Executive Order 11990 Director's Order 77-1, Wetland Protection NPS Management Policies 2006 NPS-77, Natural Resources Management Guidelines 			
Wildlife and habitats (including fisheries)	Retain	 NPS Organic Act of 1916 as amended (16 USC) NPS Management Policies 2006 NPS-77, Natural Resources Management Guidelines 			
Special Status Species (endangered, threatened, species of concern, or other protected status)	Retain	 Endangered Species Act, and other equivalent state protective legislation NPS Management Policies 2006 NPS-77, Natural Resources Management Guidelines 			
Natural lightscape (night sky)	Retain	- NPS Management Policies 2006			
Natural soundscape	Retain	- Director's Order 47, Sound Preservation and Noise Management - NPS <i>Management Policies 2006</i>			
Floodplains	Dismiss	 Rivers and Harbors Act Executive Order 11988, Floodplain Management NPS Management Policies 2006 Special Directive 93-4, Floodplain Management, Revised Guidelines for NPS Floodplain Compliance (1993) 			
Prime and unique farmland	Dismiss	– Council on Environmental Quality (1980) memorandum on prime and unique farmlands.			
Air quality	Dismiss	 Clean Air Act NPS Management Policies 2006 NPS-77, Natural Resources Management Guidelines. 			
Ecologically critical areas or other unique natural resources	Dismiss	 Wild and Scenic Rivers Act Criteria for national natural landmarks in Title 36, Code of Federal Regulations, §62 NPS Management Policies 2006 			
Energy requirements and conservation potential	Dismiss	– NPS Management Policies 2006			

Impact Topic	Retain or Dismiss	Primary Relevant Laws, Regulations, or Policies
Cultural Resources		
Archeological resources	Retain	 National Historic Preservation Act Archeological and Historic Preservation Act Archeological Resources Protection Act Native American Graves Protection and Repatriation Act Antiquities Act of 1906 National Environmental Policy Act Title 36, Code of Federal Regulations, §800 Executive Orders 11593 and 13007 Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes Director's Order 28, Cultural Resources Management NPS Management Policies 2006 National Historic Preservation Act Archeological and Historic Preservation Act Archeological Resources Protection Act National Environmental Policy Act Title 36, Code of Federal Regulations, §800 Executive Orders 11593 and 13007 Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes Director's Order 28, Cultural Resources Management NPS Management Policies 2006
Historic districts and structures	Retain	
Cultural landscapes	Dismiss	 National Historic Preservation Act Archeological and Historic Preservation Act Archeological Resources Protection Act National Environmental Policy Act Title 36, Code of Federal Regulations, §800 Executive Orders 11593 and 13007 Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes Director's Order 28, Cultural Resources Management NPS Management Policies 2006
Museum collections	Dismiss	 Historic Sites Act of 1935 Management of Museum Properties Act of 1955 (as amended) Native American Graves Protection and Repatriation Act of 1990 Endangered Species Act of 1973, as amended Title 41, Code of Federal Regulations, §101, Federal Property Management Regulations Title 43, Code of Federal Regulations, §3, Preservation of American Antiquities and Protection of Archeological Resources Department Manual 411 DM, Managing Museum Property Director's Order #28, Cultural Resources Management NPS Management Policies 2006
Ethnographic resources	Dismiss	 Executive Order 13175, Consultation and Coordination with Indian Tribal Governments NPS Management Policies 2006
Indian trust resources	Dismiss	- Department of the Interior Secretarial Orders 3175 and 3206

Impact Topic	Retain or Dismiss	Primary Relevant Laws, Regulations, or Policies		
Visitor Use, Understanding, and Enjoyment				
Recreational opportunities	Retain	-NPS Organic Act -National Park System General Authorities Act -Reclamation law, as amended and supplemented; in particular, Section 8, Colorado River Storage Project Act; and PL 89-72, as amended by Title XXVIII of PL 102-575 -NPS Management Policies 2006		
Interpretation and educational opportunities	Retain	-NPS Organic Act -National Park System General Authorities Act -NPS <i>Management Policies 2006</i>		
Scenic Resources				
Viewsheds	Retain	-NPS Management Policies 2006		
Regional Economic and Social Characteristics				
Economics	Retain	-Council on Environmental Quality (1978) regulations for Implementing the National Environmental Policy Act -NPS <i>Management Policies 2006</i>		
Private land use within the NRA	Retain	-Director's Order #25, Land Protection -NPS Management Policies 2006		
Neighboring private lands and landowners within the proposed lands	Retain	-Director's Order #25, Land Protection -NPS Management Policies 2006		
Environmental justice	Dismiss	-Executive Order 12898		
National Park Service, Reclam	ation, and C	Other Neighboring Agency Management and Operations		
NPS management/operations	Retain	-Reclamation law, as amended and supplemented (on Reclamation lands), in particular, Section 8, Colorado River Storage Project Act; and PL 89-72, as amended by Title XXVIII of PL 102-575 -CFR 43 Parts 420, 423, 429 -Title 36, Code of Federal Regulations -NPS Organic Act -National Park System General Authorities Act -NPS Director's Orders -NPS Management Policies 2006		
Reclamation management/operations	Retain	-Reclamation law, as amended and supplemented -Reclamation Manual, Policies, Directives, and Standards -Safety of Dams Program -Dam Security Program -CFR 43 Parts 420, 423, 429		
Other agency management/operations	Retain	-Other agency laws and policies -Reclamation law, as amended and supplemented (on Reclamation lands), in particular, Section 8, Colorado River Storage Project Act; and PL 89-72, as amended by Title XXVIII of PL 102-575 -CFR 43 Parts 420, 423, 429 -1983 Reclamation/BLM Interagency Agreement		
Public health and safety	Dismiss	-NPS Management Policies 2006		
Natural or depletable resource requirements and conservation potential	Dismiss	-NPS Management Policies 2006		

