

# **Gunnison Gorge National Conservation Area & Wilderness**

**Manager Report  
FY 2006**

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## **GUNNISON GORGE NCA & WILDERNESS (CO154)**

### ***2006 Annual Manager's Report***

Prepared by Karen Tucker, GGNCA Manager

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***Total NCA Acreage:*** 62,844 acres including 17,784 acres within the Gunnison Gorge Wilderness Area

***Counties within the NCA:*** Montrose and Delta Counties

***Congressional District & Representative:*** District 3 – CO03  
Senator Wayne Allard,  
Senator Ken Salazar  
Representative John Salazar

## **Section 1**

# **Background Information on the Gunnison Gorge NCA & Wilderness**

The Gunnison Gorge NCA (originally 57,725 acres), located approximately 10 miles northeast of Montrose, Colorado, was designated in the [Black Canyon of the Gunnison National Park and Gunnison Gorge National Conservation Area Act of 1999](#) (Public Law 106-76). The [Black Canyon of the Gunnison Boundary Revision Act of 2003](#) (PL 108-78) expanded the NCA to 62,844 acres. The NCA is part of the Uncompahgre Field Office (UFO) located in Montrose.

The process for designating the National Park and NCA was a long, hard-fought battle which spanned fourteen years and involved hundreds of public, interagency, and user group meetings. Major topics of controversy included water rights, instream flow protection, wild and scenic river designation, off-highway vehicle use, BLM multiple-use management vs. National Park Service preservation, and Park expansion.

The NCA encompasses diverse landscapes including dramatic and unusual adobe badlands formations, sprawling sagebrush flats, rugged oak brush and pinyon-juniper covered slopes, and colorful canyons surrounding the spectacular Gunnison Gorge river canyon.

These landscapes support an equally diverse range of uses and activities such as wilderness whitewater boating and fishing, small and big-game hunting, off-highway vehicle, mountain biking and equestrian use, domestic sheep and livestock grazing, sightseeing, wildlife photography, hiking and backpacking.

**NCA visitation is 80,000 visitors annually.**



## **NCA Program Management**

### **Gunnison Gorge Wilderness**

The Gunnison Gorge Wilderness, located in the heart of the NCA, encompasses 17,784 acres and 14 river miles of the main Gunnison River corridor. The Wilderness is the geologic continuation of the Black Canyon of the Gunnison National Park. Like the Black Canyon, the Gorge contains massive, towering black Precambrian granite walls and spires composed of the earth's ancient "basement" rocks which date back 1.7 billions years.

Unlike the Park, the Gorge is a double canyon system, and, in addition to the narrow, inner, dark canyon, there is also a broad, spacious outer canyon composed of multi-colored sedimentary rocks that contain spectacular examples of faults, drapes, unconformities, and other geologic features not seen in the Park.

The Gunnison Gorge is famous for technical (Class III-IV) and remote rafting and kayaking experiences and outstanding Gold Medal trout fishing. The annual June stone fly hatch attracts fishers from all over the world. Colorado Division of Wildlife (CDOW) 2006 fish sampling results show the Gorge's trout biomass is 600 pounds of trout per mile; **10 times the amount required for Gold Medal Trout Fishery designation.**

Recent (2006) articles in *Fish and Stream Magazine* and *Outside Magazine* tout the Gunnison Gorge as the best trout fishery in the nation. In 2005, an illegally filmed video, entitled "*The Hatch*," about the Gorge's stone fly hatch received significant recognition and awards at the Banff and Telluride Film Festivals.



BLM cited the shows' producers for illegal trespass and operating without a permit, but publicity surrounding the film continues to bring more visitors to the Gorge.

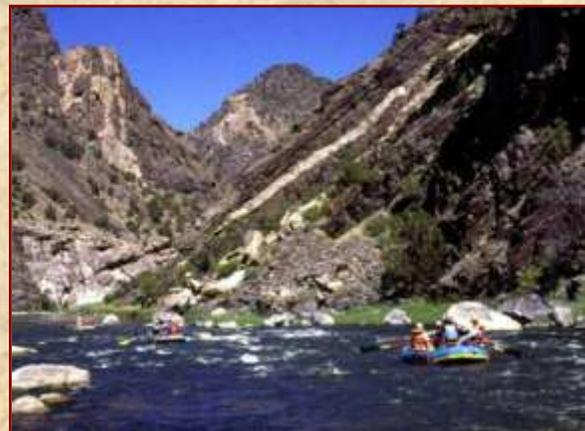
Increased national publicity, along with aggressive advertisement and promotion by commercial companies, tourism groups, and local businesses about the Gorge's extraordinary scenery and fishery is resulting in increased visitation and management concerns. Wilderness visitation has more than quadrupled in the past 15 years to over 12,000 annual visitors.

Although 12,000 visitors per year might not seem high, it's important to understand that the Gorge is a very narrow, linear and steep canyon, with limited accessibility. There are very few open areas that can safely accommodate large groups of people while providing outstanding opportunities for solitude in accordance with Wilderness mandates.

It does not take many people, either fishing from shore or boating through the canyon, to make the area appear crowded and negatively impact visitor experiences and Wilderness qualities.

In order to maintain the area's significant wilderness values, the BLM enforces strict backcountry regulations including group size limits, commercial use allocations, maximum stay lengths, designated campsites, no wood fires, and mandatory human waste pack out systems.

Under the Gunnison Gorge Resource Management Plan (RMP) the Wilderness is divided into four management zones based on desired physical, social, managerial settings and targeted user experiences and benefits. Each zone has its own carrying capacity limits for the number of visitor encounters during off-season, primary season, and special high use periods (June Stone Fly Hatch, weekends, and holidays).



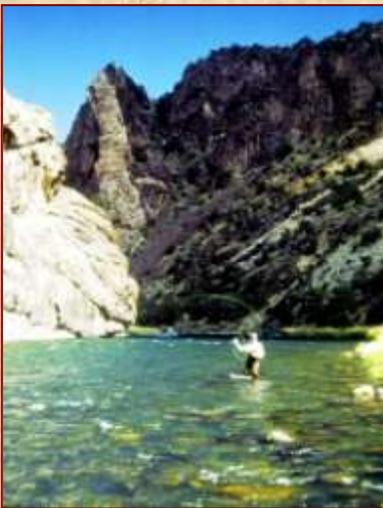
Checking for user compliance with wilderness regulations is time-consuming, difficult and very costly due to the Gorge's remoteness and difficult access trails. River patrols, conducted by seasonal river rangers, require horse pack-ins and vehicle shuttles. BLM safety regulations require a minimum of 2 river rangers per trip. In order to effectively cover the river season and provide days off, at least four river rangers (2 teams) are needed.

Total salary costs for UFO and NCA river rangers average \$80,000/yr. Their vehicle costs average \$15,000/yr. Training, per diem, shuttles, and horse pack-ins cost an average of \$25,000/yr.

In addition to river patrols, the rangers also: implement resource protection projects; coordinate volunteer opportunities; and provide visitor services including search and rescue, interpretation, and environmental education.

Beside working in the NCA, the seasonal rangers also patrol, conduct permit compliance and provide visitor services on other UFO rivers and NLCS areas including the San Miguel River, Dolores River Canyon Wilderness Study Area (WSA), Lower Gunnison River and Dominguez Canyon WSA.

### **Wilderness Fee Area**



The Gorge was one of BLM's first recre-ational fee demonstration pilot sites and has been charging fees for day and overnight Wilderness permits since 1998. A Fee Work Group, sanctioned by the Southwest Resource

Advisory Council assisted BLM in developing various scenarios for collecting fees and priorities for spending the fees.

Fees apply to all commercial and private boaters and walk-in users 16 years of age and older. The day use fee is \$3/person; camping fees are \$10/person for one night and \$15/person for two nights. Annual day use passes are \$15. Volunteers can earn a free annual pass by working a minimum of four hours on a resource protection or education project.

In 1999, the Gorge was one of 40 BLM fee sites nationwide that administered the National Recreational Use Customer Survey. Findings from the survey indicate that the majority of respondents agreed that the use fee charged in the Gorge is "about right" and was equal to the value of the recreational experience. Fee collection has averaged approximately \$25,000 annually.

Major uses of fees include: maintenance of trailhead facilities; horse pack-ins and shuttles for river patrols; vehicle and seasonal per diem costs; swift water rescue and backcountry EMT training, bio-monitoring; and control of tamarisk and other invasive species.

### **OHV Management**

The NCA legislation has special provisions for off-highway vehicle (OHV) use which allow for some cross-country vehicle use in the NCA. The 2004 RMP set new NCA travel management regulations which reduced the acreage of "open" areas by 94%; increased "limited" areas by 36% and increased "closed" areas by 7%. The Plan designated a 9,700-acre OHV Special Recreation Management Area (SRMA) containing lands both inside and adjacent to the NCA. The SRMA includes a 900-acre "open play" area within the NCA and over 100 miles of designated multiple-use trails

The NCA partners with Colorado State Parks to jointly fund an OHV trail crew through the Park's OHV Trail Program and BLM's Challenge Cost Share program.

A major workload of the crew is implementing new travel management regulations which involve extensive inventory, mapping, trail and boundary



signing, user education, and coordination with law enforcement and adjacent landowners. Signing travel management areas and routes is an on-going and costly challenge as many signs are vandalized or stolen. **The annual cost for OHV signing averages \$8-\$10,000 a year.**

Other duties include: trail maintenance, construction of information and regulation

kiosks; use and impact monitoring; development of trail maps and user education materials; visitor contacts; and training OHV riders in safety and use ethics.

### **Rangelands, Woodland & Watershed Management**

Varied topography, geology and soils in the NCA result in a range of vegetation types and plant communities. Mancos shale-derived soils on the western edge of the Area support a unique plant community dominated by several saltbush species, Salina wild rye and bottlebrush squirrel tail, and numerous endemic forbs.

To the east, increasing elevation and a transition to courser soils sustain pinyon-juniper woodlands along with pockets of galleta grass, needle and thread grass, Utah serviceberry and mountain mahogany. Riparian areas are made up of sandbar willow, reed canary grass, spike rush, and scattered box elder and hackberry.

The highest elevation areas contain mountain shrub communities dominated by Gambel's oak brush, Utah serviceberry and squaw apple. These communities transition into mountain big sagebrush parks dissected with pinyon-juniper wooded canyons.

Approximately 5,644 Animal Unit Months (AUM) of cattle and sheep grazing occur on 11 allotments throughout the NCA. New NCA grazing permits contain special stipulations requiring visual setbacks for livestock grazing activities (bedding grounds, water sties, supplemental feed sites, etc.) from recreational sites and major access routes. In 2000, the NCA added 4,700 acres along the Gunnison River formerly used for private grazing. The area is now managed as a grass bank to promote restoration and recovery.

Salinity control structures to reduce salinity in the Colorado River Basin have been developed in Elephant Skin Wash, an extensive adobe badland area located in the southernmost portion of the NCA.

The BLM has been working with science partner, the U. S. Geological Survey (USGS), for four years on numerous research projects related to Mancos shale geomorphology to determine best management practices (BMP) for Mancos areas that cover over 15,000 acres of the NCA.

Vegetation and watershed management issues in



the NCA concern weed invasions; dominance of the landscape by late seral plant communities due to absence of fire; and selenium and sediment production from surface disturbing activities and annual "monsoon" events resulting in high runoff and erosion in Mancos areas.



Cheatgrass, salt cedar, yellow toadflax and Russian knapweed threaten the river corridor, roads and trails, and lower elevation plant communities. Lack of fire has resulted in the spread of pinyon-juniper communities into the shrub and grass communities resulting in urban interface problems and wildland fire concerns.

### **Wildlife & Fisheries Management**

The NCA provides habitat for many animal species including: mule deer, elk, bighorn sheep,



mountain lions, black bear, bobcats, coyotes, beaver, red fox, ringtail cats, mink, prairie dogs, rock squirrels, weasels, cottontail rabbits, and white-tailed jackrabbits. Reptile species include: faded midget rattlesnakes, bull snakes, and collared lizards.

Larger bird species include peregrine and prairie falcons, kestrels, golden eagles, osprey, turkey vultures, great horned owls, burrowing owls, and red-tailed hawks. Gunnison sage grouse are found in the open sagebrush grassland parks on the mesa tops east of the Gorge, and chukar partridge are present within the Gorge and NCA badland areas.

BLM, Colorado Division of Wildlife (CDOW), the Habitat Partnership Program (HPP) and U.S. Fish and Wildlife Service (USFWS) coordinate on NCA wildlife habitat and species management programs. The goal is to maintain healthy native wildlife populations within the habitat's carrying capacity, and reduce conflicts between big game animals and private land interests. Work includes: riparian protection projects, sage grouse and big game habitat improvement projects, vegetation monitoring, and habitat assessment work.

