Call for Data Related to Review of National Monuments under EO 13792 (April 26, 2017)

Ironwood Forest National Monument

1. Documents Requested
    a) Resource Management Plans/Land Use Plans
        i. The Ironwood Forest National Monument Approved Resource Management Plan (RMP) and Record of Decision (ROD) is located within this drive (1ab.IFNM_mgmt_plan.pdf)
    b) Record of Decision
        i. RMP Record of Decision (ROD) approved February 2014. It is included in the RMP document located within this drive (1ab.IFNM_mgmt_plan.pdf)
    c) Public Scoping Documents
        i. RMP Scoping report, completed February 12, 2004, is located within this drive (1c.IFNM_scoping_report)
    d) Presidential Proclamation
        i. Presidential Proclamation 7320- Establishment of the Ironwood Forest National Monument, June 9, 2000 is located within this drive (1d.IFNM_proclamation)

2. Information on activities permitted at the monument, including annual levels of activity from the **date of designation to the present**

    Designation Date for IFNM is June 9, 2000.

    a) Recreation - annual visits to site
        i. IFNM uses the Recreation Management Information System (RMIS) to report recreation use, which is calculated from limited traffic counts. BLM is currently working on changes to RMIS that will improve our visitation reporting and addressing an anomaly for 2016 data.

YEAR	VISITS
2001	15,900
2002	11,974
2003	21,025
2004	27,550
2005	22,500
2006	16,200
2007	17,100
2008	17,900
2009	19,300
2010	23,026
2011	26,000
2012	30,373
2013	43,640
2014	47,435

2015	58,020

Note: The 2014 IFNM RMP closed the monument to recreational target shooting activity.

b) Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)

i. No production of coal, oil, gas or renewable energy has occurred on IFNM since designation.

ii. The amount of energy transmission infrastructure on IFNM has not changed since designation. Current energy transmission infrastructure on IFNM is listed in the table below.

SERIAL NUMBER	Sum Miles	Comment
A-19136	0.3	Electric Transmission
A-2024	5.8	Electric Transmission
A-2205	0.7	Electric Transmission
A-7274	5.7	Electric Transmission
A-7872	7.3	Electric Transmission
A-7874	1.7	Electric Transmission
AR-023490	20.7	Electric Transmission
AR-025949	1.4	Electric Transmission
AR-030401	5.1	Electric Transmission
AR-031023	2.1	Electric Transmission
AR-03905	3.0	Electric Transmission
AR-05586	1.8	Natural Gas
AR-0612	2.0	Electric Transmission
AZA-23405	1.1	Electric Transmission
PHX-083253	8.8	Natural Gas
PHX-084351	1.7	Electric Transmission
PHX-086067	6.9	Natural Gas

Total	76.1 Miles	

c) Minerals - annual mineral production on site
   i. Since monument designation, no mineral production has occurred on federal land within the IFNM boundary.
   ii. Mining claims existing at the time of monument designation and remaining active would require a validity exam and Mining Plan of Operation before mineral production. Monument lands were withdrawn from mineral entry by the proclamation.
   iii. The 4200-acre Silver Bell copper mine on adjacent private land was discovered, after designation, to have an unauthorized pipeline across monument land. The operator moved the pipeline and completed the regrading and revegetation required by the BLM, as this was less expensive than completing a Mining Plan of Operations in order to authorize the pipeline. Although authorizing the pipeline after designation would have also required a validity exam, whereas authorizing the pipeline prior to designation would have only required a Mining Plan of Operations, in either case moving the pipeline was less expensive and therefore the more appealing option for the operator.
   iv. The 120-acre Pioneer Materials mineral materials quarry on adjacent private lands has not been impacted by activities on the monument since designation. BLM issued and administers a right-of-way for hauling material across monument lands.
   v. The 40-acre Kalamazoo minerals material quarry opened on adjacent private land after monument designation. This quarry was permitted by the Arizona State Mine Inspector.

d) Timber - annual timber production on site (in board-feet, CCF, or similar measure)
   i. No timber production has occurred on IFNM since designation. The Sonoran Desert ecosystem has no timber resource nor provides timber products.

e) Grazing – annual grazing on site (AUMs permitted and sold)
   i. The number of AUMs permitted (7,849) has not changed since designation. The number of AUMs sold each year is at the lessee's discretion based on weather and forage production, with numbers being lower during drought years.
   See tables located within this Drive: 2e.IFNM_Billed AUMs, 2e.IFNM_Permitted_Active_AUMs_by_Allotment_as_of_2017-5-23

f) Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available
   i. No subsistence activities have occurred on the IFNM since designation. There are no formal subsistence activities outside of Alaska. IFNM does provide for the

collection of certain natural materials by Native American Indians. There have never been sport fish on the IFNM. The terms of the Proclamation ("The establishment of this monument is subject to valid existing rights. Nothing in this proclamation shall be deemed to enlarge or diminish the jurisdiction of the State of Arizona with respect to fish and wildlife management.") state that regulation of hunting and fishing in the monument remains with the State.

ii. Arizona Game and Fish Department does not measure hunting participation rates for the IFNM separate from the remainder of the Game Management Unit in which the monument is located.

g) Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available

i. Cultural resources data are compiled from the *Ironwood Forest National Monument Proposed RMP and Final EIS* (2011), the AZSite online database (administered by the Arizona State Museum), and the cultural heritage program files at the BLM Tucson Field Office.

ii. To date, approximately 12.5 percent of BLM-administered lands within the monument (~16,000 acres) has been inventoried for cultural resources. Roughly half of the current survey data was generated after the date of the Monument Proclamation, resulting in a net doubling of the number of known and/or documented cultural resources sites within the monument.

iii. The various surveys within the monument have resulted in the documentation of 310 archaeological and historical sites; approximately half of the known sites have been identified and documented since the date of Monument Proclamation. Analysis of current data provides an average density of approximately 11 cultural resources sites per square mile on BLM-administered lands with a projected total estimate of 3,000 to 6,000 sites likely to exist across the entirety of the monument.

iv. Cultural Values. Evidence of Paleoindian occupation (circa 12,000-8,000 B.C.) within the monument is currently limited to isolated spear points (Agenbroad 1967; Ayres 1970; Doelle 1985; Huckell 1984). Several Late Archaic/Early Agricultural era sites (circa 1,500 B.C.-A.D. 650) have been discovered along the course of the Santa Cruz River southeast of the monument (Gregory and Mabry 1998; Mabry et al. 1997); these sites include some of the oldest known canal systems and pottery types in southern Arizona (Gregory 1999; Heidke 1997; Heidke and Ferg 1998; Mabry 1999). Formative era sites (circa A.D. 650-1400) dominate the regional archaeological record and reflect an adaptation based on farming villages. Around A.D. 500, a culture referred to as the Hohokam began to flourish and occupied much of what is now southern and central Arizona for approximately a millennium. Evidence of the Hohokam occupation dominates the archaeological record of the monument. Other identified cultural affiliations

include historic-era Euro-American, Protohistoric and/or historic O'odham, possible Patayan components, and a possible Apache component.

v. Tribal Interests. The BLM regularly consults with five Native American tribes who claim ancestral and/or traditional interest in the lands and resources of the monument: the Hopi Tribe, Pascua Yaqui Tribe, Tohono O'odham Nation, White Mountain Apache Tribe, and the Yavapai-Apache Nation. There is limited information regarding specific places within the monument that have been identified as having traditional cultural significance; however, tribes with ancestral ties to the region are known to have concerns about the treatment of human remains, funerary objects, sacred objects, and objects of cultural patrimony.

Members of the Tohono O'odham Nation, which borders the monument to the west, likely consider stands of saguaro where fruit was or may be collected as having significance (c.f., Nabhan 1987, 1982). The Cocoraque Butte area also is known to have some significance as a potential traditional cultural place. Tribal interests in the lands and resources of the monument as expressed through ongoing consultations with the O'odham include indigenous plant resources, access for tribal members (various purposes), protection/preservation of archaeological and historical O'odham sites, coordinated management of archaeological sites that overlap the monument-Tohono O'odham Nation boundary, and an overarching concern about the impacts of encroaching development.

3. Information on activities occurring during the **5 years prior to designation**
   a) Recreation - annual visits to site
      i. No estimates of recreation use were made prior to designation. A recreation study completed shortly after monument designation indicated approximately 10,000 annual visits for various dispersed recreational activities (OHV driving for pleasure, hunting, sightseeing, hiking, camping).
   b) Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)
      i. No coal, oil, gas, or renewable energy production occurred on the site during the five years prior to designation.
      ii. All existing energy transmission infrastructure was developed prior to designation, including a total of 76.1 miles of right of way.
   c) Minerals - annual mineral production on site
      i. Jenott Mining operated a 5-acre mineral material sale quarry on IFNM which ended production prior to monument designation. Reclamation was complete one year after designation.
      ii. Prior to designation, a Mining Plan of Operation was required for active mining

over 5 acres or more of unpatented claims.

iii. The adjacent Silver Bell copper mine, on private land, was not impacted by activities on BLM land prior to designation. The Silver Bell mine was permitted by the Arizona State Mine Inspector.

iv. The adjacent Pioneer Materials mineral materials quarry, on private land, was not impacted by activities on BLM land prior to designation. The main product is limestone aggregate. The Pioneer quarry was permitted by the Arizona State Mine Inspector.

d) Timber - annual timber production on site (in board-feet, CCF, or similar measure)

i. No timber production occurred on IFNM in the 5 years prior to designation. The Sonoran Desert ecosystem has no timber resource nor provides timber products.

e) Grazing - annual grazing on site (AUMs permitted and sold)

i. Designation did not change the number of AUMs permitted; 7,849 AUMs were permitted each of the five years prior to designation. The number of AUMs sold each year is at the lessee's discretion based on weather and forage production, with numbers being lower during drought years.
See tables located within this Drive: 2e.IFNM_Billed AUMs, 2e.IFNM_Permitted_Active_AUMs_by_Allotment_as_of_2017-5-23

f) Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available

i. No subsistence activities have occurred on the IFNM since designation. There are no formal subsistence outside of Alaska. IFNM does provide for the collection of certain natural materials by Native American Indians. There have never been sport fish on the IFNM. The terms of the Proclamation ("The establishment of this monument is subject to valid existing rights. Nothing in this proclamation shall be deemed to enlarge or diminish the jurisdiction of the State of Arizona with respect to fish and wildlife management.") state that regulation of hunting and fishing in the monument remains with the State.

ii. Arizona Game and Fish Department does not measure hunting participation rates for the IFNM separate from the remainder of the Game Management Unit in which the monument is located.

g) Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available

i. In the five-year period prior to monument designation, approximately 8,000 acres of BLM-administered land that later became the monument had been inventoried for cultural resources. These surveys were primarily conducted in support of BLM-permitted activities associated with grazing, mining, and/or utility line construction projects.

ii. In the five-year period prior to monument designation, approximately 150 cultural sites had been documented on BLM-administered land in the areas that later became the monument. These sites were primarily identified through the previously referenced inventories.

iii. Cultural Values. Prior to monument designation, three historic properties had been recognized as having special significance by being listed on the National Register of Historic Places. These include the Los Robles Archaeological District (listed in 1989), the Cocoraque Butte Archaeological District (listed in 1975), and the Santa Ana de Cuiquiburitac Mission Site (listed in 1975).

4. Information on activities that likely would have occurred annually from the date of designation to the present **if the Monument had not been designated**

a) Recreation - annual visits to site

i. It is likely that dispersed recreational use would have continued at relatively low levels (estimated at less than 10,000 annual visits) for hunting, camping, OHV driving and target shooting.

b) Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)

i. No production of coal, oil or gas would have likely occurred because the monument lacks the geologic formations in which these resources are formed.

ii. BLM completed several BLM-wide EISs for renewable energy and none identified the area as having high potential for renewable energy development.

c) Minerals - annual mineral production on site

i. Without monument designation, it is possible but not likely that mineral material production would have occurred on a small scale. Based on the geology, the area might have supported two 2-4-person operations.

ii. Without monument designation, it is likely that mineral claims would have been located. Mineral development of those claims would have been less likely. The existing adjacent copper mine has a Mining Plan of Operation, because of active mining over five acres or more of unpatented claims. BLM has not received any new Mining Plans of Operation since monument designation.

d) Timber - annual timber production on site (in board-feet, CCF, or similar measure)

i. No timber production would have occurred on IFNM without designation. The Sonoran Desert ecosystem has no timber resource nor provides timber products.

e) Grazing - annual grazing on site (AUMs permitted and sold)

i. Without monument designation, AUMs permitted and sold would likely not have been different than they have been with designation. The number of AUMs billed varies with the based on weather and forage production.

f) Subsistence - participation rates for subsistence activities occurring on site (fishing,

hunting, gathering); quantities harvested; other quantifiable information where available

i. No subsistence activities would have occurred on the IFNM without designation. There are no formal subsistence outside of Alaska. Designation did not impede collection of certain natural materials by Native American Indians. There have never been sport fish on the IFNM. Hunting participation rates would have been the same without designation, because regulation of hunting and fishing in the monument remains with the State.

g) Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available

i. Without monument designation, it is likely that less cultural resources inventory would have occurred. Monument designation generated additional research interest, resulting in several cooperative university projects including cultural resources inventory and assessment (c.f., Heilen and Reid 2006). Likewise, recent ethnographic research on Borderlands smuggling and undocumented immigrant activities would not have been possible (c.f., Warren 2013).

ii. Without monument designation, it is likely that additional vandalism would have occurred to cultural sites. After designation, research, inventory, and educational and interpretive outreach programs increased. Education, increased presence of staff and researchers, and improved management likely led to the reduction in numbers. Continued monitoring by BLM Archaeologists, Law Enforcement, and Site Stewards serves to deter potential looting and vandalism.

iii. Without monument designation, protective measures at the National Register of Historic Places-listed Cocoraque Butte Archaeological District and Santa Ana de Cuiquiburitac Mission Site likely would not have been prioritized and funded.

5. Changes to boundaries - dates and changes in size

i. The IFNM boundary encompasses 188,628 acres of land; this number of acres has not changed since designation. At designation, 128,398 of these acres were BLM-administered. The balance of the land consisted of approximately 54,700 acres of State Trust land (administered by the Arizona State Land Department [ASLD]) and approximately 6,000 acres of privately owned land, and a 299-acre Department of Defense withdrawal. The decisions in the Approved RMP (2012) currently apply to approximately 129,358 acres within the monument boundaries which is public land administered by the BLM.

ii. There have been no changes to the monument boundary since monument designation. Acquisitions since designation have all been private land within the boundaries of the monument, from willing sellers.

iii. In 2014, the BLM acquired 358 acres of private land within the monument from willing sellers, with the assistance of Land and Water Conservation Funds and

the Arizona Land and Water Trust. The majority of the acreage was patented mining claims in the Waterman Mountains in habitat for the Endangered Nichol Turks-head cactus, and containing a major bat roost.

iv. In 2016, the BLM acquired 602 acres of private land within the monument from willing sellers, with the assistance of Land and Water Conservation Funds and the Arizona Land and Water Trust.

6. Public Outreach prior to Designation - outreach activities conducted and opportunities for public comment
    i. BLM conducted no public outreach activities prior to designation. Monument designation was a citizen's proposal.
    ii. The Board of Supervisors of Pima County, Arizona, proposed the establishment of an "Ironwood Preserve" and signed Resolution 2000-63 "Request(ing) that the United States of America through the Secretary of the Department of the Interior, consistent with the Sonoran Desert Conservation Plan, work cooperatively with Pima County to establish the Ragged Top and Silverbell Ironwood Preserve in the Silverbell Mountains." in March of 2000.

7. Terms of Designation
    i. The terms of designation are from the Presidential Proclamation 7320- Establishment of the Ironwood Forest National Monument, June 9, 2000, which is located within this Drive (1d.IFNM_proclamation):

Executive Summary of Review of National Monuments under EO 13792 (April 26, 2017)

Key Information about Ironwood Forest National Monument

Ironwood Forest National Monument (IFNM) was established by Presidential Proclamation 7320 on June 9, 2000. Prior to designation, the area was managed by the BLM and continues to be following designation. The Proclamation designated "approximately 128,917 acres" and states that acreage is "the smallest area compatible with the proper care and management of the objects to be protected." The BLM manages for multiple use within the Monument (hunting, recreation, grazing, and valid existing rights such as mining claims, etc.), while protecting the vast array of historic and scientific resources identified in the Proclamation and providing opportunities for scientific study of those resources. The resources identified in the Proclamation include biological, geological and archaeological objects. Overall, multiple use activities are allowed in Ironwood Forest National Monument that are compatible with the protection of resources and objects identified in the Presidential Proclamation. Multiple use activities are subject to decisions made in current and future BLM resource management planning efforts which include public participation. National Monuments and other conservation areas managed by the BLM continue to allow for multiple uses according to the Federal Land Policy and Management Act (depending on proclamation language).

Summary of Public Engagement Prior to Designation

The BLM conducted no public outreach activities prior to designation. Monument designation was a citizen's proposal. The Board of Supervisors of Pima County, Arizona, proposed the establishment of an "Ironwood Preserve" and signed Resolution 2000-63 "Request(ing) that the United States of America through the Secretary of the Department of the Interior, consistent with the Sonoran Desert Conservation Plan, work cooperatively with Pima County to establish the Ragged Top and Silverbell Ironwood Preserve in the Silverbell Mountains." in March of 2000.

Summary of Public Scoping in Development of Resource Management Plan

The BLM engaged in a collaborative planning process in developing the RMP. The BLM conducted public informational meetings August 2000 - March 2002. Working groups for Lands and Minerals, Vegetation, Wildlife, Recreation, and Cultural Resources were established to identify, define, and articulate issues that would need to be addressed in the RMP. Public scoping was initiated on April 24, 2002, followed by informal scoping at community meetings, special interest group meetings, and coordination with elected representatives. The BLM conducted nine public scoping meetings in an open house format during July 2002, in the Arizona communities of Mesa, Casa Grande, Eloy, Arizona City, Tucson, Sells, Picture Rock, Marana, and Green Valley. A Spanish-speaking BLM employee attended each of these meetings to provide translation. Media releases were sent to over 400 addresses, and releases and Public Service Announcements went to more than 23 newspapers, television and radio stations.

Summary of National Monument Activities since Designation

Included below is a summary of monument activities since designation:

- Recreation use has increased from 15,900 visits in 2001 to 23,600 visits in 2016. No production of coal, oil, gas or renewable energy has occurred since designation.
- The amount of energy transmission infrastructure (76.1 miles of right of way) has not changed since designation.
- Since monument designation, no mineral production has occurred.
- No timber production occurred since designation. No timber resource is present.
- The number of AUMs permitted (7,849) has not changed since designation. The number of AUMs sold each year is at the lessee's discretion based on weather and forage production, with numbers being lower during drought years.
- Native American Indians collect some natural materials; no permit is required.
- Sport fish do not exist on the IFNM. Regulation of hunting remains with the State.
- Approximately 12.5 percent of BLM-administered lands within the monument has been inventoried for cultural resources. The number of known and/or documented cultural resources sites has doubled since monument designation. 310 sites have been documented, with an average density of approximately 11 cultural resources sites per square mile. Projected total estimate is 3,000 to 6,000 sites likely to exist across the entirety of the monument.

Summary of Activities in Area for Five years Preceding Pre-Designation

Included below is a summary of monument activities five years preceding designation:

- No estimates of recreation use were made prior to designation. A recreation study completed shortly after monument designation indicated approximately 10,000 annual visits.
- No coal, oil, gas, or renewable energy production occurred on the site during the five years prior to designation.
- All existing energy transmission infrastructure was developed prior to designation, including a total of 76.1 miles of right of way.
- A small mineral material sale (decorative rock) quarry was operating prior to designation. No other mining operations or mineral production occurred on federal lands during the five years prior to designation.
- No timber production occurred on IFNM in the five years prior to designation.
- Designation did not change the number of AUMs permitted; 7,849 AUMs were permitted each of the five years prior to designation. The number of AUMs sold each year was at the lessee's discretion based on weather and forage production, with numbers being lower during drought years.
- In the five-year period prior to monument designation, approximately 8,000 acres had been inventoried for cultural resources, and approximately 150 sites had been documented. The surveys were primarily conducted in support of BLM-permitted activities associated with grazing, mining, and/or utility line construction projects.

Summary of Available Economic Information since Designation

According to the Bureau of Land Management's economic analysis for FY2016, total visitor spending at IFNM was $1,401,970 and average expenditures per visit was $59.41. The total non-BLM jobs supported by the Monument is 21 with a total labor income supported of $726,234. This resulted in a total economic output supported by the Monument of $1,995,362.
An economic snapshot summarizing economic information is located within this drive (Ironwood Forest NM-Economic snapshot.pdf)

Summary of Any Boundary Adjustments since Designation

The IFNM boundary encompasses 188,628 acres of land; this number of acres, and the configuration of the boundary, have not changed since designation. Acquisitions from willing sellers of private land within the monument boundary added 358 acres in 2014 and 602 acres in 2016, bringing the BLM-administered acres from 128,398 at monument designation to 129,358.

New Information Requested on Executive Order on the Review of Designations Under the Antiquities Act

BLM Responses to Additional Questions for Ironwood Forest National Monument

a) Any legislative language, including legislation in appropriations bills

None.

b) Alternative options available for protection of resources applicable at each monument, such as Native American Graves Protection and Repatriation Act, Paleontological Resources Preservation Act, Archaeological Resources Protection Act, Historic Preservation Act and agency-specific laws and regulations.

The following could provide some options to protect specific resources found in Ironwood Forest National Monument. Protection would likely occur on a site-by-site or resource-by-resource basis and also would take a significant amount of time to accomplish under these various laws. These laws may not provide a mechanism to protect all cultural or tribal resources in Ironwood Forest National Monument.

- National Historic Preservation Act (NHPA)
- Native American Graves Protection and Repatriation Act (NAGPRA)
- Paleontological Resources Preservation Act (PRPA)
- Archaeological Resources Protection Act (ARPA)
- American Indian Religious Freedom Act (AIRFA)
- Endangered Species Act (ESA)
- Clean Water Act (CWA)
- Clean Air Act (CAA)
- National Environmental Policy Act (NEPA)
- Federal Land Policy Management Act. (FLPMA)

b) Designated wilderness areas (name, acreage), wilderness study areas (name if there is one, acreage, type), and/or areas managed to preserve wilderness or roadless characteristics that are not WSAs.
There are no designated wilderness areas, or wilderness study areas. Approximately 9,510 acres were identified in the RMP to preserve wilderness characteristics.

c) Outstanding R.S. 2477 claims within a monument – type of road claimed and history
There are no outstanding R.S. 2477 claims within the monument.

d) Maps

A map of the IFNM is located within this drive (Additional Information d.ifnm_map.jpg).

e) Cultural or historical resources, particularly Tribal, located near a monument but not within the boundary that might benefit from inclusion in the monument

Currently, there is limited information pertaining to specific places that might have traditional cultural significance within or immediately adjacent to the Monument, or cultural/historical resources near the Monument that might benefit from inclusion. Because the Monument shares a boundary with the Tohono O'odham Nation, the BLM regularly consults with the O'odham regarding Tribal interests as applicable to the Monument and surrounding Field Office management area.

g) Other – general questions or comments

i. Monument designation was initiated and supported by the local community, which led to formation of the Friends of Ironwood Forest, a non-profit friends group to assist BLM with education, interpretive programs, and outreach.
ii. The local community support led to increased numbers of volunteers, which allowed the BLM to implement clean up, resource protection, and stewardship education efforts that would not have occurred without monument designation.
iii. The monument is located in the international border zone. Monument designation brought attention to public safety concerns (to visitors and to neighboring residents) and resource damage due to the high volume of illegal smuggling on the IFNM. As a result, the BLM was allocated funding specifically to mitigate resource impacts and to provide intensive law enforcement operations.

NATIONAL CONSERVATION LANDS

Regional Economic Contributions of National Monuments and National Conservation Areas

Site Name	Ironwood Forest
State	AZ
Designation Date	6/9/2000

Visits (2016)	23,600
15yr Average Annual Visitation Growth	7.87%
15yr Median Annual Visitation Growth	8.70%

Acres	128,734
NPS Comparison Site used for Visitor Characteristics	Saguaro

2016 Visitor Spending by Sector

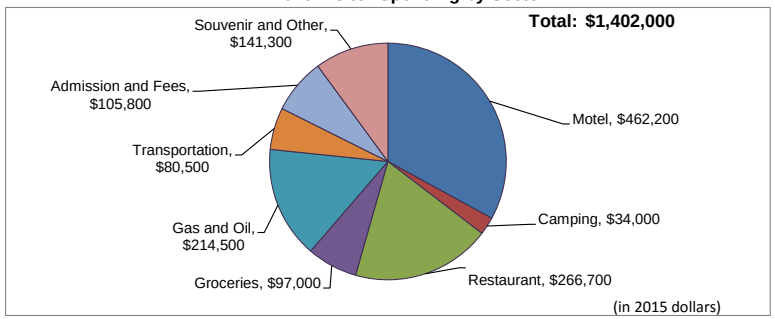

Table 1: Economic Contributions from Visitors to Ironwood Forest

Average Expenditures per Visit	$59.41
Total Expenditures	$1,402,000
Non-BLM Jobs Supported	21
Labor Income Supported	$726,000
Value Added	$1,202,000
Total Economic Output Supported	$1,995,000

Table 2: Budget, Volunteer Hours, and Revenue

FY15 Budget	$500,566
Volunteer Hours (2015)	1,774
Value of Volunteer Contributions	$40,500
FY16 Revenue	$17,317

Table 3: Economic Contributions in Context

Economic output supported per $1 of FY15 budget	$3.99
Economic output supported per acre	$15.50

Table 4: Previous Year Economic Contributions	**FY 2014 (in 2013 dollars)**				**FY 2015 (in 2014 dollars)**			
	Visits	**Total Spending**	**Jobs Supported**	**Output Supported**	**Visits**	**Total Spending**	**Jobs Supported**	**Output Supported**
	47,435	$2,713,000	40	$3,665,000	58,020	$3,382,000	50	$4,680,000

Visitation and visitation growth data were gathered from Department of Interior's Recreation Management Information System, as accessed on December 2016. Visitation growth data may be based on fewer than 15 years due to data unavailability. Acreage, budget, and volunteer hours are as reported in BLM FY15 Managers' Reports. The value of volunteer contributions was calculated using state-by-state value per hour of volunteer time from Independent Sector estimates. Economic contributions results were estimated by assigning visitor characteristics and spending patterns based on visitor surveys of the nearest National Park Service unit (Thomas and Koontz 2015). Contribution results were calculated from IMPLAN economic modeling software. Total expenditures, labor income, value added, and economic output have been rounded to the nearest thousand, and sector expenditures are rounded to the nearest hundred.

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AR-031023	2.1	Electric Transmission
AR-03905	3.0	Electric Transmission
AR-05586	1.8	Natural Gas
AR-0612	2.0	Electric Transmission
AZA-23405	1.1	Electric Transmission

PHX-083253	8.8	Natural Gas
PHX-084351	1.7	Electric Transmission
PHX-086067	6.9	Natural Gas
Total	76.1 Miles	

c) Minerals - annual mineral production on site
   i. Since monument designation, no mineral production has occurred on federal land within the IFNM boundary.
   ii. Mining claims existing at the time of monument designation and remaining active would require a validity exam and Mining Plan of Operation before mineral production. Monument lands were withdrawn from mineral entry by the proclamation.
   iii. The 4200-acre Silver Bell copper mine on adjacent private land was discovered, after designation, to have an unauthorized pipeline across monument land. The operator moved the pipeline and completed the regrading and revegetation required by the BLM, as this was less expensive than completing a Mining Plan of Operations in order to authorize the pipeline. Although authorizing the pipeline after designation would have also required a validity exam, whereas authorizing the pipeline prior to designation would have only required a Mining Plan of Operations, in either case moving the pipeline was less expensive and therefore the more appealing option for the operator.
   iv. The 120-acre Pioneer Materials mineral materials quarry on adjacent private lands has not been impacted by activities on the monument since designation. BLM issued and administers a right-of-way for hauling material across monument lands.
   v. The 40-acre Kalamazoo minerals material quarry opened on adjacent private land after monument designation. This quarry was permitted by the Arizona State Mine Inspector.

d) Timber - annual timber production on site (in board-feet, CCF, or similar measure)
   i. No timber production has occurred on IFNM since designation. The Sonoran Desert ecosystem has no timber resource nor provides timber products.

e) Grazing – annual grazing on site (AUMs permitted and sold)
   i. The number of AUMs permitted (7,849) has not changed since designation. The number of AUMs sold each year is at the lessee's discretion based on weather and forage production, with numbers being lower during drought years.

See tables located within this Drive: 2e.IFNM_Billed AUMs, 2e.IFNM_Permitted_Active_AUMs_by_Allotment_as_of_2017-5-23

f) Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available

i. No subsistence activities have occurred on the IFNM since designation. There are no formal subsistence activities outside of Alaska. IFNM does provide for the collection of certain natural materials by Native American Indians. There have never been sport fish on the IFNM. The terms of the Proclamation ("The establishment of this monument is subject to valid existing rights. Nothing in this proclamation shall be deemed to enlarge or diminish the jurisdiction of the State of Arizona with respect to fish and wildlife management.") state that regulation of hunting and fishing in the monument remains with the State.

ii. Arizona Game and Fish Department does not measure hunting participation rates for the IFNM separate from the remainder of the Game Management Unit in which the monument is located.

g) Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available

i. Cultural resources data are compiled from the *Ironwood Forest National Monument Proposed RMP and Final EIS* (2011), the AZSite online database (administered by the Arizona State Museum), and the cultural heritage program files at the BLM Tucson Field Office.

ii. To date, approximately 12.5 percent of BLM-administered lands within the monument (~16,000 acres) has been inventoried for cultural resources. Roughly half of the current survey data was generated after the date of the Monument Proclamation, resulting in a net doubling of the number of known and/or documented cultural resources sites within the monument.

iii. The various surveys within the monument have resulted in the documentation of 310 archaeological and historical sites; approximately half of the known sites have been identified and documented since the date of Monument Proclamation. Analysis of current data provides an average density of approximately 11 cultural resources sites per square mile on BLM-administered lands with a projected total estimate of 3,000 to 6,000 sites likely to exist across the entirety of the monument.

iv. Cultural Values. Evidence of Paleoindian occupation (circa 12,000-8,000 B.C.) within the monument is currently limited to isolated spear points (Agenbroad 1967; Ayres 1970; Doelle 1985; Huckell 1984). Several Late Archaic/Early Agricultural era sites (circa 1,500 B.C.-A.D. 650) have been discovered along the

course of the Santa Cruz River southeast of the monument (Gregory and Mabry 1998; Mabry et al. 1997); these sites include some of the oldest known canal systems and pottery types in southern Arizona (Gregory 1999; Heidke 1997; Heidke and Ferg 1998; Mabry 1999). Formative era sites (circa A.D. 650-1400) dominate the regional archaeological record and reflect an adaptation based on farming villages. Around A.D. 500, a culture referred to as the Hohokam began to flourish and occupied much of what is now southern and central Arizona for approximately a millennium. Evidence of the Hohokam occupation dominates the archaeological record of the monument. Other identified cultural affiliations include historic-era Euro-American, Protohistoric and/or historic O'odham, possible Patayan components, and a possible Apache component.

v. Tribal Interests. The BLM regularly consults with five Native American tribes who claim ancestral and/or traditional interest in the lands and resources of the monument: the Hopi Tribe, Pascua Yaqui Tribe, Tohono O'odham Nation, White Mountain Apache Tribe, and the Yavapai-Apache Nation. There is limited information regarding specific places within the monument that have been identified as having traditional cultural significance; however, tribes with ancestral ties to the region are known to have concerns about the treatment of human remains, funerary objects, sacred objects, and objects of cultural patrimony.

Members of the Tohono O'odham Nation, which borders the monument to the west, likely consider stands of saguaro where fruit was or may be collected as having significance (c.f., Nabhan 1987, 1982). The Cocoraque Butte area also is known to have some significance as a potential traditional cultural place. Tribal interests in the lands and resources of the monument as expressed through ongoing consultations with the O'odham include indigenous plant resources, access for tribal members (various purposes), protection/preservation of archaeological and historical O'odham sites, coordinated management of archaeological sites that overlap the monument-Tohono O'odham Nation boundary, and an overarching concern about the impacts of encroaching development.

3. Information on activities occurring during the **5 years prior to designation**
    a) Recreation - annual visits to site
        i. No estimates of recreation use were made prior to designation. A recreation study completed shortly after monument designation indicated approximately 10,000 annual visits for various dispersed recreational activities (OHV driving for pleasure, hunting, sightseeing, hiking, camping).

b) Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)
    i. No coal, oil, gas, or renewable energy production occurred on the site during the five years prior to designation.
    ii. All existing energy transmission infrastructure was developed prior to designation, including a total of 76.1 miles of right of way.
c) Minerals - annual mineral production on site
    i. Jenott Mining operated a 5-acre mineral material sale quarry on IFNM which ended production prior to monument designation. Reclamation was complete one year after designation.
    ii. Prior to designation, a Mining Plan of Operation was required for active mining over 5 acres or more of unpatented claims.
    iii. The adjacent Silver Bell copper mine, on private land, was not impacted by activities on BLM land prior to designation. The Silver Bell mine was permitted by the Arizona State Mine Inspector.
    iv. The adjacent Pioneer Materials mineral materials quarry, on private land, was not impacted by activities on BLM land prior to designation. The main product is limestone aggregate. The Pioneer quarry was permitted by the Arizona State Mine Inspector.
d) Timber - annual timber production on site (in board-feet, CCF, or similar measure)
    i. No timber production occurred on IFNM in the 5 years prior to designation. The Sonoran Desert ecosystem has no timber resource nor provides timber products.
e) Grazing - annual grazing on site (AUMs permitted and sold)
    i. Designation did not change the number of AUMs permitted; 7,849 AUMs were permitted each of the five years prior to designation. The number of AUMs sold each year is at the lessee's discretion based on weather and forage production, with numbers being lower during drought years.
    See tables located within this Drive: 2e.IFNM_Billed AUMs, 2e.IFNM_Permitted_Active_AUMs_by_Allotment_as_of_2017-5-23
f) Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available
    i. No subsistence activities have occurred on the IFNM since designation. There are no formal subsistence outside of Alaska. IFNM does provide for the collection of certain natural materials by Native American Indians. There have never been sport fish on the IFNM. The terms of the Proclamation ("The establishment of this monument is subject to valid existing rights. Nothing in

this proclamation shall be deemed to enlarge or diminish the jurisdiction of the State of Arizona with respect to fish and wildlife management.") state that regulation of hunting and fishing in the monument remains with the State.

ii. Arizona Game and Fish Department does not measure hunting participation rates for the IFNM separate from the remainder of the Game Management Unit in which the monument is located.

g) Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available

i. In the five-year period prior to monument designation, approximately 8,000 acres of BLM-administered land that later became the monument had been inventoried for cultural resources. These surveys were primarily conducted in support of BLM-permitted activities associated with grazing, mining, and/or utility line construction projects.

ii. In the five-year period prior to monument designation, approximately 150 cultural sites had been documented on BLM-administered land in the areas that later became the monument. These sites were primarily identified through the previously referenced inventories.

iii. Cultural Values. Prior to monument designation, three historic properties had been recognized as having special significance by being listed on the National Register of Historic Places. These include the Los Robles Archaeological District (listed in 1989), the Cocoraque Butte Archaeological District (listed in 1975), and the Santa Ana de Cuiquiburitac Mission Site (listed in 1975).

4. Information on activities that likely would have occurred annually from the date of designation to the present **if the Monument had not been designated**

a) Recreation - annual visits to site

i. It is likely that dispersed recreational use would have continued at relatively low levels (estimated at less than 10,000 annual visits) for hunting, camping, OHV driving and target shooting.

b) Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)

i. No production of coal, oil or gas would have likely occurred because the monument lacks the geologic formations in which these resources are formed.

ii. BLM completed several BLM-wide EISs for renewable energy and none identified the area as having high potential for renewable energy development.

c) Minerals - annual mineral production on site

i. Without monument designation, it is possible but not likely that mineral material production would have occurred on a small scale. Based on the

geology, the area might have supported two 2-4-person operations.

ii. Without monument designation, it is likely that mineral claims would have been located. Mineral development of those claims would have been less likely. The existing adjacent copper mine has a Mining Plan of Operation, because of active mining over five acres or more of unpatented claims. BLM has not received any new Mining Plans of Operation since monument designation.

d) Timber - annual timber production on site (in board-feet, CCF, or similar measure)

i. No timber production would have occurred on IFNM without designation. The Sonoran Desert ecosystem has no timber resource nor provides timber products.

e) Grazing - annual grazing on site (AUMs permitted and sold)

i. Without monument designation, AUMs permitted and sold would likely not have been different than they have been with designation. The number of AUMs billed varies with the based on weather and forage production.

f) Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available

i. No subsistence activities would have occurred on the IFNM without designation. There are no formal subsistence outside of Alaska. Designation did not impede collection of certain natural materials by Native American Indians. There have never been sport fish on the IFNM. Hunting participation rates would have been the same without designation, because regulation of hunting and fishing in the monument remains with the State.

g) Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available

i. Without monument designation, it is likely that less cultural resources inventory would have occurred. Monument designation generated additional research interest, resulting in several cooperative university projects including cultural resources inventory and assessment (c.f., Heilen and Reid 2006). Likewise, recent ethnographic research on Borderlands smuggling and undocumented immigrant activities would not have been possible (c.f., Warren 2013).

ii. Without monument designation, it is likely that additional vandalism would have occurred to cultural sites. After designation, research, inventory, and educational and interpretive outreach programs increased. Education, increased presence of staff and researchers, and improved management likely led to the reduction in numbers. Continued monitoring by BLM Archaeologists, Law Enforcement, and Site Stewards serves to deter potential looting and vandalism.

iii. Without monument designation, protective measures at the National Register

of Historic Places-listed Cocoraque Butte Archaeological District and Santa Ana de Cuiquiburitac Mission Site likely would not have been prioritized and funded.

5. Changes to boundaries - dates and changes in size
    i. The IFNM boundary encompasses 188,628 acres of land; this number of acres has not changed since designation. At designation, 128,398 of these acres were BLM-administered. The balance of the land consisted of approximately 54,700 acres of State Trust land (administered by the Arizona State Land Department [ASLD]) and approximately 6,000 acres of privately owned land, and a 299-acre Department of Defense withdrawal. The decisions in the Approved RMP (2012) currently apply to approximately 129,358 acres within the monument boundaries which is public land administered by the BLM.
    ii. There have been no changes to the monument boundary since monument designation. Acquisitions since designation have all been private land within the boundaries of the monument, from willing sellers.
    iii. In 2014, the BLM acquired 358 acres of private land within the monument from willing sellers, with the assistance of Land and Water Conservation Funds and the Arizona Land and Water Trust. The majority of the acreage was patented mining claims in the Waterman Mountains in habitat for the Endangered Nichol Turks-head cactus, and containing a major bat roost.
    iv. In 2016, the BLM acquired 602 acres of private land within the monument from willing sellers, with the assistance of Land and Water Conservation Funds and the Arizona Land and Water Trust.

6. Public Outreach prior to Designation - outreach activities conducted and opportunities for public comment
    i. BLM conducted no public outreach activities prior to designation. Monument designation was a citizen's proposal.
    ii. The Board of Supervisors of Pima County, Arizona, proposed the establishment of an "Ironwood Preserve" and signed Resolution 2000-63 "Request(ing) that the United States of America through the Secretary of the Department of the Interior, consistent with the Sonoran Desert Conservation Plan, work cooperatively with Pima County to establish the Ragged Top and Silverbell Ironwood Preserve in the Silverbell Mountains." in March of 2000.

7. Terms of Designation
    i. The terms of designation are from the Presidential Proclamation 7320- Establishment of the Ironwood Forest National Monument, June 9, 2000, which

is located within this Drive (1d.IFNM_proclamation):

Executive Summary of Review of National Monuments under EO 13792 (April 26, 2017)

Key Information about Ironwood Forest National Monument

Ironwood Forest National Monument (IFNM) was established by Presidential Proclamation 7320 on June 9, 2000. Prior to designation, the area was managed by the BLM and continues to be following designation. The Proclamation designated "approximately 128,917 acres" and states that acreage is "the smallest area compatible with the proper care and management of the objects to be protected." The BLM manages for multiple use within the Monument (hunting, recreation, grazing, and valid existing rights such as mining claims, etc.), while protecting the vast array of historic and scientific resources identified in the Proclamation and providing opportunities for scientific study of those resources. The resources identified in the Proclamation include biological, geological and archaeological objects. Overall, multiple use activities are allowed in Ironwood Forest National Monument that are compatible with the protection of resources and objects identified in the Presidential Proclamation. Multiple use activities are subject to decisions made in current and future BLM resource management planning efforts which include public participation. National Monuments and other conservation areas managed by the BLM continue to allow for multiple uses according to the Federal Land Policy and Management Act (depending on proclamation language).

Summary of Public Engagement Prior to Designation

The BLM conducted no public outreach activities prior to designation. Monument designation was a citizen's proposal. The Board of Supervisors of Pima County, Arizona, proposed the establishment of an "Ironwood Preserve" and signed Resolution 2000-63 "Request(ing) that the United States of America through the Secretary of the Department of the Interior, consistent with the Sonoran Desert Conservation Plan, work cooperatively with Pima County to establish the Ragged Top and Silverbell Ironwood Preserve in the Silverbell Mountains." in March of 2000.

Summary of Public Scoping in Development of Resource Management Plan

The BLM engaged in a collaborative planning process in developing the RMP. The BLM conducted public informational meetings August 2000 - March 2002. Working groups for Lands and Minerals, Vegetation, Wildlife, Recreation, and Cultural Resources were established to identify, define, and articulate issues that would need to be addressed in the RMP. Public scoping was initiated on April 24, 2002, followed by informal scoping at community meetings, special interest group meetings, and coordination with elected representatives. The BLM conducted nine public scoping meetings in an open house format during July 2002, in the Arizona communities of Mesa, Casa Grande, Eloy, Arizona City, Tucson, Sells, Picture Rock, Marana, and Green Valley. A Spanish-speaking BLM employee attended each of these meetings to provide translation. Media releases were sent to over 400 addresses, and releases and Public Service Announcements went to more than 23 newspapers, television and radio stations.

Summary of National Monument Activities since Designation

Included below is a summary of monument activities since designation:

- Recreation use has increased from 15,900 visits in 2001 to 23,600 visits in 2016. No production of coal, oil, gas or renewable energy has occurred since designation.
- The amount of energy transmission infrastructure (76.1 miles of right of way) has not changed since designation.
- Since monument designation, no mineral production has occurred.
- No timber production occurred since designation. No timber resource is present.
- The number of AUMs permitted (7,849) has not changed since designation. The number of AUMs sold each year is at the lessee's discretion based on weather and forage production, with numbers being lower during drought years.
- Native American Indians collect some natural materials; no permit is required.
- Sport fish do not exist on the IFNM. Regulation of hunting remains with the State.
- Approximately 12.5 percent of BLM-administered lands within the monument has been inventoried for cultural resources. The number of known and/or documented cultural resources sites has doubled since monument designation. 310 sites have been documented, with an average density of approximately 11 cultural resources sites per square mile. Projected total estimate is 3,000 to 6,000 sites likely to exist across the entirety of the monument.

Summary of Activities in Area for Five years Preceding Pre-Designation

Included below is a summary of monument activities five years preceding designation:

- No estimates of recreation use were made prior to designation. A recreation study completed shortly after monument designation indicated approximately 10,000 annual visits.
- No coal, oil, gas, or renewable energy production occurred on the site during the five years prior to designation.
- All existing energy transmission infrastructure was developed prior to designation, including a total of 76.1 miles of right of way.
- A small mineral material sale (decorative rock) quarry was operating prior to designation. No other mining operations or mineral production occurred on federal lands during the five years prior to designation.
- No timber production occurred on IFNM in the five years prior to designation.
- Designation did not change the number of AUMs permitted; 7,849 AUMs were permitted each of the five years prior to designation. The number of AUMs sold each year was at the lessee's discretion based on weather and forage production, with numbers being lower during drought years.
- In the five-year period prior to monument designation, approximately 8,000 acres had been inventoried for cultural resources, and approximately 150 sites had been

documented. The surveys were primarily conducted in support of BLM-permitted activities associated with grazing, mining, and/or utility line construction projects.

Summary of Available Economic Information since Designation

According to the Bureau of Land Management's economic analysis for FY2016, total visitor spending at IFNM was $1,401,970 and average expenditures per visit was $59.41. The total non-BLM jobs supported by the Monument is 21 with a total labor income supported of $726,234. This resulted in a total economic output supported by the Monument of $1,995,362.
An economic snapshot summarizing economic information is located within this drive (Ironwood Forest NM-Economic snapshot.pdf)

Summary of Any Boundary Adjustments since Designation

The IFNM boundary encompasses 188,628 acres of land; this number of acres, and the configuration of the boundary, have not changed since designation. Acquisitions from willing sellers of private land within the monument boundary added 358 acres in 2014 and 602 acres in 2016, bringing the BLM-administered acres from 128,398 at monument designation to 129,358.

June 2, 2017
New Information Requested on Executive Order on the Review of Designations Under the Antiquities Act

BLM Responses to Additional Questions for Ironwood Forest National Monument

a) Any legislative language, including legislation in appropriations bills

None.

b) Alternative options available for protection of resources applicable at each monument, such as Native American Graves Protection and Repatriation Act, Paleontological Resources Preservation Act, Archaeological Resources Protection Act, Historic Preservation Act and agency-specific laws and regulations.

The following could provide some options to protect specific resources found in Ironwood Forest National Monument. Protection would likely occur on a site-by-site or resource-by-resource basis and also would take a significant amount of time to accomplish under these various laws. These laws may not provide a mechanism to protect all cultural or tribal resources in Ironwood Forest National Monument.

- National Historic Preservation Act (NHPA)
- Native American Graves Protection and Repatriation Act (NAGPRA)
- Paleontological Resources Preservation Act (PRPA)
- Archaeological Resources Protection Act (ARPA)
- American Indian Religious Freedom Act (AIRFA)
- Endangered Species Act (ESA)
- Clean Water Act (CWA)
- Clean Air Act (CAA)
- National Environmental Policy Act (NEPA)
- Federal Land Policy Management Act. (FLPMA)

b) Designated wilderness areas (name, acreage), wilderness study areas (name if there is one, acreage, type), and/or areas managed to preserve wilderness or roadless characteristics that are not WSAs.
There are no designated wilderness areas, or wilderness study areas. Approximately 9,510 acres were identified in the RMP to preserve wilderness characteristics.

c) Outstanding R.S. 2477 claims within a monument – type of road claimed and history
There are no outstanding R.S. 2477 claims within the monument.

d) Maps

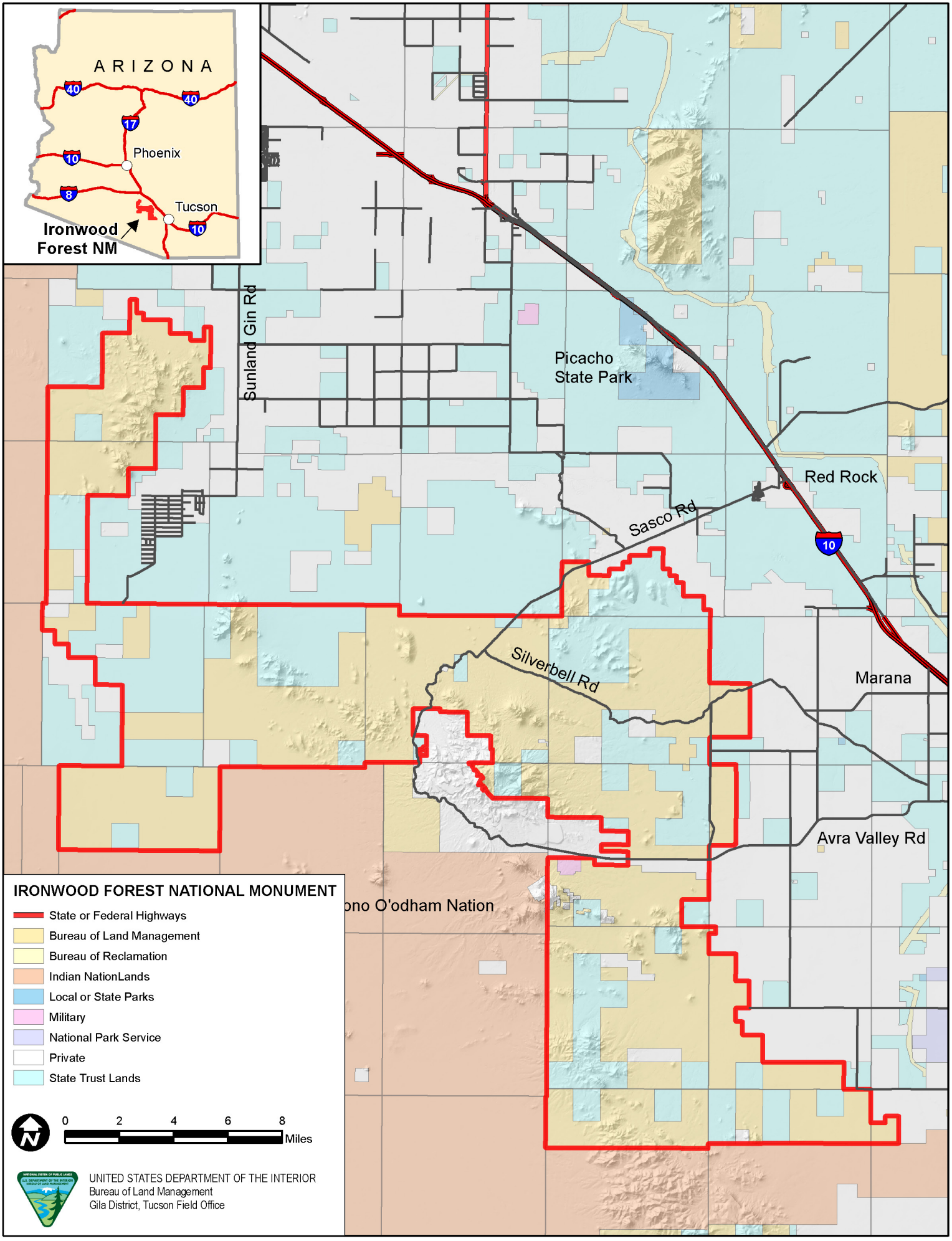
A map of the IFNM is located within this drive (Additional Information d.ifnm_map.jpg).

e) Cultural or historical resources, particularly Tribal, located near a monument but not within the boundary that might benefit from inclusion in the monument

Currently, there is limited information pertaining to specific places that might have traditional cultural significance within or immediately adjacent to the Monument, or cultural/historical resources near the Monument that might benefit from inclusion. Because the Monument shares a boundary with the Tohono O'odham Nation, the BLM regularly consults with the O'odham regarding Tribal interests as applicable to the Monument and surrounding Field Office management area.

g) Other – general questions or comments

i. Monument designation was initiated and supported by the local community, which led to formation of the Friends of Ironwood Forest, a non-profit friends group to assist BLM with education, interpretive programs, and outreach.
ii. The local community support led to increased numbers of volunteers, which allowed the BLM to implement clean up, resource protection, and stewardship education efforts that would not have occurred without monument designation.
iii. The monument is located in the international border zone. Monument designation brought attention to public safety concerns (to visitors and to neighboring residents) and resource damage due to the high volume of illegal smuggling on the IFNM. As a result, the BLM was allocated funding specifically to mitigate resource impacts and to provide intensive law enforcement operations.


ARIZONA
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Phoenix
Tucson
Ironwood
Forest NM
Sunland Gin Rd
Picacho
State Park
Red Rock
Sasco Rd
10
Silverbell Rd
Marana
Avra Valley Rd
ono O'odham Nation
IRONWOOD FOREST NATIONAL MONUMENT
State or Federal Highways
Bureau of Land Management
Bureau of Reclamation
Indian NationLands
Local or State Parks
Military
National Park Service
Private
State Trust Lands
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Miles
UNITED STATES DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Gila District, Tucson Field Office

BLM

IRONWOOD FOREST NATIONAL MONUMENT

Record of Decision and Approved Resource Management Plan

Tucson Field Office

NATIONAL SYSTEM OF PUBLIC LANDS
U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

February 2013

Ironwood Forest National Monument

Record of Decision and Approved Resource Management Plan

Prepared by

U.S. Department of the Interior
Bureau of Land Management
Tucson Field Office
Arizona

MISSION STATEMENT

"The Bureau of Land Management is responsible for stewardship of our public lands. The BLM is committed to manage, protect, and improve these lands in a manner to serve the needs of the American people. Management is based upon the principles of multiple use and sustained yield of our Nation's resources within the framework of environmental responsibility and scientific technology. These resources include recreation, rangelands, timber, minerals, watershed, fish and wildlife habitat, wilderness, air, and scenic quality, as well as scientific and cultural values."

BLM/AZ/PL-13/010

IRONWOOD FOREST NATIONAL MONUMENT
RECORD OF DECISION AND
APPROVED RESOURCE MANAGEMENT PLAN

Lead Agency: US Department of the Interior (DOI), Bureau of Land Management (BLM)

Cooperating Agencies: Arizona Game and Fish Department

Location: Arizona

Contacts: *Requests for additional information regarding the Record of Decision and Approved Resource Management Plan:*

Claire Crow, Manager, Ironwood Forest National Monument
520-258-7235

Requests for copies of the document:

*AZ*_IFNM_RMP@blm.gov or call the Tucson Field Office Receptionist, 520-258-7200

Project website: http://www.blm.gov/az/st/en/prog/planning/ironwood.html

Abstract: The Ironwood Forest National Monument Record of Decision and Approved Resource Management Plan (ROD/ARMP) is a project of BLM Arizona that supports the BLM's Mission. The Approved RMP was prepared under the authority and regulations implementing Presidential Proclamation 7320 and the Federal Land Policy and Management Act (FLPMA) of 1976 (43 Code of Federal Regulations [CFR], 1600). It includes broad land use plan decisions that provide the overall direction for managing resources and resource uses in the Ironwood Forest National Monument (IFNM). Land use plan decisions are expressed as goals and objectives (desired outcomes), allowable uses, and management actions anticipated to achieve desired outcomes. The Approved RMP also includes implementation-level decisions for geology and caves, soil and water resources, energy and minerals, and travel management.

The IFNM is located in Pinal and Pima Counties, Arizona, approximately 80 miles south of Phoenix and 25 miles northwest of Tucson, Arizona, and contains 128,400 acres of BLM-administered lands. The decisions in the RMP only apply to the BLM-administered lands within the Monument.

This plan represents years of ongoing coordinated efforts on the part of the BLM Tucson Field Office, IFNM staff, BLM Arizona State Office staff, representatives of communities in the Planning Area, cooperating agencies, special interest and user groups, and hundreds of concerned citizens. The decisions outlined in this document will enable the BLM to manage and protect the resources on public lands within the IFNM to achieve management actions and objectives in compliance with the Presidential Proclamation, in partnership with communities and citizens.

Land use plan decisions identified in the Approved RMP are final and become effective upon the Arizona's State Director's signing of the ROD.

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UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Tucson Field Office
2301 East Universal Way
Tucson, AZ 85756
www.blm.gov/az

In Reply, refer to:
2000/2050

Dear Reader/Interested Party:

I am pleased to announce that after several years of hard work and collaboration, the Ironwood Forest National Monument (IFNM) Resource Management Plan (RMP) has been complete. The document will provide guidance for the management of approximately 128,400 acres of federal surface and mineral estate administered by the Bureau of Land Management (BLM) in Pima and Pinal counties in southern Arizona.

The attached Record of Decision (ROD) and Approved RMP have been prepared in accordance with the Federal Land Policy and Management Act (FLPMA) and the National Environmental Policy Act (NEPA). The ROD/Approved RMP is available to members of the public and will be sent to pertinent local, State, Tribal, and Federal government entities. The ROD finalizes the proposed decisions presented in the Proposed RMP/Final Environmental Impact Statement (FEIS) that was published on September 29, 2011 and subject to a 30-day protest period that ended on October 29, 2011. Eight protests were received. The protests were reviewed by the BLM Director in Washington, D.C. After careful consideration of all points raised in these protests, the BLM Director concluded the responsible planning team and decision-makers followed all applicable laws, regulations, policies, and pertinent resource considerations in developing the Proposed RMP/FEIS. Minor adjustments or points of clarification are incorporated into the Approved RMP in response to issues raised in the protest process and final BLM review. These minor changes are discussed in the ROD in Section 1.2.2 Clarifications and Modifications, but the protest review did not result in any significant changes from the Proposed RMP.

The approval of this ROD by the BLM Arizona State Director serves as the final decision for all land use plan decisions described in the attached Approved RMP. Implementation decisions are site-specific decisions in the Approved RMP, relating to route designations, geologic sites, and flood and erosion control measures. Implementation decisions are subject to appeal. Appeal procedures for these implementation level decisions are described in Section 1.4.2 of the attached ROD. Future implementation of land use plan decisions will not be undertaken without suitable further NEPA analysis, including public involvement.

Notification of the approval of this ROD/Approved RMP will be announced via local news releases and on the BLM website at http://www.blm.gov/az/st/en/fo/tucson_field_office.html. CD-ROM versions of the ROD/Approved RMP may be obtained by contacting the Tucson Field Office by phone at 520-258-7200; by sending a request by email to AZ_IFNM_RMP@blm.gov; or at the following address:

BLM Tucson Field Office,
3201 East Universal Way
Tucson, Arizona 85756

A limited number of hard copy documents will be available at a later date and may be requested from the same locations.

The BLM is pleased to provide this copy of the Ironwood Forest National Monument ROD/Approved RMP for your reference. We greatly appreciate the efforts of all who contributed to completion of this RMP, including the State of Arizona, Pima and Pinal County, the City of Tucson, the Town of Marana, and numerous Federal and State government agencies that worked closely with us to complete this important effort. We also appreciate the extensive public involvement during this time by local communities, organizations, and individuals. Public input informed and improved this planning document. We look forward to continuing to work with our partners and citizens as we implement the decisions in this RMP.

Sincerely,

Brian Bellew
Tucson Field Manager

Enclosure

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LIST OF ACRONYMS AND ABBREVIATIONS

4WD	4 wheel-drive
ACEC	Area of Critical Environmental Concern
ADEQ	Arizona Department of Environmental Quality
AGFD	Arizona Game and Fish Department
ASLD	Arizona State Land Department
ATV	all-terrain vehicle
BLM	Bureau of Land Management
BMP	best management practice
BO	Biological Opinion
CFR	Code of Federal Regulations
EIS	Environmental Impact Statement
ESA	Endangered Species Act
FLPMA	Federal Land Policy and Management Act of 1976
GIS	geographic information system
IFNM	Ironwood Forest National Monument
LUP	land use planning
MOU	memorandum of understanding
NAAQS	National Ambient Air Quality Standards
National Register	National Register of Historic Places
NEPA	National Environmental Policy Act of 1969
NLCS	National Landscape Conservation System
OHV	off-highway vehicle
Proclamation	Presidential Proclamation 7320
RMP	Resource Management Plan
RMZ	recreation management zone
ROD	Record of Decision
SHPO	State Historic Preservation Office
SRMA	Special Recreation Management Area
SRP	special recreation use permits
TMP	transportation management plan
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VHA	Vegetation Habitat Management Area
VRM	Visual Resource Management
WHA	Wildlife Habitat Management Area
WSA	wilderness study area

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CHAPTER 1.0 RECORD OF DECISION

1.1 INTRODUCTION

This Record of Decision (ROD) approves the Bureau of Land Management's (BLM) proposal to manage the BLM-administered public lands within the Ironwood Forest National Monument as presented in the attached Approved Resource Management Plan (Approved RMP).

The Ironwood Forest National Monument (IFNM) was established on June 9, 2000, with the signing of Presidential Proclamation 7320 (Proclamation) to protect objects of scientific interest, including geological, biological, and archaeological resources. The IFNM encompasses approximately 189,600 acres of land. The decisions in the Approved RMP apply to approximately 128,400 acres within the Monument boundaries which is public land administered by the BLM; the balance of the land consists of approximately 54,700 acres of State Trust land (administered by the Arizona State Land Department [ASLD]) and approximately 6,000 acres that are privately owned.

This ROD provides an overview of the alternatives considered, a summary of protests received and clarifications made in response, and the key decisions and types of decisions in the plan that will guide management of the IFNM. It also provides the considerations and rationale for the decisions and an overview of public involvement in the planning process.

1.2 THE DECISION

The decision of the BLM is to approve the attached document as the Approved RMP for BLM-administered public lands in the Ironwood Forest National Monument. The Approved RMP replaces relevant decisions in the 1989 Phoenix Resource Area RMP, as amended by the Arizona Standards for Rangeland Health and Guidelines for Grazing Administration, the Arizona Statewide Land Use Plan Amendment for Fire, Fuels, and Air Quality Management, and the 1987 Eastern Arizona Grazing Environmental Impact Statement (EIS). Those portions of previous management which are responsive to changed conditions and circumstances were carried forward to the Approved RMP.

The Approved RMP was prepared under the regulations of 43 Code of Federal Regulations (CFR) Part 1600, which implements the Federal Land Policy and Management Act (FLPMA) of 1976. An EIS was prepared for this Approved RMP in compliance with the National Environmental Policy Act of 1969 (NEPA). Management decisions and guidance for public lands are presented in the Approved RMP attached to this ROD.

1.2.1 ~~Protest Resolution~~

The BLM received eight protest letters during the 30-day protest period provided for the proposed land use plan decisions in the Proposed RMP/Final EIS in accordance with 43 CFR Part 1610.5-2. Protesting parties are listed below:

- ASARCO LLC
- Don Saba
- Name Withheld

- The Wilderness Society
- Arizona Game and Fish Department (AGFD)
- Western Watersheds Project
- National Rifle Association
- Friends of Ironwood Forest

Main protest points pertained to:

Issue 1. Range of Alternatives

ASARCO LLC and the Western Watershed Project felt that the Proposed RMP/Final EIS fails to analyze a reasonable range of alternatives regarding management of valid existing mining claims and management of livestock grazing.

Issue 2. Public Comments

Name Withheld and the National Rifle Association felt that the Proposed RMP should be rejected because a public comment was falsely attributed, misrepresenting several parties, and because the BLM failed to take oral comments at its first five public meetings.

Issue 3. Length of Protest Period

ASARCO LLC and Name Withheld felt the Proposed RMP should be rejected because the 30-day protest period is insufficient.

Issue 4. Accurate, Complete Information

The Western Watershed Project and Friends of Ironwood Forest felt that the Proposed RMP should be rejected because it relies on incomplete and inaccurate information regarding:

- Resource inventories and surveys,
- Threats of livestock grazing on the Sonoran desert tortoise, and
- Determinations of rangeland health.

Issue 5. Need for Supplemental EIS

The National Rifle Association felt that Appendix I of the Proposed RMP should have been included in a supplemental EIS, which would have allowed for public comments on Appendix I and on whether it supports or fails to support the stances taken with respect to recreational shooting in the EIS' four alternatives.

Issue 6. Impact Analysis

Name Withheld believed the BLM failed to perform an EIS prior to proposing this rule and did not perform NEPA analysis supporting the ephemeral classification of two allotments.

Issue 7. Presidential Proclamation

The Western Watersheds Project, National Rifle Association, and the Friends of Ironwood Forest felt the Proposed RMP should be rejected because:

- It fails to prioritize the management of the IFNM for the protection of the objects for which it was designated over traditional multiple use.
- It applies a more protective management standard to recreational shooting without also doing so for livestock grazing. This inconsistency is arbitrary.

Issue 8. Local Agencies

Name Withheld thought the BLM failed to coordinate and consult with the Pima Natural Resources Conservation District in preparing the Proposed RMP/Final EIS.

Issue 9. Climate Change

The Wilderness Society, Western Watersheds Project, and Friends of Ironwood Forest stated that the Proposed RMP does not satisfy the requirement of Secretarial Order 3289 to consider and analyze potential climate change impacts when undertaking long-range planning exercises.

Issue 10. Special Status Species

ASARCO LLC, Western Watersheds Project, and Friends of Ironwood Forest felt the Proposed RMP should be rejected because:

- It erroneously affords special status species protection to the cactus ferruginous pygmy owl and to those species identified by Pima County.
- It fails to include the Sonoran desert tortoise and the Tucson shovel-nosed snake as special status species and manage them as such.
- It fails to meet the protective standard laid out in its special status species policy for the Sonoran desert tortoise.

Issue 11. Livestock Grazing

The Western Watersheds Project felt that the Proposed RMP/Final EIS should be rejected because:

- Its use of the Standards and Guidelines assessments to make grazing management decisions and to assess everything from livestock impacts to cultural resources, wildlife, and sensitive species habitat, is improper and contrary to BLM policy.
- It fails to analyze the impacts of livestock grazing on cultural resources and on the spread of non-native vegetation (and the subsequent effect on special status species).
- It does not justify the exception to the prohibition on removal of vegetation for livestock grazing.
- It allows livestock grazing, a use not provided for as an object of the Proclamation, to continue despite potential impacts.

Issue 12. Recreation Target Shooting

Don Saba, AGFD, and National Rifle Association felt that the Proposed RMP's closure of the IFNM to recreational target shooting is inappropriate because:

- It fails to follow the Federal Lands Hunting, Fishing, and Shooting Sports Roundtable Memorandum of Understanding (MOU).
- It circumvents the BLM's responsibility to enforce existing laws and regulations by prohibiting the activity.
- It fails to consider mitigation measures to reduce shooting impacts instead of complete closure.
- It justifies the closure to protect Monument objects while arbitrarily finding that alternatives allowing continued firearm use will protect Monument objects and continues to allow hunting.
- It dismisses the public's recommendation to allow dispersed recreational target shooting.
- It is inconsistent with allowing other uses that harm Monument objects, such as livestock grazing.
- The assumption equating noise at recreational shooting sites to a shooting range is flawed.

Issue 13. Renewable Energy

ASARCO LLC and The Wilderness Society felt that the Proposed RMP should be rejected because:

- Solar energy development must be allowed in the IFNM because it is required by Section 302(a) of the FLPMA.
- BLM policy requires the IFNM to be an exclusion area for renewable energy development rather than an avoidance area as in the Proposed RMP.

Issue 14. Travel Management

The Wilderness Society felt the Proposed RMP would violate BLM policy by allowing motorized travel according to the BLM's multiple-use mandate without acknowledging the special status of the Monument.

Issue 15. Visual Resource Management

ASARCO LLC felt neither enhancement of visual resources within the IFNM nor BLM protection of vistas outside of the IFNM is appropriate.

Issue 16. Water

ASARCO LLC felt the Proposed RMP should be rejected because its statements that the BLM could pursue a Federal reserved water right are contrary to the Proclamation.

Issue 17. Wilderness Characteristics

ASARCO LLC, The Wilderness Society, and Name Withheld stated that the Proposed RMP should be rejected because:

- The BLM lacks authority to create wilderness characteristics or to manage the IFNM to protect wilderness characteristics. This management violates the 2003 settlement agreement between the Department of the Interior and the State of Utah.
- The BLM only documented the negative consequences as the rationale for not protecting additional lands with wilderness characteristics.
- Decisions allowing motorized uses in areas managed to protect wilderness characteristics are contrary to current policy guidance.

The BLM Director's decisions on the protests are summarized in the *Director's Protest Resolution Report*, available concurrently with release of the ROD and Approved RMP. The Director denied the protests from the eight protesting parties and included a response to these protests in the *Director's Protest Resolution Report*. In summary, the Director concluded that the BLM Arizona State Director followed applicable laws, regulations, and policies, and considered all relevant resource information and public input in developing the Proposed RMP. The BLM Director resolved the protests without making changes to the Approved RMP.

1.2.2 Clarifications and Modifications

As the result of the protests and continuing internal review, the BLM made the following clarifications between the Proposed RMP/Final EIS and the Approved RMP:

- The species on Pima County's list of Priority Vulnerable Species are not BLM special status species. The BLM included this information in the Proposed RMP in the interest of coordinating with local governments as required by BLM planning regulations (see 43 CFR 1610.3-1).
- The Sonoran desert tortoise became a candidate species as of December 14, 2010. The Proposed RMP/Final EIS included the Sonoran desert tortoise as a special status species because it is a BLM sensitive species (see Chapter 3 page 3-28). The Proposed RMP designated 58,810 acres of Sonoran desert tortoise habitat categories I and II as priority habitat. The Proposed RMP also directs the BLM to implement measures to conserve Sonoran desert tortoise habitat (as prescribed in *Desert Tortoise Habitat Management on Public Lands: A Rangewide Plan*). Appendix E of the Proposed RMP/Final EIS also included specific conservation measures to be implemented for the benefit of the Sonoran desert tortoise. The Proposed RMP/Final EIS analysis of the effects of these management actions concluded that the disturbance to objects of the Monument resulting from management actions would range from undetectable to measureable at a local scale and would not cause the loss of special status species from the Monument (see Chapter 4 page 4-58). This management approach meets the protective standard laid out in the BLM's special status species policy. Appendix D of the Biological Assessment provides further technical assistance and analysis of the Sonoran desert tortoise.
- The IFNM proclamation states that it does not reserve water as a matter of Federal law. The water policy of the BLM is to acquire and perfect the water rights necessary to carry out public land

management purposes through State law and administrative claims procedures unless a Federal reserved water right is otherwise available. A Federal reserved water right is not available in this case. The statements in the response to comments that the BLM could pursue a Federal reserved water right are in error. Nevertheless, the management actions in Table 2-3 of the Proposed RMP do not propose to pursue such a right. The State of Arizona has primacy of control of water resources. The BLM will work closely with the Arizona Department of Water Resources concerning water use and water rights within the IFNM.

During the course of internal review, information came to the attention of the BLM that resulted in three modifications. The first modification revised implementation decisions for Soil and Water, Energy and Minerals, and Travel Management. The Soil and Water resources implementation decision 3 (Chapter 2 page 2-13) and Energy and Mineral Resources implementation decision 1 (Chapter 2 page 2-48) in the Proposed RMP were modified to administrative actions for each of these resources respectively. Recreation management actions 4, 6 (Chapter 2 page 2-61), and 7 (Chapter 2 page 2-62) in the Proposed RMP were also modified to administrative actions. Consistent with Arizona policy regarding the National Landscape Conservation System (NLCS), aspects of Travel Management implementation decision 1 (Chapter 2 page 2-80) regarding the reasonable use of the shoulder and immediate roadside and travel on all designated routes is subject to route-specific designations. Consistent with Arizona policy specific route designations are an implementation decision for type of use, functional class, maintenance level and route standard. This is consistent with BLM's land use planning, implementation decisions and administrative actions as describe in Section 1.4 of this ROD.

