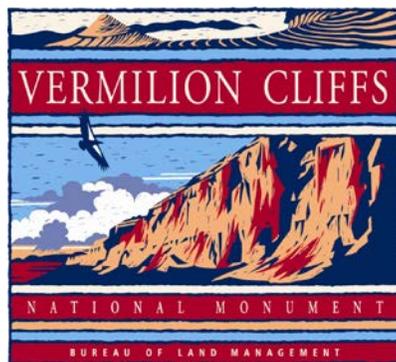




Vermilion Cliffs National Monument

National Landscape Conservation System

FY 2011 Manager's Report



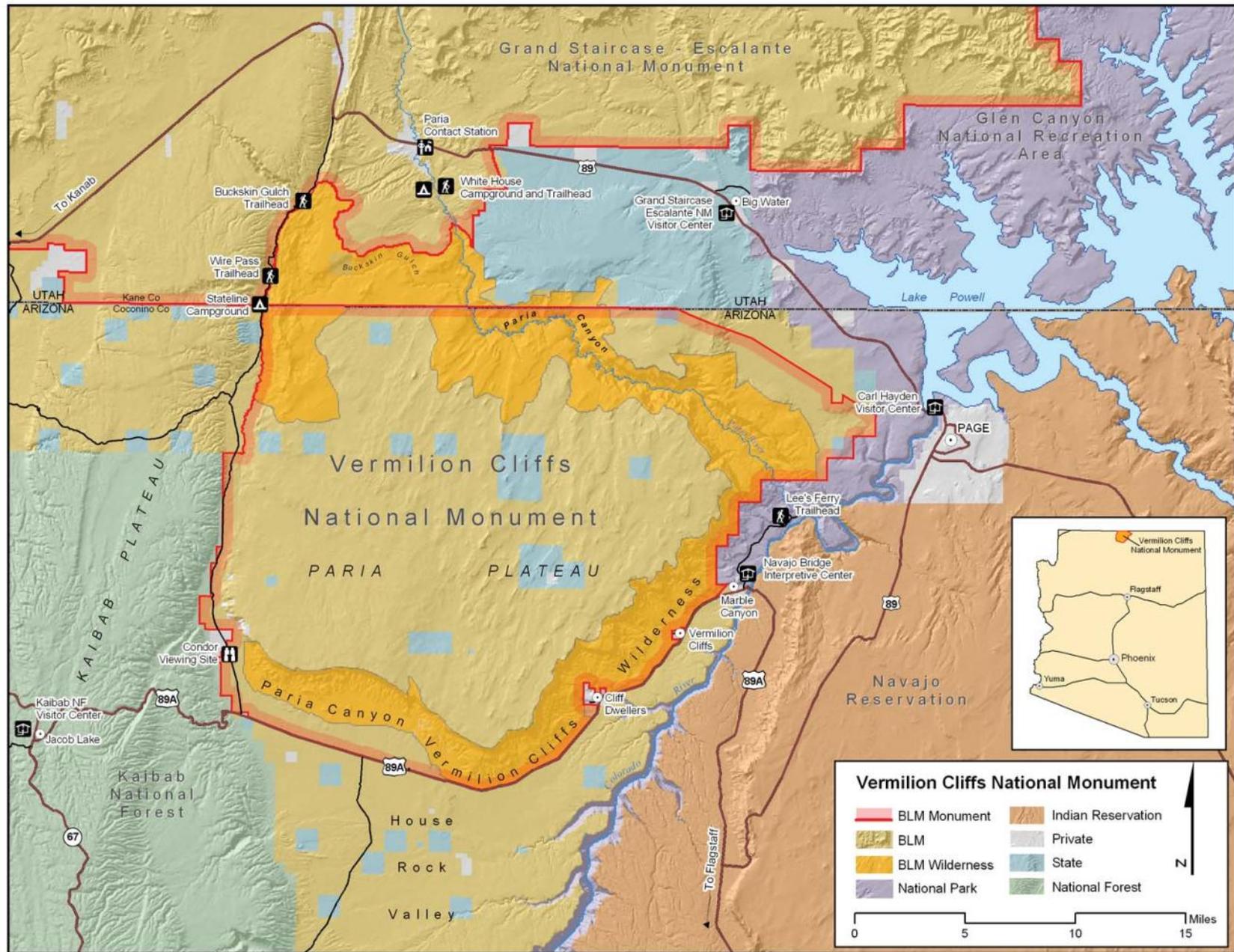
BLM



Introduction

1. Unit: Vermilion Cliffs National Monument (VCNM)
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Phone: (435) 688-3200
Email: ASOWEB_AZ@blm.gov
Website: www.blm.gov/az/st/en/prog/blm_special_areas/natmon/vermilion.html
2. Manager's Name: Kevin Wright
3. Associate field, district and state office: The Monument is part of the Arizona Strip Field Office, inside the Arizona Strip District reporting to the Arizona State Office.
4. The Monument was established by Presidential Proclamation 7374 on November 9, 2000.
5. 279,566 acres.
6. Annual visitation for FY 2011 is estimated at 65,000.





1. Natural and Heritage Resources Conditions

a. Natural Resource Trends

- No new vegetative monitoring or inventories took place in FY11. Apparent trend of natural resources is static.

b. Heritage Resource Trends

- Without a significant sample, it is difficult to address the status of heritage resources with much accuracy. Arizona State Parks Site Stewards monitored 14 archaeology sites, and performed several area wide patrols for potential adverse impacts and other concerns. The condition trend appears flat with only a minor decrease in the condition due to vandalism, human visitation, and natural phenomena such as erosion and weathering. Overall, the condition of the cultural and paleontological resources appears good to excellent.