The 26-mile portion of the Gunnison River, from the upstream boundary of the Black Canyon National Park to the North Fork confluence, is managed by the CDOW as a Gold Medal Trout River. The major game species include rainbow and brown trout. Non-game species, such as suckers, skulpins, and the state-sensitive round-tail chub are also present.

Concerns over whirling disease and declining rainbow trout numbers prompted a change in the Gold Medal fishing regulations. Under current regulations, all rainbow trout must be returned to the water immediately and there is a slot limit for brown trout. BLM is working with CDOW on a rainbow recovery program involving stocking a whirling disease resistant variety of trout.

The Gunnison Forks Wildlife Management Area, at the confluence of the main and North Fork of the Gunnison Rivers, is cooperatively managed by BLM and CDOW as a "Watchable Wildlife" area and day use recreation site. With the exception of the Wildlife Area and developed recreation areas, the NCA is open to the hunting of waterfowl, upland birds, and big game. Small game hunting is becoming increasingly popular in the NCA.

BLM is implementing RMP decisions that prohibit target shooting in the NCA. We also work with CDOW to monitor areas where special regulations may be needed to enhance public safety during hunting seasons.

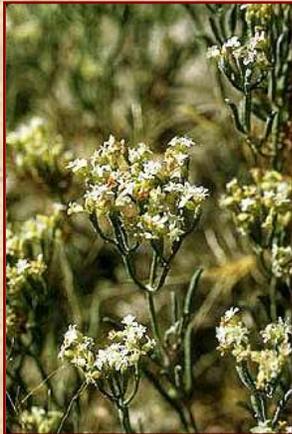
### **Sensitive Species Management**



BLM coordinates with the USFWS on habitat management plans for sensitive species in the area. The river corridor is a concentration area for

wintering bald eagles and provides nesting habitat for 3-4 pairs of peregrine falcons. DOW conducts regular monitoring of falcon eyries in both the Gorge NCA and the National Park.

River otters (state endangered species) were reintroduced in the late 1970s. Although reproduction has been documented, the size of the present population is unknown. The Gorge also serves as a resting area and refuge for thousands of ducks in mid-winter, as well as a nesting area for geese. Kit foxes (State sensitive species) live in the adobe badlands areas of Peach Valley. The sensitive big free-tailed and spotted bats inhabit the Gorge/Monument complex.



The Endangered clay-loving wild buckwheat, Threatened Uinta Basin hookless cactus, and sensitive plants, Delta lomatium, Montrose penstemmon, Rocky Mountain thistle, and Montrose bladderpod occur within and around the NCA.

The NCA plan designated three Areas of Critical Environmental Concern (ACEC): the Native Plant Community ACEC (3,785 acres of winterfat shrub steppe, juniper-grass savanna, and pinyon-juniper woodland communities); Fairview ACEC (Endangered and sensitive Mancos shale plant species); and the Gunnison Sage Grouse ACEC/Important Bird Area (IBA) (22,200 acres of sagebrush habitat). The BLM works in partnership with the Colorado Natural Heritage Program (CNHP) to maintain inventories and monitoring data on sensitive plant communities.



The Gunnison Sage Grouse ACEC/IBA contains a small population of birds managed under the 1998 Crawford Area Sage Grouse Conservation Plan.

BLM and partners work on habitat improvement, restoration, and education projects designed to increase bird numbers, public awareness and protection of this unique species.

## **Cultural Resource Management**

The NCA contains a number of paleo, prehistoric and historic sites including rock art, historic campsites, mines, trails and cabins. Some of the sites are eligible for listing in the National Register of Historic Places (NRHP).



The majority of the sites are in the Wilderness. Occupation of the area spans 13,000 years, as evidenced by the fluted points and sites of the Paleo-Indian hunters, including the later Archaic, Gateway, and proto-historic Ute traditions.

The remains of several historic cabins, located in the Ute Park area, date back to the late 1800's to early 1900's. Cultural surveys of the area are on-going as are a number of site stabilization projects such as the Howell Village project.

A major goal of the NCA plan is to provide users enhanced interpretation of the area's cultural resources to increase their awareness and understanding of the need to protect these special areas.

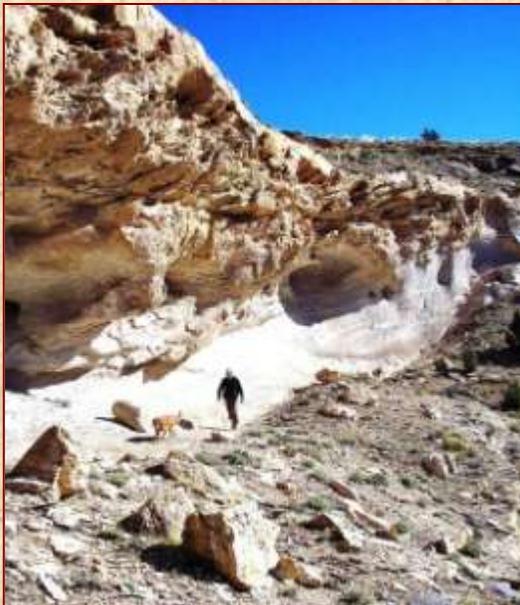
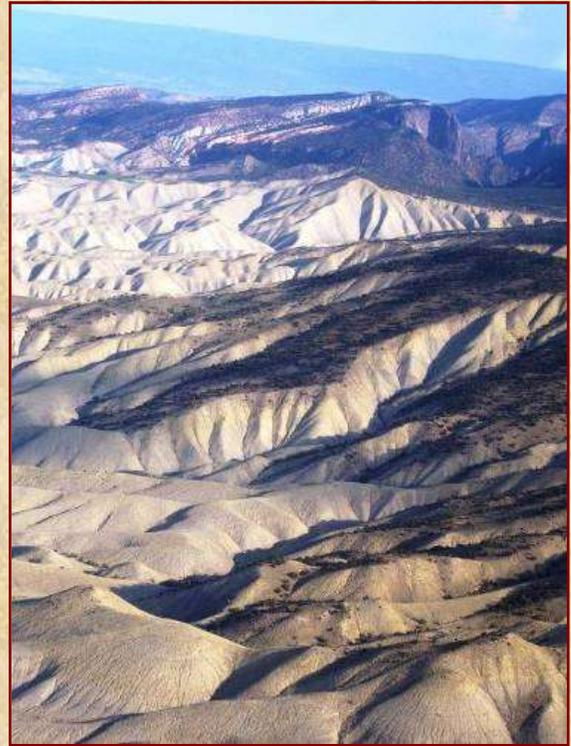
## **Lands Management**

There are approximately 1,900 acres of private inholdings with four landowners located primarily along the NCA boundary. The Wilderness boundary cherry-stems around 320 acres near Red Canyon.

In 1999, BLM negotiated a land exchange in the Gunnison Forks area, at the NCA northwestern boundary that involved approximately 5,760 acres. These acres were added to the NCA by legislation in 2003.

The acquired lands provide additional access to the river for fishing and boating; offer additional OHV, horseback riding, hiking, hunting, and camping opportunities; and contain valuable wildlife habitat areas.

BLM is currently working with The Colorado Conservation Fund on a number of Land & Water Conservation Fund (LWCF) projects for acquisition of inholdings and easements to protect scenic and sensitive resource values, provide enhanced public access and recreation, and improve resource management.



# *Gunnison Gorge RMP Development & Implementation*

***FY 2000-2004***



Immediately after designation, the BLM embarked upon a four-year Resource Management Plan (RMP) development process from 2000-2004. The Gorge plan was one of a number of DOI's "time-sensitive" plans that had very strict deadlines and intense reviews by State and Washington office staffs and other agencies.

NCA "staff" at the time consisted of only the NCA planner and manager. During the planning process, BLM held 22 focus group meetings and field trips to all the proposed management areas to acquaint the public with on-the-ground management concerns and gather input on potential alternatives and management actions.

The major issues addressed in the Plan included: wilderness protection, Wild and Scenic River eligibility and suitability, water rights, OHV management, sensitive species habitat management, cultural resource protection, livestock grazing management, facility development, commercial and private use allocation, visitor services and environmental education.

The Proposed RMP/Final EIS was published on January 23, 2004. A total of 32 protest letters were received; 25 were very similar or form letters from local OHV enthusiasts who opposed the Plan's new travel management regulations that reduced the size of NCA "open" areas from 15,000+ acres to 900 acres. The Approved Plan and Record of Decision (ROD) were published in November 2004.

## **Highlights of the NCA Plan**

### **• Travel Management**

- 32 percent closed to motorized and mechanized travel
- 67 percent limited to designated routes
- 1 percent open to cross-country travel

### **• Wild and Scenic River Study Report**

Four stream segments totaling 28.2 miles were found eligible and suitable for inclusion into the National Wild and Scenic Rivers System.

- 16 miles (main stem Gunnison River) suitable for "Wild" classification
- 6.2 miles (Red Canyon and Smith Fork Canyon tributaries) suitable for "Scenic" classification
- 6.0 miles (main stem Gunnison River) suitable for "Recreational" classification

### **• 3 Areas of Critical Environmental Concern (ACECs)**

- Gunnison Sage Grouse ACEC/Important Bird Area (22,200 acres)
- Native Plant Area ACEC & Outstanding Natural Area (3,800 acres)
- Fairview Native Plant ACEC (160 acres)

- **3 Special Recreation Management Areas (SMRAs)**

- Gunnison Gorge Wilderness (17,700 acres)
- Flat Top-Peach Valley OHV Recreation Area (9,754 acres)
- Gunnison and North Fork Rivers SRMA (13,502 acres) – designated to protect and enhance riparian and recreation resources

- **Benefits-Based Management (BBM)**

- The first BLM plan to incorporate the Benefits-Based Management (BBM) approach in a RMP-level document.
- Divides the NCA into 15 recreation management zones based on desired physical, social and managerial settings and visitor expectations.
- Management actions in zones are designed to deliver targeted high quality recreational activities and experiences which provide desired and beneficial outcomes to the individual users, local communities and environment.
- BLM partnered with Arizona State University on the development of BBM visitor surveys that were used to gather valuable visitor profile and input prior to the start of the planning process.

- **Incorporation of Interagency Management Plans, MOUs & Programs**

In accordance with NCA legislation, the RMP formalizes agreements for joint management with the following partners:

- Colorado Division of Wildlife
  - Gunnison Forks Habitat Mgt. Plan
  - Habitat Partnership Program
  - MOU for Big Horn Sheep Mgt.
  - Gold Medal Fisheries Mgt.

- Crawford Area Sage Grouse Partnership & Conservation Plan
- Tri-State Energy & Transmission Corporation MOU

- **Incorporation of Science, Best Management Practices (BMP) & Adaptive Management.**

The RMP also addresses the NCA’s legislation mandate to foster and incorporate scientific research in developing and implementing Best Management Practices for resource management, protection, rehabilitation, and use.

The RMP provides mechanisms for BLM to make “adaptive management” changes in areas where new science findings identify a need to modify existing practices to better meet landscape health and other resource objectives. The primary adaptive management projects, under-taken with a variety of partners, are shown in the table below.

<u><b>ADAPTIVE MANAGEMENT PROJECTS</b></u>
❖ <i>USGS Mancos Shale Landscape Project – USGS, National Science &amp; Technology Center</i>
❖ <i>Benefits-Based Management</i>
❖ <i>Tamarisk/Noxious Weed Eradication Program – Delta County, Tamarisk Coalition &amp; Denver Botanic Gardens</i>
❖ <i>Colorado Salinity/Selenium Task Force – Colorado Water Conservation Board, USGS</i>
❖ <i>Colorado State Parks Trails &amp; OHV Management Program</i>
❖ <i>Colorado Natural Heritage Program</i>
❖ <i>DOW Whirling Disease Reduction Program</i>
❖ <i>DOW Habitat Partnership Program</i>
❖ <i>Crawford Sage Grouse Conservation Plan</i>

## Section 2

### 1. Physical Condition of Cultural and Natural Resources

*a. What percent of the NCA has been assessed using the fundamentals of land health & what percent is meeting the standards?*



#### **2001 Land Health Assessment Gunnison Gorge Area**

The 2001 land health assessment evaluated nearly 110,000 acres of public lands in the Gunnison Gorge Landscape Health Area, which included the entire NCA (62,844 acres) and approximately 47,100 acres of public lands adjacent to the NCA.

The evaluation resulted in a determination of the acreage meeting the Rangeland Health Standards, acreage not meeting, and the nature and location of the problems on the landscape. The table provides a summary of acres meeting or not meeting specific standards.