The second modification revises Lands and Realty management action 4 (Chapter 2 page 2-69) regarding the acquisition of surface and mineral estate. The management action was modified to more clearly indicate BLM would acquire surface and mineral estate concurrently, and where the mineral estate cannot be acquired, secure an MOU or conservation agreement to protect objects of the Monument.

The terms used in the Proposed RMP/Final EIS have been modified in the Approved RMP. The terminology used in the Travel Management implementation decision 1 (Chapter 2 page 2-80) of the Proposed RMP/Final EIS were modified from motorized and non-motorized to road, primitive road, and trail in the Approved RMP for consistency with BLM's 2012 Comprehensive Travel Management Policy and 2005 Travel Management Terminology.

In its conversion from the Proposed RMP/ Final EIS to the Approved RMP, the presentation of decisions was reformatted to include the Arizona Land Use Plan codes. Section 2.1.9 Policy of the Approved RMP contains a complete list of the codes. Throughout the Approved RMP, minor edits and modifications are made for clarification to descriptions of management actions and/or allowable uses, to improve readability, or to correct grammatical errors.

1.3 THE ALTERNATIVES

NEPA requires the development and consideration of a reasonable range of management alternatives, including a No Action Alternative, to analyze impacts and guide decision-makers in developing and selecting the RMP. All alternatives must be viable and reasonable. They must reflect the requirements of the Presidential Proclamation; be responsive to issues identified by the public, stakeholders, and BLM

specialists and managers during the scoping period; and meet established planning criteria, as well as applicable federal and state laws, regulations, and BLM policies.

1.3.1 Alternatives Considered, but Not Analyzed

The following alternatives and management options were considered as possible ways of resolving resource management issues and conflicts but were eliminated from detailed analysis; rationale for each alternative's elimination is provided under each heading.

Wilderness

BLM received suggestions from a citizen group that the new RMP establish new wilderness study areas (WSAs) within the IFNM.

Rationale: BLM has the authority under FLPMA Section 201 to inventory public land resources and other values, including "characteristics associated with the concept of wilderness identified as naturalness, solitude, and primitive, unconfined recreation." The BLM Land Use Planning Handbook provides guidance on considering wilderness characteristics in the land-use planning process and directs BLM to identify decisions to protect or preserve wilderness characteristics. However, BLM has no authority to establish new WSAs or to report such areas to Congress.

Route Designations

BLM received a map proposing a route network within the IFNM from a coalition of citizen groups and a suggestion to designate all routes in the IFNM as closed to motorized traffic.

Rationale: This specific network was not considered as an alternative because it did not consider access to private inholdings or State Trust land, where BLM could be required to provide access. Closing all routes to motorized traffic was not considered because it would not allow BLM to meet the management goals and objectives established for the IFNM.

Visitor Facilities

Members of the public requested the construction of visitor facilities throughout the Monument, thereby allowing a greater level of access to restrooms, drinking water, and other essentials.

Rationale: This suggestion was not considered as an alternative because the IFNM is a unit within BLM's NLCS, and is managed, in part, to maintain the character of the existing setting.

1.3.2 ~~Alternatives Considered in Detail~~

Four alternatives, including a No Action Alternative, were analyzed in detail in the Draft RMP/EIS (BLM 2007) and the Proposed RMP/Final EIS (BLM 2011). The alternatives were developed to address major planning issues identified through the scoping process and to provide management direction for resource programs. Each alternative represented a general theme that guided the development of desired future conditions, land use allocations, and management actions for specific resources. Alternative A is a No Action Alternative; that is, it proposes no new plan. Under this alternative, management of public land within the IFNM would continue under existing planning documents/decisions, as modified by the Proclamation and additionally guided by the BLM's Interim Management Policy and Guidelines for

Lands Under Wilderness Review, H-8559-1. Alternatives B, C, and D (the "action alternatives") would each effect more change in management—each includes proactive responses to existing conditions and circumstances which, in many cases, may have changed since the existing planning document now in force was written.

Each alternative had a management emphasis that reflects a different response to balance use and conservation of resources on public lands. All four alternatives are consistent with the Proclamation, including the protection of the objects of the Monument, and with all other applicable laws, regulations, and policies. Uses of land and resources that are not consistent with the Proclamation have been excluded from consideration.

Alternative A (No Action Alternative)

Alternative A, the No Action Alternative, would continue management of public land within the IFNM according to the management prescriptions of the 1989 Phoenix RMP and the Eastern Arizona Grazing EIS, as amended by the Arizona Statewide Land Use Plan Amendment for Fire, Fuels, and Air Quality Management and the Arizona Standards for Rangeland Health and Guidelines for Grazing Administration. Alternative A would include modifications to management mandated by the Proclamation, which the BLM has already implemented with current management guidance for the IFNM.

Alternative B

The management theme of Alternative B is preservation—it is the most restrictive strategy, designed to protect the Monument's resources by limiting use of the area's resources to an allowable minimum. This alternative places more restrictions on motorized travel throughout the Monument and favors dispersed, non-motorized recreational activities over motorized recreational activities. The types of allowable uses and the intensity of those uses are restricted to provide the strongest reasonable protection for objects of historic, scientific, and aesthetic interest within the Monument—largely through preservation.

Alternative C (Proposed Plan)

The Approved RMP is the same as the Proposed RMP, with the exception that the ROD/Approved RMP selected the decision not to create utility corridors as analyzed in the Proposed RMP/Final EIS in Alternative B. It incorporates elements from each of the other alternatives to strike a balance between long-term conservation of Monument objects and resources within the IFNM and uses that have traditionally taken place on the land within the Monument, such as grazing and recreation. As a result, under Alternative C, the protection of Monument objects can be achieved at or near the level of protection afforded under Alternative B, while allowing for increased public uses in the Monument. Specifically, in sensitive resource areas, Alternative C would provide a higher level of resource protection and less public use; however, greater opportunities for public use would be allowed outside those areas.

Alternative D

The management theme of Alternative D is access—it emphasizes the maintenance of existing public access to Monument lands and resources. It identifies areas that are most appropriate to accommodate various uses—especially those identified as desirable during public scoping—and emphasizes those uses,

particularly with respect to transportation and recreation. It includes the most miles of routes designated for motorized use, would allow for the establishment of more recreational sites (e.g., campsites), and would make the entire Monument available for grazing. Though this alternative also protects Monument objects, additional mitigation efforts would likely be needed to achieve the level of protection that would be afforded under Alternatives B and C.

Environmentally Preferable Alternative

Alternative C, the Approved Resource Management Plan, is considered by the BLM to be the environmentally preferable alternative when taking into consideration the human (social and economic) environment as well as the natural environment. The U.S. Council on Environmental Quality (CEQ) has defined the environmentally preferable alternative as the alternative that will promote the national environmental policy as expressed in Section 101 of NEPA. The six broad policy goals for all Federal plans, programs, and policies are listed below:

- Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.
- Assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings.
- Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences.
- Preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment that supports diversity and variety of individual choice.
- Achieve a balance between population and resource use, which will permit high standards of living and a wide sharing of life's amenities.
- Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

In comparison with the other alternatives analyzed, Alternative C meets the above NEPA goals for future management of the Monument. It provides long-term protection and resource conservation, and balances human use and influence with resource protection. Alternative C would provide a higher level of resource protection and less public use.

The No Action Alternative, Alternative A, would continue management of public land within the IFNM according to the management of the 1989 Phoenix Resource Management Plan and would have no specific management actions to protect objects of the Monument. Alternative A would have custodial management of recreation, which could increase opportunities for vehicle based camping and continued designation of utility corridors. Alternative A also did not identify areas to retain the existing character of the landscape. For these reasons, the No Action Alternative is not preferable from an environmental perspective.

Alternative B is the most restrictive alternative, designed to protect the Monument's resources by placing the greatest emphasis on limiting human use and influence. The types of allowable uses and the intensity of those uses are restricted to provide the strongest protection for Monument objects and resources.

Alternative B was not selected as the environmentally preferable alternative because it does not achieve a balance between visitor use/access and protection of Monument objects.

Alternative D focuses on the maintenance of existing public access to Monument lands and resources. It has the least amount of resource protections and would not achieve a balance between resource uses and preserving important historic, cultural, and natural aspects of the IFNM.

Alternative C, the Approved Plan, takes the best components of each of the four alternatives to ensure protection of Monument objects and resources while providing a wide range of beneficial uses. Alternative C best meets the requirements of Section 101 of NEPA and was thus selected as the environmentally preferable alternative by the BLM.

1.3.3 What the Decision/Approved RMP Provides

Many land use planning (LUP) decisions are implemented or become effective upon approval of the Approved RMP. According to the BLM Land Use Planning Handbook, LUP decisions are broad-scale decisions which guide future land management actions and subsequent site-specific implementation decisions. LUP decisions identify specific areas of public land or mineral resources where certain uses or management actions are allowed, are excluded, or may be restricted in order to achieve a desired future condition or to protect certain resource values. LUP decisions fall into two categories: Desired Future Conditions (Goals and Objectives) and Management Actions (Allowable Uses) to achieve outcomes. For each resource, additional guidance is presented in the form of Administrative Actions. Administrative Actions are not land use planning decisions, but are a key component of the overall RMP.

1.3.4 What the Decision/Approved RMP Does Not Provide

The Approved RMP does not contain decisions for actions outside the jurisdiction of the BLM. Comments asking for decisions that were beyond the scope of this plan were forwarded to the appropriate agency. In addition, many decisions are not appropriate at this level of planning and are not included in the ROD. Examples of these types of decisions are discussed below.

Statutory requirements. The decision will not change the BLM's responsibility to comply with applicable laws and regulations.

National policy. The decision will not change the BLM's obligation to conform to current or future national policy.

Funding levels and budget allocations. These are determined annually at the national level and are beyond the control of the Tucson Field Office.

Monitoring strategies to determine the effectiveness of these decisions in achieving plan goals and objectives. Monitoring strategies will be addressed in specific activity-based plans that will be completed to implement the Approved RMP.

1.4 LAND USE PLAN DECISIONS, IMPLEMENTATION DECISIONS, AND ADMINISTRATIVE ACTIONS

The Approved RMP provides overall direction for management of all resources on BLM-administered land in the Monument. Many land use plan decisions are implemented or become effective upon publication of the ROD for the Approved RMP and may include desired future conditions, land use allocations (allowable uses) or designations, and special designations. Implementation decisions and management actions that require additional site-specific project planning, as funding becomes available, will require further environmental analysis. Some implementation decisions (e.g., route designations) are finalized with this ROD and thus require no further environmental analysis. Administrative actions are not land use planning or implementation decisions, but are a key component of the overall plan because they describe the BLM's day-to-day actions to help meet desired future conditions. The BLM will continue to involve and collaborate with the public during implementation of the Approved RMP. Brief descriptions of the types of decisions are presented below.

1.4.1 Land Use Plan Decisions

Desired Outcomes

Land use plans identify desired outcomes expressed in terms of specific goals and objectives that protect and maintain Monument objects over time. Goals and objectives direct the BLM's actions in most effectively meeting legal mandates; numerous regulatory responsibilities; national policy, including the Department of the Interior Strategic Plan goals; State Director guidance (see 43 CFR 1610.0-4b); and other resource or social needs. Desired outcomes to protect Monument objects in accordance with the Monument Proclamation should be identified for and pertain to resources such as natural, biological, and cultural; resource uses such as energy and livestock grazing; and other factors such as social and economic conditions. Land use plans are designed to most effectively protect Monument objects and meet these desired outcomes through allowable uses, land use allocations, and management actions.

Special Designations

Special designations are designated by Congress for special protection. Such designations are not land use plan decisions; however, recommendations for designation can be made at the land use plan level. Congress may then act on these recommendations at a later time.

Administrative designations made by the BLM, such as Areas of Critical Environmental Concern (ACECs), are also considered special designations and can be made in the land use plan.

Allowable Uses (Land Use Allocations)

Land use plans must identify uses, or allocations, that are allowable, restricted, or prohibited on the public lands and mineral estate to protect Monument objects. These allocations identify surface lands or subsurface mineral interests where uses are allowed, including any restrictions that may be needed to meet goals and objectives and that protect Monument objects such as geologic, cultural, and visual resources, vegetation, wildlife and wildlife habitat. Land use plans also identify lands where specific uses are excluded to protect Monument objects and resources. Certain lands may be open or closed to specific uses based on legislative, regulatory, or policy requirements or criteria to protect Monument objects and sensitive resource values in accordance with the Monument Proclamation. If land use plan decisions close

areas of 100,000 acres or greater in size to a principal or major use for two years or more, Congress must be notified of the closure upon its implementation as prescribed in 43 CFR 1610.6.

Management Actions

Land use plans for National Monuments must identify the actions anticipated to achieve desired outcomes, including actions to protect Monument objects and maintain, conserve, protect, restore, or improve land health. These actions include proactive measures (e.g., measures that will be taken to enhance watershed function and condition), as well as measures or criteria that will be applied to guide day-to-day activities on public land. Land use plans also establish administrative designations such as ACECs, recommend proposed withdrawals, land tenure zones, and recommend or make findings of suitability for congressional designations such as components of the National Wild and Scenic Rivers System.

1.4.2 Implementation Decisions

Implementation decisions (or activity-level decisions) are management actions tied to a specific location that take action to implement land use plan decisions. Implementation decisions are site-specific project-level decisions. Some of the implementation decisions in the RMP can be implemented without further NEPA analysis, such as route designations. Examples of such implementation decisions in this RMP include:

- Designate approximately 42 miles of roads and 82 miles of primitive roads as open to motorized and mechanized vehicle travel for public and administrative purposes.
- Designate approximately 118 miles of primitive roads as open for administrative vehicles only, and open for non-motorized travel for public use. Designate approximately 90 miles of trails as open for non-mechanized travel only for public and administrative purposes. Designate approximately 17 miles of routes as closed for reclamation/restoration.

Implementation decisions and management actions that involve new surface disturbance will require additional site-specific project planning that are not included in this ROD. These site-specific project plans will be completed as funding becomes available, and will require further environmental analysis. A travel and transportation management plan (TMP) will be prepared to identify the route specific and site-specific implementation actions, and site-specific impacts, and/or mitigation.

Appeal Procedures for Implementation Decisions

Implementation decisions are not subject to protest under the planning regulations. However, any party adversely affected by an implementation decision may appeal such a decision to the Interior Board of Land Appeals after the ROD is signed. The following procedures describe the appeal process for the implementation decisions, which will be available for appeal immediately upon public release of this ROD/Approved RMP.

Any party adversely affected by an implementation decision may appeal within 30 days of receipt of this decision in accordance with the provisions of 43 CFR Part 4.4. The appeal must include a statement of reasons or file a separate statement of reasons must be filed within 30 days of filing the appeal. The

appeal must state if a stay of the decision is being requested in accordance with 43 CFR 4.21 and must be filed with the Tucson Field Manager at the following address:

Bureau of Land Management
Field Manager, Tucson Field Office
3201 East Universal Way
Tucson, AZ 85756

A copy of the appeal, statement of reasons, and all other supporting documents shall be sent to the Field Solicitor at the following address:

Field Solicitor
United States Department of the Interior
Office of the Solicitor
401 West Washington Street, SPC 44
Phoenix, AZ 85003

If the statement of reasons is filed separately, it must be sent to the following address:

United States Department of the Interior
Office of Hearings and Appeals
Interior Board of Land Appeals
801 N. Quincy Street, Suite 300
Arlington, Virginia 22203

Request for Stay

Any party wishing to file a request for stay pending the outcome of an appeal of one or more implementation decisions must show sufficient justification based on the following standards under 43 CFR 4.21:

- The relative harm to the party if the stay is granted or denied
- The likelihood of the appellant's success on the merits of the stay
- The likelihood of immediate and irreparable harm if the stay is not granted
- Whether the public interest favors granting the stay

As noted above, the request for stay must be filed with the BLM Field Manager at the address listed above.

1.4.3 Administrative Actions

Although the BLM's intent and commitment to accomplish administrative actions is generally addressed in an EIS, such activities are neither management nor implementation decisions. Administrative actions are day-to-day activities conducted by the BLM, often required by FLPMA and other laws, but do not require NEPA analysis or a written decision by a responsible official. Examples of administrative actions include mapping, surveying, conducting inventory or monitoring, scientific research, other studies,

partnering and collaborating with partners, enforcement actions, developing educational materials, and working with local communities or interest groups.

1.5 MANAGEMENT CONSIDERATIONS FOR SELECTING THE APPROVED PLAN

The alternatives described in the Draft RMP/DEIS and public comment and input provided throughout this planning process were considered in preparing the RMP. The Approved RMP is based on the Preferred Alternative C described in the Proposed RMP (2011), which was based on Alternative C in the Draft RMP/DEIS (BLM 2007). Public comments and input received during all stages of planning resulted in fine tuning the RMP. The purpose and intent of the Monument Proclamation were considered at all stages and under all alternatives. The approach to managing the Monument, Alternative C without designation of utility corridors, optimally protects Monument objects from impacts on major utility corridor developments, while accommodating existing utility infrastructure. Prohibiting the use and discharge of firearms, except for permitted or authorized hunting activities in accordance with AGFD hunting regulations, was chosen because it: (a) most effectively accomplishes the overall objectives of protecting Monument objects, (b) best addresses the diverse community and stakeholder concerns in a balanced, fair, and equitable manner, and (c) provides the most workable framework for long-term protection of Monument objects.

The analysis in the PRMP/FEIS (2011) concluded that recreational target shooting is causing damage to protected Monument objects in localized areas, and is presenting safety conflicts with other users. Monitoring since the Monument was established has identified growing impacts from recreational target shooting at the existing sites, and new sites that have been created by users. Additional information related to recreational target shooting and impacts on Monument objects and public safety are found in the PRMP/FEIS Recreational Shooting Analysis in Appendix I.

1.6 MITIGATION MEASURES

The Approved RMP has incorporated the mitigation measures designed to avoid or reduce impacts within the management actions and supporting information in the Proposed RMP/Final EIS appendices. In developing the alternatives, the BLM used a variety of management methods and tools, including identifying allowable uses, temporal, spatial, and restrictions on uses, and specific actions needed to protect Monument objects. All practicable means to avoid or minimize impacts and environmental harm are incorporated into the Approved RMP. Additional measures to mitigate environmental impacts could be developed during subsequent NEPA analysis at the activity-level planning and project stages, or through consultations covering those proposed actions.

1.7 PLAN MONITORING

During the life of the RMP, the BLM expects that new information gathered from field inventories and assessments, research, other agency studies, and other sources will update baseline data or support new management techniques and scientific principles. To the extent that such new information or actions address issues covered in the RMP, the BLM will integrate the data through a process called plan maintenance or updating. This process includes the use of an adaptive management strategy. As part of this process, the BLM will review management actions and the RMP periodically to determine whether the objectives set forth in this and other applicable planning documents are being met. Where they are not being met, the BLM will consider adjustments of appropriate scope. Where the BLM considers taking or

approving actions which would alter or not conform with the overall direction of the RMP, the BLM will prepare a plan amendment and environmental analysis of appropriate scope.to make will

1.7.1 Implementation Monitoring

Implementation monitoring is the most basic type of monitoring and is used to determine whether planned activities have been implemented in the manner consistent with the Approved RMP. This monitoring documents the BLM's progress toward full implementation of the land use plan decisions. There are no specific thresholds or indicators required for this type of monitoring, but progress towards plan compliance will be evaluated and reported at regular intervals from the date of plan approval.

1.7.2 Effectiveness Monitoring

Effectiveness monitoring determines if the implementation of activities has achieved the desired future conditions (i.e., goals and objectives) set forth in the Approved RMP. Success is measured against the benchmark of achieving the objectives established by the Approved RMP, which may include regulated standards for resources such as endangered species, air, and water. The interval between these efforts will vary by resource and expected rate of change, but effectiveness monitoring progress will generally be reported to the Field Manager on an annual basis. These reports will include trends and conclusions, when appropriate, and be incorporated into the evaluation reports completed at regular intervals.

The BLM will monitor the implementation of the Approved RMP to determine whether the objectives set forth in this document are being met and if applying the land use plan direction is effective. If monitoring shows land use plan actions or best management practices are not effective, the BLM may modify or adjust management without amending or revising the plan as long as assumptions and impacts disclosed in the analysis remain valid and broad-scale goals and objectives are not changed. Where the BLM considers taking or approving actions that will alter or not conform to overall direction of the plan, the BLM will prepare a plan amendment or revision and environmental analysis of appropriate scope.

1.8 IMPLEMENTATION OF THE MANAGEMENT PLAN

Implementation of the Approved RMP will begin upon publication of its Notice of Availability in the Federal Register. Some decisions require immediate action and will be implemented upon publication of the ROD and Approved RMP. Other decisions will be implemented over a period of years. The rate of implementation is tied, in part, to priorities and available funds. The implementation of the Approved RMP will also occur in accordance with an adaptive management framework, and with appropriate levels of public involvement in project planning, and review of site-specific impacts for compliance with NEPA.

1.9 PUBLIC INVOLVEMENT

The BLM is committed to providing opportunities for meaningful participation in the resource management planning process. Throughout the preparation of this RMP, the BLM has maintained an extensive public participation process aimed at providing frequent opportunities for interaction with the public through a variety of media.

The formal process of public involvement began when the BLM published the Notice of Intent to prepare an RMP with EIS in the Federal Register on April 24, 2002. The Notice of Availability of the Draft RMP/Draft EIS was published on March 2, 2007. The BLM facilitated public involvement through a

series of open houses and workshops in 2004 and 2005, and additional meetings were held in local communities to obtain comments on the DEIS in 2007. The Notice of Availability of the Proposed RMP/Final EIS was published on September 29, 2011. The public was provided 30 days to protest any portions of the Proposed RMP/Final EIS they felt did not follow established procedure, or did not consider relevant information in reaching proposed decisions, or the proposed decisions were not consistent with BLM policy, regulation, and statute, as defined in Appendix E of the BLM Land Use Planning Handbook.

The public will continue to be involved through collaborative efforts in preparing future implementation or activity plans needed for site-specific actions to achieve planned management objectives.

1.9.1 Agency Consultations – U.S. Fish and Wildlife Service and State Historic Preservation Office

Consistent with the requirements of Section 7 of the ESA, the BLM consulted with the U.S. Fish and Wildlife Service (USFWS) to ensure that the BLM's proposed action would not jeopardize the continued existence of any listed threatened, endangered, or proposed species or critical habitat. The Biological Opinion (BO) on the IFNM RMP/EIS project included six conservation recommendations to minimize or avoid possible adverse effects on listed species or their critical habitat. See Section 2.1.8, Consultation and Collaboration for additional details.

In accordance with the requirements of Section 106 of the National Historic Preservation Act, the BLM has consulted with and obtained comment from the Arizona State Historic Preservation Office (SHPO) concerning the content of this RMP. These comments have been taken into account by the BLM during the development of this RMP. Further consultation with the SHPO will take place as specific actions implementing the RMP are developed.

1.10 AVAILABILITY OF THE PLAN

Copies of the Record of Decision and the Ironwood Forest National Monument Resource Management Plan may be obtained by viewing or downloading the document from the BLM website located at http://www.blm.gov/az/st/en/fo/tucson_field_office.html; by obtaining a CD at the BLM Tucson Field Office, located at 3201 East Universal Way, Tucson, Arizona 85756; or by sending a request by e-mail to the following address: AZ_IFNM_RMP@blm.gov.

1.11 MONUMENT MANAGER RECOMMENDATION

Having considered a full range of reasonable alternatives, associated effects, and public input, I recommend adoption and implementation of the attached Ironwood Forest National Monument Resource Management Plan.

Claire Crow, Ironwood Forest National Monument Manager — Date: 2/15/13

1.12 FIELD MANAGER CONCURRENCE

I concur with adoption and implementation of the attached Ironwood Forest National Monument Resource Management Plan.

Brian Bellew, Tucson Field Manager — Date: 2/15/13

1.13 ACTING GILA DISTRICT MANAGER CONCURRENCE

I concur with adoption and implementation of the attached Ironwood Forest National Monument Resource Management Plan.

Kelly Castillo, Acting Gila District Manager — Date: 2/15/13

1.14 STATE DIRECTOR APPROVAL

In consideration of the foregoing, I approve the Ironwood Forest National Monument Resource Management Plan.

Raymond Suazo, Arizona State Director — Date: 2/19/13

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CHAPTER 2.0 APPROVED RESOURCE MANAGEMENT PLAN

2.1 INTRODUCTION

The BLM Tucson Field Office has prepared the IFNM RMP to provide comprehensive current and future management of BLM-administered lands in the IFNM. The Monument is located in Pinal and Pima Counties, Arizona, approximately 80 miles south of Phoenix and 25 miles northwest of Tucson, Arizona (Map 1). Its boundaries encompass 189,600 acres, including 128,400 BLM-administered acres, with the remaining lands consisting of privately owned and state-administered parcels (Map 2).

The RMP was prepared in compliance with the Ironwood Forest National Monument Proclamation (Proclamation 7320, "the Proclamation") and the BLM's planning regulations 43 CFR 1600 under the authority of the FLPMA. This document also meets the requirements of NEPA, the Council on Environmental Quality Regulations for Implementing the NEPA (40 CFR 1500-1508), and requirements of the BLM's NEPA Handbook 1790-1.

This plan represents years of ongoing, coordinated efforts on the part of BLM Tucson Field Office, IFNM staff, the BLM Arizona State Office staff, representatives of communities near the Planning Area, cooperating agencies, special interest and user groups, and hundreds of concerned citizens. The decisions outlined in this document will enable the BLM to manage and protect the unique resources and Monument objects on public lands within the IFNM to achieve management actions and objectives in partnership with communities, organizations, and citizens.

2.1.1 Purpose and Need

The IFNM was designated to protect objects of scientific interest within the Monument, including the drought-adapted vegetation of the Sonoran Desert, geological resources such as Ragged Top Mountain, and abundant archaeological resources. The purpose of the IFNM is to preserve, protect, and manage the biological, cultural and geological resources, and other objects of this area for future generations, and to further our knowledge and understanding of these resources through scientific research and interpretation.

These objects are referred to as "Monument objects" in this document. Table 1 includes the text from Presidential Proclamation 7320 that identifies the Monument objects, and lists what those objects are. The table also identifies the specific indicators and thresholds for protection of Monument objects, and references the resource management category in which each of the objects are addressed in this plan.

Table 1: Protection of Objects Within the IFNM

Text from Presidential Proclamation 7320	Monument Object	Object Indicators and Protection Thresholds	Resource Management Category
The landscape of the Ironwood Forest National Monument is swathed with the rich, drought-adapted vegetation of the Sonoran Desert. The Monument contains objects of scientific interest throughout its desert environment. Stands of ironwood, palo verde, and saguaro blanket the Monument floor beneath the rugged mountain ranges, including the Silver Bell Mountains. Ragged Top Mountain is a biological and geological crown jewel amid the depositional plains in the Monument.	Drought-adapted vegetation	▪ Maintain viable natural populations of ironwood, palo verde, saguaros, and other drought-adapted vegetation within the Monument. ▪ Prevent avoidable loss of unique vegetation communities on Ragged Top and other rugged mountain ranges.	Vegetation Special Status Species
	Rugged mountain ranges	▪ Maintain natural characteristics, processes, and scenic and wildlife values of geologic resources.	Geology and Caves Visual Resources
The Monument presents a quintessential view of the Sonoran Desert with ancient legume and cactus forests. The geologic and topographic variability of the Monument contributes to the area's high biological diversity.	View of the Sonoran Desert	▪ Maintain visual quality of landscapes from important viewing areas.	Visual Resources
Ironwoods, which can live in excess of 800 years, generate a chain of influences on associated understory plants, affecting their dispersal, germination, establishment, and rates of growth. Ironwood is the dominant nurse plant in this region, and the Silver Bell Mountains support the highest density of ironwood trees recorded in the Sonoran Desert. Ironwood trees provide, among other things, roosting sites for hawks and owls, forage for desert bighorn sheep, protection for saguaro against freezing, burrows for tortoises, flowers for native bees, dense canopy for nesting of white-winged doves and other birds, and protection against sunburn for night blooming cereus.	Ironwood trees	▪ Maintain viable natural populations of ironwood; prevent increased mortality of ironwood stands.	Vegetation

Text from Presidential Proclamation 7320	Monument Object	Object Indicators and Protection Thresholds	Resource Management Category
The ironwood-bursage habitat in the Silver Bell Mountains is associated with more than 674 species, including 64 mammalian and 57 bird species. Within the Sonoran Desert, Ragged Top Mountain contains the greatest richness of species. The Monument is home to species federally listed as threatened or endangered, including the Nichols Turk's head cactus and the lesser long-nosed bat, and contains historic and potential habitat for the cactus ferruginous pygmy-owl. The desert bighorn sheep in the Monument may be the last viable population indigenous to the Tucson basin.	Habitat for threatened, endangered, and rare wildlife and vegetative species	▪ Maintain a natural range of variation in vegetation communities to support rare species. ▪ Prevent avoidable loss of special status species.	Vegetation Wildlife and Wildlife Habitat Special Status Species
In addition to the biological and geological resources, the area holds abundant rock art sites and other archaeological objects of scientific interest. Humans have inhabited the area for more than 5,000 years. More than 200 sites from the prehistoric Hohokam period (600 A.D. to 1450 A.D.) have been recorded in the area. Two areas within the Monument have been listed on the National Register of Historic Places, the Los Robles Archeological District and the Cocoraque Butte Archeological District. The archaeological artifacts include rhyolite and brown chert chipped stone, plain and decorated ceramics, and worked shell from the Gulf of California. The area also contains the remnants of the Mission Santa Ana, the last mission constructed in Pimeria Alta.	Archaeological objects of scientific interest	▪ Reduce threats and resolve conflicts from natural or human-caused deterioration of rock art and other prehistoric sites, Archeological Districts on the National Register of Historic Places, artifacts, and remnants of Mission Santa Ana.	Cultural Resources

The Monument proclamation assigns responsibility to protect objects for which the Monument was established and requires that an RMP be prepared to ensure that the management actions needed to do so are identified and implemented. The Monument Proclamation is the principal direction for management of the IFNM; all other considerations are secondary to that edict. In the absence of such a plan, current management for the IFNM falls under BLM's Interim Management Policy and Guidelines for Lands Under Wilderness Review, H-8559-1, and the various existing RMPs and amendments. These documents do not address many management issues and direction given in the Presidential Proclamation. To address these issues, the BLM needed to prepare the IFNM RMP.

The purpose of the IFNM RMP is to provide guidance for managing the use of BLM-administered lands and to provide a framework for future land management actions within the National Monument. The IFNM RMP will consolidate and replace the current management guidance for the IFNM.

2.1.2 Decision Area Description

The IFNM lies in the heart of the Sonoran Desert ecosystem in southern Arizona, and is a unique scenic area of rolling desert and ironwood woodlands including the Silver Bell, Waterman, Sawtooth, and Roskruge Mountains. Much of the vegetation in the area is classic Sonoran Desert upland habitat dominated by cacti such as saguaro, Bigelow's cholla, and staghorn cholla. Other common plants include ironwood, palo verde, creosote, brittlebush, triangle-leaf bursage, ocotillo, and white thorn acacia. The upper slopes of the Silver Bell Mountains possess a chaparral community dominated by jojoba. The lower bajadas contain interbraided streambeds that carry water after heavy rains. Large ironwood, blue palo verde, and mesquite trees characterize these desert wash habitats. Within these natural environments, the IFNM contains habitat for two endangered species, including the lesser long-nosed bat and Nichol Turk's head cactus, as well as several other species of concern.

In addition to the natural environment, abundant cultural resources occur within the IFNM. The IFNM includes a site listed in the National Register of Historic Places (National Register), two archaeological districts listed in the National Register, historic mining camps, and other cultural resources that are eligible for listing in the National Register.

Public lands within the IFNM provide for various uses including grazing, land use authorizations (such as rights-of-way for utilities), and dispersed recreational opportunities.

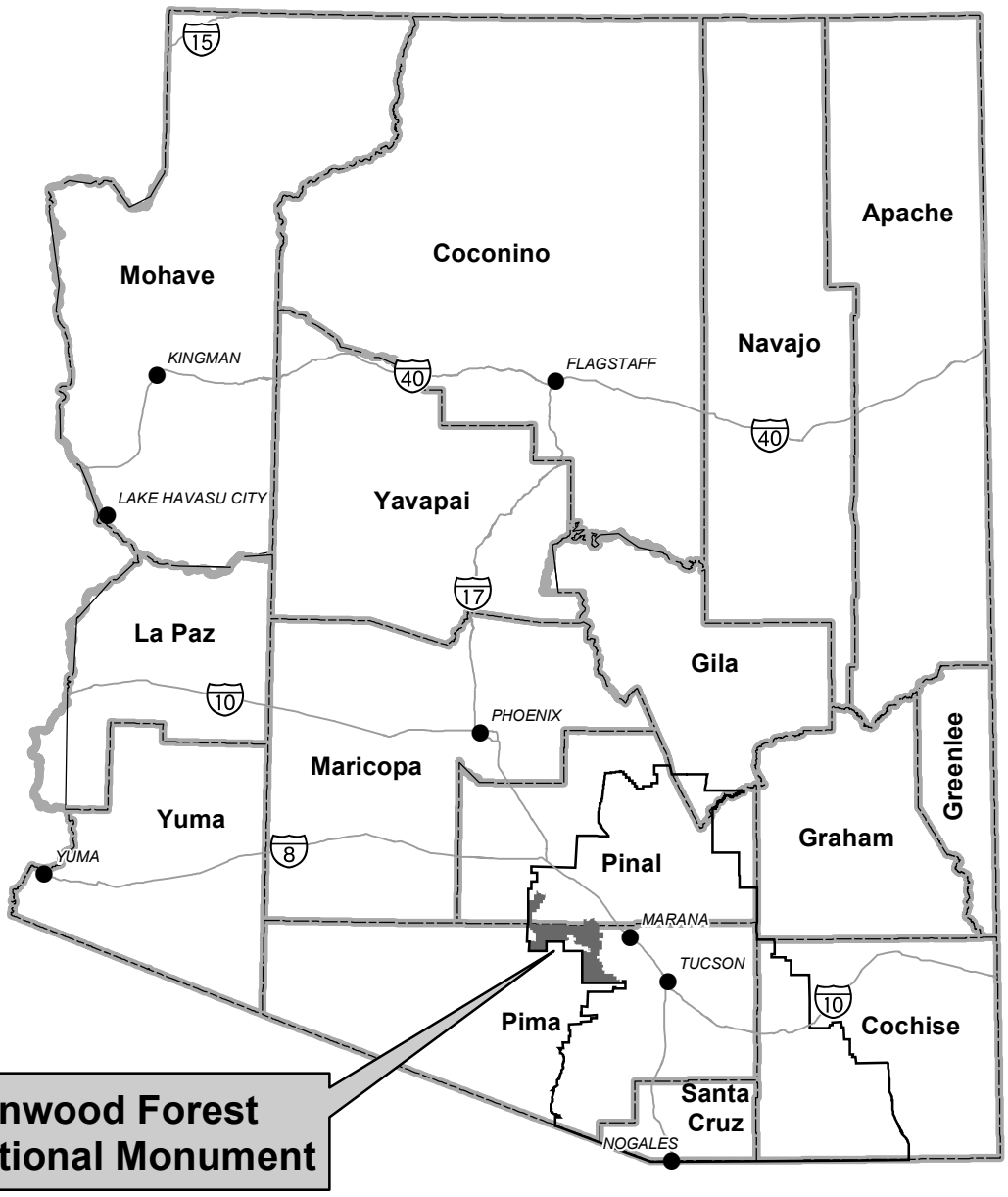
2.1.3 Scoping Issues

Development of this RMP was formally initiated with publication of a Notice of Intent in the Federal Register on April 24, 2002 (67 Federal Register 20157, April 24, 2002 [AZ-400-02-1610-DO-089A]). Following scoping, the BLM held six public workshops throughout the Tucson Field Office, which includes the IFNM, to collaborate on planning criteria, RMP goals and objectives, the range of alternatives, and preliminary alternatives. One of the most important outcomes of the scoping process was the identification of significant issues to be addressed in the planning effort. For planning purposes, an "issue" is defined as a matter of controversy or dispute over potential land and resource allocations, levels of resource use, production, and related management practices. Issues help determine what decisions will be made in the RMP and what the EIS must address as required by NEPA.

2.1.4 Issues Addressed

Planning issues are derived from scoping, which takes place in the preliminary stages of the planning process to solicit public and agency input to help identify the relevant issues and define the range of environmental analysis to be undertaken for the plan.

The planning issues identified through the scoping process included a variety of resources and resource uses. The comments and issues identified assisted in determining the scope of the studies completed and addressed in this plan.



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Legend

Planning Area

- Ironwood Forest National Monument Planning Area
- Tucson Field Office Boundary

General Reference

- County Boundary
- Interstate

Universal Tranverse Mercator
Zone 12, Units Meters
Clark 1866 Spheroid
NAD27 Datum

0 25 50 100 Miles

Location of the Ironwood Forest National Monument in Arizona

Map 1

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Surface Management

Ironwood Forest National Monument
ROD/Approved RMP

Legend

Surface Management

- Bureau of Land Management
- National Park Service
- Bureau of Reclamation
- American Indian Reservation
- Military Reservation
- State Trust Land
- State, County, City; Wildlife, Park and Outdoor Recreation Area
- Private
- Pima County

Data Source:
Base Information: BLM 2003
Quadrangle Image: U.S. Geological Survey 1977 Tucson

General Reference

- County Boundary
- Central Arizona Project (CAP) Canal
- River
- Interstate 10
- Main public access routes to monument. County administered roads connecting monument travel route system to public highways.

Planning Area

- Ironwood Forest National Monument

Universal Tranverse Mercator
Zone 12, Units Meters
Clark 1866 Spheroid
NAD27 Datum

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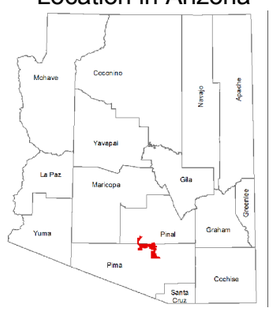
Location in Arizona



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Map 2

Key planning issues considered for developing alternatives in this plan included the following:

Vegetation

- What management actions will provide for preservation of existing plant communities and biodiversity?
- How will BLM manage potential impacts on plants from recreation, land development on State Trust land and private inholdings, grazing, and areas where there are existing mining claims?
- How will grazing and off-highway vehicle (OHV) use be managed for preventing the introduction and spread of noxious weeds into and within the IFNM?

Wildlife and Wildlife Habitat

- What management actions will protect wildlife and wildlife habitat?
- How will nearby human activity be managed to limit adverse impacts on the desert bighorn sheep population and lambing habitat?
- How will BLM manage potential conflicts with habitat and wildlife corridors from grazing, recreational shooting, camping activities, OHV use, land development on State Trust land and private inholdings, grazing, and areas where there are existing mining claims?

Special Status Species

- How will BLM give precedence to protection and restoration of habitat for threatened and endangered species and wildlife of special concern (as listed by the AGFD) species identified by local governments?

Cultural Resources

- How will BLM manage public access to potentially sensitive cultural resource sites?

Visual Resources

- How will BLM manage threats to scenic values of the IFNM from visitor facilities and OHV use?

Wilderness Characteristics

- How will BLM manage areas within the IFNM to protect wilderness characteristics?

Energy and Mineral Resources

- What management actions will be conducted to avoid potential impacts on wildlife, vegetation, water quality, and soil resources from ground-disturbing activities within the IFNM, including mining where valid existing rights occur?

Grazing/Livestock Management

- How will BLM manage grazing to be compatible with multiple uses within the IFNM?

Recreation (including visitor facilities)

- What management actions will be conducted to limit recreational activities (e.g., hiking, horseback riding, biking, camping, hunting, and recreational shooting) to protect resources within the IFNM from degradation?
- What visitor facilities should BLM provide within the IFNM?

Lands and Realty

- How will BLM evaluate and/or prioritize land acquisitions of private and State Trust land within the IFNM boundaries?

Travel Management

- How will BLM manage access into the IFNM from adjacent lands and communities (e.g., State and private inholdings and Tohono O'odham Nation lands)?

2.1.5 Issues Considered but Not Further Analyzed

The issues identified during public scoping (discussed in Section 2.1.4) shaped the alternatives carried forward in the RMP process. Other issues identified during public scoping were also considered but were not analyzed further in the planning process because they fell outside of BLM jurisdiction or were beyond the scope of the RMP. The issues and the rationale for not analyzing them further are provided below.

Wilderness

BLM received suggestions from a citizen group that the new RMP establish new WSAs within the IFNM.

Rationale: BLM has the authority under FLPMA Section 201 to inventory public land resources and other values, including characteristics associated with the concept of wilderness identified as naturalness, solitude, and primitive, unconfined recreation. The BLM Land Use Planning Handbook provides guidance on considering wilderness characteristics in the land-use planning process and directs BLM to identify decisions to protect or preserve wilderness characteristics. However, BLM has no authority to establish new WSAs or to report such areas to Congress.

Livestock Grazing

BLM received comments recommending the elimination of livestock grazing from the IFNM.

Rationale: BLM considered but eliminated an alternative that would immediately remove livestock grazing from the IFNM because it was determined to be unreasonable in terms of costs to BLM and IFNM lessees, manageability, enforcement, and various other issues.

Route Designations

BLM received a map proposing a route network within the IFNM from a coalition of citizen groups and a suggestion to designate all routes in the IFNM as closed to motorized traffic.

Rationale: This specific network was not considered as an alternative because it did not accommodate access to existing facilities and improvements and allowable uses, and did not consider access to private inholdings or State Trust land, where BLM could be required to provide access. Closing all routes to motorized traffic was not considered because it would not allow BLM to meet the management goals and objectives established for the IFNM.

Visitor Facilities

Members of the public requested the construction of visitor facilities throughout the Monument, thereby allowing a greater level of access to restrooms, drinking water, and other essentials.

Rationale: This suggestion was not considered as an alternative because the IFNM is a unit within BLM's NLCS, and is managed, in part, to maintain the character of the existing setting.

2.1.6 Planning Criteria

Planning criteria are the standards, rules, and guidelines that helped guide the RMP/EIS process. The BLM developed planning criteria principally from FLPMA and other applicable laws and, in the case of the IFNM, from Presidential Proclamation 7320, as well as collaboration with partner agencies, Native American tribes, and the public. The planning criteria were provided to the public for review during the scoping process and were included in the scoping report. General planning criteria and criteria specific to planning in the IFNM are presented below.

General Planning Criteria

- The planning process will include an EIS that will comply with NEPA standards. One record of decision will be issued for the IFNM Decision Area.
- The RMP will be completed in compliance with FLPMA, the Endangered Species Act (ESA) (16 United States Code 1531 et seq.), NEPA, the Archaeological Resources Protection Act, and all other relevant federal laws and executive orders, as well as the management policies of the BLM.
- Planning decisions will be made in the context of the best-available data, including information specific to public lands. Regional contextual data may also be used to identify the regional importance of public lands for resource use and protection.
- The planning team will work collaboratively with the State of Arizona; Pinal and Pima counties; tribal governments; municipal governments; other federal agencies; the Resource Advisory Council; and all other interested groups, agencies, and individuals. Decisions in the plan will strive to be compatible with existing plans and policies of adjacent local, state, tribal, and federal agencies, consistent with federal law and regulations. Opportunities to coordinate management with adjoining landowners for resource protection and public uses will be considered.
- The RMP will be developed to be flexible and adaptable to new and emerging issues and opportunities. During implementation of the RMP, the BLM will continue to work in partnership with the public and with local, state, and tribal governments and agencies to identify priority implementation projects and to identify and resolve emerging issues.

- Native American tribes will be consulted in accordance with policy, and tribal concerns will be given due consideration. The planning process will include the consideration of any impacts on Indian trust assets.
- Consultation with the U.S. Fish and Wildlife Service (USFWS) will take place throughout the planning process in accordance with Section 7 of the ESA and the National Memorandum of Agreement (August 30, 2000) to identify conservation actions and measures for inclusion in the plans.
- Coordination with the Arizona State Historic Preservation Office (SHPO) will be conducted throughout the planning process.
- The plan will recognize the state's authority to manage wildlife populations, including hunting and fishing, within the Planning Area. Coordination with AGFD will occur in accordance with the statewide memorandum of understanding (MOU; August 2007).
- The plan will set forth a framework for managing recreational and commercial activities in order to maintain existing natural landscapes and to provide for the enjoyment and safety of the visiting public.
- The lifestyles of area residents, including the wide variety of uses of the public lands, will be considered in the RMP.
- Any lands, or interests therein, acquired by the BLM within the Planning Area boundary will be managed consistently with the RMP, subject to any constraints associated with the acquisition.
- The RMP will recognize valid, existing rights.
- Federal Geographic Data Committee standards and other applicable BLM standards will be followed in the development and management of data.

Criteria Specific to IFNM

Planning criteria for the IFNM were derived from Presidential Proclamation 7320. The proclamation states that the BLM will manage the Monument "pursuant to applicable legal authorities, to implement the purposes of the proclamation." Thus, any BLM planning criteria developed for the IFNM were inextricably tied to protecting the objects identified in the proclamation. The following IFNM criteria were used in addition to the general planning criteria noted above:

- The IFNM RMP will establish guidance upon which the BLM will manage the IFNM and will replace and supersede all other BLM RMPs for the lands covered by the IFNM RMP.
- The IFNM RMP will meet the requirements of the Presidential Proclamation 7320, dated June 9, 2000, to conserve, protect, and restore the objects of geological, archaeological, historical, and biological value within the Monument.
- In accordance with the proclamation, acquired lands and interests within the Monument's boundary will be added to the Monument and will be managed consistently with the IFNM RMP.
- To maintain the existing natural and cultural landscapes of the IFNM to the maximum extent possible, facilities will be located outside the Monument's boundary or in neighboring communities. Facilities that must be located within the Monument's boundaries will be placed in such a way that they are unobtrusive, to the extent practicable.

- The IFNM RMP will not address Monument boundary adjustments or proposals to change the Proclamation.

2.1.7 Planning Process

The IFNM RMP was initiated under the authority of Section 202(f) of FLPMA and guided by BLM planning regulations in 43 CFR 1600. Additionally, the EIS is subject to Section 202(c) of NEPA and guided by the Council on Environmental Quality regulations in 40 CFR 1500.

BLM uses a multi-step planning process when developing RMPs as required by 43 CFR Part 1600 and illustrate in the BLM's Land Use Planning Handbook (H-1601-1). The planning process is designed to help BLM identify the uses of BLM-administered lands desired by the public and to consider these uses to the extent they are consistent with the laws established by Congress and the policies of the executive branch of the federal government. The planning process is issue-driven. The BLM used the public scoping process to identify planning issues, noted above, to direct the development of the IFNM RMP. The scoping process also was used to introduce the public to the planning criteria.

Title II, Section 202, of FLPMA directs BLM to coordinate planning efforts with Native American tribes, other federal departments, and agencies of the state and local governments as part of its land use planning process. The BLM is also directed to integrate NEPA requirements with other environmental review and consultation requirements to reduce paperwork and delays (40 CFR Part 1500.4-5). The BLM accomplished coordination with Native American tribes, other agencies, and consistency with other plans through ongoing communications, meetings, and collaborative efforts with an interdisciplinary team, which includes BLM specialists and federal, state, and local agencies.

2.1.8 Consultation and Collaboration

BLM land use planning regulations (43 CFR 1610.3), FLPMA (43 United States Code 1712), and regulations for implementing NEPA (40 CFR 1501.5 and 1501.6) guide the BLM in coordinating and cooperating with other federal and state agencies, local governments, and Native American tribes during the land use planning process. This collective guidance instructs the BLM to:

- Stay informed of federal, state, local, and tribal plans;
- Ensure that it considers these plans in its own planning;
- Help resolve inconsistencies between such plans and BLM planning; and
- Cooperate with other agencies and tribal governments during the development of RMPs and NEPA analysis.

The USFWS reviewed the biological assessment and developed a Biological Opinion (BO), the purpose of which is to prevent unacceptable harm to an ESA-listed species or its habitat. A BO is a scientific judgment about a proposed action, not a policy document. The BO on the IFNM Proposed RMP/EIS project included six conservation recommendations to minimize or avoid possible adverse effects on listed species or their critical habitat. In addition to the conservation measures included in Appendix B, the USFWS recommended the following conservation measures:

Lesser Long-nosed Bat

1. BLM continue to monitor disturbance, such as expansion of campsite areas and expansion of road corridors, to monitor effects of recreation activities to lesser long-nosed bat foraging habitat and recruitment of forage plants and to adaptively manage recreational activities to address impacts. BLM continue utilization of photogrammetric analysis of satellite imagery in a geographic information system (GIS) based platform.
2. BLM survey IFNM lands and work with others to survey private and ASLD managed lands within IFNM for roosts utilized by lesser long-nosed bats.

Nichol Turk's Head Cactus

1. BLM continue to monitor disturbance, such as expansion of campsite areas and expansion of road corridors, to monitor effects of recreation activities to Nichol Turk's Head Cactus habitat and to adaptively manage recreational activities to address impacts. BLM continue utilization of photogrammetric analysis of satellite imagery in a GIS based platform.
2. BLM establish a systematic monitoring protocol for Nichol Turk's Head Cactus to more effectively evaluate the status of the subspecies on IFNM and work collaboratively with others to evaluate the status of the subspecies across its known range. BLM establish a database with geo-referenced locations of stands of Nichol Turk's Head Cactus and digital images of those stands to provide a means to evaluate survivorship and assess threats such as OHV impacts.
3. BLM work with others to survey private and ASLD managed lands within IFNM to prioritize lands to acquire or secure for conservation of Nichol Turk's Head Cactus.
4. BLM work with the Tohono O'odham Nation to survey Nichol Turk's Head Cactus on the tribal lands.

Agency coordination efforts included reviewing numerous plans that provide the policies and guide the activities of these agencies and governments.

The BLM has coordinated with federal, state, and county agencies throughout the planning and EIS process. The BLM gathered issues, ideas, and concerns, and discussed the role of agencies in the process. A full listing of the agencies that the BLM coordinated with can be found in the Scoping Report (available from the BLM Tucson Field Office).

A letter introducing the RMP/EIS, identifying data-gathering efforts, and offering agencies the opportunity to become cooperating agencies in the planning efforts was sent to more than 200 agencies, followed by a cooperating agency meeting at the Arizona State Office. The meeting agenda included discussions on the BLM's planning process, collaborative planning, the meaning and responsibilities of cooperating agency status, and opportunities for involvement in the BLM's planning process without becoming a cooperating agency. The BLM's goal was to encourage involvement by all interested parties using whatever methods the parties wished.

For those agencies choosing to be a cooperating agency, MOUs were developed that outlined the roles and responsibilities of the cooperating agencies and the BLM throughout the planning process. The BLM signed an MOU with the AGFD which is discussed below.

Specific Agreements

The BLM and AGFD have agreed to work cooperatively to manage wildlife resources on public lands throughout Arizona. The master MOU (AZ-930-0703) between the BLM's Arizona State Office and the Arizona Game and Fish Commission, which sets policy for the management, preservation, and harvest of wildlife and fish resources, establishes the BLM's responsibility for managing wildlife habitat on public lands and the AGFD's public trust responsibility to manage fish and wildlife populations through the authority of the Commission. As stated in the MOU, the BLM and the AGFD "consider the management of fish and wildlife resources as a high priority and agree to work cooperatively to achieve a shared goal to actively manage, sustain, and enhance those resources."

Tribal Government-to-Government Consultation

The BLM has a long history of consultation on this RMP. Beginning in 2002 until late in 2011, BLM staff and managers held and documented seven face-to-face meetings with tribal staff, legislative council members, or tribal council members about the RMP.

The BLM began by contacting the following tribes to initiate consultation, and invite them to the scoping meetings at the start of the RMP process as well as to participate as a cooperating agency in the planning process:

- Ak-Chin Indian Community
- Gila River Indian Community
- Salt River Pima-Maricopa Indian Community
- San Carlos Apache Tribe
- Tohono O'odham Nation
- Pascua Yaqui Tribe

The BLM met with interested tribes to describe and discuss the planning process and Planning Area. Three formal letters were sent to the Tribal Chairs with courtesy copies sent to the cultural staff at each and every tribal government. These were sent with return receipt requested. A few reply letters from some tribes were received. Follow-up telephone calls were made to tribal staff in order to make sure that the letters and accompanying documents arrived and to inquire whether there were any concerns that needed to be addressed. The BLM offered field tours for Tribal staff and elders attended. These field tours allowed time for discussion of planning issues at particular sites and particular broad landscapes.

Topics covered during consultation included formal consultation, cooperating agency status, and community involvement and collaboration. Tribal staff emphasized the importance of ongoing and regular consultation, and voiced concerns regarding protection of cultural and natural resources, grazing management, law enforcement with regard to cultural resource site protection, route access, undocumented immigrants, and drug smuggling, and possible land exchanges and acquisitions. The BLM kept the tribes informed on RMP development throughout the planning process via meetings, telephone conversations, letters, faxes, email, personal communication, and news releases, including how to participate in commenting on the Draft RMP/EIS and notification of the publication of the Proposed RMP

in September 2011. These important topics are issues that will continue to be worked on with the tribes throughout Plan implementation.

Section 7 Consultation

In accordance with the requirements of Section 7 of the ESA, the BLM consulted with the USFWS to ensure that the BLM's proposed action will not jeopardize the continued existence of any listed threatened, endangered, or proposed species or critical habitat.

BLM wrote a Biological Assessment and held a meeting with the USFWS to explain the proposed action and the format used for the effects determinations. The assessment discussed the effects on two listed species in the IFNM Biological Assessment from the Proposed RMP. The BLM delivered the completed Biological Assessment to the USFWS for comments and clarification.

The USFWS reviewed the Biological Assessment and developed a BO; the purpose of a BO is to prevent unacceptable harm to an ESA-listed species or its habitat: it is a scientific judgment about a proposed action, not a policy document. The BO on the IFNM RMP/EIS project included conservation recommendations to minimize or avoid possible adverse effects on listed species or their critical habitat. It also imposed conservation measures needed to minimize any harmful impacts, and required monitoring and reporting to ensure adequate protection and compliance.

Section 106 Consultation

In accordance with the requirements of Section 106 of the National Historic Preservation Act, the BLM coordinated with and solicited input from the Arizona SHPO. The BLM and Arizona SHPO followed the coordination protocols in the Arizona Protocol relating to resource management plans; the protocol provides for a phased consultation process related to historic, traditional, and cultural resources for an EIS and subsequent activities that could tier from a ROD. Per these procedures, the Arizona BLM initiated consultation with the Arizona SHPO by written correspondence in 2003. The letter described the IFNM RMP/EIS and specified the need to consult on information presented in the EIS.

Over the course of the planning process, the BLM met with or contacted the SHPO to share updates and information on the planning effort. In February 2007, the BLM sent a letter to the SHPO detailing the history of the planning effort and requesting review and comment on the Draft RMP/EIS by the SHPO. In July 2010, the BLM received the SHPO's comments on the Draft RMP/EIS noting comments regarding impacts on cultural resources and associated mitigation outlined in the plan.

Federal Coordination

The BLM also worked with the Borderlands Management Taskforce, which coordinates all federal agencies involved with borderlands management. The BLM's responsibility is to manage and protect natural resources, protect employees and public land users, and coordinate with all other law enforcement agencies (e.g., county, state, and federal agencies, including Immigration and Customs Enforcement). Issues discussed included impacts related to undocumented immigration, drug and human trafficking, and coordinated management and mitigation measures.

Arizona Governor's Office Coordination

The BLM coordinated and consulted with the Arizona governor and governor's office and other state agencies. The Arizona governor was given the opportunity to identify any inconsistencies between the proposed plan and state or local plans, policies, and programs, and to provide recommendations in writing during a 60-day consistency review period, a requirement of the BLM's planning process. The Governor's Office did not note any inconsistency with state policies or plans.

Local Government

The BLM coordinated and consulted with local governments throughout the planning process. The BLM reviewed numerous county planning documents, including the Pima County Comprehensive Plan, the Pinal County Open Space and Trails Master Plan, and the Sonoran Desert Conservation Plan. The BLM's planning guidance notes that RMPs shall be consistent with other federal, state, and local plans to the maximum extent consistent with federal law and FLPMA provisions, and ensure that consideration is given to those state and local plans relevant to the development of land use plans for public lands. The BLM has reviewed these county plans for consistency and found that the actions in the RMP are consistent with the intent and actions in the county plans.

Local governments submitted scoping comments when BLM initiated the planning effort and reviewed and commented on the Draft RMP/EIS. The BLM will continue to coordinate with local governments after the ROD is signed.

Public Outreach and Local Constituency Groups

In an effort to provide outreach to the local communities in the Planning Area, the BLM contacted constituency groups with interests in several of the planning issues. The BLM contacted several shooting groups to discuss the target shooting analysis, including the Pima County Shooting Sports Program Manager, and the AGFD. The Arizona State Rifle and Pistol Association provided feedback on the shooting analysis, including areas that will remain open for shooting activities and information on safe shooting practices and distances.

2.1.9 ~~Policy~~

This plan is consistent with and incorporates requirements identified in various laws, regulations, and policy. These include Executive Orders, legislative designations, and court settlements and rulings. The policies and decisions that existed prior to this plan being written are outside the scope of the plan but have influenced the decisions, constrained the alternatives, and are needed to understand management of the area.

The management decisions (Management Goals and Objectives and Management Actions) under the Approved RMP are numbered and arranged by specific resources and resource uses consistent with BLM Arizona Land Use policy. Each decision as well as Administrative Actions, are assigned one of the following codes:

AA	Administrative Actions
AQ	Air Quality
GR	Geology and Cave Resources
SW	Soil and Water Resources
VH	Vegetation
WH	Wildlife and Wildlife Habitat
TE	Special Status Species
FM	Fire Ecology and Management
CL	Cultural Resources
PL	Paleontological Resources
VR	Scenic and Visual Resources
WC	Lands Managed to Protect Wilderness Characteristics
MI	Energy and Mineral Resources
LM	Livestock Grazing
RR	Recreation
LR	Lands and Realty
TM	Travel Management
SD	Special Designations

2.2 MANAGEMENT DECISIONS

As described in the proclamation the "Monument contains objects of scientific interest throughout its desert environment. Stands of ironwood, palo verde, and saguaro blanket the Monument floor beneath the rugged mountain ranges, including the Silver Bell Mountains. Ragged Top Mountain is a biological and geological crown jewel amid the depositional plains in the Monument. In addition to the biological and geological resources, the area holds abundant rock art sites and other archeological objects of scientific interest. For the purpose of protecting the objects identified above, the Secretary of the Interior shall prohibit all motorized and mechanized vehicle use off road, except for emergency or authorized administrative purposes." The goals, objectives, and management actions were developed to protect Monument objects.

This section of the RMP presents the Goals, Objectives, Land Use Allocations, and Management Actions established for BLM-administered lands in the IFNM. Most of the management actions are long-range in nature and will not be achieved immediately, but will require a period of time to achieve. These management decisions are presented by program area. Not all types of decisions were identified for each program.

Implementation decisions (or activity-level decisions) are management actions tied to a specific location that take action to implement land use plan decisions. Implementation decisions generally constitute the BLM's final approval allowing on-the-ground actions to proceed and require appropriate site-specific planning and NEPA analysis. Such decisions may be incorporated into implementation plans (activity or project plans) or may exist as stand-alone decisions. Examples of implementation decisions described in Chapter 2 include:

- Designate approximately 42 miles of roads and 82 miles of primitive roads as open to motorized and mechanized vehicle travel for public and administrative purposes.
- Designate approximately 118 miles of primitive roads as open for administrative vehicles only, and open for non-motorized travel for public use. Designate approximately 90 miles of trails as open for non-mechanized travel only for public and administrative purposes. Designate approximately 17 miles of routes as closed for reclamation/restoration.

Implementation decisions and management actions that require additional site-specific project planning, as funding becomes available, and will require further environmental analysis.

The RMP also includes Administrative Actions that outline the objectives, basic management policy, and program direction. Administrative Actions are not land use plan decisions; however, these are day-to-day activities that are not ground-disturbing and are an important component when considering program activities.

2.2.1 Air Quality

2.2.1.1 Management Goals and Objectives

AQ-001: Reduce fugitive dust production and manage uses to maintain Federal and State air quality standards.

AQ-002: Implement measures to reduce fugitive dust within the Monument, especially as they pertain to unpaved roads and other disturbed areas to less than 50 tons of particulate matter equal to or less than 10 microns in diameter dust per year.

2.2.1.2 Management Actions

AQ-003: Control fugitive dust emissions from unpaved roads and disturbed areas (e.g., parking pull-offs) regularly accessed by the public for various purposes (e.g., recreation) by using appropriate control methods, such as:

- Posting signs or creating obstacles to speed (e.g., speed bumps)
- Applying dust suppressants or gravel
- Implementing road-use restrictions

2.2.1.3 Administrative Actions

AA-001: Work with local businesses that have non-major permits within 6 miles (10 kilometers) of the IFNM to establish an understanding of the potential impacts their operations may have on the Monument.

AA-002: Attend work group meetings pertaining to new or revised regulations that will impact the IFNM, with fugitive-dust regulations being a priority, and provide comments as necessary and appropriate.

AA-003: Establish interpretive displays in recreationally used portions of the Monument with themes based on the importance of improving or maintaining the existing visibility and air quality conditions in the Monument.

AA-004: Promote the study of air quality conditions at the Monument, including the effects of ozone, acid deposition, and other related pollutants on plants and the supporting ecosystems, with academic institutions and other interested parties.

AA-005: Enlist volunteers and partners to assist with environmental education and public awareness campaigns related to air quality.

AA-006: Work with permitting authorities to ensure that the IFNM is treated as a pseudo "affected state" for the purposes of major-source air quality permitting for facilities within 100 kilometers of the IFNM. This would allow BLM to review applications for major source permits, in conjunction with the permitting agency, to determine the potential air quality impacts a proposed major source could have on the IFNM and Monument objects.

AA-007: Work with permitting authorities to ensure BLM has an opportunity to review non-major-source permits within 6 miles (10 kilometers) of the IFNM to determine their effects on air quality and Monument resources.

AA-008: Work with Federal, State, and local agencies to install air quality and/or meteorological monitors in the IFNM. Recommended air quality monitors include those that measure visibility, particulate matter, ozone, and acid deposition. Use the data collected to identify air quality trends that could impact the IFNM.

AA-009: Keep informed of the compliance status of minor and major sources near the IFNM, and inform the applicable permitting agency of potential violations if necessary.

AA-010: Coordinate with adjoining land managers and county or municipal authorities for specific measures to mitigate air quality effects on the IFNM (e.g., controlling fugitive-dust emissions from unpaved roads, construction sites, or other activities within the vicinity of the IFNM).

AA-011: Include stipulations for controlling dust in right-of-way grants.

AA-012: Follow the development of new and revised State regulations and designations of nonattainment area to determine what public lands will be affected.

2.2.2 ~~Geology and Cave Resources~~

2.2.2.1 Management Goals and Objectives

GR-001: Manage geologic features to protect natural characteristics and processes for public access and enjoyment where access does not conflict with other resource goals (as opposed to mining or mineral potential).

GR-002: Unique or unusual geologic and cave resources are managed to protect their visual, wildlife habitat, or other values in accordance with the proclamation.

2.2.2.2 Management Actions

GR-003: If geologic resources are discovered that warrant special management, identify appropriate management actions, allowable uses, and allocations for the resource or site.

GR-004: Prohibit collection of geologic resources unless officially authorized by written permit and allow collection and removal of geologic resources for legitimate scientific research or educational uses.

2.2.2.3 Administrative Actions

AA-013: Interpret unique geologic features for their scientific and educational value and for protection of those features.

AA-014: Establish liaison with local and regional scientific and academic communities to promote opportunities to study the unique geologic features found in the Monument.

AA-015: Provide administrative and logistical support for detailed scientific studies of unique geologic features in the Monument.

AA-016: Identify and inventory unique geologic features, assess potential impact from human visits, and evaluate impact from uses of other resources.

AA-017: Conduct field surveys for cave locations on IFNM land with potential for caves, prior to any ground-disturbing activities, and to develop an inventory of cave locations within the Monument.

AA-018: Conduct surveys where, based on geology, caves may occur. If a cave is located, evaluate the discovery for cultural, scientific, biological, geological, hydrological, educational, and recreational values and management related to primary cave values.

AA-019: Establish a database for the inventory of caves on the Monument, including information to assess the quality of the caves. This may include locations that should remain confidential (adequate protection must be developed for these data entries) until a time, as determined by the BLM Director, from advisement of resource staff that the cave has been evaluated and methods of protection from human entry established, if suitable.

AA-020: Establish MOUs for cooperative agreements with appropriate scientific organizations, caving groups, and other Federal and State agencies to allow for discovery and inventory of cave locations, and assessment of cave condition.

AA-021: Establish criteria to assess the quality of the cave, including cultural, geological, biological, hydrological, educational, and recreational values.

2.2.3 ~~Soil and Water Resources~~

2.2.3.1 Management Goals and Objectives

SW-001: Conserve sensitive soils, desert pavement, and biological soil crusts.

SW-002: Manage land uses to protect the water supply needs of the biota and other natural resources.

SW-003: Manage watersheds to maintain healthy conditions and restore degraded areas.

SW-004: Manage land uses such that erosion and sedimentation rates are appropriate to natural conditions, and so that areas returning to natural conditions, or areas under active restoration meet, or are making progress towards meeting, Land Health Standards within five years.

SW-005: Conserve areas of biological soil crusts and desert pavement with minimum disturbance so that stability of soil crusts and desert pavement is maintained.

SW-006: Limit fugitive-dust pollution by reducing disturbance to soils.

2.2.3.2 Management Actions

SW-007: Minimize surface disturbance during construction, reconstruction, or maintenance of facilities (including structures for recreation, livestock grazing, transportation, or any other structure within the IFNM). Develop mitigation plans, restore surfaces, and stabilize soils in accordance with resource management and/or restoration objectives.

SW-008: Maintain and improve soil cover and productivity through erosion prevention measures and land treatments, and incorporate salinity control measures into erosion prevention strategies and rehabilitation treatments.

SW-009: In areas of sensitive or fragile soils, allow new and continuing ground disturbing activities with mitigation.

SW-010: Prohibit surface water diversions and groundwater pumping that removes water within the Monument boundary to outside its boundary, or adversely affects the Monument's values.

SW-011: Discontinue the Agua Blanca Ranch Multiple Resource Management Area.

SW-012: Discontinue the Cocoraque Butte-Waterman Mountains Multiple Resource Management Area.

2.2.3.3 Administrative Actions

AA-022: Complete functionality analysis to maintain or remove existing flood and erosion control structures.

AA-023: Work with appropriate State authorities to ensure that any water resources needed for Monument purposes are available.

AA-024: Address erosion, and consider soil types and measurable factors that compare conditions to Rangeland Health Standards when making land management decisions.

AA-025: Use best management practices (BMPs) for road maintenance and other allowed and authorized surface disturbances to limit soil loss and erosion.

AA-026: Determine the current existence, location, and condition of desert pavement and biological soil crusts.

AA-027: Identify and evaluate sensitive areas that may require special management to prevent soil loss, soil destruction, and excessive erosion.

AA-028: Work with the U.S. Geological Survey (USGS) and Arizona Department of Environmental Quality (ADEQ) to identify the groundwater and surface water quality parameters most likely to be impacted by the current and forecast public land uses in the Monument.

AA-029: Identify locations where groundwater and surface water can be sampled for analysis under the ADEQ ambient monitoring program.

AA-030: Develop an MOU, or an amendment of the existing State non-point-source monitoring program MOU, to support ADEQ monitoring of groundwater and surface water at selected locations in the Monument.

AA-031: Identify locations within the Monument where groundwater levels can be monitored. Begin to develop cooperative agreements with the USGS to compare and analyze groundwater data on the public land.

AA-032: Develop a water quantity database to assess the current and forecast water needs of the Monument and to evaluate impairments to public land water resources from other water users.

AA-033: Identify, quantify, and secure legal entitlement for existing and future water sources on public lands within the Monument by acquiring surface water rights/well permits, when possible, to ensure water availability to meet the purposes of the Monument.

AA-034: Ensure that land management practices and policies protect the water supply by exercising existing land management authorities under NEPA to protect and maintain all available water and natural flows in the Monument.

AA-035: Determine BLM interests and needs for a surface and groundwater protection agreement with the State of Arizona.

AA-036: Begin a dialog with appropriate State of Arizona policy, legal, and water resources staff on the development of a cooperative agreement on the protection of water resources within the Monument. Conclude this process with a formal agreement between the State and BLM that supports the objectives and preserves the resources listed in the IFNM enabling proclamation.

AA-037: Develop, with range conservation staff, a data collection protocol for specific watershed metrics that can be routinely collected during watershed health assessments.

AA-038: Develop and maintain an electronic database of watershed health metrics that is useful for rapidly identifying trends and prescribing management corrections when problems are apparent.

AA-039: Increase public awareness and appreciation of water resources and healthy watersheds through interpretive displays as part of the public outreach program and visitor facilities planning for the Monument.

AA-040: Work with ADEQ to apply the non-point-source pollution MOU within the guidance for public land health (both grazed and ungrazed). Use this cooperative approach to evaluate water quality impacts

to impaired waters of the United States (303d List) and pollutant load reductions to any future listed streams. Use rangeland health BMPs, as suggested in the Arizona Standards and Guidelines and any new land health guidance developed by BLM.

AA-041: Track data from the existing state water quality database that could indicate impairment to resources of the planning area.

AA-042: Review regional water level data on an annual basis to determine if a monitoring program is needed.

AA-043: Review Pima County Flood Control District surface-water monitoring stations and suggest a new site close to the planning area.

AA-044: Develop a historical database of water quality data from the planning area and adjacent regions.

AA-045: Develop a database from watershed assessments information. Maintain with data as problems are addressed.

AA-046: Work with existing research programs to identify and map desert pavement and biological soil crusts, and develop a conservation strategy for these areas.

AA-047: Develop and require implementation of BMPs for road maintenance and other allowed and/or authorized surface disturbances to limit soil loss from erosion and minimize impacts on natural water flow patterns.

