

Grand Canyon-Parashant

National Monument

Annual Report
FY 2014



Arizona

NATIONAL
CONSERVATION
LANDS



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1 Grand Canyon-Parashant Profile

Designating Authority

Designating Authority: Antiquities Act of 1906, Presidential Proclamation #7265

Date of Designation: January 11, 2000

Acreeage

Total Acres in Unit	BLM Acres	Other Fed. Acres	State Acres	Other Acres
1,048,321	810,661	208,449 (NPS)	23,206	6,005 (Private)

Contact Information

Unit Managers	Phone	E-mail	Mailing Address
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Field Office	District Office	State Office
Not Applicable	Arizona Strip	Arizona

Budget

Total FY14 Budget	Subactivity 1711	Other Subactivities/ Contributions	Other Funding
\$1,200,417	\$790,664	\$409,753	\$25,000

In addition to Bureau of Land Management (BLM) funding, the FY14 National Parks Service (NPS) budget totaled \$1,610,200 plus additional project funding totaling \$142,991.

Map of Grand Canyon-Parashant National Monument.



Grand Canyon-Parashant National Monument (GCPNM) is co-managed by the BLM and NPS as a Service First organization with both agencies striving to maintain a unified and seamless management process for the public lands and citizens.

Staffing

GCPNM has a dedicated staff consisting of 21 BLM and NPS employees. Although seven of those are full time Parashant BLM staff, 28 additional Arizona Strip District BLM employees contributed over 30 work months to support monument operations. These support positions include various employees skilled in management, administrative services, public affairs, tribal relations, environmental planning, GIS, cultural resources, biology, range management, fire and fuels management, engineering, maintenance, and law enforcement.

The full time Parashant BLM positions include the Monument Manager, a Law Enforcement Officer, two Range Management Specialists, an Archeologist, an Outdoor Recreation Planner, and an Administrative Assistant. The 14 NPS positions include the Superintendent, a Budget Technician, four Park Rangers (Visitor and Resource Protection), three Park Rangers (Interpretation), an Ecologist, a Physical Science Technician, an Archeologist, and a Facility Management and Maintenance Worker.

During FY14, Parashant hosted seven internship positions in a variety of disciplines through the Intergovernmental Internship Cooperative at Southern Utah University and five American Indian Youth Cultural Resource Internship students during the summer.

2 **Planning and NEPA**

Status of RMP

The Record of Decision for the Resource Management Plan (RMP)/General Management Plan (GMP) was signed in February 2008. A copy of the plan can be found online at http://www.blm.gov/az/st/en/info/nepa/environmental_library/arizona_resource_management/gcp_ROD.html.

Status of Activity Plans

A Long Range Interpretive Plan has been completed in cooperation with a variety of stakeholders, to guide the interpretive program and services.

The four designated Wilderness Areas, within the GCPNM, are managed by under existing management plans.

A specific sign plan for jointly managed areas was developed in conjunction with Craters of the Moon, the only other BLM/NPS co-managed unit.

A Travel Management Plan is to be completed in 2015. The plan will reflect travel management on designated routes, recommend closure methods, and identify monitoring actions for implementation.

Status of RMP Implementation Strategy

Implementation actions are aligned with state and national level strategies and evaluated on a recurring basis.

Key NEPA Actions and/or Authorizations

There were two Parashant specific completed NEPA documents and three NEPA actions initiated during Fiscal Year 2014 (FY14). Three Categorical Exclusions (CX) were completed; two were for the transfer of grazing allotments, one was for the Mt. Logan Seismometer Right-of-Way. Determinations of NEPA Adequacy (DNA's) included: a wildlife catchment replacement near Mount Logan and Oak Grove, and three DNA's authorizing eight new Special Recreation Permits (SRP) for guiding hunters. One Environmental Assessment (EA) was initiated for the proposed grazing permit renewal for the Red Pond and Wildcat allotments. Progress was made on the Uinkaret Mountains Landscape Restoration Project Environmental Impact Statement (EIS) and will continue, as scheduled, through 2015.