#### **Land Health Problems**

**Standard 1:** Nearly all of the area was meeting this standard. Surrogate indicators of soil erosion, low plant basal cover and high levels of bare ground were the common reason for defining areas meeting the soil standard with problems. Additionally, in some isolated areas erosionally active gullies occur.

**Standard 2 – Riparian Areas:** Riparian areas along about one-third of the perennial and intermittent streams meet this standard with no significant hydrologic or vegetation problems.

The majority of riparian areas were rated as functioning at risk—meeting Standard 2 with some problems. Most of the problems are minor and relate to vegetation community changes and minor channel changes resulting mainly from flow alteration from dams or irrigation return flow. The Upper Gunnison River makes up the majority of riparian miles functioning at risk.

Standard	Meeting	Meeting With Problem Areas	Not Meeting	Not Known
Standard 1- Soils (acres)	77,861	23,181	48	8,098
Standard 2- Riparian (miles)	14.8	24.7	0	0.3
Standard 3- Healthy Communities (acres)	47,348	48,734	5,008	8,098
Standard 4- T&E Species (acres)	84,692	26,433	0	0
Standard 5- Water Quality (miles)	74.7	5.0	4.4	0

**Standard 3 - Vegetation:** The great majority of the area meets this standard, or meets the standard with isolated problems. Where problems occur, they are varied in nature and include lack of perennial grasses, (especially cool season grasses) and forbs, extensive invasions by nonnative species (mainly cheatgrass), scattered noxious weed infestations, low shrub vigor in some areas, and localized problems with the vegetation age-class diversity, and landscape mosaic.



**Standard 4 - Threatened & Endangered Species (T&E):** The majority of the Gunnison Gorge area meets this standard. There are some areas with problems, such as the late seral stage conditions, lack of perennial forbs, and poor shrub vigor common to so much of the Gunnison sage grouse range. Mancos shale areas pose concerns with effects of recreation use and grazing on sensitive communities. Some problems, such as habitat fragmentation of kit fox habitat and alterations of stream flows are beyond the scope of BLM's management authority.

**Standard 5 – Water Quality:** Most of the streams and rivers in the Gunnison Gorge area meet this standard. Problem identified include unstable channel and poor watershed condition in some areas, and the Smith Fork for high temperatures and dissolved solids and lack of aquatic life.

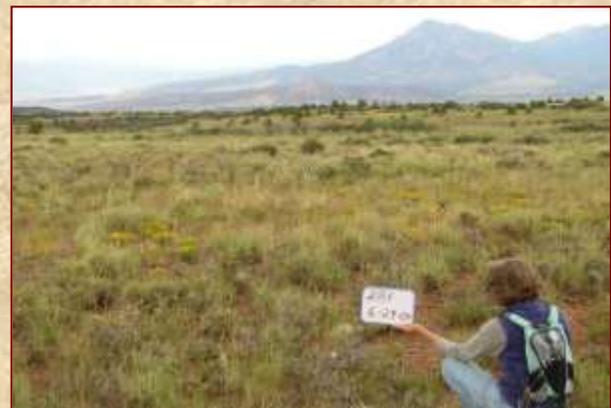
***b. Describe the accomplishments towards meeting standards.***

In 2006, NCA and UFO specialists, recreation and biological seasonal employees, partners, and volunteers were involved in numerous projects, planning efforts, or other actions designed to: meet NCA legislative mandates; comply with Bureau strategies and policies; and implement RMP decisions and management objectives for public land use, resource protection and visitor services.



These projects, which included invasive plant and noxious weed control; sage grouse guzzlers; fire site rehabilitation; implementing grazing utilization limits to protect sage grouse nesting habitat; endangered and sensitive plant species monitoring; allotment inspections; wilderness permit compliance checks; orphan well capping; campsite and fish surveys; and stewardship training for OHV riders, all contributed towards meeting standards.

**Our primary 2006 accomplishments are highlighted in the following table.**



Collecting wildlife habitat monitoring data.

# GUNNISON GORGE NCA - CO154

## FY 2006 Landscape Health Improvement Projects

PROJECT	PROGRAM	WORK COMPLETED	COMMENTS
<b><i>Invasive Plant and Noxious Weed Inventories</i></b>			
Riparian Areas	1040	55 acres	State Dept of Corrections Program
Gunnison River Riparian Areas	1020	2,000 acres	Delta County Weeds & BLM Partnership
Fairview ACEC	1150	180 acres	Colorado Natural Heritage Program Report
Wilderness campsites	1210	5 acres	BLM ecologist & river rangers
NCA Upland Areas	1020	4,780 acres	Delta County Weeds & BLM Partnership
<b><i>Invasive Plant and Noxious Weed Treatments</i></b>			
Fruitland Mesa & East Side Uplands, knapweed & thistle	1020	10 acres	Delta County Weeds and BLM Partnership
River corridor thistle, knapweed, toadflax	1040	25 acres	BLM (BPS), Gorge user fees & river rangers
Gunnison River tamarisk	1020	11 acres	Delta County Weeds and BLM Partnership
Gunnison River knapweed	1020	15 acres	Delta County Weeds and BLM Partnership
Peach Valley Uplands, halogeton & knapweed	1020	16 acres	Delta County Weeds and BLM Partnership
Wilderness tamarisk	1210	5 acres	Gunnison Gorge Tammy Whackers & NPS staff
Gunnison Forks, trailheads	1220	5 acres	BLM maintenance
Fruitland Wildfire cheatgrass	1020	500 acres	BLM staff
<b><i>Weed Treatment Evaluations</i></b>			
Fruitland Mesa	1020	30 acres	BLM ecologist
Gunnison River/North Fork SRMA -river recreation sites	1040	9 acres	BLM ecologist & river rangers
Wilderness campsites	1210	5 acres	BLM ecologist & river rangers
<b><i>Landscape Health Monitoring &amp; Recovery Projects</i></b>			
Fruitland Mesa Fire seeding	1020	200 acres	Habitat Partnership Project
Falcon Road seeding	1232	2 acres	Funded by Gorge user fees

# GUNNISON GORGE NCA - CO154

## FY 2006 Landscape Health Improvement Projects

PROJECT	PROGRAM	WORK COMPLETED	COMMENTS
<b><i>Wildlife Habitat Landscape Health Monitoring</i></b>			
Native Plant ACEC, Peach Valley enclosure, East Side	1110	16,000 acres	Colorado Natural Heritage Program partnership
<b><i>Fisheries Protection &amp; Monitoring</i></b>			
Native Fish survey (below confluence)	1220	4 miles	River Rangers, NCA staff & DOW partnership
Whirling Disease Research	1220	2 studies	River Rangers, NCA staff & DOW partnership
Gold Medal Fishery annual survey	1220	4 day study	River Rangers, NCA staff & DOW partnership
Joint fishing compliance patrols with DOW	1210	6 river patrols	River Rangers & DOW
<b><i>Sensitive Species Protection &amp; Recovery Projects</i></b>			
Fruitland Mesa sage grouse habitat recovery	1110, 1150	500 acres	Gunnison Sage Grouse Partnership
Black Ridge sage grouse guzzlers & drinkers	1110	7 project maintained	Gunnison Sage Grouse Partnership
Gunnison Sage grouse habitat monitoring for livestock permit renewal	1150	1 population	Gunnison Sage Grouse Partnership
Sensitive Plant Monitoring Plan	1110	9 populations	Co-funded by State of Colorado Natural Heritage Program Report
USGS clay loving buckwheat paired soil site analysis project	1150	1 project	USGS Mancos Shale Landscape Research partnership
<b><i>Riparian Improvement Projects</i></b>			
CO2 Gas well reclamation/reseeding along lower river corridor	1040	1 project	Co-funded by State of Colorado Orphan Well program & BLM
<b><i>Rangeland Management</i></b>			
Allotment inspections & monitoring for conformance with LHAs.	1020	6	Black Ridge, Brush Ridge, Gould Reservoir, Dead Horse, Green Mtn, Iron Canyon, Poison Spring allotments
Relocation of sheep bed grounds to protect recreation sites & visual resources	1220	4 projects	Allen, Hotchkiss, Leonard & Nicolas allotments

# GUNNISON GORGE NCA - CO154

## FY 2006 Landscape Health Improvement Projects

PROJECT	PROGRAM	WORK COMPLETED	COMMENTS
<b><i>Hydrologic Monitoring</i></b>			
USGS Mancos project water & soils monitoring	1040	4 projects, 80 acres	Rain gages, sediment, photo plots
Water quality monitoring of Gunnison mainstem and major tributaries	1010	water quality monitoring: chemical, physical, biological, and aquatic invertebrates	Meets Colorado Water Quality Designations, Classifications and Standards
Monthly Climate Monitoring and Forecasting	1010	12 Climate Summaries	Prepared by UFO staff to facilitate management actions where climatic conditions are a factor (e.g grazing and drought)
Close Range Photographic Monitoring	1010	3 sites – Mancos shale badlands	BLM National Science & Technology Center Monitoring technique to assess hillslope erosion processes and the effects of surface disturbance.
<b><i>Wilderness Protection, Monitoring &amp; Permit Administration</i></b>			
Wilderness Monitoring	1210	17,700 acres	Foot, boat, vehicle, aerial monitoring
Wilderness patrols & campsite cleanups	1210, 1220	76 river patrols	Seasonal River Rangers
Trailhead & trail patrols	1210, 1220	165 patrols	River Rangers, LEO, visitor services, staff
Wilderness visitor contacts	1210, 1220	5,400 visitors	River Rangers, LEO, visitor services, staff
Commercial permits SRP review for compliance with wilderness regulations & Land Health Standards.	1210, 1220	22 permits	NCA staff
SRP field compliance checks	1210, 1220	22 permits	River Rangers, LEO, visitor services, staff
Gunnison Gorge non-commercial permit administration & compliance	1232	4,500 permits = 8,300 visitors	River Rangers, LEO, visitor services, staff
Closure of OHV route to protect wilderness & fishery	1210, 1220	1 project	River Rangers & Gunnison school partners
Wilderness campsite inventories	1210, 1220	30+ sites	BLM ecologist & river rangers

# GUNNISON GORGE NCA - CO154

## FY 2006 Landscape Health Improvement Projects

PROJECT	PROGRAM	WORK COMPLETED	COMMENTS
<b><i>Recreation Management, Operations &amp; Visitor Services</i></b>			
Maintain recreation facilities, dispersed campsites, trailheads, to control visitor impacts/resource damage	1220, 1652	9 developed sites, 30+ dispersed recreation sites	1 maintenance person shared with UFO, seasonals
Evaluate SRMAs for facility, signing, maintenance needs.	1220	47,000 acres	NCA staff
Monitor & sign travel management areas	1770, 1652	5,000 acres	OHV crew funded jointly by BLM & Colorado State Parks
Trail maintenance to control erosion, replace signs, etc.	1770, 1652	138 miles	OHV crew funded jointly by BLM & Colorado State Parks
OHV visitor contacts & compliance checks	1770	5,875 contacts	OHV crew funded jointly by BLM & Colorado State Parks
<b><i>Lands &amp; Mineral Management</i></b>			
Right of ways processed & inspected to ensure sensitive area protection & reduce resource impacts.	1430, 1492	11 projects	All in compliance.
Flat Top Communications Plan	1492	1 plan	Completed.
Orphan well capping & rehab	1310	3 sites	State of Colorado partners.
<b><i>Cultural Site Protection</i></b>			
Gunnison Rock Art site study	1050	1 project	Recommendations for further study, protection, interpretation.
Non-Sec 106 inventories	1050	250 acres	Tri-State, OHV trails, Ute Park
Howell Village stabilization	1050	1 project	Successful completion.
<b><i>Major Public Outreach &amp; Environmental Education Projects</i></b>			
Peach Valley Recreation Area Dedication Event	1220, 1770	5 projects	Safe riding demonstrations, "Stay the Trail" programs, education displays, guided hikes, mountain bike, ATV, motorcycle rides.
Mancos Shale brochure	1150	1 project	Chicago Botanical Garden internship
Bird Check list for NCA	1110	1 project	Chicago Botanical Garden internship