2.2.4 Vegetation

2.2.4.1 Management Goals and Objectives

VM-001: Assure adequate vegetative cover with an approximate mix of natural plant species that meet acceptable range health standards based on current ecological conditions.

VM-002: Manage to protect, enhance, and restore as appropriate vegetation communities to maintain their natural range of variation in plant composition, structure, and function. Communities within the Monument include (1) palo verde–cacti-mixed scrub; (2) jojoba chaparral; (3) creosotebush–white bursage; (4) curly mesquite grass-scrub; and xeroriparian.

VM-003: Manage grazing, off-highway vehicles, and other uses to prevent the introduction and spread of noxious weeds and invasive species into and within the IFNM.

VM-004: Manage allowable and authorized uses of the Monument to minimize potential impacts on vegetation.

VM-005: Limit the impact of invasive species and noxious weeds on natural resources and processes by reducing the distribution and abundance of these species. Reduce known infestations by 10 percent annually.

VM-006: Priority habitats, vegetation assemblages, and species will be managed to maintain the vegetative community complex while recognizing valid existing rights and appropriate catastrophic wildfire dangers.

VM-007: Manage collection and/or salvage of desert vegetation for personal and commercial uses (including firewood) in accordance with Monument objectives and the State of Arizona Native Plant Law, while taking into consideration potential traditional and/or cultural uses.

VM-008: Manage activities on the Monument to maintain the following priority species and habitats: (1) dense or large ironwoods*;* (2) cholla forest; (3) cactus dunes; (4) creosote rings; (5) xeroriparian vegetation; (6) curly mesquite grassland; (7) jojoba chaparral; (8) the Ragged Top vegetation assemblage; and (9) Nichol Turk's head cactus; and special status species. Ensure no net loss of high priority species and habitats throughout the IFNM.

VM-009: Restore the diversity and distribution of existing natural plant communities in disturbed areas to their ecological site potential, with conditions moving toward ecological site potential within 5 to 10 years.

2.2.4.2 Management Actions

VM-010: Minimize surface disturbance that results in loss of existing vegetation cover. Restrict surface-disturbing activities to methods that allow for re-sprouting of tree and shrub species unless permanent construction is required.

VM-011: Removal and/or use of living or dead and down native plant material is prohibited, with the following exceptions, when specifically authorized: (1) non-commercial Native American traditional use/collection, (2) seed collection and transplant for revegetation projects within IFNM, (3) collection for scientific purposes as authorized with a BLM Special Use Permit, (4) administrative vegetation treatment to ensure adequate side and overhead clearance along designated routes, (5) hazard fuels reduction, and (6) consumption by wildlife.

VM-012: Pursue an integrated weed management approach to prevent the introduction of and control invasive species and noxious weeds using methods including mechanical, chemical, and biological treatments. Use biological control methods to control invasive plant species if appropriate safety measures are applied, and in coordination with appropriate Federal, State, County, municipal and tribal agencies.

VM-013: Assign priority to the control of invasive species and noxious weeds that have a substantial and apparent impact on native plant communities and wildlife. When infestations are identified, they will be evaluated for their potential threat. Prioritize treatment of species that are identified as aggressive invasive species or are considered noxious weeds, and are located within priority vegetative habitats. Schedule other species for action in coordination with partners.

VM-014: Restore disturbed areas based on restoration plan to be developed within five years following RMP approval. Include the following elements in the restoration plan:

- Identification of disturbed areas
- Inventory and description of the history of areas to be restored
- Objectives and success criteria for the restoration efforts at each site
- Restoration strategies to be implemented at each site
- Duration and severity of restricted uses after restoration activities are implemented
- Monitoring protocol to be used to assess restoration efforts against the objectives and success criteria
- Adaptive management strategies to address situations where success criteria are not met
- Priorities for restoration

VM-015: Emphasize passive restoration by natural processes to return sites to their desired resource conditions and hydrological functions; use active reclamation practices to stabilize and reclaim sites that are likely to be successfully reclaimed using active management methods due to their ecological characteristics, and that are:

- severely damaged, rapidly deteriorating, or rapidly expanding
- placing adjacent resources at risk
- prone to invasion by nonnative species
- heavily disturbed, such as mining sites
- capable of improving habitat for special status species
- a management priority and require accelerated restoration to meet a selected management objective, such as obliterating a route to effectively implement a route closure or restoring an important habitat function
- identified as having high visual resource values that are being affected
- located in priority vegetative habitats

VM-016: Use a variety of vegetation reclamation methods, as appropriate, to restore and promote a natural range of native plant associations. Methods may include mechanical, chemical, and biological treatments.

VM-017: Use native plants for all restoration projects.

VM-018: Fence along designated routes, as necessary, to prevent damage to sensitive and unique vegetation and minimize the spread of invasive species and noxious weeds. Fencing will be designed and installed consistent with the procedures and configurations described in BLM Manual H-1741, Fencing.

VM-019: Avoid projects or activities that could disturb priority species or habitats. Require mitigation when avoidance is not possible.

2.2.4.3 Administrative Actions

AA-048: Monitor the Ragged Top vegetation assemblage and Nichol Turk's head cactus population within the IFNM.

AA-049: Monitor vegetation and progress toward achieving desired outcomes with an emphasis on invasive species and noxious weed treatment areas and reclaimed and restored areas.

AA-050: Identify and monitor areas of invasion by nonnative, invasive species and noxious weeds.

AA-051: Support and/or implement public education programs addressing management of invasive species and noxious weeds by developing a volunteer or docent program to control these species and interpret related issues to visitors, providing literature on nonnative, invasive species and noxious weed issues to visitors, and constructing permanent graphics at selected points along the roadways of the Monument.

AA-052: Monitor the effects of fire suppression activities on the spread of nonnative species.

AA-053: Develop monitoring plans for establishing sample plots within each of the unique or important vegetation associations. The monitoring plan will identify key areas within each community where monitoring will be conducted. Permanent photo points will be established for long-term monitoring.

AA-054: Collect monitoring information on one-half of the sample plots within vegetation associations or key areas every year, ensuring that all vegetation associations or key areas are monitored every 2 years.

AA-055: Implement a long-term monitoring program that includes rainfall and temperature gauges, permanent photo points, plant plots, mammal trapping transects, bird call points, and wildlife/plant community surveys (emphasis on herpetofauna).

AA-056: Monitor invasive species and noxious weed treatment areas for at least three years to evaluate population trends and establish a baseline for evaluating the results of management actions; identify resurgence of treated species; evaluate the effectiveness of control treatments; and determine if re-treatment is necessary.

2.2.5 ~~Wildlife and Wildlife Habitat~~

2.2.5.1 Management Goals and Objectives

WH-001: Sustain ecological conditions within the IFNM that continue to support the wildlife populations and achieve AGFD wildlife management goals.

WH-002: Conserve, enhance, and, where appropriate, restore native wildlife and wildlife habitats.

WH-003: Maintain or enhance wildlife corridors between blocks of habitat.

WH-004: Manage wildlife habitat in cooperation with adjacent land owners to minimize degradation, loss, and fragmentation throughout the Monument.

WH-005: Manage and/or conserve areas identified as important for the viability of priority species and bighorn sheep populations, including, but not limited to lambing areas and movement corridors. Within 10 years, enhance habitat conditions in movement corridors so they are conducive to wildlife movement.

WH-006: Manage for wildlife water availability to sustain optimal wildlife population sizes as determined by AGFD. Minimize adverse impacts of current and potential waters on all wildlife species.

WH-007: Manage access and transportation, and implement use restrictions to protect wildlife habitat values, decrease human-wildlife conflicts, and reduce and/or minimize fragmentation of habitat.

WH-008: Manage allowable activities and uses to protect the following priority species: game species, bighorn sheep, mule deer, javelina, burrowing owls, migratory birds, and special status species to sustain healthy populations.

2.2.5.2 Management Actions

WH-009: Priority habitats for wildlife are bighorn sheep habitat (as allocated for the Wildlife Habitat Management Area [WHA] below), xeroriparian habitat, and desert tortoise habitat categories I and II (desert tortoise are discussed further in Section 2.2.6, Special Status Species).

WH-010: Discontinue the 41,470 acres Silver Bell Desert Bighorn Sheep Management Area. Instead, approximately 29,820 acres are allocated for the Desert Bighorn Sheep WHA (as shown on Map 3) to protect habitat, lambing areas, and movement corridors. The WHA will be managed in conjunction with appropriate agencies.

WH-011: For the Desert Bighorn Sheep WHA: In coordination with AGFD, implement closures to human entry from January 1 through April 30, as needed, based on information and monitoring data gathered on lambing areas within the WHA, as identified by available information and monitoring data. Lambing areas are closed to sheep and goats year-round.

WH-012: As appropriate, BLM will coordinate the evaluation and implementation of proposals to enhance wildlife populations through partnerships with the AGFD and other agencies as necessary to determine what levels of wildlife introductions or habitat enhancements are appropriate for each desired plant community.

WH-013: Dogs must be leashed when on public land within the Monument, except when being used for hunting or when being used for livestock operations.

WH-014: Evaluate and implement, as appropriate, proposals for wildlife waters including selecting sites and installing new waters; modifying, replacing, and/or repairing existing waters; and removing nonfunctioning waters. Coordinate with AGFD for this action. Any new or modified waters will be designed consistent with current standards for wildlife and public safety.

WH-015: Remove fences, roads, and facilities that are no longer necessary for transportation, wildlife management, Monument administration, or other purposes in their present locations.

WH-016: Construct or modify fences as necessary to maintain safe, unrestricted travel by wildlife. Fencing will be designed and installed consistent with the procedures and configurations described in BLM Manual H-1741, Fencing.

2.2.5.3 Administrative Actions

AA-057: Develop, implement, and update wildlife habitat management through the use of wildlife habitat management plans, developed in cooperation with AGFD.

AA-058: Coordinate with AGFD for species-specific management to achieve desired outcomes (e.g., coordinate during development of any habitat management plans).

AA-059: Coordinate with AGFD to conduct population monitoring and movement studies on bighorn sheep, javelina, and mule deer.

AA-060: Identify and describe disturbed and degraded areas throughout the Monument, and describe their potential for restoration.

AA-061: Support research by qualified biologists from other agencies, and academic and private groups.

AA-062: Coordinate with outside entities to identify and protect wildlife corridors that extend beyond the boundaries of the Monument.

AA-063: Compile observation data on roadkills from Monument employees, visitors, residents, and other volunteers.

AA-064: Support and/or implement public education program(s) addressing management of wildlife and wildlife habitat.

AA-065: Develop and implement a cooperative program with agency, academic, and private groups to assist with research and monitoring of wildlife habitats.

AA-066: Conduct extensive literature review of past and present studies (wildlife movements), and compile in a summary format, updating, as appropriate.

AA-067: Mitigate for wildlife habitat degradation, loss, and fragmentation if and when such effects are unavoidable.

2.2.6 ~~Special Status Species~~

2.2.6.1 Management Goals and Objectives

TE-001: Conserve special status species (including Federally listed species, Arizona's Wildlife of Special Concern, BLM Sensitive Species, and Arizona Department of Agriculture); where necessary, enhance or restore their habitats. Priority Vulnerable Species in Pima County will not be considered BLM special status species.

TE-002: Manage land uses to sustain adequate habitat for special status species.

TE-003: Restore large disturbed areas (> 1 acre) within priority special status species habitats within 10 years, including roads and other habitat alterations.

2.2.6.2 Management Actions

TE-004: Priority special status species habitats include: (1) 2,240 acres of Nichol Turk's head cactus habitat; (2) 58,810 acres of desert tortoise habitat categories I and II; and (3) lesser long-nosed bat foraging habitat (the IFNM in its entirety).

TE-005: Manage approximately 2,240 acres of Nichol Turk's head cactus habitat on BLM-administered public land as the Waterman Mountains Vegetation Habitat Management Area (VHA) for the protection of this species (Map 4).

TE-006: Within Waterman Mountains VHA:

- Prohibit land use authorizations except along routes designated for motorized use.
- Acquire non-Federal land, which, upon acquisition will be managed as part of the VHA
- Revise and implement the 1986 Habitat Management Plan.
- Allow camping within the VHA (Section 2.2.15.6, Recreation Management Actions [RR-013] for more information regarding camping).

TE-007: Approximately 6,780 acres are allocated as the Ragged Top VHA as shown on Map 4.

TE-008: Within Ragged Top VHA:

- Acquire non-Federal land, which upon acquisition will be managed as part of the VHA.
- Allow camping within the VHA (refer to Section 2.2.15.6, Recreation Management Actions [RR-013] for more information regarding camping).

TE-009: Implement the applicable conservation measures found in the Lesser Long-nosed Bat Recovery Plan (USFWS 1994), including measures to protect columnar cacti and agaves. Refer to Appendix B.

TE-010: Implement measures to conserve desert tortoise habitat, as prescribed in *Desert Tortoise Habitat Management on the Public Lands: A Rangewide Plan*. Refer to Appendix B.

TE-011: Minimize livestock impacts on listed or candidate plants by providing water sources away from existing populations. Move or replace livestock waters that are found to be causing habitat deterioration near rare plants.

TE-012: Implement the Nichol Turk's head cactus recovery plan to increase soil cover, reduce sediment yield, and improve ecological site conditions.

TE-013: Implement conservation measures (refer to Appendix B) during fire suppression operations to reduce the effects of fire management actions on threatened and endangered species.

Wildlife Habitat Management

Ironwood Forest National Monument
ROD/Approved RMP

Legend

Desert Bighorn Sheep Wildlife Habitat Management Area

Surface Management

- Bureau of Land Management
- National Park Service
- Bureau of Reclamation
- American Indian Reservation
- Military Reservation
- State Trust Land
- State, County, City; Wildlife, Park and Outdoor Recreation Area
- Private
- Pima County

Note:
Land use allocations, designations, and management prescriptions apply only to public lands administered by the BLM. If non-Federal lands are acquired, they would be managed according to the allocations depicted on the map.

Data Source:
Habitat Alternative: BLM 2005
Base Information: BLM 2003
Quadrangle Image: U.S. Geological Survey 1977 Tucson

General Reference

- County Boundary
- Central Arizona Project (CAP) Canal
- River
- Interstate 10
- Main public access routes to monument. County administered roads connecting monument travel route system to public highways.

Planning Area

- Ironwood Forest National Monument

Universal Tranverse Mercator
Zone 12, Units Meters
Clark 1866 Spheroid
NAD27 Datum

No warranty is made by the Bureau of Land Management (BLM) for the use of this map for purposes not intended by BLM, or to the accuracy, reliability, or completeness of the information shown. Spatial information may not meet National Map Accuracy Standards. This information may be updated without notification.

0 0.75 1.5 3 Miles
0 1.75 3.5 7 Kilometers

Location in Arizona

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Map 3

Special Status Species Management

Ironwood Forest National Monument
ROD/Approved RMP

Legend

Vegetation Habitat Management Area (VHA)

Surface Management

- Bureau of Land Management
- National Park Service
- Bureau of Reclamation
- American Indian Reservation
- Military Reservation
- State Trust Land
- State, County, City; Wildlife, Park and Outdoor Recreation Area
- Private
- Pima County

Note:
Land use allocations, designations, and management prescriptions apply only to public lands administered by the BLM. If non-Federal lands are acquired, they would be managed according to the allocations depicted on the map.

Data Source:
VHMA Alternatives: BLM 2005
Base Information: BLM 2003
Quadrangle Image: US Geological Survey 1977 Tucson

General Reference

- County Boundary
- Central Arizona Project (CAP) Canal
- River
- Interstate 10
- Main public access routes to monument. County administered roads connecting monument travel route system to public highways.

Planning Area

- Ironwood Forest National Monument

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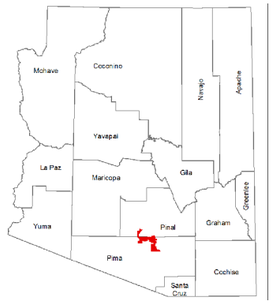
0 0.75 1.5 3 Miles
0 1.75 3.5 7 Kilometers

Location in Arizona



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Map 4

2.2.6.3 Administrative Actions

AA-068: For the Nichol Turk's head cactus, coordinate with USFWS and the State of Arizona to enforce existing regulations under the ESA, Convention on International Trade in Endangered Species of Wild Fauna and Flora, Lacey Act, and Arizona Native Plant Law.

AA-069: Continue to actively participate in regional planning efforts, such as Pima County's Sonoran Desert Conservation Plan and the Town of Marana's Habitat Conservation Plan, and other conservation efforts.

AA-070: Monitor the effectiveness of conservation measures associated with issuance of BLM authorizations, including rights-of-way, easements, and special use permits.

AA-071: Actively participate in the recovery of, and any revision of the recovery plan for, listed plant species on BLM lands.

AA-072: Monitor the effects of fire suppression activities on all populations of listed plants.

AA-073: Fund, aid, or establish research or study projects regarding fire ecology and conservation listed plant species on BLM lands.

AA-074: Educate employees and public users about listed plant species.

AA-075: Support and/or implement public education programs addressing management of special status species by developing a volunteer or docent program to interpret information on such species to visitors, providing literature on special status species issues to visitors, and constructing permanent graphics at selected points along the roadways of the Monument.

AA-076: Support research by qualified biologists from other agencies, universities, or private organizations.

AA-077: Develop increased awareness of tortoises on the public lands.

AA-078: Develop and maintain effective coordination and cooperation with outside agencies and BLM constituents concerning tortoise population and habitat management.

AA-079: Provide training by BLM and cooperators on data gathering according to protocols and methods.

AA-080: Refine data on distribution and densities of Nichol Turk's head cactus in or near the habitat management plan area.

AA-081: Continue to assist USFWS and other organizations to gather biological data and meet objectives and goals of species recovery plans.

AA-082: Monitor populations of Nichol Turk's head cactus occurring on BLM land for at least 10 years.

AA-083: Develop a resource monitoring and evaluation plan for special status species to evaluate population stability and habitat condition in habitat area-wide annually using field surveys and site inspection of habitat.

AA-084: Implement a monitoring program for federally listed species, Arizona Wildlife of Special Concern, and BLM Sensitive Species.

AA-085: Continue support of conservation efforts (including monitoring) of species occurring within the Monument and designated by other agencies (Pima County, Arizona Department of Agriculture) as rare, sensitive, protected, vulnerable, or other special status, and consider each for addition to the BLM Sensitive Species list.

AA-086: Evaluate species for addition to BLM Sensitive Species list every fourth year beginning in the fourth year after the completion of the baseline inventory.

AA-087: Provide for a monitoring program for special status species through partnerships that would include completing baseline survey and inventory, data review and evaluation, threat analysis and response, and monitoring. Where monitoring identifies threats to these populations, take actions (based on the best available data and science) to protect the special status species and their habitats.

2.2.7 Fire Ecology and Management

2.2.7.1 Management Goals and Objectives

FM-001: Maintain fuels in the wildland-urban interface at levels to provide for public and firefighter safety.

FM-002: Maintain each vegetation community within its natural range of variation in plant composition, structure, and function, and maintain fuel loads below levels that are considered to be hazardous.

FM-003: All fuels treatment actions will prioritize public and firefighter safety.

FM-004: Maintain characteristics of Fire Regime Condition Class 1 (vegetation composition, structure, and fuels are similar to those of the historical regime and do not pre-dispose the system to risk of loss of key ecosystem components; wildland fires are characteristic of the historical fire regime behavior, severity, and patterns; disturbance agents, native species habitats, and hydrologic functions are within the historical range of variability; smoke production potential is low in volume).

FM-005: Suppress wildfire in the shortest practical time using minimum impact suppression tactics, while minimizing suppression costs.

2.2.7.2 Management Actions

FM-006: IFNM is allocated to Non-Wildland Fire Use (areas not suitable for wildland fire use for resource benefit). This allocation requires mitigation and suppression to prevent direct threats to life or property. It includes areas where fire never played a large role, historically, in the development and maintenance of the ecosystem, and some areas where fire return intervals were very long. It also includes

areas (including some wildland urban interface areas) where an unplanned ignition could have negative effects to the ecosystem unless some form of mitigation takes place.

FM-007: Maintain full suppression in all areas in accordance with applicable conservation measures (refer to Appendix B).

FM-008: Implement programs to reduce unwanted ignitions, and emphasize prevention, detection, and rapid suppression response techniques.

FM-009: Where fuel loading is high, use biological, mechanical or chemical treatments to maintain non-hazardous levels of fuels, reduce the hazardous effects of unplanned wildland fires, and meet resource objectives. Use of prescribed fire is prohibited.

FM-010: A Resource Advisor with local knowledge will be present on all fires within the IFNM.

2.2.7.3 Administrative Actions

AA-088: Undertake education, enforcement, and administrative fire prevention mitigation measures.

2.2.8 Cultural Resources

2.2.8.1 Management Goals and Objectives

CL-001: Identify, preserve, and protect significant cultural resources and ensure that they are available for appropriate uses by present and future generations.

CL-002: Recognize the potential public and scientific uses of the cultural resources on Monument lands, and manage those resources so that their values are not diminished, but rather are maintained and enhanced.

CL-003: Allocate cultural resources to one of five use categories: (1) scientific use, (2) conservation for future use, (3) traditional use, (4) public use, (5) experimental use, or classify as discharged from management, according to the BLM Cultural Resource Manual 8110.

CL-004: Protect the variety of cultural resources on Monument lands to preserve their integrity and historic and prehistoric context.

CL-005: On sites not allocated for scientific or public use, cultural resources are undisturbed, with any changes only attributable to natural causes.

CL-006: Research activities in the Monument yield additional and new information regarding cultural resources and improve management and protection.

CL-007: Educational activities enhance public understanding and appreciation of cultural resources, and further protection of cultural resources.

2.2.8.2 Management Actions

CL-008: The following prehistoric site is allocated to scientific use:

- the Santa Ana de Cuiquiburitac Mission site (640 acres)

CL-009: Allow scientific and historical studies, including excavation if warranted, by permitted qualified researchers at selected sites allocated to scientific use. Assign the highest priority for study to sites that are threatened with damage from human activities or natural processes, areas of scientific interest, sites eligible for the National Register of Historic Places, and areas where research may inform management actions or otherwise benefit IFNM management and resources. Use historic contexts and research designs to provide guidance for scientific studies.

CL-010: Sites managed for public use will be protected and developed as interpretive exhibits in place, or for related educational and recreational uses. Sites allocated to public use include:

a. Segments of the Historic Sasco Railroad located on public land
b. Historic sites associated with Silver Bell Mine on public land
c. Historic ranching sites
d. Certain agricultural use areas within the existing Avra Valley

CL-011: Restrict visitor access, group tours, and group size as needed to prevent any damage from visitor use. Require commercial tour operators to receive Arizona Site Steward training and provide appropriate educational information on archaeological site etiquette and resource conservation to their customers if cultural sites are included on tours. Require tour operators to report vandalism or damage to sites.

CL-012: Allocate sites to traditional use that are important in maintaining the identity, heritage or well-being of American Indian tribes or other cultural groups. Sites allocated for traditional use are managed in ways that recognize the importance ascribed to them and seek to accommodate their continuing traditional use.

CL-013: Allocate sites to traditional use based on consultation with affiliated Indian tribes and consideration of other public uses.

CL-014: Continue to consult with American Indian tribes to identify places of traditional importance and associated access needs. Develop measures for managing and protecting places that might be identified by tribes during the life of the plan. Honor tribal requests to protect the confidentiality of sensitive information, to the extent permitted by law.

CL-015: Allocate sites to the conservation for future use category that are of singular historic importance, architectural interest or cultural importance. Their unusual significance makes them unsuitable for scientific or historical study that would result in their physical alteration. No sites are allocated for conservation for future use at this time.

CL-016: Sites would be conserved for the future until specified provisions were met such as the discovery of new information about the site, the development of new scientific techniques capable of fully

realizing the research potential of the site, or damage to the site's integrity from vandalism or natural processes.

CL-017: Sites best suited for controlled experimental studies that would improve management of other sites would be allocated to the experimental use category.

CL-018: Sites in the experimental use category will be considered for studies such as testing and measuring natural or human-caused deterioration, testing the effectiveness of certain protection measures, and testing the effects of fire. Studies would develop new research or interpretation methods or would generate similar kinds of practical management information. Experimental study would not be applied to cultural properties with strong research potential, traditional cultural importance, or valid public use potential if it would significantly diminish those values. Justifications would be made in terms of weighing the benefits of specific information to be gained versus the loss of cultural attributes or data that may occur during the experiment or study.

CL-019: Discontinue the designation of the Avra Valley as a Cultural Resource Management Area.

2.2.8.3 Administrative Actions

AA-089: Sites would be allocated and re-allocated according to the BLM Cultural Resource Manual 8100 using the criteria pertinent to the specified use listed below and in response to changing resource conditions, public use, research opportunities, and other reasons.

AA-090: Sites that are most important for the scientific or historical information they contain are allocated to scientific use. Sites are allocated to this category based on the following criteria:

- significance and uniqueness of site
- potential to contribute toward scientific understanding
- capability of currently available scientific methods to achieve research goals
- appropriate research proposal that will further scientific understanding or resource management
- existing threats to site, including vandalism, erosion, or other types of disturbance

AA-091: The following general sites classes may be allocated to scientific use. Classes of prehistoric sites:

- village sites, camp sites, agricultural sites, rock shelters or cave sites
- lithic scatters, artifact scatters
- groundstone manufacturing sites
- rock features and alignments
- food and other resource processing sites, roasting pits
- hunting blinds and ambush sites
- trail sites
- tinaja and spring sites

- petroglyph sites, pictograph sites
- intaglio sites

Classes of historic sites:

- ranches, homesteads, and associated features and components
- livestock raising related sites, agricultural features
- mines and prospecting sites
- settlements and camps
- roads, trails, and driveways, railroads and associated features, stage stops and stations
- public works sites, military camps and sites
- rock features and walls
- facilities used in commerce
- wells and water developments, water control features
- artifact scatters
- historic aboriginal sites
- historic rock art
- trash dumps

AA-092: Other sites may be allocated to public use based on the following criteria:

- the ability of the site to support public use while protecting Monument objects
- presence of aboveground features, such as structures or rock art, landscape characteristics, or other features that are of interest to the public and are amenable to interpretive development
- the condition of the site and the feasibility of treating or stabilizing selected areas to withstand visitation
- accessibility to travel routes;
- visitor safety
- compatibility of other land uses and site values, such as traditional use by Native Americans
- feasibility of regular inspections by BLM staff and volunteers
- partnership opportunities for interpretive and educational projects
- unique site(s) and/or interpretive opportunity not available in the surrounding area

AA-093: Continue to participate in Arizona Archaeology Awareness Month events and other educational outreach, to highlight the values of cultural resources and the need to protect these resources.

AA-094: Promote use of volunteers to enhance cultural resource values, including site documentation, research, protection, and educational projects.

AA-095: Promote and increase patrol and monitoring of sites by site stewards, BLM staff, cooperating organizations, and agencies, to the extent possible and practicable.

AA-096: Plan and conduct future inventories, focusing efforts in areas important for understanding the cultural history of the Monument or where significant resources could be degraded by uses of the Monument or erosion.

AA-097: Provide pamphlets and brochures containing information about sites allocated to public use.

AA-098: Consider management practices to achieve desired plant communities protection and conservation of known cultural resources, including historical sites, and prehistoric sites and plants of significance to Native American peoples.

AA-099: Coordinate with tribal groups and other interested groups to inventory any traditional cultural resources.

AA-100: Continue the program of monitoring archaeological and historical sites, and implement adaptive management responses to identified threats, including but not limited to; signing, fencing, trash removal, road closures, erosion control measures, backfilling, stabilization, restrictions on other land uses, and law enforcement if warranted.

AA-101: Provide educational and interpretive opportunities to enhance public understanding and appreciation of the cultures that created the archaeological and historical resources within the Monument (discretionary). Topics could include (1) prehistoric adaptations to the Sonoran Desert, (2) Tohono O'odham interactions with past, present, and future landscapes, and (3) historic mining and ranching.

AA-102: Provide opportunities for the public to actively participate in volunteer programs that protect, preserve, conserve, and interpret cultural resources on the Monument.

AA-103: Promote public interpretation of selected cultural resources (those allocated to public use) in partnership with other organizations pursuing heritage tourism.

AA-104: Promote cultural resource research through partnerships and cooperative programs.

AA-105: Develop cultural resource project plans for special status resources. These could include (1) portions of Los Robles Archaeological District within IFNM, (2) Cocoraque Butte Archaeological District, and (3) Santa Ana de Cuiquiburitac Mission Site (discretionary).

AA-106: Coordinate with the agencies, tribes, and private landowners that manage cultural resources on adjacent lands.

AA-107: Identify and evaluate opportunities to acquire non-Federal lands with significant cultural resources in the planning area. Potential acquisitions could include lands within the Los Robles Archaeological District (discretionary).

AA-108: Complete Class II (sample) and Class III (intensive) field inventories to identify cultural resources and evaluate the condition of sites, in accordance with the National Historic Preservation Act. Priorities for inventory will be determined based on resource use and protection priority areas and sites.

AA-109: Develop a monitoring scheme to evaluate the condition of cultural resources. Where adverse effects are occurring, implement protection measures to stop, limit, or repair damage to sites.

AA-110: Develop a cultural resource management plan for the IFNM based on the criteria in Section 110 of the National Historic Preservation Act.

2.2.9 Paleontological Resources

2.2.9.1 Management Goals and Objectives

PL-001: Protect paleontological resources.

PL-002: Manage paleontological resources for their scientific, educational and recreational values.

2.2.9.2 Management Actions

PL-003: The collection of any objects, including paleontological resources will not be permitted, except where intended for legitimate scientific uses for which documentation is provided to the satisfaction of the responsible management official.

PL-004: Require field surveys for paleontological resources prior to any ground-disturbing activities on IFNM lands and mitigate according to BLM guidelines.

2.2.9.3 Administrative Actions

AA-111: Establish Memoranda of Understanding for Cooperative Agreements with a museum(s), university(ies), or other appropriate scientific organizations to allow for evaluation, collection, mitigation, curation, and protection of paleontological resources discovered on the Monument and surrounding BLM lands.

AA-112: Evaluate paleontological resources, as they are discovered, considering their scientific, educational and recreational values. Adjust the appropriate paleontological sensitivity class and determine appropriate management and monitoring.

AA-113: Develop, maintain, and/or contribute information to a database for known and discovered paleontological sites within the Monument and BLM administered lands.

2.2.10 Scenic and Visual Resources

2.2.10.1 Management Goals and Objectives

VR-001: Preserve the Monument's natural scenic and visual values, and where appropriate, rehabilitate disturbed areas that impact important views.

VR-002: Maintain or enhance opportunities to view those landscapes of the Monument that may be valued for scenic, cultural, biological, recreation, or other reasons. Preserve the visual quality of those landscapes visible from important viewing areas or key observation points, which may include:

- specific scenic road corridors
- recreational sites and areas (characterized by Recreation Management Zones [RMZs])
- designated motorized and non-motorized trails
- cultural and historic areas
- residences in and near the Monument
- other sites/areas with identified place-based values

VR-003: Prioritize disturbed areas for rehabilitation based on the following criteria:

- Amount of visual contrast with the surrounding area
- Distance the area is visible
- Proximity to high recreation and/or visitor use areas or scenic routes and overlooks
- High scenic quality

VR-004: Apply best management practices and visual design guidelines to minimize visual contrast of proposed projects to achieve Visual Resource Management (VRM) objectives to the greatest extent possible.

VR-005: Manage the transportation system to provide a variety of sightseeing opportunities.

2.2.10.2 Management Actions

VR-006: Consistent with visual resources values and other resources and resource use allocations, manage visual resources on IFNM lands according to the following VRM class allocations:

Class II: 124,900 acres
Class III: 3,420 acres
Class IV: 80 acres

The VRM Classes are shown on Map 5.

VR-007: Rehabilitate existing disturbed areas, as feasible, that attract attention to achieve visual contrast level consistent with designated VRM class.

VR-008: Manage activities that result in fugitive-dust (e.g., road route system) to protect visual quality in the Monument (see also alternatives for air quality and transportation).

2.2.10.3 Administrative Actions

AA-114: Coordinate with adjacent jurisdictions and planning authorities to manage visual resources consistently on lands adjacent to the Monument lands.

AA-115: Conduct visual resource contrast ratings in accordance with Bureau VRM Handbook H-8321 for all projects. Require measures to mitigate visual impact exceeding VRM Class visual contrast thresholds.

2.2.11 Lands Managed to Protect Wilderness Characteristics

2.2.11.1 Management Goals and Objectives

WC-001: Protect wilderness characteristics where they provide for the greatest opportunities for a combination of naturalness, opportunities for solitude, and/or opportunities for unconfined recreation.

WC-002: Allow land uses and authorizations compatible with wilderness characteristics and consistent with resource management objectives.

WC-003: Manage lands identified for protecting wilderness characteristics to preserve the following qualities:

- *Naturalness:* Lands and resources exhibit a high degree of naturalness when affected by the forces of nature and where the imprint of human activity is substantially unnoticeable. Naturalness attributes may include the presence or absence of roads and trails, fences and other improvements; the nature and extent of landscape modification; the presence of native vegetation communities; and the connectivity of habitats. Wildlife populations and habitats are recognized as important aspects of the naturalness and will be managed actively.
- *Solitude*: Visitors may have outstanding opportunities for solitude when the sights, sounds, and evidence of other people are rare or infrequent, where visitors can be isolated, alone or secluded from others.
- *Primitive and Unconfined Recreation*: Visitors may have outstanding opportunities for primitive and unconfined types of recreation where the use of the area is through non-motorized, non-mechanical means off designated routes and as specifically excepted, and where no or minimal developed recreation facilities are encountered.

2.2.11.2 Management Actions

WC-004: Manage 9,510 acres of IFNM to protect wilderness characteristics, as shown on Map 6.

WC-005: Visual changes from allowable uses and management activities to the characteristic landscape on lands managed to protect wilderness characteristics (9,510 acres, as shown on Map 6) must be low and retain existing character consistent with VRM Class II objectives.

WC-006: Recreation setting conditions (particularly solitude, remoteness, facilities, encounters among visitors, evidence of use, and accessibility) in areas managed to protect wilderness characteristics will be in accordance with the Primitive RMZ objectives (as defined in Section 2.2.14.1).

Visual Resources Management

BLM Administered Land Only

Ironwood Forest National Monument
ROD/Approved RMP

Legend

Visual Resource Management Class

- Class II
- Class III
- Class IV

Data Source:
VRM Alternative: URS 2006
Base Information: BLM 2003
Quadrangle Image: U.S. Geological Survey 1977 Tucson

General Reference

- County Boundary
- Central Arizona Project (CAP) Canal
- River
- Interstate 10
- Main public access routes to monument. County administered roads connecting monument travel route system to public highways.

Planning Area

- Ironwood Forest National Monument

Universal Tranverse Mercator
Zone 12, Units Meters
Clark 1866 Spheroid
NAD27 Datum
No warranty is made by the Bureau of Land Management (BLM) for the use of this map for purposes not intended by BLM, or to the accuracy, reliability, or completeness of the information shown. Spatial information may not meet National Map Accuracy Standards. This information may be updated without notification.

0 0.75 1.5 3 Miles

0 1.75 3.5 7 Kilometers

Location in Arizona

Map 5

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Lands Managed to Protect Wilderness Characteristics

Ironwood Forest National Monument
ROD/Approved RMP

Legend

- Lands Managed to Protect Wilderness Characteristics
- Existing Mining Claim
  (Areas would be removed from management to protect wilderness characteristics upon validity of the claim.)

Surface Management

- Bureau of Land Management
- National Park Service
- Bureau of Reclamation
- American Indian Reservation
- Military Reservation
- State Trust Land
- State, County, City; Wildlife, Park and Outdoor Recreation Area
- Private
- Pima County

Note:
Land use allocations, designations, and management prescriptions apply only to public lands administered by the BLM. If non-Federal lands are acquired, they would be managed according to the allocations depicted on the map.

Data Source:
Wilderness Characteristics Alternative: BLM 2005
Mining Claims: BLM 2003
Base Information: BLM 2003
Quadrangle Image: U.S. Geological Survey 1977 Tucson

General Reference

- County Boundary
- CAP Canal
- River
- Interstate 10
- Main public access routes to monument. County administered roads connecting monument travel route system to public highways.

Planning Area

- Ironwood Forest National Monument

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0 0.75 1.5 3 Miles

0 1.75 3.5 7 Kilometers

Location in Arizona

P:\BLM\Ironwood\GIS\Plots\RODApprovedRMP\\Map 6 WC.pdf

Map 6

2.2.11.3 Administrative Actions

AA-116: Coordinate with adjacent jurisdictions and planning authorities to manage visual resources consistently on lands adjacent to the Monument lands.

AA-117: Conduct visual resource contrast ratings in accordance with Bureau VRM Handbook H-8321 for all projects. Require measures to mitigate visual impact exceeding VRM Class visual contrast thresholds.

2.2.12 Energy and Mineral Resources

2.2.12.1 Management Goals and Objectives

MI-001: Manage mining on the Monument where valid existing rights occur. Where lands covered by mining claims are withdrawn from future entries "subject to valid existing rights," the withdrawal attaches, as of the date of the segregation or withdrawal, to all land described by the withdrawal, including the lands covered by the mining claims. So as long as the claims are valid, the withdrawal is ineffective as to the lands embraced by the claims. For additional information see the Glossary term Valid Existing Rights.

MI-002: Prevent unnecessary and undue degradation from mining activity on grandfathered mining claims that have established valid existing rights.

2.2.12.2 Management Actions

MI-003: Mining activities within the IFNM will continue to be administered on a case-by-case basis for valid mining claims. (New mining claims, mineral leases and mineral material sales are prohibited in the IFNM; refer to Appendix A.)

MI-004: Reclaim abandoned mines having the greatest and immediate risk to human health or convert to another use protective of other resources.

2.2.12.3 Administrative Actions

AA-118: If areas are identified with potential physical and chemical hazards related to mines, BLM will mitigate these hazards to protect objects of the Monument.

2.2.13 ~~Livestock Grazing~~

2.2.13.1 Management Goals and Objectives

LM-001: Manage and monitor livestock grazing, in areas open for this use, consistent with the Arizona Standards for Rangeland Health and Guidelines for Grazing Administration (Appendix C), and with protection of Monument objects.

LM-002: Manage grazing and range resources toward best possible ecological conditions for the local area given past uses and current potential.

LM-003: Acknowledge the cultural, historical and economic values of ranching through interpretive efforts.

LM-004: Manage grazing and range resources to limit the amount of ephemeral forage used by livestock to no more than 30 percent of annual production.

LM-005: Manage grazing to maintain the integrity of Monument objects over time, such that noticeable impacts are measurable only in small and localized areas.

2.2.13.2 Management Actions

LM-006: All public lands within 11 allotments (approximately 128,400 acres) are available for grazing.

LM-007: Classify Agua Blanca, Agua Dulce, Blanco Wash, Claflin, Cocoraque, King, Old Sasco, Sawtooth Mountains, and Silver Bell allotments as perennial (refer to Appendix D for classification criteria). Morning Star and Tejon Pass allotments continue to be classified ephemeral.

- If the resource conditions within an allotment change due to implementation of management decisions or other factors, an allotment may be recategorized based on those conditions.

LM-008: Following cancellation or voluntary relinquishment of a grazing lease, BLM will determine if conditions within the associated allotment(s) are satisfactory based on applicable management objectives. If BLM determines that livestock grazing is preventing or hindering progress towards the achievement of applicable management objectives, BLM may decide to discontinue livestock grazing use on the allotment(s) if this action will help promote attainment of these objectives. Even if BLM initially decides to discontinue livestock use on some or all of an allotment, it may later decide to resume livestock use if it determines, based on its subsequent evaluation of ecological conditions and other pertinent factors, that it is appropriate to do so.

LM-009: Allow only those new range improvements for livestock in (Desert Tortoise) Category I and II Habitat Areas that will not create conflicts with tortoise populations. Mitigation for such conflicts is permissible to make the net effect of the improvements positive or neutral to desert tortoise populations. Conflicting existing improvements will be eliminated as opportunities arise.

- Where range improvements are necessary and/or permitted, access and activities will be located and implemented to minimize additional disturbance to resources.

LM-010: Provide additional (stock) water sources in the Twin Tanks and Cocoraque Pastures. All stock waters will be constructed to accommodate all wildlife species that might benefit from them. Current stock waters will be evaluated, and modified as necessary, to provide the maximum benefit and minimum adverse impact on wildlife.

LM-011: Maintain yearlong water sources in all pastures for livestock to ensure safe availability of water to wildlife. Minimize livestock impacts on priority plant species and habitats by providing water sources away from existing populations. Move or replace livestock waters that are found to be causing habitat deterioration near rare plants.

LM-012: Use of motorized vehicles by authorized users (livestock grazing, wildlife management activities, rights-of-way and special use permits) is subject to the OHV use and travel route designations, unless specifically authorized in writing on a case-by-case basis.

- Administrative access to fence lines, corrals, wells, and water infrastructure for inspection and maintenance will be granted, as necessary, provided measures are taken to protect Monument objects.

2.2.13.3 Administrative Actions

AA-119: Enforce against trespass grazing.

AA-120: Inventory and monitoring data will be collected on a regular basis as needed to determine achievement of Land Health Standards, or progress toward achieving standards.

AA-121: Include information on the role of ranching in interpretive materials generated for the Monument.

AA-122: Evaluate existing exclosures, and as needed, establish new livestock/wildlife and livestock-only exclosures in each vegetation association in each allotment found within the Monument. Exclosures will meet standard design configurations from manual H-1741-1.

AA-123: Integrate into existing educational materials information explaining cultural, economic, and ecological role and impacts of ranching and proper grazing management.

AA-124: Form a team of land and resource management agencies, and BLM staff to develop a monitoring plan based on best available methodologies.

AA-125: Coordinate with AGFD, USFWS, SHPO, and others to remove range improvements if they are not necessary for management or conservation of other resources (e.g., cultural and wildlife resources, recreation, etc.). If removed, the owner shall be compensated at fair market value. Land Health Assessments, evaluations and re-evaluations will be tied to lease renewal schedules.

AA-126: Range improvement standards and design will meet specifications in BLM Manual 1740 or be designed to provide the maximum benefit and minimum adverse impact to wildlife and special status species.

AA-127: The extent, location and timing of range improvements will be based on allotment-specific management objectives adopted through the evaluation process, interdisciplinary development and analysis of proposed actions, and funding.

AA-128: BLM will consult with AGFD on the design and location of new fences.

AA-129: Existing fences that create wildlife movement problems will be modified.

AA-130: Stock pond sites will be selected based on available watershed and hydrologic information. All applicable state laws and regulations will be followed.

AA-131: Well sites will be selected based on geologic reports that predict the depth to reliable aquifers. All applicable state laws and regulations that apply to ground water will be observed.

AA-132: Provisions regarding access to range improvements for inspection, maintenance, and operation activities will be amended or added to existing grazing permits.

2.2.14 Recreation

2.2.14.1 Management Goals and Objectives

RR-001: Manage Monument lands to produce a variety of quality recreation experiences in largely natural settings, while protecting natural and cultural resources, and promoting safety and harmony among users.

RR-002: Manage recreation resources and visitor services to facilitate production and protection of appropriate recreation opportunities, activities, experiences and benefits derived from the Monument, and that are important to individuals and the communities affected.

RR-003: Make visitor information available to the public to aid in visitor use, and foster compliance with use restrictions, management objectives, and appreciation for resources.

RR-004: Coordinate visitor information, signing, and management with ASLD, AGFD, counties, private land owners, and other interests to achieve desired recreation outcomes.

RR-005: Intensively manage the IFNM with an undeveloped recreation-tourism market strategy to sustain its distinctive undeveloped setting character, and produce targeted recreation opportunities, experiences and benefits.

RR-006: Identify Recreation Management Zones (RMZs) based on resource capability and accessibility, and prescribe the required settings to produce targeted recreation opportunities, experiences and benefits representing the range of opportunities currently available.

RR-007: When recreation use conflicts arise, promote communication, collaboration, and coordination among users to address them.

2.2.15 ~~Recreation Management Zone Objectives:~~

2.2.15.1 Roaded Natural RMZ Objectives:

1. ***Recreation Niche*:** Scenic Sonoran Desert touring on improved roads for viewing the natural landscape, with wayside stops for interpretation of the Monument's natural and cultural history, and access to dispersed recreation opportunities.
2. ***Recreation Management Objective*:** This zone provides opportunities for visitors to engage in scenic road tours in a variety of modes of travel, and in interpretive programs available, with at least 75 percent of visitors realizing the targeted outcomes and/or benefits within the life of the RMP.

3. ***Primary Activities*:** Driving passenger car and a variety of other motorized recreational vehicles for viewing scenery and points of interest. Stopping at wayside interpretive sites and overlooks to view scenery or wildlife. Driving to and staging for access to more remote and primitive settings.
4. ***Experiences*:** Enjoying the natural Sonoran desert landscape and climate with family or friends; learning about the Monument's natural and cultural history; taking low risks.
5. ***Benefits*:** Enhanced sensitivity, awareness and appreciation of the Monument's natural and cultural resources. High sense of personal responsibility for protecting Monument objects.

Recreation Setting Character Required to Produce Recreation Management Outcomes:

1. ***Remoteness*:** Areas are readily accessible with low sense of remoteness due to their location along collector or local improved and maintained roads that are accessible by passenger and recreational vehicles.
2. ***Naturalness*:** Largely natural with a few developments in the foreground view, as needed for allowable IFNM land uses (range improvements, recreation sites, parking areas, signs, etc.)
3. ***Facilities*:** Stabilized, improved and maintained roads and trails, parking turnouts, traffic control, interpretive signs/exhibits, trailheads to side trails. Minimal improvements provided for visitor convenience, and public health and safety.
4. ***Contacts*:** Daily average no more than 50 parties passing along the road, and no more than 25 other parties at activity areas.
5. ***Group size*:** Parties of 50 persons or more with special permit only, 100 persons maximum.
6. ***Evidence of use*:** Maintained roads, parking turnouts, trailheads or staging areas, signs (portal, directional, informational, other), fence crossings without gates, stabilized or improved activity areas, intersections with side roads, or more primitive roads.
7. ***Accessibility*:** Motorized vehicles and non-motorized vehicles licensed and insured to operate on a public road under Arizona law (Arizona Revised Statute Title 28). Design vehicle is passenger car and recreational vehicle. Recreation sites and/or activity areas barrier free for persons with mobility impairments.
8. ***Management Controls*:** Vehicle use and recreation activity areas limited to designated sites. Rules of conduct for developed sites implemented. Regulatory signs, other visitor control devices installed.
9. ***Visitor Services*:** Regular visitor contact patrols by official personnel, with frequency depending on time of year. Regular law enforcement patrols. Regular clean-ups and trash collection. Self service on-site visitor information at recreation activity areas, special purpose sites, and access points to more remote settings.

2.2.15.2 Semi-Primitive Motorized RMZ Objectives:

1. ***Recreation Niche*:** Scenic Sonoran Desert touring on semi-primitive routes for viewing the natural and cultural landscape by a variety of off-highway vehicles, and access to dispersed recreation opportunities and more remote settings.
2. ***Recreation Management Objective*:** This zone provides opportunities for visitors to engage in semi-primitive road touring on off-highway motorized vehicles (4 wheel-drive [4WD], all-terrain vehicle [ATV], and trail motorcycle), with at least 75 percent of sampled visitors realizing the targeted outcomes and/or benefits within the life of the RMP.

3. ***Primary Activities*:** Driving off-highway vehicles (4WD, ATVs, and trail motorcycles). Vehicle based semi-primitive camping and/or picnicking, hunting, viewing scenery and wildlife, access to more remote settings.
4. ***Experiences*:** Enjoying self-directed desert adventure, exploring, taking moderate risks.
5. ***Benefits*:** Self-reliance for survival and comfort. Improved or practicing outdoor recreation ethics and skills. Enhanced sensitivity, awareness, and appreciation of the Monument's natural and cultural resources. Greater sense of personal responsibility for protecting Monument objects.

Recreation Setting Character Required to Produce Recreation Management Outcomes:

1. ***Remoteness*:** Areas where physical access may require special equipment providing for a moderate sense of remoteness. Areas are located along resource access roads accessible to off-highway vehicles (high clearance, 4WD, ATV, trail-bike) and at least 0.5 mile away from maintained collector roads and/or county roads.
2. ***Naturalness*:** Natural landscape with some modifications, consistent with VRM objectives.
3. ***Facilities*:** Stabilized, minimally maintained single lane roads, trails. Rustic parking turnouts, traffic control, signs and trailheads. No visitor conveniences at recreation areas. Minimal public health and safety hazard mitigation.
4. ***Contacts*:** Daily average, no more than 15 other parties passing along the road, and no more than 10 other parties at activity areas.
5. ***Group size*:** Parties of 50 persons or more with special permit only, 100 persons maximum.
6. ***Evidence of use*:** Single lane, semi-primitive roads, rustic parking turnouts, well worn and lightly worn activity areas, and signs.
7. ***Accessibility*:** Motorized vehicles and non-motorized vehicles limited to routes designated for that use. Typical design vehicle is full size high clearance utility vehicle, with trailer combination vehicles for special purposes. Some recreation sites and/or activity areas barrier free for persons with mobility impairments.
8. ***Management Controls*:** Regulatory signs and other visitor control devices installed. Regular law enforcement patrols.
9. ***Visitor Services*:** Periodic patrols by BLM visitor services personnel, with frequency depending on time of year, on at least a bi-weekly basis during high use season. On-site visitor information at recreation activity areas, access points and special purpose sites, and access points to more remote settings.

2.2.15.3 Semi-Primitive Non-Motorized RMZ Objectives:

1. ***Recreation Niche*:** Scenic Sonoran Desert touring for viewing the natural and cultural landscape by a variety of non-motorized travel.
2. ***Recreation Management Objective*:** This zone provides opportunities for visitors to engage in non-motorized touring (hiking, equestrian, mountain bike), with at least 75 percent of sampled visitors realizing the targeted outcomes and/or benefits within the life of the RMP.

3. ***Primary Activities*:** Hiking, horseback riding, mountain biking, and riding livestock-pulled wagons to view scenery, access semi-primitive camping and picnicking, hunting, viewing landscape or wildlife, and access more remote settings.
4. ***Experiences*:** Enjoying self-directed desert adventure, exploring, and taking moderately high risks.
5. ***Benefits*:** Self-reliance for survival and comfort. Improved or practicing outdoor recreation ethics and skills. Enhanced sensitivity, awareness, and appreciation of the Monument's natural and cultural resources. Greater sense of personal responsibility for protecting Monument objects.

Recreation Setting Character Required to Produce Recreation Management Outcomes:

1. ***Remoteness*:** Areas located along routes limited to non-motorized travel that are at least 0.5 mile away from resource access roads.
2. ***Naturalness*:** Natural landscape with some modifications, consistent with VRM objectives.
3. ***Facilities*:** Stabilized designated trails. Rustic parking turnouts, traffic control, signs and trailheads. No visitor conveniences at recreation activity areas. Minimal public health and safety hazard mitigation.
4. ***Contacts*:** Daily average, no more than 15 other parties encountered along travel routes, and no more than 10 other parties at activity areas.
5. ***Group size*:** Parties of 25 persons or more with special permit only, 50 persons maximum.
6. ***Evidence of use*:** Single-track trails, converted use roadways, unimproved activity areas, and minimal signs.
7. ***Accessibility*:** Only by non-motorized travel, including non-motorized mechanized vehicles, on single track trails or converted single lane roadways. Typical design vehicles are equestrian and mountain bike, with full size utility vehicle for special administrative purposes. Some routes and recreation sites and/or activity areas with some barriers for persons with mobility impairments, requiring assistance, special equipment or exceptional ability.
8. ***Management Controls*:** No restrictions on hiking and equestrian use, or dispersed camping and picnicking and other dispersed recreation activities, except as needed to mitigate potential impacts to fragile, sensitive resources. Mechanized vehicles (including mountain bikes) restricted to routes designated for that purpose. Regulatory signs and other visitor control devices installed at access points. Minimal law enforcement presence; regular patrols at access points.
9. ***Visitor Services*:** Periodic patrols by BLM visitor services personnel with frequency depending on time of year; monthly basis or as needed for follow-up. On-site visitor information at access points and special purpose sites along travel route.

2.2.15.4 Ragged Top Wildlife Viewing RMZ Objectives:

1. ***Recreation Niche*:** Viewing and learning about a variety of desert wildlife in their natural habitat, in the most diverse and rugged Sonoran Desert mountain setting found in the IFNM.
2. ***Recreation Management Objective*:** This zone provides opportunities for visitors to engage in wildlife viewing and nature study in a naturally appearing landscape with at least 75 percent of sampled visitors realizing the targeted outcomes and/or benefits within the life of the RMP.

3. ***Primary Activities*:** Hiking, horseback riding, roadside or trailside stopping to view wildlife and the natural landscape, rough trekking, and mountain climbing.
4. ***Experiences*:** Learning about the Sonoran Desert ecology and wildlife. Enjoying the natural desert landscape. Enjoying self-directed desert adventure, exploring, and taking moderately high risks.
5. ***Benefits*:** Enhanced awareness and appreciation of the Monument's wildlife and natural habitat resources. Increased self-reliance for survival and comfort. Greater sense of personal responsibility for protecting Monument objects. Improved or practicing outdoor recreation ethics and skills.

Recreation Setting Character Required to Produce Recreation Management Outcomes:

1. ***Remoteness*:** Areas where access is by way of walking or riding along trails, and by driving vehicle only along perimeter of area.
2. ***Naturalness*:** Natural landscape with few modifications, consistent with VRM objectives.
3. ***Facilities*:** No facilities within the area's interior, except gates at fences and interpretive signs. Rustic parking turnouts, trailheads, traffic control, interpretive signs, and informational and other signs on the area's perimeter access points, or along the trails.
4. ***Contacts*:** Daily average, no more than 15 other parties encountered along travel routes, and no more than 10 other parties at activity areas.
5. ***Group size*:** Parties of 25 persons or more with special permit only, 50 persons maximum.
6. ***Evidence of use*:** Paths and unimproved single-track trails, converted use roadways, parking turnouts, and signs.
7. ***Accessibility*:** Foot, horse and mountain bike travel on designated trails. Passenger car access to area's perimeter. Interior not accessible due to natural barriers for persons with mobility impairments. Perimeter accessible to persons with mobility impairments.
8. ***Management Controls*:** Seasonal restrictions on hiking, equestrian use camping, and picnicking may apply as needed to mitigate potential impacts to fragile, sensitive resources. Regulatory signs and other visitor control devices installed at access points. Infrequent law enforcement presence; regular patrols at access points.
9. ***Visitor Services*:** Regular patrols by BLM visitor services personnel with frequency depending on time of year. Weekly presence during high use season. On-site visitor information and interpretive sites at access points and special sites along travel routes.

2.2.15.5 Primitive RMZ Objectives:

1. ***Recreation Niche*:** Hiking and riding excursions into the most remote, rugged and naturally appearing Sonoran Desert landscape found in the Monument.
2. ***Recreation Management Objective*:** This zone provides opportunities for visitors to engage in primitive recreation activities with a sense of remoteness and solitude, in a naturally appearing landscape with at least 75 percent of sampled visitors realizing the targeted outcomes and/or benefits within the life of the RMP.

3. ***Primary Activities*:** Hiking, horseback riding, trailside semi-primitive camping and/or picnicking, hunting, viewing scenery, and wildlife.
4. ***Experiences*:** Enjoying self-directed desert adventure, exploring, and opportunities for taking high risks.
5. ***Benefits*:** Self-reliance for survival and comfort. Improved or practicing outdoor recreation ethics and skills. Enhanced sensitivity, awareness, and appreciation of the Monument's natural and cultural resources. Greater sense of personal responsibility for protecting Monument objects.

Recreation Setting Character Required to Produce Recreation Management Outcomes:

1. ***Remoteness*:** Areas where access is by way of walking, horseback riding, and cross-country or non-motorized trail travel. Areas are located at least 0.5 mile away from local and resource access roads.
2. ***Naturalness*:** Natural landscape with few modifications, consistent with VRM objectives.
3. ***Facilities*:** No facilities within the area's interior, except gates on fences. Rustic parking turnouts, traffic control, signs and trailheads on boundary along perimeter.
4. ***Contacts*:** Daily average, no more than 1 other party encountered along travel routes, and no more than 1 other party at activity areas.
5. ***Group size*:** Parties of 10 persons or more with special permit only, 25 persons maximum.
6. ***Evidence of use*:** Paths and unimproved single-track trails, and converted use roadways.
7. ***Accessibility*:** Foot and horse cross country travel, no non-motorized mechanized vehicles. Not accessible due to natural barriers for persons with mobility impairments without extraordinary measures or risks.
8. ***Management Controls*:** Seasonal restrictions on hiking, equestrian use, dispersed camping and picnicking, and other dispersed recreation activities may apply as needed to mitigate potential impacts to fragile, sensitive resources. Regulatory signs and other visitor control devices installed at access points. Minimal law enforcement presence; regular law enforcement presence at access points.
9. ***Visitor Services*:** Periodic patrols by BLM visitor services personnel with frequency depending on time of year. Presence limited to case-by-case condition surveys or follow up activities. On-site visitor information at access points and special purpose sites along travel route.

2.2.15.6 Management Actions

RR-008: Allocate the entire IFNM (approximately 128,400 acres) as a Special Recreation Management Area (SRMA). The SRMA is managed with a strategy targeting the local undeveloped recreation-tourism market. This market demands a variety of distinctive kinds of dispersed recreation opportunities produced by settings in open spaces with an undeveloped character, and a high degree of self-reliance. As non-Federal land in-holdings are acquired, they will be added to this allocation.

RR-009: Recreation Management Zones

1. Allocate Monument land to RMZs as follows (approximate BLM acreages):
   - Roaded Natural = 18,380 acres
   - Semi-Primitive Motorized = 36,230 acres
   - Semi-Primitive Non-Motorized = 57,450 acres
   - Ragged Top Wildlife Viewing = 6,780 acres
   - Primitive 9,510 acres

The RMZs are shown on Map 7.

RR-010: Resources

1. Implement recreation actions as necessary that sustain specific setting characteristics and achieve targeted outcomes for each RMZ.

RR-011: Marketing

1. For all RMZs, concentrate marketing strategies on delivering visitor information and other services once visitors arrive in the local area. Publicity is not attempting to position the Monument as a major destination for a large volume of tourism or recreational use. Coordinate marketing efforts among the various providers.

RR-012: Visitor Services

1. The level of visitor services within the IFNM will vary by zone, with the greatest presence of BLM staff within the roaded natural RMZ. Visitor center facilities will be provided offsite in coordination with the local communities.

RR-013: Camping

1. Allow wood campfires only when firewood is from a non-Monument source.
2. Allow overnight vehicle-based camping (including recreational vehicles) at identified sites only. Specific sites identified as open and/or available for camping will be periodically reviewed and modified based on public demand and resource protection needs within the IFNM. Approximately 100 sites potentially will be identified, subject to additional site-specific analysis and monitoring.
3. Allow overnight, dispersed, non-motorized camping throughout the Monument unless camping in an area is specifically prohibited for protection of resource values (e.g., signed sensitive closure areas, which could vary over time).
4. Large group camping is allowed at identified group sites only. Special permit required for groups larger than prescribed by RMZ. Group size maximum varies depending on RMZ (see RMZ objectives above). Group camping could only occur at three identified large campsites located at Manville Road (within the roaded natural RMZ), Reservation Road (within the roaded natural RMZ), and near the West Silver Bell Mountains (within the semi-primitive motorized RMZ) (Map 7). Site-specific locations and improvement plans will be determined during implementation project planning.

Recreation Management Zones

BLM Administered Land Only

Ironwood Forest National Monument
ROD/Approved RMP

Legend

Recreation Management Zone (RMZ)

- Roaded Natural (RN)
- Semi-Primitive Motorized (SPM)
- Semi-Primitive Non-Motorized (SPNM)
- Ragged Top Watchable Wildlife
- Primitive

Recreation Sites

- Campsite with Motorized Access on BLM Land
- Group Campsite with Motorized Access on BLM Land
- Primary Access Points

Route Designations

- Primitive Road
  Primitive road open to all motorized use
- Road
  Road open to all motorized vehicle use.
  (Includes county routes across IFNM and BLM routes)
- Primitive Road, Administrative
  Primitive road open for administrative motorized vehicles and public non-motorized and mechanized use.
- Trail
  Open for administrative and public non-motorized and non-mechanized use only
- Road, Administrative
  Road open only for El Tiro Gliderport lease administrative use.
- Closed for Restoration

Data Source:
RMZ Alternative: URS 2008
Transportation Alternatives: BLM 2012
Base Information: BLM 2003
Quadrangle Image: U.S. Geological Survey 1977 Tucson

General Reference

- County Boundary
- Central Arizona Project (CAP) Canal
- River
- Interstate 10
- Main public access routes to monument. County administered roads connecting monument travel route system to public highways.

Planning Area

- Ironwood Forest National Monument

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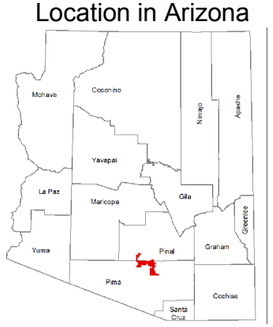
0 0.75 1.5 3 Miles

0 1.75 3.5 7 Kilometers

Location in Arizona



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Map 7

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RR-014: Use and Discharge of Firearms/Target Shooting

1. Prohibit the use and discharge of firearms within the IFNM, except for lawful or authorized hunting activities conducted in accordance with AGFD hunting regulations. Additional information related to recreational target shooting and Monument objects are found in the Proposed RMP/Final EIS Recreational Target Shooting Analysis in Appendix L, which was conducted during preparation of this RMP.

RR-015: Equestrian Use

1. Provide access and/or staging areas for equestrian uses. Allow equestrian use cross country, on roads, primitive roads, administrative roads, and non-motorized trails, unless specifically prohibited and posted. Refer to Section 2.2.17.2, Travel Management Action TM-010 for more information regarding equestrian use.

RR-016: Collection of Objects

1. Prohibit collection of any renewable resources (such as flowers, berries, nuts, seeds, cones and leaves); nonrenewable resources (such as rocks, mineral specimens, fossils and semiprecious gemstones); mineral materials (such as stone, sand and gravel); forest/woodland products (such as firewood, posts, poles), except as specifically authorized in writing to accommodate valid existing rights (such as mining claims), research, scientific, educational, or native American traditional purposes furthering Monument management objectives.

RR-017: General Recreation

1. Discontinue the CRMA and RCA allocations.

   NOTE: BLM will seek cooperative management of the IFNM through administrative actions (refer to Appendix B).

2.2.15.7 Administrative Actions

AA-133: Manage for camping activities in accordance with the following regulations: (1) allow camping on all lands open to public use to meet management objectives and standard operating procedures, except within 0.25 mile of wildlife waters as required by State law, or in areas closed to camping to meet management objectives per 43 CFR §83641.1; (2) maintain the 14-day camping limit on dispersed camping within a 25-mile radius of one location on public lands; (3) ensure compliance with 43 CFR §8360, Visitor Services, and §8365, Rules of Conduct for the protection of public lands and resources, and for the protection, comfort and well-being of the public in its use of recreation areas, sites and facilities on public lands; (4) ensure that recreation services, programs, and facilities are Americans with Disabilities Act compliant except where substantial harm to the cultural or natural features might occur or they might be compromised; compliance will alter the nature of the setting; or where compliance will not be feasible due to terrain or prevailing construction practices.

AA-134: Allow large-group camping outside of identified sites for administrative purposes, such as for volunteer work groups, on a case-by-case basis provided the locations are suitable for such activity

without new surface disturbance (clearing or grubbing) or improvement, as needed to accomplish a planned action that is consistent with other management objectives.

AA-135: Include camp stove and campfire safety and etiquette materials in public outreach materials developed and distributed for the IFNM, noting restrictions within the IFNM.

AA-136: Manage for the use and discharge of firearms in accordance with applicable Arizona Game and Fish Commission Rules 17-301, 309, 312, and 12-4-303 (relating to hunting), and in accordance with 43 CFR §8364.1 relating to order issuance for land closures to protect persons, property, public lands and resources.

AA-137: Visitor center establishment is in accordance with 43 CFR §8360, Visitor Services, and §8365, Rules of Conduct for the protection of public lands and resources, and for the protection, comfort and well-being of the public in its use of recreation areas, sites and facilities on public lands.

AA-138: Management of sight-seeing, driving for pleasure, vehicle touring, and OHV recreation in accordance with the existing route network and BLM's National Management Strategy for Motorized Off-Highway Vehicle Use on Public Lands.

AA-139: Manage non-motorized, mechanized recreational activities according to the BLM's National Mountain Biking Strategic Action Plan.

AA-140: Use limits of acceptable change monitoring and adaptive management methods to minimize potential impacts to sensitive natural and cultural resources.

AA-141: Develop a multi-faceted adaptive management process.

AA-142: Identify standards for achieving and maintaining the desired recreational resource settings, social settings, managerial conditions, accessibility, visitor services and facilities.

AA-143: Promote public safety by taking physical management actions where practicable and by providing the public with adequate information regarding potential risks.

AA-144: Manage special recreation use permits to accommodate a variety of recreation opportunities consistent with land use allocations and management objectives.

AA-145: Manage commercial/group vehicle touring opportunities in accordance with special recreation use permits (SRPs).

AA-146: Manage SRPs in accordance with 43 CFR §2930 Special Recreation Permits requirements for: (1) commercial, (2) competitive, (3) vending, (4) individual or group use in special areas, and (5) organized group activity and event use, and on a case-by-case basis, and to achieve recreation management objectives.

AA-147: Limit issuance of SRPs based on the potential for resource damage and conflicts with other uses.

AA-148: Provide maintenance and minimal improvement to prevent resource damage at large group campsites.

AA-149: Ensure recreation tours remain on the designated route system.

AA-150: Coordinate with the BLM State Office and other agencies for managing emerging recreation issues.

AA-151: Enlist volunteers to assist in monitoring, maintenance (including litter cleanup), and education, thereby potentially lessening recreation use conflicts.

AA-152: Under Alternative B, C, or D, BLM may conduct the following administrative actions related to recreation:

- Provide minimal improvements and maintenance to accommodate allowable uses in accordance with RMZ objectives.
- Establish restrictions pursuant 43 CFR 8340 and 43 CFR 8360, as appropriate, to limit motorized vehicle use, non-motorized use, non-motorized mechanized use to designated routes, and limit recreation use to designated sites in accordance with RMZ objectives and prescriptions.
- Install regulatory, informational, identification, and interpretive signing as needed.
- Install visitor and traffic control devices.
- Provide regular or periodic visitor contact and law enforcement patrols, with frequency depending on RMZ and or time of year.
- Provide litter and trash clean up as needed.
- Coordinate recreation management with the ASLD and other adjacent land owners.
- Establish or develop partnerships or local volunteer resources to assist in implementing monitoring, maintenance and improvement projects to achieve recreation management objectives.

AA-153: For all RMZs, provide on-site signing, where needed, for visitor information, regulatory, or interpretation purposes in accordance with RMZ setting prescriptions; provide portal information facilities at Monument access points (such as informational kiosks); maintain facilities to levels appropriate to the RMZ; and, develop materials and designs to blend in with the natural landscape.

AA-154: Provide interpretive exhibits, signs or programs on-site at suitable locations in all RMZs. On-site programs may include BLM-sponsored field trips or events, commercial interpretive or educational field trips or events, etc. Participate in off-site interpretive or educational events with Monument related themes.

AA-155: Conduct baseline and follow-up intensive surveys of recreation sites and activity areas. Conduct resource condition, recreation use, and visitor surveys to determine if recreation and RMZ objectives are being achieved, and setting prescriptions are being maintained.

2.2.16 Lands and Realty

2.2.16.1 Management Goals and Objectives

LR-001: Secure non-Federal land and interests in land to further the natural and cultural resource and public and administrative access goals for the Monument.

LR-002: Manage rights-of-way to avoid or minimize impacts on Monument objects.

LR-003: Acquire lands and interest in land from willing sellers to further protection of Monument objects and/or achieve management objectives. Priority lands for consideration (1) contain ecologically or administratively important areas (e.g., riparian areas and wildlife movement corridors); (2) expand undisturbed blocks of public land; (3) protect existing blocks of habitat; or (4) provide legal access to Monument lands.

LR-004: Construction and maintenance activities for utilities occur in locations that utilize established rights-of-way and corridors (if applicable) so that they do not conflict with the natural and cultural resource goals for the Monument.

LR-005: Manage land use authorizations to accommodate use, maintenance, and operation with minimal impacts to Monument objects.

2.2.16.2 Management Actions

LR-006: Retain all Federal land (surface and subsurface) except in special instances where land exchanges could be used to further the natural and cultural resource goals of the Monument.

- Acquire non-Federal land or interests in land within the boundaries of the IFNM from willing sellers by purchase, exchange, or donation, as opportunities arise.
    - Where land cannot be acquired, secure conservation easements.
- Acquire through exchange, or other means, non-Federal mineral estate underlying Federal surface holdings throughout the Monument.
- Acquire surface and mineral estate concurrently.
    - Where mineral estate cannot be acquired, secure MOU or conservation agreement to protect Monument objects.
- Military withdrawals exist on approximately 300 acres; if and when the land is returned to BLM the area will be managed consistent with the management of adjacent public land.
- Recreation and Public Purposes Act leases (existing at the time of Monument designation) will be renewed at the discretion of BLM to protect Monument objects. (NOTE: No new Recreation and Public Purposes Act leases will be granted within the Monument per the Proclamation.)

Rights-of-Way

LR-007: All rights-of-way for access and utilities, including for inholdings, will be considered and issued on a case-by-case basis consistent with the protection of the Monument objects. No utility corridors will be designated within the Monument.

LR-008: Avoidance and Exclusion Areas

1. The entire Monument is an avoidance area; however, valid pre-existing authorizations (i.e., rights-of-way) will be recognized. Existing rights-of-way may be renewed in accordance with 43 CFR 2800.
2. As part of the land use authorization process, construction and maintenance activities will include protective measures to minimize the following:
   - spread of noxious weeds
   - soil erosion
   - air quality degradation
   - water quality degradation (e.g., limited disturbance in washes)
   - vegetation disturbance and/or removal
   - extensive or loud noise from heavy equipment
   - impacts on wildlife (i.e., wildlife-friendly design)
   - disturbance of cultural resources
   - visual intrusions

   A reclamation plan will be required on a site-specific basis. In addition, communication site plans will be updated as necessary.
3. Land use authorizations for permits and easements will be considered on a case-by-case basis, consistent with protection of the Monument objects.
4. Upon acquisition of land, designate that land as avoidance area for rights-of-way.