Two filming permits were issued during FY14. Mossback Productions, Inc. was issued a permit to film their hunting activities pursuant to a commercial hunting DVD. Muley Crazy was issued a permit to film hunters and wildlife for commercial resale of videos and publication of photos in hunting magazines. These permits were issued under a district-wide filming permit. Thirty-one SRP's were re-authorized for commercial activities on the monument for FY14.

3

Year's Projects and Accomplishments

General Accomplishments

The GCPNM continues to be a leader in Service First organization management, serving as a model for successful government partnerships between the BLM and the NPS. This model provides effective and efficient management of public lands.

Significant efforts have been directed toward cultivating the next generation of public land stewards, with youth employment and education remaining a top priority. The Monument hosted eight internship positions through an agreement with the Intergovernmental Internship Cooperative at Southern Utah University. These interns completed a variety of assignments involved in education and outreach activities, recreation management, range support, travel management, and other resource-based projects throughout the Monument.

The fire and fuels management program reported 347 acres of fuels reduction completed. BLM conducted prescribed burning on 297 acres and mechanical thinning on 50 acres along with monitoring 297 acres of prior treated units. The NPS treated 925 acres with prescribed fire and 52 acres of mechanical thinning.

The Parashant Partnership marked its fifth year by conducting two meetings. The Partnership is a network of practitioners and conservationists working together to gather and share knowledge that guides management recommendations for ecological restoration issues within the Monument.

Current Areas of Focus

Invasive species and uncharacteristic fire remain as primary management concerns. Past fire suppression efforts continue to impact fire size and severity. It is anticipated that impacts from climate change will increase the complexity of fire management. In the Mojave Desert, brome grasses have affected fire size and severity by influencing landscape scale change and loss of habitat for threatened and endangered species. In higher elevation forests, opportunities exist to manage fire regimes into a more "natural" historic levels, by using mechanical fuels reduction and prescribed fire.

The Uinkaret Mountains Landscape Restoration Project was initiated in 2012, originally as an Environmental Assessment. In 2013, it was determined that an EIS would be prepared to account for the cumulative impacts related to the project. The BLM will continue working with cooperating agencies, tribes and interested parties to analyze and disclose the impacts related to the regional vegetation management for 128,535 acres in the monument and Arizona Strip

Field Office. A Draft EIS is to be completed in late 2015 with the Final EIS and Record of Decision to be issued in 2016.

During FY14, the monument was awarded Dark Sky Status under the moniker of "Parashant International Night Sky Province". It was stated that the Parashant "has outstanding Gold-tier night skies- some of the best in the southwest" according to International Dark-Sky Association Executive Director Bob Parks. The Parashant is the first dark sky designated for BLM managed lands.

Education, Outreach, and Interpretation

The Public Lands Information Center (the Center) is funded by BLM, NPS, US Forest Service employees and volunteers who answer questions and update visitors on district and monument resources. The Dixie Arizona Strip Interpretive Association (DASIA) is collocated in the Center. DAISA enhances visitors' understanding of GCPNM and the Arizona Strip by operating a bookstore, offering a variety of maps and publications related to local history and public land resources. In addition, DASIA assists the BLM and NPS in presenting on-site interpretive programs.

A "brownbag lecture" series is presented at the Center each Friday from October thru April. Twenty-five programs were presented in FY14 on a variety of local topics including Parashant area history and natural resources.

The Junior Ranger program continues to be a well-received and popular youth program. The program provides a free booklet of activities for participants. As part of the Junior Ranger program, several interagency outreach activities are supported through the nearby Tonaquint Nature Center in St. George, Utah with over 40 contacts being made during FY14.

The GCPNM staff participated in several 'Day in the Desert' environmental education programs for 6th and 7th grade school children from the Sunrise Ridge Intermediate School (300 contacts).

Partners in the Parks, an experiential learning camp for collegiate honors students from across the United States, visited the GCPNM during the last week of May for a seventh year. The six-day camping program is a unique "immersion" experience with Monument resource specialists (6 contacts).