c. Land Health Assessments

- No new Land Health Assessments were conducted in FY11.

d. Inventory

- No new natural resource inventories were conducted in FY11.
- 540 acres of heritage resource inventory were completed in FY11 because of additional funding made available for cultural resource at risk projects.

e. Restoration

- The Paria Canyon Tamarisk 5-year Removal Project was begun in 2008 and is a partnership between the Bureau of Land Management (BLM) and Grand Canyon Trust to aid in the restoration of the ecological integrity of the Paria River system within Paria Canyon. In 2011 the Grand Canyon Trust donated approximately 843 labor hours to continue the treatment and removal of tamarisk and Russian olive in the river corridor.

2. Recreation Facilities, Roads, and Trails Conditions

a. Overview

Overall, physical facilities, including roads and trails are in good condition (i.e., no resource damage is occurring as a result of the facility) and provide for a positive user experience. It should be noted that most roads within the Monument are unimproved, 4-wheel-drive roads.

- The Asset Management Plan for Vermilion Cliffs National Monument (VCNM) was completed in 2009. The report states that VCNM has 12 owned constructed assets. This represents 100% of the total assets owned by the Monument.
- According to the 2009 Asset Management Plan, there are 10 assets (83%) in Quadrant 1 of the Asset Priority Index/Facility Condition Index (high priority-good condition). There are 2 assets (17%) in Quadrant 2 of the Index (high priority-poor condition).