2.2.16.3 Administrative Actions

AA-156: Where the BLM manages the surface estate, and the subsurface estate is owned by the State of Arizona or private entities either acquire the surface and subsurface estate or develop an MOU or conservation agreement with the subsurface estate owner to establish procedures to protect objects of the Monument.

AA-157: The Pan Quemado communication site is located on 2 acres and includes one facility with one tower; the Confidence Peak communication site is located on 3 acres and includes one multi-user right-of-way with one facility. No additional facilities such as towers and buildings will be allowed.

2.2.17 Travel Management

2.2.17.1 Management Goals and Objectives

TM-001: Provide a comprehensive transportation system for the Monument that is protective of Monument objects.

TM-002: Provide adequate, legal, and safe access for allowable public use and administrative purposes while protecting Monument objects.

TM-003: Improve on-the-ground travel management operations and maintenance programs to protect Monument objects, and to manage visitor access, safety, and recreation opportunities and experiences.

TM-004: Give priority to establishing, improving, or maintaining designated routes or access points to protect Monument objects and accommodate allowable uses.

TM-005: Secure legal and safe access, appropriate for achieving and maintaining Monument management objectives, for both motorized and non-motorized entry into the Monument. Provide and maintain connectivity of the IFNM transportation system with the surrounding public highway system (interstate, Federal, State and county roads).

2.2.17.2 Management Actions

TM-006: OHV Area Designations

1. Monument lands are designated as open, limited, or closed in accordance with definitions and criteria in 43 CFR 8340. Area designations to manage motorized vehicle use will be as follows:
   a. Open: 0 acres.
   b. Limited to designated routes: 117,520 acres
   c. Closed**:** 10,880 acres, including:
      - 9,900 acres to protect wildlife habitat
      - 340 acres to protect cultural resources at Cocoraque Butte
      - 640 acres to protect other cultural resources

   These area designations are shown on Map 9. As non-Federal lands are acquired, lands will be designated for OHV use consistent with protection of Monument objects and designations on adjacent lands and the maps presented in the RMP.

TM-007: Public Access Locations

1. Public access is subject to route designations, travel restrictions, and acquisition of legal access. Public access onto IFNM from non-IFNM lands or from routes without public legal access is subject to easement acquisition, or acquisition of the non-Monument land inholding.

TM-008: Development of New Routes and Rehabilitation of Closed Routes

1. Develop new routes only when a new segment is needed to provide legal public access to Monument lands or provide access to a non-Federal land inholding or other locations specified in a land use authorization or if needed for administrative use or to meet a specific management objective. Construction of new routes will be considered on a case-by-case basis.
2. Rehabilitate or restore identified routes using the most appropriate method based on ecological site conditions.

Rights-of-Way Authorizations

BLM Administered Land Only

Ironwood Forest National Monument
ROD/Approved RMP

Legend

- Communication Site
- Existing Electrical Transmission Line
- Existing Natural Gas Pipeline

Surface Management

- Bureau of Land Management
- National Park Service
- Bureau of Reclamation
- American Indian Reservation
- Military Reservation
- State Trust Land
- State, County, City; Wildlife, Park and Outdoor Recreation Area
- Private
- Pima County

Data Source:
Utility and Corridor Alternatives: BLM 2005
Base Information: BLM 2003
Quadrangle Image: U.S. Geological Survey 1977 Tucson

General Reference

- County Boundary
- CAP Canal
- River
- Interstate 10
- Main public access routes to monument. County administered roads connecting monument travel route system to public highways.

Planning Area

- Ironwood Forest National Monument

Universal Tranverse Mercator
Zone 12, Units Meters
Clark 1866 Spheroid
NAD27 Datum

No warranty is made by the Bureau of Land Management (BLM) for the use of this map for purposes not intended by BLM, or to the accuracy, reliability, or completeness of the information shown. Spatial information may not meet National Map Accuracy Standards. This information may be updated without notification.

0 0.75 1.5 3 Miles

0 1.75 3.5 7 Kilometers

Location in Arizona

P:\BLM\Ironwood\GIS\Plots\RODApprovedRMP\Map 8Lands_Realty.pdf

Map 8

Travel Management

BLM Administered Land Only

Ironwood Forest National Monument
ROD/Approved RMP

Legend

Off-highway Vehicle Designations

- Limited to Designated Roads and Trails
- Closed

Route Designations

- Primitive Road
  Primitive road open to all motorized use
- Road
  Road open to all motorized vehicle use.
  (Includes county routes across IFNM and BLM routes)
- Primitive Road, Administrative
  Primitive road open for administrative motorized vehicles and public non-motorized and mechanized use.
- Trail
  Open for administrative and public non-motorized and non-mechanized use only
- Road, Administrative
  Road open only for El Tiro Gliderport lease administrative use.
- Closed for Restoration

Surface Management

- Bureau of Land Management
- National Park Service
- Bureau of Reclamation
- American Indian Reservation
- Military Reservation
- State Trust Land
- State, County, City; Wildlife, Park and Outdoor Recreation Area
- Private
- Pima County

Data Source:
OHV Alternative Designations: BLM 2006
Route Alternative Designations: BLM 2012
Base Information: BLM 2003
Quadrangle Image: U.S. Geological Survey 1977 Tucson

General Reference

- County Boundary
- Central Arizona Project (CAP) Canal
- River
- Interstate 10
- Main public access routes to monument. County administered roads connecting monument travel route system to public highways.

Planning Area

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0 0.75 1.5 3 Miles

0 1.75 3.5 7 Kilometers

Location in Arizona

P:\BLM\Ironwood\GIS\Plots\RODApprovedRMP\Map 9 Routes.pdf

Map 9

TM-009: Recreational Access

1. Allow motorized, mechanized, and recreational livestock access into the IFNM from areas of urban interface only via public or community access points to be designated through the travel management planning process. Types of access (i.e., motorized or non-motorized) will depend on the RMZ. New access will be considered on a case-by-case basis.
2. Provide minimum improvements for, and maintain Monument access staging areas or facilities, to accommodate multi-mode access to Monument lands consistent with RMZ objectives.
3. Take measures or install appropriate barriers to promote compliance with travel route use designations and restrictions consistent with RMZ objectives.
4. Provide signing along travel routes for directional, informational, regulatory purposes consistent with RMZ objectives.

TM-010: Equestrian Use

1. Allow equestrian uses on routes designated as motorized or non-motorized; cross-country equestrian travel is allowed in all areas of the Monument open to public use. New trails for equestrian uses will be considered on a case-by-case basis. Equestrian uses may be restricted where BLM has determined through inventory and monitoring that such use is adversely impacting Monument objects.

TM-011: Non-Motorized, Mechanized Use

1. Use of non-motorized hand-powered wheeled game carriers to retrieve lawfully taken game is allowed in all areas of the Monument. Retrieval of downed game by cross-country motor vehicle use is prohibited.

TM-012: As Per Arizona National Land Conservation System Policy

1. Motorized use will be required to keep within the designated route with reasonable use of the shoulder and immediate roadside, allowing for vehicle passage, and emergency stopping or parking, unless otherwise posted.
2. Travel on all designated routes is subject to route-specific designations for type of use, functional class, maintenance level and route standard (refer to Appendix G of the Proposed RMP/Final EIS for route inventory and evaluation information).

2.2.17.3 Implementation-Level Decisions

TM-013: Motorized and Non-Motorized Use Route Designations

1. Travel route designations:
    a. Designate approximately 42 miles of roads and 82 miles of primitive roads as open to motorized and mechanized vehicle travel for public and administrative purposes.
    b. Designate approximately 118 miles of primitive roads as open for administrative vehicles only, and open for non-motorized and non-motorized mechanized travel for public use.

c. Designate approximately 90 miles of trails as open for non-motorized non-mechanized travel only for public and administrative purposes.
d. Approximately 17 miles of existing routes will be closed for reclamation/restoration.

Route designations are shown on Map 9 (NOTE: mileage shown above is for BLM land only) and Appendix G from the Proposed RMP/Final EIS contains the route inventory and evaluation. Transportation designations are implementation level decisions that will be finalized in an implementation plan to be prepared after the RMP decisions are finalized, with additional public involvement.

2.2.17.4 Administrative Actions

AA-158: Take corrective action including maintenance and repairs to remedy damage to resource concerns and safety hazards along the designated transportation system routes.

AA-159: Enlist volunteers and partners to assist in fieldwork and other stewardship functions, such as monitoring and maintaining routes.

AA-160: Maintain an ongoing monitoring system and database to track and measure motorized and non-motorized use and prescribe route maintenance.

AA-161: Provide signing, mapping, and travel information to visitors that reinforces protection of Monument resources.

AA-162: Expand and pursue partnerships for sources of funding for travel and transportation management.

AA-163: Enforce route designation restrictions for all users, including permittees (e.g., hunters, wood gatherers, livestock operators) and authorize exceptions for motorized vehicle travel on a case-by-case basis, provided measures are taken to protect Monument objects.

AA-164: Allow AGFD the use of motorized and mechanized equipment off designated routes in suitable locations (as agreed to in writing by AGFD and BLM) for such purposes including, but not limited to the following: law enforcement activities, wildlife water supplementation, collar retrieval, capture and release of wildlife, telemetry, surveys, habitat evaluation, and research activities.

AA-165: Establish supplementary rules pursuant to 43 CFR 8340 and 43 CFR 8365 as needed to implement OHV area and travel route designations.

AA- 166: Authorize motorized administrative use on non-motorized routes subject to physical condition of the route, and on a case-by-case basis.

AA-167: Manage OHV use and travel activities, and implement best management practices according to the Arizona BLM Guidelines for OHV Recreation Management referenced in the IFNM Proposed RMP (BLM 2007 Report).

AA-168: Allow non-motorized non-mechanized access to active mining claims for casual use activities. Require a plan of operations to use motor vehicles on areas or routes closed to vehicle use.

AA-169: Seek access agreements, easements or rights–of-way, or adjudication of existing physical access for routes across non-federal land needed to access Monument lands for administrative purposes or public use.

AA-170: Limit motorized vehicle use to the designated route travelway, with reasonable use of the shoulder and immediate roadside, allowing for vehicle passage, and emergency stopping or parking unless otherwise posted.

AA-171: Prepare an implementation plan to define maintenance and operational activities needed to carry out the Travel Management decisions established in this RMP/Final EIS. Identify initial on-the-ground measures for closures and access restrictions, maintenance and repair work, and work needed for a sustainable long-term transportation system. Define monitoring and maintenance standards or guidelines and schedules. Define the designated access point and route system for both motorized and non-motorized uses of public lands. BLM will pursue partnerships with Federal, State, local, and educational agencies and institutions, and users in developing and adapting the ongoing operations plan. The implementation plan will provide the basis for initial ground work and ongoing adaptive management and activities. At a minimum, it will address:

- initial condition surveys for each road and trail, and describe corrective or stabilization, maintenance and repair work needed;
- traffic counter monitoring system to sample the amount and pattern of use of the network;
- schedule for periodic condition surveys with intervals depending on the type of route, condition and use;
- initial site surveys for road or trailside turnouts and activity areas, describe baseline footprint for monitoring change in ground conditions, and for defining limits of acceptable change. Describe thresholds for adaptive management action, consistent with RMZ objectives;
- user and traveler sampling to describe users experience (as part of recreation management program studies);
- design and maintenance guidelines and procedures for managing access points, roads and trails, consistent with the route's access purpose and design vehicle;
- guidelines and procedures for adjustments to route designations and the transportation plan. (Note: Because route designations are implementation-level decisions, these can be modified without amending to the RMP). Adjustments to the route designations will be subject to appropriate NEPA review;
- maintenance schedule for each route (road or trail), consistent with its maintenance intensity designation; and
- site-specific route analysis to determine if a new route needs to be created, or an existing route needs to be re-routed to prevent damage to resources, alleviate safety problems, avoid conflicts with other land uses, or if there is no other means of securing legal access.

2.2.18 Special Designations

2.2.18.1 Management Goals and Objectives

SD-001: Manage special designations, as applicable, to protect resources for which they are established.

SD-002: No Land Use Plan-level objectives for special designations have been developed.

2.2.18.2 Management Actions

SD-003: Remove the ACEC designation.

2.3 PUBLIC INVOLVEMENT

The BLM will continue to work with existing partners, cultivate new partnerships, and actively seek the views of the public. Using techniques such as news releases, website postings, and mass mailings, the BLM will inform the public of new and ongoing management actions and site-specific planning, and provide opportunities and timeframes for comment and other participation. The public is encouraged to contact the BLM and request that their name be placed in the field office mailing list along with their specific area of interest (e.g., wildlife, cultural resources, etc.) for plan implementation. The public may also make this request by calling (520) 258-7200.

The BLM will also continue to coordinate, both formally and informally, with the numerous federal and state agencies, Native American tribes, local agencies, and officials interested and involved in the management of public lands in the IFNM.

2.4 MANAGEMENT PLAN IMPLEMENTATION

The RMP will be implemented as funding and workforce allow. Most of the land use plan decisions are effective upon approval of this document. However, some decisions will take a number of years to be fully implemented. Implementation monitoring will track which decisions have been implemented and when.

After issuing the ROD/Approved RMP, the BLM will establish implementation strategy consistent with guidance in Section IV E of the BLM Land Use Planning Handbook. The implementation planning process will assist BLM managers and staff in preparing budget requests and in scheduling work priorities. However, the proposed schedule must be considered tentative and will be affected by future funding, changing program priorities, nondiscretionary workloads, and cooperation by partners and the public. Periodic review of the implementation plan will provide consistent tracking of accomplishments and provide information that can be used to develop annual budget requests to continue implementation. Plan implementation is a continuous and active process.

Interdisciplinary impact analysis on implementation actions will be based on the Proposed RMP/Final EIS and other applicable environmental analyses and studies. If the analysis prepared for site-specific projects finds potential for significant impacts not already described in an existing EIS, another EIS or a supplement to an existing EIS may be warranted.

Site-specific environmental analyses and documentation, including the use of categorical exclusions and determinations of NEPA adequacy where appropriate, may be prepared for one or more individual

projects in accordance with management objectives and decisions established in the approved land use plan. In addition, the BLM will ensure that the environmental review process complies with Council on Environmental Quality regulations on NEPA and applicable BLM guidance including consultations with Tribes, USFWS Section 7 and coordination with SHPO.

2.5 PLAN EVALUATION AND MAINTENANCE

2.5.1 Plan Evaluation

Plan evaluation is a process in which the plan and monitoring data are reviewed to determine if management goals and objectives are being met and if management direction is sound. Land use plan evaluations determine if decisions are being implemented, if mitigation measures are satisfactory, if there are significant changes in the related plans of other entities, if there is new data of significance, and if decisions will change through amendment or revision. Monitoring data gathered over time is examined and used to determine whether management actions are meeting objectives. Conclusions are then used to make recommendations on whether to continue current management or to identify what changes need to be made in management practices to meet RMP objectives.

BLM will use land use plan evaluations to determine if the decisions in the RMP, supported by the accompanying NEPA analysis, are still valid in light of new information and monitoring data. Evaluation of the RMP will generally be conducted every five years, unless unexpected actions, new information, or significant changes in other plans, legislation, or litigation triggers an evaluation.

2.5.2 Plan Maintenance

Land use plan decisions and supporting information can be maintained to reflect minor changes in data, but maintenance is limited to refining, documenting, and clarifying previously approved decisions. Some examples of maintenance actions include:

- Correcting minor data, typographical, mapping, or tabular data errors;
- Refining baseline information as a result of new inventory data (e.g., changing the boundary of an archaeological district; refining the known habitat of special status species; or adjusting the boundary of a fire management unit based on updated fire regime condition class inventory, fire occurrence, monitoring data, or demographic changes); and
- Applying an existing solid mineral lease stipulation to a new area prior to the lease sale based on new inventory data (e.g., applying an existing protective stipulation for tortoise to a newly discovered tortoise habitat area.)

Plan maintenance will be documented in supporting records. Plan maintenance does not require formal public involvement, interagency coordination, or the NEPA analysis required for making new land use plan decisions.

2.6 MONITORING AND ADAPTIVE MANAGEMENT

Monitoring is the repeated measurement of activities and conditions over time, with the implied purpose of using these measurements to adjust management, if needed, in order to achieve or maintain established objectives. The primary objective of monitoring in the IFNM is to detect change in the condition of

Monument objects, and to use this information to ensure continued protection of Monument objects and to meet other resource objectives as identified in this plan. Two levels of monitoring will be used to meet this objective: implementation monitoring and effectiveness monitoring.

2.6.1 Monitoring

The BLM expects that new information gathered from field inventories and assessments, research, other agency studies, and other sources will update baseline data and/or support new management techniques, best management practices, and scientific principles. Monitoring the RMP involves tracking the implementation and effectiveness of land use plan decisions (implementation monitoring) identified in Section 2.2, Management Decisions. Implementation monitoring tracks the completion of land use plan decisions whereas effectiveness monitoring helps determine whether completion of land use plan decisions achieves anticipated desired outcomes. If implementation of land use plans does not achieve anticipated desired outcomes, adaptive management may be necessary.

Management actions identified for the IFNM are based on studies and the best scientific and commercial information available. However, conditions may change over time. Experience has shown that implemented management actions can be improved as new technology and new information become available. It is also possible that changes in land use will require a different management action to protect the resources. To address the changing conditions and provide management flexibility using best management practices, the IFNM staff will monitor and evaluate the RMP using a process that provides the optimum means of checking the effectiveness of management actions. This process will measure the effectiveness of existing actions by monitoring these actions and applying the results of new scientific research. The process will analyze the current resource conditions resulting from implemented actions and identify and recommend alternatives or modified actions, as necessary, to reach established objectives and goals.

Because the capability to conduct monitoring and analysis at the optimum level can vary from year to year, the actions to be monitored will be prioritized. If monitoring indicates the goals and objectives are not being met, the adaptive management process will be implemented to adjust actions and improve resource condition.

2.6.2 ~~Adaptive Management~~

Adaptive management is a system of management practices based on clearly identified outcomes, monitoring to determine if management actions are meeting outcomes, and, if not, facilitating management changes that will best ensure that outcomes are met or to re-evaluate the outcomes. The IFNM managers will implement the adaptive management process for decisions appropriate to be adapted in order to meet resource goals and objectives. Monitoring, reports, documents, and timelines associated with the adaptive management process will be subject to the Monument's budget and staffing constraints.

GLOSSARY

A

Administrative Actions: The day-to-day activities required to serve the public and provide optimum management of the resources within the planning area. These actions are allowable and do not require authorization within an RMP, but may require site-specific analysis under the National Environmental Policy Act of 1969 (NEPA).

Agency: Any Federal, State, or county government organization participating with jurisdictional responsibilities.

Air Pollutant: Generally, an airborne substance that could, in high enough concentrations, harm living things or cause damage to materials. From a regulatory perspective, an air pollutant is a substance for which emissions or atmospheric concentrations are regulated or for which maximum guideline levels have been established due to potential harmful effects on human health and welfare.

Air Quality: The cleanliness of the air as measured by the levels of pollutants relative to standards or guideline levels established to protect human health and welfare. Air quality is often expressed in terms of the pollutant for which concentrations are the highest percentage of a standard (e.g., air quality may be unacceptable if the level of one pollutant is 150% of its standard, even if levels of other pollutants are well below their respective standards).

Air Quality Standard: Levels of air pollutants prescribed by regulations that may not be exceeded during a specified time in a defined area.

Allotment (range): A designated area of land available for livestock grazing upon which a specified number and kind of livestock may be grazed under management of an authorized agency. An allotment generally consists of Federal rangelands, but may include intermingled parcels of private, State, or Federal lands. BLM and the Forest Service stipulate the number of livestock and season of use for each allotment.

Ambient (air): The surrounding atmospheric conditions to which the general public has access.

Analysis: An examination of existing and/or recommended management needs and their relationships in order to discover and display the outputs, benefits, effects, and consequences of initiating a proposed action.

Animal Unit Month (AUM): The amount of forage needed to sustain one cow, five sheep, or five goats, for a month. A full AUM's fee is charged for each month of grazing by adult animals if the animal (1) is weaned, (2) is 6 months old or older when entering public land, or (3) will become 12 months old during the period of use. For fee purposes, an AUM is the amount of forage used by five weaned or adult sheep or goats or one cow, bull, steer, heifer, horse, or mule. The term AUM is commonly used in three ways:

(1) stocking rate as X acres per AUM,
(2) forage allocation as in X AUMs in allotment A, and
(3) utilization as in X AUMs consumed from Unit B.

Aquifer: A groundwater bearing rock unit (unconsolidated or bedrock) that will yield water in a usable quantity to a well or spring.

Archaeology: The scientific study of the life and culture of past, especially ancient, peoples, by excavation of ancient cities, relics, artifacts, etc.

Archaeological Site: A discrete location that provides physical evidence of past human use.

Area of Critical Environmental Concern (ACEC): An area of public lands designated by BLM for special management attention to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life/provide safety from natural hazards. Areas designated as ACECs have met criteria for importance and relevance that are outlined in 43 CFR 1610.7-2(b).

Artifact: A manmade object.

Attainment Area: An area that the Environmental Protection Agency has designated as being in compliance with one or more of the National Ambient Air Quality Standards (NAAQS) for sulfur dioxide, nitrogen dioxide, carbon monoxide, ozone, lead, and particulate matter. An area may be in attainment for some pollutants but not for others.

Avoidance area: An environmentally sensitive area where rights-of-way may be granted only when no feasible alternative route is available.

B

Basin: A depressed area having no surface outlet (*topographic basin*); a physiographic feature or subsurface structure that is capable of collecting, storing, or discharging water by reason of its shape and the characteristics of its confining material (*water*); a depression in the earth's surface, the lowest part often filled by a lake or pond (*lake basin*); a widened part of a river or canal (*drainage, river, stream basin*).

Basin and Range: A geological and geographical landform common to western North America and characterized by a series of tilted-fault-block mountain ranges and broad intervening basins.

Biodiversity: The variety of life and its processes, and the interrelationships within and among various levels of ecological organization. Conservation, protection, and restoration of biological species and genetic diversity are necessary to sustain the health of existing biological systems. Federal resource management agencies must examine the implications of management actions and development decisions on regional and local biodiversity.

Biological Soil Crust: A living community of lichen, cyanobacteria, algae, and moss growing on the soil surface, creating a crust of soil particles bound together by organic materials. Biological soil crusts are also known as cryptogamic, microbiotic, cryptobiotic, and microphytic crusts and are commonly found in semiarid and arid environments throughout the world.

Border Patrol: The mobile law enforcement arm of the Immigration and Naturalization Service that detects and prevents illegal entry of aliens into the United States.

Browse: Leaf and twig growth of shrubs, woody vines, trees, cacti, and other non-herbaceous vegetation available for animal consumption.

C

Carbon Monoxide: A colorless, odorless, poisonous gas produced by incomplete burning of carbon-based fuels including gasoline, oil and wood. Carbon monoxide is also produced from incomplete combustion of many natural and synthetic products.

Cave: Any naturally occurring void, cavity, recess, or system of interconnected passages that occurs beneath the surface of the earth or within a cliff or ledge (including any cave resource therein, but not including any vug [a small cavity in a rock], mine, tunnel, aqueduct, or other manmade excavation) which is large enough to permit an individual to enter, whether or not the entrance is naturally formed or manmade. Such term includes any natural pit, sinkhole, or other feature that is an extension of the entrance.

Characteristic: That which constitutes a character; that which characterizes; a distinguishing trait, feature, or quality; a peculiarity.

Clean Air Act: Federal legislation governing air pollution. The Clean Air Act established NAAQS for carbon monoxide, nitrogen dioxide, ozone, particulate matter, sulfur dioxide, and lead. Prevention of Significant Deterioration classifications define the allowable increased levels of air quality deterioration above legally established levels. They include the following:

- Class I – minimal additional deterioration in air quality (certain national parks and wilderness areas)
- Class II – moderate additional deterioration in air quality (most lands)
- Class III – greater deterioration for planned maximum growth (industrial areas)

Clean Water Act (CWA): Federal legislation governing water quality. The CWA refers to a series of Federal laws and regulations that attempt to restore the beneficial uses of surface waters of the United States (also referred to as "waters of the U.S."). The CWA regulates such programs as the National Pollutant Discharge Elimination System, a permit-based set of regulations that control the discharge of pollution to U.S. waterways from an individual point (for example, the end of a pipe) and the discharge of concentrated storm water from highways, cities, and other built environments. The CWA also regulates the placing of fill in streams and washes for the construction of road crossings, pipelines, and power lines. The U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers, which in some cases have extended responsibilities to the individual states, regulate these programs.

Community (ecological): The living part of an ecosystem. Communities change with succession, thereby forming distinctive ecological units both in time and space. The plant community and the animal community together form the biotic community. Size of area is not implied (i.e., organisms associated with a decaying log or with an entire forest each represent communities).

Compaction: The process of packing firmly and closely together; for example, mechanical compaction by vehicular, human or livestock activity. Soil compaction results from particles being pressed together so that the volume of the soil is reduced. It is influenced by the physical properties of the soil, moisture content, and the type and amount of compactive effort.

Composition: The proportions of various plant species in relation to the total on a given area. It may be expressed in terms of cover, density, weight, etc.

Contrast: Diversity of adjacent parts, as in color, tone, or emotions. The closer the juxtaposition of two dissimilar perceptions, in time or space, the more powerful the appeal to the attention.

Corridor: A wide strip of land within which a proposed linear facility (e.g., pipeline, transmission line) could be located. A corridor may also be a strip of land that is set aside for conservation purposes, particularly to provide wildlife an area of use to move between patches of habitat.

Corrosivity: A characteristic defining a hazardous waste. Solid waste that is defined as corrosive demonstrates the capability to destroy gradually by chemical action.

Criteria Pollutant: An air pollutant that is regulated by NAAQS. The Environmental Protection Agency must describe the characteristics and potential health and welfare effects that form the basis for setting, or revising, the standard for each regulated pollutant. Criteria pollutants include sulfur dioxide, nitrogen dioxide, carbon monoxide, ozone, lead, and two size classes of particulate matter, less than 10 micrometers (0.0004 inch) in diameter, and less than 2.5 micrometers (0.0001 inch) in diameter. New pollutants may be added to, or removed from, the list of criteria pollutants as more information becomes available. (See National Ambient Air Quality Standards.)

Critical Habitat: Habitat essential to the conservation of an endangered or threatened species that has been designated as critical by the U.S. Fish and Wildlife Service or the National Marine Fisheries Service.

Cultural Resources: A cultural resource is any definite location of past human activity, occupation, or use, identifiable through inventory, historical documentation, or oral evidence. Cultural resources include archaeological, historical, or architectural sites, structures, places, objects, and artifacts.

D

Decibel: A unit of sound pressure level, abbreviated dB.

dBA: Unit of sound level. The sound pressure level weighted by the use of the "A" metering characteristic and weighting specified in American National Standards Institute (ANSI) Specifications for Sound Level Meter. Used to represent the response of the human ear to loudness.

Decision Area: BLM-administered public land and private split-estate (i.e., private surface acreage overlying federally owned minerals) within the planning area are referred to in this document as the decision area.

Desert Pavement: A surface of angular, interlocking fragments of pebbles, gravel, or boulders found in arid and semiarid environments. These surfaces are found on level or gently sloping desert flats, fans, or bajadas, and lake and river terraces. Desert pavement forms under the influence of daily thermal expansion and contraction as sandy particles slowly sort downward, leaving the larger stones at the surface.

Desired Plant Community: An objective regarding a group of compatible plant species, including the desired percentage of occurrence, considered ideal to meet land-management goals for the area.

Developed Recreation: Recreation that requires facilities that result in further concentrated use of the area. For example, off-road vehicles require parking lots and trails. Campgrounds require roads, picnic tables, and toilet facilities.

Distance Zones (views/visual resources): A subdivision of the landscape based on the distance from viewers along travel routes or other observation points. Viewing distance zones include the foregroundmiddleground, background, and seldom seen.

> ***Foreground-Middleground Zone***: The area that can be seen from each travel route for a distance of 3 to 5 miles where management activities might be viewed in detail. The outer boundary of this distance zone is defined as the point where the texture and form of individual plants are no longer apparent in the landscape.
>
> ***Background Zone***: The remaining area that can be seen from each travel route to approximately 15 miles. In order to be included within the distance zone, vegetation should be visible at least as patterns of light and dark.
>
> ***Seldom-Seen Zone***: Areas that are not visible within the foreground-middleground and background zones due to screening primarily by topographic or terrain features, and areas beyond the background zones.

E

Easement: A right or privilege one may have on another's land.

Ecological Site: A distinctive kind of rangeland that differs from other kinds of rangeland in its ability to produce a characteristic natural plant community.

Ecosystem: Any area or volume in which there is an exchange of matter and energy between living and nonliving parts; that is, the biotic community together with soil, air, water, and sunlight form an ecosystem. Ecosystems are the best units for studying the flow of energy and matter.

Endangered Species: Plants or animals that are in danger of extinction through all or a significant portion of their ranges and that have been listed as endangered by the U.S. Fish and Wildlife Service following the procedures outlined in the Endangered Species Act and its implementing regulations.

Enhance: To improve the productivity or quality of resources or resource uses.

Environmental Assessment: A concise public document for which a Federal agency is responsible. An EA serves (1) to briefly provide enough evidence and analysis for determining whether to prepare an environmental impact statement (EIS) or a finding of no significant impact; and (2) to aid an agency's compliance with the National Environmental Policy Act when no EIS is needed; and (3) to facilitate preparation of an EIS when one is needed.

Environmental Impact Statement: An analytical document that portrays potential impacts on the human environment of a particular course of action and its possible alternatives. The document is released to the public for review and comment. Required by the National Environmental Policy Act, an EIS is prepared for use by decision makers to assess the environmental consequences of a potential decision. An EIS must meet the requirements of the National Environmental Policy Act, the Council on Environmental Quality, and the directives of the agency responsible for the proposed action.

Environmental Justice: The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people, including racial, ethnic, or socioeconomic groups, should bear a disproportionate share of the negative

environmental consequences resulting from industrial, municipal, and commercial operations or the execution of Federal, State, local, and tribal programs and policies. Executive Order 12898 directs Federal agencies to make achieving environmental justice part of their missions by identifying and addressing disproportionately high and adverse effects of agency programs, policies, and activities on minority and low-income populations.

Erosion: Detachment or movement of soil or rock fragments by water, wind, or gravity. Accelerated erosion is much more rapid than normal, natural or geologic erosion, primarily as a result of the influence of surface-disturbing activities of people, animals or natural catastrophes.

Exclusion area: An environmentally sensitive area where rights-of-way will be granted only in cases where there is a legal requirement to provide such access.

Extraction: The removal of mineral resources from the land by mining, quarrying, or excavation.

F

Federal Lands: Lands, or interests in lands (such as easements and rights-of-way), owned by the United States.

Federal Undertaking: A project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency including those carried out on or on behalf of the agency, those carried out with Federal financial assistance, those requiring a Federal permit, license or approval, and those subject to State or local regulation administered pursuant to a delegation or approval by a Federal agency.

Fire Frequency: A general term referring to the recurrence of fire in a given area over time. It is sometimes stated as number of fires per unit time in a designated area. It is also used to refer to the probability of an element burning per unit time

Fire Intensity: derived from the energy content of the fuel, the mass of fuel consumed, and the rate of spread of the fire. The units of fireline intensity reflect energy release (kW) per unit length (m) of the fireline: energy release along a linear front. The length of the flames of a fire can be related to its intensity.

Fire Regime: The characteristics of fire in a given ecosystem, including factors such as frequency, intensity, severity, and patch size. The terms used for the different fire regimes are Nonlethal, Mixed 1, Mixed 2, and Lethal. Nonlethal fires are generally of the lowest intensity and severity with the smallest patches of mortality, while lethal fires are generally of the highest intensity and severity with the largest patches of mortality. The others fall in between.

Fire Regime Condition Classes: Fire Regime Condition Classes are a qualitative measure describing the degree of departure from historical fire regimes, possibly resulting in alterations of key ecosystem components such as species composition, structural stage, stand age, canopy closure, and fuel loadings. One or more of the following activities may have caused this departure: fire exclusion, timber harvesting, livestock grazing, introduction and establishment of exotic plant species, introduced insects and disease, or other management activities.

Forage: All browse and herbaceous growth available and acceptable to grazing animals or that may be harvested for feeding purposes. Forage includes pasture, rangelands, and crop aftermath. Feed includes forage, hay and grains.

Forb: An herbaceous plant that is not a grass, sedge, or bush.

Form: The mass or shape of an object or objects which appear unified.

G

Game Species: Any species of wildlife or fish that is managed for hunters.

Goal: The desired state or condition that a resource management policy or program is designed to achieve. Broader and less specific than objectives, goals are usually not measurable and may not have specific dates by which they must be reached. Objectives are developed by first understanding and defining goals.

Grazing: Consumption of native forage from rangelands or pastures by livestock or wildlife.

Grazing Allotment: An area where one or more livestock operators graze their livestock. An allotment generally consists of Federal public land but may include parcels of private or State-owned land.

Grazing Fee: A charge, usually on a monthly basis, for grazing a specific kind of livestock.

Grazing Permit: An authorization that allows grazing on public lands. Permits specify class of livestock on a designated area during specified seasons each year.

Groundwater: Water below the ground surface in a zone of saturation.

Guidelines: Management approaches, methods, and practices that are intended to achieve a standard. Guidelines typically (1) identify and prescribe methods of influencing or controlling specific public land uses, (2) are developed and applied consistent with the desired condition and within site capability, and (3) may be adjusted over time.

H

Habitat: A specific set of physical conditions in a geographic area(s) that surrounds a single species, a group of species, or a large community. In wildlife management, the major components of habitat are food, water, cover, and living space.

Habitat Management Plan: A written and officially approved plan for a specific geographical area of public land that identifies wildlife habitat and related objectives, establishes the sequence of actions for achieving objectives, and outlines procedures for evaluating accomplishments.

Hazardous Materials: Substances or mixtures of substances that have the capability of either causing or significantly contributing to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness, or posing a substantial present or potential risk to human health or the environment. Hazardous wastes are defined as wastes or combination of wastes that, because of quantity, concentration, or physical, chemical, or infectious characteristics, may either cause, or significantly contribute to, an

increase in mortality or an increase in serious irreversible illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed. Hazardous wastes are products or by-products of hazardous materials. In order to be classified as hazardous, wastes must either appear on a series of lists compiled by the U.S. Environmental Protection Agency or demonstrate the characteristics of ignitability, corrosivity, reactivity, or toxicity.

Hazardous Waste: The Resource Conservation and Recovery Act defines hazardous waste as a solid waste that may cause an increase in mortality or serious illness or pose a substantial threat to human health and the environment when improperly treated, stored, transported, disposed of, or otherwise managed. A waste is hazardous if it exhibits characteristics of ignitability, corrosivity, reactivity, and/or toxicity.

Haze: An atmospheric aerosol of sufficient concentration to be visible. The particles are so small that they cannot be seen individually, but are still effective in scene distortion and visual range restriction.

Historic Fire Regime: A classification of the effects of ecosystem disturbance caused by fire over time and space. Generally encompasses the period between 1500 to late 1800, before extensive settlement by European-Americans in many parts of North America, before intense conversion of wildlands for agricultural and other purposes, and before fire suppression effectively reduced fire frequency in many areas. Sometimes referred to as “presettlement” fire regimes.

I

Illegal Immigration: The entrance into the United States of an alien (non-citizen) without government permission.

Infiltration: The downward entry of water into soil or other material.

Interdisciplinary Team: A team of varied land use and resource specialists formed to provide a coordinated, integrated information base for overall land use planning and management.

J

Jurisdiction: The legal right to control or regulate use of land or a facility. Jurisdiction requires authority, but not necessarily ownership.

K

Key Observation Points: Locations with views of the planning area that are used to characterize the scenery for visual resource inventory purposes, and the locations from which visual impact assessments are conducted for proposed projects.

L

Land Use Plan: Any document developed to define the kinds of use, goals and objectives, management practices, and activities that will be allowed to occur on an individual parcel or group of land parcels.

Landform: A discernible natural landscape that exists as a result of geological activity, such as a plateau, plain, basin, or mountain.

Landscape: An aggregate of different but interacting landforms, sometimes united by a cultural attribute (e.g., a mosaic of farmland, including tilled fields, woodlots, stock ponds, swales, and fencerows). Landscape ecology generally operates at a scale of at least many acres/hectares or, more often, several square miles/square kilometers.

Leasable Minerals: Those minerals or materials designated as leasable under the Mineral Leasing Act of 1920. They include coal, phosphate, asphalt, sulfur, potassium, and sodium minerals, and oil, gas, and geothermal resources.

Lease: An authorization or contract by which one party (lessor) conveys the use of property, such as real estate, to another (lessee) in return for rental payments. In addition to rental payments, lessees also pay royalties (a percentage of value) to the lessor from resource production.

Line: The path, real or imagined, that the eye follows when perceiving abrupt differences in form, color, or texture or when objects are aligned in a one-dimensional sequence. Usually evident as the edge of shapes or masses in the landscape.

Locatable Mineral: Any valuable mineral that is not saleable or leasable including gold, silver, copper, uranium, etc., that may be developed under the General Mining Law of 1872.

Low-income populations: Defined in terms of Bureau of the Census annual statistical poverty levels (Current Population Reports, Series P-60 on Income and Poverty), may consist of groups or individuals who live in geographic proximity to one another or who are geographically dispersed or transient (such as migrant workers or Native Americans), where either type of group experiences common conditions of environmental exposure or effect.

M

Management Actions/Practices: Actions or practices that improve or maintain basic soil and vegetation resources. Rangeland practices typically consist of watershed treatments (planting, seeding, burning, rest, vegetation manipulation, grazing management) in an attempt to establish desired vegetation species or communities.

Maintenance Intensity Definitions: Transportation management designations used to indicate priorities for maintenance of roads and trails depending on their access purpose, type and volume of use.

> **Level 0 Maintenance Description:** Existing routes that will no longer be maintained or declared as routes. Routes identified as Level 0 are identified for removal from the Transportation System entirely.
>
> **Level 1 Maintenance Description:** Routes where minimal (low-intensity) maintenance is required to protect adjacent lands and resource values. These roads may be impassable for extended periods of time.
>
> **Level 3 Maintenance Description:** Routes requiring moderate maintenance because of low-volume use (e.g., seasonally or year-round for commercial, recreational, or administrative access). Maintenance Intensities may not provide year-round access, but are intended to generally provide resources appropriate for keeping the route in use for the majority of the year.

Level 5 Maintenance Description: Routes for high (Maximum) maintenance because of year-round needs, high-volume traffic, or significant use. Also may include routes identified through management objectives as requiring high intensities of maintenance or to be maintained open year-round

Mechanized Travel: Moving by means of mechanical devices such as a bicycle; not powered by a motor.

Minimum Impact Suppression Techniques: A set of strategies utilized by wildland firefighters to suppressing wildfire while causing the fewest possible impacts to natural and/ or cultural resources in the vicinity.

Minority Populations: Minority populations exist where either (a) the minority population of the affected area exceeds 50 percent or (b) the minority population percentage of the affected area is meaningfully greater than in the general population or other appropriate unit of geographic analysis (such as a governing body's jurisdiction, a neighborhood, census tract, or other similar unit). "Minority" refers to individuals who are members of the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black, not of Hispanic origin; or Hispanic. Minority populations include either a single minority group or the total of all minority persons in the affected area. They may consist of groups of individuals living in geographic proximity to one another or a geographically dispersed / transient set of individuals (such as migrant workers or Native Americans), where either type of group experiences common conditions of environmental exposure or effect.

Minimum Impact Suppression Techniques (MIST): A Set of strategies utilized by wildland firefighters to suppressing wildfire while causing the fewest possible impacts to natural and/or cultural resources in the vicinity.

Motorized Travel: Synonymous with off-highway vehicle (OHV). Examples of this type of vehicle include all-terrain vehicles (ATV), Utility Type Vehicle (UTV), Sport Utility Vehicle (SUV), motorcycle, and snowmobiles.

Multiple Use: Multiple use as defined by the Multiple Use – Sustained Yield Act 1960 means (1) the management of all the various renewable surface resources so that they are used in the combination that will best meet the needs of the American people, (2) making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions, (3) that some land will be used for less than all of the resources, and (4) harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will be given the greatest dollar return or the greatest unit output.

N

National Ambient Air Quality Standards (NAAQS): The allowable concentrations of air pollutants in the air specified by the Federal Government. The air quality standards are divided into primary standards (based on the air quality criteria and allowing an adequate margin of safety and requisite to protect the public health) and secondary standards (based on the air quality criteria and allowing an adequate margin of safety and requisite to protect the public welfare) from any unknown or expected adverse effects of air pollutants.

National Environmental Policy Act of 1969 (NEPA): An Act that encourages productive and enjoyable harmony between man and his environment and promotes efforts to prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; enriches understanding of the ecological systems and natural resources important to the Nation, and established the Council on Environmental Quality.

National Register of Historic Places (National Register): The official list of the Nation's cultural resources that are worthy of preservation. The National Park Service maintains the list under direction of the Secretary of the Interior. Buildings, structures, objects, sites, and districts are included in the National Register for their importance in American history, architecture, archeology, culture, or engineering. Properties included on the National Register range from large-scale, Monumentally proportioned buildings to smaller scale, regionally distinctive buildings. The listed properties are not just of nationwide importance; most are significant primarily at the State or local level.

Native Species: With respect to a particular ecosystem, a species that, other than as a result of an introduction, historically occurred or currently occurs in that ecosystem.

Naturalness: A characteristic of lands where the imprint of human activity is substantially unnoticeable. Imprints of human activity typically include travel routes or trails, fences, and other landscape modifications.

Nonattainment Area: An area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) any of the Federal primary or secondary ambient air quality standards for the pollutant.

Non-motorized Travel: Moving by foot, stock or pack animal (or other animal-powered travel), boat, or mechanized vehicle such as a bicycle.

Noxious Weeds: Plant species that have been legally designated as unwanted or undesirable. This includes national, State and county or local designations. According to the Federal Noxious Weed Law, native plant species are not designated "noxious." Native plant species that may be of a management concern, such as poisonous plants or desert shrub and subshrub species, are not considered priorities for noxious weed work or funding.

Nutrient Cycle: The process of use, release, and reuse of elements by plants and animals through uptake by incorporation into and decomposition of organisms. Elements involved in nutrient cycling remain in the vicinity of the earth's surface.

O

Objectives: The planned results to be achieved within a stated time period. Objectives are subordinate to goals, more narrow in scope, and shorter in range. Objectives must specify time periods for completion, and products or achievements that are measurable.

Off-Highway Vehicle (OHV) or Off-Road Vehicle: Any motorized vehicle capable of, or designed for, travel on or immediately over land, water, or other natural terrain, excluding: (1) any nonamphibious registered motorboat; (2) any military, fire, emergency, or law enforcement vehicle while being used for emergency purposes; (3) any vehicle whose use is expressly authorized by the authorized officer, or otherwise officially approved; (4) vehicles in official use; and (5) any combat or combat support vehicle when used in times of national defense emergencies.

Off-Highway Vehicle (OHV) Designations:

Open: An area where all types of vehicle use is permitted at all times, anywhere in the area subject to the operating regulations and vehicle standards set forth in 43 CFR Subparts 8341 and 8342.

Limited Area: An area restricted at certain times, in certain areas, and/or to certain vehicular use. These restrictions may be of any type, but can generally be accommodated within the following type of categories: Numbers of vehicles; types of vehicles; time or season of vehicle use; permitted or licensed use only; use on existing roads and trails; use on designated roads and trails; and other restrictions. In areas limited to designated routes, motorized uses are allowed on the designated routes, with reasonable use of the shoulder and immediate roadside, allowing for vehicle passage, emergency stopping, or parking, unless otherwise posted.

Closed: An area where off-road vehicle use is prohibited. Use of off-road vehicles in closed areas may be allowed for certain reasons; however, such use shall be made only with the approval of the authorized officer.

Ozone (O_3): A gas that is a variety of oxygen. The oxygen gas found in the air consists of two oxygen atoms stuck together; this is molecular oxygen. Ozone consists of three oxygen atoms stuck together into an ozone molecule. Ozone occurs in nature; it produces the sharp smell you notice near a lightning strike. High concentrations of ozone gas are found in a layer of the atmosphere—the stratosphere—high above the earth. Stratospheric ozone shields the earth against harmful rays from the sun, particularly ultraviolet B. Smog's main component is ozone; this ground-level ozone is a product of reactions among chemicals produced by burning coal, gasoline, and other fuels, and chemicals found in products including solvents, paints, hairsprays, etc.

P

Particulate Matter: Includes dust, soot, and other tiny bits of solid materials that are released into and move around in the air. Particulates are produced by many sources, including burning of diesel fuels by trucks and buses, incineration of garbage, mixing and application of fertilizers and pesticides, road construction, industrial processes such as steel making, mining operations, agricultural burning (field and slash burning), and operation of fireplaces and woodstoves.

Permit: Permits are one of three forms of a land use authorization (the others are leases and easements). Permits are short-term, revocable authorizations to use public lands for specific purposes that involve either little or no land improvement, construction, or investment that can be amortized within the term of the permit. A permit conveys no possessory interest. The permit is renewable at the discretion of the authorized officer and may be revoked in accordance with its terms and applicable regulations.

pH: A number used by chemists to express the acidity of solutions, including water. A pH value lower than 7 indicates an acidic solution, a value of 7 is neutral, and a value of higher than 7 indicates an alkaline solution. Most groundwater in the United States has pH values ranging from about 6.0 to 8.5.

Planning Area: As used in this document, includes all land within the planning area boundaries regardless of jurisdiction or ownership.

Preference: Grazing preference or preference means a superior or priority position against others for the purpose of receiving a grazing permit or lease. This priority is attached to base property owned or controlled by the permittee or lessee.

Prevention of Significant Deterioration (air): A Clean Air Act requirement to include a permit review process applicable to the construction and operation of new and modified stationary sources in attainment areas.

Primary Access Points: Areas provided to accommodate parking and staging activities at or near the Monument entrance. These sites may have parking for trailer towing vehicles, informational kiosks and associated minor improvements consistent with the Resource Management Zone.

Primitive Recreation: Includes non-motorized, nonmechanical forms of recreation, such as hiking or bird watching, in areas without or with minimal developed recreation facilities.

Primitive Road: A linear route managed for four-wheel drive or high-clearance vehicles. Primitive roads do not normally meet any BLM road design standards.

Primitive Routes: Any transportation linear feature located within a WSA or lands with wilderness characteristics designated for protection by a land use plan and not meeting the wilderness inventory road definition.

Priority Habitat: Unique vegetation type with a dominant plant species of primary importance to wildlife. A priority habitat may be described as an area having unique or significant value to many wildlife species, a successional stage, or a specific habitat element (e.g., columnar cacti) that is of key value to wildlife.

Q

R

Range Improvement: An authorized physical modification or treatment designed to improve production of forage; change vegetation composition; control patterns of use; provide water; stabilize soil and water conditions; and restore, protect and improve the condition of rangeland ecosystems to benefit livestock, wild horses, burros, fish and wildlife. The term includes, but is not limited to, the structure, treatment projects, and use of mechanical devices, or modifications achieved through mechanical means.

Rangeland: A type of land on which the native vegetation or natural potential consists predominantly of grasses, grass-like plants, forbs, or shrubs. Rangeland includes lands revegetated naturally or artificially to provide a plant cover that is managed like native vegetation. Rangelands may consist of natural grasslands, savannas, shrub lands, most deserts, tundra, alpine communities, coastal marshes, and wet meadows.

Reclamation: Rehabilitation of a disturbed area to make it acceptable for designated use. This normally involves regrading, replacement of topsoil, revegetation and other work necessary to restore it for use.

Resource Management Plan (RMP): A land use plan that establishes land use allocations, multiple-use guidelines, and management objectives for a given planning area. The RMP planning system has been used by the BLM since 1980.

Restore Habitat: Return the quantity and quality of habitat to a previous, naturally occurring condition, most often a baseline considered suitable and sufficient to support self-sustaining wildlife populations.

Restore/Restoration: The process of returning an ecosystem as closely as possible to the pre-disturbance condition and function. Note: restoration involves restoring a site to a specific point in time.

Revegetate: The replacement of vegetation into a disturbed area with little or no concern for ecological conditions or functions.

Right-of-Way: Land authorized to be used or occupied for the construction, operation, maintenance, and termination of a project, pursuant to a right-of-way authorization.

Riparian: Situated on or pertaining to the bank of a river, stream, or other body of water, including areas of transition between permanently saturated wetlands and upland areas. These areas exhibit vegetation or physical characteristics reflective of permanent surface or subsurface water influence.

Riparian Habitat: Riparian habitat is an ecological transition between an in-stream community of plants and animals and the adjacent, upland community. Normally the term is used for perennial, or year-round flowing streams. However, in Arizona the term xeroriparian habitat is used to describe the distinct plant and animal communities that concentrate around dry washes and are sustained by desert storms.

Road: Linear route declared a road by the owner, managed for use by low-clearance vehicles having four or more wheels, and maintained for regular and continuous use.

Route: Multiple roads, trails and primitive roads; a group or set of roads, trails, and primitive roads that represents the BLM transportation system. Generically, components of the transportation system are described as 'routes.'

S

Salable Minerals: Minerals that may be sold under the Material Sale Act of 1947, as amended. Included are common varieties of sand, stone, gravel, and clay.

Saturated: When referring to soil, the maximum amount of water that can be held either when the soil is frozen or the spaces between the soil particles are filled with water. Any additional seepage over saturated soil will result in runoff.

Scale: The proportionate size relationship between an object and the surroundings in which it is placed.

Scenic Quality: The relative worth of a landscape from a visual perception point of view. Seven factors (landform, vegetation, water, color, adjacent scenery, scarcity, and cultural modifications) are examined to evaluate the scenic quality of a landscape. The relative scenic quality (A, B, or C) assigned a landscape by applying the scenic quality evaluation key factors; scenic quality A being the highest rating, B a moderate rating, and C the lowest rating. The scenic quality-rating unit is defined as a portion of the landscape, which displays primarily homogenous visual characteristics of the basic landscape features (land and water form, vegetation, and structures).

Scoping: An early and open process for determining the scope of issues to be addressed in an environmental impact statement and for identifying the significant issues related to a proposed action.

Sensitive and Fragile Soils: Soils that are located on steep topography, are highly susceptible to wind and/or water erosion, have high potential for mass failure, are shallow to bedrock, are saline or alkaline, or soils that are virtually impossible or extremely difficult to reclaim.

Sensitive Species: Species not yet officially listed but that are undergoing status review for listing on the U.S. Fish and Wildlife Service's official threatened and endangered list; species whose populations are small and widely dispersed or restricted to a few localities; and species whose numbers are declining so rapidly that official listing may be necessary.

Solid Minerals: Solid minerals can be categorized into four types: (1) coal, (2) leasable minerals, (3) hardrock (locatable) minerals, and (4) common variety materials.

Solitude: Occurs in areas where the sights, sounds, and evidence of human activity are rare or infrequent and where visitors can be isolated, alone, or secluded from others.

Special Status Species: Plant or animal species listed as threatened, endangered, candidate, or sensitive by State governments or the Federal government.

Soil Compaction: The pressing of soil particles closer together, reducing the soil's capacity to hold organic matter, organisms, water, and air, all of which are essential for optimal plant growth.

Standards: Goals for the desired condition of the biological and physical components and characteristics of rangelands. Standards (1) are measurable and attainable; and (2) comply with various Federal and State statutes, policies, and directives applicable to BLM rangelands.

Structural Diversity: The diversity of the composition, abundance, spacing, and other attributes of plants in a community.

Sulfur Dioxide (SO_2): A gas produced by burning coal, most notably in power plants. Some industrial processes, such as production of paper and smelting of metals, produce sulfur dioxide. Sulfur dioxide is closely related to sulfuric acid, a strong acid. Sulfur dioxide plays an important role in the production of acid rain.

Surface Disturbance: The physical disturbance, which alters the structure and composition of vegetation and topsoil/ subsoil.

Surface Water: All bodies of water on the surface of the earth and open to the atmosphere, such as rivers, lakes, reservoirs, ponds, seas, and estuaries.

Sustained Yield: The concept of steady-state management of timber, wildlife, and many other natural resources. Consumption is matched by production.

T

Texture: The aggregation of small forms or color mixtures into a continuous surface pattern; the aggregated parts are enough that they do not appear as discrete objects in the composition of the scene.

Total Dissolved Solids: The total quantity (reported in milligrams per liter) of dissolved materials in water.

Toxicity: A characteristic defining a hazardous waste. Toxicity refers to the ability of a material to produce injury or disease on exposure, ingestion, inhalation, and assimilation by a living organism.

Trail: Linear route managed for human powered, stock, or off-highway vehicle forms of recreation or for historic or heritage values. Trails are not generally managed for use by four-wheel drive or high-clearance vehicles.

Transportation Asset: Term utilized to describe roads, primitive roads, and trails that comprise the transportation system. Transportation assets are designated in transportation plans, with a defined functional class, maintenance intensity, and type of access depending on their purpose and use, with maintenance standards for their physical and geometric requirements.

Trend: The direction of change over time, either toward or away from desired management objectives.

U

Uplands: Land at a higher elevation than the alluvial plain or low stream terrace; all lands outside the riparian-wetland and aquatic zones.

V

Valid Existing Rights: Locatable mineral development rights (mining claims) that existed as of the date of the Monument Proclamation (June 9, 2000) are presumed are presumed to be valid unless they fail to meet the test of discovery of a valuable mineral required under the Mining Law. Determining the validity of mining claims located on segregated lands requires the BLM to conduct a valid existing rights determination. These valid existing rights may be forfeit if the claimant fails to timely pay annual claim maintenance fees or timely file a maintenance fee waiver certificate.
Where lands covered by mining claims are withdrawn from future entries "subject to valid existing rights," the withdrawal attaches, as of the date of the segregation or withdrawal, to all land described by the withdrawal, including the lands covered by the mining claims. So as long as the claims are valid, the withdrawal is ineffective as to the lands embraced by the claims.

Such lands are subject to the valid existing rights of the claimants, and in order to have valid existing rights, a claim must contain a discovery as of the date of the withdrawal as well as at the date of any validity determination. The claimant must demonstrate that he/she has made a discovery in each mining claim. To do this he/she must meet both the Prudent Man Rule and the Marketability Tests. The claimant must have made a physical exposure of the valuable mineral deposit within the limits of each claim. These exposures must contain mineralization of sufficient quantity and quality to justify a prudent man in expending both labor and money in developing a paying mine. U.S.v. Feezor, 74 IBLA 56, 90 I.D. 262 (1983). If a discovery is not physically exposed within the limits of the claim before the date of withdrawal, the claim is void. U.S. Gunsight Mining Co., 5 IBLA 62 (1972).

Anyone intending to develop mineral resources on the public lands must submit a mining plan of operations, and obtain Bureau of Land Management's (BLM) approval, 43 CFR 3809.11. The BLM policy is that validity examinations are not automatically performed when a mining plan of operation is filed, unless the mining operation is within an area that is withdrawn or segregated, 43 CFR 3809.100; or a mineral examination report is required to determine if the minerals are uncommon varieties, 43 CFR 3809.101.

If a claimant files a mining plan of operations pursuant to 43 CFR 38009.11, BLM will not approve a plan of operations until BLM has prepared a mineral examination report to determine whether the mining claim was valid before the withdrawal, and whether it remains valid. If the Authorized Officer makes the decision to conduct a mineral examination under 43 CFR 3809.100(a), the proponent will be charged the cost recovery for the examination as required by 43 CFR 3800.5(b).

A validity examination determines whether a prudent person "would be justified in the further expenditure of his labor and means, with a reasonable prospect of success, in developing a valuable mine." Chrisman v. Miller, 197 U.S. 313, 322 (1905). A validity examination is a process whereby the federal government verifies whether the claimant has discovered a valuable mineral deposit and, otherwise, has a valid mining claim.

Validity examinations consist of (1) an administrative review of the Bureau's mining claim records to determine whether the claimant has complied with all pertinent laws and regulations, (2) a mineral examination of the claim site (fieldwork) to assess whether the claimant has discovered an economically valuable mineral deposit, and (3) a detailed mineral report prepared by the examiner.

If an examiner finds that a claimant has not complied with requirements or that the mineral deposit on a claim cannot be mined economically, the BLM may seek to have the claim eliminated by declaring the claim invalid meaning that the claim can be legally extinguished. If the claim(s) are found to be valid BLM would review and process the plan of operations in accordance with 43 CFR 3809.

Viable: A [wildlife] population that has the estimated numbers and distribution of reproductive individuals to ensure its continued existence.

Viewshed: The landscape that can be directly seen under favorable atmospheric conditions from a viewpoint or along a transportation corridor.

Visual Resources: The visible physical features on a landscape (e.g., land, water, vegetation, animals, structures, and other features). Visual resources are managed by inventory and planning actions taken to identify resource values and to establish objectives for managing those values; and the management actions taken to achieve the visual management objectives.

W

Watershed: The land area that drains water to a particular stream, river, or lake. It is a land feature that can be identified by tracing a line along the highest elevations between two areas on a map, often a ridge.

Water Quality: The chemical, physical, and biological characteristics of water in respect to its suitability for a particular purpose.

Weed: A non-native plant that disrupts or has the potential to disrupt or alter the natural ecosystem function, composition, and diversity of the site it occupies. Its presence deteriorates the health of the site, it makes efficient use of natural resources difficult, and it may interfere with management objectives for that site.

Wetlands: Those areas that are inundated by surface or groundwater with a frequency sufficient to support, and under normal circumstances do or will support, a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands

generally include swamps, marshes, bogs, and similar areas (e.g., sloughs, potholes, wet meadows, river overflow areas, mudflats, natural ponds).

Wilderness Characteristics: These attributes include the area's size, its apparent naturalness, and outstanding opportunities for solitude or a primitive and unconfined type of recreation. They may also include supplemental values. Lands with wilderness characteristics are those lands that have been inventoried and determined by the BLM to contain wilderness characteristics as defined in section 2 (c) of the Wilderness Act.

Wildland Urban Interface: The area where developed and undeveloped lands meet.

X

Xeroriparian Habitat: The distinct plant and animal communities that concentrate around dry washes and are sustained by desert storms.

Y

Z

CHAPTER 3.0 LIST OF PREPARERS

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APPENDICES

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APPENDIX A

PRESIDENTIAL PROCLAMATION

Monday, June 12, 2000

Volume 36, Issue 23; ISSN: 0511-4187

Proclamation 7320 — Establishment of the Ironwood Forest National Monument

William J. Clinton

June 9, 2000

By the President of the United States of America

A Proclamation

The landscape of the Ironwood Forest National Monument is swathed with the rich, drought-adapted vegetation of the Sonoran Desert. The monument contains objects of scientific interest throughout its desert environment. Stands of ironwood, palo verde, and saguaro blanket the monument floor beneath the rugged mountain ranges, including the Silver Bell Mountains. Ragged Top Mountain is a biological and geological crown jewel amid the depositional plains in the monument.

The monument presents a quintessential view of the Sonoran Desert with ancient legume and cactus forests. The geologic and topographic variability of the monument contributes to the area's high biological diversity. Ironwoods, which can live in excess of 800 years, generate a chain of influences on associated understory plants, affecting their dispersal, germination, establishment, and rates of growth. Ironwood is the dominant nurse plant in this region, and the Silver Bell Mountains support the highest density of ironwood trees recorded in the Sonoran Desert. Ironwood trees provide, among other things, roosting sites for hawks and owls, forage for desert bighorn sheep, protection for saguaro against freezing, burrows for tortoises, flowers for native bees, dense canopy for nesting of white-winged doves and other birds, and protection against sunburn for night blooming cereus.

The ironwood-bursage habitat in the Silver Bell Mountains is associated with more than 674 species, including 64 mammalian and 57 bird species. Within the Sonoran Desert, Ragged Top Mountain contains the greatest richness of species. The monument is home to species federally listed as threatened or endangered, including the Nichols turk's head cactus and the lesser long-nosed bat, and contains historic and potential habitat for the cactus ferruginous pygmy-owl. The desert bighorn sheep in the monument may be the last viable population indigenous to the Tucson basin.

In addition to the biological and geological resources, the area holds abundant rock art sites and other archeological objects of scientific interest. Humans have inhabited the area for more than 5,000 years. More than 200 sites from the prehistoric Hohokam period (600 A.D. to 1450 A.D.) have been recorded in the area. Two areas within the monument have been listed on the National Register of Historic Places, the Los Robles Archeological District and the Cocoraque Butte Archeological District. The archeological artifacts include rhyolite and brown chert chipped stone, plain and decorated ceramics, and worked shell

from the Gulf of California. The area also contains the remnants of the Mission Santa Ana, the last mission constructed in Pimeria Alta.

Section 2 of the Act of June 8, 1906 (34 Stat. 225, 16 U.S.C. 431), authorizes the President, in his discretion, to declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest that are situated upon the lands owned or controlled by the Government of the United States to be national monuments, and to reserve as a part thereof parcels of land, the limits of which in all cases shall be confined to the smallest area compatible with the proper care and management of the objects to be protected. Whereas it appears that it will be in the public interest to reserve such lands as a national monument to be known as the Ironwood Forest National Monument:

Now, Therefore, I, William J. Clinton, President of the United States of America, by the authority vested in me by section 2 of the Act of June 8, 1906 (34 Stat. 225, 16 U.S.C. 431), do proclaim that there are hereby set apart and reserved as the Ironwood Forest National Monument, for the purpose of protecting the objects identified above, all lands and interests in lands owned or controlled by the United States within the boundaries of the area described on the map entitled "Ironwood Forest National Monument" attached to and forming a part of this proclamation. The Federal land and interests in land reserved consist of approximately 128,917 acres, which is the smallest area compatible with the proper care and management of the objects to be protected.

All Federal lands and interests in lands within the boundaries of this monument are hereby appropriated and withdrawn from all forms of entry, location, selection, sale, or leasing or other disposition under the public land laws, including but not limited to withdrawal from location, entry, and patent under the mining laws, and from disposition under all laws relating to mineral and geothermal leasing, other than by exchange that furthers the protective purposes of the monument.

For the purpose of protecting the objects identified above, the Secretary of the Interior shall prohibit all motorized and mechanized vehicle use off road, except for emergency or authorized administrative purposes.

Lands and interests in lands within the proposed monument not owned by the United States shall be reserved as a part of the monument upon acquisition of title thereto by the United States. The Secretary of the Interior shall manage the monument through the Bureau of Land Management, pursuant to applicable legal authorities, to implement the purposes of this proclamation. The Secretary of the Interior shall prepare a transportation plan that addresses the actions including road closures or travel restrictions, necessary to protect the objects identified in this proclamation.

The establishment of this monument is subject to valid existing rights. Nothing in this proclamation shall be deemed to enlarge or diminish the jurisdiction of the State of Arizona with respect to fish and wildlife management.

This proclamation does not reserve water as a matter of Federal law. Nothing in this reservation shall be construed as a relinquishment or reduction of any water use or rights reserved or appropriated by the United States on or before the date of this proclamation. The Bureau of Land Management shall work with appropriate State authorities to ensure that any water resources needed for monument purposes are available. Nothing in this proclamation shall be deemed to enlarge or diminish the rights of any Indian tribe.

Laws, regulations, and policies followed by the Bureau of Land Management in issuing and administering grazing permits or leases on all lands under its jurisdiction shall continue to apply with regard to the lands in the monument.

Nothing in this proclamation shall be deemed to revoke any existing withdrawal, reservation, or appropriation; however, the national monument shall be the dominant reservation.

Warning is hereby given to all unauthorized persons not to appropriate, injure, destroy, or remove any feature of this monument and not to locate or settle upon any of the lands thereof. In Witness Whereof, I have hereunto set my hand this ninth day of June, in the year of our Lord two thousand, and of the Independence of the United States of America the two hundred and twenty-fourth.

William J. Clinton

[Filed with the Office of the Federal Register, 10:47 a.m., June 12, 2000]

NOTE: This proclamation will be published in the Federal Register on June 13.

APPENDIX B

CONSERVATION MEASURES

Conservation Measures from the Lesser Long-nosed Bat Recovery Plan

BLM will manage public land within the IFNM in accordance with the following conservation measures for the lesser long-nosed bat:

1. Continue protecting roost sites and evaluate the need for and implement protection for food plants.
2. Monitor all major roosts in Arizona, New Mexico, and Mexico once a year.
3. Continue surveying for additional roosts in the United States and Mexico.
4. Develop and conduct a public education and information campaign in Arizona, New Mexico, and Mexico on the beneficial aspects of bats in general and the lesser long-nosed bat specifically.
5. Conduct critical research on population census techniques, physical requirements for roosts, foraging ranges of roosts, reproduction and mating systems and other life history and habitat questions.

Conservation Measures from Desert Tortoise Habitat Management on the Public Lands: A Rangewide Plan

The following management objectives were developed to help BLM meet its overall goal for preserving and managing tortoises and their habitats.

Objective 1. Develop increased awareness of tortoise resources on the public land.

Objective 2. Complete and maintain on a continuing basis an inventory and monitoring program for tortoise populations and habitats to assist in making management decisions on the public lands.

Objective 3. Develop and maintain a monitoring program specifically for land-use activities that adversely affect tortoise habitats. This program will, be used in the analysis of and response to the cumulative impacts of land-use decisions on tortoise habitats.

Objective 4. Comply fully with the Endangered Species Act of 1973, as amended, as it relates to tortoise population and habitat management on the public lands.

Objective 5. Develop and maintain effective coordination and cooperation with outside agencies and Bureau constituents concerning tortoise population and habitat management.

Objective 6. Conduct research and studies sufficient to develop and document the knowledge and techniques needed to ensure the viability of tortoise populations and habitats in perpetuity.

Objective 7. Manage the public lands, on a continuing basis, to protect the scientific, ecological, and environmental quality of tortoise habitats consistent with the category goals and other objectives of

the Rangewide Plan. This implies management for the existence of an adequate number of healthy and vigorous tortoise populations of sufficient size and resilience to withstand the most severe environmental impacts, and with appropriate sex and age ratios and recruitment rates to maintain viable populations in perpetuity.

Objective 8. When the need is identified through the BLM planning system, acquire and/or consolidate, under BLM administration, management units with high tortoise habitat values, and mitigate the effects of issuing rights-of-way across public lands.

Objective 9. Ensure that off-highway vehicle use in desert tortoise habitats is consistent with the category goals, objectives, and management actions of the Rangewide Plan.

Objective 10. Ensure that livestock use is consistent with the category goals, objectives, and management actions of the Rangewide Plan. This may include limiting, precluding, or deterring livestock use as documented in site-specific plans.

Objective 11. Provide for herd management for wild horses and burros which is consistent with the category goals, objectives, and management actions of the Rangewide Plan. This may include limiting or precluding wild horse and/or burro use, as appropriate. (No wild horses or burros exist within the IFNM.)

Objective 12. Provide for management of wildlife other than desert tortoises on the public lands consistent with the category goals, objectives, and management actions of the Rangewide Plan.

Objective 13. Cooperate with state wildlife agencies and the Animal and Plant Health Inspection Service to effect appropriate types and levels of predator control, to meet the category goals, objectives, and management actions of the Rangewide Plan. This will be considered only where predation is interfering with maintaining viable tortoise populations.

Objective 14. Manage the BLM's energy and minerals program in a manner consistent with the category goals, objectives, and management actions of the Rangewide Plan.

~~Conservation Measures from the Arizona Statewide Land Use Plan Amendment for Fire, Fuels,~~ and Air Quality Management

The following conservation measures for fire management activities are common to all alternatives and will be implemented for all authorized management activities. These conservation measures are intended to provide State-wide consistency in reducing or eliminating the effects of management actions on Federally endangered, threatened, proposed, and candidate species, as well as species included on the Wildlife Species of Concern in Arizona and BLM Arizona Sensitive Species lists.

Wildland Fire Suppression

The following conservation measures will be implemented during fire suppression operations unless firefighter or public safety, or the protection of property, improvements, or natural resources, render them infeasible during a particular operation. Each conservation measure has been given an alphanumerical designation for organizational purposes (e.g., FS-1). Necessary modifications of the conservation measures or impacts to Federally protected species and habitat during fire suppression operations will be documented by the Resource Advisor, and coordinated with the USFWS.

- **FS-1.** Protect known locations of habitat occupied by Federally listed species. Minimum Impact Suppression Tactics (M.I.S.T.) will be followed in all areas with known Federally protected species or habitat [*Interagency Standards for Fire and Aviation Operations 2003*, or updates].
- **FS-2.** Resource Advisors will be designated to coordinate natural resource concerns, including Federally protected species. They will also serve as a field contact representative responsible for coordination with the USFWS. Duties will include identifying protective measures endorsed by the Field Office Manager, and delivering these measures to the Incident Commander; surveying prospective campsites, aircraft landing and fueling sites; and performing other duties necessary to ensure adverse effects to Federally protected species and their habitats are minimized. On-the-ground monitors will be designated and used when fire suppression activities occur within identified occupied or suitable habitat for Federally protected species.
- **FS-3.** All personnel on the fire (firefighters and support personnel) will be briefed and educated by Resource Advisors or designated supervisors about listed species and the importance of minimizing impacts to individuals and their habitats. All personnel will be informed of the conservation measures designed to minimize or eliminate take of the species present. This information is best identified in the incident objectives.
- **FS-4.** Permanent road construction will not be permitted during fire suppression activities in habitat occupied by Federally protected species. Construction of temporary roads is approved only if necessary for safety or the protection of property or resources, including Federally protected species habitat. Temporary road construction will be coordinated with the USFWS, through the Resource Advisor.
- **FS-5.** Crew camps, equipment staging areas, and aircraft landing and fueling areas will be located outside of listed species habitats, and preferably in locations that are disturbed. If camps must be located in listed species habitat, the Resource Advisor will be consulted to ensure habitat damage and other effects to listed species are minimized and documented. The Resource Advisor will also consider the potential for indirect effects to listed species or their habitat from the siting of camps and staging areas (e.g., if an area is within the water flow pattern, there may be indirect effects to aquatic habitat or species located off-site).

Species Specific Conservation Measures

The following species-specific conservation measures will be applied during wildfire suppression to the extent possible, and will be required during fuels treatment activities. Necessary modifications of the conservation measures or impacts to Federally protected species and habitat during fire suppression operations will be documented by the Resource Advisor, and coordinated with the USFWS.