Monument staff participated in Concrete-to-Canyons with Lake Mead National Recreation area and Zion National Park. This program brings inner city youth to the park for a 3-day 2-night outdoor experience where they are introduced to camping and outdoor science activities. Over

the period of 4 weeks, approximately 80 youth and volunteers had their first camping experience.

Local children and family members attended the third annual interagency 'Get Outdoors Day' celebration of public lands at the Tuachan Saturday Farmers Market in Ivins, UT. Parashant staff provided a telescope for solar viewing and made approximately 225 public contacts.

The GCPNM extended outreach efforts into community schools by setting up their cave simulator and presenting cave safety and science over a three-day period to approximately 600 students. The cave simulator was also used at the Bryce Canyon National Park Geofest where youth interns reached another 600 participants.

Staff and volunteers came together for the Parashant National Monument Dark Sky Province kick off. During this event, 200 participants had the opportunity to learn about astronomical topics, why dark night skies are important, look through a telescope and earn a Jr. Ranger Night Explorer badge.



Parashant intern helps youth learn a planet mnemonic at Jr. Ranger Night.



Get Outdoors Day brought the wildlife in for solar viewing.



Students exam macro invertebrates at Day in the Desert.

Partnerships

The GCPNM BLM/NPS Service First Partnership combines the strengths of the two agencies and leverages funding to enable seamless planning and execution of multiple projects. The synergy of that would otherwise be either very difficult or impossible to accomplish.

The Parashant Partnership is a network of practitioners and conservationists working together to gather and share knowledge that will help to guide recommendations for ecological restoration and fire management issues within the Monument. The Parashant Partnership provides opportunities to educate partners and stakeholders about management issues.

The DASIA partners with GCPNM through a strategic plan that outlines mutual goals for supporting operation of the interagency information center, builds DASIA's capacity, supports agency missions and programs, and provides interpretive and educational programs.

The GCPNM has been a partner with the Inter-Governmental Internship Cooperative hosted by Southern Utah University in Cedar City, Utah for four years. Youth interns were funded by NPS in FY14 and continued to complete a variety of assignments, working in education and outreach activities, range programs, recreation, and other resource management projects.

For nearly 20 years, the Northern Arizona University's Ecological Restoration Institute and the Arizona Game and Fish Department have played a major cooperative role in the on-going Mt. Trumbull Ecosystem Restoration Project.

The GCPNM is a partner in the Mojave Desert Initiative (MDI) along with other federal, state, and local agencies, as well as non-government organizations throughout the northeast Mojave region. The MDI has targeted protection and restoration of unburned habitat as a top priority throughout the region.

The BLM implemented a grant from the Arizona State Parks to assist with the implementation of the travel management plan. The grant provides additional funding for interns, route evaluation/NEPA contracts, Kiosks, route markers, as well as digital and paper map creation.

Volunteers

The volunteer program continued to grow with 130 volunteers contributing 12,756 hours for a total of \$277,953.24 in value of work (based on a \$21.76/hour as calculated by independent sector) on a wide variety of projects supporting natural and cultural resource management efforts. Forty-eight youth volunteers (age 25 and under), accounted for 10,078 additional

hours. The Arizona Site steward program also continued its strong presence in providing cultural resource protection. Cave inventory and research volunteer activities increased significantly. The Recreational Aviation Foundation leveled and cleared two backcountry airstrips. Parashant received \$4,000 of volunteer funding from the NPS to provide supplies, uniforms and recognition.

Land (or Interests in Land) Acquisitions

Not Applicable

4 Science

Science

Science Plan

The Parashant Science Plan is expected to begin the planning process in late FY15.

Future

Expansion of the current science projects on Parashant will include increased citizen science opportunities and outreach to local universities. Projects include bird surveys at springs and other water sources, botany research trips to unusual areas of the monument that have been overlooked by formal botanizing trips in the early part of the 20th century.

Mojave Desert Inventory and Monitoring Network (MOJN): Vital Signs Monitoring

Description: Long-term monitoring of selected sites on the Monument, including upland vegetation (sagebrush steppe), large springs, and small, arid land springs.