Cultural Landscapes

No cultural landscapes have been identified, surveyed, or documented within Curecanti NRA or the surrounding study area; therefore, this topic was not assessed.

Museum Collections

The scope of collections for Curecanti NRA includes archeological objects collected from within the NRA; and historic objects and archival material related to early settlement, to the Denver and Rio Grande narrow gauge railroad, and to the Town of Cimarron. Data from the 2005 Collections Management Report indicate that the total number of objects and specimens number 179,975; with total archival documents of 27,571. These items are managed as provided for in Director's Order #24: NPS Museum Collections Management and the NPS Museum Handbook.

The implementation of the Proposed Action would not have a direct impact on museum collections currently managed by NPS. However, if other agency lands are transferred into the NRA as a result of the Proposed Action, the agencies involved would need to jointly determine how to approach ownership and storage of collections related to those lands in order to ensure that the integrity of each collection remains as intact as possible. Entering into an administrative agreement would be considered. Collections and any associated records that would be transferred or exchanged among agreeing federal DOI and non-DOI agencies as a result of implementation of the Proposed Action would follow the guidelines found in the DOI Departmental Manual (411) Museum Property Handbook, Volume I.

Ethnographic Resources

Ethnographic resources are defined as the natural and cultural materials, features, and places that are linked by a subject community to the traditional practices, values, beliefs, history, and/or ethnic identity of that community. In 2002, the NPS Intermountain Support Office,

in cooperation with the NRA, sought to summarize American Indian tribal affiliation within and surrounding the NRA for the study. Historical records document Ute affiliation with the region from western Colorado and into eastern Utah. The Uncompangre (or Taviwach) band also has a historic affiliation with this area. Other tribes identified with possible cultural affiliation include the Chevenne, Comanche, Hopi, Navajo, Apache, White Mesa Ute (comprised of Paiute and Ute), Paiute, and the San Juan Southern Paiute (NPS 2002a). It was concluded that the primary tribes with which the study team should confer are the Northern Ute, the Southern Ute, and the Ute Mountain Ute.

While ethnographic resources have not yet been formally evaluated for their status as traditional cultural properties or sacred sites, it is possible that potentially eligible resources could be either outside the study area or in areas already experiencing heavy visitor use or other disturbances. However, it is expected that impacts to ethnographic resources as a result of the proposal would be negligible because of protection on federal lands.

Indian Trust Resources

Secretarial Order 3175 requires that any anticipated impacts to Indian trust resources from a proposed project or action by Department of the Interior agencies be explicitly addressed in environmental documents. The federal Indian trust responsibility is a legally enforceable fiduciary obligation on the part of the United States to protect tribal lands, assets, resources, and treaty rights, and it represents a duty to carry out the mandates of federal law with respect to American Indian and Alaska Native tribes.

There are no Indian trust resources at Curecanti NRA or within the study area. The lands comprising the recreation area or the land units are not held in trust by the Secretary of the Interior for the benefit of Indians due to their status as Indians. Therefore, the project would have negligible effects on Indian trust resources, and this topic was dismissed as an impact topic.

Environmental Justice

Executive Order 12898: General Actions to Address Environmental Justice in Minority Populations and Low-Income Populations requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high and adverse human health or environmental effects of their programs and policies on minorities and lowincome populations and communities. The conservation of, or acquisition of, lands within the study area, adjacent to Curecanti NRA, is dependent upon willing and interested landowners. The alternatives do not impose upon property rights through condemnation or any other procedure. In addition, any lands acquired and included within the NRA would be maintained and interpreted by NPS for all peoples regardless of race or income level. Therefore, there would be no disproportionate health or environmental effects on minorities or low-income populations or communities.

Public Health and Safety

The conservation and potential acquisition of lands adjacent to the NRA would not result in public health and safety issues because the potential use and disposition of these lands is landowner dependent. The alternatives in this study do not involve any proposals for new access or infrastructure that could impact public health and safety.

Natural or Depletable Resource Requirements and Conservation Potential

There are no actions proposed in the alternatives that would result in a change in requirements of natural or depletable resources or conservation potential. This topic is dismissed from further analysis.