Cactus ferruginous pygmy-owl

- **FP-1.** Treatment of riparian habitat, Sonoran desert/desertscrub, or mesquite-invaded grasslands under 4,000 feet in elevation that may support nesting cactus ferruginous pygmy owls will only occur during the non-nesting season of August 1 to January 31, unless pre-project surveys indicate the area does not support pygmy-owls or mitigation plans approved by the USFWS have alleviated negative consequences.

- **FP-2.** Develop mitigation plans in coordination with the USFWS for fuels treatment projects (mechanical, chemical, or biological treatments) that may adversely affect cactus ferruginous pygmy-owls or their habitat. Mitigation plans will be approved by the USFWS.
- **FP-3 (Recommended).** To the extent possible, maintain habitat features necessary to support breeding populations of the pygmy-owl within their historic range and review ongoing fire management activities for effects on essential habitat features needed by cactus ferruginous pygmy-owls. Modify activities, where necessary, to sustain the overall suitability of the habitat for the owls. Priority will be given to activities in or near occupied or recently (w/in the last 10 years) occupied habitat.

Flowering Plants

The following conservation measures for known locations and unsurveyed habitat of all Federally protected plant species within the planning area will be implemented during fire suppression to the extent possible, and are mandatory for fuel treatment activities:

- **PL-1.** Known locations and potential habitat for plant populations will be mapped to facilitate planning for vegetation treatments, and to ensure protection of these populations during fire suppression.
- **PL-2.** BLM will coordinate with USFWS to delineate buffer areas around plant populations prior to vegetation treatment activities. BLM will coordinate with USFWS during any emergency response to ensure protection of plant populations from fire and fire suppression activities.
- **PL-3.** During fire suppression, in habitat occupied by federally protected plant species, no staging of equipment or personnel will be permitted within 100 meters of identified individuals or populations, nor will off-road vehicles be allowed within the 100- meter buffer area, unless necessary for firefighter or public safety or the protection of property, improvements, or other resources (see **FS-7**). One of the primary threats to many of these plant species is trampling/crushing from personnel and vehicles.

Lesser long-nosed bat

- **LB-1.** Instruct all crew bosses (wildfire suppression and mechanical, chemical, biological treatments) in the identification of agave and columnar cacti and the importance of their protection.
- **LB-2.** Prior to implementing any fuels treatment activities (mechanical, chemical, biological treatments), preproject surveys will be conducted for paniculate agaves and saguaros that may be directly affected by fuels management activities.
- **LB-3.** Protect long-nosed bat forage plants—saguaros and high concentrations of agaves—from wildfire and fire suppression activities, and from modification by fuels treatment activities (mechanical, chemical, biological treatments), to the greatest extent possible. Agave concentrations are contiguous stands or concentrations of more than 20 plants per acre. Avoid driving over plants, piling slash on top of plants, and burning on or near plants. Staging areas for fire crews or helicopters will be located in disturbed sites, if possible.

- **LB-4.** No seeding/planting of nonnative plants will occur in any wildfire rehabilitation site or fuels treatment site with paniculate agaves or saguaros.
- **LB-5.** A mitigation plan will be developed by the Bureau in coordination with the USFWS for fuels management projects (mechanical, chemical, biological treatments) within 0.5 mi of bat roosts or in areas that support paniculate agaves or saguaros. The mitigation plan will ensure that effects to bat roosts and forage plants are minimized and will include monitoring of effects to forage plants. The plan will be approved by the USFWS.
- **LB-6 (Recommended).** BLM personnel will examine concentrations of agaves (including shindagger (*A. schottii*) within each proposed fuels treatment area, and protect from treatments any significant concentrations of agaves that appear to be amidst fuel loads that could result in mortality greater than 20 percent (>50% for *A. schottii).* BLM personnel will use their best judgment, based on biological and fire expertise, to determine which significant agave stands are prone to mortality greater than 20 percent (>50% for *A. schottii*).

Desert tortoise, Sonoran population

Implement the conservation measures for desert tortoise, as appropriate, for fire suppression and fuels treatment activities (mechanical, chemical, biological treatments), excluding requirements for notification to USFWS.

Conservation Measures for Desert tortoise

- **DT-1.** Take appropriate action to suppress all wildfires in desert tortoise habitat, based on preplanned analysis and consistent with land management objectives, including threats to life and property. Full suppression activities will be initiated within key desert tortoise habitat areas identified in site-specific Fire Management Plans.
- **DT-2.** Suppress all wildfires in desert tortoise habitat with minimum surface disturbance, in accordance with the guidelines in Duck et al. (1995) and the 1995 programmatic BO on fire suppression on the Arizona Strip (2-21-95-F-379).
- **DT-3.** Pre-position suppression forces in critical areas during periods of high fire dangers.
- **DT-4.** As soon as practical, all personnel involved in wildfire suppression (firefighters and support personnel) will be briefed and educated about desert tortoises and the importance of protecting habitat and minimizing take, particularly due to vehicle use. Fire crews will be briefed on the desert tortoise in accordance with Appendix II of Duck et al. (1995).
- **DT-5.** If wildfire or suppression activities cannot avoid disturbing a tortoise, the Resource Advisor or monitor will relocate the tortoise, if safety permits. The tortoise will be moved into the closest suitable habitat within 2 miles of the collection site that will ensure the animal is reasonably safe from death, injury, or collection associated with the wildfire or suppression activities. The qualified biologist will be allowed some discretion to ensure that survival of each relocated tortoise is likely. If the extent or direction of movement of a fire makes sites within 2 miles of the collection site unsuitable or hazardous to the tortoise or biologists attempting to access the area, the tortoise may be held until a suitable site can be found or habitat is safe to access and not in immediate danger of burning. The Resource Advisor will contact the USFWS Arizona Ecological Services Field Office (AESFO) as soon as possible concerning disposition of

any animals held for future release. Desert tortoises will not be placed on lands outside the administration of the Federal government without the written permission of the landowner. Handling procedures for tortoises, including temporary holding facilities and procedures, will adhere to protocols outlined in Desert Tortoise Council (1994).

- **DT-6.** Upon locating a dead, injured, or sick desert tortoise, initial notification must be made to the appropriate USFWS Law Enforcement Office within three working days of its finding. Written notification must be made within five calendar days and include the date, time, and location of the animal, a photograph, and any other pertinent information. The notification will be sent to the Law Enforcement Office with a copy to the AESFO.
- **DT-7.** Care must be taken in handling sick or injured animals to ensure effective treatment and care, and in handling dead specimens to preserve biological material in the best possible state. If possible, the remains of intact desert tortoises will be placed with educational or research institutions holding appropriate State and Federal permits. If such institutions are not available, the information noted above will be obtained and the carcass left in place. Arrangements regarding proper disposition of potential museum specimens will be made with the institution prior to implementing the action. Injured animals will be transported to a qualified veterinarian by an authorized biologist. Should any treated desert tortoise survive, the USFWS will be contacted regarding final disposition of the animal.
- **DT-8.** The Resource Advisor or monitor(s) will maintain a record of all desert tortoises encountered during fire suppression activities. This information will include for each desert tortoise: (1) locations and dates of observation; (2) general condition and health, including injuries and state of healing, and whether animals voided their bladders; (3) location moved from and to; and (4) diagnostic markings (i.e., identification numbers of marked lateral scutes). No notching of scutes or replacement of fluids with a syringe is authorized.
- **DT-9.** Prior to moving a vehicle, personnel will inspect under the vehicle for tortoises. If a tortoise is found under the vehicle, the tortoise will be allowed to move away from the vehicle on its own accord, if possible. Otherwise an individual will move the tortoise to a safe locality in accordance with **FS-2** and **DT-5**.
- **DT-10.** Off-road vehicle activity will be restricted to the minimum necessary to suppress wildfires. Vehicles will be parked as close to roads as possible, and vehicles will use wide spots in roads or disturbed areas to turn around. Whenever possible, a biologist or crewperson trained to recognize tortoises and their shelter sites will precede any vehicle traveling off-road to direct the driver around tortoises and tortoise burrows. Whenever possible, local fire-fighting units will provide direction and leadership during off-road travel because of their expertise and knowledge of area sensitivities.
- **DT-11.** Fire-related vehicles will drive slow enough to ensure that tortoises on roads can be identified and avoided.
- **DT-12.** Fire crews or rehabilitation crews will, to the extent possible, obliterate off-road vehicle tracks made during fire suppression in tortoise habitat, especially those of tracked vehicles, to reduce future use.
- **DT-13.** To the maximum extent practical, campsites, aircraft landing/fueling sites, and equipment staging areas will be located outside of desert tortoise habitat or in previously disturbed areas. If

such facilities are located in desert tortoise habitat, 100 percent of the site will be surveyed for desert tortoises by a qualified biologist approved by BLM, whenever feasible. Any tortoises found will be moved to a safe location in accordance with **FS-2** and **DT-5**. All personnel located at these facilities will avoid disturbing active tortoise shelter sites.

- **DT-14.** Elevated predation by common ravens or other predators attributable to fire suppression activities will be reduced to the maximum extent possible. Work areas, including campsites, landing/fueling sites, staging areas, etc. will be maintained in a sanitary condition at all times. Waste materials at those sites will be contained in a manner that will avoid attracting predators of desert tortoises. Waste materials will be disposed of at an appropriate waste disposal site. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.
- **DT-15.** Backfiring operations are permitted where necessary in desert tortoise habitat. Burning out patches of identified habitat within or adjacent to burned areas is not permitted as a standard fire suppression measure unless necessary for firefighter or public safety or to protect property, improvements, or natural resources.
- **DT-16.** Use of foam or retardant is authorized within desert tortoise habitat.
- **DT-17.** Rehabilitation of vegetation in tortoise habitat will be considered, including seeding, planting of perennial species, etc.
- **DT-18.** Recovery of vegetation will be monitored, including establishing and monitoring paired plots, inside and outside burned areas in tortoise habitat. Recovery plans will be coordinated with the USFWS and AGFD.
- **DT-19.** The effectiveness of wildfire suppression activities and desert tortoise conservation measures will be evaluated after a wildfire. Procedures will be revised as needed.

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APPENDIX C

ARIZONA GUIDELINES FOR GRAZING ADMINISTRATION

The Arizona Guidelines for Grazing Administration are a series of management practices used to ensure that grazing activities meet the Land Health Standards. These guidelines apply to management of all public lands, and are therefore common to all alternatives presented in this document.

1-1. Management activities will maintain or promote ground cover that will provide for infiltration, permeability, soil moisture storage, and soil stability appropriate for the ecological sites within management units. The ground cover will maintain soil organisms and plants and animals to support the hydrologic and nutrient cycles, and energy flow. Ground cover and signs of erosion are surrogate measures for hydrologic and nutrient cycles and energy flow.

1-2. When grazing practices alone are not likely to restore areas of low infiltration or permeability, land management treatments may be designed and implemented to attain improvement.

2-1. Management practices maintain or promote sufficient vegetation to maintain, improve or restore riparian-wetland functions of energy dissipation, sediment capture, groundwater recharge and stream bank stability, thus promoting stream channel morphology (e.g., gradient, width/depth ratio, channel roughness and sinuosity) and functions appropriate to climate and landform.

2-2. New facilities are located away from riparian-wetland areas if they conflict with achieving or maintaining riparian-wetland function. Existing facilities are used in a way that does not conflict with riparian-wetland functions or are relocated or modified when incompatible with riparian-wetland functions.

2-3. The development of springs and seeps or other projects affecting water and associated resources shall be designed to protect ecological functions and processes.

3-1. The use and perpetuation of native species will be emphasized. However, when restoring or rehabilitating disturbed or degraded rangelands, non-intrusive, nonnative plant species are appropriate for use where native species (a) are not available, (b) are not economically feasible, (c) cannot achieve ecological objectives as well as nonnative species, and/or (d) cannot compete with already established nonnative species.

3-2. Conservation of Federal threatened or endangered, proposed, candidate, and other special status species is promoted by the maintenance or restoration of their habitats.

3-3. Management practices maintain, restore, or enhance water quality in conformance with State or Federal standards.

3-4. Intensity, season and frequency of use, and distribution of grazing use will provide for growth and reproduction of those plant species needed to reach desired plant community objectives.

3-5. Grazing on designated ephemeral (annual and perennial) rangeland may be authorized if the following conditions are met:

- ephemeral vegetation is present in draws, washes, and under shrubs and has grown to useable levels at the time grazing begins;
- sufficient surface and subsurface soil moisture exists for continued plant growth; serviceable waters are capable of providing for proper grazing distribution;
- sufficient annual vegetation will remain on site to satisfy other resource concerns;
- watershed, wildlife, wild horses and burros); and monitoring is conducted during grazing to determine if objectives are being met.

3-6. Management practices will target those populations of noxious weeds which can be controlled or eliminated by approved methods.

3-7. Management practices to achieve desired plant communities will consider protection and conservation of known cultural resources, including historical sites, and prehistoric sites and plants of significance to Native American peoples.

APPENDIX D

ROUTE INVENTORY AND EVALUATION

Route Inventory Process

Through the RMP process and associated environmental analysis, BLM will establish a Travel Management Plan (TMP), as directed by the Presidential Proclamation and consistent with BLM policy. The IFNM TMP development process considers long-term monitoring, maintenance, and management of the designated route system to accommodate motorized and non-motorized use for administrative purposes and public use. An inventory of existing travel routes within the IFNM, which serves as the foundation of the TMP, was competed in 2003 under a cooperative project between the School of Renewable Natural Resources at the University of Arizona and the BLM (Gimblett 2004). Existing road and trail networks, route conditions, facilities, improvements and public use areas accessed by the routes (range improvements, wildlife improvements, recreation activity areas, gates, fences, trailheads, and other features) were inventoried and mapped. Inventory procedures were designed to collect information necessary for planning and management for the IFNM. Tools and procedures used to complete the inventory included route identification using aerial photography, on-the-ground verification and data collection with global positioning system (GPS) equipment, and documentation of route conditions. The routes identified in the inventory were later evaluated to identify route designation alternatives for developing the comprehensive TMP. This appendix describes the route evaluation process in detail, lists the criteria that were applied to each route during evaluation, and explains how route designations in this RMP were derived from the route evaluation process.

Description of the Route Evaluation Tree Process©

The BLM in Arizona has adapted the Route Evaluation Tree Process©, designed by Advanced Resource Solutions, Inc., for evaluating and designating routes. The Route Evaluation Tree Process© applies a standard analytical method to existing routes to assist in determining route designations. This process was used to evaluate routes on the IFNM.

The Route Evaluation Tree Process © is a tool designed to assist agency staff with the systematic collection and compilation of data necessary for the thorough evaluation, analysis, and/or designation of both motorized and non-motorized routes. It builds upon the history of past efforts of route designation, assists with addressing various issues and concerns raised by both private and public entities (e.g., planning policy, sensitive resource protection, commercial access needs, recreational access preferences), and helps to assess compliance with state and federal statutory requirements that need to be considered in this type of planning effort. The Route Evaluation Tree Process© helps to build into the land use planning process a means by which to achieve desired outcomes that are specifically tailored to the needs and issues unique to a planning area. It is not a replacement for the NEPA process, documents, or analysis, but rather is a tool designed to assist with the systematic collection of sensitive resource and route-use information that can then be subsequently used to evaluate and designate routes. The Route Evaluation Tree Process © or its software does not make any final decisions regarding route designation. Route designation recommendations are made by agency staff utilizing both data collected during the Route Evaluation Tree Process© and from other agency data sources. Ultimately, any decisions made regarding route designation are made by BLM managers as part of the Record of Decision.

In order to address the many facets of route evaluation and transportation planning, the Route Evaluation Tree Process© is divided into a number of smaller steps that fine-tune the information needed to successfully evaluate and designate routes. The process is illustrated on the "Route Evaluation Tree Process© for Travel Management Planning" at the end of this appendix.

The Route Evaluation Tree©[1] is only one step within the overall Route Evaluation Tree Process©. The process takes a systematic approach to collect data and evaluate routes individually, as well as collectively, based upon statutory requirements and issues raised by the public, and plan alternative themes developed by the BLM. The result of this process is the creation of different potential designated route networks that address identified issues and constraints (see "Route Evaluation Tree©" diagram at the end of this appendix). The data collected through this route evaluation process may assist agency planners is making potential decisions within the environmental impact analysis process required by NEPA. The Route Evaluation Tree Process © has been extensively used by the BLM and other land management agencies. The process meets or exceeds the needs of the BLM Land Use Planning Handbook. The details and results of this process are summarized in this appendix and documented fully in the IFNM Route Evaluation Database, available for public review at the Tucson Field Office.

Route Evaluation Criteria

During the route evaluation process, a BLM interdisciplinary team used detailed variables or criteria to evaluate each route. Route evaluations were then applied to the themes governing each alternative to produce a range of alternatives and route designations, as presented in Chapter 2. The criteria developed were based foremost upon the overarching "minimization criteria" for location of OHV areas and trails as specified in 43 CFR 8341:

(a) Areas and trails shall be located to minimize damage to soil, watershed, vegetation, air, or other resources of the public lands, and to prevent impairment of wilderness suitability.

(b) Areas and trails shall be located to minimize harassment of wildlife or significant disruption of wildlife habitats. Special attention will be given to protect endangered or threatened species and their habitats.

(c) Areas and trails shall be located to minimize conflicts between off-road vehicle use and other existing or proposed recreational uses of the same or neighboring public lands, and to ensure the compatibility of such uses with existing conditions in populated areas, taking into account noise and other factors.

(d) Areas and trails shall not be located in officially designated wilderness areas or primitive areas. Areas and trails shall be located in natural areas only if the authorized officer determines that off-road vehicle use in such locations will not adversely affect their natural, esthetic, scenic, or other values for which such areas are established.

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[1]The process has previously been referred to as the "Route Evaluation/Designation Decision Tree Process" or "Decision Tree." A "decision tree" is a technique or tool for assisting in the decision making process by leading one through a series of yes/no questions based upon input received (flowchart). A "decision" in the context of NEPA has a more legalistic meaning specifically relating to the NEPA process. The name "Decision Tree" was used to indicate it was created in a style; however, to avoid the potential for misunderstanding of the meaning of the word "decision," it has been removed from the title of the process.

Under consideration of these criteria, BLM developed the following guidelines (listed in no particular order) and applied them to the route evaluation process on the IFNM.

1. Provide access to meet management objectives and other administrative requirements (including Border Patrol use and access needs for fire management activities and vehicle types).
2. Provide access to inholdings and for valid, existing rights through easement or right-of-way grants.
3. Retain reasonable access that appropriately accommodates current recreational activities.
4. Minimize the number of routes by closing duplicative routes.
5. Designate routes to support protection of Monument objects, enhancement, and restoration of sensitive resources.
6. Accommodate universal access needs by designating access points and routes for both motorized and non-motorized uses to provide a range of recreation opportunities (e.g., landscape /visual, ecological, cultural/historic, wildlife) along the Avra Valley – Silverbell – Sasco Road loop route.
7. Close/limit public use where there is a high risk of damage to Monument objects or sensitive resource values from public access and use.
8. Watershed (Air, Soil, Water Resources):
    - Minimize designation of motorized and non-motorized routes as open on/across dust-prone soils.
    - Unsurfaced (i.e., unpaved) routes designated as open in silty-clay soils may be closed during wet soil conditions to prevent damage.
    - Minimize designation of routes as open to motorized or non-motorized use that cross or include a segment that follows a wash; where possible, close those routes where the purpose or presence of the route contributes to the deteriorating condition of the wash, soil loss, damage to the plant community, cultural damage, or other resource damage.
9. Biological Resources
    - Minimize designation of routes as open to motorized use or non-motorized mechanized use in or across vegetative communities identified as unique or important; blocks of undisturbed habitat; special management areas identified for bighorn sheep; Nichol Turk's Head cactus habitat; xeroriparian areas used as movement corridors by mule deer and javelina; and (for desert tortoise protection) across incised washes between Samaniego Hills, Waterman, Roskruge, and Pan Quemado Mountains.
    - Minimize designation of routes as open to motorized use or non-motorized mechanized use within Nichol Turk's Head cactus habitat and desert tortoise habitat.
10. Cultural Resources
    - Provide adequate access to cultural sites allocated for public use.
    - Minimize selection of routes as open to motorized use or non-motorized mechanized use on/across significant cultural sites.
    - Close existing vehicle route spurs that end at significant cultural sites.
11. Paleontological Resources and Caves: close to motorized and non-motorized mechanized use existing vehicle route spurs that end at significant caves with significant resource values.
12. Lands and Realty: close access roads to public use on routes to sensitive facilities.

13. Recreation

    - In order to meet recreation objectives, retain existing routes that provide for a key sightseeing, driving for pleasure, and vehicle touring opportunities (including watchable wildlife) as open to public access; close/limit public access in favor of natural/cultural resource protection even if opportunities for high value for this recreation activity are compromised.
    - Close overgrown routes. Vegetation treatment (clearing/trimming) may be authorized to provide access on overgrown access routes to existing utilities. Allow use of these routes for emergency purposes and administrative purposes, provided vegetation cover is protected.
    - Routes identified for closure to motorized and non-motorized mechanized vehicles would be either (1) closed to all travel, obliterated, and revegetated, or (2) remain open for non-motorized use, excluding mechanized use (bicycles), based on recreation management and natural/cultural resource objectives.
    - Identify and address proper management of historic routes, including those that may be abandoned and reclaiming those that may be associated with the Juan Bautista de Anza National Historic Trail. Consider designation of Sasco Road trails project, which would provide interpretation along the historic railroad route.

14. Visual: provide access to identified scenic overlooks.

The following is a sample of additional specific data that was collected to assist agency staff with recommending route designations for each alternative:

1. <u>Resource Issues</u>:

Association or Proximity of Route to:

- Known Cultural Site
- Site or Area of Tribal Significance
- Sites on National Register of Historic Places
- Vegetation Habitat Management Area
- Area of Critical Environmental Concern
- Portal Access to National Monument
- Wilderness Charateristics
- Wildife Habitat Management Area
- Emergency Closure Areas
- Exemplary Plant Communities
- Sensitive Plant Species Area
- Special Status Plant Species
- Sensitive Wildlife Species Area

Other Resource Considerations:

- Air Quality
- Desert Wash
- Dumping
- High Density Route Area
- Route Proliferation
- Soils
- Critical Habitat Designations
- Recreation Opportunity Spectrum

- Visual Resource Management
- Hazards

2. <u>Public Uses</u>

Existing Public Uses:

- ATV Use
- Birding
- Camping – Developed
- Camping – Primitive
- Equestrian
- Firewood Gathering – Illegal
- Firewood Gathering – Legal
- Geocaching
- Hiking
- Hunting
- Motorcycle Trials
- Motorcycle Use
- Mountain Biking
- New Age Visitors
- OHV Touring
- Paintball
- Parking Area – Improved
- Parking Area – Unimproved
- Public Use Site Access/Interpretative Panel
- Rockhounding
- Shooting
- SUV Touring
- Vistas, Sightseeing, Photography
- Wildlife Watching

Other Public Use Considerations:

- Route Contributes to Public Safety
- Route Contributes to User Conflicts
- Route Helps Minimize User Conflicts
- Route is a Concern for Public Safety
- Commercial Recreation Permit
- Special Recreation Use Permit

3. <u>Commercial, Administrative, Property Access, and Economic Issues</u>:

Commercial Ranching Facilities

- Active Allotment
- Allotment Boundary Fenceline
- Cattleguard
- Corral
- Fence Line (not Allotment Boundary Fenceline)
- Gate
- Pipeline
- Ranch
- Ranch HQ

- Tank, Trough
- Water Catchment
- Well
- Windmill

Administrative Uses

- Administrative Gate
- Compliance/Enforcement Monitoring
- Fire Suppression
- Monitoring Site
- Resource Treatment
- Weed Abatement
- Wildlife Agency Monitoring
- Wildlife Catchment
- Wildlife Water / Guzzler

Utilities

- Gate
- Utility Corridor
- Cell Site
- Communication Site
- Gas Pipeline
- Electrical Transmission / Powerline
- Telephone

Land Access

- City Gate
- City Land Access
- County Land Access
- Private Property Access
- State Land
- Tribal Land Access

Other

- Active/Inactive Mines
- Apiary Site
- Cemetery
- Desert Plant Sales (from Private Land)
- Dude Ranch
- Landing Strip
- Military Facility
- Mining Claims
- Officially recognized in Federal Planning Document and Maintained
- Route is recognized as contributing to the local economy
- Route is recognized in a local plan
- Route provides connection to public highway system (Federal, State, county)

Adaptation of Route Evaluation Process to IFNM Travel Management

The route evaluation concluded in a variety of route specific management designations, which vary by alternative (as each alternative has a different management theme). These designations are identified in the list below as "designation codes." Each of the 28 designation codes that resulted from the route evaluation process was then grouped under one of the following three route designations for this RMP: motorized use, non-motorized use (excluding non-motorized mechanized use), or reclamation. These resulting designations are identified below as "route designations."

Alternatives B, C, and D each propose a travel management plan for the long-term monitoring, maintenance and management of the designated access point and route system for both motorized and non-motorized/non-mechanized uses of public lands (see Table 2-16 in the Proposed Resource Management Plan and Final Environmental Impact Statement). The travel management plan proposed by each alternative would differ with regard to which roads and trails would remain open or be closed. The designations below help to define the travel management plan objectives and discuss how each route with that designation code would be treated in the implementation phase of the travel management plan. The travel management objectives and definitions for each designation also are listed below:

Designation Code:	C01
Objective:	Route will be closed and not maintained as a trail.
Definition:	Closed to all motorized and mechanized travel year-round. Revegetate and stabilize erosion.
Route Designation:	None. Route would be reclaimed.

Designation Code:	C07
Objective:	Route will be closed and not maintained as a trail.
Definition:	Closed to all motorized and mechanized travel year-round. Revegetate and stabilize erosion.
Route Designation:	None. Route would be reclaimed.

Designation Code:	C08
Objective:	Route will be closed and not maintained as a trail.
Definition:	Closed to all motorized and mechanized travel year-round. No maintenance work will be performed to accommodate non-motorized public use. Open to non-motorized public use except for mechanized uses (bicycles) subject to route conditions.
Route Designation:	Non-motorized use.

Designation Code:	C26
Objective:	Route will be closed and not maintained as a trail.
Definition:	Closed to all motorized and mechanized travel year-round. Revegetate and stabilize erosion.
Route Designation:	None. Route would be reclaimed.

Designation Code:	ML02-TransAllNM
Objective:	Route will be maintained as a non-motorized, non-mechanized trail.
Definition:	Closed to all public motorized and mechanized use year-round. Maintain to accommodate non-motorized public use with the exception of mechanized use (bicycles).
Route Designation:	Non-motorized use.

Designation Code:	ML02-UserAdminMtrPermitteeMtr
Objective:	Route is available for authorized motorized and mechanized use only year-round, which at a minimum will be for motorized and mechanized administrative use and right-of-way holder only. Future authorizations may be granted on a case by case basis such as to other permittees, lessees, etc.
Definition:	Open to motorized and mechanized vehicle use year-round by right-of-way or permit holder and for official administrative purposes or authorized private property access. Open to non-motorized public use year-round, with the exception of bicycles. Closed to motorized and non-motorized mechanized public use year-round.
Route Designation:	Non-motorized use.

Designation Code:	ML02-UserAdminMtrPermitteeMtrPvtPropMtr
Objective:	Route is available for authorized motorized and mechanized use only year-round, which at a minimum will be for motorized and mechanized administrative use, right-of-way holder, and authorized private property access only. Future authorizations may be granted on a case by case basis such as to permittees, lessees, etc.
Definition:	Open to motorized and mechanized vehicle use year-round by right-of-way or permit holder and official administrative purposes. Open to non-motorized public use year-round, with the exception of bicycles. Closed to motorized and non-motorized mechanized public use year-round.
Route Designation:	Non-motorized use.

Designation Code:	ML02-UserAdminMtrPermitteeMtr-TransPublicNM
Objective:	Route is available for authorized motorized and mechanized use only year-round, which at a minimum will be for motorized and mechanized administrative use and right-of-way holder only. Future authorizations may be granted on a case by case basis such as to other permittees, lessees, etc. Route will also be identified as and maintained for a non-motorized and non-mechanized trail.
Definition:	Open to motorized and mechanized vehicle use year-round by right-of-way or permit holder and official administrative purposes. Maintain to accommodate non-motorized, non-mechanized public use. Closed to motorized and mechanized public use year-round.
Route Designation:	Non-motorized use.

Designation Code:	ML02-UserAdminMtrPvtPropMtr
Objective:	Route is available for authorized motorized and mechanized use only year-round, which at a minimum will be for motorized and mechanized administrative use and authorized private property access only. Future authorizations may be granted on a case by case basis such as to permittees, lessees, etc.
Definition:	Open to motorized and mechanized vehicle use year-round by right-of-way or permit holder and official administrative purposes. Open to non-motorized public use year-round, with the exception of bicycles. Closed to motorized and non-motorized mechanized public use year-round.
Route Designation:	Non-motorized use.

Designation Code:	ML05-UserAdminMtrPermitteeMtr
Objective:	Route is available for authorized motorized and mechanized use only year-round, which at a minimum will be for motorized and mechanized administrative use and permittees only. Future authorizations may be granted on a case by case basis such as to other permittees, lessees, etc.
Definition:	Open to motorized and mechanized vehicle use year-round by right-of-way or permit holder and official administrative purposes. Open to non-motorized public use year-round, with the exception of bicycles. Closed to motorized and non-motorized mechanized public use year-round.
Route Designation:	Non-motorized use.

Designation Code:	ML06-SeasonOther___Day Use Only – no overnight camping
Objective:	Day use only; no overnight camping allowed.
Definition:	Open to motorized and mechanized public use year-round. Open to non-motorized public use year-round.
Route Designation:	Motorized use.

Designation Code:	ML06-TransAllNM
Objective:	Route will be maintained as a non-motorized trail.
Definition:	Open to non-motorized public use year-round , with the exception of bicycles. Closed to all motorized and mechanized public use year-round.
Route Designation:	Non-motorized use.

Designation Code:	ML06-TransAllNMM
Objective:	Route will be maintained as a non-motorized and non-mechanized trail.
Definition:	Open to non-motorized and non-mechanized public use year-round. Closed to all public motorized and mechanized use year-round.
Route Designation:	Non-motorized use.

Designation Code:	ML06-TransAllNM-SeasonOther___Day Use Only - no overnight camping
Objective:	Route will be maintained as a non-motorized and non-mechanized trail. Day use only; no overnight camping allowed.
Definition:	Open to non-motorized and non-mechanized public use year-round during day time. Closed to all motorized and mechanized vehicle use year-round.
Route Designation:	Non-motorized use.

Designation Code:	ML06-TransAllNM-SeasonSPC_January 1_April 1_
Objective:	Route will be maintained as a non-motorized and non-mechanized trail. The route is closed to all public uses (motorized, non-motorized, and non-mechanized, including hiking and equestrian) from January 1 to April 1.
Definition:	Open to non-motorized public use, with the exception of bicycles, April 1 to December 30. Closed to all public entry and use January 1 to April 1.
Route Designation:	Non-motorized use.

Designation Code:	ML06-UserAdminMtrPermiteeMtr
Objective:	Route is available for authorized motorized and mechanized use only year-round, which at a minimum will be for motorized and mechanized administrative use and permittees only. Future authorizations may be granted on a case by case basis such as to other permittees, lessees, etc.

Definition:	Open to motorized and mechanized vehicle use year-round by right-of-way or permit holder and official administrative purposes. Open to non-motorized public use year-round, with the exception of bicycles. Closed to motorized and mechanized public use year-round.
Route Designation:	Non-motorized use.

Designation Code:	ML06-UserAdminMtrPermitteeMtrPvtPropMtr
Objective:	Route is available for authorized motorized and mechanized use only year-round, which at a minimum will be for motorized and mechanized administrative use, permittees, and authorized private property access only. Future authorizations may be granted on a case by case basis such as to permittees, lessees, etc.
Definition:	Open to motorized and mechanized vehicle use year-round by right-of-way or permit holder and official administrative purposes. Open to non-motorized public use year-round, with the exception of bicycles. Closed to motorized and mechanized public use year-round.
Route Designation:	Non-motorized use.

Designation Code:	ML06-UserAdminMtrPermitteeMtr-TransPublicNM
Objective:	Route is available for authorized motorized and mechanized use only year-round, which at a minimum will be for motorized and mechanized administrative use and permittees only. Future authorizations may be granted on a case by case basis such as to other permittees, lessees, etc. Route will also be identified as and maintained for a non-motorized trail.
Definition:	Open to motorized and mechanized vehicle use year-round by right-of-way or permit holder and official administrative purposes. Maintain to accommodate non-motorized public use with the exception of mechanized use (bicycles). Closed to motorized and mechanized public use year-round.
Route Designation:	Non-motorized use.

Designation Code:	ML06-UserAdminMtrPermitteeMtr-TransPublicNMM
Objective:	Route is available for authorized motorized and mechanized use only year-round, which at a minimum will be for motorized and mechanized administrative use and permittees only. Future authorizations may be granted on a case by case basis such as to other permittees, lessees, etc. Route will also be identified as and maintained for a non-motorized and non-mechanized trail.
Definition:	Open to motorized and mechanized vehicle use year-round by right-of-way or permit holder and official administrative purposes. Maintain to accommodate non-motorized and non-mechanized public use, with the exception of bicycles. Closed to motorized and mechanized public use year-round.
Route Designation:	Non-motorized use.

Designation Code:	ML06-UserAdminMtrPvtPropMtr
Objective:	Route is available for authorized motorized and mechanized use only year-round, which at a minimum will be for motorized and mechanized administrative use and authorized private property access only. Future authorizations may be granted on a case by case basis such as to permittees, lessees, etc.

Definition:	Open to motorized and mechanized vehicle use year-round by right-of-way or permit holder and official administrative purposes. Open to non-motorized public use year-round, with the exception of bicycles. Closed to motorized and mechanized public use year-round.
Route Designation:	Non-motorized use.

Designation Code:	ML06-UserAdminOnlyATV
Objective:	Route is available for authorized ATV use only, which at a minimum will be for ATV administrative use only. Future authorizations may be granted on a case by case basis such as to permittees, lessees, etc.
Definition:	Open to motorized vehicle under 42 inch width use year-round by right-of-way or permit holder and official administrative purposes.
Route Designation:	Motorized use.

Designation Code:	ML06-UserAdminOnlyMtr
Objective:	Route is available for authorized motorized and mechanized use only year-round, which at a minimum will be for motorized and mechanized administrative use only. Future authorizations may be granted on a case by case basis such as to permittees, lessees, etc.
Definition:	Open to motorized and mechanized vehicle use year-round by right-of-way or permit holder and official administrative purposes. Open to non-motorized public use year-round, with the exception of bicycles. Closed to motorized and mechanized public use year-round.
Route Designation:	Non-motorized use.

Designation Code:	ML06-UserAdminOnlyMtr-TransPublicNM
Objective:	Route is available for authorized motorized and mechanized use only year-round, which at a minimum will be for motorized and mechanized administrative use only. Future authorizations may be granted on a case by case basis such as to permittees, lessees, etc. Route will also be identified as and maintained for a non-motorized and non-motorized mechanized trail.
Definition:	Open to motorized and mechanized vehicle use year-round by right-of-way or permit holder and official administrative purposes. Open to non-motorized public use year-round, with the exception of bicycles. Closed to motorized and mechanized public use year-round
Route Designation:	Non-motorized use.

Designation Code:	ML16-UserAdminMtrPermitteeMtr
Objective:	Route is available for authorized motorized and mechanized use only year-round, which at a minimum will be for motorized and mechanized administrative use and permittees only. Future authorizations may be granted on a case by case basis such as to other permittees, lessees, etc.
Definition:	Open to motorized and mechanized vehicle use year-round by right-of-way or permit holder and official administrative purposes. Open to non-motorized public use year-round, with the exception of bicycles. Closed to motorized and mechanized public use year-round.
Route Designation:	Non-motorized use.

Designation Code:	ML16-UserAdminOnlyMtr
Objective:	Route is available for authorized motorized and mechanized use only year-round, which at a minimum will be for motorized and mechanized administrative use only. Future authorizations may be granted on a case by case basis such as to permittees, lessees, etc.
Definition:	Open to motorized and mechanized vehicle use year-round by right-of-way or permit holder and official administrative purposes. Open to non-motorized public use year-round, with the exception of bicycles. Closed to motorized and mechanized public use year-round.
Route Designation:	Non-motorized use.

Designation Code:	MO01
Objective:	Route will be open to all vehicles which are legal for the type of route.
Definition:	Open to all motorized and mechanized public use year-round. Open to all non-motorized public use year-round.
Route Designation:	Motorized use.

Designation Code:	MO03
Objective:	Route will be open to all vehicles which are legal for the type of route.
Definition:	Open to all motorized and mechanized vehicle use year-round. Open to all non-motorized public use year-round.
Route Designation:	Motorized use.

Designation Code:	O04
Objective:	Route will be open to all vehicles which are legal for the type of route.
Definition:	Open to all motorized and mechanized vehicle use year-round. Open to all non-motorized public use year-round.
Route Designation:	Motorized use.

Other Route Attributes and Prescriptions

Route designations, as proposed in Table 2-16 and depicted on Maps 2-20 through 2-22, are the basic elements of the transportation management plan that would be implemented for the IFNM, depending on the alternative selected. As part of the route evaluation, and in accordance with BLM policy, other transportation plan prescriptions, including route functional class, maintenance intensity level, and access standard are assigned to each route so that BLM can better identify the needs associated with each route and define its intended use for administrative and public uses. To facilitate public review of the proposed transportation plan, Table D-1 lists each route on BLM-administered lands within the IFNM and identifies the following attributes:

1. Route Number
2. Land Owner
3. Length: Length of route in feet
4. Miles: Length of route in miles
5. **Alt B Code**: Route designation code derived from the route evaluation process, Alternative B
6. **Alt C Code**: Route designation code derived from the route evaluation process, Alternative C
7. **Alt D Code**: Route designation code derived from the route evaluation process, Alternative D (NOTE: For items 5-7, see Table D-1 for the definitions and objectives associated with each route designation code.)
8. **Route Designation**: Proposed designation of each route for Alternative C (preferred alternative). Designations include motorized, non-motorized, and closed for reclamation.

Proposed route designations for Alternatives B, C, and D are found in Table 2-16 and depicted on Maps 2-20 through 2-22.

9. **Asset Type**: BLM transportation system asset type code, as defined below. The following codes are used in Table D-1:
    - **RD = Road**: A linear route declared a road by the owner, managed for use by low-clearance vehicles having four or more wheels, and maintained for regular and continuous use.
    - **RDP = Primitive Road**: A linear route managed for use by four-wheel drive or high clearance vehicles. Primitive roads do not normally meet any BLM road design standards.
    - **RDPA = Primitive Road, Administrative Vehicles Only**: A linear route managed for human-powered, stock, or infrequent off-highway vehicle use for administrative purposes only.
    - **TNM = Trail, non-motorized**: A linear route managed for human-powered, stock, or historical or heritage values. Trails are not generally managed for use by four-wheel drive or high-clearance vehicles.
    - **NA = Not Applicable**: Not a transportation asset (such as fencelines).
10. **FC**: Functional class, as defined in BLM transportation planning guidance. The following codes are used in Table D-1:
    - **C = Collector road**: These Bureau roads normally provide primary access to large blocks of land, and connect with or are extensions of a public road system. Collector roads accommodate mixed traffic and serve many uses. They generally receive the highest volume of traffic of all the roads in the Bureau road system. User cost, safety, comfort, and travel time are primary road management considerations. Collector roads usually require application of the highest standards used by the Bureau. As a result, they have the potential for creating substantial environmental impacts and often require complex mitigation procedures.
    - **L = Local road**: These Bureau roads normally serve a smaller area than collectors, and connect to collectors or public road systems. Local roads receive lower volumes, carry fewer traffic types, and generally serve fewer uses. User cost, comfort, and travel time are secondary to construction and maintenance cost considerations. Low volume local roads in mountainous terrain, where operating speed is reduced by effort of terrain, may be single lane roads with turnouts. Environmental impacts are reduced as steeper grades, sharper curves, and lower design speeds than would be permissible on collector roads are allowable.
    - **R = Resource road**: These Bureau roads normally are spur roads that provide point access and connect to local or collector roads. They carry very low volume and accommodate only one or two types of use. Use restrictions are applied to prevent conflicts between users needing the road and users attracted to the road. The location and design of these roads are governed by environmental compatibility and minimizing Bureau costs, with minimal consideration for user cost, comfort, or travel time.
    - **NA** = Not applicable
11. **MI**: Maintenance intensity, as defined in the BLM Roads and Trails Terminology Report (reference this); definitions of maintenance intensity levels listed below are also found in the RMP glossary. The following codes are used in Table D-1:
    - **L0 = Level 0**: remove from travel route inventory.
    - **L1 = Level 1**: minimum maintenance.
    - **L3 = Level 3**: moderate maintenance.
    - **L5 = Level 5**: high maintenance

12. **DSTD**: Typical design vehicle or criteria for route. The following codes are used in Table D-1:
    - P = Passenger car (per AASHTO)
    - PT = Passenger car and camper trailer (equivalent: truck and stock trailer) (per AASHTO)
    - MH = Motor home, recreational vehicle (per AASHTO)
    - WB-50 = Semi trailer (per AASHTO)
    - 4WD = Passenger can with 4WD or high clearance
    - ATV = All terrain vehicle, under 48"
    - MX = Motorcycle
    - EQ = Equestrian
    - H = Hiking
    - MB = Mountain bike
    - NES = Natural ecological site potential (route closed for reclamation)

Proposed travel management routes are shown on Maps D-1 through D-4. Maps depicting route numbers can be reviewed online at http://www.blm.gov/az/LUP/ironwood/reports.htm or at the Tucson Field Office at 3201 East Universal Way, Tucson, Arizona.

Table D-1
Travel Route Designations

INDEX	Route Number (Ars_id)	OWNERSHIP	FEET	MILES	Alt B Code	Alt C Code	Alt D Code	Proposed Route Designation	Asset Type	FC	MI	DSTD
1	2 Total	BLM	12835	2.43	MO01	MO01	MO01	Motorized	RD	C	L5	MH
2	2E1 Total	BLM	1317	0.3	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
3	2E2 Total	BLM	1955	0.4	ML06-UserAdminOnlyMtr	ML06-UserAdminOnlyMtr	MO03	Motorized	RDPA	R	L1	EQ
4	600 Total	BLM	14917	2.8	MO03	MO03	MO03	Motorized	RD	L	L3	P
5	601 Total	BLM	5113	1.0	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
6	602 Total	BLM	5695	1.1	MO03	MO03	MO03	Motorized	RD	L	L1	P
7	608 Total	BLM	10338	2.0	ML06-UserAdminOnlyMtr	ML06-SeasonOther___Day Use Only - no overnight	MO03	Motorized	RDP	R	L1	4WD
8	608.5 Total	BLM	3093	0.6	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
9	608.6 Total	BLM	131	0.0	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
10	610 Total	BLM	20183	3.8	MO03	MO03	MO03	Motorized	RD	L	L3	P
11	610.5 Total	BLM	134	0.0	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
12	610.9 Total	BLM	795	0.2	ML06-UserAdminOnlyMtr	ML06-UserAdminOnlyMtr	MO03	Motorized	RDPA	R	L1	EQ
13	614 Total	BLM	23857	4.5	MO01	MO01	MO01	Motorized	RD	L	L3	P
14	616.5 Total	BLM	3385	0.6	C08	ML06-SeasonOther___Day Use Only - no overnight	MO03	Motorized	RDP	R	L1	4WD
15	620 Total	BLM	47507	9.0	MO01	MO01	MO01	Motorized	RD	C	L5	MH
16	621 Total	BLM	15311	2.9	ML06-UserAdminMtrPermitteeMtr-TransPublicNM	MO03	MO03	Motorized	RDP	R	L3	4WD
17	622 Total	BLM	36671	7.0	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
18	623 Total	BLM	12376	2.3	MO01	MO01	MO01	Motorized	RD	R	L3	PT
19	624 Total	BLM	22675	4.3	MO01	MO01	O04	Motorized	RD	C	L5	MH
20	625 Total	BLM	600	0.1	ML06-TransAllNMM	ML06-TransAllNM	ML06-TransAllNM	Non-motorized	TNM	R	L1	EQ
21	626 Total	BLM	2281	0.4	ML06-UserAdminMtrPermitteeMtr	MO03	MO03	Motorized	RDP	R	L1	4WD
22	627 Total	BLM	3070	0.6	ML06-UserAdminMtrPermitteeMtr	MO03	MO03	Motorized	RDP	R	L1	4WD
23	628 Total	BLM	9303	1.8	C08	ML06-UserAdminMtrPermitteeMtr	MO03	Motorized	RDPA	R	L1	EQ
24	629 Total	BLM	18191	3.5	MO03	MO03	MO03	Motorized	RDP	R	L1	4WD
25	630 Total	BLM	9003	1.7	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	MO03	Motorized	RDPA	R	L1	EQ
26	631 Total	BLM	6474	1.2	MO03	MO03	MO03	Motorized	RDP	R	L1	4WD
27	632 Total	BLM	12574	2.4	MO03	MO03	MO03	Motorized	RDP	R	L1	4WD
28	633 Total	BLM	10645	2.0	MO03	MO03	MO03	Motorized	RDP	R	L1	4WD
29	634 Total	BLM	10740	2.0	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	MO03	Motorized	RDP	R	L1	4WD
30	635 Total	BLM	34572	6.6	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
31	636 Total	BLM	10597	2.0	C08	MO03	MO03	Motorized	RDP	R	L1	4WD
32	637 Total	BLM	20383	3.9	C08	ML06-UserAdminMtrPermitteeMtrPvtPropMtr	MO03	Motorized	RDPA	R	L1	EQ

Table D-1
Travel Route Designations

INDEX	Route Number (Ars_id)	OWNERSHIP	FEET	MILES	Alt B Code	Alt C Code	Alt D Code	Proposed Route Designation	Asset Type	FC	MI	DSTD
33	638 Total	BLM	4493	0.9	ML06-UserAdminMtrPermitteeMtr	MO03	MO03	Motorized	RDP	R	L1	4WD
34	639 Total	BLM	35574	6.7	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	4WD
35	641 Total	BLM	7986	1.5	MO03	MO03	MO03	Motorized	RD	L	L3	WB-50
36	647 Total	BLM	2622	0.5	ML06-UserAdminMtrPvtPropMtr	MO03	MO03	Motorized	RDP	R	L1	4WD
37	648 Total	BLM	2633	0.5	C08	ML06-UserAdminMtrPermitteeMtr	MO03	Motorized	RDPA	R	L1	EQ
38	650 Total	BLM	26014	4.9	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
39	652 Total	BLM	5327	1.0	ML06-UserAdminOnlyMtr	MO03	MO03	Motorized	RDP	R	L1	4WD
40	656 Total	BLM	3472	0.7	ML06-UserAdminMtrPermitteeMtr-TransPublicNMM	MO03	MO03	Motorized	RDP	R	L1	4WD
41	658 Total	BLM	7936	1.5	ML06-TransAllNM	MO03	MO03	Motorized	RDP	R	L1	4WD
42	660 Total	BLM	2204	0.4	ML06-UserAdminOnlyMtr	MO03	MO03	Non-motorized	TNM	R	L1	EQ
43	662 Total	BLM	10092	1.9	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
44	664 Total	BLM	955	0.2	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
45	665 Total	BLM	78	0.0	C08	MO03	MO03	Motorized	RDP	R	L1	4WD
46	620E1 Total	BLM	3269	0.6	C08	MO03	MO03	Motorized	RDP	R	L1	4WD
47	610E2 Total	BLM	11075	2.1	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
48	622E5 Total	BLM	2240	0.4	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
49	622E6 Total	BLM	789	0.2	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
50	622E7 Total	BLM	441	0.1	C08	C08	ML06-UserAdminMtrPermitteeMtr	Non-motorized	TNM	R	L1	EQ
51	622E8 Total	BLM	2337	0.4	C08	C08	ML06-UserAdminMtrPermitteeMtr	Non-motorized	TNM	R	L1	EQ
52	622E9 Total	BLM	827	0.2	C08	C08	ML06-UserAdminMtrPermitteeMtr	Non-motorized	TNM	R	L1	EQ
53	622E10 Total	BLM	4366	0.8	C08	C08	ML06-UserAdminMtrPermitteeMtr	Non-motorized	TNM	R	L1	EQ
54	622E11 Total	BLM	298	0.1	C08	C08	ML06-UserAdminMtrPermitteeMtr	Non-motorized	TNM	R	L1	EQ
55	622E12 Total	BLM	119	0.0	C08	C08	ML06-UserAdminMtrPermitteeMtr	Non-motorized	TNM	R	L1	EQ
56	622E13 Total	BLM	188	0.0	C08	C08	ML06-UserAdminMtrPermitteeMtr	Non-motorized	TNM	R	L1	EQ
57	622E14 Total	BLM	391	0.1	C08	C08	ML06-UserAdminMtrPermitteeMtr	Non-motorized	TNM	R	L1	EQ
58	622E61 Total	BLM	198	0.0	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
59	2A Total	BLM	3006	0.6	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
60	2A1 Total	BLM	659	0.1	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
61	2A2 Total	BLM	1982	0.4	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
62	2B Total	BLM	5252	1.0	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ

Table D-1
Travel Route Designations

INDEX	Route Number (Ars_id)	OWNERSHIP	FEET	MILES	Alt B Code	Alt C Code	Alt D Code	Proposed Route Designation	Asset Type	FC	MI	DSTD
63	2C Total	BLM	2265	0.4	C08	C08	ML06-UserAdminMtrPermitteeMtr	Non-motorized	TNM	R	L1	EQ
64	2D Total	BLM	807	0.2	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
65	2E Total	BLM	3249	0.6	ML06-UserAdminOnlyMtr	ML06-UserAdminOnlyMtr	MO03	Motorized	RDP	R	L1	4WD
66	2F Total	BLM	5357	1.0	C08	C08	C08	Non-motorized	TNM	R	L1	4WD
67	2H Total	BLM	2931	0.6	C08	MO03	MO03	Motorized	RDP	R	L1	4WD
68	2H1 Total	BLM	3152	0.6	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
69	2J Total	BLM	7021	1.3	C08	MO03	MO03	Motorized	RDP	R	L1	4WD
70	2J1 Total	BLM	595	0.1	C08	MO03	MO03	Motorized	RDP	R	L1	4WD
71	2J2 Total	BLM	3974	0.8	C08	C08	ML06-TransAllNM	Non-motorized	TNM	R	L1	EQ
72	2J3 Total	BLM	13221	2.5	MO03	MO03	MO03	Motorized	RDP	R	L1	4WD
73	2X Total	BLM	17298	3.3	MO03	MO03	MO03	Motorized	RD	C	L5	MH
74	2Z Total	BLM	5277	1.0	C08	MO03	MO03	Non-motorized	TNM	R	L1	EQ
75	600A1 Total	BLM	16659	3.2	ML06-TransAllNM	ML06-UserAdminMtrPermitteeMtr	MO03	Motorized	RDPA	R	L1	EQ
76	600A1A Total	BLM	8814	1.7	ML06-TransAllNM	ML06-TransAllNM	MO03	Non-motorized	TNM	R	L1	EQ
77	600A2 Total	BLM	500	0.1	C26	C26	C26	Reclamation	NA	NA	L0	NES
78	600C Total	BLM	2274	0.4	C08	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
79	600D Total	BLM	5781	1.1	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
80	600D1 Total	BLM	752	0.1	MO03	MO03	MO03	Non-motorized	TNM	R	L1	EQ
81	600D2 Total	BLM	823	0.2	C08	ML06-UserAdminMtrPvtPropMtr	MO03	Motorized	RDPA	R	L1	EQ
82	600D3 Total	BLM	321	0.1	C08	ML06-UserAdminMtrPvtPropMtr	MO03	Motorized	RDPA	R	L1	EQ
83	600D9 Total	BLM	1648	0.3	C08	ML06-UserAdminMtrPermitteeMtr	MO03	Motorized	RDPA	R	L1	EQ
84	600G Total	BLM	1706	0.3	ML06-UserAdminOnlyMtr	ML06-UserAdminMtrPermitteeMtr	MO03	Motorized	RDPA	R	L1	EQ
85	600G1 Total	BLM	2862	0.5	ML06-UserAdminOnlyMtr	ML06-UserAdminOnlyMtr	MO03	Motorized	RDPA	R	L1	EQ
86	600H Total	BLM	2346	0.4	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
87	600I Total	BLM	200	0.0	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
88	600J Total	BLM	985	0.2	C08	MO03	MO03	Motorized	RDP	R	L1	4WD
89	600K Total	BLM	1186	0.2	MO03	MO03	MO03	Motorized	RDP	R	L1	4WD
90	600L Total	BLM	2000	0.4	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
91	600M Total	BLM	1308	0.3	C08	MO03	MO03	Motorized	RDP	R	L1	4WD
92	600N Total	BLM	1746	0.3	ML06-TransAllNM	ML06-TransAllNM	MO03	Non-motorized	TNM	R	L1	EQ
93	600N1 Total	BLM	1754	0.3	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
94	601A Total	BLM	1580	0.3	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr-SeasonSPC_Sept 1_	MO03	Motorized	RDPA	R	L1	EQ
95	601A1 Total	BLM	922	0.2	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
96	601B Total	BLM	15172	2.9	ML06-UserAdminOnlyATV	ML06-UserAdminOnlyATV	ML06-UserAdminOnlyATV	Motorized	RDPA	R	L1	EQ
97	601B1 Total	BLM	969	0.2	ML06-UserAdminOnlyATV	ML06-UserAdminOnlyATV	ML06-UserAdminOnlyATV	Motorized	RDPA	R	L1	EQ
98	601BC Total	BLM	10556	2.0	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ

Table D-1
Travel Route Designations

INDEX	Route Number (Ars_id)	OWNERSHIP	FEET	MILES	Alt B Code	Alt C Code	Alt D Code	Proposed Route Designation	Asset Type	FC	MI	DSTD
99	601D Total	BLM	5256	1.0	ML06-UserAdminMtrPermitteeMtr	MO03	MO03	Motorized	RD	R	L1	PT
100	601E Total	BLM	4949	0.9	ML06-UserAdminMtrPermitteeMtr	MO03	MO03	Non-motorized	TNM	R	L1	EQ
101	601X Total	BLM	5027	1.0	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
102	606A Total	BLM	5363	1.0	ML06-UserAdminMtrPermitteeMtr	MO03	MO03	Motorized	RDP	R	L1	4WD
103	606A1 Total	BLM	6796	1.3	C08	MO03	MO03	Motorized	RDP	R	L1	4WD
104	606B Total	BLM	1547	0.3	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
105	606C Total	BLM	685	0.1	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
106	606C1 Total	BLM	192	0.0	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
107	606F Total	BLM	3160	0.6	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
108	606F1 Total	BLM	5228	1.0	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
109	607A Total	BLM	255	0.1	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
110	608B Total	BLM	213	0.0	ML06-UserAdminOnlyMtr	ML06-SeasonOther___Day Use Only - no overnight	MO03	Motorized	RDP	R	L1	4WD
111	609A Total	BLM	489	0.1	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
112	609B Total	BLM	177	0.0	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
113	610C Total	BLM	28952	5.5	MO03	MO03	MO03	Motorized	RDP	R	L1	4WD
114	610C1 Total	BLM	4002	0.8	ML06-UserAdminMtrPermitteeMtrPvtPropMtr	MO03	MO03	Motorized	RDP	R	L1	4WD
115	610D Total	BLM	10363	2.0	C08	MO03	MO03	Motorized	RDP	R	L1	4WD
116	610D1 Total	BLM	2075	0.4	C08	MO03	MO03	Motorized	RDP	R	L1	4WD
117	610D2 Total	BLM	425	0.1	C08	MO03	MO03	Motorized	RDP	R	L1	4WD
118	610E Total	BLM	5737	1.1	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
119	611A Total	BLM	7107	1.4	C08	ML06-UserAdminMtrPermitteeMtr	MO03	Motorized	RDPA	R	L1	EQ
120	612A Total	BLM	5712	1.1	C08	ML06-UserAdminMtrPermitteeMtr	MO03	Motorized	RDPA	R	L1	EQ
121	613A Total	BLM	6758	1.3	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
122	614A Total	BLM	5288	1.0	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
123	614A1 Total	BLM	3896	0.7	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
124	614B Total	BLM	4990	1.0	ML06-UserAdminMtrPermitteeMtr-TransPublicNM	ML06-UserAdminMtrPermitteeMtr-TransPublicNM	MO03	Motorized	RDPA	R	L1	EQ
125	614B1 Total	BLM	1018	0.2	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	MO03	Motorized	RDPA	R	L1	EQ
126	614B1A Total	BLM	1697	0.3	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
127	614B2 Total	BLM	2537	0.5	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
128	614B2A Total	BLM	589	0.1	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
129	614B2B Total	BLM	415	0.1	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ

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INDEX	Route Number (Ars_id)	OWNERSHIP	FEET	MILES	Alt B Code	Alt C Code	Alt D Code	Proposed Route Designation	Asset Type	FC	MI	DSTD
130	614B3 Total	BLM	1253	0.2	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
131	614B4 Total	BLM	9048	1.7	ML06-TransAllNM	ML06-UserAdminMtrPermitteeMtr-TransPublicNM	MO03	Motorized	RDPA	R	L1	EQ
132	614C Total	BLM	5721	1.1	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
133	614C1 Total	BLM	6827	1.3	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
134	614C1A Total	BLM	116	0.0	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
135	614I Total	BLM	124	0.0	MO03	MO03	MO03	Motorized	RD	L	L3	4WD
136	614J Total	BLM	831	0.2	MO03	MO03	MO03	Motorized	RDP	R	L3	P
137	614K Total	BLM	819	0.2	MO03	MO03	MO03	Motorized	RDP	R	L3	P
138	614L Total	BLM	13388	2.5	MO03	MO03	MO03	Motorized	RD	L	L3	4WD
139	615A Total	BLM	5698	1.1	C08	ML06-UserAdminMtrPermitteeMtr	MO03	Motorized	RDPA	R	L1	EQ
140	616A Total	BLM	5402	1.0	C08	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
141	617A Total	BLM	9533	1.8	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	MO03	Motorized	RDPA	R	L1	EQ
142	617A1 Total	BLM	1602	0.3	C07	C07	C07	Reclamation	NA	NA	L0	NES
143	617A2 Total	BLM	6788	1.3	C08	ML06-UserAdminMtrPermitteeMtr	MO03	Motorized	RDPA	R	L1	EQ
144	617B Total	BLM	1586	0.3	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
145	617C Total	BLM	4240	0.8	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	MO03	Motorized	RDPA	R	L1	EQ
146	617C1 Total	BLM	1008	0.2	C08	ML06-UserAdminMtrPermitteeMtr	MO03	Motorized	RDPA	R	L1	EQ
147	617D Total	BLM	11263	2.1	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	MO03	Motorized	RDPA	R	L1	EQ
148	617D1 Total	BLM	359	0.1	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
149	617D4 Total	BLM	4096	0.8	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
150	617D4A Total	BLM	5350	1.0	ML02-UserAdminMtrPermitteeMtr-TransPublicNM	ML02-UserAdminMtrPermitteeMtr-TransPublicNM	MO01	Motorized	RDPA	R	L1	EQ
151	617D5 Total	BLM	9064	1.7	ML06-TransAllNM	ML06-TransAllNM	MO03	Non-motorized	TNM	R	L1	EQ
152	617D9 Total	BLM	7713	1.5	C08	ML06-UserAdminMtrPermitteeMtr	MO03	Motorized	RDPA	R	L1	EQ
153	617E Total	BLM	4374	0.8	C08	ML06-TransAllNM	MO03	Non-motorized	TNM	R	L1	EQ
154	618A Total	BLM	11489	2.2	MO03	MO03	MO03	Motorized	RDP	R	L1	4WD
155	618A1 Total	BLM	11460	2.2	MO03	MO03	MO03	Motorized	RDP	R	L1	4WD
156	618B Total	BLM	2252	0.4	C08	ML06-SeasonOther___Day Use Only - no overnight	MO03	Motorized	RDP	R	L1	4WD
157	618B1 Total	BLM	5183	1.0	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
158	618B2 Total	BLM	3553	0.7	C08	ML06-TransAllNM	MO03	Non-motorized	TNM	R	L1	EQ
159	618C Total	BLM	4036	0.8	MO03	MO03	MO03	Motorized	RDP	R	L1	4WD
160	618C1 Total	BLM	1942	0.4	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ

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INDEX	Route Number (Ars_id)	OWNERSHIP	FEET	MILES	Alt B Code	Alt C Code	Alt D Code	Proposed Route Designation	Asset Type	FC	MI	DSTD
161	618D Total	BLM	3596	0.7	C08	ML06-UserAdminMtrPermitteeMtrPvtPropMtr	MO03	Motorized	RDPA	R	L1	EQ
162	618D1 Total	BLM	3095	0.6	ML06-TransAllNM-SeasonOther___Day Use Only - no overn	ML06-TransAllNM	ML06-TransAllNM	Non-motorized	TNM	R	L1	EQ
163	618E Total	BLM	1701	0.3	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
164	618G Total	BLM	716	0.1	C08	ML06-TransAllNM	ML06-TransAllNM	Non-motorized	TNM	R	L1	EQ
165	618Y Total	BLM	2377	0.5	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
166	618Y1 Total	BLM	1827	0.4	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
167	618Y10 Total	BLM	4596	0.9	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
168	618Y11 Total	BLM	6155	1.2	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
169	618Y11A Total	BLM	391	0.1	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
170	618Y12 Total	BLM	929	0.2	C08	ML06-UserAdminMtrPermitteeMtr	MO03	Motorized	RDPA	R	L1	EQ
171	618Y13 Total	BLM	163	0.0	C08	ML06-UserAdminMtrPermitteeMtr	MO03	Motorized	RDPA	R	L1	EQ
172	618Y14 Total	BLM	308	0.1	C08	ML06-UserAdminMtrPermitteeMtr	MO03	Motorized	RDPA	R	L1	EQ
173	618Y15 Total	BLM	920	0.2	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
174	618Y16 Total	BLM	6929	1.3	ML02-TransAllNM	ML02-UserAdminMtrPvtPropMtr	MO01	Motorized	RDPA	R	L1	EQ
175	618Y16A Total	BLM	813	0.2	C08	ML06-UserAdminMtrPvtPropMtr	MO03	Reclamation	NA	NA	L0	NES
176	618Y16B Total	BLM	659	0.1	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
177	618Y17D Total	BLM	617	0.1	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
178	618Y2 Total	BLM	240	0.1	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
179	618Y20 Total	BLM	116	0.0	ML06-UserAdminOnlyMtr	ML06-UserAdminOnlyMtr	ML06-UserAdminOnlyMtr	Motorized	RDPA	R	L1	EQ
180	618Y3 Total	BLM	7950	1.5	MO03	MO03	MO03	Motorized	RD	R	L5	WB-50
181	618Y4 Total	BLM	450	0.1	C01	C01	C01	Reclamation	NA	NA	L0	NES
182	618Y5 Total	BLM	406	0.1	C08	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
183	618Y6 Total	BLM	911	0.2	C08	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
184	618Y7 Total	BLM	1482	0.3	C08	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
185	618Y8 Total	BLM	2023	0.4	C08	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
186	619A Total	BLM	6040	1.1	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
187	619A1 Total	BLM	4521	0.9	C08	ML06-UserAdminMtrPermitteeMtr	MO03	Motorized	RDPA	R	L1	EQ
188	619C Total	BLM	279	0.1	C08	C08	ML06-TransAllNM	Non-motorized	TNM	R	L1	EQ

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INDEX	Route Number (Ars_id)	OWNERSHIP	FEET	MILES	Alt B Code	Alt C Code	Alt D Code	Proposed Route Designation	Asset Type	FC	MI	DSTD
189	619G Total	BLM	1415	0.3	ML06-TransAllNM-SeasonOther___Day Use Only - no overn	ML06-TransAllNM	ML06-TransAllNM	Non-motorized	TNM	R	L1	EQ
190	619I Total	BLM	185	0.0	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
191	620A Total	BLM	1436	0.3	C08	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
192	620AX Total	BLM	3707	0.7	C08	ML06-SeasonOther___Day Use Only - no overnight	ML06-SeasonOther___Day Use Only - no overni	Non-motorized	TNM	R	L1	EQ
193	620B Total	BLM	6566	1.2	ML06-TransAllNMM	ML06-SeasonOther___Day Use Only - no overnight	MO03	Motorized	RDP	R	L1	4WD
194	620B1 Total	BLM	1059	0.2	ML06-TransAllNMM	ML06-SeasonOther___Day Use Only - no overnight	MO03	Non-motorized	TNM	R	L1	EQ
195	620BX Total	BLM	5269	1.0	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
196	620C Total	BLM	2478	0.5	C08	C08	C08	Motorized	RDP	R	L1	4WD
197	620C1 Total	BLM	2094	0.4	C08	C08	ML06-UserAdminMtrPermitteeMtr	Non-motorized	TNM	R	L1	EQ
198	620C2 Total	BLM	1328	0.3	C08	C08	ML06-UserAdminMtrPermitteeMtr	Non-motorized	TNM	R	L1	EQ
199	620D Total	BLM	3521	0.7	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
200	620DX1 Total	BLM	653	0.1	MO03	MO03	MO03	Motorized	RDP	R	L1	4WD
201	620DX2 Total	BLM	412	0.1	MO03	MO03	MO03	Motorized	RDP	R	L1	4WD
202	620DX3 Total	BLM	243	0.1	MO03	MO03	MO03	Motorized	RDP	R	L1	4WD
203	620E Total	BLM	1301	0.3	MO03	MO03	MO03	Motorized	RDP	R	L1	4WD
204	620F Total	BLM	10918	2.1	ML06-UserAdminMtrPermitteeMtr	ML06-SeasonOther___Day Use Only - no overnight	MO03	Motorized	RDP	R	L1	4WD
205	620F1 Total	BLM	1349	0.3	C08	ML06-UserAdminOnlyMtr	ML06-UserAdminOnlyMtr	Motorized	RDPA	R	L1	EQ
206	620F1A Total	BLM	2683	0.5	C08	ML06-UserAdminOnlyMtr	ML06-UserAdminOnlyMtr	Motorized	RDPA	R	L1	EQ
207	620F2 Total	BLM	262	0.1	C08	ML06-SeasonOther___Day Use Only - no overnight	MO03	Motorized	RDP	R	L1	4WD
208	620F2A Total	BLM	2335	0.4	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
209	620F3 Total	BLM	1365	0.3	ML06-UserAdminMtrPermitteeMtr	ML06-SeasonOther___Day Use Only - no overnight	MO03	Non-motorized	TNM	R	L1	EQ
210	620F4 Total	BLM	453	0.1	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
211	620F5 Total	BLM	360	0.1	ML06-UserAdminMtrPermitteeMtr	ML06-SeasonOther___Day Use Only - no overnight	MO03	Non-motorized	TNM	R	L1	EQ
212	620H Total	BLM	619	0.1	MO03	MO03	MO03	Motorized	RDP	R	L1	4WD
213	620H1 Total	BLM	2404	0.5	C08	MO03	MO03	Non-motorized	TNM	R	L1	EQ
214	620H2 Total	BLM	191	0.0	MO03	MO03	MO03	Non-motorized	TNM	R	L1	EQ
215	620J Total	BLM	3271	0.6	C08	MO03	MO03	Motorized	RDP	R	L1	4WD
216	620K Total	BLM	3081	0.6	C08	MO03	MO03	Motorized	RDP	R	L1	4WD
217	620K1 Total	BLM	773	0.2	C08	MO03	MO03	Non-motorized	TNM	R	L1	EQ
218	620K2 Total	BLM	1572	0.3	C08	ML06-SeasonOther___Day Use Only - no overnight	MO03	Motorized	RDP	R	L1	4WD
219	620K2A Total	BLM	3953	0.8	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
220	620K3 Total	BLM	1224	0.2	C08	MO03	MO03	Non-motorized	TNM	R	L1	EQ

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INDEX	Route Number (Ars_id)	OWNERSHIP	FEET	MILES	Alt B Code	Alt C Code	Alt D Code	Proposed Route Designation	Asset Type	FC	MI	DSTD
221	620N Total	BLM	781	0.2	C08	ML06-UserAdminMtrPermitteeMtr	MO03	Motorized	RDPA	R	L1	EQ
222	620O Total	BLM	8397	1.6	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
223	620O1 Total	BLM	3228	0.6	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
224	620O2 Total	BLM	38	0.0	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
225	620P Total	BLM	11457	2.2	ML06-UserAdminMtrPermitteeMtr	MO03	MO03	Motorized	RDP	R	L1	4WD
226	620P1 Total	BLM	2247	0.4	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
227	620P2 Total	BLM	1092	0.2	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
228	620P3 Total	BLM	2451	0.5	ML06-TransAllNM	ML06-UserAdminOnlyMtr-TransPublicNM	MO03	Motorized	RDPA	R	L1	EQ
229	620P4 Total	BLM	4541	0.9	ML06-TransAllNM	ML06-UserAdminOnlyMtr-TransPublicNM	MO03	Motorized	RDPA	R	L1	EQ
230	620P4A Total	BLM	4277	0.8	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
231	620Q Total	BLM	11	0.0	C07	ML05-UserAdminMtrPermitteeMtr	ML05-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
232	620S Total	BLM	1303	0.3	C08	ML06-UserAdminMtrPermitteeMtr	MO03	Motorized	RDPA	R	L1	EQ
233	620S1 Total	BLM	370	0.1	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
234	620T Total	BLM	1401	0.3	C08	MO03	MO03	Motorized	RD	R	L1	WB-50
235	620X Total	BLM	19162	3.6	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
236	620Z Total	BLM	1722	0.3	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
237	621-1 Total	BLM	8899	1.7	ML06-UserAdminMtrPermitteeMtr	MO03	MO03	Motorized	RDP	R	L1	4WD
238	621B1 Total	BLM	4300	0.8	C07	C07	C07	Non-motorized	TNM	R	L1	EQ
239	621B2 Total	BLM	4451	0.8	ML06-TransAllNM-SeasonSPC_January 1_April 1_	ML06-TransAllNM-SeasonSPC_January 1_April 1_	ML06-TransAllNM-SeasonSPC_January 1_April 1	Non-motorized	TNM	R	L1	EQ
240	621B3 Total	BLM	1012	0.2	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
241	621B4 Total	BLM	3038	0.6	C07	C07	C07	Reclamation	NA	NA	L0	NES
242	621E Total	BLM	8969	1.7	C08	MO03	MO03	Motorized	RDP	R	L1	4WD
243	621F Total	BLM	8662	1.6	ML06-UserAdminOnlyMtr	MO03	MO03	Motorized	RDP	R	L1	4WD
244	621F1 Total	BLM	439	0.1	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
245	621F2 Total	BLM	805	0.2	C08	MO03	MO03	Motorized	RDP	R	L1	4WD
246	621F3 Total	BLM	6039	1.1	ML06-UserAdminOnlyMtr	MO03	MO03	Motorized	RDPA	R	L1	EQ
247	621G Total	BLM	1676	0.3	C08	MO03	MO03	Motorized	RDP	R	L1	4WD
248	621G2 Total	BLM	625	0.1	C08	MO03	MO03	Motorized	RDP	R	L1	4WD
249	621H Total	BLM	14026	2.7	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
250	621H1 Total	BLM	985	0.2	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
251	621H2 Total	BLM	539	0.1	C08	MO03	MO03	Motorized	RD	R	L3	PT
252	621K Total	BLM	1891	0.4	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
253	622A Total	BLM	1017	0.2	C08	C08	C08	Non-motorized	TNM	R	L1	EQ