Keywords: Botany, Soil, Hydrology

Principal Investigator: NPS (Pacific West Region, MOJN)

Project Status: Research In Progress

BLM's Contributed Funds: \$0.00

Develop and Test Mojave Native Plant Materials

Description: Influences of light and nutrient availability on red brome (*Bromus rubens*) abundance and biomass, density dependent competitive relationships between native annual species and brome, and density dependent relationships of native perennial species and red brome abundance, and the establishment of competitive thresholds are all investigated in the Pakoon Basin. Part of the interagency Mojave Desert Initiative (MDI) series of projects across the desert in California, Nevada, Arizona and Utah.

Keywords: Botany, T&E, Soil, Invasives

Principal Investigator: Cayenne Engel, UNLV

Project Status: Complete

BLM's Contributed Funds: \$ 0.00 (FY14)



UNLV Students at work.

Rangeland Condition Assessment

Description: Assessment of rangeland ecosystem conditions in selected portions of GCPNM to identify resource management needs pertinent to livestock grazing, ecological restoration and long-term ecological monitoring.

Keywords: Botany, T&E, Soil, Invasives

Principal Investigator: Mike Duniway, USGS

Project Status: Final Report in progress

BLM's Contributed Funds: \$0.00

Mapping the Vegetation of the Grand Canyon Using ADS40 Imagery, Image Segmentation and CART

Description: Vegetation Map for Grand Canyon National Park and the NPS portion of Grand Canyon- Parashant National Monument

Keywords: USGS; NPS Inventory & Monitoring Program; baseline; data; botany

Principal Investigator: Mike Kearsley, NPS

Project Status: Final Report in progress, partial dataset uploaded to IRMA (Irma.nps.gov)

BLM's Contributed Funds: \$0.00

Natural Resource Condition Assessment

Description: Define suite of focal biotic and abiotic resources at each of 6 National Park units (Death Valley National Park, Joshua Tree National Park, Lake Mead National Recreation Area, Manzanar National Historic Site, Mojave National Preserve, and Grand Canyon-Parashant National Monument). Implement assessments of measurable status and trends of resources.

Keywords: wildlife, botany, climate

Principal Investigator: University of California, Davis

Project Status: First draft submitted

BLM's Contributed Funds: \$0.00

Development of Native Plant Materials for Restoration of Disturbed Desert Tortoise Habitat in the Mojave

Description: Evaluating the best native species for use in restoration projects based on 1) development of a climate-based seed transfer zone map, and 2) multiple common gardens established across the range of seed zones on Arizona, Nevada, and California BLM lands.

Keywords: Botany, T&E, Soil, Invasives

Principal Investigator: Leslie DeFalco, USGS

Project Status: Research In Progress

BLM's Contributed Funds: \$10,000

Monitoring the Effectiveness of Seeding and Applying Herbicides to Burned Critical Habitat for Mojave Desert Tortoise

Description: Four interrelated projects related to rehabilitation of the Mojave Desert ecosystem following large-scale fire. Projects focus on natural and aided regeneration of annual and perennial Mojave Desert native vegetation by manipulating seed sources, planting natives and suppressing non-natives. Priority is given to species of plants that are important to the survival of the Mojave Desert tortoise (food and cover). Part of the interagency Mojave Desert Initiative (MDI) series of projects across the desert in California, Nevada, Arizona and Utah.

Keywords: wildlife, botany, T&E

Principal Investigator: Leslie DeFalco, USGS

Project Status: Research In Progress

BLM's Contributed Funds: \$10,000



USGS personnel seeding a test plot.

USGS Common Gardens

Description: The U.S. Geological Survey is developing a map of seed transfer zones for the Mojave Desert by refining the resolution of environmental parameters, incorporating natural correlations among environmental parameters, and exploring suitable resolutions of maps for varied plant functional groups. This project establishes common garden sites across portions of the Mojave Desert in and around southern Nevada.

Keywords: restoration, botany, T&E

Principal Investigator: Leslie DeFalco, USGS

Project Status: Environmental Assessment in progress

BLM's Contributed Funds: \$0 (ASDO only, funding currently from BLM CA and BLM NV)

Invasive Plant Surveillance

Description: Invasive plant surveillance project to determine if roadside plant observations skew the perception of the level of invasion by non-native plants. Crew consisted of 2 student interns through the Intergovernmental Internship Cooperative.