b. Construction

- There was no new construction on the Monument in FY11

- c. Maintenance
 - The Monument currently has a deferred maintenance backlog of approximately \$86,041 with a current replacement value of \$686,653. Annual maintenance is meeting the needs of the BLM and visitors at this time.
 - Many of the visitors access the Monument through physical facilities in Utah. For example, three of the four trailheads accessing Paria Canyon are in Utah. The Paria Contact Station, where the walk-in lottery was held, is also in Utah. The Condor Viewing Site and Stateline Campground are the only significant physical facilities for outdoor recreation located on the Monument and are in excellent condition.
- d. Signage
 - The Interpretive and Information Sign Plan for Grand Staircase-Escalante National Monument (GSENM)/Paria Canyon-Vermilion Cliffs Wilderness/VCNM was completed in 2003. This is a comprehensive interpretive sign plan for VCNM and the Paria Canyon-Vermilion Cliffs Wilderness in partnership with GSENM.
 - Signing is a key element to managing and implementing the Monument's travel management implementation decisions from the 2008 Resource Management Plan (RMP). The Monument continues to develop a Travel Management Implementation Plan that includes goals and objectives of signing, types of signs, placement, and design. The Implementation Plan is expected to be finalized in FY 2012.
 - VCNM has two portal signs at the north and south entry points of the Monument on House Rock Valley Road. Both are in good condition. The south portal sign needs to have the BLM emblem added to it.
- 3. Outreach, Environmental Education, Interpretive, and Volunteers
 - a. Outreach
 - On September 24, 2011, VCNM sponsored a National Public Lands Day event at the condor viewing site. Approximately 300 people attended the event to witness the release of 3 California condors. The Dixie/Arizona Strip Interpretive Association (D/ASIA) aided the event by providing the public with information on the BLM and Arizona Strip. Chris Parish (with the Peregrine Fund) and Kathy Sullivan (with Arizona Game and Fish Department) provided participants with information and gave educational talks on condors and associated issues.
 - b. Visitor Centers
 - VCNM has no visitor centers.
 - D/ASIA enhances visitors' understanding of VCNM and the rest of the Arizona Strip by operating the Interagency Visitor Center in St. George, providing a wide range of materials and services to assist the public, including hosting environmental education programs, answering questions about the local area, and issuing permits - mineral,

woodcutting, and Christmas trees for portions of the Arizona Strip outside national monuments. D/ASIA maintains a sales area that offers a variety of maps and publications on local history and resources, and gifts.

The GSENM (Utah) visitor centers in Big Water and Kanab, Utah are also used as satellite information centers providing a wide range of materials and services to assist the public, including hosting environmental education programs, hosting a bi-annual commercial special recreation permit meeting in Kanab, Utah, in which VCNM participates.

The Kanab Field Office (Utah) visitor center provided a wide range of materials, books, maps, phone and on-line services for Paria Canyon-Vermilion Cliffs Wilderness and VCNM. They also held the Coyote Buttes North and South lotteries and issued permits from November 16 to March 14.

The Paria Contact Station (Utah) from March 15-November 15 provided up-to-date Paria Canyon weather conditions, road conditions in the area, patrols to the permit areas, emergency services and basic visitor information. They held the Coyote Buttes North lottery in which as many as 100 people participated every day, and issued walk-in permits for Coyote Buttes South and Paria Canyon.

The visitation at the Interagency Information Center in St. George, UT is estimated at 60,033 people. Utah BLM offices report visitation number at the Utah visitor centers.

c. Environmental Education

- VCNM, in conjunction with the Kanab Field Office in Utah, began production on a public safety and information video on the Paria Canyon-Vermilion Cliffs Wilderness. The final product should be completed in FY 2012

d. Interpretation

- Major updates to the website were implemented in FY 2011. Permit informational hand-outs and maps were also updated.
- Though located just off VCNM, monument staff helped install new interpretive and trailhead signs at the Arizona National Scenic Trailhead.
- VCNM purchased a trailer to serve as a quasi-traveling interpretive center for VCNM. Interpretive materials will be kept in the trailer to be used at schools, public events, etc.

e. Volunteers

- Heritage Resources: In Archaeology the use of volunteers from support groups such as the Arizona State Parks Site Steward Program, Kaibab Vermilion Cliffs Heritage Alliance (KVCHA), Northern Arizona University (NAU), and professional archaeologists from both Arizona and Utah is

extremely important in managing for cultural resources on the Monument. The Monument offers challenges in this area because it has a small staff and is some distance from its managing agency's physical location in Saint George, Utah.