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INDEX	Route Number (Ars_id)	OWNERSHIP	FEET	MILES	Alt B Code	Alt C Code	Alt D Code	Proposed Route Designation	Asset Type	FC	MI	DSTD
254	622B Total	BLM	6272	1.2	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
255	622C Total	BLM	6328	1.2	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
256	622C1 Total	BLM	1949	0.4	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
257	622C1.1 Total	BLM	294	0.1	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
258	622E Total	BLM	5436	1.0	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
259	622F Total	BLM	6866	1.3	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
260	622F1 Total	BLM	6461	1.2	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
261	622F12 Total	BLM	2313	0.4	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
262	622F13 Total	BLM	717	0.1	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
263	622F14 Total	BLM	483	0.1	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
264	622G Total	BLM	1290	0.2	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
265	622I Total	BLM	577	0.1	C08	C08	ML06-UserAdminOnlyMtr	Non-motorized	TNM	R	L1	EQ
266	622I1 Total	BLM	5938	1.1	C08	C08	ML06-UserAdminOnlyMtr	Non-motorized	TNM	R	L1	EQ
267	622I2 Total	BLM	5431	1.0	C08	C08	ML06-UserAdminOnlyMtr	Non-motorized	TNM	R	L1	EQ
268	622I3 Total	BLM	803	0.2	C08	C08	ML06-UserAdminOnlyMtr	Non-motorized	TNM	R	L1	EQ
269	622I4 Total	BLM	2689	0.5	C26	C26	ML16-UserAdminOnlyMtr	Reclamation	NA	NA	L0	NES
270	622J Total	BLM	5762	1.1	C08	ML06-UserAdminOnlyMtr	ML06-UserAdminOnlyMtr	Motorized	RDPA	R	L1	EQ
271	622J1 Total	BLM	687	0.1	C08	ML06-UserAdminOnlyMtr	ML06-UserAdminOnlyMtr	Motorized	RDPA	R	L1	EQ
272	622K1 Total	BLM	46	0.0	C08	C08	ML06-UserAdminOnlyMtr	Non-motorized	TNM	R	L1	EQ
273	622M1 Total	BLM	12526	2.4	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
274	622N Total	BLM	2211	0.4	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
275	622P Total	BLM	345	0.1	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
276	623A Total	BLM	16334	3.1	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
277	623B Total	BLM	2488	0.5	C08	ML06-UserAdminMtrPermitteeMtrPvtPropMtr	MO03	Motorized	RDPA	R	L1	EQ
278	623B1 Total	BLM	1349	0.3	C08	ML06-UserAdminMtrPermitteeMtrPvtPropMtr	MO03	Reclamation	NA	NA	L0	NES
279	623D Total	BLM	9339	1.8	C26	C26	C26	Reclamation	NA	NA	L0	NES
280	623E Total	BLM	4946	0.9	ML06-UserAdminOnlyMtr	ML06-UserAdminOnlyMtr	ML06-UserAdminOnlyMtr	Motorized	RDPA	R	L1	EQ
281	623F Total	BLM	18127	3.4	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
282	623G Total	BLM	4072	0.8	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
283	624C1 Total	BLM	72	0.0	C08	MO03	MO03	Motorized	RDP	R	L1	4WD
284	624D Total	BLM	81	0.0	C08	MO03	MO03	Motorized	RDP	R	L1	4WD
285	624F Total	BLM	507	0.1	C26	C26	C26	Reclamation	NA	NA	L0	NES
286	624G Total	BLM	120	0.0	ML06-UserAdminMtrPermitteeMtr	MO03	MO03	Motorized	RDP	R	L1	4WD
287	624H Total	BLM	6268	1.2	C08	MO03	MO03	Non-motorized	TNM	R	L1	EQ
288	624H1 Total	BLM	130	0.0	C08	MO03	MO03	Motorized	RDP	R	L1	4WD
289	624J Total	BLM	10	0.0	ML06-UserAdminMtrPermitteeMtr	MO03	MO03	Motorized	RD	R	L3	WB-50
290	624J1 Total	BLM	2572	0.5	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	Motorized	RDA	R	L3	WB50

Table D-1
Travel Route Designations

INDEX	Route Number (Ars_id)	OWNERSHIP	FEET	MILES	Alt B Code	Alt C Code	Alt D Code	Proposed Route Designation	Asset Type	FC	MI	DSTD
291	624K1 Total	BLM	7797	1.5	C08	ML06-UserAdminMtrPermitteeMtr	MO03	Motorized	RDPA	R	L1	EQ
292	624K2 Total	BLM	7265	1.4	C08	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
293	624KA Total	BLM	2883	0.6	C08	C08	ML06-UserAdminMtrPermitteeMtr	Non-motorized	TNM	R	L1	EQ
294	624KB Total	BLM	501	0.1	C08	C08	ML06-UserAdminMtrPermitteeMtr	Non-motorized	TNM	R	L1	EQ
295	624L Total	BLM	827	0.2	ML06-UserAdminMtrPermitteeMtr	MO03	MO03	Motorized	RDP	R	L1	PT
296	624L1 Total	BLM	1533	0.3	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
297	624M Total	BLM	3634	0.7	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
298	624M1 Total	BLM	2323	0.4	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
299	624M2 Total	BLM	2221	0.4	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
300	624M3 Total	BLM	1829	0.4	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
301	624P Total	BLM	417	0.1	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
302	624Q Total	BLM	9339	1.8	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
303	624R Total	BLM	1148	0.2	C26	C26	C26	Reclamation	NA	NA	L0	NES
304	624S Total	BLM	507	0.1	C26	C26	C26	Reclamation	NA	NA	L0	NES
305	624T Total	BLM	716	0.1	C26	C26	C26	Reclamation	NA	NA	L0	NES
306	625A Total	BLM	8519	1.6	C08	ML06-SeasonOther___Day Use Only - no overnight	MO03	Motorized	RDP	R	L1	4WD
307	625A1 Total	BLM	1275	0.2	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
308	625B Total	BLM	445	0.1	C08	ML06-SeasonOther___Day Use Only - no overnight	MO03	Motorized	RDP	R	L1	4WD
309	625C Total	BLM	187	0.0	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
310	625D Total	BLM	7592	1.4	ML06-TransAllNMM	ML06-TransAllNM	ML06-TransAllNM	Non-motorized	TNM	R	L1	EQ
311	625D1 Total	BLM	1493	0.3	ML06-TransAllNMM	ML06-TransAllNM	ML06-TransAllNM	Non-motorized	TNM	R	L1	EQ
312	625E Total	BLM	1618	0.3	ML06-TransAllNMM	ML06-TransAllNM	ML06-TransAllNM	Non-motorized	TNM	R	L1	EQ
313	625F Total	BLM	3672	0.7	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
314	626A Total	BLM	8048	1.5	ML06-UserAdminMtrPermitteeMtr	MO03	MO03	Motorized	RDP	R	L1	4WD
315	626B Total	BLM	12376	2.3	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
316	626C Total	BLM	6578	1.3	C08	ML06-UserAdminMtrPermitteeMtr	MO03	Motorized	RDPA	R	L1	EQ
317	626D Total	BLM	346	0.1	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
318	627C Total	BLM	7220	1.4	C08	MO03	MO03	Motorized	RDP	R	L1	4WD
319	627C1 Total	BLM	4083	0.8	C08	ML06-UserAdminMtrPermitteeMtr	MO03	Motorized	RDPA	R	L1	EQ
320	627F Total	BLM	9502	1.8	ML06-UserAdminMtrPermitteeMtr	MO03	MO03	Motorized	RDP	R	L1	4WD
321	627G Total	BLM	4632	0.9	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	MO03	Motorized	RDPA	R	L1	EQ
322	628A Total	BLM	1740	0.3	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
323	628B Total	BLM	9772	1.9	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ

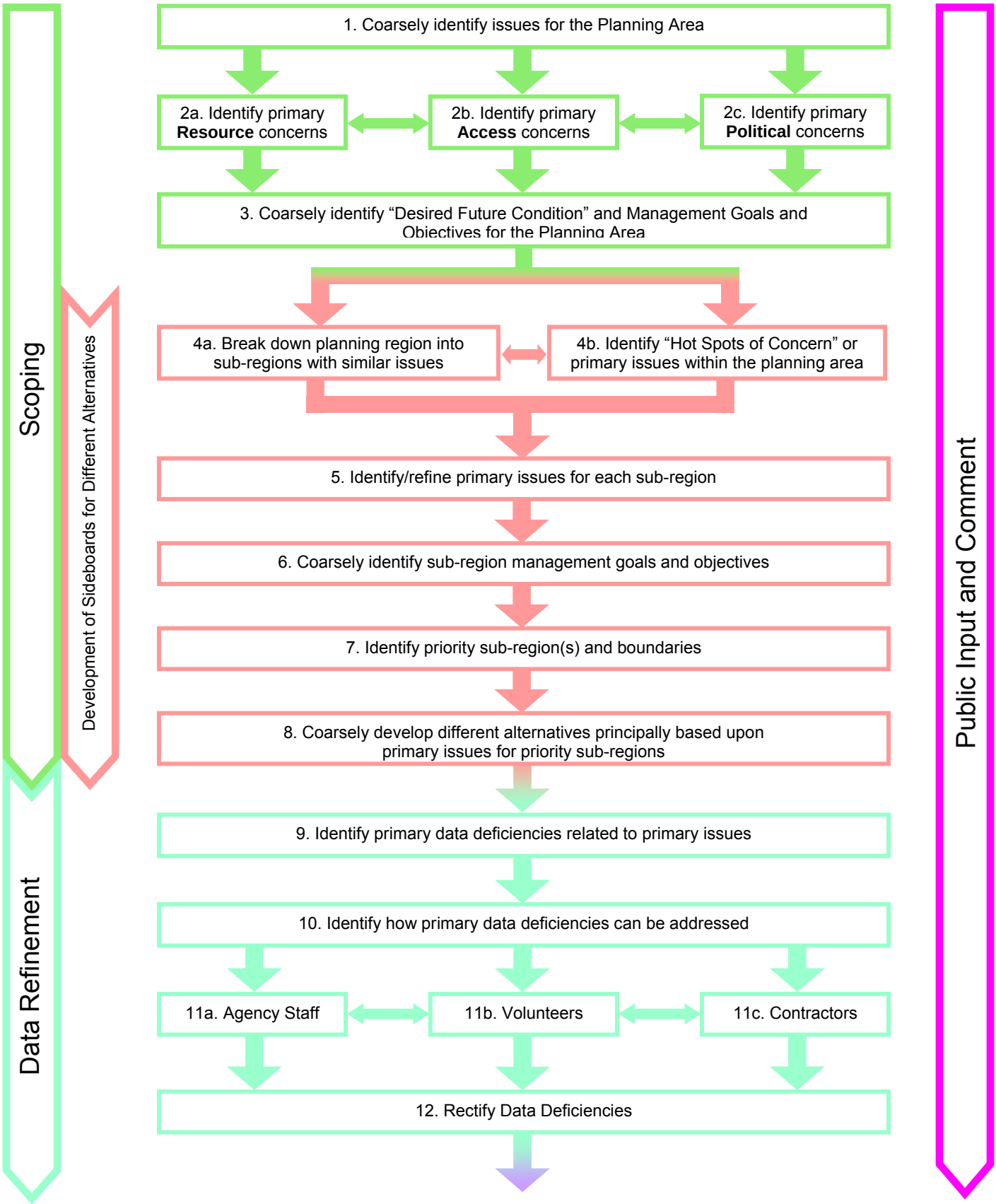
Table D-1
Travel Route Designations

INDEX	Route Number (Ars_id)	OWNERSHIP	FEET	MILES	Alt B Code	Alt C Code	Alt D Code	Proposed Route Designation	Asset Type	FC	MI	DSTD
324	629B1 Total	BLM	4164	0.8	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
325	629B1A Total	BLM	2915	0.6	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
326	629C Total	BLM	4538	0.9	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
327	629C1 Total	BLM	2872	0.5	MO03	MO03	MO03	Motorized	RDP	R	L1	4WD
328	629C2 Total	BLM	8993	1.7	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
329	629C3 Total	BLM	820	0.2	MO03	MO03	MO03	Non-motorized	TNM	R	L1	EQ
330	629D Total	BLM	10660	2.0	ML06-UserAdminOnlyMtr-TransPublicNM	ML06-UserAdminMtrPermitteeMtr-TransPublicNM	MO03	Motorized	RDPA	R	L1	EQ
331	629E Total	BLM	15085	2.9	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
332	629F Total	BLM	265	0.1	C08	ML06-UserAdminMtrPermitteeMtr	MO03	Motorized	RDPA	R	L1	EQ
333	629F2 Total	BLM	4444	0.8	C08	ML06-UserAdminMtrPermitteeMtr	MO03	Motorized	RDPA	R	L1	EQ
334	629G Total	BLM	5368	1.0	C08	ML06-UserAdminOnlyMtr	MO03	Motorized	RDPA	R	L1	EQ
335	629M1 Total	BLM	3121	0.6	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
336	629M1A Total	BLM	4588	0.9	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
337	631A Total	BLM	330	0.1	C08	MO03	MO03	Motorized	RDP	R	L1	4WD
338	631B Total	BLM	13699	2.6	C08	MO03	MO03	Motorized	RDP	R	L1	4WD
339	632A Total	BLM	2858	0.5	ML06-UserAdminOnlyMtr	MO03	MO03	Motorized	RDP	R	L1	4WD
340	632A1 Total	BLM	1345	0.3	C08	ML06-UserAdminMtrPermitteeMtr-TransPublicNM	MO03	Motorized	RDPA	R	L1	EQ
341	632A2 Total	BLM	569	0.1	ML06-UserAdminOnlyMtr	MO03	MO03	Non-motorized	TNM	R	L1	EQ
342	632E Total	BLM	5520	1.1	C08	MO03	MO03	Motorized	RDP	R	L1	4WD
343	633B Total	BLM	4866	0.9	ML06-UserAdminMtrPermitteeMtr	MO03	MO03	Motorized	RDP	R	L1	4WD
344	634A Total	BLM	1796	0.3	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	MO03	Motorized	RDPA	R	L1	EQ
345	634A1 Total	BLM	3107	0.6	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
346	634A2 Total	BLM	1671	0.3	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
347	634AX Total	BLM	10444	2.0	C07	C07	ML05-UserAdminMtrPermitteeMtr	Reclamation	NA	NA	L0	NES
348	635A Total	BLM	233	0.0	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
349	638A Total	BLM	16427	3.1	C26	C26	ML16-UserAdminMtrPermitteeMtr	Reclamation	NA	NA	L0	NES
350	638B Total	BLM	479	0.1	ML06-UserAdminMtrPermitteeMtr	MO03	MO03	Motorized	RDP	R	L1	4WD
351	638B1 Total	BLM	17907	3.4	C08	MO03	MO03	Motorized	RDP	R	L1	4WD
352	638C Total	BLM	13580	2.6	ML06-UserAdminMtrPermitteeMtr	MO03	MO03	Non-motorized	TNM	R	L1	EQ
353	638D Total	BLM	4233	0.8	C08	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
354	639A Total	BLM	42764	8.1	C26	C26	ML16-UserAdminMtrPermitteeMtr	Reclamation	NA	NA	L0	NES
355	639B Total	BLM	3850	0.7	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	Motorized	RDP	R	L1	4WD

Table D-1
Travel Route Designations

INDEX	Route Number (Ars_id)	OWNERSHIP	FEET	MILES	Alt B Code	Alt C Code	Alt D Code	Proposed Route Designation	Asset Type	FC	MI	DSTD
356	639C Total	BLM	1074	0.2	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	ML02-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
357	648A Total	BLM	5293	1.0	ML02-UserAdminMtrPvtPropMtr	MO01	MO01	Motorized	RD	R	L3	WB-50
358	650C Total	BLM	1740	0.3	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	ML06-UserAdminMtrPermitteeMtr	Motorized	RDPA	R	L1	EQ
359	652B Total	BLM	11801	2.2	ML06-UserAdminMtrPermitteeMtr-TransPublicNM	MO03	MO03	Motorized	RDPA	R	L1	EQ
360	652B2 Total	BLM	7791	1.5	ML06-TransAllNM	ML06-UserAdminOnlyMtr-TransPublicNM	ML06-UserAdminOnlyMtr-TransPublicNM	Motorized	RDPA	R	L1	EQ
361	652F Total	BLM	6573	1.2	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
362	652H Total	BLM	2438	0.5	ML06-TransAllNM	ML06-TransAllNM	MO03	Non-motorized	TNM	R	L1	EQ
363	652H1 Total	BLM	258	0.1	C08	ML06-TransAllNM	MO03	Non-motorized	TNM	R	L1	EQ
364	652I Total	BLM	2744	0.5	C08	C08	MO03	Motorized	RDP	R	L1	4WD
365	652I1 Total	BLM	1132	0.2	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
366	652J Total	BLM	329	0.1	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
367	652M Total	BLM	8050	1.5	C08	C08	C08	Non-motorized	TNM	R	L1	EQ
368	654A Total	BLM	2859	0.5	ML06-TransAllNMM	MO03	MO03	Motorized	RDP	R	L1	4WD
369	654A1 Total	BLM	7042	1.3	ML06-TransAllNMM	ML06-UserAdminMtrPermitteeMtr	MO03	Motorized	RDP	R	L1	4WD
370	654A2 Total	BLM	6902	1.3	ML06-TransAllNMM	ML06-TransAllNM	MO03	Non-motorized	TNM	R	L1	EQ
371	654AA Total	BLM	1312	0.3	ML06-TransAllNMM	ML06-TransAllNM	ML06-TransAllNM	Non-motorized	TNM	R	L1	EQ
372	654AB Total	BLM	1260	0.2	ML06-TransAllNMM	MO03	MO03	Motorized	RDP	R	L1	4WD
373	654AB1 Total	BLM	7814	1.5	ML06-TransAllNMM	MO03	MO03	Non-motorized	TNM	R	L1	EQ
374	654AB2 Total	BLM	4856	0.9	ML06-TransAllNMM	MO03	MO03	Non-motorized	TNM	R	L1	EQ
375	654AC Total	BLM	187	0.0	MO03	MO03	MO03	Non-motorized	TNM	R	L1	EQ
376	656A Total	BLM	1933	0.4	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
377	656B Total	BLM	2712	0.5	UserAdminMtrPermitteeMtr-TransPublicNMM	MO03	MO03	Motorized	RDPA	R	L1	EQ
378	656C Total	BLM	15158	2.9	ML06-TransAllNMM	MO03	MO03	Non-motorized	TNM	R	L1	EQ
379	658B Total	BLM	6066	1.2	ML06-TransAllNMM	MO03	MO03	Motorized	RDP	R	L1	4WD
380	658B1 Total	BLM	1873	0.4	ML06-TransAllNMM	MO03	MO03	Non-motorized	TNM	R	L1	EQ
381	660A Total	BLM	4955	0.9	C08	C08	MO03	Non-motorized	TNM	R	L1	EQ
382	662I1 Total	BLM	34	0.0	C08	C08	ML06-UserAdminOnlyMtr	Non-motorized	TNM	R	L1	EQ
383	662I2 Total	BLM	61	0.0	C08	C08	ML06-UserAdminOnlyMtr	Non-motorized	TNM	R	L1	EQ
384	665A Total	BLM	15976	3.0	C08	MO03	MO03	Non-motorized	TNM	R	L1	EQ
	TOTAL		1844723	349.48								

Route Evaluation Process©
for Travel Management Planning



Route Evaluation Process©
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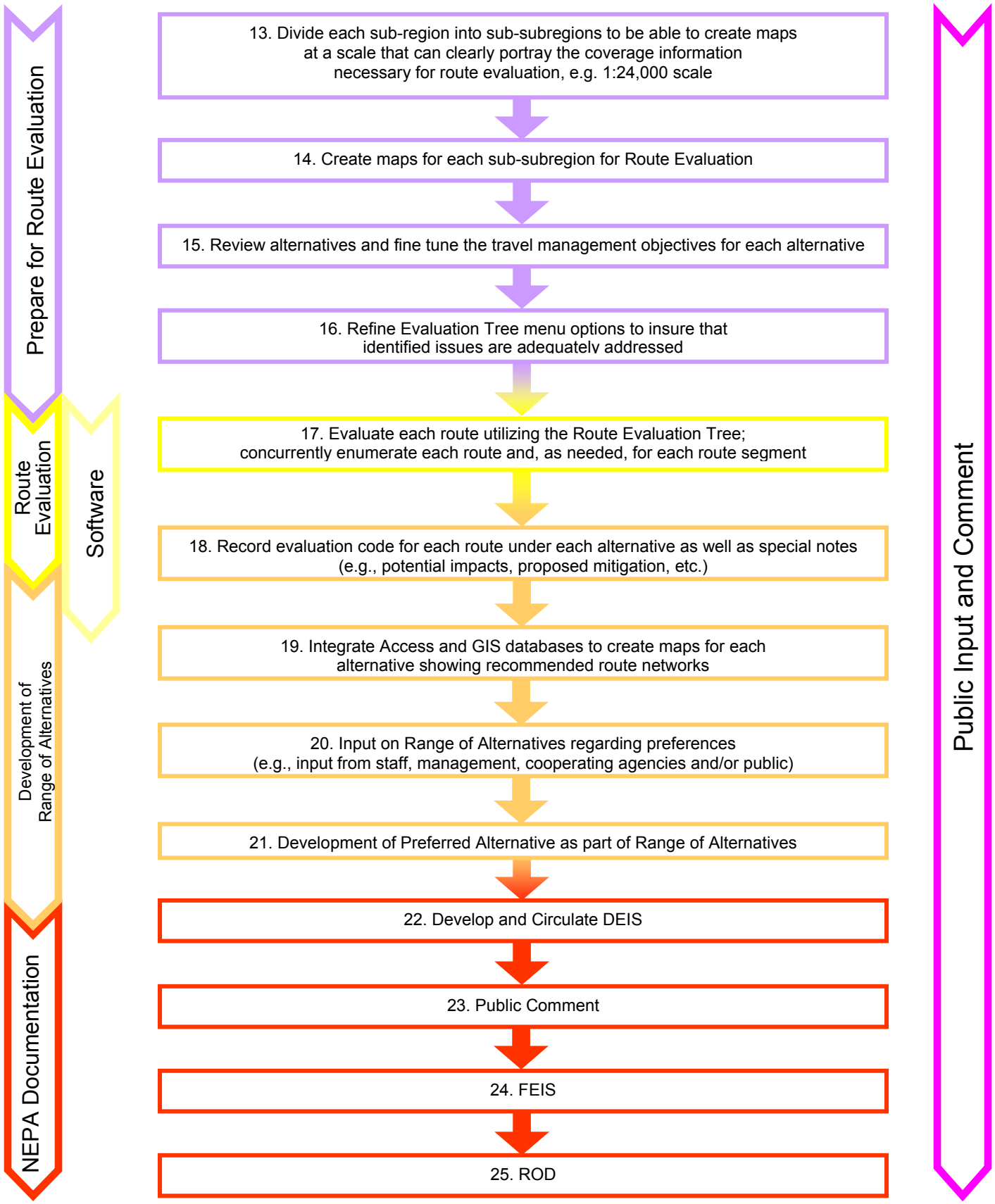

Route Evaluation Tree©

Version October 11, 2004

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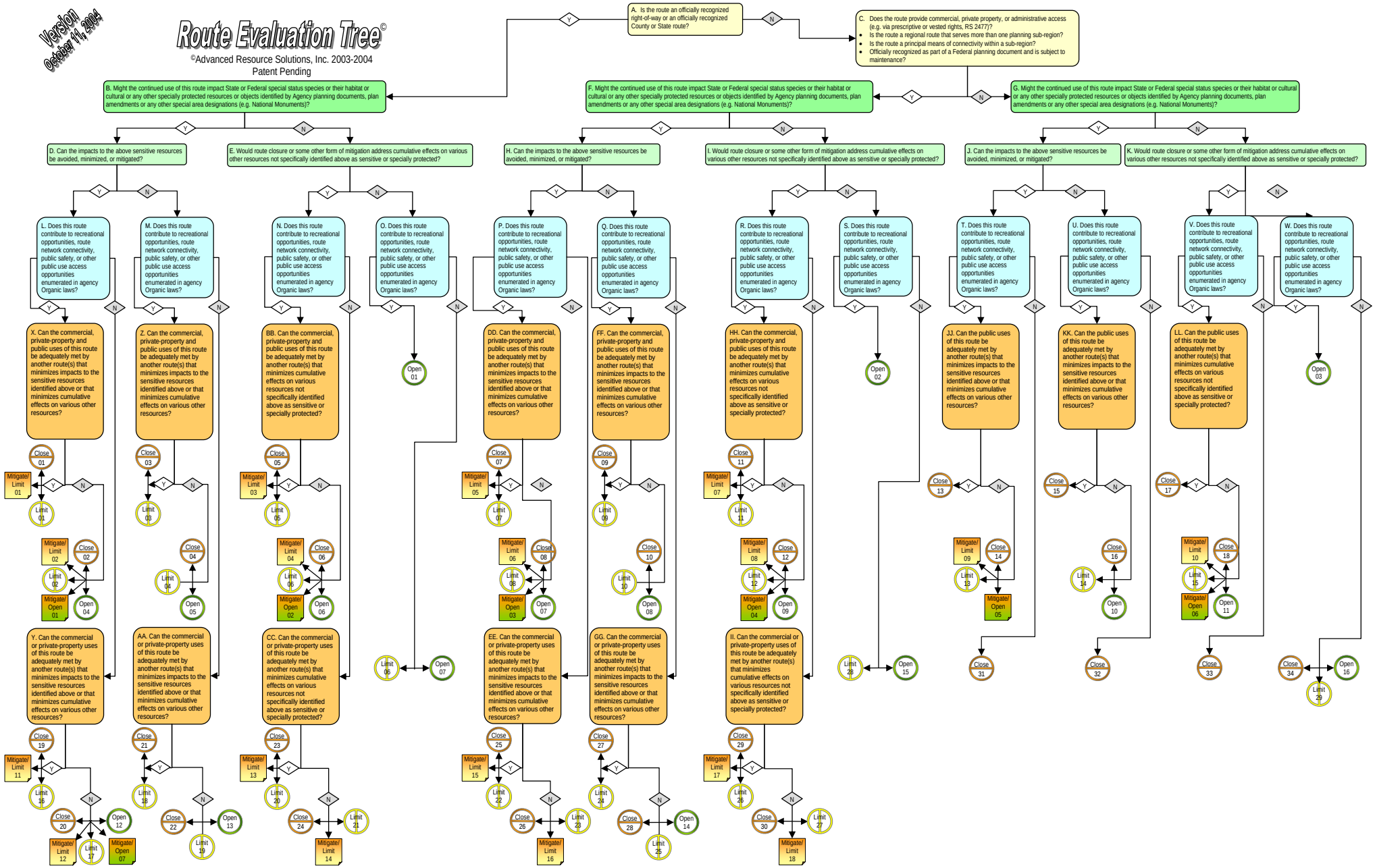

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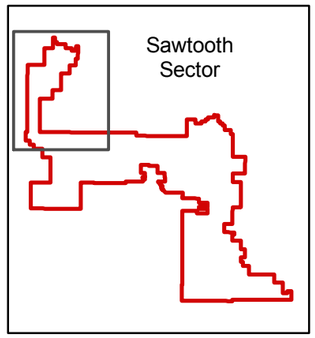

Proposed Travel Management Sawtooth Sector

Ironwood Forest National Monument
PRMP/FEIS

Legend

Route Designations

Motorized

- Road
- Primative Road
- Trail

Non-Motorized

- Road, Administrative Vehicles Only
- Primative Road, Administrative Vehicles Only
- Non-Mechanized Trail
- Not Designated

Surface Management

- Bureau of Land Management
- State Trust Lands
- Private

Data Source:
Route Alternative Designations: BLM 2008
Base Information: BLM 2003
Quadrangle Image: TOPO!, ©2007 National Geographic Maps, All Rights Reserved

General Reference

- County Boundary
- Main public access routes to monument. County administered roads connecting monument travel route system to public highways.

Planning Area

- Ironwood Forest National Monument

Map D-1

Proposed
Travel Management
West Silver Bell Sector

Ironwood Forest National Monument
PRMP/FEIS

Legend

Route Designations

Motorized

- Road
- Primative Road
- Trail

Non-Motorized

- Road, Administrative Vehicles Only
- Primative Road, Administrative Vehicles Only
- Non-Mechanized Trail
- Not Designated, on ASLD

Surface Management

- Bureau of Land Management
- State Trust Lands
- Private

Data Source:
Route Alternative Designations: BLM 2008
Base Information: BLM 2003
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General Reference

- County Boundary
- Main public access routes to monument. County administered roads connecting monument travel route system to public highways.

Planning Area

- Ironwood Forest National Monument

Universal Tranverse Mercator
Zone 12, Units Meters
Clark 1866 Spheroid
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0 0.5 1 2 Miles

0 0.5 1 2 Kilometers

West Silver Bell Sector

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Map D-2

Universal Tranverse Mercator
Zone 12, Units Meters
Clark 1866 Spheroid
NAD27 Datum
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0 0.5 1 2 Miles

0 0.5 1 2 Kilometers

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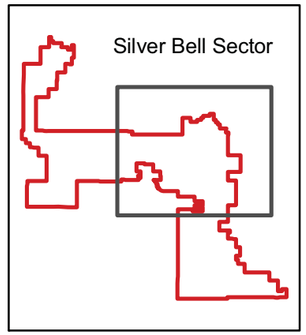

Proposed Travel Management Silver Bell Sector

Ironwood Forest National Monument
PRMP/FEIS

Legend

Route Designations

Motorized

- Road
- Primative Road
- Trail

Non-Motorized

- Road, Administrative Vehicles Only
- Primative Road, Administrative Vehicles Only
- Non-Mechanized Trail
- Not Designated

Surface Management

- Bureau of Land Management
- Military Reservations
- State Trust Lands
- Private

Data Source:
Route Alternative Designations: BLM 2008
Base Information: BLM 2003
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General Reference

- County Boundary
- River
- Main public access routes to monument. County administered roads connecting monument travel route system to public highways.

Planning Area

- Ironwood Forest National Monument

Map D-3

R. 09 E.

Proposed Travel Management Cocoraque Sector

Ironwood Forest National Monument
PRMP/FEIS

Legend

Route Designations

Motorized

- Road
- Primative Road
- Trail

Non-Motorized

- Road, Administrative Vehicles Only
- Primative Road, Administrative Vehicles Only
- Non-Mechanized Trail
- Not Designated

Surface Management

- Bureau of Land Management
- State Trust Lands
- Private
- Pima County

Data Source:
Route Alternative Designations: BLM 2008
Base Information: BLM 2003
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General Reference

- Central Arizona Project (CAP) Canal
- Main public access routes to monument. County administered roads connecting monument travel route system to public highways.

Planning Area

- Ironwood Forest National Monument

Universal Tranverse Mercator
Zone 12, Units Meters
Clark 1866 Spheroid
NAD27 Datum
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0 0.5 1 2 Miles
0 0.5 1 2 Kilometers

Cocoraque Sector

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Map D-4

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PERMIT NO. G-76

SCOPING REPORT

Ironwood Forest National Monument Resource Management Plan and Environmental Impact Statement

Prepared for
U.S. Department of the Interior
Bureau of Land Management
Tucson Field Office

Prepared by
URS

Ironwood Forest National Monument
Resource Management Plan and Environmental Impact Statement

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U.S. Department of the Interior
Bureau of Land Management
Tucson Field Office

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LIST OF ACRONYMS AND ABBREVIATIONS

ACEC	Area of Critical Environmental Concern
ADEQ	Arizona Department of Environmental Quality
ADWR	Arizona Department of Water Resources
AGFD	Arizona Game and Fish Department
ATV	All-terrain vehicle
AUM	Animal Unit Months
AZSDM	Arizona Sonora Desert Museum
BLM	Bureau of Land Management
CFR	Code of Federal Regulations
EIS	Environmental Impact Statement
FLPMA	Federal Land Policy and Management Act
GIS	Geographic Information System
GPS	Global Positioning System
IFNM	Ironwood Forest National Monument
LUP	Land Use Plan
MOU	Memorandum of Understanding
NEPA	National Environmental Policy Act
OHV	Off-highway vehicle
ORV	Off-road vehicle
RMP	Resource Management Plan
SHPO	State Historic Preservation Office
TFO	Tucson Field Office
TON	Tohono O'odham Nation
USFWS	U.S. Fish and Wildlife Service
U of A	University of Arizona
USGS	United States Geological Survey
WSA	Wilderness Study Area

SECTION 1.0 – INTRODUCTION

1.1 Overview

The Bureau of Land Management (BLM), Tucson Field Office (TFO), is preparing a Resource Management Plan (RMP) and Environmental Impact Statement (EIS) to analyze BLM's management of public land in the Ironwood Forest National Monument (IFNM) in Arizona (Map 1). The IFNM, which was established on June 9, 2000 with the signing of Presidential Proclamation 7320 (see Appendix A), encompasses approximately 189,600 acres, including approximately 128,900 acres of public land administered by the BLM.

An EIS is being prepared to identify the potential effects of implementing the alternative management approaches within the IFNM and to identify appropriate measures to mitigate potential impacts. The EIS will be prepared in compliance with the National Environmental Policy Act (NEPA) of 1969, Council on Environmental Quality regulations implementing NEPA, the Federal Land Policy and Management Act (FLPMA) of 1976, and other associated regulations. Together, the RMP and EIS will analyze and establish BLM's management practices for these lands in response to the Presidential Proclamation, current legislation and policies, and the demand to use public land and its resources.

1.1.1 Background

BLM-administered public land in the IFNM currently is managed with direction from the Phoenix Resource Area RMP (1989) and the Eastern Arizona Grazing EIS (1987). The purpose of these documents was to provide a comprehensive framework for managing the public land and for allocating resources over a planning period of 15 to 20 years. These documents set forth land use decisions and terms and conditions for guiding the management of activities on public land. Also, wildlife habitat plans, such as the Silverbell Habitat Management Plan, and allotment management plans provided specific management direction and actions for wildlife and range programs on lands within or immediately adjacent to the IFNM. While BLM can make decisions related only to public land and its resources, BLM is responsible for collaboratively planning with adjacent jurisdictions and the public to encourage compatible land uses within a regional context.

Since the Phoenix Resource Area RMP and Eastern Arizona Grazing EIS were developed, numerous changes have occurred that require reconsideration of certain decisions, most significantly the establishment of IFNM for the protection of natural and cultural resources. In addition to the IFNM designation, changes have occurred to land and resource use, including continued urban growth in the Tucson and Marana metropolitan area and surrounding communities, and increased recreational use of BLM-administered public lands.

While some elements of the current management documents are consistent with the Presidential Proclamation establishing the monument and provide appropriate management direction, other elements need revising. Many elements of the current management documents for the area are outdated based on changing circumstances, demographics, resource conditions, and/or policies, or are not consistent with the Presidential Proclamation. BLM intends to carry forward those elements that are working well.

There are many factors to consider in developing the RMP. For example, population growth in the region has increased recreational uses of public land. The Presidential Proclamation establishing the national monument assigns BLM with the responsibility to protect the special qualities for which the monument was designated, while continuing to allow public access within the monument. Factors such as these emphasize the importance of replacing the existing management documents with a plan that addresses the current issues.

BLM is responsible for balanced management of public lands and resources considered in a combination that will serve the needs of the public most effectively. In accordance with FLPMA, management is based on the principles of multiple use and sustained yield; this integration of uses takes into account the long-term needs of present and future generations for renewable and nonrenewable resources. For the IFNM, this planning process also must take into consideration Presidential Proclamation 7320, which defines for IFNM "objects of scientific and historic interest" that must be protected and lists actions necessary to protect IFNM resources. The Presidential Proclamation also reserves all federal lands within the boundaries and withdraws all lands in the IFNM from disposal under public land laws and continues many current uses and authorities. BLM is developing the RMP/EIS to be consistent with current laws and regulations, and is encouraging the public to be involved in the development of the RMP and the planning process for public lands in the IFNM.

Integral to the planning and environmental process is the public participation program, which keeps relevant agencies and the interested public engaged in the project's progress. Opportunities for public participation include scoping, public meetings and workshops, focus group discussions, project mailings, and hearings. Some of these opportunities have occurred (e.g., scoping), while others will occur at key milestones throughout the process.

1.2 Planning Area

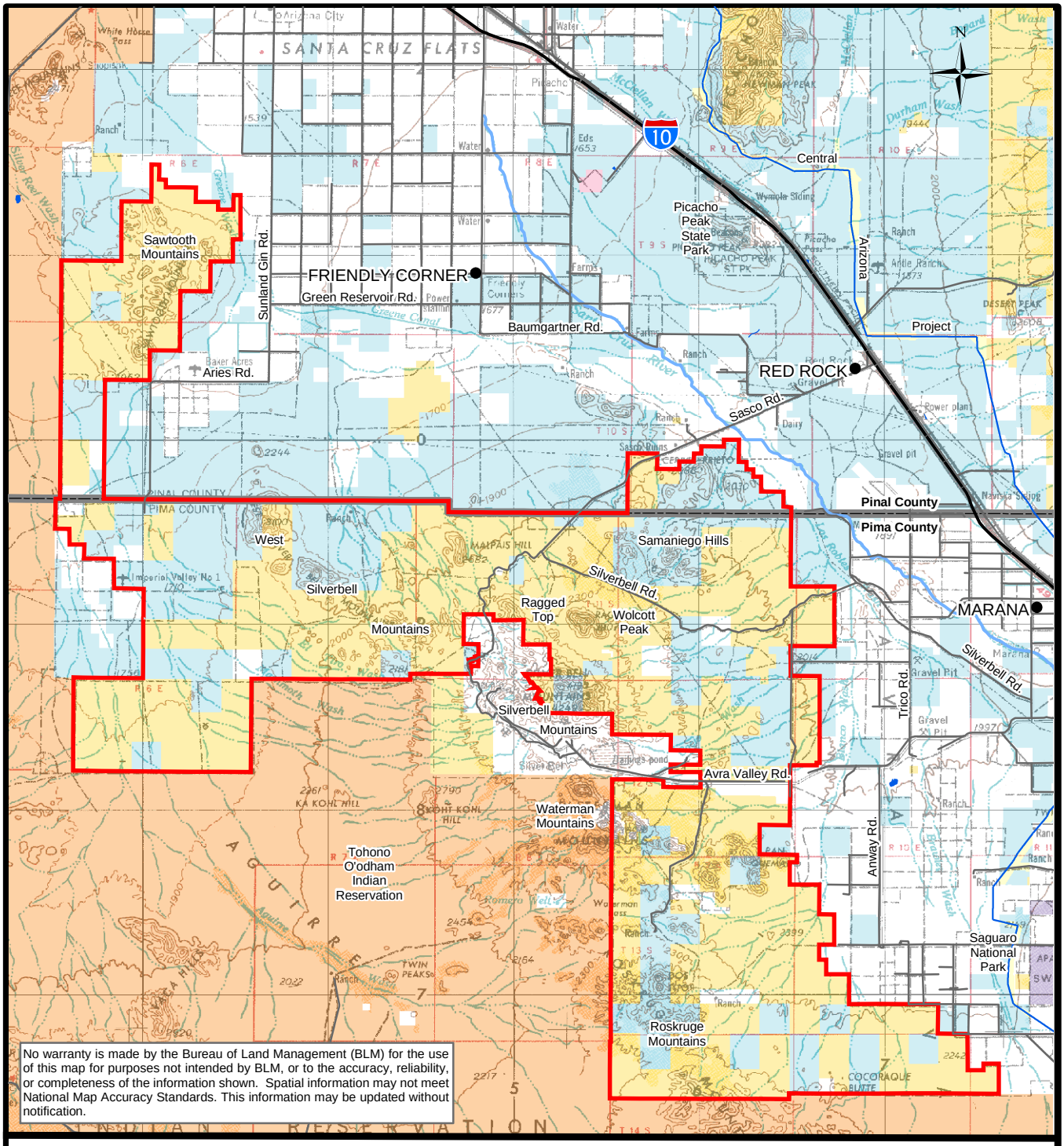
1.2.1 Location

The IFNM is located in south-central Arizona (refer to Map 1). The entire study area in which these BLM-administered lands are located covers approximately 189,600 acres; this is referred to as the Planning Area. Approximately 128,900 acres within the monument boundaries are BLM-administered public land. The balance of the land consists of approximately 54,700 acres of State Trust Land and approximately 6,000 acres that are privately owned. In addition, other agencies may have management responsibilities within the Planning Area; for example, the Arizona Game and Fish Department (AGFD) is responsible for managing wildlife for the state and the Arizona State Land Department holds and manages State Trust Lands. The Tohono O'odham Nation generally lies to the west and south of the IFNM, and a mosaic of BLM, state, and private land abuts the northern and eastern monument boundaries.

1.2.2 Description

The IFNM lies in the heart of the Sonoran Desert ecosystem in southern Arizona, and is a unique scenic area of rolling desert and ironwood woodlands including the Silverbell, Waterman, and Roskruge mountains. Much of the vegetation in this area is classic Sonoran Desert upland habitat dominated by cacti such as saguaro, Bigelow's cholla, and staghorn cholla. Other common plants include ironwood, paloverde, creosote, brittlebush, triangle-leaf bursage, ocotillo, and white thorn acacia. The upper slopes of the Silverbell Mountains possess a chaparral community dominated by jojoba. The lower bajadas contain inter-braided streambeds that carry water after heavy rains. These desert wash habitats are characterized by large ironwood, blue paloverde, and mesquite trees.

The IFNM encompasses most of the mountain ranges that are important to the diverse wildlife and plant communities associated with the ironwood/saguaro forest. In addition, the IFNM contains habitats for several endangered species and species of concern (e.g., desert tortoise), an Area of Critical Environmental Concern (ACEC) to protect an endangered cactus, and a desert bighorn sheep special management area. IFNM also includes a site listed on the National Register of Historic Places (National



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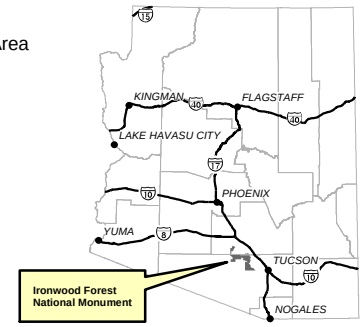
Ironwood Forest National Monument Planning Area

Legend

Planning Area
- Ironwood Forest National Monument Planning Area

Surface Ownership
- Bureau of Land Management
- National Park Service
- Bureau of Reclamation
- Indian Lands
- Military Reservations
- State
- Private

General Reference
- County Boundaries
- Interstate
- Roads
- Railroad
- Rivers



Universal Tranverse Mercator
Zone 12, Units Meters
Clark 1866 Spheroid
NAD27 Datum

Map 1

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Register), two archaeological districts on the National Register, historic mining camps, and other cultural resources that are eligible for the National Register.

Located along the Tohono O'odham Nation boundary, within an hour of the rapidly growing Tucson metropolitan area, the IFNM offers outstanding dispersed recreational opportunities. The area also is readily accessible from the Phoenix metropolitan area. Access is provided by dirt and paved roads connecting with Interstate 10. In addition to the nearby metropolitan areas and connecting roadways, human modifications within and visible from the IFNM include electrical transmission lines, pipeline facilities, mining operations, fences, and other infrastructure associated with developed areas.

1.3 Collaborative Planning

Collaboration may be used to describe a wide range of external and internal working relationships. According to BLM Handbook H-1601-1, Appendix B, collaboration implies that other federal agencies; tribal, state and local governments; and various members of the public will be involved in the project well before the planning process is officially initiated, rather than at specific points mandated by regulation and policy (BLM 2002). The collaborative process essentially allows the community to communicate to the BLM how public lands should be managed from the public's perspective. The final goal of the process should be that the communities and agencies work together toward a common understanding on the future management of the public lands.

Agency coordination is an important step in a successful collaborative process for several reasons. First, early involvement with other federal, tribal, state, and local governments establishes a solid working relationship with each agency. Next, it builds trust and credibility among agencies that then can be transferred to the public. Finally, it will help ensure BLM develops land use decisions that are supported by and conform to other jurisdictions in any given area to the maximum extent possible.

Similarly, active involvement by the public early in the process helps to ensure alternatives are considered that:

- address the diversity of public interests
- builds trust between BLM and the public
- creates public understanding and acceptance of the eventual management decisions
- develops a working relationship that will carry into the shared implementation of those management decisions.

After the monument was designated, the BLM Tucson Field Office established a collaborative process to build a solid foundation of community trust and respect as the RMP is prepared. Collaborative efforts, such as the Asarco Working Group and volunteer projects, have already supported the BLM in accomplishing its mission and will remain important in fostering continued community support for the plan and its implementation.

1.3.1 Cooperating Agencies

As a part of initiating multiple planning efforts throughout the state, BLM compiled a list of federal, state, county, and local agencies and Native American tribes that may have a relevant interest in the planning process. A letter was sent to more than 200 agencies to introduce the various RMP/EIS processes, identify the upcoming data gathering efforts, and offer an opportunity to become a cooperating agency in the planning effort. A cooperating agency meeting was held at the BLM Arizona State Office on October 30, 2002. The purpose of the meeting was to discuss BLM's planning process, collaborative

planning, and the meaning and responsibilities of cooperating agency status. Opportunities for involvement in BLM's planning process without becoming a cooperating agency also were discussed. It was made clear that BLM's goal was to encourage involvement by all interested parties using whatever methods the parties wished.

AGFD already has an established Memorandum of Understanding (MOU) with the TFO and plans to use this agreement to work collaboratively with BLM on the IFNM. Pima and Pinal counties are currently reviewing an MOU to establish a cooperating agency relationship with the TFO. Also, the City of Marana has established a specific agreement with the BLM TFO to collaborate throughout the development of the RMP.

1.3.2 Agency Coordination

Though no specific agency scoping meetings were held, BLM has contacted key federal, state, and county agencies to initiate coordination and collaborative efforts that will continue throughout the RMP/EIS process. As of the date of this report, contact has been made with the following agencies:

Federal

- Bureau of Indian Affairs, Phoenix Area Office
- Bureau of Reclamation, Arizona, Field Office
- Environmental Protection Agency
- Federal Highway Administration
- National Park Service, Organ Pipe Cactus National Monument, Juan Bautista de Anza National Historic Trail, and Saguaro National Park
- Natural Resources Conservation Service
- Southwest Strategy Coordination Office
- Borderlands Task Group (Interagency)
- U.S. Department of Agriculture, Rural Development, Arizona
- U.S. Department of Defense (Air Force, Marine Corps, Army Corps of Engineers, and National Guard)
- U.S. Department on Homeland Security, Border Patrol, Tucson Office Sector
- U.S. Fish and Wildlife Service, Cabeza Prieta National Wildlife Refuge
- U.S. Fish and Wildlife Services, Arizona Ecological Services
- U.S. Forest Service, Coronado National Forest
- U.S. Geological Survey

State

- Arizona Corporation Commission
- Arizona Department of Commerce
- Arizona Department of Emergency Management
- Arizona Department of Environmental Quality
- Arizona Department of Transportation
- Arizona Department of Water Resources
- Arizona Game and Fish Department
- Arizona Governor's Office
- Arizona Mines and Mineral Resources
- Arizona Office of Tourism
- Arizona Office of the Attorney General
- Arizona State Land Department

- Arizona State Mine Inspector
- Arizona State Parks
- State Historic Preservation Office
- State of Arizona

County
- Central Arizona Association of Governments
- Pinal County
- Pima County
- Graham County
- Apache County
- La Paz County
- Navajo County
- Cochise County
- Gila County
- Yuma County
- Greenlee County
- Mohave County
- Santa Cruz County

Local
- City of Tucson
- City of Marana
- City of Green Valley
- City of Casa Grande
- City of Mesa
- Town of Eloy
- Arizona City
- Town of Sells

Due to the limited response by agencies during the scoping process, BLM TFO has sent a follow-up letter to many of the agencies listed above to invite agency participation and to request data relevant to the IFNM planning process that may be available for BLM's use. Coordination meetings with these and additional agencies will continue throughout the planning process.

BLM also attends the monthly Tucson Basin Managers Meeting to provide briefings on the IFNM planning efforts. This group is comprised of various representatives from federal, state, county, and other local jurisdictions, as well as local environmental organizations. In addition, BLM has provided updates to the Middle Gila Conservation Partnership and the Winkleman Natural Resource Conservation District.

1.3.3 Tribal Consultation

As previously described, multiple governmental organizations have management responsibilities for land or resources within the IFNM, and the IFNM abuts to tribal lands of the Tohono O'odham Nation (though the Tohono O'odham do not manage lands within the IFNM). As part of the scoping effort, BLM contacted the following tribes to initiate consultations and to reiterate the opportunity to be a cooperating agency in the planning process:

- Tohono O'odham Nation

- Gila River Indian Community
- Ak-Chin Indian Community
- Pasqua Yaqui Indian Community

Though the tribes want to participate in the planning process, they are not pursuing cooperating agency status at this time.

The Native American tribal representatives have attended most of BLM's public meetings and provided input on issues that concern them. A coordination meeting was held in January 2002 with the Tohono O'odham Nation, in which the tribe expressed a desire to gain ownership of BLM lands that are part of their ancestral lands, but outside the boundary of IFNM. The tribe also expressed interest in a formal relationship with BLM through an MOU that officially recognizes the Government-to-Government relationship in accordance with the three following Guidance documents: (1) Memorandum for the Heads of Executive Departments and Agencies dated April 29, 1994 entitled "Government to Government Relations with Native American Tribal Governments," (2) Executive Order 13175 of November 6, 2000 entitled "Consultation and Coordination with Indian Tribal Governments," and (3) Executive Order 13007 of May 24, 1996 entitled "Indian Sacred Sites." At other public meetings, the members of the Tohono O'odham tribe made the distinction that the IFNM is part of the tribe's ancestral homeland versus an area containing cultural resources. The tribe expressed further concern about preservation of the natural and cultural resources found on the IFNM.

BLM intends to continue to consult with the Native American tribes to learn more about the values they have with regard to the resources within IFNM. Through this Government-to-Government relationship, BLM can obtain data from interviews with tribal elders, tribal records on cultural resources, and relevant research.

1.3.4 Public Interaction

The BLM began conducting public informational meetings in August 2000 and continued holding meetings for almost two years until March 2002. The purpose of these meetings was to engage the community in dialogue to determine the future of how the public lands, specifically the monument, should be managed. This process has served to educate the public and agencies about sustaining natural and cultural resource values and the relationship of these resources to economic activities within the community.

These meetings were well attended by a diverse public that included several conservation and user groups as well as local, state, tribal, and federal agencies. During these meetings, the establishment of the monument and its future management were openly discussed. This forum served as a platform to build relationships between the community and BLM and, more importantly, allowed for the community to build relationships with each other. The formation of these relationships allowed the BLM to establish working groups to identify, define, and articulate issues that would need to be addressed in the RMP. These working groups included Lands and Minerals, Vegetation, Wildlife, Recreation, and Cultural Resources.

Public involvement remains critical to the success of the planning process. BLM has performed a variety of public outreach programs to increase awareness of and involvement in the planning process. These efforts have included presentations to community councils, business and social groups, and various organizations as well as public meetings. BLM now has several hundred individuals on its mailing list and the list is continuing to grow. The initial public involvement occurred prior to public scoping, as there was strong public support in establishing the monument and public interest in how the monument is going to be managed. BLM held working group meetings to discuss specific resources or issues with

interested parties. Public scoping for the IFNM planning was initiated on April 24, 2002 with the *Federal Register* publication of the Notice of Intent to prepare the RMP/EIS. Since public scoping, BLM has continued to have informal discussions with agencies, organizations, and individuals interested in the planning for IFNM. BLM also has attended various organized meetings as a guest to provide information regarding the IFNM RMP.

Initial public interaction occurred through BLM participation at community meetings, special interest group meetings, and coordination with elected representatives. BLM staff members were invited to speak at meetings held by environmental and recreation groups—including the Arizona-Sonora Desert Museum, Mason Audubon Center, and Coalition for Sonoran Desert Protection—and at meetings in the community of Marana. These informal meetings provided BLM with the opportunity to explain the planning process and timeline and to encourage citizen participation in the planning efforts. The initial public interactions included coordination with multiple special interest groups and non-profit organizations, including (but not limited to):

- Sierra Club
- Tucson Rough Riders
- Red Hills Neighborhood Association
- Center for Biological Diversity
- Coalition for Sonoran Desert Protection
- Desert Watch
- Mule Deer Foundation
- Arizona Desert Bighorn Sheep Society
- Arizona Wilderness Coalition
- Arizona Association of Four Wheel Drive Club
- Desert Gold Diggers
- Blue Ribbon Coalition
- Tucson Hiking Club
- Green Valley Hiking Club

BLM conducted nine public scoping meetings during July 2002. The open house scoping meetings were held in the Arizona communities of Mesa, Casa Grande, Eloy, Arizona City, Tucson, Sells, Picture Rock, Marana, and Green Valley. These meetings are discussed in more detail in Section 1.4.3.

BLM will continue to actively encourage public involvement through the formal planning process, informal community meetings, and other methods.

1.4 Scoping Process

This section describes the scoping process, identifies the techniques that were used to notify the public about their opportunity to be involved in scoping, and gives a brief summary of the public scoping meetings.

1.4.1 Description of Process

Scoping is a timeframe in a planning process when public and agency input is solicited in order to identify the range, or scope, of issues to be addressed during the planning and environmental analysis for a planning project (in this case, the IFNM RMP/EIS). The lead agency (in this case, BLM) solicits comments from relevant agencies and the public, organizes and analyzes all of the comments received, then identifies the issues that will be addressed during the planning and environmental analysis and

compiles this information into an organized report (the Scoping Report). A scoping period is required to be a minimum of 30 days beginning with the publication of a *Federal Register* notice. BLM TFO is encouraging comments at anytime throughout the planning process; however, comments received during scoping are particularly helpful to guide the direction of the studies and analyses. The official scoping period for the IFNM RMP/EIS lasted more than 30 days—from April 24, 2002 to September 30, 2002. Comments received within this period, as well as substantive comments received through August 1, 2003, were used to compile this scoping report.

BLM's intent during the scoping process was to inform agencies and the public about the IFNM RMP/EIS and solicit their comments in order to identify issues and questions to consider when developing the plan. During the scoping period, BLM announced the commencement of the RMP/EIS through various means, invited written comments, and held public scoping meetings. These activities are described below.

1.4.2 Announcements

The RMP/EIS and scoping meetings were announced through the *Federal Register*, newspaper advertisements, the Arizona BLM website, and media releases.

Federal Register

The IFNM RMP/EIS and public scoping process began officially with the publication in the *Federal Register* of BLM's Notice of Intent to develop the RMP, prepare an EIS, and conduct public scoping meetings. The Notice of Intent to initiate planning on the IFNM was published on April 24, 2002 (Vol. 67, No. 79, Page 20157, [AZ-400-02-1610-DO-089A]).

Media Releases and Public Service Announcements

BLM prepared a media release and public service announcement to introduce the project and announce the scoping meetings and their respective locations. The announcement was issued in June and July 2002 to local and regional newspapers, television stations, and radio stations. The following list provides a representative sample of entities that received the media release:

Newspapers

- *Desert Times*
- *Monument News*
- *Saguaro News*
- *North Valley Chronicle*
- *Green Valley News* (south of Tucson)
- *Tri-Valley News*
- *Desert Leaf*
- *Arizona Daily Star*
- *Tucson Citizen*
- *Arizona Republic*

Television Stations

- KOLD
- KVOA
- KGUN
- KMSB

- KUAT
- KHRR

Radio Stations

- KNST FM
- KFMA FM (Green Valley)
- KUAT FM
- KUAZ AM
- KIIM FM
- KOHT FM (Marana)
- KWFM FM

In addition, this media release was mailed to approximately 400 addresses, which were derived from the lists of participants who attended the working group meetings hosted by BLM prior to public scoping.

Paid Newspaper Advertisements

BLM prepared a newspaper advertisement for the scoping meetings for each geographic location to introduce the project and announce the scoping meetings. Table 1-1 shows the date and publication of each paid newspaper advertisement.

Table 1-1 – Paid Newspaper Advertisements and Date of Publication

Publication	Date
Monument News	July 2002
Saguaro News	July 2002
Desert Times	July 2002
Casa Grande Dispatch	June 20, 2002
Arizona City Independent	June 19, 2002
Eloy Enterprise	June 27, 2002
Tucson Citizen	June 26, 2002
Arizona Daily Star	June 26, 2002
East Valley Tribune	June 19, 2002
Green Valley News	July 3, 2002
Ajo Copper News	July 3, 2002

Website

BLM posted a news release of the planning effort on the Arizona State Office website, and meetings were noted on the website calendar of events.

1.4.3 Public Meetings

BLM hosted nine public scoping meetings during July 2002 that were attended by 173 persons, as shown in Table 1-2.

Table 1-2 - Public Scoping Meeting Dates, Locations, and Attendance

Meeting Date	Meeting Location	Attendance
July 10, 2002	Mesa, Arizona	63
July 11, 2002	Casa Grande, Arizona	10
July 16, 2002	Picture Rock, Arizona	21
July 17, 2002	Tucson, Arizona	33

July 18, 2002	Marana, Arizona	22
July 23, 2002	Sells, Arizona	5
July 25, 2002	Arizona City, Arizona	8
July 30, 2002	Eloy, Arizona	1
July 31, 2002	Green Valley, Arizona	10

Each of the nine meetings was conducted in an open house format, allowing meeting participants to review maps and display boards and ask specific questions one-on-one to BLM staff about the RMP/EIS process.

The media release announcing the scoping meetings, comment worksheets, and fact sheets regarding the various resources were available for the public as handouts at each scoping meeting. A Spanish speaking BLM staff member attended each of the scoping meetings.

A comment worksheet was circulated at each of the public meetings. The comment worksheet inquired about the public's opinions of lands, minerals, cultural, vegetation, and wildlife and recreation information. BLM invited participants to submit comments in formats other than the comment worksheets, including letters and electronic mail (e-mail) messages.

SECTION 2.0 – PLANNING CRITERIA

2.1 Introduction

The planning criteria provide direction for the plan, and determine how the planning team approaches the development of alternatives as well as the selection of a preferred alternative. The criteria ensure that plans are tailored to the identified issues and ensure that unnecessary data collection and analyses are avoided. They focus on the decisions to be made in the plan and achieve the following:

- Provide an early, tentative basis for inventory and data collection needs.
- Enable the manager and staff to develop a preliminary planning base map delineating geographic analysis units.
- Stimulate the development of planning criteria during public participation.

2.2 Issue Categories

The resource categories and issues for which public scoping comments were received, or where BLM has identified management concerns, include the following:

- Air Resources
- Soils
- Water Resources
- Biological Resources
- Grazing Management
- Fire Management
- Mineral and Energy Resources
- Lands and Realty
- Special Area Designations
- Wilderness Characteristics
- Visual Resources
- Recreation
- Transportation and Access
- Social and Economic Conditions
- Cultural Resources
- Native American Issues
- Law Enforcement and Undocumented Immigrants (including Public Safety)
- Hazardous Materials
- Facilities and Education

2.3 General Planning Criteria

- The IFNM RMP will establish the guidance upon which the BLM will manage the IFNM, and will supercede all other BLM RMPs for the lands covered by the IFNM RMP.

- The RMP will be completed in compliance with FLPMA, Endangered Species Act, NEPA, and all other relevant federal law and executive orders (including wilderness legislation) and management policies of the BLM. The RMP also will meet the requirements of the Presidential

Proclamation to protect the objects of biological, archaeological, historical, and geological value within the IFNM.

- Where planning decisions have previously been made that still apply, they will be re-evaluated to determine if they are compatible with the Presidential Proclamation and then those decisions will be carried forward into the RMP. They also will use information developed and management alternatives proposed in previous studies of the planning area.

- The planning team will work collaboratively with the State of Arizona; Pinal and Pima counties; tribal governments; municipal governments; other federal agencies; the Resource Advisory Council; and all other interested groups, agencies, and individuals. Decisions in the RMP will strive to be compatible with existing plans and policies of adjacent local, state, tribal, and federal agencies, consistent with federal law and regulations.

- Native American tribal consultations will be conducted in accordance with policy, and tribal concerns will be given due consideration. The planning process will include the consideration of any impacts on Indian trust assets.

- Consultation with the U.S. Fish and Wildlife Service (USFWS) will take place throughout the planning process in accordance with the recent National Memorandum of Agreement to identify conservation actions and measures for inclusion in the plan. The TFO has begun the consultation process with the USFWS under a specific Consultation Agreement, which identified the roles and responsibilities of the TFO and the USFWS during the consultation process.

- Coordination with Arizona State Historic Preservation Office (SHPO) will be conducted throughout the planning process.

- The RMP will recognize the State of Arizona's authority to manage wildlife, including hunting and fishing, within the planning area.

- The RMP will establish whether visitor facilities will be located within the monument, while recognizing the desire to maintain the existing natural and cultural landscapes.

- The RMP will set forth a framework for managing recreational and commercial activities in order to maintain existing natural landscapes and provide for the enjoyment and safety of the visiting public.

- The lifestyles of area residents, including activities of grazing, hunting, and backcountry motorized use and recreation, will be considered in the RMP.

- Any lands or interests located within the IFNM boundary, which are acquired by BLM, will be managed consistently with the RMP, subject to any constraints associated with the acquisition.

- The RMP will address transportation and access for all public lands. Within the IFNM, motorized and mechanized routes will be designated.

- The RMP will recognize all existing rights.

- Federal Geographic Data Committee standards and other applicable BLM standards will be followed.

SECTION 3.0 – COMMENT SUMMARY

3.1 Introduction

Scoping commenced with the publication of the *Federal Register* Notice of Intent on April 24, 2002. While BLM encourages and considers comments throughout the planning process, BLM requested that comments be submitted early in the process, by September 30, 2002 in order to identify the issues to be addressed in the studies and analyses.

During scoping, BLM received a total of approximately 9,100 letters, e-mail messages, and comment forms. BLM also noted comments made during other meetings with agencies and the public.

3.2 Comment Compilation

All of the comments were organized, reviewed, and analyzed to identify the preliminary issues that will be addressed during the preparation of the RMP/EIS. The comment letters, and each comment, was entered into an electronic database system that facilitates organization, sorting, and management of the comments in several different ways including type of submitter (e.g., agency, special interest group, individual), geographic location of submitter, and type of issue.

The majority of the comment letters are attributed to two form letters resulting from letter-writing campaigns. Both of the form letters, submitted primarily through the use of e-mail, pertain specifically to the protection of the natural and cultural resources within the IFNM.

One of the form letters (form letter 1), submitted by approximately 5,270 individuals (about 58 percent of all submittals), urges BLM to develop a plan that emphasizes protecting IFNM resources as the highest priority by limiting vehicle routes and preventing destructive activities. This letter also requests that BLM define the status and distribution of species within the IFNM before BLM develops plan alternatives for the EIS.

The other form letter (form letter 2), submitted by approximately 3,420 individuals (about 38 percent of all submittals), urges BLM to fully protect the IFNM from further degradation and misuse, specifically from off-road vehicles and mining activities.

In addition to the two form letters, approximately 416 individuals, agencies, businesses, and/or special interest groups submitted unique comment letters (about 4 percent of all submittals). These letters were received from the following agencies, businesses, and organizations:

State
- Arizona State Land Department

Businesses
- Asarco Incorporated
- Parsons Biological Consulting
- Silver Bell Mining, LLC
- T & E, Inc.
- Tucson Electric Power

Organizations and Interest Groups
- Alaska Center for the Environment
- American Society of Landscape Architects

- Arizona Coalition for the Environment
- Arizona Desert Bighorn Sheep Society
- Arizona Dust Devils
- Arizona Nature Club
- Arizona Trail Riders
- Arizona Virtual Jeep Club
- Arizona Wilderness Coalition
- Avra Valley-Silverbell Conservation Alliance
- Blackbrook Audubon Society of Northeast Ohio
- Blueribbon American Motorcycle Association
- Center for Biological Diversity
- Defenders of Wildlife
- Friends of Arizona Rivers
- Friends of the Earth, et al.
- Heat Dirt Riders
- International Dark Sky Association
- International Mountain Bicycling Association
- Ironwood Conservation Alliance
- National Wildlife Federation
- Natural Trails and Water Coalition
- Pima Trails Association
- Raytheon Dirt Riders
- Sierra Club
- Sky Island Alliance
- Society for American Archaeology
- Sonoran Desert Mountain Bicyclists
- The Phoenix Zoo
- The Preservation of American Wildlands
- The Wilderness Society
- Tucson Audubon Society
- Urban Trails Coalition
- U.S. PIRG (Public Interest Research Group)
- Wild Canid Research Group

Comments were received from every state in the United States as well as the District of Columbia and Puerto Rico. Approximately 900 of the 9,100 submittals were received from 33 foreign countries. Table 3-1 lists the states from which the most comments were received (that is, states submitting at least one percent of the total submittals).

Table 3-1 – Geographic Sources of Comments

Location	Number of Comments	Percent of Comment Letters
California	1,213	13.3
Arizona	706	7.8
Colorado	566	6.2
New York	519	5.7
Florida	455	5.0
Texas	339	3.7
Washington	308	3.4

Location	Number of Comments	Percent of Comment Letters
Pennsylvania	299	3.3
Illinois	298	3.3
Ohio	244	2.7
New Jersey	206	2.3
Oregon	206	2.3
Michigan	201	2.2
New Mexico	188	2.1
Virginia	186	2.0
Massachusetts	174	1.9
North Carolina	173	1.9
Wisconsin	147	1.6
Maryland	146	1.6
Missouri	126	1.4
Georgia	125	1.4
Minnesota	125	1.4
Connecticut	92	1.0
Indiana	92	1.0

Also, BLM provided a comment worksheet at each of the public scoping meetings. The comment worksheet inquired about the public's opinion on the land use opportunities to consider in the IFNM. Completed comment forms were submitted to BLM by 62 individuals, most of whom have Arizona mailing addresses. As noted in Section 1.4.3, a total of 173 people registered their attendance at the nine scoping meetings.

3.3 Summary of Public Comments

The public comments received address a variety of resources and resource uses as well as collaboration and the RMP/EIS process. Each comment letter was reviewed, the individual comments were analyzed and separated into categories, and the comments were entered into a digital database. The approximately 1,600 unique comments (though some of these are very similar in nature) in the database focused on 43 different issues, which were generally grouped into the issue categories listed in Table 3-2. The issues are listed in descending order, rather than the order that categories are presented in this report.

Table 3-2 – Percent of Letters Mentioning Various Issues

Issue Category	Percent of Comment Letters Mentioning the Issue
Recreation [1, 2]	98.0
Transportation and Access [1, 2]	97.7
Biological Resources [1, 2]	97.7
Mineral and Energy Resources [1, 2]	97.6
Cultural Resources [1, 2]	96.4
Lands and Realty [1]	59.6
Facilities and Education [1]	58.5
Visual Resources [1]	58.3
Law Enforcement and Undocumented Immigrants [2]	38.3
Air Resources	< 1.0
Fire Management	< 1.0
Grazing Management	< 1.0
Hazardous Materials	< 1.0

Issue Category	Percent of Comment Letters Mentioning the Issue
Native American Issues	< 1.0
Social and Economic Conditions	< 1.0
Soil Resources	< 1.0
Special Area Designations	< 1.0
Water Resources	< 1.0
Wilderness Characteristics	< 1.0

1 This issue was mentioned in form letter 1.
2 This issue was mentioned in form letter 2.

Within each issue category listed in Table 3-2, the following headings were used to organize the information gathered and analyzed: (1) Issues Overview; (2) Representative Comments; (3) Issues to be Used in the Development and Analysis of EIS Alternatives (further organized by Issues Identified by the Public and BLM Management Concerns); (4) Issues That Can Be Addressed Administratively; and, (5) Issues That Will Not Be Addressed.

Though a majority of the issue categories include information under each of the five heading noted above, headings were omitted if no information or comments were relevant to those particular headings. For example, an issue category that does not have a heading for "Issues That Can be Addressed Administratively" indicates that no scoping comments were received requesting actions by BLM that can be handled administratively. Therefore, headings are listed only where applicable for each issue category.

Each of the headings are defined as follows:

The "Planning Criteria" provide direction for the plan, and determine how the planning team approaches the development of alternatives as well as the selection of a preferred alternative.

The "Representative Comments" are actual statements that were made in comments received during the scoping period. Analysts who had reviewed the comments selected these brief issue-related statements to represent the types of comments that were received on the issue. When specified, the agency or organization that made the comment was noted; if the comment was from an individual, the city and state of the commenter's address were noted with the comment. Most of the comments selected were brief; however, in some cases additional content of the comment statement has been included to provide further context. Some representative comments apply to more than one resource category and may appear more than once within this report. The number of representative comments presented does not necessarily represent the relative number of comments received on the issue; rather, it is more representative of the variety of viewpoints and context in which those issue statements were received. In some cases, minor spelling or typographical corrections were made within the quoted statements. However, no other changes were made to these statements; they are as they appear in the comment forms, letters, and e-mails.