Keywords: invasives, botany

Principal Investigator: Jennifer Fox, GCPNM

Project Status: FY14 field season complete, field season will recommence FY15

BLM's Contributed Funds: \$0



Invasive Plant Surveillance

Pilot Bird Survey

Description: Using citizen scientists, record birds of Parashant. Initial survey and testing of protocol in FY14.

Keywords: bird, inventory

Principal Investigator: Jennifer Fox, GCPNM

Project Status: FY14 field season complete, field season will recommence FY15

BLM's Contributed Funds: 2 wildlife biologists for 2 days

Parashant Acoustical Monitoring and Soundscape

Description: Multi-year research project on impacts stemming from natural and unnatural sound sources along proposed wilderness areas and proposed air tour routes. Study consists of four acoustical monitoring stations positioned at selected sites which quantify and identify sound sources from aircraft, vehicles and natural sources. Largely these stations are positioned along the North Rim of the Grand Canyon as this remote area sustains the bulk of air tour traffic.

Keywords: Air Tour Management, Biodiversity, Climate change.

Principal Investigator: Eathan McIntyre. GCPNM

Project Status: On-going

BLM's Contributed Funds: \$0



Tassi Soundscape Station

Bat Hibernaculum Inventory and Microclimate Study

Description: Multi-year research project on cave ecology and bat wildlife in selected caves. This project involves species identification, multiple year inventory and analysis of existing bat populations and arthropod communities. Microclimate research included a three dimensional analysis of selected caves with data logging instruments to create a thermal model of the caves in order to characterize the specific environment conditions that facilitate bat hibernacula. This thermal modeling also aids in the identification of white-nose syndrome risks which can be present at certain cave soil temperatures.

Keywords: Biodiversity, climate change, cave impact, bat habitat

Principal Investigator: Eathan McIntyre, Dr. Jut Wynne, GCPNM

Project Status: Project Complete December 2014.

BLM's Contributed Funds: \$0



Obtaining cave soil samples for White Nose Syndrome testing.

Cave Inventory and Assessment

Cave and karst features in Parashant remain protected, largely due to remoteness and lack of accessibility by the public. Researchers are continuing projects to further inventory and monitor cave resources. Five new caves have been inventoried in 2014 demonstrating potential for paleontological resources. Five other known caves identified as being at risk due to their

proximity to nearby road access as well as being visible from easily accessible aerial images. These 5 caves contain paleontological, geological, biological resources, as well as cultural items and are known bat habitats. These caves are scheduled to be gated in FY16 with collaboration with BCI (Bat Conservation International).

Keywords: Cave Inventory, Archeology, Paleontology, Biodiversity

Principal Investigator: Eathan McIntyre

Project Status: Project Ongoing

BLM's Contributed Funds: \$0



Cave sediment contains abundant paleo-bone fragments indicating a possible roost for raptures or other Pleistocene carnivores.

Water Quality Assessment

With over 232 various springs and seeps across the Monument, water plays an important role for, riparian growth, wildlife, grazing, and recreation. Broad water quality assessments have been completed in both 2002 and 2008, however 2014 initiated an ongoing water quality program to maintain field measurement of selected water sources. Additionally, sensitive water sources which stem from carbonate rock strata (Karst) are of importance for monitoring due to the ease at which these aquifers can be impacted by surface activities.