- In March 2011, NAU, Boston University and the University of Illinois Alternative Spring Break (ASB) groups worked on BLM lands within VCNM and House Rock Valley. **35 ASB volunteers contributed 1200 hours** on projects across the Kane and Two Mile Ranches. ASB students accomplished some amazing work, including: modifying almost two miles of barbed wire fence to meet acceptability criteria for pronghorn passage and removed twelve tons of debris from residential and ranching dump sites in House Rock Valley and the Paria Plateau.



- The AmeriCorps NCCC **crew of ten** 18-24 year-olds hosted by Grand Canyon Trust and VCNM completed several worthwhile projects over an 8 week period living and working on the Paria Plateau and House Rock Valley. They restored approximately 420 feet of trail to the Maze petroglyph panel by building several steps, defining and stabilizing switchbacks, and rehabilitating slopes with multi-trailing to prevent erosion and use of social trails.



The crew closed approximately 8 miles of road at 15 different sites on the Paria Plateau designated for closure in the 2008 VCNM RMP. The crew built tree barriers, raked out tracks, transplanted native vegetation and used naturalization techniques to disguise visible sections of roads.

The crew assisted with ongoing Plateau cleanup efforts and removed 3,500 lbs of trash from the Pine Pocket homestead. They also built a barbed wire fence enclosure with the help of Justun Jones at the Pine Tree Pocket campsite to prevent off road vehicle travel. Five gates were installed on "Administrative Use Only" roads on the west side of the Plateau.

Over the 8 week period, the crew donated **2,900 volunteer hours** between VCNM and Arizona Strip Field Office.

- **7 volunteers** with the Grand Canyon Trust, contributing **168 hours**, collected 100 plant specimens as part of the Vermilion Cliffs Botanical survey and monitored livestock exclosures.
- **8 volunteers** with the Grand Canyon Trust, contributing **264 hours**, cleared 3 miles of old pipeline and painted the Jarvis Ranch house.

4. Science

- a. Heritage Resources: All of the Archaeological and Paleontological sites on the Monument are of significant scientific interest due to the lack of professional scientific research and study of the Arizona Strip. As information about resources is compiled it provides the data to make better land management decisions.
- b. Researchers with the University of Utah began preliminary research on exposures of Navajo Sandstone located on the monument in the White Pockets area that exhibit polygonal weathering cracks. The study will focus on what factors play a prominent role in the formation of these weathering cracks. Researches are hoping to have a published peer-reviewed journal article in 2012. The research can be used to development and refine interpretive materials of the White Pocket area.

5. Partnerships

- a. The NAU partnership consists of a wilderness and recreation use monitoring program. Site monitoring in Paria Canyon and Coyote Buttes is conducted annually by professors and graduate students in the Department of Geography, Planning, and Recreation. In addition, monitoring of other key sites (including White Pockets) has been initiated. Monitoring is conducted to document visitor use impacts and the resultant data is part of the information used to assist managers in making informed land use decisions. In addition to the NAU project, trail and road counters have been placed at strategic locations to more

accurately reflect the number of visitors entering and exiting the Paria Canyon/Coyote Buttes Special Management Area. In FY 2011, BLM contributed approximately \$20,000 to the monitoring program.