The "Issues Identified By The Public" a subheading under "Issues to be Used in the Development and Analysis of the EIS Alternatives" also may help guide the focus of the analysis. For example, comments were received that address facilities, particularly for visitors. Alternatives that could be developed for facilities might include (a) providing limited facilities within the IFNM (e.g., kiosks, restrooms); (b) providing a visitor center for interpretive information and public safety within the IFNM boundaries; and (c) locating any visitor facilities outside the boundary of the IFNM.

The "BLM Management Concerns" are those concerns that were not identified by the public during the scoping process, but add to the "Issues to be Used in the Development and Analysis of EIS Alternatives.

The "Issues That Can Be Addressed Administratively" are those that can be resolved through policy or administrative action include those issues that do not require a plan decision but can be addressed immediately through administrative action by BLM. Examples include removing trash from the IFNM.

3.3.1 Air Resources

Planning Criteria

Laws, regulations, policies, and guidelines followed for air resources will include, but not be limited to, Presidential Proclamation 7320, FLPMA, NEPA, Land and Water Conservation Fund Act, and Arizona Standards for Rangeland Health.

The planning criterion is to maintain and enhance air quality and visibility in a manner consistent with the Clean Air Act. Under the Clean Air Act, BLM-administered public lands were given a Class II air quality classification unless reclassified by the State. Wilderness areas and national monuments must be classified as Class I or Class II. This classification allows moderate deterioration associated with moderate, well-controlled industrial and population growth.

Issues Overview

Very few comments were received that pertain to air quality. Those that were received regard maintaining air quality for the benefit of wildlife and the reduction of dust pollution in accordance with the Clean Air Act. Another issue raised in the comments was the impact of off-road vehicles and other traffic on air quality within the IFNM.

Representative Comments

"Wildlife in the area (such as nesting Harris hawks we found by accident) need protection from vehicles, noise, fumes, and other disturbance." – Individual, Tucson, Arizona

"BLM must develop an alternative that would include maximum provisions for clean air within the monument, especially the reduction of particulate (dust) pollution." – Center for Biological Diversity, Tucson, Arizona

"An extensive body of scientific literature documents the adverse impact of off-road vehicles on soil, water, vegetation, sensitive habitats, fish and wildlife, public land visitors and cultural and archeological and historical resources. Off-road vehicles are also significant sources of air, water, and noise pollution." – Natural Trails and Waters Coalition, Missoula, Montana

Issues to be Used in the Development and Analysis of EIS Alternatives

Issues Identified by the Public

- Monitor air quality in the area and any potential effect on wildlife.
- Reduce activities that create dust pollution.

BLM Management Concerns

- Consider the effect of air quality on the monument resources, including monument viewsheds.
- Consider whether to recommend a change in the Air Quality Class to the State.

3.3.2 Soil Resources

Planning Criteria

Laws, regulations, policies, and guidelines followed will include, but not be limited to, Presidential Proclamation 7320, FLPMA, NEPA, Land and Water Conservation Fund Act, Arizona Standards for Rangeland Health, and Executive Order 11988.

Proposed decisions will be measured against the Arizona Standards for Rangeland Health, Standard 1: upland soils will exhibit infiltration, permeability and erosion rates that are appropriate to soil type, climate, and land form (ecological site) to ensure long-term soil productivity. Best management practices will be incorporated into programs to minimize soil erosion and compaction resulting from management actions.

Issues Overview

There were very few comments raised in public scoping directly relating to soils. The comments received related to impacts on soils, specifically erosion, and their perceived cause by activities within the IFNM such as mining and travel on roads and trails.

Representative Comments

"Erosion and pollution from mining far surpasses that made by OHV [off-highway vehicle] users." – Individual, San Carlos, California

"Once identified, the BLM must assess all legal travel ways for their impact on monument objects including their potential impact on soil compaction and erosion, exotic plant germination and distribution, water drainage and watershed quality, fragmentation of wildlife habitat and travel corridors, disruption or damage of archaeological and cultural sites, damage or obliteration of historic trails, air quality (dust pollution), natural quiet, and interruption of scenic qualities." – Defenders of Wildlife, Tucson, Arizona

Issues to be used in the Development and Analysis of EIS Alternatives

Issues Identified by the Public

- Evaluate erosion impacts from mining.
- Evaluate erosion impacts for other activities such as off-highway vehicle use and other uses on travel ways.

BLM Management Concerns

Concerns regarding soils to be addressed in the plan, identified by BLM (but not necessarily by other agencies or the public during scoping), are as follows:

- Establish reclamation goals for disturbed areas that will ensure that soils are stable.
- Evaluate existing erosion control structures and the need for additional structures.

3.3.3 Water Resources

Planning Criteria

Laws, regulations, policies, and guidelines followed for water resources will include, but not be limited to, the Presidential Proclamation 7320, FLPMA, NEPA, Land and Water Conservation Fund Act, and Arizona Standards for Rangeland Health.

Water Quality – Section 319 of the Clean Water Act obligates federal agencies to be consistent with state non-point source management program plans and relevant water quality standards. Section 313 requires compliance with state water quality standards. BLM will coordinate with the Arizona Department of Environmental Quality (ADEQ) regarding their total maximum daily load program and other relevant water quality programs. BLM will incorporate applicable best management practices or other conservation measures for specific programs and activities into the RMP. Water quality will be maintained or improved in accordance with state and federal standards. Proposed decisions within the planning area will be in compliance with the Clean Water Act, federal and state water quality standards, and BLM/ADEQ agreements.

Water Rights – Where the need for water rights is identified on the public lands, BLM will file for water rights in accordance with state law and in accordance with the IFNM Presidential Proclamation.

Issues Overview

A considerable number of comments were received concerning water resource issues such as groundwater, surface water, artificial waters, and water rights. The majority of the comments received were related to potential impacts on water quality from activities within the monument such as mining, vehicles, grazing, etc. Additionally, several comments were concerned with protecting waters for the benefit of wildlife and biodiversity in the IFNM. Very few comments were received regarding water rights and artificial water development.

Representative Comments

"Close and rehabilitate all vehicle routes that threaten cultural and historic sites, fragment wildlife habitat, damage plants, soils and local hydrology; and endanger public safety and private property." – Individual, Tucson, Arizona

"BLM should test and monitor the quality of groundwater resources to ensure local mining and ranching operations are not polluting the monument aquifer." – Individual, unspecified community

"[Off road vehicles] threaten and destroy cultural resources, habitat for wildlife, catchments for clean and healthy drinking water, a variety of recreational opportunities and solitude." – Alaska Center for the Environment, Anchorage, Alaska

"Create a transportation system that will provide reasonable access while safeguarding wildlife habitat, plant species, soil and local hydrology." – Individual, Green Valley, Arizona

"I am concerned about water quality issues and possible well contamination due to mining in the area." – Individual, Marana, Arizona

"Please protect and restore springs and seeps, for critical wildlife water sources." – Individual, unspecified community

"The scoping process should consider the impact of reserving water upon present existing water rights, particularly for important existing economic interests such as the Silver Bell Mine. [No] water rights that are legally held should be impacted by the management plan." – Silver Bell Mining, LLC, Marana, Arizona

"BLM should file for ownership of any water rights on newly developed wells or springs. We discourage development of artificial waters, however." – Individual, Cortaro, Arizona

Issues to be Used in the Development and Analysis of EIS Alternatives

Issues Identified by the Public

- Protect groundwater resources from contamination from activities such as mining, vehicle use, and ranching.
- Identify an aquifer protection plan including groundwater monitoring.
- Review water rights and potential impacts to those rights.
- Discourage development of artificial waters.

BLM Management Concerns

A concern regarding water resources to be addressed in the plan, identified by BLM (but not necessarily by other agencies or the public during scoping), is as follows:

- Identify any watersheds designated by ADEQ as Category I watersheds and identify decisions or restoration actions that should be considered.

3.3.4 Biological Resources

3.3.4.1 Vegetation and Noxious Weeds

Planning Criteria

Vegetation and Noxious Weed Management

Laws, regulations, policies, and guidelines followed for vegetation and noxious weed management will include, but are not limited to, Arizona Standards for Rangeland Health and Guidelines for Grazing Administration, BLM Grazing Regulations 43 CFR 4100, Executive Order 13112, FLPMA, Federal Noxious Weed Act of 1974, Federal Pollution Control Act, NEPA, Presidential Proclamation 7320, Public Rangelands Improvements Act, Soil Conservation and Domestic Allotment Act, Taylor Grazing Act, and the Watershed Protection and Flood Control Act.

Proposed decisions on vegetation and noxious weed management will be measured against various state and federal laws and regulations to ensure the continuance of desired plant communities, which provide for biodiversity, and protection and restoration of native species. Desired plant community descriptions will be developed that emphasize the protection of the diversity of natural communities specified in the proclamation. Vegetation will be managed to achieve desired plant communities (considering the ecological site potential) that provide for biodiversity as well as protection and restoration of native species. The plant communities will be managed to protect, improve, and restore communities to provide wildlife habitat.

Noxious weeds (invasive species) are defined as "alien species whose introduction does or is likely to cause economic or environmental harm or harm to human health" (Executive Order 13112). BLM will work with county, state, tribal, and federal agencies, and individuals to monitor, manage, and control

noxious weeds and invasive species within the monument. Noxious weed control will be considered in the RMP in accordance with the integrated weed management guidelines and design features identified in national, state, and local BLM programs and policies. Noxious weed infestations will be prevented, contained, and/or reduced on BLM-administered public land using an integrated pest management approach. Proposed decisions will be assessed to determine whether or not they would contribute to the introduction or spread of noxious weeds or invasive species in accordance with the federal Noxious Weed Act and Executive Order 13112. Management practices that prevent and control invasive species will be emphasized.

Issues Overview

A majority of the comments received regarding vegetation and noxious weeds for the monument concerned the existing status and distribution of the vegetative communities and management thereof to ensure retention and enhancement of biodiversity. Comments regarding vegetation focused primarily on protection of the ironwood tree and small cacti species. Impacts on flora species from recreational, land development, grazing, and mining activities were the prominent concerns. Additionally, comments emphasized the importance of the ironwood tree as a nursery plant as well as for forage and shelter for a wide range of fauna species. Comments received regarding noxious weeds stressed the importance of off-road vehicle management and grazing management practices within the monument to avoid the introduction of noxious weeds. Remediation of existing noxious weeds also was a concern because of the detrimental effects on biodiversity.

Representative Comments

"Botanical communities require a long time to grow and recover and all life depends on the communities." – Individual, unspecified community

"[Protect] diverse desert habitat, rare cacti species, dense stands of ironwood trees [and desert bighorn sheep]." – Individual, Scottsdale, Arizona

"Ironwood cannot be [easily] reclaimed. If it is destroyed, restoring it will not be easy." – Individual, unspecified community

"A major objective of the management plan must be to protect [ironwood trees], which in turn will also help protect other species." – Individual, Santa Barbara, California

"The ironwood system provides roosts for hawks and owls, burrows for desert tortoise, forage for desert bighorns, nests for white-winged doves and nearly [an additional] 150 bird species." – Alaska Center for the Environment, Anchorage, Alaska

"Grazing should be scientifically managed to limit damage to soils, plants, and effects on wildlife." – Individual, Glendale, Arizona

"Please let us have a baseline assessment first of the flora/fauna which will be affected, the impact of off-road vehicles and the economic impact of mining, development and vehicular traffic versus the economic importance of low impact eco-tourism in this area." – Individual, Lakeland, Florida

"BLM's goal should be to manage for a natural range of native plant associations. Prevent introduction and spread of exotic plants. Monitor and assess rangeland conditions to ensure cattle or existing ranching practices are not introducing or encouraging the spread of exotic plants." – Individual, unspecified community

"Eliminate noxious and exotic species of plants from IFNM" – Individual, Tucson, Arizona

"We realize that roads are one of the prime vectors of exotic species as well as trash. This is one of the primary reasons suggesting road closures." – T&E, Inc., Cortaro, Arizona

Issues to be Used in the Development and Analysis of EIS Alternatives

Issues Identified by the Public – Vegetation

- Close and rehabilitate all the vehicle routes that threaten vegetation.
- Develop a baseline assessment of vegetative communities.
- Protect ironwood trees and rare cacti species from human activities.
- Restore native plant species.
- Ban target shooting to protect vegetation.
- Recognize that ironwood trees cannot be easily reclaimed.

Issues Identified by the Public – Noxious Weeds

- Eradicate existing noxious weeds.
- Close roads that serve as a transfer source of noxious weeds.
- Monitor and assess rangeland conditions to ensure cattle or existing ranching practices are not introducing or encouraging the spread of exotic plants.

BLM Management Concerns

- Ensure that management actions and uses within the IFNM are not introducing or spreading non-native or noxious plants.
- Determine which vegetative products, if any, should be available for collection (e.g., firewood).

Issues That Can Be Addressed Administratively

- Require Asarco mining operation to restore vegetation in areas of illegal mining activities. Asarco has reclaimed the areas of trespass within the IFNM and vegetative monitoring will continue in this area.

3.3.4.2 Special Status Species

Planning Criteria

Laws, regulations, policies, and guidelines followed for special status species management will include, but are not limited to, Arizona Standards for Rangeland Health and Guidelines for Grazing Administration, BLM Manual 6840, Desert Bighorn Sheep Range Wide Plan and Sonoran Desert Tortoise Range Wide Plan, Endangered Species Act, Executive Order 13112, FLPMA, NEPA, Nichol's Turks Head Recovery Plan, Presidential Proclamation 7320, Public Rangelands Improvements Act, Sikes Act, and the Taylor Grazing Act.

Special status species (federally designated threatened, endangered, or agency designated sensitive species or species of concern) are flora and fauna species that need increased protection due to dwindling numbers or loss of habitat. Proposed management decisions for this planning effort will be designed to enhance and maintain habitat for special status species. Management actions authorized, funded, or implemented by BLM will be done so as to not jeopardize the continued existence of federally listed

threatened or endangered flora or fauna species or result in the destruction or adverse modification of critical habitat. Species proposed for federal listing and proposed critical habitat will be given the same consideration as listed species. Candidate species, BLM-sensitive and AGFD-listed species will be managed so as not to contribute to the need to list as threatened or endangered. The intent is to recover listed species and maintain healthy populations of all other species and therefore avoid the need for further listing of any species as threatened or endangered.

In addition, BLM adheres to BLM's Manual 6840, which outlines the conservation management procedures of threatened and endangered species and the habitat on which they depend; ensures that all actions that BLM authorizes, funds, or implements comply with the Endangered Species Act; requires cooperation with the USFWS in the planning and recovery of threatened and endangered species; states the BLM policy for managing special status candidate species. BLM also will follow terms and conditions implemented by Biological Opinions and Conservation Agreements when making special status species management decisions for the IFNM.

Issues Overview

The comments received regarding special status species were concerned mostly with habitat restoration and protection from human encroachment and recreational activities. A majority of the concern expressed for special status species included emphasis that BLM assess existing road and dirt tracks associated with recreational activity and propose closure of those roads and activities that occur near habitat of special status species. Many of the comments request that BLM give precedence to protection and restoration of habitat for threatened, endangered species, and species of concern (as listed by AGFD) that have been assembled within the Sonoran Desert Conservation Plan.

Representative Comments

"Prohibit new mining, purchase nearby lands for ecological integrity and protecting habitat for species of concern." – Individual, Grand Canyon, Arizona

"Imperiled species should be a top concern in management decisions." – Individual, Davis, California

"Budget to restore and protect habitat for endangered and protected species." – Individual, Arivaca, Arizona

"Protect and restore habitat for threatened and endangered species." – Individual, Tucson, Arizona

"Exclude the private lands inheld to Ironwood Forest National Monument from [Pima] County's proposed Section 10 permit [under the Endangered Species Act for a regional, multi-species conservation plan]." – Ironwood Conservation Alliance, Tucson, Arizona

Issues to be Used in the Development and Analysis of EIS Alternatives

Issues Identified by the Public

- Preserve open space, wildlife habitat, and protect the area's endangered species.
- Protect and restore priority vulnerable species as identified in the Sonoran Desert Conservation Plan.
- Consider special status species concerns in transportation and access planning, including desert tortoise.

BLM Management Concerns

Concerns regarding special status species to be addressed in the plan, identified by BLM (but not necessarily by other agencies or the public during scoping), are as follows:

- Evaluate potential closure areas to human access or regulate land use to prevent potential disturbance to sensitive plant and animal resources.
- Determine what management actions are necessary to reduce the chance of habitat degradation for desert tortoises and still provide for increased human visitation and historical uses such as grazing, hunting, recreation, etc.

3.3.4.3 Wildlife and Wildlife Habitat

Planning Criteria

Laws, regulations, policies, and guidelines followed for wildlife and wildlife habitat management will include, but are not limited to, Arizona Standards for Rangeland Health and Guidelines for Grazing Administration, BLM Manual 6840, Desert Bighorn Range Wide Plan and Desert Tortoise Range Wide Plan, Endangered Species Act, FLPMA, Presidential Proclamation 7320, Public Rangelands Improvement Act, Sikes Act, and the Silverbell-Baboquivari Habitat Management Plan.

Proposed wildlife and wildlife habitat management activities for the IFNM include re-establishment of native species, protection and enhancement of the habitat of these native species, and development of policies and guidelines designed to prevent harm to the health of these species or degradation of their habitats. State regulations govern the taking of wildlife not listed as threatened or endangered by the USFWS.

BLM works in cooperation with the AGFD on management plans, studies, and permits as well as the USFWS to manage wildlife and wildlife habitat on its public lands. Additionally, BLM coordinates with Pima County on the Sonoran Desert Conservation Plan to achieve levels of consistency on wildlife protection, including migration corridors. BLM also manages habitat for game animals on public lands. Currently, for the game management units within the IFNM, hunting seasons are established for mule deer, javalina, desert bighorn sheep, mountain lion, and small game such as quail, rabbits, and doves.

Issues Overview

A majority of the comments received regarding biological resources within the monument expressed concern for wildlife and wildlife habitat. These comments stated that BLM should make wildlife and wildlife habitat protection and enhancement the utmost priority within the RMP. Concern for the desert bighorn sheep and the impact from human activity was prominent. Most people that commented would like BLM to implement seasonal closures near bighorn sheep habitat and lambing areas. Additionally, comments stressed the importance of managing mining, grazing, recreational shooting, camping activities, and land development as they relate to wildlife habitat and wildlife corridors. Concern about recreational off-road vehicles and the associated effects on wildlife and habitat were numerous; the comments note the noise pollution these vehicles generate and the myriad trails created by them. Other comments state that BLM should implement ongoing enforcement actions for recreational activities within the monument to avoid habitat destruction. Many comments urge BLM to purchase State Trust Land near wildlife habitat areas to ensure future protection of these habitats. Others stressed the importance of wildlife conservation versus wildlife preservation. Some comments state that wilderness designation would be the best approach to protect wildlife and habitat. Concern for wildlife and habitat from illegal activity and undocumented immigrant activity also was expressed.

Representative Comments

"I urge you to develop a plan that makes protecting the Monument's biological resources the highest priority by appropriately limiting vehicle routes and preventing destructive activities like mining." – Alaska Center for the Environment, Anchorage, Alaska

"BLM should include full consideration of wildlife populations including the desert bighorn, in their management plans. This means mining, activities; off-road travel and inappropriate development should not be permitted." – Individual, Gunnison, Colorado

"Wildlife in the area (such as nesting Harris hawks we found by accident) need protection from vehicles, noise, fumes, and other disturbance." – Individual, Tucson, Arizona

"Wildlife is important to this area and must be protected. Wildlife corridors, migration, routes and access to forage must be kept intact." – Individual, Beaverton, Oregon

"Mining poses a considerable threat to this important wildlife habitat." – Individual, Denver, Colorado

"Purchase State Trust Lands and private lands critical to maintain ecological integrity and wildlife populations." – Individual, Tucson, Arizona

"This land was created in part as a refuge for the Bighorn Sheep that live there." – Individual, Sherman Oaks, California

"Consider prohibiting the husbandry of domestic sheep within a 15-mile radius of known bighorn sheep habitat for the purpose of avoiding domestic sheep botfly larvae from infecting the wild sheep population." – Individual, Tucson, Arizona

"[It] is necessary that those responsible for the stewardship of the land make themselves aware of the baseline of present flora and fauna within their operations." – Individual, unspecified community

"Off-road vehicles and mining can destroy the ancient trees and the diverse wildlife populations of the monument and should be strictly curtailed." – Individual, Federal Way, Pennsylvania

"Protect the biodiversity, integrity and population viability of wildlife within the monument." – Individual, Orrville, Ohio

"Please limit all development within the Monument so the wildlife within and without (that which makes use of the area in migration or foraging routes) will be protected." – Individual, unspecified community

"Consider seasonal closures for Ragged Top and other areas during breeding and lambing [of bighorn sheep]." – Individual, Tucson, Arizona

"This plan should include: Careful monitoring of the monument lands and wildlife." – Individual, Pacific Grove, California

"Help create a huge wildlife corridor by extending or connecting the Monument to the Tortolita Mountain Preserve." – Individual, Tucson, Arizona

"Target shooting is harmful to the bighorn sheep." – Individual, Marana, Arizona

"Management of predators on the monument by Arizona Game and Fish -per state policy- ensures the sheep population for the future." – Individual, Tucson, Arizona

"BLM should do as little as possible to protect so called endangered species, extinction is a normal process and no one really cares if some rat or weed dies off." – Individual, Phoenix, Arizona

"Once identified, the BLM must assess all legal travel ways for their impact on monument objects including their potential impact on soil compaction and erosion, exotic plant germination and distribution, water drainage and watershed quality, fragmentation of wildlife habitat and travel corridors, disruption or damage of archaeological and cultural sites, damage or obliteration of historic trails, air quality (dust pollution), natural quiet, and interruption of scenic qualities." – Individual, Tucson, Arizona

"Of primary concern to the [Arizona Desert Bighorn Sheep Society, Inc.] is that the establishment of the Ironwoods Monument does not compromise, restrict or unnecessarily delay sound wildlife management and conservation activities." – Arizona Desert Bighorn Sheep Society, Inc., Phoenix, Arizona

Issues to be Used in the Development and Analysis of EIS Alternatives

Issues identified by the Public

- Close Ragged Top to all forms of entry and activity (and other areas important to desert bighorn sheep) seasonally during bighorn sheep lambing and breeding seasons.
- Close roads that fragment wildlife habitat.
- Keep off-road vehicles on designated trails to prevent habitat fragmentation.
- Prevent inappropriate development in the monument that can damage wildlife corridors.
- Acquire more land for additional habitat.
- Ban target shooting to protect wildlife habitat.

BLM Management Concerns

Concerns regarding wildlife and wildlife habitat to be addressed in the plan, identified by BLM (but not addressed by other agencies or the public during scoping) are as follows:

- Identify what indicators or limits of acceptable change will be used to determine when wildlife populations are being impacted to an unacceptable degree.
- Integrate habitat management with other resource programs to minimize impacts on wildlife species and their habitats while still providing for other uses on the public lands within the IFNM.
- Determine what management actions are necessary to encourage movement of desert bighorn sheep from the Silverbell Resource Conservation Area into other areas to increase genetic exchange and to improve the health of the herd.
- Implement recovery and conservation plans for special status species through management practices.
- Evaluate the use of wildlife water catchments in the IFNM.

Issues That Can Be Addressed Administratively

- Require Asarco mining operation to restore land that it illegally trespassed near wildlife habitat.

3.3.5 Grazing Management

Planning Criteria

Laws, regulations, policies, and guidelines followed for livestock grazing management include, but are not limited to, Arizona Standards for Rangeland Health and Guidelines for Grazing Administration, BLM grazing regulations 43 CFR 4100, Desert Bighorn Sheep Range Wide Plan, Desert Tortoise Range Wide Plan, Eastern Arizona Grazing EIS (BLM 1986), Endangered Species Act, Presidential Proclamation 7320, Public Rangeland Improvement Act, Safford/Tucson Grazing Biological Opinion 2-21-96-F-160 (as amended), and the Taylor Grazing Act.

With this planning effort, BLM will provide for livestock management in the IFNM and will determine if allotments are open or closed to grazing in accordance with the Taylor Grazing Act and, if open, in what manner. Decisions will include a strategy for ensuring that proper grazing practices are followed while preserving habitats for sensitive plant and wildlife species. The RMP will incorporate the statewide standards and guidelines established by the BLM State Director and approved by the U.S. Secretary of the Interior. It will include a strategy for ensuring that proper grazing practices are followed while preserving habitats for sensitive plant and wildlife species. Appropriate best management practices will be followed to protect rangeland resources and, where necessary, to mitigate any conflicts with other uses and values. Administrative actions to assure compliance with existing permit/lease requirements, to modify permits and leases, to monitor and supervise grazing use, and to remedy unauthorized grazing use will continue.

Issues Overview

Most of the comments received concerning livestock grazing management in the IFNM stress that BLM must conduct an inventory of current grazing practices and assess rangeland conditions and allotment plans prior to developing management criteria. Some comments state that livestock grazing activity should not occur within the IFNM at all, while others would like to retain their existing grazing allotments and animal unit months (AUMs). Some comments state that livestock grazing activities should be phased out slowly from the monument. The concern for wildlife competing with livestock is important to some people, whereas others urge BLM to develop a quality grazing management plan for multi-use activity within the IFNM.

Representative Comments

"Inventory and assess rangeland conditions and implement allotment management plans." – Individual, Tucson, Arizona

"Grazing levels should also be closely monitored to ensure that no degradation is taking place through inappropriate or over-stocking." – Individual, Davis, California

"Please assess and mitigate negative grazing impacts on grassland animals and desert tortoise habitat." – Individual, unspecified community

"Evaluate the impact of livestock on cultural and historical monument objects. Cattle should be removed from sensitive archaeological and historical sites." – Individual, unspecified community

"The BLM must consider all the scientific evidence that livestock negatively impact soil, native plant communities, watershed function, endangered species, game animals, songbirds, cultural and historic resources, scenic and recreational values." – Center for Biological Diversity, Tucson, Arizona

"Eliminate cattle grazing." – Individual, Tucson, Arizona

"Preclude domestic livestock grazing in riparian and other environmentally sensitive areas." – Individual, Minneapolis, Minnesota

"Consider prohibiting the husbandry of domestic sheep within a 15-mile radius of known bighorn sheep habitat for the purpose of avoiding domestic sheep botfly larvae from infecting the wild sheep population." – Individual, Tucson, Arizona

"Livestock should be removed from areas where they compete with monument wildlife objects, such as in critical rare cactus habitat and bighorn sheep lambing grounds, and should be removed from areas where they pose a significant threat to cultural and historic resources." – Defenders of Wildlife, Tucson, Arizona

"We want to keep our cattle business intact, without loss of AUMs or grazing land or our home." – Individual, Tucson, Arizona

"I fully support ranching and mining activities in this area." – Individual, Phoenix, Arizona

"Environmentally sound grazing practices need to be implemented and then kept in place inside the Monument." – Individual, Mesilla Park, New Mexico

"Grazing should be scientifically managed to limit damage to soils, plants, and effects on wildlife." – Individual, Glendale, Arizona

"BLM needs to hire a range specialist to defend any opposition towards grazing." – Individual, unspecified community

"A single range management plan would not be appropriate for all allotments in the entire monument." – Avra Valley-Silverbell Conservation Alliance, Tucson, Arizona

Issues to be Used in the Development and Analysis of EIS Alternatives

Issues Identified by the Public

- Inventory and assess current rangeland conditions.
- Monitor grazing activities.
- Address and restore overgrazed areas.
- Remove cattle from locations near sensitive flora and fauna species habitat.
- Preclude grazing from environmentally sensitive areas.
- Implement allotment range management plans.
- Consider the impact of grazing on wildlife.
- Support the presence of economically viable ranches.

BLM Management Concerns

- Determine what management actions are necessary to reduce the chance of habitat degradation for desert tortoises and still provide for increased human visitations and historical uses such as grazing, hunting, recreations, etc.
- Evaluate grazing leases that were issued for the lands within the IFNM prior to the establishment of the monument; many of the ranches have been mapped for ecological sites for coordinated ranch plans through the Natural Resources Conservation Service.

- Determine fire and grazing management strategies that will be employed on lands within and adjacent to the IFNM to protect regeneration of native plants.
- Determine the appropriate levels of livestock grazing for the IFNM.
- Determine the role of livestock grazing in the IFNM as it relates to the tourism industry.
- Determine if livestock grazing supports dude ranching or commercial off-highway vehicle tours in the IFNM.
- Determine areas within the IFNM where livestock grazing is not appropriate, determine areas for seasonal use grazing, and determine class of livestock that should be allowed.
- Determine how monitoring and adaptive management will be used to manage grazing in the IFNM.

Issues That Can Be Addressed Administratively

- Ensure monies available for ranch assistance are spent on range management activities.

3.3.6 Fire Management

Planning Criteria

Fire management is divided into two categories: wildfire and prescribed fire. Fire management decisions and prescriptions made in the Arizona Statewide Land Use Plan (LUP) Amendment for Fire, Fuels, and Air Quality and Environmental Assessment (U.S. Department of the Interior, BLM 2003) will be incorporated into the IFNM RMP. Adjustments to the fire decisions, if required, will be consistent with the Federal Wildland Fire Policy, the National Fire Plan, and all other BLM policy.

Fire suppression will be accomplished with the least amount of surface disturbance and to protect significant cultural or paleontological values. Public lands and resources affected by fire will be rehabilitated in accordance with the objectives identified for the affected area, subject to BLM policies and available funding.

Issues Overview

Very few comments noted fire management as an issue. Those comments received generally focused on maintaining open roads to ensure that sufficient access is available to fight wildfires and taking protective measures to prevent human-caused wildfires.

Issues to be Used in the Development and Analysis of EIS Alternatives

Issues Identified by the Public

- Consider fire control and fire fighting when evaluating roads for closure.

BLM Management Concerns

- Wildfire risk is greater where non-native vegetation is present, which can threaten native plant communities.
- Determine availability of firewood for collection.

Issues That Can Be Addressed Administratively

- Take protective measures to prevent human-caused wildfires.

3.3.7 Mineral and Energy Resources

Planning Criteria

Minerals management will be consistent with the General Mining Law of 1872 (as amended), FLPMA, Mining and Minerals Policy Act, National Materials and Minerals Policy, Research and Development Act, and current BLM mineral resources policy.

Additionally Presidential Proclamation 7320 withdrew all public lands within IFNM from entry, location and leasing under the mineral leasing and mining laws. In order to establish valid existing rights for a mining claim, a validity examination must be conducted to determine if the claim supported a discovery of a valuable mineral deposit prior to the Proclamation.

Issues Overview

There were many comments relating to mining activities in the IFNM. Those opposed to mining were concerned with impacts on wildlife, water quality, and erosion. Most of the comments relating to mineral and energy resources are general comments opposed to mining access and activities in the area without stating specific reasons for the opposition. A large number of comments indicate opposition to mining activities due to the potential impact on wildlife and vegetation in the area. A small number of comments indicate opposition to mining because of the impacts on water quality and erosion from mining operations. Several comments supported mining access and operations in the IFNM.

In addition to those comments discussed above, a large number of comments received relating to mineral and energy resources discuss the issue of historical environmental damage by mining companies. These comments suggest that those responsible should restore areas that have been disturbed by past mining operations. Some of these comments refer specifically to the Asarco Silver Bell mining operations.

Representative Comments

"Prohibit any new mining or mine expansion within the Monument." – Tucson Audubon Society, Tucson, Arizona

"There is no place in units of the National Park System for ATV's, motorized personal water craft, snowmobiles, or commercial operations like logging, grazing or mining." – Individual, Billings, Montana

"I believe that the [IFNM] should be left as pristine and unspoiled as possible, with no off-road vehicles of any type allowed (including bicycles), vehicles restricted to designated roadways only, and no mining, logging, grazing, or other commercial activities allowed." – Individual, Phoenix, Arizona

"Protect [Ironwood Forest National Monument and all other National Parks and Monuments] from the ravages that are caused by mining, clear cut logging and especially off-road vehicles." – Individual, Copperopolis, California

"Consider both the mineral and economic potential of the area and reinstate the ability to locate mining claims in the areas of the district with good mineral potential." – Individual, Tucson, Arizona

"The Monument has the potential to impact the Silver Bell Mine in the following ways: 1) jeopardizing existing operations, 2) threatening near term plans for expansion or replacement of mineral reserves on Asarco land, 3) threatening the ability to prove and develop Asarco's mining claims within the Monument boundary, negatively impacting longer term prospects for expansion or replacement of reserves. [Each] of these impacts would be affected by the nature of the RMP for the Monument." – Silver Bell LLC, Marana, Arizona

"I am against mining, exploration and mine expansion in the area since it will significantly threaten the last viable population of bighorn sheep indigenous to the Tucson basin." – Individual, Tempe, Arizona

"Mining will significantly threaten big horn sheep and their habitat and should not be allowed." – Individual, San Diego, California

"Preserve and protect Ironwood, its flora, fauna and environment from the predators that would devour it. Predators such as Asarco, heedless off-road vehicle users, and the many who think concerns such as these are quaint." – Individual, unspecified community

"I do not believe that sensible mining practices would significantly threaten bighorn sheep and their habitat." – Individual, Rockwell, North Carolina

"I am concerned about water quality issues and possible well contamination due to mining in the area." – Individual, Marana, Arizona

"BLM should test and monitor the quality of groundwater resources to ensure local mining and ranching operations are not polluting the monument aquifer." – Individual, unspecified community

"If an environmental impact survey has been made, it may conclude that erosion and pollution from mining by far surpasses that made by OHV users." – Individual, San Carlos, California

"Please restore all areas and watersheds damaged by off-road vehicle use and help in their recovery from ATV, grazing or other extractive industry damage." – Individual, Minneapolis, Minnesota

"Asarco should be required to restore fully the land it illegally disturbed." – Individual, San Diego, California

Issues to be Used in the Development and Analysis of EIS Alternatives

Issues Identified by the Public

- Prohibit mining or mine expansion.
- Consider how mining may contribute to the disturbance of desert bighorn sheep or destruction of desert bighorn sheep habitat.
- Keep the monument free from destructive practices such as mining.
- Consider avenues for the restoration of habitat disturbed by historical mining operations.
- Bar any interference with current or future mining activities at the Silver Bell mine location.

BLM Management Concerns

Concerns regarding mineral and energy resources to be addressed in the plan, identified by BLM (but not necessarily by other agencies or the public during scoping), are as follows:

- Establish reclamation goals for mining disturbance that stabilize the site and conform with designated past mining land uses and established land use objectives.
- Retain ability to use mineral material for administrative purposes within the IFNM.
- Consider general requirements for protecting resource values of the public lands, including stipulations and construction and/or operating standards to apply to surface disturbing activities.

3.3.8 Lands and Realty

3.3.8.1 Land Tenure Adjustments

Planning Criteria

Laws, regulations, policies, and guidelines followed for land tenure adjustments will include, but not be limited to, Presidential Proclamation 7320, FLPMA, NEPA, Federal Land Exchange Facilitation Act, Recreation and Public Purposes Act, Land and Water Conservation Fund Act, and Arizona Standards for Rangeland Health.

All lands and interest in lands within the monument will be retained in federal public ownership. The RMP will evaluate the opportunity for acquiring non-federal lands within or adjacent to the monument that could protect or enhance management of monument resources. Acquired lands and interests within the monument boundary will be added to the monument. Decisions to acquire lands will be based on public benefits, management considerations, and public access needs. Specific actions to implement RMP land tenure decisions will include full public participation.

Presidential Proclamation 7320 withdrew the monument from all forms of entry, location, selection, sale, or leasing or other disposition under public land laws, including but not limited to withdrawal from location, entry, and patent under the mining laws, and from disposition under all laws relating to mineral and geothermal leasing, other than by exchange that furthers the protective purposes of the monument.

Issues Overview

The comments received on land tenure adjustments resources. Several comments also note that BLM should pursue acquisition of private lands for similar reasons focus on the inholdings of private and State Trust Land within the monument boundaries. Some commenters suggest that BLM should work with the Arizona State Land Department to adjust land ownership patterns to protect natural resources. Other comments indicate that BLM should not change ownership patterns within the monument or that BLM should recognize private property rights. In addition, one comment requests that BLM consider whether the monument and its planning would affect trespass on State Trust Land.

Representative Comments

“A majority of the 54,773 acres of State Trust land within the IFNM boundaries are in large blocks on the monument's periphery. It is, therefore, conceivable that these trust lands could be excluded from the IFNM boundary without diminishing its integrity or purpose, since they are not actually part of the monument.” – Arizona State Land Department, Phoenix, Arizona

"State Trust Lands and private lands critical to maintain ecological integrity and wildlife populations should be purchased." – Individual, Albuquerque, New Mexico

“BLM should do nothing that harms private property rights of those in the monument area.” – Individual, Phoenix, Arizona

“Establish a plan that will accurately map out a strategy for dealing with the state and private land inholdings in the Monument. A strategy [should be] developed to acquire them.” – Individual, Tucson, Arizona

“Maintain the status quo of land ownership and land uses within the IFNM.” – Individual, unspecified community

Issues to be Used in the Development and Analysis of EIS Alternatives

Issues Identified by the Public

- Acquire inholdings, including private and State Trust Land.
- Assure that private property rights will be protected.
- Examine the possibility of using conservation easements, in lieu of land acquisition, to prevent excessive development from occurring in or adjacent to the monument.

BLM Management Concerns

Concerns regarding land tenure adjustment to be addressed in the plan, identified by BLM (but not necessarily other agencies or the public during scoping), are as follows:

- Develop criteria for prioritizing lands for acquisition.
- Determine recommended management for lands that may be acquired within the monument.
- Evaluate existing Recreation and Public Purposes Act leases for the potential for patent or modification.

3.3.8.2 Right-of-Way Corridors, Communications Sites, and Renewable Energy Sites

Planning Criteria

Laws, regulations, policies, and guidelines followed for right-of-way corridors, communication sites, and renewable energy sites will include, but not be limited to, Presidential Proclamation 7320, FLPMA, NEPA, Land and Water Conservation Fund Act, and Arizona Standards for Rangeland Health.

Existing and proposed land use authorizations (e.g., corridors, communication sites, renewable energy sites, apiary permits, etc.) will be evaluated for compatibility with protecting the monument resources. Existing right-of-way corridors and communication sites from previous plans may be modified, removed, or carried forward. Additional right-of-way corridors and communication sites, and new renewable energy sites, including wind and solar energy, will be considered based on consideration of monument resource protection, along with established criteria, procedures, and policy, and in association with industry demand and resource protection objectives. New locations for right-of-way corridors, communication sites, and renewable energy sites also will consider environmental quality, economic efficiency, security, safety, and good engineering and technological practices. Decisions will consider preferred locations and exclusion areas to protect significant resource values.

Issues Overview

A small number of comments were received regarding utilities and communication facilities within IFNM, and no comments were received pertaining to renewable energy sites. Utility comments (received from the energy generating and transmission industries) indicate that the IFNM creates potential restrictions to energy distribution in southern Arizona. A comment received from an individual expresses opposition to limiting utility corridors because these facilities provide needed access to remote areas of the IFNM. Commenters that are opposed to the new utility corridors urge the BLM, in general, to keep the IFNM free of development, including power lines.

Representative Comments

"Without consultation with electric utilities in general, and TEP in particular, segments of these necessary [extra high voltage] facilities have been recently designated as part of the IFNM. The result has been the

creation of potential restrictions to existing electric energy distribution and/or to plans for other southern Arizona system enhancements that may cost hundreds of millions of dollars to change." – Tucson Electric Power, Tucson, Arizona

"Prohibit any proposed power lines from crossing land contained within the Monument." – Individual, Arivaca, Arizona

"I am opposed to [limiting power lines]. Power lines create roads vital to provide access to remote areas." – Individual, Phoenix, Arizona

Issues to be Used in the Development and Analysis of EIS Alternatives

Issues Identified by the Public

- Do not allow power line development.
- Allow existing electric infrastructure to remain and continue to serve their respective customer loads.

BLM Management Concerns

Concerns regarding right-of-way corridors, communication sites, and renewable energy sites to be addressed in the plan, identified by BLM (but not necessarily other agencies or the public during scoping), are as follows:

- BLM must comply with federal regulation pursuant to 43 CFR 2800 for all right-of-way renewals, which would include the NEPA process and the review of the holder's services provided under the existing rights-of-way, and determine if the renewal of the existing BLM right-of-way authorization would conflict with the values of the Monument and the Presidential Proclamation.
- For right-of-way corridors, consider the following:
    - Types of right-of-way facilities to be allowed
    - Right-of-way activities to be allowed or restricted
    - Non-right-of-way activities to be allowed, restricted, or prohibited within the proposed right-of-way corridor or right-of-way use area
    - Non-standard or administrative (i.e., resource protection) terms and conditions to be applied to specific right-of-way facilities that may be subsequently located within the right-of-way corridor or right-of-way use area
    - Ancillary facilities and "perpendicular" access needed to efficiently gain access to the right-of-way corridor or right-of-way use area

3.3.8.3 Land Use and Development

Planning Criteria

Existing development and facilities on public land will be evaluated for compatibility with protecting monument resources. BLM will consider new permanent development or facilities in the monument only for recreation purposes to the extent they are compatible with IFNM resource protection. Decisions for placing any new facilities will consider preferred locations and exclusion areas to protect significant resource values.

Issues Overview

The comments received on land use and development within the IFNM focus on the potential for additional development, including visitor facilities, to occur within the monument. Several comments note that nearby urban development is encroaching upon the IFNM and its resources, and that as one of the greatest threats facing the IFNM, this "urban sprawl" should be managed. A large proportion of the comments favor limiting or prohibiting any additional development within the monument, including visitor facilities. A few comments note that the encroachment of development results in negative effects on visitor experiences, natural landscapes, or wildlife populations and habitat.

Representative Comments

"Ironwood Forest National Monument must be protected from development of any kind – mining, roads, housing – forever." – Individual, Lake City, Minnesota

"The three greatest threats to the integrity of the monument that I recognize are: uncontrolled recreational use of the monument; grazing and the ever expanding impacts of the urban and suburban interface." – Individual, Phoenix, Arizona

"Development within the monument should be limited and visitor services should be placed outside the monument in nearby communities." – Individual, Ben Lomond, California

"Development in the monument should be limited, but visitor services should not be forced outside the monument." – Individual, Rockwell, North Carolina

"Inappropriate development will degrade the integrity of wildlife habitat." – Individual, Brooklyn, New York

Issues to be Used in the Development and Analysis of EIS Alternatives

Issues Identified by the Public

- Limit development within the monument.
- Limit new uses within the monument to those consistent with the monument Proclamation.
- Manage the urban-wildland interface to prevent encroachment.

BLM Management Concerns

Concerns regarding land uses and development to be addressed in the plan, identified by BLM (but not necessarily other agencies or the public during scoping), are as follows:

- Develop a proactive approach to address urban interface issues.

3.3.8.4 Boundary Changes

Planning Criteria

Pursuant to the Proclamation establishing the IFNM, "All Federal lands and interests in lands within the boundaries of this monument are hereby appropriated and withdrawn from all forms of entry, location, selection, sale, or leasing or other disposition under the public land laws, including but not limited to withdrawal from location, entry, and patent under the mining laws, and from disposition under all laws relating to mineral and geothermal leasing, other than by exchange that furthers the protective purposes of the monument."

Issues Overview

Comments received regarding boundary changes requested that BLM expand the IFNM boundaries to provided wildlife corridors connectivity with adjacent mountain preserves. Comments also requested that BLM consider the threat of future encroachment. Other comments asked that BLM does not consider any boundary changes.

Representative Comments

"Help create a huge wildlife corridor by extending or connecting the Monument to the Tortolita Mountain Preserve." – Individual, Tucson, Arizona

"The RMP should address the reality of administrating such an odd shaped parcel of land (irregular boundaries) with numerous in holdings as the ongoing threat of further encroachment." – Individual, Phoenix, Arizona

"Don't do anything, don't disturb anything by adding buildings. Don't expand or explore in the Monument." – Individual, Scottsdale, Arizona

"Do not consider or recommend any change to the boundaries of the IFNM." – Individual, Coon Rapids, Minnesota

3.3.9 Special Area Designations

Planning Criteria

Special area designations on public lands include national monument designations, ACECs, national trails, wild and scenic rivers, and backcountry byways. Special areas that may be considered in this plan include ACECs, national trails, backcountry byways, and other administrative designations that are consistent with federal law as well as policies and procedures. Management requirements for designated special areas will be identified in the plan.

Existing ACECs selected for continued management as ACECs will be managed with site-specific plans or guidelines established in the RMP. ACECs will be designated where special management attention is required to protect historical, cultural, or scenic values, natural resources or processes, or human life and safety.

Issues Overview

Comments received related to special area designations generally requested stronger protection (e.g., ACEC designation) for sensitive areas.

Representative Comments

"Protect areas with substantial significance such as significant historic, cultural or scenic values, rare or relic plant communities, important wildlife habitat, or special riparian and wetland areas." – Individual, Minneapolis, Minnesota

"We strongly encourage designation of Areas of Critical Environmental Concern for an additional layer of protection for especially sensitive or dangerous areas." – Individual, Cortaro, Arizona

Issues to be Used in the Development and Analysis of EIS Alternatives

Issues Identified by the Public

- Consider the importance of maintaining access to existing areas of economic activity (e.g., mines, ranches) when considering special management designations.
- Designate ACECs for protection of sensitive resources.

BLM Management Concerns

Concerns regarding special management areas to be addressed in the plan, identified by BLM (but not necessarily by other agencies or the public during scoping), are as follows:

- Consider special area designations, if appropriate, to achieve resource management goals.
- Determine the applicability of special area designations within a national monument.

3.3.10 Wilderness Characteristics

Planning Criteria

Consistent with BLM policy, the Secretary of the Interior letter to Senator Robert Bennett (dated April 11, 2003), and the settlement in the case of Utah v. Norton (dated April 14, 2003), BLM has the authority to discuss and incorporate wilderness values into the land use plan, in accordance with the public process incorporated in all land use planning efforts. Thus, BLM is committed to listening to public input through the land use planning process and, where appropriate, managing specified areas of land for wilderness values. However, BLM has no authority to establish new wilderness study areas (WSAs) or to report such areas to Congress. BLM can protect areas in their natural state using a wide range of land use tools other than the WSA designation process. The BLM will review, through this planning process, lands within the planning area with that may possess remote or primitive characteristics.

Issues Overview

Comments regarding wilderness/wilderness characteristics focused primarily on the issue of designating or managing the IFNM as wilderness (or a WSA). Many comments urge BLM to adopt the Arizona Wilderness Coalition proposal for WSAs. Other comments in support of protecting wilderness values through the designation of WSAs state that such designation would protect sensitive wildlife, wildlife habitat, and cultural resources. Comments in opposition to new wilderness designations also were received. Some of these comments express the view that wilderness areas (or WSAs) are not needed within the IFNM, as the IFNM offers protection to the area already. Opponents of wilderness (or WSAs) stated that misguided management of wilderness in other locations has had a detrimental effect on wildlife, as it prohibits proactive management of resources.

Representative Comments

"The Arizona Wilderness Coalition (AWC) recommends the following four areas for consideration as Wilderness Study Areas in the Ironwood Forest National Monument (IFNM): Ragged Top, Silver Bell Mountains, West Silver Bell Mountains, and Sawtooth Mountains." – Arizona Wilderness Coalition, Tucson, Arizona

"Closely scrutinize any attempt at creating more wilderness/roadless areas." – Individual, Tucson, Arizona

"[Arizona Desert Bighorn Sheep Society] has witnessed the detrimental effects to wildlife caused by misguided wilderness management. We would not support recommendations for additional wilderness area designations within IFNM." – Arizona Desert Bighorn Sheep Society, Inc., Phoenix, Arizona

Issues to be Used in the Development and Analysis of EIS Alternatives

Issues Identified by the Public

- Recognize and protect outstanding wilderness resources and values.
- Provide protection for wilderness values, while allowing a reasonable range of recreational opportunities

BLM Management Concerns

The concern regarding areas with wilderness characteristics to be addressed in the plan, identified by BLM (but not necessarily by other agencies or the public during scoping), is as follows:

- Consider wilderness characteristics when making land and resource allocations.

3.3.11 Visual Resources

Planning Criteria

Laws, regulations, policies, and guidelines followed for visual resources will include, but not be limited to, Presidential Proclamation 7320, FLPMA, NEPA, Arizona Standards for Rangeland Health, and BLM's Visual Resource Management Manual 8400.

A visual resource management classification will be conducted to address the public's concerns about open space and natural vistas. Some areas may be subject to special measures to protect resources or reduce conflicts among uses. The monument will be managed to protect visual resources consistent with the purposes for which the monument was established.

Issues Overview

There were many comments that attest to the beauty of the land and the need to protect the natural landscape; several comments reference scenic views/open space. A large portion of the comments on visual resources stated that the threats to scenic values are development (urban sprawl and visitor facilities) and impacts of recreational use (in particular, off-road vehicle use). One commenter notes that lighting within the monument should be minimized.

Representative Comments

"The beauty of the land was meant for the quiet enjoyment of people." – Individual, Wilmette, Illinois

"Inappropriate development in the monument can damage the integrity of wildlife corridors, migration routes, and access to forage. It also damages the experience of visitors who come to see natural landscapes, natural diversity, and to hear natural sounds and quiet." – Submitters of a Form Letter

"One of the special qualities of this place is the shear remoteness and openness of the landscape. Planning strategies that ensure these qualities remain a lasting resource will serve the burgeoning populations of the Desert Southwest as well as the nation as a whole." – Arizona Chapter of the American Society of Landscape Architects, unspecified community

"I believe it is possible to set up a multiple use area within the IFNM while maintaining the natural beauty and cultural resources." – Individual, Gilbert, Arizona

"We recommend the BLM vision statement for the National Monument convey the intent of Proclamation 7320 and, accordingly: Protect, conserve and restore the special values of the landscape including natural and cultural resources." – Friends of the Earth, National Wildlife Federation, Sierra Club, The Wilderness Society, and U.S. Public Interest Research Group, and several individuals

Issues to be Used in the Development and Analysis of EIS Alternatives

Issues Identified by the Public

- Protect the natural beauty and wildlife indigenous to the monument.
- Limit recreation, grazing, and road development to protect visual resources.
- Address how development could seriously damage natural landscapes.
- Protect the remoteness and undeveloped character of the monument.

BLM Management Concerns

Concerns regarding visual resources to be addressed in the plan, identified by BLM (but not necessarily by other agencies or the public during scoping), are as follows:

- Protect visual resources, consistent with the protection the natural and cultural resources, by designating appropriate visual resource management classes.
- Rehabilitate disturbed areas that do not meet the visual resource management class requirements.

Issues That Can Be Addressed Administratively

- Stripped and vandalized cars can be seen in the monument, and remain for long periods of time.

3.3.12 Recreation

Planning Criteria

Laws, regulations, policies, and guidelines followed for recreation management will include, but not be limited to, Federal Land Policy and Management Act of 1976, Americans with Disabilities Act of 1990, Land and Water Conservation Fund, 43 CFR 8300, BLM Recreation Management regulations, 43 CFR 2930, BLM Special Recreation Permits regulations, BLM Manual 8300 – Recreation Management, Presidential Proclamation 7320, and the Arizona Standards for Rangeland Health.

The Presidential Proclamation, in designating management of the monument to the BLM, "pursuant to applicable legal authorities, to implement the purposes of this proclamation," establishes that the FLPMA shall be the basic policy for management of the monument. Among other things, FLPMA requires management under the principles of multiple use and sustained yield and provides for outdoor recreation and use.

The RMP/EIS will set forth a framework for managing recreational and commercial activities in order to maintain existing natural landscapes and to provide for the enjoyment and safety of the visiting public. The lifestyles of area residents, including activities of grazing, hunting, and motorized use and recreation, will be considered in the plan.

3.3.12.1 ***General Recreation***

Issues Overview

General recreation comments received refer to those comments that did not focus on just one type of recreational use (e.g., hunting). Several of the comments suggest that recreational activities should be limited to protect the resources in the IFNM from degradation. Other comments state that opportunities should be available for a variety of activities, including motorized uses. A large portion of the comments support the continuation of currently allowed recreational uses.

While some visitor use services issues are addressed here, Section 3.3.19 provides additional information about the facilities issues.

Representative Comments

"Recreational activities need to be appropriately managed, not just removed from the monument, so they do not compromise natural and cultural resources. The RMP should provide for reasonable vehicular access and promote dispersed recreation. These lands should continue to provide for multiple public uses including hunting, and other wildlife dependent recreational uses." – Arizona Desert Bighorn Sheep Society, Inc.

"We support visitation and recreational use of the National Monument especially low impact activities carried out in a responsible fashion such as backpacking, bird watching, hunting, and fishing." – Friends of the Earth, National Wildlife Federation, Sierra Club, The Wilderness Society, and the U.S. Public Interest Research Group, and several individuals

"The management plan must address this pressure [from visitors regarding recreational activities] by first determining which activities are compatible with protection of the Monument and its objects, allowing only those activities which have been determined to have no adverse impacts to the sensitive biological, geological and archaeological objects for which the monument was created." – Individual, Tucson, Arizona

"BLM must also carefully plan and manage recreation opportunities that do not conflict with the protection of the monument objects, including the Sonoran Desert ecosystem itself." – Arizona Wildlife Coalition et al.

"I encourage you to seek ways to provide suitable opportunities for both motorized and "quiet" recreation. Set aside periods of the year, week, or day for quiet recreation." – Individual, Santa Fe, New Mexico

"[Recommend] passive recreational use such as horseback riding, hiking, bird watching, etc. within the Monument." – Individual, Tucson, Arizona

"Development within the monument should be limited [and] recreational activities that can be carried out at many other locations should not be allowed within the monument." – Individual, Santa Barbara, California

"Hiking should be strictly controlled as these people are filthy and leave trash all over any place they visit." – Individual, Phoenix, Arizona

"Draft a management plan that puts protection first and foremost. This means no resource extraction (i.e. mining, grazing, or logging). This means minimal development of infrastructure (i.e. no more roads, close most existing roads, and no campgrounds or [recreational vehicle] dump stations, etc.). This especially means no off-highway vehicles." – Individual, Tucson, Arizona

"Put the perpetuation of wildlife species ahead of human recreation." – Individual, Mesa, Arizona

"Access should be restricted to cultural sites, however tours should be provided to those interested. Other areas roads should not be closed. People need to access to biking and hiking trails." – Individual, Marana, Arizona

"Hikers leave trash and waste and have no respect for other people's right to visit our public lands. Hikers should be educated that they need to go on one of the many wilderness areas to hike." – Individual, Phoenix, Arizona

"Hiking should be banned in this monument [because] the Border patrol cannot tell who is an American and who is an illegal Mexican criminal." – Individual, Phoenix, Arizona

"BLM must monitor visitor uses and impacts and curtail or modify recreational uses that threaten to harm monument objects." – Individual, unspecified community

"Recreation is part of a multi-use management plan. Limited use in the monument differs from limited use in a park or wildlife refuge. This is still BLM land, which is meant for public access." – Individual, Avondale, Arizona

Issues to be Used in the Development and Analysis of EIS Alternatives

Issues Identified by the Public

- Provide suitable opportunities for both motorized and "quiet" recreation.
- Limit recreation use to what is sustainable/protective of the national monument.
- Do not allow for recreational activities that can be carried out at many other locations.
- Protect IFNM from intensive/destructive/intrusive recreational use.
- Continue to allow hiking.
- Continue to allow hunting.
- Continue to allow mountain biking.
- Continue to allow camping.
- Continue to allow horseback riding.
- Continue to allow for and plan for dispersed recreational opportunities.
- Do not establish campgrounds/Recreational Vehicle (RV) facilities.
- Consider seasonal closures for Ragged Top and other areas during lambing and breeding seasons for bighorn sheep.
- Allow only those recreational activities that are compatible with the protection of the monument and its objects.
- Appropriately manage recreational uses rather than just prohibiting them within the monument.
- Monitor visitor use and impacts.
- Recommend passive recreational use such as horseback riding, hiking, bird watching, etc. within the monument.
- Prioritize the protection of monument objects/wildlife over recreation.
- Plan for all visitor use services to be established outside of the monument.

BLM Management Concerns

Concerns regarding general recreation to be addressed in the plan, identified by BLM (but not necessarily by other agencies or the public during scoping), are as follows:

- Establish criteria of unacceptable recreation use impacts and develop a monitoring plan.
- Evaluate appropriate Recreation Opportunity Spectrum classes or zones.
- Establish a specific policy for Special Recreation Permits including services, uses, and limitations, including commercial use permits and hunting/outfitting guide concessions.
- Develop criteria to guide issuance of Recreation Use Permits for individual use.
- Plan for the location, financing, and placement of a visitor center for the IFNM.
- Evaluate needs for visitor facilities on IFNM (besides a visitor center or signs).
- Address administrative policies regarding large group activities and the associated problems including refuse, woodcutting, off-road vehicle use, resource damage, and reckless motor vehicle operation (e.g., driving under the influence, collisions).
- Continue monitoring uses of visitors to understand use trends over time and modify management, as needed.

Issues That Can be Addressed Administratively

- Control litter from recreational use.
- Educate the visiting public about the value of public lands and rules, such as rules of conduct for waste disposal (littering).

*3.3.12.2 **Camping***

Issues Overview

There were a few comments regarding the management of camping within the monument. There were concerns that camping continued to be allowed in the monument with some specifying dispersed or primitive camping. Several comments suggest that campsites be designated in areas compatible with such use and in consideration of the transportation and access plans, and that the information about the designated campsites be provided to the visiting public.

Representative Comments

"Designated camping sites should not be developed, but must be clearly signed as campsites. Interpretive signs at the entrances to the monument must provide maps and information clearly showing the public transportation network and designated camping sites." – Tucson Audubon Society, Tucson, Arizona

"Manage the monument to provide "designated dispersed camping." Designated existing dispersed camping sites that do not destroy native plants or interfere with the survival or travel of bighorn sheep, or other monument objects." – Tucson Audubon Society, Tucson, Arizona

"Camping should be banned in the heart of the monument." – Individual, Phoenix, Arizona

"All undesignated campsites should be rehabilitated in the same fashion as undesignated motorized travel was." – Individual, Tonopah, Arizona

"Designate existing dispersed camping sites that do not destroy native plants or interfere with the survival or travel of bighorn sheep, or other monument objects." – Individual, Tonopah, Arizona

"I would strongly suggest that the area be left "primitive," that no pavements, restrooms, or developed camping areas be created." – Individual, unspecified community

"Please make sure access is preserved, hunting continues to be allowed and camping is still permitted." – Individual, Glendale, Arizona

"Please designate a minimal road network. My wife and I car camp as she is handicapped; a few pullouts are always nice, we mean a few." – Defenders of Wildlife et al.

"In this management plan, BLM [should consider] where there are appropriate sites for camping, where there will be no adverse impacts on the monument's sensitive biological and archaeological objects, and preferably where there are existing campsite footprints. BLM will need to consider providing adequate visitor information regarding these designated sites to direct visitors to these sites and away from less appropriate areas." – Individual, Tucson, Arizona

Issues to be Used in the Development and Analysis of EIS Alternatives

Issues Identified by the Public

- Continue to allow for camping.
- Continue to allow for dispersed/primitive camping.
- Address camping for handicapped.
- Rehabilitate undesignated campsites.
- Designate campsites in existing dispersed camping sites that do not conflict with resource management, but do not develop the sites. Provide adequate visitor information to direct visitors to the designated campsites.
- Ban camping in the heart of the monument.

BLM Management Concerns

Concerns regarding camping to be addressed in the plan, identified by BLM (but not necessarily by other agencies or the public during scoping), are as follows:

- Consider guidelines for what is permissible in areas where vehicles are prohibited from driving off of established routes, particularly with regard to pulling off the road to camp or otherwise park vehicles.
- Address large-group camping.

3.3.12.3 Hunting

Planning Criteria

The plan will recognize the State's authority to manage wildlife, including hunting and fishing, within the planning area.

Issues Overview

Comments regarding hunting generally support continued hunting opportunities in the future. Some note the role of the AGFD in managing hunting and wildlife management. Many who support continued hunting, also support continued opportunities for other recreational uses, such as camping and OHV use.

Representative Comments

"Hunting [should be permitted], by permit only, as we believe the proper restrictions are in place to do this responsibly." – Individual, Marana, Arizona

"Maintain hunting and wildlife management by AGFD. Realize that hunting is the cornerstone of wildlife conservation." – Individual, Tucson, Arizona

"Maintain hunting and reasonable access." – Arizona Desert Bighorn Sheep Society, Phoenix, Arizona

"Please make sure access is preserved, hunting continues to be allowed and camping is still permitted." – Individual, Glendale, Arizona

"Ensure future hunting on the monument." – Individual, Tucson, Arizona

"Allow continued hunting of sheep and other big and small game under existing AGFD regulations." – Individual, Scottsdale, Arizona

"We support visitation and recreational use of the National Monument especially low impact activities carried out in a responsible fashion such as backpacking, bird watching, hunting, and fishing." – Friends of the Earth, National Wildlife Federation, Sierra Club, The Wilderness Society, an the U.S. Public Interest Group, and several individuals

"The EIS should address hunting/shooting opportunities." – Individual, Tucson, Arizona

Issues to be Used in the Development and Analysis of EIS Alternatives

Issues Identified by the Public

- Continue to allow hunting by permit only.
- Maintain/ensure the future of hunting in the monument.
- Maintain hunting and wildlife management by AGFD.
- Realize that hunting is the cornerstone of wildlife conservation.
- Continue to allow hunting of the big game and small game species as well as predator and furbearers under existing AGFD regulation.

BLM Management Concerns

Concerns regarding hunting to be addressed in the plan, identified by BLM (but not necessarily by other agencies or the public during scoping), are as follows:

- Recognize that a hunting license is also one way to gain access to state lands in lieu of having a use permit.

Issues That Can be Addressed Administratively

- Prevent illegal hunting.

3.3.12.4 Recreational Shooting

Issues Overview

Recreational shooting is meant to describe target-shooting activities as opposed to hunting for game species. There are two general types of recreational shooting—dispersed target shooting by individuals or small groups of individuals using sporting firearms and organized shoots by large groups in a concentrated location using a wide variety of firearms, which may include fully automatic weapons. There were comments opposing recreational shooting within IFNM as well as comments supporting the continued opportunity for recreational shooting within IFNM. A large number of comments suggest that recreational shooting should be prohibited in certain areas and/or only permitted in certain designated areas. Those that support the prohibition or some form of restriction on recreational shooting cite concerns for resource protection and/or public safety. Some comments relate the recreational shooting issue to the transportation and access issue as well as other issues such as vandalism and litter.

Representative Comments

"As an avid hiker and amateur archaeologist, I'm annoyed at seeing shell casings, destroyed signs, and defaced petroglyphs, bullet ridden saguaro cactus and other evidence of unrestricted target shooters." – Individual, Tucson, Arizona

"BLM should consider establishing some shooting areas or ranges." – Individual, Sun Lakes, Arizona

"The EIS should address hunting/shooting opportunities." – Individual, Tucson, Arizona

"Target shooting anywhere on the monument should be prohibited until such time as BLM is in a position to devote adequate resources and staff to its management." – Defenders of Wildlife, Tucson, Arizona

"All shooting should be moved outside the monument." – Individual, Prescott, Arizona

"Prevent target practice in or around the monument." – Individual, Tucson, Arizona

Issues to be Used in the Development and Analysis of EIS Alternatives

Issues Identified by the Public

- Prohibit recreational shooting within IFNM.
- Prohibit recreational shooting near residential areas, ranching areas, roads, and popular visitor areas.
- Ban target shooting within the monument to protect monument wildlife and plant objects and to ensure public safety.
- Prohibit recreational shooting in resource sensitive areas (consider desert bighorn sheep).
- Prohibit automatic weapons use.
- Provide a designated shooting area or range within the monument.
- Restrict target shooting to one small designated shooting area or range within the monument.
- Consider using State and local funds available for developing a designated shooting area or range.
- Continue to allow recreational shooting throughout the monument where the law allows for it.
- Do not ban the use of firearms.
- Ensure an open space for shooting.

- Recognize that the U.S. Forest Service has already closed one shooting range in Tucson and that closing the monument to shooting would add to the reduction for this recreational opportunity in the area.
- Prohibit recreational shooting until BLM can devote adequate resources and staff to manage this activity.
- Consider recreational shooting in context of the transportation and access plan and other users, especially residences and ranches.

BLM Management Concerns

Concerns regarding recreational shooting to be addressed in the plan, identified by BLM (but not necessarily by other agencies or the public during scoping), are as follows:

- Recreational shooting has been a long-standing issue in the Tucson basin, but there has not been a lot of dialogue with the community or among land management agencies. The Udall Center for Studies in Public Policy is currently conducting a recreational shooting assessment for the entire Tucson basin, which identifies the community interests in, need for, and criteria to guide whether and where such activities should take place. The results of the Udall Center study will be incorporated into the RMP/EIS planning process.
- Adopt recommendations that result from the Tucson Basin Recreational Shooting Dialogue that address education, environmental issues, and safety.
- Educate the public about the impacts of recreational shooting, including damage to resources such as vegetation and cultural resources and shooting in an irresponsible manner such as across roads, toward buildings, etc. Efforts to inform the public that such actions are illegal and punishable by fine if caught have had some effect, but the problems with resource damage and concerns for safety persist.

Issues That Can be Addressed Administratively

- Enforce existing laws regarding recreational shooting.
- Address inadequate law enforcement.

3.3.13 Transportation and Access

The issues related to transportation and access touch on many of the multiple use and resource management issues as well as multi-jurisdictional concerns that will be addressed in the planning process for IFNM. Because of their interrelatedness, it is difficult to categorize the scoping comments regarding transportation and access into subtopics. However, for the purposes of this Scoping Report, this section has been divided into two discussions – one regards general access issues and the other more specifically addresses the transportation management concerns. General access issues are those that are related to access to specific areas (including public lands, State lands, inholdings, interest sites, etc.) within the monument boundaries and access to the monument as it relates to adjacent multi-jurisdictional lands.

3.3.13.1 General Access

Planning Criteria

Laws, regulations, policies, and guidelines followed for general access will include, but not be limited to, Presidential Proclamation 7320, Land and Water Conservation Fund Act, 43 CFR 2200 (which provides for acquisition of easements), subsequent regulations in 43 CFR 8340, Executive Order 11644, and the Americans with Disabilities Act of 1990.

The RMP will include transportation and access needs for motorized and non-motorized uses, and all public lands will be designated as open, limited, or closed to motorized vehicles. The plan will designate a network of vehicle routes. Public safety, resource protection, current and future user access needs and conflict resolution will be considered in making these decisions. The BLM route inventory will provide a basis for considering route management.

Issues Overview

Issues related to access include access points to the monument as well as access to and from adjacent lands and communities. Some comments regard access for a specific purpose or use. Multijurisdictional concerns were noted in relation to State and private lands located within the planning area as well as adjacent State, private, and Tohono O'odham Nation lands. Among those commenters that support continued access in some form or another, a strong sentiment that the public lands should be accessible to Americans was often noted. Some comments note general access concerns that principally regard the designation of special management areas and areas with wilderness characteristics; these comments are addressed in Section 3.3.9 and 3.3.10, respectively.

Representative Comments

"Closing existing gates will lead to concentrated and congested use sites." – Individual, Marana, Arizona

"Equal access to the wonders of the Sonoran Desert for children, the elderly, and the disabled [is necessary]." – Individual, Tucson, Arizona

"All Americans should have unlimited access to our beautiful deserts." – Individual, unspecified community

"I support reducing the number of access points to the monument." – Individual, Tucson, Arizona

"Protect, restore, and acquire desert bighorn sheep habitat, travel corridors, and lambing grounds. Institute seasonal closures for Ragged Top and other areas during breeding and lambing." – Individual, Tucson, Arizona

"If these roads are closed the area will become inaccessible and virtually will be a wilderness. Multiple use activity in the past is what made this a desirable place for national monument designation. If you allow roads to be closed, you are denying the public access to their land." – Individual, Tucson, Arizona

"Maintain reasonable access – don't restrict roads without accomplishing an outreach program and public review." – Individual, Tucson, Arizona

"Foot traffic should have total access to non-road areas." – Individual, Sahuarita, Arizona

"All wilderness areas and all federal and state land should be off limits to human intrusion for at least 20 years and afterwards access should be only on foot." – Individual, Cottonwood, Arizona.

"I purchased land adjacent to BLM land solely because of the access to public lands for horseback riding." – Individual, Marana, Arizona

Issues to be Used in the Development and Analysis of EIS Alternatives

Issues Identified by the Public

- Coordinate designation of gates/access points with adjacent land owners/managers.

- Reduce the number of access points.
- Consider how closure of access points could lead to concentrated/congested use areas.
- Provide for convenient access to the road/trail system from adjacent private lands and communities.
- Consider equal access for children, the handicapped, and the disabled.
- Comply with provisions of the Americans with Disabilities Act that require consideration of access needs for special populations.
- Consider access to inholdings.
- Designate the Blanco Wash Trail south of Tucker Road and at the extreme south end of Blanco Wash through a small strip of city property and the Trico utility easement be used for public access.
- Allow foot access to all areas of the monument.
- Continue to allow for access for all groups of users.
- Do not allow a minority of the public ruin access for the majority of the public.
- Consider whether the planning for the monument will encourage the public to trespass on State land.
- Consider the importance of maintaining access to existing areas of economic activity including Silver Bell Mine and ranching as well as access to inholdings.
- Limit public access to the monument.
- Limit access to cultural resource sites.
- Consider seasonal closures for Ragged Top Mountain and other areas during desert bighorn sheep breeding and lambing season.
- All management problems can be directly or indirectly connected to access, particularly by motorized vehicles of all types.
- Limit access to portions of the Tohono O'odham Indian Reservation

BLM Management Concerns

Concerns regarding general access to be addressed in the plan, identified by BLM (but not necessarily by other agencies or the public during scoping), are as follows:

- Address legal access easements needed to secure public access and/or administrative access (including access points and transportation network) across State and private lands in order to secure access to public lands.

Issues That Can be Addressed Administratively

- Provide opportunity for public review and input with regard to changes to access.

3.3.13.2 Transportation

Planning Criteria

Laws, regulations, policies, and guidelines followed for transportation will include, but not be limited to, BLM Manual 9110, Transportation Facilities, BLM Handbook H-9110-1, Transportation Planning Americans with Disabilities Act of 1990, Arizona Standards for Rangeland Health, 43 CFR 8340 – Off Road Vehicles, 43 CFR 8360 – Visitor Services, and BLM's National Management Strategy for Motorized Off-Highway Vehicle Use on Public Lands.