Keywords: watershed, water quality, biodiversity, riparian

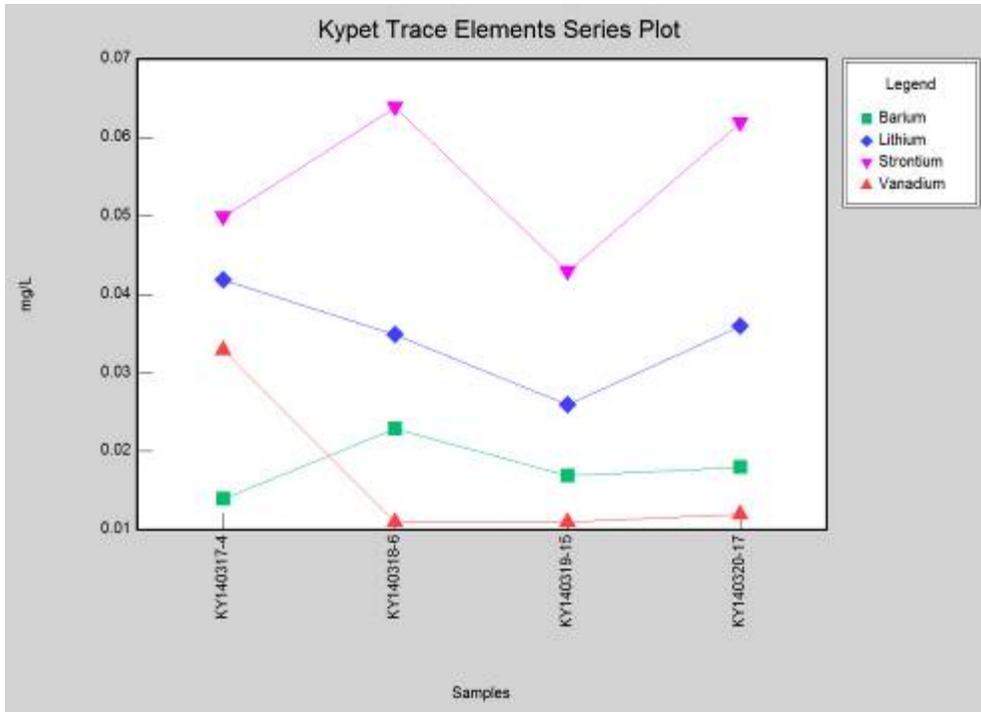
Principal Investigator: Eathan McIntyre

Project Status: Project Ongoing

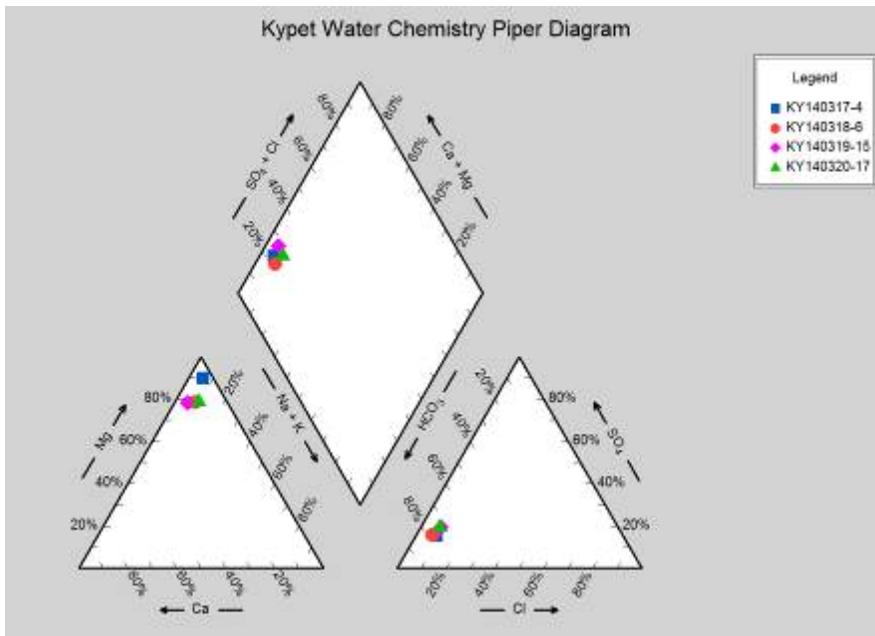
BLM's Contributed Funds: \$0



Mitra Sartipi, GeoCorp Intern, samples water quality at Pocum Springs



Water Chemistry results from a carbonate aquifer environment.



Water chemistry results demonstrating a homogenous aquifer source.