- b. The Peregrine Fund continued to partner with VCNM in the California condor recovery program. VCNM contains the release site that the Peregrine Fund uses to release condors raised in captivity and re-release birds captured to test for lead contamination. In FY 2011, the BLM contributed \$50,000 through an assistance agreement to aid in the condor recovery efforts.
- c. Arizona Game and Fish Department continued their involvement with VCNM in the lead reduction program. Lead poisoning is the leading cause of mortality in California condors. This program consists of supplying hunters in northern Arizona with lead-free ammunition to use on their big game hunts in hunting units that include VCNM. The program is voluntary but shows participation rates close to what they are in states that ban lead ammunition (i.e. California). The lead reduction program is critical to the success of the California condor recovery program. The BLM continues to contribute money through an assistance agreement to help pay for the cost of the program. In FY 2011, the BLM contributed \$36,000 to the program.
- d. Since 2008, the Grand Canyon Trust has coordinated volunteer efforts to remove invasive species (tamarisk and Russian olive) from the Paria River in the Paria Canyon-Vermilion Cliffs Wilderness. Grand Canyon Trust continued these efforts in FY 2011. Volunteers treated 17 acres of the project area in the fall of 2010 and spring of 2011. BLM was going to contribute labor and supplies to the project in FY 2011 to burn slash piles, but due to timing and logistics were unable to do so. Burns are planned for FY 2012.
- e. At the end of FY 2011, the VCNM friends group, Friends of the Cliffs, was formally established.

6. Planning and Business Practices

a. Planning

- The VCNM RMP (including travel management route designations) was completed and approved on January 29, 2008.
- The VCNM Travel Management Plan is being drafted and should be finalized in FY 2012. Through volunteer work and VCNM staff, 8 miles of routes were closed.
- Other RMP implementation efforts are included in other sections of this report.

b. Budget

- VCNM staff work months for FY 2011 are in Table 3. Responsibilities of the manager, outdoor recreation planner, recreation technician, and law enforcement officer positions are dedicated to the monument. Since the Vermilion Cliffs-Paria Canyon Wilderness is located in Arizona and Utah, the Monument pays for half of the wilderness ranger. The other half is paid for by BLM-Utah. The range management specialist, though a

Monument employee, administers grazing allotments outside the Monument boundary.

- VCNM identified no priority staffing needs in FY 2011 as indicated in Table 4.
- Table 5 contains contributions made to VCNM. 100% of contributions to the Monument were through volunteer hours.

State Name: Arizona
 Unit: Vermilion Cliffs NM
 Manager: Kevin Wright

Table 1: SCIENCE (table continues on next page, please scroll to the right)										
Location	Project Name	Discipline	Research Contributor/ Collaborator/	Project Description	Status	Products	Applications	Outreach Options	BLM Contributions	Partner Contributions
		<i>Geology, Paleontology, Hydrology,</i>			<i>Ongoing, 1st year, or completed</i>	<i>Provide citations and web addresses where applicable</i>	<i>How the research has or will be used</i>	<i>Identify projects or stories that may be of interest to the public</i>	<i>To date by year</i>	<i>To date by year</i>
Vermilion Cliffs National Monument (VCNM)	Archaeological Survey	Archaeology	PaleoWest Solution in Archaeology (A contract company)	540 acres of inventory of pro-active inventory and site records	Completed	Baseline cultural resource data. 540 acres of inventory, re-recording and refinement of 17 previously recorded sites, and recording of 26 new sites. 43 site records (17 re-recorded and 26 new sites).	1) Aids in future management. 2) Aids in the refinement of modeling location of prehistoric sites.			
Vermilion Cliffs National Monument (VCNM)	Weathering Patterns in Navajo Sandstone	Geology	Univeristy of Utah	Researchers began preliminary research on exposures of Navajo Sandstone located on the monument in the White Pockets area that exhibit polygonal weathering cracks. The study will focus on what factors play a prominent role in the formation of these weathering cracks.	Ongoing	Researchers are hoping to publish a peer-reviewed article sometime in 2012	The basic understanding of White Pocket will help determine the importance of north facing exposures in term of moisture, microclimates, and potential biological activity.	Research can be used to refine interpretive materials for the White Pocket area.		