# GUNNISON GORGE NCA - CO154

## FY 2006 Landscape Health Improvement Projects

PROJECT	PROGRAM	WORK COMPLETED	COMMENTS
<b><i>Major Public Outreach &amp; Environmental Education Projects (cont'd)</i></b>			
Gunnison Sage Grouse study outreach w/ partners	1150	1 project	Gunnison Sage Grouse Partnership
NCA entrance & recreation Area signs	1220	2 projects	Partnership with Delta County Tourism Cabinet
River Ranger education & river cleanup trips.	1210, 1220	14 trips	Partnerships with Delta County, school districts, Partners, Western State College, tourism groups, etc.
Nat. Rivers Week - North Fk River Awareness Event	1220	1 event	200+ participants
Gunnison River Alliance Friends Group	1220	1 project	Organizational meetings, grant writing, website & mailing list development
Chukar Trail Work & Ute Toilet relocation project	1232	2 projects	River Rangers & Volunteers
Gunnison Tammy Whacker projects	1232	8 projects	Volunteers & Delta County
Motorcycle & ATV certification & user ethics training	1770	120 students	20 classes completed
CO2 well cleanup - media coverage	1310	1 project	Partnership with State
Cocker Kids Foundation Earth Day cleanup	1220	1 project	Kids-at-risk group
Trash dumping news release	1220	1 project	Good coverage & response
Cross-training with NPS front desk & backcountry visitor service seasonals & rangers	1220	2 trainings	River Rangers & NPS interpretive specialists & rangers
Benefits Based Mgt. float with Delta County tourism groups to discuss marketing strategies & issues.	1220	1 event	River Rangers, BLM State office Recreation Planner & tourism partners
Delta Commissioners float to provide updates & evaluate progress on RMP implementation.	1220	1 event	River Rangers, NCA staff, UFO manager
Float with BLM LEO, Delta Montrose County Sheriffs to discuss NCA regulations, public safety, SAR, etc.	1210, 1220	1 event	River Rangers, LEO & law enforcement partners
President Jimmy Carter's Wilderness Float	1210, 1630	3 day trip	BLM provided boat support & LEO to augment Secret Service protection

# GUNNISON GORGE NCA - CO154

## FY 2006 Landscape Health Improvement Projects

PROJECT	PROGRAM	WORK COMPLETED	COMMENTS
<b><i>Law Enforcement Patrols, Enforcement &amp; Investigations</i></b>			
<b><i>NCA patrols</i></b>			
Recreation/Wilderness, OHV areas, trailheads, North Fork. SRMA, jeep trails, cultural sites, etc.	1220	83 patrols	Monitor recreation sites, sign & facilities, permit & wilderness compliance, OHV vehicle checks, visitor contacts & education
Wildlife, lands, T & E species, minerals, etc.	1110, 1150,	24 patrols	Monitor sensitive species sites (ACECs), hunter contacts, boundary patrols
<b><i>NCA investigations</i></b>			
Recreation - Wilderness, OHV areas, trailheads	1220	51 investigations	Vandalism, theft of fees, SRP & OHV registration violations, travel management violations
Other Investigations	1630, 1430, 2810	10 investigations	Trespass, game violations, trash & hazardous waste dumping, littering, fireworks.
<b><i>Emergency Responses</i></b>	1220	6 incidents	Horse rescue, boater rescues, etc.
<b><i>Drug Enforcement</i></b>	1630	8	Possession charges, fines, etc.

### ***c. Indication of overall natural resource and heritage condition trend.***

We have records for 15 long-term, upland vegetation studies in the NCA that date back to the 1960-1970s. The results of these studies show no clear trend in resource condition. These studies were originally established to monitor range conditions and do not capture much of the natural resource information that is needed to address current issues.

Visual assessments of upland vegetation trend tend to support the observation that upland vegetation is not clearly improving or declining across the NCA. The recent drought has caused declines in some areas, with actual loss of desirable plants occurring.

Weeds continue to be a problem in the NCA, not only noxious weeds in isolated areas, but large areas are also infested with cheatgrass and other annual, nonnative species. Shrub vigor is low in some areas, a combination of drought and heavy browsing—primarily by domestic sheep. These problems have been present for the past few decades, and have diminished in some areas, while increasing in others.

Riparian area condition appears to be stable with some areas improving due to camping regulations limiting impacts, and with removal of tamarisk along much of the Upper Gunnison River. Much of the current condition is due to the river flow regime that supports a thick growth of the naturalized canary reed grass along the riverbanks.

*d. What has been done to improve natural baseline data?*

Nineteen new monitoring sites have been established in the NCA as part of our implementation of Land Health Standards.

These studies are designed to capture an array of information that will address broader ecological, vegetation, soils and wildlife habitat concerns. The studies have only been read once, so do not yet provide an indication of natural resource trend.

Additionally, established water quality monitoring sites are located on the Gunnison River main stem and major tributaries. Chemical, physical, and biological water quality parameters are assessed including aquatic macro-invertebrates. The highest quality waters in the NCA include the Gunnison River from the NPS boundary to the confluence with the North Fork of the Gunnison River.

Ten new riparian monitoring sites have been established to track changes in the riparian plant community and river bank. These have also been read only once. Campsite monitoring transects have been established and reread twice to track user impacts to soil and vegetation. This information is being used to help guide campsite management, type, closures, and visitor numbers.

The USGS has established numerous vegetation and cryptogam survey plots on the Mancos shale and in Native Plant Management ACEC. They have analyzed this data to improve our understanding of these plant communities, effects of surface disturbance to the vegetation, and links between plant and cryptogam communities.

The UFO, in coordination with NSTC, is piloting a potentially effective monitoring technique using close range photography to assess hill slope erosion processes, and the effects of surface disturbance.

The results of these efforts will be used to develop Best Management Practices (BMP) for managing surface disturbing activities on soils derived from Mancos shale, primarily aimed at reducing soil erosion, and yields of sediment, salinity and selenium to the Colorado River system.



Early results of prescribed fire on NCA east side.



Results of fire & seeding 3 years later.

## 2. Condition of Recreation Facilities, Roads and Trails

### FACILITIES

Facilities in the NCA are maintained by permanent and seasonal staffs. The NCA shares one permanent maintenance position with the UFO (900,000 acres). Annual maintenance includes painting, repair of tables, roofs, sign kiosks, fences, graveling of parking areas, floor and wall resurfacing, vault pumping, large-scale weed treatments, etc.

In addition to annual maintenance, many areas require weekly and sometimes daily maintenance to keep them in acceptable condition for public use. Vandalism to signs, restrooms, fences, etc., is a chronic and costly NCA maintenance problem.

Annual NCA operations and maintenance funds are not adequate to cover all the work needed to repair vandalized sites, address public health and safety concerns, and keep our facilities in good day-to-day working condition that meet visitor expectations for high quality recreation sites.

**11 Toilets (7 vaults, 1 compost toilet, 3 pit toilets)** These facilities require a *minimum* of weekly cleaning. During the summer river season and OHV high-use periods (spring & fall), the toilets require almost daily cleaning. Annual vault pumping costs for the 6 more accessible vaults average \$ **3,000/yr.**



Annual costs to clean out the remote Chukar Trailhead composting and back-country vault toilets, which require packing out barrels of waste by horses, average \$**4,000/yr.**



Vandalism to these units (bullet holes in risers, roofs & walls, graffiti, theft of solar panels) is common (4-6 occurrences/yr) and requires immediate attention and additional funds.

In a recent inspection, the Chukar composting toilet was determined to need replacement because of confined space problems. We are currently working with BLM engineers on a new toilet vault that will meet public health and safety standards.

**1 Large-capacity (3,600 gallons) sanitation dump station** requires additional maintenance throughout the season due to high use and problems with the pump. Costs to pump the unit average \$**1,200/yr.**

**4 Major Wilderness Trailheads** (picnic tables, cabanas, sign kiosks, fences, graveled parking area with barricades) - Areas are treated 2-3 times throughout the season for weed control. Vandalism (damage to tables and cabanas, tipped over or cut fences, trash dumping, graffiti, bullet holes, etc.) is very common (10-12 occurrences/yr) and costly.

**4 Major NCA Entrance Sites** (fencing, sign kiosks, graveled parking areas) - These sites with large portal signs are constant vandalism targets. All of our painted wooden portal signs were replaced with ½-inch thick steel signs and decals that hold up better to repeated vandalism and are less costly to repair.

### **Falcon Road OHV Staging and Training Area**

**Area** (extensive fencing, sign kiosks, graveled parking areas with barricades, picnic tables, cabanas, 2 loading ramps, 2 toilets). This facility receives heavy use and requires year-round maintenance and monitoring by recreation staff and LEO. Underage drinking and drug parties are common and leave the area trashed with fire rings, broken bottles, etc.



Typical Flat Top cleanup

**Flat Top OHV Area** (large parking area, signs, and restroom) – This site does not have a lot of facilities, but it is one of our heaviest used areas and requires weekly maintenance attention to clean up the aftermath of busy weekends, large drinking parties and bonfires. Local partiers bring in huge piles of wooden pallets, tires, and other household trash to burn. Our maintenance person is constantly hauling these items away to the dump and cleaning up the site.

### **Gunnison Forks Watchable Wildlife Area & Day Use Recreation Site**

(picnic tables, cabanas, sign kiosks, graveled parking with barricades, boat launch, 2 restrooms, sanitation dump station) - This very popular area requires additional LEO and maintenance attention due to increased year-round use and impacts from illegal camping and OHV use, and vandalism. Weed control and mowing on the site is extensive, requiring 4-5 treatments annually to control re-invasion of weeds from surrounding private lands.

### **Other High-Maintenance NCA Areas**

In addition to large, developed sites, the NCA has over 60 dispersed campsites, trailheads, overlooks, and other high-use areas with few (signs, parking, etc.) or no facilities which require constant monitoring and maintenance.

The adobe badland areas provide numerous remote sites for parties and trash dump sites. Dumpsites include large amounts of household trash and appliances (refrigerators, stoves, etc.); construction waste (carpets, siding, roofing); mountains of tires (50 per incident); hazardous materials (oil, antifreeze, paint, herbicides); and animal carcasses (sheep, horses, illegally poached wildlife) which local ranchers and hunters discard along access roads and at recreation sites.

In one incident, 65 dead ewes and lambs (*photo*) were dropped at a popular trailhead, resulting in a costly, difficult cleanup. The



NCA averages 1-2 large trash dump sites a week that require immediate LEO investigation and maintenance attention due to public health and safety concerns.

Another huge maintenance problem in the adobes is caused by target shooters who leave behind acres

of land and hillsides littered with the shattered glass bottles, twisted beer cans, broken clay pigeons, spent shells, and the remains of larger targets such as TVs, computers, furniture, and appliances.

We are currently implementing RMP decisions that close the NCA to target shooting, but many users choose to ignore the new regulations.

## **ROADS & TRAILS**

NCA access roads are a mixture of dirt and gravel county roads; partially graveled high clearance and four-wheel drive BLM roads; primitive ATV routes and single track motorcycle trails; and steep and rocky hiking trails. These diverse routes require varying levels of maintenance to meet management objectives for different types of recreational activities and experience, permittee access, and BLM administration needs.

Certain roads are scheduled for annual maintenance while others are maintained only when they have been impacted by heavy runoff and flooding, or irresponsible motorized use that



creates ruts or damages to water bars. Some popular motorcycle, ATV, and mountain bike routes require frequent monitoring and

maintenance by the OHV crew to repair water bars and arroyo crossings after rain events or to remove evidence of switchback cutting, rutting, and illegal off-route use.

Summer monsoons are very common in the NCA. We usually average 2-3 major events per year that require emergency maintenance on primary access roads and popular trails. This year's monsoons damaged Wilderness access roads, stranded visitors, knocked out trail bridges in the OHV area, and blew out a major NCA access road, shutting down use for a week in a very popular area. Costs for repairing this damage are not covered in our annual budget.

Illegal routes off of signed designated roads, pushed in by hunters, antler collectors, unauthorized moss rock collectors, and OHV users are a chronic problem in the NCA. This year, a formerly closed and reclaimed spur route leading into the Wilderness was re-opened by four-wheel drive users during last fall's

hunting season. The route was repaired and a barricade put in place but scars are still evident and may entice more use.



Adobe badland areas consist of wide open, barren or sparsely vegetated hill slopes easily accessible to OHV users due to their close

proximity to county roads and expanding housing developments. Illegal trails are highly visible and difficult to eradicate given the nature of the Mancos soil, lack of vegetative cover, and lack of trees, rocks, or other large topographic features that can be used as natural barricades.

In addition to OHV tracks, the adobes are also criss-crossed with miles of sheep trails. Sheep routes are often mistaken for OHV routes. We have used signs, barricades, and fences to address these problems. Our maintenance worker and Delta Corrections Center (DCC) and OHV crews spend many hours trying to rake out illegal tracks.

## **SIGNS**

We often hear that all BLM needs to do to fix problems with illegal OHV use, trash dumping, underage drinking parties, etc. is to just "put up a sign." It sounds easy, but in reality, dealing with signs is one of the hardest, most time consuming, and costly jobs we do in the NCA.