Mt. Trumbull Archaeological Research Project, California State University-Long Beach

Description: Examining the prehistoric Mt Trumbull populations engaged in long-distance exchange relationships with groups in Nevada,

Keywords: CSULB; archaeology; inventory; data; cultural

Principal Investigator: Sachiko Sakai, PhD.

Project Status: On-going; annual progress reports

BLM's Contributed Funds: \$0.00

American Indian Youth Cultural Resource Internship, Year Five

Description: Sample and characterize potting-quality clays from the Arizona Strip and Southern Utah using field and laboratory tests.

Keywords: clay; archaeology; inventory; data; cultural

Principal Investigator: David Van Alfen, Monument Archaeologist

Project Status: On-going; annual progress reports

BLM's Contributed Funds: \$60,000.00



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Resources, Objects, Values, and Stressors

Cultural Resources

Cultural resources include all physical evidence of past human activity in addition to the information obtained from modern Tribal entities. Examples of resources include prehistoric structural remnants, broken pottery, chipped stone scatters, historic ranch houses, fences, corrals, mines, and even certain tree stumps and Aspen graffiti.

Status and Trend Table

Status of Resource, Object, or Value	Trend
Overall, the Cultural resources are in Good condition.	By their very nature, Cultural Resources are in a constant state of decline. However, there does not appear to be any extraordinary increase in the decline.

Inventory, Assessment, Monitoring Table

Acres in Unit	Acres Inventoried	Acres Possessing Object	Acres Monitored in FY14
1,048,316	Class II- 13,048 Class III- <u>31,986</u> Total- 45,034	2,035 sites	48 sites monitored

Stressors Affecting Cultural Resources

The primary stressor affecting the Cultural Resources of the Monument are wind and water erosion. While erosion can be very destructive to cultural sites, it can also help physically preserve sites if erosion serves to slowly burying them.

Wind erosion, primarily in sandy areas, can lead to the "deflation" of sites, a condition in which the soil surrounding the artifacts is removed leaving the artifacts on resilient underlying material.

Water erosion, in the form of sheet erosion and gullying/down-cutting can both expose and carry away surface artifacts, but can destroy entire features through down cutting and head cutting of gullies and drainages.

Natural Resources

A variety of natural resources can be found within elevations ranging from 1,200 to 8,000 feet on more than one million acres within the GCPNM. Resources include geological features of the Basin and Range and Colorado Plateau geologic provinces; abundant paleontological specimens; ecological diversity resulting from the junction of the Basin and Range and Colorado Plateau ecoregions and the Mojave Desert, Great Basin and Colorado Plateau floristic provinces; wildlife including threatened and endangered species; clean air; watershed values and spring resources; scenic viewsheds; vast, remote and undeveloped landscapes that provide solitude, natural quiet, dark night skies and wilderness values.

Stressors Affecting Natural Resources

Invasive Species - The primary invasive species group causing landscape level change is vegetation. In the Mojave Desert, bromes have altered fire size and severity.

Uncharacteristic Fire - Past fire suppression efforts continue to effect fire size and severity as staff works to bring the fire regime back to more "natural" historic levels.

Threatened and Endangered Species Habitat Loss - Fires of greater magnitude and frequency than historic levels are converting the non-fire adapted native vegetation to a brome monoculture, altering the habitat of Mojave Desert Tortoise. Relict leopard frog potential habitat surveys were conducted to augment successful reintroduction site at Tassi Springs.

White Nose Syndrome - Bat populations across the Monument are at risk of White Nose Syndrome (WNS), the soil fungus responsible for the bat crisis in the Eastern US. Ongoing WNS monitoring in cave soils have shown no presence yet and a cave decontamination protocol established by US Fish and Wildlife Service is used by all a staff and researchers.

Climate Change - Climate affects sediment yield, frequency of surface runoff, recharge of shallow aquifers, and the recovery of the landscape from human disturbances. Climate also influences vegetation density, establishment of invasive species, and the frequency and intensity of wildfires.

Population Increase - The gateway communities of St. George, UT and Mesquite, NV are increasing in population which in turn, brings more urban interface issues, noise, air and light pollution and illegal activities closer to Parashant.

Increased Illegal OHV Use - Illegal off road travel creates resource damage and requires increased law enforcement patrols and recreation staff monitoring.