State Name: Arizona
Unit: Vermilion Cliffs NM
Manager: Kevin Wright

Table 2: PARTNERSHIPS (table continues on next page, pleas scroll to the right)								
Location	Project Name	Partners	Project Description	Status	Results	Outreach Options	BLM Contribution	Partner Contribution
						<i>Identify projects or stories that may be of interest to the public</i>	<i>Funding To date by year</i>	<i>To date by year</i>
Vermilion Cliffs National Monument (VCNM)	Archaeological Site Monitoring.	Arizona State Parks - Site Steward Program	Conduct small scale archaeological site monitoring.	Ongoing	14 sites monitored and area wide monitoring performed annually.	Provides members of the public an opportunity to help in preserving cultural resource properties, and to learn more about archaeology and BLM.	FY 2011, BLM provided \$410 to cover training and reimbursement to regional coordinator for a once a year program coordination meeting held by the Arizona State parks.	FY 2011, partner contributed \$5,824 in labor. They also use their own vehicles, gas, and misc. materials.
Vermilion Cliffs National Monument (VCNM)	Recreation Impact Monitoring	Northern Arizona Univeristy	Monitor Paria Canyon and Coyote Buttes Special Management Areas to document visitor use impacts. Information is used to assist manager in making informed land use management decisions.	Ongoing	148 miles of monitoring, 10 monitoring sites, 22 days of work	Provides BLM with information on wilderness resource conditions. This aids in BLM's development on visitor use restrictions in the Paria Canyon-Vermilion Cliffs Wilderness	FY2011: \$20,073	FY2011: \$5,000 (Field Data Collection \$2,800, Data Collector/Input Supervision \$700, Data Analysis & Reporting \$2,000)
Vermilion Cliffs National Monument (VCNM)	Condor Recovery Program	Peregrine Fund	Reintroduce California condors to their historical range. The release site of condors raised in captivity is located on VCNM. The Peregrine Fund has been releasing condors at this site since 1997	Ongoing	73 free flying condors, 7 new birds released from the captive breeding program, and 3 wild chicks hatched.	This long-term partnership and the condor reintroduction is a tremendous success. From a low of 22 condors remaining in the early 1980's, to over 200 free flying condors though 2011.	FY2011: \$50,000	FY2011: \$1.1 million. This includes labor, vehicles, supplies, facilities, travel, etc.
Vermilion Cliffs National Monument (VCNM)	Lead Reduction Program	Arizona Game and Fish	Lead poinsoning is the leading cause of mortality in the California condor. The Arizona Game and Fish offers hunters with tags on hunting units where condors are found lead-free bullets. The program is voluntary	Ongoing	AZGF saw 87% participation with 70% of hunters using non-lead ammunition and 17% hauling out gut piles.	This partnership with Arizona Game and Fish is critical to the success of the California condor reintroduction program. The leading cause of mortality in condors is lead poisoning. Their voluntary program sees the same participation as mandatory lead ban rules.	FY2011: \$36,000	FY2011: \$90,000 spent on the cost of the free non-lead ammo program and another \$90,000 on the condor recovery and education efforts.
Vermilion Cliffs National Monument (VCNM)	Invasive species removal in Paria Canyon Wilderness	Grand Canyon Trust	Remove invasive species (tamarisk and Russian olive) from the Paria River riparian area in the Paria Canyon Wilderness. Volunteers use hand tools and herbicides to kill the invasives. They also pile the slash for BLM fire crews to burn them.	Ongoing since 2008	In FY11, Grand Canyon Trust voluteers treated the 17 acres of the project area in the fall of 2010 and Spring of 2011.	Invasive species reduction work in Paria Canyon has been going on since 2008. Monitoring demonstates effectiveness in the treatments.	BLM fire personnel were unable to burn slash piles in Paria Canyon in FY2011 due to logistical and weather related restrictions.	15 volunteers contributed 843 labor hours.

State Name: Arizona
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Table 5. CONTRIBUTIONS	
AmeriCorps National Civilian Community Corp (NCCC) - Value of 2900 donated hours	\$52,000
Alternative Spring Break (ASB) groups - Value of 1200 donated hours	\$21,600
Grand Canyon Trust - Value of 1275 donated hours	\$22,950
TOTAL Contributions	\$96,550