Over the past two years, the OHV crew installed more than 350 travel management signs designating routes and open and closed areas. More than half of them have been damaged (shot, driven over, or stolen). Average cost of these narrow, flexible carsonite signs (including installation) is \$50/sign. Replacing the same sign 2-3 times per year is costly, and those are the least expensive of the signs we use.

Temporary sign at Wilderness trailhead.



Chronic vandalism to large wooden regulatory and informational signs has forced us to replace the majority of NCA directional signs with ½-inch plate steel signs with decals. Although steel signs hold up better and longer than wood signs, they are neither cheap nor immune to vandalism, armor-piercing bullets, AK-47s, winches and other heavy artillery. Annual costs for these signs average \$8,000-\$10,000/year, not including LEO time spent investigating vandalism incidents.

This year, we installed highway directional signs and new information and interpretive signs at our new Falcon Road entrance site. We need to upgrade signs at four major trailhead areas to update maps and visitor information. The total price of an average-size embedded fiberglass sign (including development, shipping, fabrication, and installation) is about \$1,500.

In addition to vandalism, larger information signs also suffer damage from the elements (wind, sun, water damage, etc.) that greatly detract from their appearance and effectiveness.

It is difficult to predict which signs will need replacing, and maintaining large inventories of back-up signs is impractical and costly. Ordering signs takes a minimum of 2-4 months, often longer. Early cut-off dates and heavy workloads at the BLM sign shop and in the procurement process add to the delay in getting signs back on the ground in a timely manner.

***Our current budget and chronic vandalism problems are major limiting factors to our ability to meet our goals for high quality visitor information and interpretive signs in the NCA.***

## **Deferred Maintenance**

### **Gunnison Forks Day Use Area -**

Upgrades made to this popular day use site to meet ADA requirements, address public safety and resource protection concerns, and enhance boating and fishing access included:

- Replaced a single vault toilet with double
- Replaced 2 picnic tables and grills with accessible units
- Re-surfaced a walking path
- Enlarged an existing parking area to accommodate trailers and recreational vehicles
- Installed a new gravel boat ramp
- Installed new sign kiosk
- Re-routed a culvert to stop flooding of the sanitation dump station
- Rehabbed old parking areas
- Installed rock barricades to stop parking in rehabbed areas

### **NCA Portal Signs - 4**

wooden signs were replaced with ½-inch plate steel with decals to reduce vandalism and theft.



## **New Construction Projects Completed in FY2006**

**Peach Valley Recreation Site** – Construction included: picnic tables and cabanas, restrooms, informational kiosks, vehicle and trailer parking, loading ramps, and an OHV training area. The site was jointly funded by congressional appropriations and OHV grants from the Colorado State Park OHV registration program.



The mulch around the cabanas is treated and chopped tamarisk from the nearby arroyo. We saved money by not having to haul the chips away to the dump. The mulch works effectively to define use areas and reduce dust and mud on the site.

**Falcon Road NCA Entrance Area** – Project included: three-panel information kiosk, graveled parking area, fencing and rehabilitation of approximately 3 acres formerly used as an OHV staging area. The Falcon Road entrance site receives the heaviest amount of visitor traffic in the NCA.



**Flat Top Toilet** – A single vault toilet was installed at the popular Flat Top OHV Area, located adjacent to the NCA. This toilet was originally at the Gunnison Forks. New construction there replaced the toilet with a double vault unit. The contract included moving the old toilet to Flat Top where it was needed to help reduce sanitation problems in that high-use recreation area.

### 3. Environmental Education and Resource Interpretation

*a. Contact with visiting public and local public through printed media, web, etc.*

**NCA visitation is 80,000 visitors/year.**

The majority of visitor contacts are made in the field by BLM law enforcement personnel, non-LEO seasonal river rangers (4-5 positions depending on budget; shared with UFO), 1 visitor services person, and 1 maintenance personnel (shared with UFO). About 20% of visitors come into the Montrose Public Lands Center where front desk personnel working jointly for BLM, USFS, and NPS assist them.

The NCA manager, NCA recreation planner, UFO recreation planner and seasonal staff spend many hours talking to visitors on the phone and answering email and letter inquiries for information and brochures. The majority of contacts involve questions about Gunnison Gorge Wilderness boating and fishing, camping regulations, and OHV recreation areas and trails.

Our NCA website <http://www.co.blm.gov/ggnca/index.htm> contains user information, regulations, maps, photos, commercial outfitter lists, and BLM contacts.



#### **NCA information brochures include:**

- *Gunnison Gorge Visitor Guide* - due for an update incorporating new regulations.
- *Gunnison Gorge Day Use and Camping Fees Information*
- *Peach Valley Recreation Area – trail system map* - (in progress)
- *BLM & NPS Visitor Guide* -- Since 2002, BLM/NPS have partnered on an annual newspaper which includes maps, visitor information and regulations for the Black Canyon National Park, Curecanti National Recreation Area, and the Gunnison Gorge NCA. Circulation (200,000 copies/yr) of the guide includes all NPS entrance sites and BLM trailheads, local tourism offices, and local restaurants and motels.

#### **Additional printed materials available to the public:**

- *USGS Geological Map of the NCA* - wall-sized poster that BLM makes available to schools and interested public.
- *USGS Geologic Story of the Gunnison Gorge NCA* - 40 page pamphlet; detailed info on geology that is used as a text book in local schools and colleges.



- *USGS Geology of the NCA* – brochure contains info on cultural, geologic, wildlife and plant resources.

- *Adobe Badlands Brochure* - BLM information about Mancos shale soils, plant and animal communities, and how visitors can help protect them.

***b. Describe participation in your interpretative program.***

We currently do not have a formal interpretive program for the NCA. Our NCA table of organization includes an environmental education/ interpretation position; however, base budget funding is not adequate to fund this position. Our annual budget submissions to develop an interpretive program through one-year flexible funds have not been funded.

In the absence of an interpretive plan and reliably funded program, the NCA and UFO staffs respond the best they can to local demands from visitors, schools and user groups for field



trips, interpretation materials, environmental education programs, etc.

We recently filled an UFO

archeologist position vacancy with a person that has interpretive program background. Funding in the NCA cultural program, however, only covers 2 work months of that person’s time for NCA work.

In addition to working on NCA cultural inventories and site protection projects, the archeologist will be developing a “Project Archeology” program for the NCA. We expect that by this time next year, we will be reporting progress on that important interpretive task.

***c. What are the main messages being delivered?***

At this time, the main message we are delivering to the public is that things have changed on the ground in the NCA and that it is a very special place that with rules and restrictions prohibiting target shooting, vandalizing facilities, engaging in underage drinking and drug parties, dumping trash, or poaching wildlife).

Many residents and new people moving here believe that BLM lands are places “where anything goes.”

The NCA’s location so close to the fast-growing communities of Montrose and Delta invites urban interface issues.



Vandalism of Interpretive Sign

Trying to provide interpretive information through signing is just not feasible at present. We first need to get all our regulatory signs installed at primary access areas and reduce current levels of vandalism before we spend more taxpayer dollars on signs that will simply not survive more than a month or two.

The good news is that, despite chronic sign problems, we are getting out messages of stewardship in a variety of effective ways described in following sections of this report.

The methods we use include increasing visitor contacts; working with schools and friends groups; involving user and interest groups in cooperative conservation projects; and including stewardship messages in OHV training classes.

*d. Describe environmental education offered offsite or onsite for local K-12 educational institutions.*

**OHV Education Program**

As part of the NCA education program, our OHV crew is trained as certified motorcycle and ATV instructors. Providing OHV training to the public is not common in BLM, and we are proud to showcase a successful example of how effective training programs can be in exposing OHV users of all ages to NCA management, use regulations, and stewardship principals while teaching them safe and responsible riding skills.

The training program emphasizes user ethics, public land stewardship, and environmental protection programs including “Stay the Trail,” “Right Rider,” and “Leave No Trace.” Since 2004, over 150 students (K-12) have participated in this successful education program.

Two members of the crew are middle and high school instructors and work on-campus with other teachers on environmental education efforts in science, local history, and physical education courses. The teachers also work continuously with over 100 students in local middle and high school dirt bike clubs to foster responsible riding on Public Lands.

**Montrose High Dirt Bike Club**



The **Montrose High School Dirt Bike Club** regularly assists the NCA with projects, monitoring trails, replacing signs, and networking with other users to spread the word about changes in NCA OHV regulations and why they exist.

This year the Club assisted with the dedication of the new Peach Valley Recreation Area. Club members conducted safety demonstration rides and sponsored trail rides to make new riders aware of riding regulations and ethics enforced in the NCA.

**Olathe Schools Community Stewardship Day**



During the past four years, we have partnered with Olathe teachers and students on their **Community Stewardship Day**. This year, the group conducted an extensive clean-up effort and then participated in an interpretive hike with the NCA manager through the Eagle Valley Living Classroom site where they learned about the Area’s history, geology, wildlife and plant communities, and biological crusts.



**Cocker Kids Foundation**

Rock legend, Joe Cocker, and his wife, Pam, are

NCA neighbors and active supporters of public lands. Their Cocker Kids Foundation targets local kids-at-risk and involves them in many community efforts. This year, we partnered with them for a National Public Lands Day project to clean up a target shooting area.

**Partners & Nexus Kids Program**



The river rangers have worked with Delta and Montrose **Partners & Nexus Programs** for over 10 years. The NCA sponsors annual Gunnison River floats for 30-50 children.

The program provides an outstanding education opportunity for kids-at-risk to learn about their public lands.

### **Gunnison School District**

For 3 years our river rangers have worked with teachers and students from the **Gunnison School District** on Wilderness resource projects. This year, the students installed a new trailhead that helped us implement an RMP decision to close a motorized route that was impacting the Wilderness. The project was a great opportunity for the river ranger to discuss wilderness management and user ethics.



*e. Describe other outreach efforts.*

### **USGS Geologic Guide & Poster Map**

The NCA's on-going partnership with the **U.S. Geological Survey** has produced a number of environmental education projects including a geologic map and guide of the NCA which is used by local elementary, middle and high school teachers for science classes and field trips in the NCA. Western State College uses the materials as texts in their earth science curriculum and on annual NCA field trips.

### **Chicago Botanical Gardens Internship Programs**

FY 05-06, the NCA coordinated with the **Chicago Botanical Gardens** on a four-month biological internship. The intern received valuable on-the-job training in resource management by assisting us in monitoring sensitive species areas and developing NCA interpretive materials. The materials included an

NCA bird list and a brochure emphasizing protection of Mancos shale plant and animal communities.

### **Gunnison Gorge River Ranger Trips**

A significant number of environmental educational and outreach projects are done by our seasonal river rangers. This year, they conducted 22 raft trips with schools, environmental organizations, boating and angling groups, kids-at-risk programs (Partners, Nexus and Gateway), local tourism groups, and local and state agencies.

The primary purpose of the trips is to enhance visitor awareness, appreciation and stewardship of the NCA. Participants receive hands-on training in Wilderness management and resource protection projects while learning about the Area's natural resources.



### **Delta County Tourism Cabinet**

As a member of the **Delta Tourism Cabinet**, the NCA manager attends monthly meetings to: network with tourism providers and keep abreast of tourism trends and potential impacts to public lands; provide accurate BLM input, NCA information and stewardship messages for local, regional, and national tourism marketing materials and special events; and coordinate joint funding grants for kids-at-risk programs.

This year, members of the Cabinet and Delta Recreation Department participated in a float through the Gorge to discuss tourism issues and learn firsthand how we are implementing benefits based management throughout the NCA. In October 2006, the group received a Governor's Award for their work on the State's cultural heritage tourism program.

## **Colorado Tourism Office (CTO) Cultural Heritage Program**

The NCA manager also attends **Colorado Tourism Office** cultural heritage meetings to network with tourism providers and provide BLM input into strategies, grants, and outreach efforts of the **Southwest Colorado Tourism Region**.

The Region received a \$56,000 grant to develop pilot cultural heritage projects. We are assisting CTO with database information, maps, and descriptions of potential NCA heritage opportunities. The next phase includes developing tour itineraries and site stewardship plans for selected NCA sites that can be effectively managed for increased visitor use.

## **Peach Valley Recreation Area Dedication – April 2006**

The spring dedication of our new recreation area provided a perfect environmental education and outreach opportunity.



UFO and NCA resource specialists manned displays about public lands stewardship, NCA geology, USGS science work, sensitive species, fire, Wilderness, range and OHV management.