Increased Air Traffic - An increased demand for air tours is creating more overflights and noise issues. Parashant is monitoring and working with the Grand Canyon National Park Air Tour Management Plan.

Cave and Karst Features

Numerous cave and karst features can be found in the GCPNM and remain protected largely due to remoteness and lack of accessibility by the public. Some of the caves contain significant paleontological, geological, biological and cultural resources, and provide bat habitat. Several new invertebrate species have also been discovered in caves in the GCPNM. Researchers are continuing projects to further inventory and monitor cave resources.

Stressors Affecting Cave and Karst Features

Five caves have found to be at risk due to their proximity to nearby road access and being visible from easily accessible aerial images. These five caves contain paleontological, geological, biological resources (including bat habitat), and cultural items. These caves are scheduled to be gated in FY15 in collaboration with Bat Conservation International.

Vegetation and Range Resources

Range Management Specialists monitor 28 allotments totaling 784,440 acres on a five-year rotational period. Long-term trend monitoring was conducted for 5 allotments on 105,424 acres. Compliance monitoring was completed on 22 allotments. Some allotments are only partially within GCPNM. Weed inventory was conducted on 40,000 acres and rain gauge precipitation monitoring was completed at 14 stations on a quarterly basis for a total of 56 times monitored.

Status and Trend Table

Long-Term Monitoring Acres	Trend
397,060	Upward
320,647	Static
57,342	Downward
15,691	Undetermined

Inventory, Assessment, Monitoring Table

Acres in Unit	Acres Inventoried	Acres Possessing Object	Acres Monitored in FY14
784,440	784,440	784,440	105,424

Stressors Affecting Vegetation and Range Resources

Invasive species and uncharacteristic fire return intervals are affecting vegetation and range resources. Scotch thistle populations continue to be a concern and are treated with other invasive species as they are detected.

Physical Facilities

Developed facilities are minimal. BLM administrative use facilities are maintained at Nixon Springs, Poverty, Parashant and Pakoon Fire Station and an NPS facility at Dellenbaugh. Roads are unpaved and subject to seasonal debris flows associated with monsoon storm events. Limited designated trails exist.

Stressors Affecting Physical Facilities

Facilities inspections were conducted by the Arizona State Safety Manager, overall condition of physical facilities, including roads and trails is generally stable with nominal issues needing to be addressed. Normal wear and tear along with natural occurrences such as erosion and weather is evident and showing only slight impacts on physical facilities.

6 Summary of Performance Measure

The natural and cultural resources of GCPNM have largely been protected by remoteness and inaccessibility. However, that measure of protection will be compromised, as the area is more becomes more popular and accessible to the public. Combined with other natural factors such as invasive species; uncharacteristic fire and climate change, the complexity of management will likely continue to increase. The summary table, see below, is a broad representation of the status of various resources, objects, and/or values.

Summary Table*		
Resource, Object, or Value	Status	Trend
Prehistoric Resources	Fair to Good	Stable
Historic Resources	Poor to Good	Stable
Natural Resources	Good	Stable
Cave & Karst Resources	Good	Stable
Vegetation and Range Resources	Poor to Good	Upward
Physical Resources	Fair to Good	Stable

*This table is a synthesis of the individual object/value status tables in the "Objects, Values, and Stressors" section.

7

Manager's Letter

The GCPNM remains an outstanding and unique collection of resources. The management of these resources, through the Service First Organization continues to serve as a model for highly successful collaboration with the BLM and NPS. The GCPNM will continue to take advantage of funding and human resources to maximize the benefits found in each agency.

In 2015, the GCPNM staff will persist in expanding our collaborative opportunities with local gateway communities, tribal partners, diverse stakeholders and visitors. Youth employment and education programs will continue to be supported. Research projects from the scientific community will continue to be supported and advanced as we discover and interpret the resources found within the GCPNM. The GCPNM staff will continue to promote our dark night skies and work towards completing an Environmental Impact Statement for the Uinkaret Mountains Vegetation Management Project.



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Grand Canyon- Parashant National Monument

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January 2015

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