Colorado State Parks personnel provided outreach materials (poster, brochures, hand-outs) on “Stay the Trail” and “Right Rider” OHV programs and assisted in safety demonstrations and trail rides. The event was highlighted in the Summer 06 Volunteer Outdoors publication.

## **President Jimmy Carter’s 3-Day Gorge Float – June 2006**

Our NCA recreation planner and LEO accompanied President Carter’s entourage on his third fishing trip to the Gorge during the stone fly hatch. The President’s visits during this high-use period attract public and media interest and provide us excellent opportunities to make visitors aware of increasing visitation impacts, Wilderness management regulations, and on-going resource protection projects in the NCA.



## 4. Status of NCA Science Program

- a. *Ongoing/completed 2006 science research projects in NCA.*
- b. *Description of application of research & scientific studies in management practices & how those practices have been affected, reinforced, or changed.*
- c. *Explain how results of research studies have been made available to the local and scientific communities, and BLM.*

### **USGS-BLM Mancos Shale Landscapes Project**

The **U. S. Geological Survey** has been our primary NCA science partner since FY2002 when we requested the agency to provide RMP baseline studies and inventories; analyze potential impacts from surface-disturbing activities (recreation, OHV use, grazing, etc.); and develop Best Management Practices for our Mancos shale areas.



Under the BLM's "***Applications of Science Initiative***," we received over \$250,000 in funding from 2003-2005 that was used to leverage \$2+ million in USGS research in the NCA. Additional support funding in 2005-2007 has come from BLM's salinity program.



The NCA's adobe badlands provide primary research sites for the **USGS Mancos Shale Landscapes Project**, a multi-disciplinary project covering the Upper Colorado River Basin and involving the USFWS, Bureau of Reclamation, Gunnison Basin Selenium Task Force, Colorado River Basin Salinity Control Forum and Grand Valley Selenium Task Force.

The Mancos Landscapes Project involves studies in regional geochemistry; geologic and soil mapping, digital elevation and GIS modeling; soil and rock mineralogy; remote sensing; landscape classification; erosion processes; and inventories of Mancos vegetation communities.

The primary project objective is to identify, quantify and understand processes responsible for physical and chemical erosion and develop adaptive management techniques for Mancos landscapes throughout western Colorado and eastern Utah.

#### **Gunnison Gorge NCA Mancos Shale Landscapes Project**

- 1. Develop best management practices (BMPs) for Mancos shale landscapes.**
- 2. Provide a benchmark for monitoring studies.**
- 3. Develop an interagency coordination model & experience base for other Mancos shale areas.**
- 4. Provide information & methods for Mancos reclamation and restoration projects.**

## **2006 USGS Project Work**



1. Drilled a 550-foot core hole in the Mancos shale to determine stratigraphy & chemistry of individual soil unit members.
2. Sampling and preliminary analysis of 6 pairs of Endangered clay-loving wild buckwheat sites to develop protection strategies for habitat areas.
3. Detailed geologic mapping to delineate areas underlain by specific members of the Mancos Shale.
4. Preliminary analysis of soil chemistry data for the entire GGNCA (the “BLITZ” sampling effort).
5. Completion of rainfall simulation data gathering & preliminary analysis of data useful in understanding natural erosion processes.
6. Completion of mass movement and slope-wash data gathering.
7. Acquisition of LIDAR coverage of portions of the GGNCA.
8. Continued development of a web-based data and analysis delivery system.
9. Completion of botanical surveys.

## **Applications of USGS Mancos Shale Landscapes Project Research**

This ongoing project integrates many facets in the specific application of science: soil chemistry, geology, land form characterization, vascular plants, and soil erosion research and data collection. Project research has wide scale applications to adaptive management in the NCA because it:

- ❖ *Provides new ways & methods to assess, monitor, manage & protect natural & cultural resources;*
- ❖ *Provides scientific basis for supporting enhanced NCA management & adaptive management decisions;*
- ❖ *Contributes to a wider understanding & application of science based management;*
- ❖ *Provides models for data gathering, storage, integration & analysis that are transferable to other areas & agencies.*

Products derived from the USGS partnership include: outstanding Landsat and LIDAR imagery; photography, data sets and erosion models for hillslopes and valley floors; soil characteristics, run-off estimates, geochemical analysis of rock and soil samples; and monitoring protocols.

The project has also yielded outstanding education projects including a geologic map, posters and guide used in NCA living classroom sites; interpretive & environmental education programs, and school and college classes.

A primary outcome of the project is a model for data collection, storage, and analysis that allows NCA science work done to be transportable to other BLM offices with Mancos shale management issues.



The Mancos project helps BLM managers and the public understand landscape-level changes over time as well as the effects of surface-disturbing activities on Mancos areas. It furthers Bureau-wide science and research goals and contributes to technology transfer among USGS, BLM, other agencies and academia.

### **Other Outreach Activities on the Gunnison Gorge Mancos Shale Landscape Project**

- Project briefing posters were exhibited at public briefings for the USGS 125<sup>th</sup> anniversary & USGS National Leadership Team workshop.
- Project personnel presented project briefings and discussed field work results at the Grazed Lands Salinity Round Table, a multi-agency academia meeting.
- The NCA project was selected to be a part of USGS's national "[DOI Science on the Landscapes](#)" program, designed to help fund and highlight interagency research efforts.
- Annual Mancos Shale "Datafest" meetings are held to share information among agencies, researchers, and academia. CDs of presentations are distributed to all interested parties.
- The excellent USGS website: [http://minerals.cr.usgs.gov/projects/Mancos\\_shale/index.html](http://minerals.cr.usgs.gov/projects/Mancos_shale/index.html) provides copious information on this large, multi-agency project including research updates, summaries, maps, Landsat & LIDAR imagery, and scientist contact information



USGS scientists set up rainfall simulation equipment for the Elephant Skin Wash project.

### **Crawford Sage Grouse Population: Habitat Improvement Projects & Conservation Plan Progress Evaluation**

The 2006 report describes habitat improvement work completed on public land in the Crawford sage grouse area since 1994, and evaluates progress made under the Conservation Plan.

The study, which implements RMP actions to develop long-term grouse monitoring and protection strategies, was essential for documenting landscape health improvements and determining effectiveness of treatments designed to increase bird numbers.

### **CNHP Sensitive Plants and Plant Communities Inventory and Monitoring Study**

This project, completed in May 2006, by the Colorado Natural Heritage Program, includes establishing permanent monitoring plots for endangered clay-loving buckwheat (*Eriogonum pelinophilum*) and designing rapid, cost efficient programs for four additional rare species: Uinta Basin hookless cactus, Delta lomatium, Rocky Mountain thistle, and good neighbor bladderpod.

Additional tasks included mapping the extent of sensitive native plant communities in the Native Plant ACEC and conducting further inventories for endangered & rare plants on 5,700 acres of newly designated NCA lands.

Baseline conditions were documented and monitoring plots established within three enclosures. This project implements RMP decisions to develop long-term monitoring and protection strategies for rare and sensitive plants.

CNHP maintains an excellent public website: [www.cnhp.colostate.edu](http://www.cnhp.colostate.edu) which contains maps, rare plant field guides, data requests, contact information, and online projects, documents and reports, including the three Gunnison Gorge NCA rare plant inventories and monitoring studies.

## **BLM Wilderness Campsite Inventories**



Gunnison Gorge river rangers, volunteers, and the UFO ecologist completed inventories of 30 Wilderness campsite and day use areas. The inventories, which include photo monitoring plots and data on soil, vegetative, invasive weeds, human sanitation, litter, and other impacts, will be compared to baseline inventories to track trends and changes in site condition and use.

Inventories results are used to: make changes in regulations to enhance wilderness protection; determine where closures, reclamation projects, or weed treatments are needed; and monitor limits of acceptable change (LAC) thresholds and Benefits-Based Management objectives.

Accurate campsite, resource data, and visitor use numbers are essential to developing and implementing our top RMP implementation priority, the **Wilderness Recreation Strategy**.

The Strategy, scheduled to begin in 2007, is needed to determine new visitor use allocations and permit regulations for all Wilderness uses in the Gorge to protect and maintain the Area's outstanding wilderness qualities and visitor experiences.

## **Hill Slope Erosion Processes Study**

The BLM National Science and Technology Center (NSTC) pilot project implemented this summer is designed to test the feasibility of using close-range photogrammetry to collect 3-

dimensional data to detect and monitor changes in surface soil elevations.

Preliminary results from the Hill Slope Erosion research in the NCA indicates that areas of soil loss and/or gain can be quantified by comparing the high-resolution, 3-dimensional data sets collected from each year. Information gained from this comparison is very useful in developing an accurate, timely and cost efficient large-scale monitoring method for NCA soils.

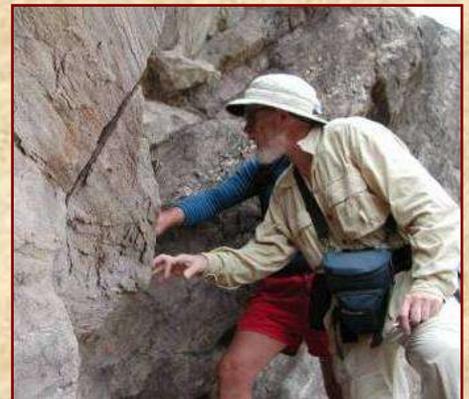
## **BLM/NLCS Research Permit and Reporting System (RPPS) Pilot**

This August, the Gunnison Gorge NCA became a pilot office for the NLCS new web-based research permit and reporting system.

The RPPS will: 1) provide a centralized access point to learn about science needs and opportunities across BLM jurisdictions;

2) afford quick access to previous and ongoing projects to foster collaboration between researchers;

3) supply NLCS units science contact information, and 4) facilitate communication between the researcher and NLCS staff regarding logistic of projects.





## 5. Cooperative Conservation

### *a. Describe success in establishing unit Friends group(s).*

#### **Gunnison River Alliance (GRA)**

This year we received \$4,000 in funding from the Washington NLCS office towards developing an NCA friends group, named the **Gunnison River Alliance** or **GRA**. The funding was used to: hold organizational meetings, cover start up costs (501.3c application processing, grant proposals, etc.), develop a 300-person database/ mailing list, and begin development of a website.

The mission of this new friends group is to assist the NCA in implementing river-related RMP decisions; host special events such as National Public Lands Day, National Rivers Weeks, etc.; and help with volunteers and outside funding for river-related resource protection projects such as tamarisk control, fishery enhancement, weir and low head dam improvements, etc.

In addition to the NCA, the group also assists BLM in projects related to the Dominguez Canyon WSA, another UFO NLCS unit located downstream of the NCA.

#### **Gunnison Gorge Tammy Whackers**

Since 1999, the **Gunnison Gorge “Tammy Whackers,”** a friends group supported by Wilderness user fees, have assisted BLM river rangers in controlling tamarisk (*aka* “tammies”) in the Gorge.

This summer, the Tammy Whackers achieved their goal of treating all tamarisk areas in the main river corridor and all tributary canyons within the 17,780-acre Wilderness Area

Controlling tamarisk in the Wilderness is labor intensive and expensive as it is done by hand, without the use of chainsaws or other motorized equipment. Complete removal of tamarisk requires repeated cutting and spraying treatments over the course of 3-4 years to effectively control reinvasions from this “hard-to-kill” plant. Chemicals used in tamarisk control average \$100 per gallon.



Though work will continue to ensure complete kills and rehabilitation of the sites, this accomplishment celebrates the work of over 500 “friends” contributing over 8,000 hours of public service over 7 years to the NCA. BLM estimates that contracting the work done by the Tammy Whackers would have cost the taxpayers a minimum of \$450,000.

### *b. Advisory Committees’ achievements*

The **Southwest Colorado Resource Advisory Council (SWRAC)** supported NCA designation, and its members played a significant role in the RMP planning and

implementation process by providing critical input and feedback from various constituent groups.

The RMP incorporates the RAC's Recreational Guidelines which were developed to ensure that BLM manages NCA recreation in concert with Landscape Health objectives. The RAC was also instrumental in helping BLM develop and implement the Wilderness fee program. The UFO and NCA managers regularly update and solicit feedback from the RAC on major NCA issues, proposed management actions, etc.

### *c. Accomplishments of Natural History & Interpretive Associations*

The NCA works with **Western Colorado Interpretive Association (WCIA) and the Delta Historical Society** on interpretive needs for the NCA, and Grand Mesa and West Elk Scenic and Historic Byways. WCIA operates a book outlet in the UFO office which provides visitors a great resource for maps, and natural and local history. Our new Mancos Shale brochure was done by an intern from the Chicago Botanic Gardens.

### *d. Collaborative efforts with Local & State & Federal governments & Other Partners.*

#### **Colorado State Oil & Gas Commission**

In winter 2006, we worked with the State Oil and Gas Commission Orphan Well Program to plug and reclaim three abandoned (orphan) carbon dioxide well sites in the NCA.



One of the wells was leaking CO<sup>2</sup> and large amounts of salt into the Gunnison River causing water quality problems and interfering with operation of a nearby canal.

The project involved accessing the well site by driving heavy equipment over private land and across the river; digging out and capping the well; and reclaiming impacted areas on both public and private lands.

Reclaimed well site.



Extensive communication and coordination between BLM, the State, BOR, Army Corps of Engineers, USFWS, the Relief Ditch Company, area water users, and adjacent landowners was essential to the success of the project. In addition to project administration, the Commission contributed \$50,000 to fund the effort.

#### **Colorado State Parks/OHV Program**

BLM has worked with **Colorado State Parks** for over 15 years on OHV issues and user education projects. Since 2002, BLM has received \$50,000 annually in OHV trail grants from the State's OHV registration program to fund a 3 person NCA/UFO trail crew. BLM has successfully leveraged grant dollars to secure another \$50,000/year in BLM Challenge Cost Share (CCS) funds for the past four years. CCS funding is used to cover vehicle, equipment, and contract costs, supplies for on-the-ground projects, and educational materials.

#### **OHV Crew Accomplishments**

**FY 02-06:** GPS inventory and GIS mapping of over 300 miles of NCA trails; installation, monitoring, and maintenance of



350+ travel management signs; construction of sign kiosks; installation & monitoring of trail

counters to assess visitor use, impacts & trends; development of trail maps & user education information; and contacting an average of 4,000 user contacts each year.

As part of the NCA's OHV education program, the crew is trained as certified motorcycle and ATV instructors. We work with Colorado State Parks and a local OHV dealership that loans us free motorcycles for the training.

In addition to teaching basic equipment, safety and riding skills, the crew emphasizes user ethics, public land stewardship, and environmental protection programs including "Stay the Trail," "Right Rider," and "Leave No Trace." Since 2004, over 250 students (ages 6-82) have participated in this very successful education program.



The crew also works with local schools, dirt bike clubs and dealerships to foster responsible riding on Public Lands.

### **Colorado Division of Wildlife**

The BLM works with the **Colorado Division of Wildlife (CDOW)** on a number of high profile, very productive conservation efforts.

Over the past five years, the CDOW Habitat Partnership Program (HPP) has funded approximately \$350,000 worth of vegetative treatments (roller chopping, brush hogging, prescribed fire, seedings, etc.) in the NCA. These projects helped to improve big game habitat conditions, meet Landscape Health Standards on 40,000+ acres of public lands, and mitigate game damage on adjacent private lands.

The NCA regularly assists CDOW on its fish stocking, monitoring and user education efforts to reduce whirling disease impacts, re-establish a rainbow trout fishery in the Gorge, and reduce conflicts between boaters and fishers. Our NCA LEO and seasonal river rangers do joint river patrols with CDOW to conduct compliance checks on anglers in the canyon.

BLM & CDOW coordinate on fisher compliance patrols, user education projects, Gold Medal Fishery surveys, fish stocking & whirling disease outreach efforts.



Our LEO partners with CDOW officers for hunter compliance checks during the hunting season. CDOW officers also work with BLM on implementing, monitoring, and enforcing seasonal road and area closures to protect sensitive species and big game winter range. This year we implemented an extension to a Fruitland Mesa road closure to provide enhanced protection for Gunnison sage grouse critical strutting and nesting periods.

### **Colorado Department of Corrections**

UFO and NCA partner with **Delta Corrections Center (DCC)** to fund a year-round, 8-person inmate crew and supervisor that assists us on numerous resource projects. Since 2000, the crew has contributed an average \$120,000 a year in labor on NCA projects including: installation and repair of NCA signs; construction and maintenance of range and wildlife improvements (sage grouse and bighorn sheep guzzlers, fences, vegetative treatments); and building and maintaining recreation facilities (kiosks, trailheads, OHV staging areas, etc.).



At least 30% of the crew's time is spent cleaning up large dumpsites and litter in the NCA. On average, the crew picks up over 1,200 cubic yards of household trash a year in the NCA. The crew is crucial to protecting outstanding scenic and sensitive resource values and providing safe and enjoyable visitor experiences.

### **Colorado Natural Heritage Program (CNHP)**

The **Colorado Natural Heritage Program**, sponsored by Colorado State University at Fort Collins, is a key NCA cooperative conservation partner. Specialists from the program assist us on many projects to inventory, manage, and monitor native and sensitive NCA plant communities.

The 2001 CNHP report, [Gunnison Gorge National Conservation Area Survey of Impacts on Rare Plants](#), and 2004 report, [Gunnison Gorge NCA North of Falcon Road Survey of Impacts on Rare Plants](#), provided critical inventory and assessment of sensitive plant communities and impacts to them from roads, grazing, and illegal OHV trails.

CNHP's 2006 follow-up report, [Gunnison Gorge NCA Inventory and Monitoring of Sensitive Plants and Plant Communities](#), outlines monitoring protocols for sensitive species and habitat. Copies of CNHP reports and more information can be found at their website: [www.cnhp.colostate.edu](http://www.cnhp.colostate.edu).

### **Delta and Montrose Counties**

BLM maintains a very productive working relationship with representatives from **Montrose**

**and Delta Counties.** Delta and Montrose commissioners were very active participants in the RMP process and are very supportive of our RMP implementation efforts. In September 2006, we completed and signed a Memorandum of Understanding (MOU) with the Delta County commissioners.

Both Counties assist with road improvements and emergency maintenance for key NCA access routes. We are currently working with Delta County on road maintenance agreements which will address critical access problems and save BLM thousands of dollars annually.

Our NCA LEO and river rangers work regularly with the Counties on law enforcement, search and rescue incidents, and youth-at-risk programs. This year, Montrose and Delta County sheriffs and deputies joined our LEO and river rangers on a Gorge float to coordinate strategies for backcountry rescues and emergencies.

Montrose & Delta County sheriffs & deputies joined BLM LEO & river rangers on a float trip to discuss Wilderness rescue strategies.



We work closely with Delta County on many Gunnison River corridor management issues including: acquisition and development of boating and angling access sites, landowner and trespass issues, and removal of river hazards such as low head dams. This year, the NCA teamed up with Delta County, CDOW, USFWS, GRA, local landowners, water interests and other partners on a new Gunnison River watershed planning project.

In August, we co-wrote and sponsored a Great Outdoors Colorado (GOCO) planning grant for the project. The NCA manager is a member of the Delta County Tourism Cabinet and works with local and regional Chambers of Commerce and tourism providers on numerous projects including: developing maps and interpretive

signs, visitor information and education, cultural heritage workshops and projects, and byways programs.

The NCA also partners with Delta County on large-scale tamarisk, knapweed, and other invasive weed eradication projects. This year, we successfully treated over 55 acres of invasive weeds in the NCA. Delta County provides the labor, inventory, coordination, training, supervision, and equipment for these efforts.

### **Crawford Sage Grouse Partnership**

The **Crawford Sage Grouse Partnership**, composed of a very diverse group of rangeland users, general public, landowners, academia, private organizations (environmental groups, sportsman groups, etc.) and local, State, Federal agencies, was instrumental in the designation of the NCA's 22,400-acre Gunnison Sage Grouse ACEC/Important Bird Area. The group's 1998 **Gunnison Sage Grouse Conservation Plan** was incorporated wholly into the RMP and provides the adaptive management guidance for the area.

The Partnership's mission is to maintain or increase sage grouse numbers and distribution while maintaining current users and healthy landscapes. Over the past 5 years, the partnership has been successful in funding habitat improvement and restoration projects, environmental education products, increased monitoring; and mitigating permanent loss of habitat through land exchanges, conservation easements and other practices.



Gunnison sage grouse watering site

Projects include: installation and maintenance of watering projects; brush beatings, prescribed fire, and other vegetative treatments designed to improve lek, brooding, rearing, thermal cover and other critical sage grouse habitat areas.

The partners were successful in reaching their 2001 goal of increasing the population over 225 birds. The group's 2006 monitoring report shows an optimistic increasing trend in grouse numbers that are now approaching 300 birds.

### **Geological Society of America**

This year we partnered with the **Geological Society of America (GSA)** to jointly fund a GeoCorps intern for the NCA. The intern worked with our science partner, USGS, and provided critical geologic mapping data for the National Mancos Shale Landscapes Project. GSA's contributions included candidate recruitment and administration, and a work stipend for the 10-week program. BLM's share of the project was \$2,500.

In addition to extending the NCA and USGS research capabilities, the GeoCorps program provided the intern valuable on-the-job training and work experience.

### **Arizona State University (Phoenix)**

In 2001-2002, BLM and **Arizona State University** at Tempe partnered on a benefits-based management (BBM) customer survey of the attitudes and preferences of NCA visitors. ASU waived out-of-state tuition and provided a 2-year stipend for a BLM STEP (Student Temporary Employment Program) student to earn a Master's degree in Recreation/Tourism while assisting in the collection and processing of the surveys.

The **Gunnison Gorge National Conservation Area Visitor Study** provided key baseline RMP information on visitor profiles and an analysis of desired user activities, experiences and benefits derived from recreating in the NCA.

The ASU Study was used to develop the NCA's 15 recreation management zones and in determining management objectives and prescriptions for the physical, social, and managerial settings in those zones.

ASU Recreation/Tourism professors facilitated NCA focus groups in 2002-2003 and provided substantial input and feedback on RMP recreation sections. In 2005, ASU completed an

[\*Assessment of Use Allocation Issues in the Gunnison Gorge National Conservation Area Wilderness.\*](#)

The Assessment includes interviews and feedback from all Gunnison Gorge commercial outfitters and is an important first step in developing the RMP's Wilderness Recreation Strategy.

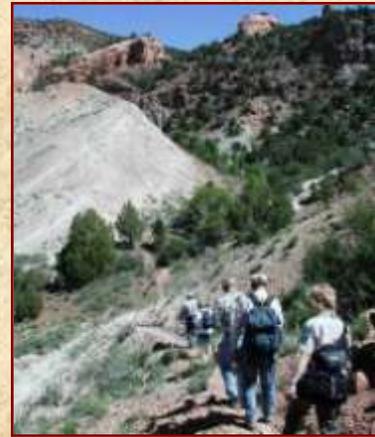
**Black Canyon of the Gunnison National Park, BOR & WAPA**

The NCA also coordinates regularly with the **Black Canyon of the Gunnison National Park** on cooperative conservation issues involving customer service, visitor management, and use compliance.

We team up with NPS on backcountry patrols, visitor services and user education, OHV trail monitoring, tamarisk removal, campsite management, resource protection projects, signing, and search and rescue events. BLM river rangers cross-train with NPS rangers and interpretive specialists to ensure seamless management and visitor services. BLM and NPS also share costs for a joint annual Visitor Guide.

The NCA recreation planner is on the Interdisciplinary (ID) Team for the Park's new Backcountry Management Plan. We also work together on land tenure adjustments, filming trespasses, water rights issues, special area stipulations, sage grouse habitat protection and rangeland issues.

NCA & NPS staff, county commissioners & local OHV group members take a hike on the Ben Nighthorse Trail to discuss OHV management issues.



Other cooperative partners in river corridor and Wilderness management are the **Bureau of Reclamation (BOR)** and the **Western Area Power Administration (WAPA)** who administer the upstream Aspinall Operations Unit near Gunnison, Colorado. The Unit controls flows in the Gunnison River. BLM attends quarterly meetings with BOR to discuss river flow needs for fish stocking, dam maintenance, flushing flow releases, and NCA visitor safety concerns.

Continued dialogues with BOR and WAPA over the past five years have resulted in significant improvements in communication particularly as it relates to early notification of fluctuating water levels which affect the safety of Gorge visitors and commercial river operations.

*e. Describe local non-profit organizations, their mission, accomplishments and extent of our cooperation with them.*

**North Fork River Improvement Association (NFRIA)**

This 400+ member, diverse group of boaters, business people, families, ranchers, environmentalists, water users, and scientists work on large-scale river restoration projects in the North Fork area.

Their projects, funded by grants, local support, and fundraisers include riverbank stabilization projects, tamarisk control, and low head dam reconstruction and removal to enhance fisheries and riparian areas.

The NCA began partnering with NFRIA a few years ago on its annual National Rivers Week awareness and cleanup float. This year's 200+ person float was a great opportunity for us to exchange information about the NCA and outreach for members for our new friends group.

**Montrose-Delta Public Lands Partnership (PLP)**

This diverse partnership of city, county, state and federal agencies representatives, land-owners, business owners, special interest groups, and general public played an active role in NCA designation and development our RMP and implementation strategy.

The group's mission is to facilitate discussion and provide recommendations to BLM, USFS, NPS, DOW and other agencies on land management issues by hosting quarterly meetings, special forums, and field trips.

We provide regular updates at PLP meetings and the group provides feedback on matters ranging from OHV management, fees, grazing, oil and gas leasing, recreation use management, facility development and other issues of importance to local communities. This April, PLP members assisted the NCA with the dedication of our new Peach Valley Recreation Area.

**Colorado Plateau Mountain Bike Trail Association (COPMOBA)**

COPMOBA's mission is to develop strong working relationships with land managers to promote and enhance mountain-biking opportunities and stewardship on public land.

The group assists the NCA in trail planning, construction, and maintenance; volunteer



patrols, and special events including National Public Lands Day and the Peach Valley Recreation Site Dedication.

**Additional NCA Partners**

Additional partners include members of local non-profit environmental, OHV, equestrian, boating, angling, and other sporting organizations who contribute many hours of time, energy and assistance in NCA plan implementation, stewardship projects, and day-to-day management.

These groups have diverse and sometimes competing or opposite missions (i.e., wilderness protection vs. multiple use) which adds to the complexity of our work with them. The primary groups we work with in the NCA include:

<b>Additional NCA Partnerships</b>	
The Access Fund	Montrose High Dirt Bike Club
Center for Native Ecosystems	Montrose Model Aircraft Association
Colorado Environmental Coalition	Montrose Recreation District
Colorado Mountain Club	Motorcycle Trail Riders Association
Colorado Off-Highway Vehicle Coalition	Southern Rockies Conservation Alliance
Colorado River Outfitters Association	Thunder Mountain Wheelers
Delta & Montrose County Search & Rescue	Uncompahgre Valley Trail Riders
Trout Unlimited	Volunteers for Outdoor Colorado
Grand Canyon Private Boaters Association	Western Colorado Congress
North Fork River Improvement Association	Western Slope Four Wheelers
North Fork Trails Network	Western Slope Environmental Resource Council
High Country Citizens Alliance	The Wildlife Society
Montrose, Delta, Crawford & Olathe schools	Women's Surface Creek Saddle Club

**f. Volunteer Accomplishments**

In 2006, 381 volunteers from local schools, environmental groups, non-profit organizations, businesses and sporting groups contributed over 4,248 hours of work on projects in the NCA. Hosted workers from Delta Corrections Center added another 2,924 hours of work for a total of 7,172 contributed hours valued at \$126,000. For the purpose of the annual BLM Volunteer report, volunteer labor is valued at \$17.00/hr; although most of the work would be much more expensive if done by private companies and contractors.

**The Table below summarizes 2006 work which included:** tamarisk control, river patrols, cleanups, campsite rehabilitation, inventories, monitoring, environmental education, riparian improvements, public access enhancement, tourism information and outreach.



	<b>VOLUNTEER/ HOSTED WORKERS</b>	<b>VOLUNTEER HOURS</b>	<b>HOSTED WORKER HRS</b>	<b>VALUE WORK HOURS</b>	<b>FUNDS EXPENDED</b>
<b>2006 Gunnison Gorge NCA Volunteers &amp; Hosted Worker Report</b>					
Tamarisk control river trips	40	600		\$10,500	\$1,250
Wilderness patrols - campsite cleanups	60	1250		\$22,000	\$1,000
OHV/Mountain bike patrols - trail maintenance & cleanup of recreation sites	25	350		\$6,150	\$350
Delta crew - fence building, dump cleanups, weed removal, wildlife improvement projects.	294		2,924	\$51,350	\$2,200
Environmental Education Projects, National Rivers Week Clean-up Float, "Living Classrooms" field trips, GOCO grant assistance, access & riparian enhancement projects, tourism outreach assistance, Peach Valley Recreation Area Dedication	256	2048		\$36,000	\$1,500
<b>Total</b>	<b>675</b>	<b>4,248</b>	<b>2,924</b>	<b>\$126,000</b>	<b>\$6,300</b>

## 6. FY 2006 Business Practices

### a. Total BLM annual expenditures and total number of work months

### Gunnison Gorge NCA/Wilderness Funding and Work Month Summary

Total allocated federal funding available for labor and project work in the Gunnison Gorge National Conservation Area in FY 06 was **\$615,976**. This allocation, as shown in **Table 1**, was composed of \$406,748 of base funding and \$209,228 of one-year flexible funding.

<b>Table 1. BLM Allocation FY 2006</b>	
<b>Base NCA Funding - Labor and Operations</b>	<b>\$ 406,748</b>
<b>One Year Flexible Funding - Labor and Operations</b>	<b>\$ 209,228</b>
<b>TOTAL NCA BUDGET</b>	<b>\$ 615,976</b>

One-time funding is a combination of additional funds directed to various programs by State and Washington offices and funding of requests for special projects submitted by offices via the Bureau's Budget Planning System (BPS).

**Table 2** shows total work months and cost figures for permanent and seasonal NCA and UFO staff funded by NCA funds. It is important to note that although NCA funding does extend across the NCA and UFO, it by no means covers all the work done in the NCA.

Approximately \$100,000 of UFO base and one-time funds are used each year to fund NCA-related labor, vehicles, procurement, and support costs not covered by the NCA budget. This year, for example, the UFO covered \$30,000 of funding for two of the Gunnison Gorge seasonal river rangers. In the past, the NCA base budget was adequate to cover these positions.



<b>Table 2. FY 2006 GGNCA Budgeted Staff Permanents &amp; Seasonals</b>		
<b>Work Months &amp; Funding (10 wms = 1 work year)</b>	<b>Work Months (wms)</b>	<b>Funding (\$ K)</b>
<b>NCA Staff</b>		
Permanent Staff (NCA Manager, LEO, Recreation Planner)	30	260
River Rangers - 2 seasonals <sup>1</sup>	11.8	35
OHV Crew - 2 seasonals <sup>2</sup>	2	6.5
Visitor Services - 1 seasonal <sup>3</sup>	2	5.1
<b>Total for NCA Staff</b>	<b>44.8</b>	<b>\$312.6</b>
<b>UFO Staff Support Funded by NCA</b>		
Biological & GIS	10.4	62.5
Lands & Minerals	5.5	35.2
Recreation & Cultural	4.3	18.5
Admin. & Mgt Support	4.4	50.6
Maintenance	7.5	30.6 k
<b>Totals for UFO Staff</b>	<b>32.1</b>	<b>\$197.4</b>
<b>TOTAL</b>	<b>76.9</b>	<b>\$ 510 K</b>

<sup>1</sup> Positions funded also by UFO funds & fees.

<sup>2</sup> Positions funded primarily by contributed funds.

<sup>3</sup> Position funded primarily by Gunnison Gorge fees.

## **Major NCA Expenditures**

<b>Item</b>	<b>Cost</b>
Labor	<b>510,526</b>
Travel	<b>9,292</b>
Supplies/Materials	<b>29,350</b>
Vehicles	<b>50,743</b>
Contracts, Services & Agreements	<b>16,065</b>
<b>TOTAL</b>	<b>\$ 615,976</b>

Our major expenditures in 2006 are shown in the table above. The labor costs include surcharges, benefits, administrative overhead, etc. Materials and supplies purchased included: boulders, fence posts and other materials used for resource protection projects; weed control equipment; facility maintenance needs (trash bags, lumber, toilet paper, rental equipment, etc.); visitor services (displays, signs, etc.); vandalism repair; and law enforcement equipment.

Contracts and services included: funding front desk positions; toilet pumping; law enforcement details; Delta Corrections Crew support, GeoCorp internship; and interpretive, graphic design and mapping services.

### ***b. Receipts from recreation and other activities and their associated uses.***

<b>GGNCA Recreation Receipts</b>	<b>Recreation Visitors</b>	<b>Fee Receipts \$</b>
<b>1. Gunnison Gorge Wilderness User Fees</b>	7,300	\$ 25,000
<b>2. Special Recreation Permit fees</b>	3,500	\$ 21,800
<b>TOTALS</b>	<b>10,800</b>	<b>\$46,800</b>

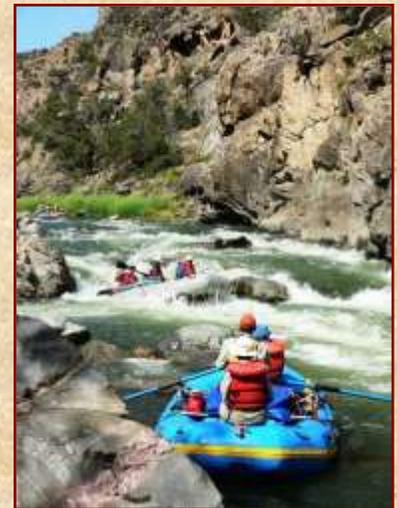
Gunnison Gorge fees for day and overnight Wilderness permits and Special Recreation Permit (SRP) fees from commercial outfitters provide the NCA cash receipts which stay in the NCA for immediate use.



Wilderness permit fees apply to all private and commercial boaters and walk-in users 16 years of age and older. The day use fee is \$3 per person; camping fees are \$10/person for

one night; \$15/person for two nights. Annual day use passes are \$15. Volunteers earn free annual passes by working a minimum of four hours on a resource protection or education project. Revenue from individual Wilderness permits average \$25,000/yr.

We manage 22 commercial SRPs for a variety of uses including: whitewater boating, float-fishing, horse packing, jet boat use, and vehicle shuttles. We collect 3% of gross income from commercial SRPs which totals approximately \$22,000/yr.



Major uses of receipts: maintenance of roads and trailhead facilities; horse pack-ins and vehicle shuttles for river patrols; swift water rescue and backcountry EMT training, ranger vehicle and per diem costs; monitoring; and weed control.

Fees also support environmental education efforts and outreach events such as National Public Lands Day, National Rivers Week, etc. Wilderness fees are used to purchase Wag-bags for packing out human waste in the Gorge. Bags

are provided at no additional charge. Visitors are complimentary about the bags that help reduce sanitation problems in the river corridor. Details on collection and use of NCA fees can be found in our annual fee report to Congress. We have submitted reports since 1999.

**c. Contributed funds from all sources and associated uses of those funds.**

Funding and in-kind contributions from partners, friends groups and volunteers have been described in the **Environmental Education and Resource Interpretation** and **Cooperative Conservation** sections of this report.

The following table summarizes major partner funding and in-kind contributions and the projects they contributed to in the NCA in 2006:

<b>CONTRIBUTED FUNDS &amp; IN-KIND SUPPORT FY 2006</b>	
<b>Colorado State Parks</b> - OHV grant for crew, signs, training , management support	<b>\$ 50,000</b>
<b>State Oil and Gas Commission</b> - orphan well plugging projects	<b>\$ 50,000</b>
<b>State of Colorado Department of Corrections</b> - Delta Corrections Crew hosted worker supervision, training and labor	<b>\$ 120,000</b>
<b>Delta County Weed Board</b> - tamarisk, knapweed, and halogeten control	<b>\$ 15,000</b>
<b>Chicago Botanical Gardens</b> - internship projects (Mancos Shale brochure & NCA bird list)	<b>\$ 15,000</b>
<b>Geographic Society of America (GSA)</b> GeoCorp intern position administration and stipend- Mancos geologic mapping	<b>\$ 5,000</b>
<b>Gunnison Sage Grouse Partners</b> - maintenance of projects, funding of studies	<b>\$ 4,000</b>
<b>Delta County Tourism Cabinet</b> - cultural heritage tourism inventory project, front desk hospitality training workshop	<b>\$ 4,000</b>
<b>TOTAL Contributions</b>	<b>\$263,000</b>

**d. Acres of lands acquired.**

In 1999, BLM negotiated a land exchange in the Gunnison Forks area, at the NCA northwestern boundary that involved approximately 5,760 acres. These acres were added to the NCA by legislation in 2003.

The acquired lands provide additional access to the river for fishing and boating; offer additional OHV, horseback riding, hiking, hunting, and camping opportunities; and contain valuable wildlife habitat areas for bighorn sheep, migratory waterfowl and upland birds, and big game.

BLM is currently working with The Colorado Conservation Fund on a number of potential Land & Water Conservation Fund (LWCF) projects for acquisition of inholdings and easements to protect scenic and sensitive resource values, provide for enhanced public access and recreation, and improved resource management.



View of area added to the NCA in 2003. The acquisition included 5,700 acres and 9 miles of the Gunnison River along the NCA's northern border.