Consistent with the Proclamation, all motorized and mechanized vehicle use off-road will be prohibited, except for emergency or authorized administrative purposes. The plan will designate a network of routes for motorized and mechanized vehicle use. Protection of the monument resources, public safety, current and future user access needs, and conflict resolution will be considered in making these decisions. The BLM route inventory will provide a basis for considering route management.

Issues Overview

Transportation issues were among the most prevalent concerns raised during the scoping process. The comments ranged from simple statements about allowing or prohibiting off-road use to complex, legal arguments about how BLM should address transportation issues in the RMP/EIS process. Before further describing these comments, a few things should be noted about transportation terminology. While BLM generally uses the term OHV to refer to those types of vehicles that are capable of driving off road and OHV use as the act of driving that vehicle, the public comments used various terms, most frequently off-road vehicle and off-road vehicle use, but also all-terrain vehicles (ATV) and ATV use (which is a slightly more specific term since not all OHV/off-road vehicles would be considered ATVs), as well as use by jeeps, 4x4s, dirt bikes, etc. Comments regarding use under any of these terms sometimes seem to refer to the act of driving cross-country off of established roadways versus the use of these types of vehicles on established routes. The most difficult to interpret is the use of the term off-road vehicle because it could most easily be interpreted in various ways. Therefore, the terminology used by the commenters was left unchanged.

The majority of the comments were in favor of limiting or restricting motorized transportation by some means or another, most specifically motorized off-road use. The adverse impacts of driving off-road/off-road vehicle use to various natural and cultural resources were noted in many public comments opposed to off-road vehicle use. The specific concerns most prevalently noted were for desert bighorn sheep, cultural sites, and monument objects. Other concerns were for Harris hawk, desert tortoise, soils, hydrology, public health and safety, noise, driving in washes, and endangerment to private property. Many who suggest limiting vehicle routes also oppose uses such as mining, grazing, and rights-of-way development. Among those advocating limiting motorized vehicle use in some way, few suggest prohibiting the use altogether, although some do – more particularly with regard to ATVs than other types of motorized vehicles that have the capability to go off-road. There were several comments that note that Presidential Proclamation 7320 prohibits motorized and mechanized vehicle use off of roads. Resource concerns related to non-motorized vehicle trail uses were fewer, but there were concerns for the impacts of such uses to desert bighorn sheep as well as cultural sites.

While some comments advocate the minimum road network necessary for monument management, many advocate providing for reasonable access (usually with a caveat similar to “as consistent with the purpose of the monument”). Still others advocate leaving all existing trails open and some suggest the consideration of additional roads. Reasons cited in favor of retaining roads include recreational value, public safety, emergency response, fire control/fighting, economic benefit, and monument management issues related to criminal activity and sanitation. Many comments advocate non-motorized trail use, including mountain bike, equestrian, and hiking trails. A considerable number of comments encourage the development of a comprehensive recreation trail system that would consider motorized and non-motorized uses with suggestions such as separation between motorized vehicle use and other types of non-motorized recreation use/“quiet” recreation, as well as popular areas for recreational driving, mountain biking, hiking, equestrian use, etc. A transportation plan for IFNM was submitted by some monument residents, ranchers, and conservation groups.

In addition to management of the transportation network, there were substantial comments regarding management oversight of transportation use such as user education, providing signs and maps, and sufficient enforcement of transportation policy.

Representative Comments

"The transportation plan that the BLM will write should leave open only those roads that are the minimum necessary for management of the monument. Other dirt tracks and trails should be closed to protect the objects of scientific and historic interest the monument is meant to safeguard." – Submitters of a Form Letter

"Off-road vehicles are strictly prohibited on all but designated roads within the monument. You should close and restore all vehicle routes that threaten cultural and historic sites, fragment wildlife habitat, and endanger public safety and private property." – Submitters of a Form Letter

"Protect the resources of the Monument by closing "outlaw" roads and making sure mining interests are prevented from damaging any part of the property that belongs to the American people." – Individual, Tyler, Texas

"If taxes are collected in the state of Arizona for registration of off-road vehicles (like California) any revenue from green sticker funds from off-road funds should be more than adequate to create designated OHV riding areas including its maintenance." – Individual, San Carlos, California

"Create a transportation system that provides reasonable access while upholding monument purposes. Close and rehabilitate all vehicle routes that threaten cultural and historic sites; fragment wildlife habitat; damage plants, soils, and local hydrology; and endanger public safety and private property." – Individual, Tucson, Arizona

"Most people who travel to a national monument expect to see pristine lands, not tire tracks. Off-road vehicles are not compatible with the goals of national monument designation, therefore, unofficial roads should be closed and clearly marked." – Individual, Fort Collins, Colorado

"I urge you to keep our national monuments wild and free of development, which includes new roads, new communication lines and off-road permits." Individual, unspecified community

"Designate a transportation network that is consistent with the preservation purposes for which the Monument was created, retaining the minimum routes needed to provide reasonable access and closing extraneous or little-used routes." – Individual, Minneapolis, Minnesota

"Off-road vehicles owners need to have a place to ride them." – Individual, Rockwell, North Carolina

"ORVs need to stay away from sensitive areas." – Individual, Santa Clara, California

"Protect the monument from off-road vehicles. They must be kept on designated trails only." – Individual, unspecified community

"Travel [needs] to be restricted to vehicles that are necessary for monument management. This especially means no off-road vehicles." – Individual, Woodland Hills, California

"Please consider revising your management approach to preserve public access to public lands, including motorized vehicle trails…I believe in equal access to the wonders of the Sonoran Desert for children, the elderly and the disabled, and this generally means via vehicle. Non-use public lands should be limited to selective areas where use has not previously occurred." – Individual, Mesa, Arizona

"Fix the problems that threaten the Monument in the form of extensive off-road vehicle abuse, urban sprawl and overgrazing. Please ensure that the IFNM is managed for all people and all generations, not just the short-term interests of a few." – Individual, Las Cruces, New Mexico

"I encourage BLM [to keep] existing routes open [and look] for opportunities to add routes." – Individual, Tucson, Arizona

"Off-road vehicles are probably the most destructive factors in this area and should definitely be restricted to only designated trails." – Individual, Mesa, Arizona

"I would like to see dirt roads and tracks closed and sensible travel restrictions applied to ORVs." – Individual, Bethesda, Maryland

"Motorized vehicles are a nuisance and should be prohibited over all but a designated, small portion of the monument. That area should be where road development has occurred." – Individual, Tucson, Arizona

"The Proclamation prohibits use of motorized and mechanized vehicles off-road." – Individual, Alpine, Arizona

"A properly managed OHV trail system requires equal elements of education, communication, and design to prove successful." – Individual, Tucson, Arizona

"We would like to see most of the trails stay open to recreational use on existing trails." – Individual, Avondale, Arizona

"I enjoy hunting and OHV use in this area. I am concerned the Monument designation will limit access by motorized vehicles and limit hunting. Please do not close these public lands." – Individual, Gilbert, Arizona

"Providing continued access through existing roads is also critical to safety, as well as management of the monument itself, including issues related to criminal activity, fire fighting, and sanitation." – Individual, Marana, Arizona

"Based on the widespread, serious and long-lasting impacts associated with off-road vehicle use, developing an effective and legally sound travel management component of any Monument plan will be absolutely crucial to safeguarding the historic, scientific, and other objects of interest for which Ironwood National Monument was established." – Individual, Missoula, Montana

"I support OHV access to the areas under consideration for closure. Most OHV users have gotten a bad rap – I am an avid believer in the "tread lightly" campaign. OHV users would think twice about leaving an existing trail if they knew they could receive a $1,000 fine or have their OHV seized." – Individual, Tucson, Arizona

"The Monument, particularly the Waterman and West Silverbell Mountains, are popular mountain bicycling areas, and [Sonoran Desert Mountain Bicycles] urges the BLM not only to preserve existing roads and routes used by mountain bicyclists, but to consider additional trails for non-motorized users." – Sonoran Desert Mountain Bicycles, Phoenix, Arizona

"The U.S. Border Patrol exacerbates the problem with its own wildcat roads, an open invitation to destructive off-road vehicle use." – Individual, Alloway, New Jersey

Issues to be Used in the Development and Analysis of EIS Alternatives

Issues Identified by the Public

- Create a transportation system that provides reasonable access while upholding monument purposes.
- Close and rehabilitate all vehicle routes that threaten cultural and historic sites; fragment wildlife habitat; damage plants, soils, and local hydrology; and endanger public safety and private property.
- Adopt the Ironwood Forest Transportation Plan submitted by conservation groups, monument homeowners, and ranchers.
- Establish a recreation trail system with designated access points that provides a range of opportunities for mountain bikers, hikers, and equestrians.
- Restrict motorized use to what is minimally necessary for maintenance of the monument.
- Provide for vehicular recreation in areas that are not as susceptible to long-term damage from such use.
- Make the roads safe.
- Allow access by only trucks, cars, and street bikes on designated roads only; prohibit all other types of motorized vehicles.
- Retain all major access roads as open to the public, including Avra Valley Road, Red Rock (SASCO) Road, Silver Bell (Marana Road), and El Tiro Wash Road near the Silver Bell Cemetery.
- Prohibit motorized access in all but a small portion of the monument where road development has occurred.
- Implement the directive from the Presidential Proclamation, which states that all motorized and mechanized vehicle use off road, except for emergency or authorized administrative purposes, should be prohibited for the purpose of protecting the monument objects.
- Consider the rights of OHV users; off-road vehicles owners need to have a place to ride them.
- Address control of and damage from ATV use.
- Consider leaving roads open for emergency response/access purposes and for fire control/fighting; safety; and monument management, including issues related to criminal activity and sanitation.
- Keep existing roads open and evaluate opportunities to add roads.
- Prohibit motorized vehicles in washes.
- Close roads not constructed by BLM through the NEPA process.
- Designate roads available for off-road vehicle use based on a set of objective and legally-based criteria, NEPA review, and public comment -- it can not merely adopt any or all "existing" travel ways as "designated" roads for the purpose of complying with the Proclamation.
- Do not use categorical exclusions to shield actions related to off-road vehicle use from NEPA review.
- Rehabilitate/restore closed roads.
- Retain roads and trails as defined by existing maps as open.
- Retain most of the trails open for public use.
- Do not close frequently used roads.
- Close all “wild”/“wildcat”/“outlaw” roads.
- Close dirt roads/tracks/trails.

- Designated routes as open, closed, or limited through the plan.
- Designate and sign roads as closed/open.
- Adopt a closed unless posted open policy that would allow off-road vehicles to be used only on roads specifically marked with signs as open to such vehicles.
- Impose travel restrictions on off-road use.
- Prioritize the protection of monument objects over providing/identifying recreation opportunities for off-road vehicle use through a route inventory process.
- Consider how roads can promote the spread of exotic species and trash.
- Do not allow organized motorized recreation events.
- Consider how revenues from State taxes of off-road vehicles may be used to create designated OHV riding areas including maintenance.
- Trail design and maintenance standards should be applied consistent with the desired level of use (primitive and non-motorized) and, thus, more use should be provided for riders, hikers, and mountain bikers.
- Differentiate roads from routes/tracks/trails.
- Anything identified as a road should meet the legal definition of a road as set forth in FLPMA.
- Preserve existing popular roads and routes used by mountain bicyclists, particularly the Waterman and West Silverbell Mountains, and consider additional trails for non-motorized users.
- Inform the public about accessible areas, roads designated open/closed.
- Educate the users using signs, maps, brochures, website, etc.

BLM Management Concerns

Concerns regarding transportation to be addressed in the plan, identified by BLM (but not necessarily by other agencies or the public during scoping), are as follows:

- The IFNM Proclamation requires preparation of a transportation plan.
- Determine a plan for road and trail maintenance.
- Address the fact that considerable illegal use occurs on existing roads and has resulted in significant trails or vehicle tracks where smuggling routes or undocumented immigrant pick-up areas occur.
- Current management limits use of motorized vehicles to "existing roads or trails," or "designated roads and trails," but these have not yet been identified.

<u>Issues That Can be Addressed Administratively</u>

- Take advantage of assistance being offered by local user groups and experts being offered for the development of a trail system.
- Enforce restrictions/limitations on OHV use.
- Keep off-road vehicles on designated routes only.
- Strictly enforce limitations on OHV use.

3.3.14 Social and Economic Conditions

Planning Criteria

The effects of proposed plan decisions will be evaluated for socioeconomic impacts. The impacts of decisions on disadvantaged communities will be evaluated, consistent with BLM's environmental justice policy and Executive Order 12898.

Issues Overview

The comments received on socioeconomics were few and varied widely. There were several comments about the monument's potential economic impact to the community. These comments suggest creating economic opportunities for surrounding communities by placing monument services (such as visitor center) in these communities. This would, according to the comments, foster stewardship and a sense of ownership of the monument while providing jobs and other economic benefits to the communities. Several other comments suggest weighing the economic benefits of mining, ecotourism, and access against conservation efforts that may negatively impact these potential economic benefits. Finally, comments were received outlining the importance of current mining operations on the community and the Arizona economy in general and were concerned that the management plan would limit access to economic development opportunities within the IFNM.

Representative Comments

"Please let us have a baseline assessment first of the flora/fauna which will be affected, the impact of off road vehicles and the economic impact of mining, development and vehicular traffic versus the economic importance of low impact ecotourism in this area." – Individual, Lakeland, Florida

"Visitor services should be placed outside the Monument in nearby communities which brings with it the added advantage of an economic boost to those towns." – Individual, Austin, Texas

"According to the Western Economic Analysis Center, Silver Bell has a direct impact on the Arizona economy of $24.5 million and indirect economic impact of state of $74.5 million for a total economic benefit to the state of $99 million. The scoping process must take into account the important contribution the Asarco Silver Bell Mine makes to the local, state and national economies. Particular emphasis should be placed on these economic contributions in developing elements of the management plan that would potentially negatively impact the mine's operations and its ability to expand and develop new mineral reserves." – Individual, Marana, Arizona

"We recommend the BLM vision statement for the National Monument convey the intent of Proclamation 7320 and, accordingly: [Build community relationships to foster cooperative stewardship. For example, locating visitor services in surrounding communities builds ownership within those communities for the long-term protection, conservation, and restoration of the landscape and creates economic opportunities for citizens]." – Friends of the Earth, National Wildlife Federation, Sierra Club, The Wilderness Society, and the U.S. Public Interest Research Group, and several individuals

Issues to be Used in the Development and Analysis of EIS Alternatives

Issues Identified by the Public

- Recognize how these lands contribute to the social and economic welfare of local residents and industry.
- Recognize that mining contributes to local and regional economies, and efforts to limit these activities may have negative effects on the economy.

- Consider a cost/benefit analysis of the economic potential of the lands versus the intrinsic value of the lands.

BLM Management Concerns

Concerns regarding socioeconomics to be addressed in the plan identified by BLM (but not necessarily by the public or other agencies during scoping) are as follow:

- Ensure planning decisions do not disproportionately impact disadvantaged communities consistent with BLM's environmental justice policy and Executive Order 12898.

3.3.15 Cultural Resources

Planning Criteria

Laws, regulations, policies, and guidelines followed will include, but not be limited to, Presidential Proclamation 7320, FLPMA, NEPA, Arizona Standards for Rangeland Health, National Historic Preservation Act of 1966, Archaeological Resources Protection Act of 1979, Executive Order 11593, and Executive Order 13007.

Identify cultural and paleontological resource localities and manage them for public, scientific, and cultural heritage purposes. Conserve and protect designated cultural and paleontological resources for future generations. Fulfill responsibilities to appropriate Native American groups regarding heritage and religious concerns. Cultural and paleontological resources will be managed to maintain or enhance significant scientific, educational, and recreational values. Cultural resource sites that meet National Register criteria will be protected and managed as eligible sites. Coordination with the Arizona SHPO will be conducted throughout the plan.

Issues Overview

Nearly all of the comments received pertained to cultural resources concerning the need to recognize and protect these resources. Some comments stress the importance of giving cultural resource protection high priority. Several recommend that a cultural resources inventory be conducted in the monument. A large number of the comments indicate concern with travelways providing unnecessary access to potentially sensitive cultural areas. Many suggest closing travelways that lead to or near sensitive cultural sites. Some comment concerning off-road vehicle use in the area specifically state that off-road vehicles threaten and destroy resources. Many of these comments support closing vehicle routes in areas sensitive in nature. A few of those who commented were concerned about other activities within the monument endangering cultural resources such as grazing, camping, and the presence of undocumented immigrants. Some comments indicate the need to consult with tribes regarding the importance of cultural resources in the area. Several comments refer to the Arizona Wilderness Coalition proposal to incorporate WSAs in the monument and suggested that WSAs would be a way to protect cultural resources. No comments were received pertaining specifically to paleontological resources.

Representative Comments

"The transportation plan BLM is required to write should leave open only those roads that are the minimum necessary for management of the monument. Other dirt tracks and trails should be closed to protect the scientific, historic, and biological resources that the Monument is meant to safeguard." – Individual, Anchorage, Alaska

"Please do a cultural inventory of monument." – Individual, Tucson, Arizona

"Incorporate Arizona Wilderness Coalition proposal for Wilderness Study Areas; Ragged Top, Silver Bell Mountains, West Silver Bell Mountains, and Sawtooth Mountains. Wilderness is the strongest form of multi-species protection, and an excellent way to protect the natural and cultural objects for which the monument was created." – Individual, Tucson, Arizona

"ORVs are strictly prohibited on all but designated roads within the monument. You should close and restore all vehicle routes that threaten cultural and historic sites, fragment wildlife habitat and endanger public safety and private property." – Individual, Thornton, Colorado

"Consult with local tribes on important cultural areas and sites. Fund surveys and mapping of archaeological sites and sensitive areas within the monument." – Individual, unspecified community

"Undocumented immigrants impact cultural resources." – Individual, Prescott, Arizona

"Livestock should be removed from areas where they compete with monument wildlife objects, such as in critical rare cactus habitat and bighorn sheep lambing grounds, and should be removed from areas where they pose a significant threat to cultural and historic resources." – Individual, Tucson, Arizona

Issues to be Used in the Development and Analysis of EIS Alternatives

Issues Identified by the Public

- Give priority to archaeological site protection because of their vulnerability and sensitivity to vandalism.
- Close travelways to or near sensitive cultural sites.
- Evaluate the impact of grazing, camping, and off-road vehicle use on cultural sites.
- Identify tribes that may have interest in cultural resources in the area.
- Evaluate the inclusion of WSAs in the monument and their impact on cultural resources.
- Assess the impact of undocumented immigrants on cultural resources in the monument.
- Protect cultural resource sites from looters, thieves, artifact collectors, etc.

BLM Management Concerns

Concerns regarding cultural resources to be addressed in the plan, identified by BLM (but not necessarily by other agencies or the public during scoping), are as follows:

- Assign appropriate use categories for cultural resource sites, consistent with BLM Manual 8110, Identifying Cultural Resources.
- Identify sites suitable for public interpretation, while maintaining appropriate protection for the site.
- Consider how to best manage cultural and paleontology sites in areas where extensive recreational uses occur.

Issues That Can Be Addressed Administratively

- Conduct an inventory to identify, locate, and evaluate cultural and paleontological resources because without an accurate and complete resource database, even well-intentioned actions may prove destructive. Seek citizen volunteers to help with the inventory if BLM's budget cannot accommodate the inventory.

3.3.16 Native American Issues

Planning Criteria

Native American tribal consultations will be conducted in accordance with policy and tribal concerns will be given due consideration. The planning process will include the consideration of any impacts on Indian trust assets.

Issues Overview

Very few comments were received relating to Native American issues. Several comments suggest consulting with tribes on the importance of cultural resources in the monument. Another comment suggests evaluating access to and from the Tohono O'odham Nation.

Representative Comments

"The EIS should address access to and from the TON [Tohono O'odham Nation]." – Individual, Tucson, Arizona

"Consult with local tribes on important cultural areas and sites. Fund surveys and mapping of archaeological sites and sensitive areas within the monument." – Individual, unspecified community

Issues to be Used in the Development and Analysis of EIS Alternatives

Issues Identified by the Public

- Consult with tribes when evaluating the cultural resources within the IFNM.
- Evaluate access issues involving the Tohono O'odham Nation.

BLM Management Concerns

Concerns regarding Native American issues to be addressed in the plan, identified by BLM (but not necessarily by other agencies or the public during scoping), are as follows:

- Coordination with all tribes interested in the monument including but not limited to, Tohono O'odham Nation, Ak Chin Indian Community, and Gila River Indian Community, and involve tribes in the planning process and decisions to be made.

Issues That Can Be Addressed Administratively

- Consult with tribes when evaluating the cultural resources within the IFNM.

3.3.17 Law Enforcement and Undocumented Immigrants (including Public Safety)

3.3.17.1 Law Enforcement and Public Safety

Planning Criteria

The plan will develop a framework to protect public health and safety, including addressing hazardous sites and activities; incorporating requirements to meet the Clean Air Act, Clean Water Act, and other environmental laws and regulations; and considering other potential hazards.

Issues Overview

Law enforcement issues identified by the public focused on off-road vehicle traffic, recreational shooting, resource damage, trash (including both littering and dumping), and undocumented immigrants. Most of the comments noting public safety as an issue were submitted from various individuals in one of the form letters. Additional letters, which varied from the form letter, include similar language indicating that vehicle routes that endanger public safety should be closed and restored. In addition, many comments state that additional law enforcement is needed in the IFNM, with respect to existing permitted activities. Other comments note that recreational shooting poses a hazard to public safety. The few comments regarding undocumented immigrants, which suggest illegal immigrants harm the land and resources, are described more completely in the next section.

Representative Comments

"There is damage occurring from undocumented alien traffic, drug smuggling, Border Patrol use, off-road driving, shooting, littering, wildcat dumping, etc. Current law enforcement is woefully inadequate and this issue must be addressed immediately and in a manner consistent with the mandate laid out in the proclamation." – Individual, Arizona City, Arizona

"You should close and restore all vehicle routes that threaten cultural and historic sites, fragment wildlife habitat, and endanger public safety and private property." – Submitters of a Form Letter

"The Management Plan [should] include a section on Ranger Safety, specific policies for Rangers working with other agencies, and emergencies procedures as they relate to the unique situation and circumstances of the Ironwood Monument." – Individual, unspecified community

"Enforcement of the restrictions already in place [is] necessary." – Individual, unspecified community

"Prevent target shooting near residential areas, ranching areas, and popular visitor areas and protect monument residents, visitors, landscape, archaeology and wildlife by diverting flow of illegal cross-border traffic and accompanying law enforcement activities to areas outside the monument." – Individual, Tucson, Arizona

"BLM must consider the likelihood, for the life of the plan, of adequate law enforcement rangers and resources staff to regularly patrol, monitor, and enforce permitted activities on the monument." – Center for Biological Diversity, Tucson, Arizona

Issues to be Used in the Development and Analysis of EIS Alternatives

Issues Identified by the Public

- Have park rangers and safety patrols.
- Ban shooting within the monument to protect public safety.
- Close roads that threaten public safety.
- Increase the presence of law enforcement in the monument.
- Increase enforcement of existing laws.
- Restrict target shooting to safe and nondamaging locations.
- Address trespass, vandalism, and other illegal issues.
- Consider BLM's ability to monitor and enforce permitted activities.

BLM Management Concerns

Concerns regarding public health and safety and law enforcement to be addressed in the plan, identified by BLM (but not necessarily by other agencies or the public during scoping), are as follows:

- Identify and consider safety issues at historic mine sites, which are often popular visitor destinations.
- Consider the increasing concern regarding undocumented immigrant traffic and smuggling activities on the public lands relative to public and employee safety.
- Determine what level of maintenance should be provided on roads to maintain access and to protect both public safety and natural and cultural resources.
- Consider appropriate management of sites and areas that pose a threat to public health and safety, whether man-made or natural (e.g., rocky cliff areas).
- When developing resource management objectives, consider the need for an enforcement aspect, including developing appropriate penalties.
- Enforce federal laws and regulations pertaining to use, management, and development of the public lands and their resources. Particularly, evaluate options to effectively enforce vehicle laws.

Issues That Can Be Addressed Administratively

- Address the need for more law enforcement to address illegal activities (e.g., cross-country vehicle travel).
- Address the need for an adequate number of rangers for the number of visitors.
- Secure staff and funding needed to enforce rules and regulations.

3.3.17.2 Undocumented Immigrants and Smugglers

Planning Criteria

No issue-specific planning criteria have been identified for law enforcement regarding undocumented immigrants and smugglers.

Issues Overview

Less than two dozen comments indicated that undocumented immigrants are an issue in the IFNM. A majority of the comments acknowledge that some type of resource damage or trash dumping is occurring from undocumented immigrants or Border Patrol activities. Several of the comments state that BLM should increase law enforcement and eliminate illegal immigrant use of lands in the monument.

Representative Comments

"Plan and ensure that no illegal immigration is allowed using monument territory." – Individual, Newport, Pennsylvania

"All Border Patrol activities within the monument must cease immediately unless it can be conclusively demonstrated that their activities have either a zero or a positive net effect upon the cultural and natural resources of the monument." – Individual, Arizona City, Arizona

"Open the border to day labor immigrants." – Individual, Tucson, Arizona

"A complete revision of the current US Border Policy which forces migrants into the most remote regions of the southwestern U.S. is needed." – Individual, Tucson, Arizona

Issues to be Used in the Development and Analysis of EIS Alternatives

Issues Identified by the Public

- Address the trash left behind by undocumented immigrants and drug smugglers.
- Lessen impacts on resources by undocumented immigrants and Border Patrol activities.

BLM Management Concerns

Concerns regarding undocumented immigrants and drug smuggling to be addressed in the plan, identified by BLM (but not necessarily by other agencies or the public during scoping), are as follows:

- Collaborate with other agencies to address the impacts on resources caused by undocumented immigrants and drug smugglers.
- Develop strategies to encourage undocumented immigrants to remain on existing roads, to not litter, and to protect and respect natural resources.
- Undocumented immigrants and drug smugglers often drive vehicles off of roads, leave behind trash, and burn campfires. This has resulted in management concerns including resource damage (to soils, vegetation, wildlife habitat, cultural resources, etc.), unsanitary human waste disposal, costly clean-up of trash, and the potential for wildfire.
- Safety is another significant management concern. Undocumented immigrants are frequently ill-prepared for the harsh environmental and climatic conditions they encounter, particularly in the summer. This can result in the need for search and rescue operations. Recently, the illegal activities also have resulted in an increased concern for employee and visitor safety as drug smugglers and guides leading the undocumented immigrants (also known as coyotes) have been carrying and sometimes using lethal weapons.

Issues That Can Be Addressed Administratively

- Address the undocumented immigrants (and drug smugglers) and their impacts on the land.
- Address impacts of border law enforcement on the land.

3.3.18 Hazardous Materials

Planning Criteria

Laws, regulations, policies, and guidelines followed for hazardous materials will include, but not be limited to, Presidential Proclamation 7320, FLPMA, NEPA, and the Resources Conservation and Recovery Act of 1986.

Issues Overview

Very few comments were received relating to hazardous materials issues. One comment received suggests that recreational shooting in the monument is damaging to natural resources in the area and can create waste products (that contain lead). Several comments address concern for hazardous materials management associated with mining operations, including transport and spill response management.

Representative Comment

"There is serious ecological damage to the cactus and other plants and the trash and targets are often hazardous in nature." – Individual, unspecified community

Issues to be Used in the Development and Analysis of EIS Alternatives

Issues Identified by the Public

- Evaluate extent of recreational shooting and damage in the monument, including waste from shell casings and target remnants.
- Consider management of waste (including with lead content) in locating a designated shooting area within the monument.

BLM Management Concerns

Concerns regarding hazardous materials to be addressed in the plan, identified by BLM (but not necessarily by other agencies or the public during scoping), are as follows:

- Evaluate the extent and damage of hazardous materials dumping within the monument.
- Address that industry, such as the Silver Bell Mine has the potential for chemical spills that may affect the monument and its resources.
- Address compatibility concerns on travel routes used to transport chemicals for mining operations and increasing public traffic.

Issues That Can Be Addressed Administratively

- Manage illegal dumping with BLM law enforcement personnel.

3.3.19 Facilities and Education

Planning Criteria

The RMP will consider what facilities are needed to provide visitor safety, information, interpretation, and disabled access. Laws, regulations, policies, and guidelines followed for facilities will include, but are not be limited to, Presidential Proclamation 7320, FLPMA, NEPA, Americans with Disabilities Act, Rehabilitation Act, and Architectural Barriers Act.

Issues Overview

A majority of the comments that were received on facilities oppose placement of any visitor facilities within the monument boundaries. Many of these comments suggest putting visitor facilities in nearby communities that already are developed, which would provide an economic benefit to the respective communities. A few comments suggest that facilities (or development) should not be definitively excluded from within the monument.

Representative Comments

"Visitor services such as visitor centers, restroom facilities, interpretive exhibits, and signage should be designed to match not only the level of visitation desired, but also the level of maintenance and staffing available to BLM." – Arizona Chapter of the American Society of Landscape Architects

"All visitor facilities, where possible, should be located in nearby local communities." – Friends of the Earth, National Wildlife Federation, Sierra Club, The Wilderness Society, U.S. Public Interest Research Group, and several individuals

"Road construction and concessionaires such as gas stations, lodges and restaurants should be limited or excluded from the monument." – Individual, Fort Collins, Colorado

"Development in the monument should be limited, but visitor services should not be forced outside the monument." – Individual, Rockwell, North Carolina

Issues to be Used in the Development and Analysis of EIS Alternatives

Issues Identified by the Public

- Place visitor services outside the monument.
- Do not limit visitor services to locations outside the monument.

BLM Management Concerns

Concerns regarding facilities to be addressed in the plan, identified by BLM (but not necessarily by other agencies or the public during scoping), are as follows:

- Determine which, if any, facilities are needed within the IFNM for administrative purposes (e.g., law enforcement or public safety).
- Determine where facilities can be placed to promote partnerships within the community.
- Establish criteria to guide permitting of research coordination, and related educational activities to further the purposes of the IFNM.

Issues That Can Be Addressed Administratively

- Determine what resources should be allocated for interpretation and environmental education.

3.4 RMP/EIS Process

A review of the comments indicate a strong desire for the protection of the rich biological diversity and integrity of the IFNM through inventory, assessment, and monitoring. This includes cultural resources, roads, native and endangered species, wildlife habitat, wildlife migration patterns, rangeland conditions, trails, and utility corridors. The ability to store all of this information in a spatial format (i.e., geographic information system [GIS]) also was suggested as a practical and effective method to enhance the planning process, and protect the IFNM for future generations. Conducting baseline studies, continually monitoring all resources within the IFNM, and assessing the conditions on a regular basis could eliminate deterioration of resources within the IFNM.

Other comments suggest both using and not using any portion of previous planning documents for the area. The justification for not using the previous documents is that management plans are outdated and irrelevant, especially given the designation of the IFNM. Justification for using previous documents includes that certain elements worked well, and therefore, should be preserved in the new RMP/EIS.

Partnering with universities and private institutions to assist BLM in research purposes also was suggested as part of the RMP/EIS process. This approach would be a collaborative working relationship, creating a win-win situation for all involved. BLM would obtain data required to complete the RMP/EIS, and researchers would gain practical experience.

Ensuring broad-based public participation throughout the planning process also was a noted concern. Several comments indicate BLM should consider comments equally, despite the geographic origin of the comment. Local input was acknowledged as important, but should not be considered more valid than a comment given from an individual thousands of miles away from the IFNM.

The remaining comments regarding the RMP/EIS process varied. Some comments indicate that before doing an inventory of roads, BLM must first define what constitutes a road within the IFNM. Other comments suggest the RMP/EIS should maximize access while preserving the resources within the IFNM.

3.5 Collaboration

A few of all comments received were directed specifically at BLM's collaboration with other federal agencies, state agencies, tribes, individuals, or groups. These comments encourage the BLM to continue working proactively with AGFD, private landowners adjacent to the IFNM, and other interested parties to establish a plan consistent with regional resource objectives. Another viewpoint expressed is that the creation of the IFNM should not result in changes to the successful work BLM has already conducted in the area.

Comments also document the need for BLM to continue working with local businesses, mainly mining and utility companies that own property within the IFNM. Letters received from Tucson Electric Power and Asarco indicate the importance of the designation of the IFNM and the need to protect the resources within the monument. Frequent communication between BLM and these companies can help ensure an effective working relationship and protection of the IFNM. Some comments reflect the community's desire to participate with management of the IFNM, by offering to assist BLM with management activities (e.g., trash clean up).

In addition to comments received, BLM identified management concerns related to collaboration, particularly with respect to community partnerships. BLM recognizes that there is a need to address how multiple agencies and organizations will participate in the management of the IFNM.

3.6 Decisions Anticipated To Be Made

In accordance with the FLPMA, BLM is responsible for balanced management of public land and its resources based on the principles of multiple use and sustained yield. Management direction is provided by a land use plan, in this case an RMP. The RMP is developed to determine decisions regarding appropriate multiple uses and allocation of resources, develop strategy to manage and protect resources, and establish systems to monitor and evaluate the status of resources and effectiveness of these management practices over time. Also, the management direction developed through the planning process needs to be adaptable to changing conditions and demands over the life of the RMP. Development of the RMP will be in accordance with the guidance set forth in BLM *H-1601-1 – Land Use Planning Handbook.*

The IFNM planning process also must take into consideration Presidential Proclamation 7320, which defines for IFNM "objects of scientific and historic interest" that must be protected and lists actions needed to protect IFNM resources. It also reserves all federal lands within the boundaries and withdraws all lands in IFNM from disposal under public land laws and continues many current uses and authorities.

In anticipation of this planning process, BLM developed an initial list of questions that reflect the kinds of decisions that will need to be made. These planning questions can be found in BLM TFO's Pre-Plan Analysis for the IFNM dated February 9, 2001, which is available for review at the TFO.

In light of the public scoping process and the resource-specific planning criteria, public issues, and BLM management concerns identified in Section 3, the key planning questions identified to be addressed in the development and analysis of RMP/EIS alternatives (in no particular order) are as follows:

- How does BLM's management need to be adjusted in order to implement the purposes of the monument Proclamation?
- How can BLM protect the natural and cultural resources of the monument consistent with the Proclamation and continue to meet existing and future demand for use of public lands and resources, pursuant to applicable legal authorities?
- How can potential conflicts and inconsistencies associated with the intermixed land ownership of the monument be minimized through integrating management with agencies and individuals that have jurisdiction or responsibility for management of lands in or near the monument?
- How can BLM allow and manage for public use and enjoyment, including recreation and access, while meeting requirements, goals, and objectives for resource management?
- What can BLM do to address urban interface issues?
- What facilities and infrastructure are needed to provide visitor services and administration of IFNM?

3.7 Existing Management To Be Carried Forward

BLM-administered public land in the planning area is managed with direction from two documents: Phoenix Resource Area RMP (1989) and Eastern Arizona Grazing EIS (1992). Since these plans were implemented 11 to 14 years ago, numerous changes have occurred in the area that require reconsideration of certain management decisions. BLM has determined that some of the existing management decisions are not current with changing circumstances, demographics, resource conditions, and/or policy (e.g., fire management, noxious weed management, energy production and transport). In addition, the designation of the IFNM necessitates the development of an RMP specific to management of the monument's resources.

Based on demonstrated experience, many elements of the existing plans work well and remain valid, and BLM intends to carry these management decisions forward. Determining which existing management decisions will be carried forward is a part of the planning process. As part of the Management Situation Analysis, BLM will review the existing condition of the environment, review the existing management situation, and identify which existing management decisions should be carried forward and where there are opportunities to modify existing management direction and/or develop new management direction.

SECTION 4.0 – DATA

4.1 Data Summary

The TFO staff has identified data that are required to address resource and use issues and develop and analyze impacts of plan alternatives. These are summarized below. In many cases, existing resource information available in the BLM TFO will be used in formulating resource objectives and alternative management actions. Much of the data, however, will have to be updated, compiled, and converted into digital format (e.g., GIS) for use in the planning process and for development of resource maps for the plan. GIS files are the building blocks to quantify resources, create maps, and manipulate information during alternative formulation, especially the preferred alternative.

In addition to existing information, new data also are needed in a number of areas to provide the baseline resource condition information. The RMP may recommend that certain additional resource data be gathered in implementing an action, or gathering data may be a recommended action. All GIS data developed for the RMP will meet the data and metadata standards identified by BLM as appropriate. The projected data needs by issue/concern are described in the following sections. Where BLM is identified as developing data, BLM may choose to contract for that data development.

4.1.1 Water Source and Use Assessment

Water source and use assessment baseline data are needed to assess valid existing rights and resources available to support IFNM purposes. The sources for these data include Arizona Department of Water Resources (ADWR) water rights and well databases and GIS data, and Phoenix Field Office and TFO water rights paper files and electronic files. Water rights are currently specified by 1/4 and 1/16 sections on paper maps, paper files, and ADWR GIS data. BLM will convert any necessary data for the planning process into a GIS format.

4.1.2 Wildlife

In order to manage wildlife species effectively, it is necessary to have a clear understanding of the status and distribution of the species present within IFNM. This understanding will be enhanced by literature searches of recent studies to be found at the University of Arizona (U of A) and the Arizona Sonora Desert Museum (AZSDM), and by fieldwork to do wildlife inventories. BLM will digitize polygons at a scale of 1:100,000.

The impacts of increased human-use disturbance on wildlife populations are a major concern and data are required to determine the upper limits of these disturbances (limits of acceptable use). U of A researchers will gather these data and sensitive area polygons will be digitized at a scale of 1:100,000.

A portion of the IFNM contains proposed critical habitat for the cactus ferruginous pygmy-owl, with other areas potentially containing suitable habitat for this species. Baseline data will be needed to determine the quality of the habitat and the presence or absence of the pygmy-owl. These data are essential for proper management of this endangered species. These data will be obtained by fieldwork and presented as polygons digitized at a scale of 1:100,000. Field sightings and nests will be at a scale of 1:24,000. Similar field studies to determine the habitat quality and presence or absence of lesser long-nosed bats and desert tortoise will be conducted and reported on the same map scales. Personnel of U of A, AZSDM, and AGFD will conduct field studies and prepare GIS data.

Finally, IFNM contains the last viable population of desert bighorn sheep within the Tucson Basin. Baseline data to determine habitat quality, distribution, and migration patterns of these sheep will be

conducted by AGFD and reported as polygons at a scale of 1:100,000 with field sightings at a scale of 1:24,000.

4.1.3 Vegetation

In order to manage vegetative communities effectively, data are needed to determine the status and distribution of these communities, including exotic/introduced species. These data will be gathered using literature searches of recent studies (U of A and AZSDM) and through vegetation inventories by AZSDM. Results will be reported as polygons at a scale of 1:100,000.

Three vegetation species (saguaro, ironwood, and paloverde) are extremely important in the IFNM. Data are needed to determine whether management objectives are compatible with acceptable levels of regeneration to sustain these species. These data will be supplied through contracts with U of A and AZSDM as management zone polygons digitized at a scale of 1:100,000. These two contractors will supply similar data for fire assessment and natural history studies of the ironwood forest vegetative community.

4.1.4 Transportation Management

Data will be provided by U of A contracts to evaluate the existing route system using United States Geological Survey (USGS) digital orthophotography, other maps, on the ground verification, and road condition evaluations. BLM will digitize all existing routes and their condition for inclusion in the GIS system.

4.1.5 Facilities Management

Field data and data from BLM records will be used to determine existing facilities within the IFNM, their condition, access potential, and maintenance needs. Global positioning system (GPS) data will be collected by BLM, as necessary.

4.1.6 Recreation

Data are required to identify recreational visitor characteristics, use areas, and specific sites in order to develop management that reflects current activities, preferences, and perceptions. These data will be collected in the field and with visitor surveys by BLM personnel and U of A contractors. GIS data of user zones will result from BLM and U of A efforts.

4.1.7 Land Ownership

In order to conduct basic planning and ensure notification of interested parties about the ongoing planning effort, it will be necessary to determine current surface and subsurface ownership within the planning area and adjacent areas. This will be accomplished by BLM by using master title plats and county records, which will be digitized into the correct GIS format. For accurate township and range lines, section lines, and general resource assessments, Arizona Land and Resource Information System (which is at a scale of 1:24,000) will be used.

4.1.8 Cultural Resources

Only about 2 percent of IFNM has been surveyed for cultural resources. In order to accomplish IFNM planning goals, it will be necessary to do Class I and II surveys. In some specified areas, Class III surveys will be conducted. U of A researchers will use GIS technology to map site locations; U of A researchers will submit the information to AZSITE (Arizona Archaeological Site and Survey Database).

4.1.9 Geology and Minerals

Data collection is required for geologic resources and for determining the location of existing mining claims and saleable mineral resources for planning purposes. These data will be obtained from the Arizona Geological Survey, TFO, BLM Arizona State Office, and Pima and Pinal County Recorder offices, and digitized to either a scale of 1:24,000 or 1:100,000, whichever meets data requirements.

4.1.10 Wastes and Hazardous Materials

Data on wastes and hazardous materials will be collected to identify where they occur on IFNM. This will be accomplished by BLM via field reconnaissance, and locations will be identified and documented using GPS.

4.1.11 Unlawful Activities

In order to plan for effective law enforcement within the IFNM, data will be collected on the number and kinds of illegal activities that occur and where they occur. Patterns and trends of these activities, including dumping and resource theft, will be mapped. These data can be obtained from the LawNet database, paper case files, reports, and citations.

4.2 GIS Data Inventory

Table 4-1 presents the data BLM have gathered to date and those data that are missing, but needed for the RMP.

Table 4-1 – GIS Data Inventory

Data Description	Coverage Name	Format	Data Source (if not BLM)	Notes, Contacts, Collection Method
Base Data				
DRG's				URS Data Library
DEM's				
DOQQ's				URS Data Library (Pima County Only)
Aerial Photography				
Topography				URS Data Library
County Boundaries	Azcountybnd	shape		URS Data Library
BLM Field Office Boundaries	Azfos697a	shape		URS Data Library
PLSS	Azsecplss;trplss	shape		URS Data Library
Planning Area Boundary	ifnmgcdbdy; IRONWOODPAB	shape		
Decision Area Boundary				
Lands & Access				
Surface Land Ownership	ifnmlst;lstr	shape		ownership with local edits to update known errors in the FO
ROW Exclusion/Avoidance Areas				
ROW Corridors				
Border Patrol Areas				
City Boundaries				URS Data Library
Access	ifnm-access-pts	shape		
Main regional access routes	ironwoodtrn	shape		
Withdrawal Area Boundaries				
State/Federal Exchange				
State/Private Exchange				
Route Inventory				
City Parks				
County Parks				
Monuments				
Realty Management Locations				
Land Tenure				
Land Tenure Joint Management Areas				
Undocumented Immigrant Routes				
Air Quality				
Class 1				
PM-10 Non-attainment Areas - Pima/Pinal Counties				
Cultural Resources				
AZSITE				
Historic Structures				
Historic Trails				
Cult. features identified during the travel route inventory	cultural_lst	shape		
Energy & Minerals				
Subsurface Mineral Ownership				
Subsurface Estate				
Renewable Energy Resources (wind, solar)			NREL	http://www.nrel.gov/gis/index_of_maps.html
Mineral Districts	mineraldisttrict_utm12	shape		
Mining Activities	minerals-merge	shape		Mining related features from UA route inventory
Lithology				
Mineral Production Facilities				
Abandoned Mine Lands				
Mining Claims	ifnmclains	shape		
Oil & Gas Leases				
Coal Leases				
Physiographic Sections				

Table 4-1 – GIS Data Inventory

Data Description	Coverage Name	Format	Data Source (if not BLM)	Notes, Contacts, Collection Method
Oil & Gas and Coal Fields				
Mineral Occurrences				
Mineral Resource Potential (Coal, Coal bed Methane, O&G)				
Past, Present, Project Mineral Development				
Saleable and Locatable Minerals (sand, gravel, decorative rock)				
Environmental Justice				
Census Data Summary Tape 1 (1990 & 2000)				URS Data Library
Census Data Summary Tape 3 (1990 & 2000)				URS Data Library
Geology				
Geology			AGS	URS Data Library (AGS Map 35, Richard, et. all 2002)
Tectonic Index Map				
Fault Lines				
Caves				
Paleontological Resources				
Hazardous Materials				
Active/Closed Landfills				
Non-point Source				
Superfund Sites				
UST Sites				
LUST Sites				
CERCLA Sites				
RCRA Sites				
Trash, Waste or Junk Dump sites	trashdum-merge	shape		
Land Use				
Existing Land Use (points, lines, polygons)				
Proposed Land Use (points, lines, polygons)				
Range Resources				
Allotment Boundaries	grazallot	shape		
Range Improvements	fences_ifnm;gate-merge	shape		
Range Facilities	rangefac0lst	shape		salt licks-corrals-water
Wild Horse/Burro Management Areas				
Cattleguards	cattlegu-merge	shape		
livestock waters	rangewaterbuf402	shape		
Recreation				
Recreational Sites (geocashing, gold panning, rockhounding, climbing, etc.)	recsitelst	shape		UA Recreation study
Backpacking Areas				
Horseback Riding Areas				
Mountain Bike Use Areas				
Target Shooting Areas				
Hiking Trails				
Recreation & Public Purpose Act lands				
Visitor Facilities				
Recreation Opportunity Spectrum Classes				
OHV Trails/Areas	ifnmohv	shape		
Drainages with OHV use	wash_orv	shape		
OHV Drainage Access from existing roads	washrun_ifnm;washrun110702	shape		
Areas of unauthorized/unregulated OHV Use				
Historic Trails				
ERMAs				
SRMAs				
Seasonal RV Camping Areas				
Traffic counter locatons	counters	shape		

Table 4-1 – GIS Data Inventory

Data Description	Coverage Name	Format	Data Source (if not BLM)	Notes, Contacts, Collection Method
travel routes	ifnmitrnbdylst	shape		Preliminary from UA data
travel routes	ifnmrout27bdy	shape		linear disturbance features from photointerp. of 1996 aerials
travel routes	ifnmrout27	shape		same as above, outside ifnm
travel inventory merged GPS	itrn-merge	shape		Preliminary from UA data
Signs	sign-merge	shape		
Special Management Areas				
ACEC's	watermanacec	shape		URS Data Library
Nominated ACEC's				
Wilderness Boundaries	wildblm;wildfs;wildfws;wildnps	shape		URS Data Library
Research National Areas				
Wilderness Characteristics (BLM or Citizen proposals)				
Soils				
Soils				
Prime and Unique Farmlands				
Erosive and Fragile Soils				
Erosion problems along roads	erosions-merge	shape		
Transportation				
Interstates	azclass1rds	shape		URS Data Library
Major Roads	azclass2rds	shape		URS Data Library
Secondary Roads	Class345rdsse	shape		
Light Duty Roads	Class345rdsse	shape		
4-Wheel Drive Roads	Class345rdsse	shape		
Railroads				URS Data Library
Scenic Byways				
Closed Roads				
Road Barriers/Obstructions	barrier-merge	shape		
Potential safety hazards along roads	hazardsi-merge	shape		
Utilities				
Right-of-Way				
Right-of-Way Avoidance Areas				
Communication Sites	ifnm-commsite	shape		
Pipelines	pipeline	shape		URS Data Library
Electric Transmission Lines	powerline	shape		URS Data Library
Utility Corridors (proposed)	powerlinep	shape		
Wind Powered Generation Sites				
Utility Withdrawals				
Vegetation				
Vegetation	gapveg_ifnm	shape		
Standard Habitat Sites				
Wetlands				
Riparian				URS Data Library (SDCP Inventory)
Noxious weeds/non-native plants				
Ecological Study Plots				
Rare Plants				
Vegetation Trend				
Vegetation Condition	vegetati-merge	shape		Vegetation Condition along UA travel routes
Vegetation Treatment				
Visual Resources				
Scenic Quality				
Landscape Character				
Sensitive Viewpoints				
Distance Zones				
VRM's				

Table 4-1 – GIS Data Inventory

Data Description	Coverage Name	Format	Data Source (if not BLM)	Notes, Contacts, Collection Method
Surface Water Resources				
Annual Precipitation				http://www.climatesource.com/
Watershed Basins				URS Data Library (8 digit HUC Code)
Streams/Lakes/Playas	hydroper_lse;hydroint_lse	shape		URS Data Library
Waters of the US				
FEMA Floodplains				
Wells (Base Waters;springs, wells, tanks)	ifnmwellreg;waterfac-merge	shape		ADWR 2000; dams, tanks, wells, trought from UA Route Inventory
Wellhead Protection Areas				
ADEQ Category 1 Watersheds				
Road/Drainage Crossings	drainage-merge	shape		
Groundwater Resources				
Aquifers				
Underground Water Basins "TEC"				
Declared Underground Water Basins				
Wildlife Resources				
Wildlife Migration Corridors				
Habitat Management Plan Boundaries				
AGFD Hunt Units	azgmu	shape		URS Data Library
Desert Tortoise Habitat Areas	torthab	shape		URS Data Library (2003 BLM Transfer)
Habitat Areas (individual species)				
Wildlife Reintroduction Areas				
Species Distributions (T&E, AZ Sp. of Concern, BLM Sens. Sp.)				
T&E Reintroduction Areas				
Inland Native Fish/Anadromous Fish				
Critical Habitat			USFWS	URS Data Library
Proposed Critical Habitat				
Proposed Recovery Habitat				
Willow-Flycatcher Areas				
Big Horn Sheep Wildlife Management Areas	sibishwma	shape		
Wildlife Waters	guzzler	shape		
Cactus Ferrugynous Pygmy-owl Critical Habitat	cfpo	shape		
Wildlife related features	wildlife-merge	shape		from UA route inventory
Special Project Areas				
Available Lands DOI/Governor Agreement				
Cross-border Issue Areas with Mexico				
Timber/Fire Resources				
Wildfire History				
Fuel Loading Areas				
Fuel Reduction Areas				
Prescribed Burn Areas/Boundaries				
Urban Interface Risk Areas				
Fire Management Plan Boundary				

SECTION 5 – SUMMARY OF FUTURE STEPS

5.1 Planning Process

BLM's planning process employs nine basic steps, which are listed below and described in the planning regulations (Manual 1617, Section 42):

- Identification of issues
- Development of planning criteria
- Data and information collection
- Management situation analysis
- Formulation of alternatives
- Estimation of effects of the alternatives
- Selection of the preferred alternative(s)
- Selection of the plan
- Monitoring and evaluation

The process requires the use of an interdisciplinary team of resource specialists to complete each step. An important part of the BLM's planning process is to develop an RMP that will have community and political support. To achieve this, BLM is committed to continuing to engage the public and relevant agencies in a planning process. Land use planning often provides the catalyst for bringing communities, agencies, other groups, and individuals together to reach mutually beneficial goals. Over the past few years, BLM has incorporated collaborative approaches to planning and land stewardship projects. A collaborative approach to planning entails BLM working together with tribal, state, and local governments; other federal agencies; and interested organizations and individuals, from the earliest stages of, throughout, and beyond the planning process to address common needs and goals within the planning area. Collaboration increases community involvement with and support for management decisions and implementation – it establishes a long-term commitment by the participants for a shared responsibility and stewardship for the land.

5.1.1 Identification of Issues

Issues were identified through the scoping process, which initiated the planning process. The scoping process and the issues identified are documented in this Scoping Report.

5.1.2 Development of Planning Criteria

Planning criteria establish constraints and guidelines for the planning process; establish standards, rules, and measures; set the scope of inventory and data collection; help identify the range of alternatives; and estimate the extent of analysis. Based on the issues identified and on BLM management concerns, BLM drafted the planning criteria as described in Section 2.0 of this document.

5.1.3 Data and Information Collection

As explained in Section 4.0, much of the data and information will be extracted and used from existing data on file at BLM TFO, BLM Arizona State Office, or through other local agencies and academic institutions. Other data and information will be obtained from current studies being conducted by BLM and through relevant sources to update and/or supplement BLM's data. Data include published and

unpublished reports, maps, and digital format for use in a GIS. Generally, the resources and resource uses to be addressed include the following:

- Land (tenure) and real estate
- Geology
- Soils
- Water resources
- Air quality
- Vegetation
- Wildlife
- Special status species
- Grazing management
- Noxious weeds
- Cultural resources
- Paleontological resources
- Recreation
- Visual resources
- Special management areas
- Social and economic conditions
- Fire management
- Public health and safety

During the data and information collection step of the process, BLM will initiate specific coordination with agencies, including the USFWS for Section 7 consultation and SHPO for Section 106 consultation, to ensure these processes are completed in conjunction with the RMP process.

5.1.4 Management Situation Analysis

The purpose of the Management Situation Analysis is to conduct a deliberate assessment of the current situation in the planning area. The documentation is a compilation of information appropriate to and commensurate with the planning issues. The Management Situation Analysis provides a profile of the existing condition of the environment, description of the existing management (e.g., laws, regulations, policies, management direction), and analysis of opportunities to continue or modify the existing management situation.

5.1.5 Formulation of Alternatives

BLM, in collaboration with relevant agencies and the public, will develop a range of reasonable alternatives (i.e., combinations of management strategies) to the existing management situation that address the issues identified during scoping, comply with BLM's planning regulations and policies, comply with the FLPMA requirement of managing for sustained yield and multiple use, and comply with other laws and regulations. Also, an alternative for no action will be addressed. The no-action alternative assumes that existing management will continue.

This is the most prominent milestone task for collaboration and public participation. Because the development of alternatives is a critical step for which careful and thorough collaborative planning is needed, several public workshops will be scheduled to discuss the alternatives for the planning area. The meetings will be informal, open house meetings with the public, interested organizations, and agencies. Following approval of the alternatives by the BLM Arizona State Director, additional public meetings will be held to present and explain the alternatives to the public.

5.1.6 Estimation of Effects of the Alternatives

BLM then will assess the potential effects of the RMP alternatives.

5.1.7 Selection of the Preferred Alternative

Based on the information generated in the previous step, the Tucson Field Manager will identify and recommend a preferred alternative to the BLM Arizona State Director. The Draft RMP/EIS will be prepared and distributed to the public for review and comment for a period of 90 days. Public meetings will be scheduled during the comment period. The availability of the Draft RMP/EIS and public meetings will be announced via *Federal Register*, media, planning bulletin, and on the website.

5.1.8 Selection of the Plan

Based on the results and thorough consideration of the public and agency comments on the Draft RMP/EIS, the Tucson Field Manager will recommend to the BLM Arizona State Director the Proposed RMP and publish the RMP along with the Final EIS. A final decision will be made after a 60-day Governor's Consistency Review and simultaneous 30-day protest period. The Record of Decision and approved RMP then will be published. The availability of the Proposed RMP/Final EIS will be announced via *Federal Register*, media, planning bulletin, and on the website.

5.1.9 Monitoring and Evaluation

Over time, BLM will monitor and evaluate actions, resource conditions, and trends to determine the effectiveness of the RMP and to ensure that implementation of the RMP is achieving the desired results. The RMP will be kept current through minor maintenance, amendments, or revisions as demands on resources change, as the resources change, or as new information is acquired.

SECTION 6 – REFERENCES

U.S. Department of the Interior, BLM. 2003. Arizona Statewide Land Use Plan Amendment for Fire, Fuels, and Air Quality Management Environmental Assessment. AZ State Office. September.

_____. 2002. Land Use Planning Handbook. BLM Handbook H-1601-1. August 22 release.

APPENDIX A

Presidential Proclamation 7320

Monday, June 12, 2000

Volume 36, Issue 23; ISSN: 0511-4187

Proclamation 7320--Establishment of the Ironwood Forest National Monument

William J Clinton

June 9, 2000

By the President of the United States of America

A Proclamation

The landscape of the Ironwood Forest National Monument is swathed with the rich, drought-adapted vegetation of the Sonoran Desert. The monument contains objects of scientific interest throughout its desert environment. Stands of ironwood, Palo verde, and saguaro blanket the monument floor beneath the rugged mountain ranges, including the Silver Bell Mountains. Ragged Top Mountain is a biological and geological crown jewel amid the depositional plains in the monument.

The monument presents a quintessential view of the Sonoran Desert with ancient legume and cactus forests. The geologic and topographic variability of the monument contributes to the area's high biological diversity. Ironwoods, which can live in excess of 800 years, generate a chain of influences on associated understory plants, affecting their dispersal, germination, establishment, and rates of growth. Ironwood is the dominant nurse plant in this region, and the Silver Bell Mountains support the highest density of ironwood trees recorded in the Sonoran Desert. Ironwood trees provide, among other things, roosting sites for hawks and owls, forage for desert bighorn sheep, protection for saguaro against freezing, burrows for tortoises, flowers for native bees, dense canopy for nesting of white-winged doves and other birds, and protection against sunburn for night blooming cereus.

The ironwood-bursage habitat in the Silver Bell Mountains is associated with more than 674 species, including 64 mammalian and 57 bird species. Within the Sonoran Desert, Ragged Top Mountain contains the greatest richness of species. The monument is home to species federally listed as threatened or endangered, including the Nichols turk's head cactus and the lesser long-nosed bat, and contains historic and potential habitat for the cactus ferruginous pygmy-owl. The desert bighorn sheep in the monument may be the last viable population indigenous to the Tucson basin.

In addition to the biological and geological resources, the area holds abundant rock art sites and other archeological objects of scientific interest. Humans have inhabited the area for more than 5,000 years. More than 200 sites from the prehistoric Hohokam period (600 A.D. to 1450 A.D.) have been recorded in the area. Two areas within the monument have been listed on the National Register of Historic Places, the Los Robles Archeological District and the Cocoraque Butte Archeological District. The archeological artifacts

include rhyolite and brown chert chipped stone, plain and decorated ceramics, and worked shell from the Gulf of California. The area also contains the remnants of the Mission Santa Ana, the last mission constructed in Pimeria Alta.

Section 2 of the Act of June 8, 1906 (34 Stat. 225, 16 U.S.C. 431), authorizes the President, in his discretion, to declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest that are situated upon the lands owned or controlled by the Government of the United States to be national monuments, and to reserve as a part thereof parcels of land, the limits of which in all cases shall be confined to the smallest area compatible with the proper care and management of the objects to be protected.

Whereas it appears that it would be in the public interest to reserve such lands as a national monument to be known as the Ironwood Forest National Monument:

Now, Therefore, I, William J. Clinton, President of the United States of America, by the authority vested in me by section 2 of the Act of June 8, 1906 (34 Stat. 225, 16 U.S.C. 431), do proclaim that there are hereby set apart and reserved as the Ironwood Forest National Monument, for the purpose of protecting the objects identified above, all lands and interests in lands owned or controlled by the United States within the boundaries of the area described on the map entitled "Ironwood Forest National Monument" attached to and forming a part of this proclamation. The Federal land and interests in land reserved consist of approximately 128,917 acres, which is the smallest area compatible with the proper care and management of the objects to be protected.

All Federal lands and interests in lands within the boundaries of this monument are hereby appropriated and withdrawn from all forms of entry, location, selection, sale, or leasing or other disposition under the public land laws, including but not limited to withdrawal from location, entry, and patent under the mining laws, and from disposition under all laws relating to mineral and geothermal leasing, other than by exchange that furthers the protective purposes of the monument.

For the purpose of protecting the objects identified above, the Secretary of the Interior shall prohibit all motorized and mechanized vehicle use off road, except for emergency or authorized administrative purposes.

Lands and interests in lands within the proposed monument not owned by the United States shall be reserved as a part of the monument upon acquisition of title thereto by the United States.

The Secretary of the Interior shall manage the monument through the Bureau of Land Management, pursuant to applicable legal authorities, to implement the purposes of this proclamation.

The Secretary of the Interior shall prepare a transportation plan

that addresses the actions> including road closures or travel restrictions, necessary to protect the objects identified in this proclamation.

The establishment of this monument is subject to valid existing rights.

Nothing in this proclamation shall be deemed to enlarge or diminish the jurisdiction of the State of Arizona with respect to fish and wildlife management.

This proclamation does not reserve water as a matter of Federal law. Nothing in this reservation shall be construed as a relinquishment or reduction of any water use or rights reserved or appropriated by the United States on or before the date of this proclamation. The Bureau of Land Management shall work with appropriate State authorities to ensure that any water resources needed for monument purposes are available.

Nothing in this proclamation shall be deemed to enlarge or diminish the rights of any Indian tribe.

Laws, regulations, and policies followed by the Bureau of Land Management in issuing and administering grazing permits or leases on all lands under its jurisdiction shall continue to apply with regard to the lands in the monument.

Nothing in this proclamation shall be deemed to revoke any existing withdrawal, reservation, or appropriation; however, the national monument shall be the dominant reservation.

Warning is hereby given to all unauthorized persons not to appropriate, injure, destroy, or remove any feature of this monument and not to locate or settle upon any of the lands thereof.

In Witness Whereof, I have hereunto set my hand this ninth day of June, in the year of our Lord two thousand, and of the Independence of the United States of America the two hundred and twenty-fourth.

William J. Clinton

[Filed with the Office of the Federal Register, 10:47 a.m., June 12, 2000]

NOTE: This proclamation will be published in the Federal Register on June 13.

Presidential Documents

Proclamation 7320 of June 9, 2000

Establishment of the Ironwood Forest National Monument

By the President of the United States of America

A Proclamation

The landscape of the Ironwood Forest National Monument is swathed with the rich, drought-adapted vegetation of the Sonoran Desert. The monument contains objects of scientific interest throughout its desert environment. Stands of ironwood, palo verde, and saguaro blanket the monument floor beneath the rugged mountain ranges, including the Silver Bell Mountains. Ragged Top Mountain is a biological and geological crown jewel amid the depositional plains in the monument.

The monument presents a quintessential view of the Sonoran Desert with ancient legume and cactus forests. The geologic and topographic variability of the monument contributes to the area's high biological diversity. Ironwoods, which can live in excess of 800 years, generate a chain of influences on associated understory plants, affecting their dispersal, germination, establishment, and rates of growth. Ironwood is the dominant nurse plant in this region, and the Silver Bell Mountains support the highest density of ironwood trees recorded in the Sonoran Desert. Ironwood trees provide, among other things, roosting sites for hawks and owls, forage for desert bighorn sheep, protection for saguaro against freezing, burrows for tortoises, flowers for native bees, dense canopy for nesting of white-winged doves and other birds, and protection against sunburn for night blooming cereus.

The ironwood-bursage habitat in the Silver Bell Mountains is associated with more than 674 species, including 64 mammalian and 57 bird species. Within the Sonoran Desert, Ragged Top Mountain contains the greatest richness of species. The monument is home to species federally listed as threatened or endangered, including the Nichols turk's head cactus and the lesser long-nosed bat, and contains historic and potential habitat for the cactus ferruginous pygmy-owl. The desert bighorn sheep in the monument may be the last viable population indigenous to the Tucson basin.

In addition to the biological and geological resources, the area holds abundant rock art sites and other archeological objects of scientific interest. Humans have inhabited the area for more than 5,000 years. More than 200 sites from the prehistoric Hohokam period (600 A.D. to 1450 A.D.) have been recorded in the area. Two areas within the monument have been listed on the National Register of Historic Places, the Los Robles Archeological District and the Cocoraque Butte Archeological District. The archeological artifacts include rhyolite and brown chert chipped stone, plain and decorated ceramics, and worked shell from the Gulf of California. The area also contains the remnants of the Mission Santa Ana, the last mission constructed in Pimeria Alta.

Section 2 of the Act of June 8, 1906 (34 Stat. 225, 16 U.S.C. 431), authorizes the President, in his discretion, to declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest that are situated upon the lands owned or controlled by the Government of the United States to be national monuments, and to reserve as a part thereof parcels of land, the limits of which in all

cases shall be confined to the smallest area compatible with the proper care and management of the objects to be protected.

WHEREAS it appears that it would be in the public interest to reserve such lands as a national monument to be known as the Ironwood Forest National Monument:

NOW, THEREFORE, I, WILLIAM J. CLINTON, President of the United States of America, by the authority vested in me by section 2 of the Act of June 8, 1906 (34 Stat. 225, 16 U.S.C. 431), do proclaim that there are hereby set apart and reserved as the Ironwood Forest National Monument, for the purpose of protecting the objects identified above, all lands and interests in lands owned or controlled by the United States within the boundaries of the area described on the map entitled ''Ironwood Forest National Monument'' attached to and forming a part of this proclamation. The Federal land and interests in land reserved consist of approximately 128,917 acres, which is the smallest area compatible with the proper care and management of the objects to be protected.

All Federal lands and interests in lands within the boundaries of this monument are hereby appropriated and withdrawn from all forms of entry, location, selection, sale, or leasing or other disposition under the public land laws, including but not limited to withdrawal from location, entry, and patent under the mining laws, and from disposition under all laws relating to mineral and geothermal leasing, other than by exchange that furthers the protective purposes of the monument.

For the purpose of protecting the objects identified above, the Secretary of the Interior shall prohibit all motorized and mechanized vehicle use off road, except for emergency or authorized administrative purposes.

Lands and interests in lands within the proposed monument not owned by the United States shall be reserved as a part of the monument upon acquisition of title thereto by the United States.

The Secretary of the Interior shall manage the monument through the Bureau of Land Management, pursuant to applicable legal authorities, to implement the purposes of this proclamation.

The Secretary of the Interior shall prepare a transportation plan that addresses the actions, including road closures or travel restrictions, necessary to protect the objects identified in this proclamation.

The establishment of this monument is subject to valid existing rights.

Nothing in this proclamation shall be deemed to enlarge or diminish the jurisdiction of the State of Arizona with respect to fish and wildlife management.

This proclamation does not reserve water as a matter of Federal law. Nothing in this reservation shall be construed as a relinquishment or reduction of any water use or rights reserved or appropriated by the United States on or before the date of this proclamation. The Bureau of Land Management shall work with appropriate State authorities to ensure that any water resources needed for monument purposes are available.

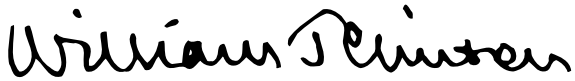
Nothing in this proclamation shall be deemed to enlarge or diminish the rights of any Indian tribe.

Laws, regulations, and policies followed by the Bureau of Land Management in issuing and administering grazing permits or leases on all lands under its jurisdiction shall continue to apply with regard to the lands in the monument.

Nothing in this proclamation shall be deemed to revoke any existing withdrawal, reservation, or appropriation; however, the national monument shall be the dominant reservation.

Warning is hereby given to all unauthorized persons not to appropriate, injure, destroy, or remove any feature of this monument and not to locate or settle upon any of the lands thereof.

IN WITNESS WHEREOF, I have hereunto set my hand this ninth day of June, in the year of our Lord two thousand, and of the Independence of the United States of America the two hundred and twenty-fourth.



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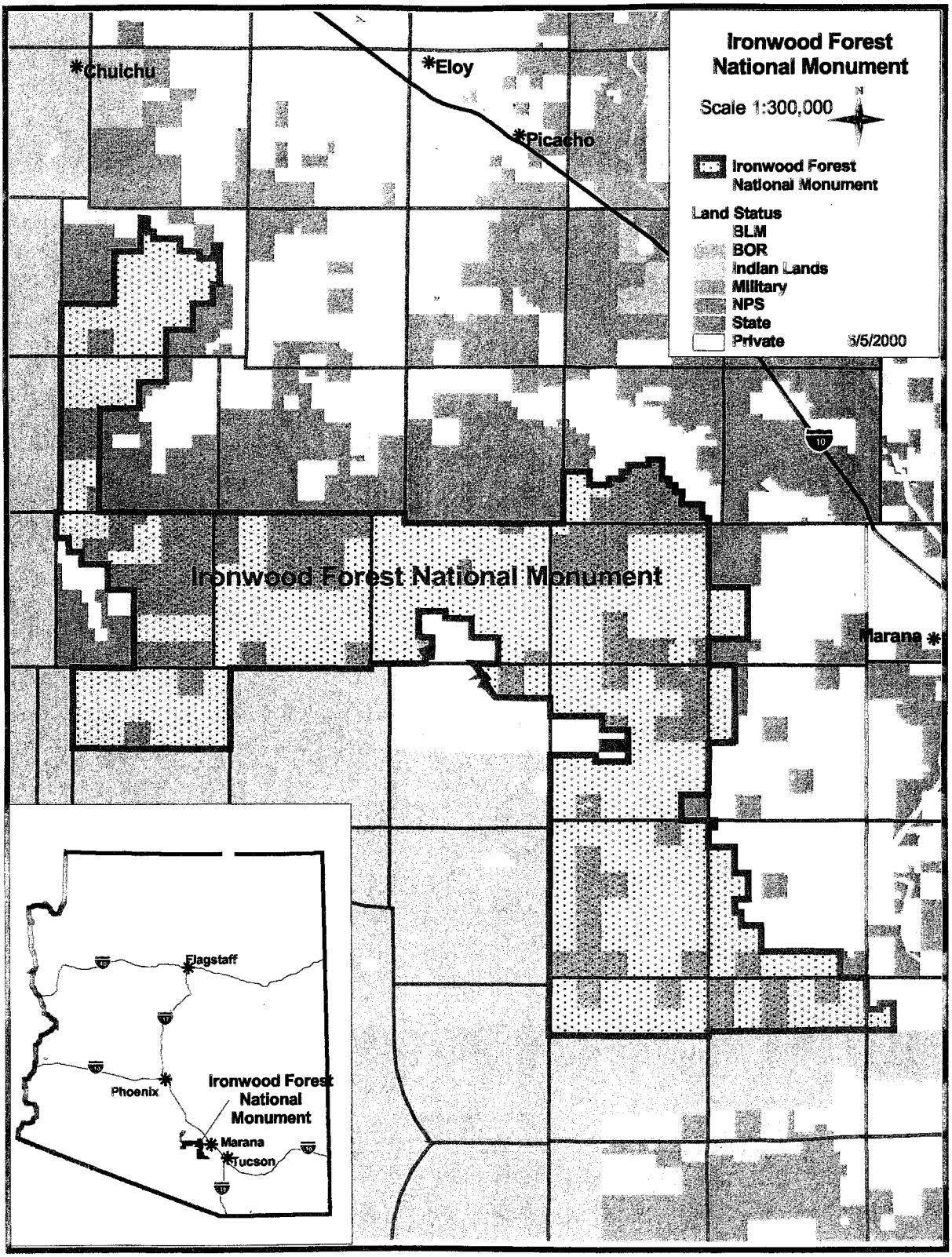


[FR Doc. 00–15112

Filed 6–12–00; 10:47 am]

Billing code 3195–01–C

Fee Year	Bill Allotment Number	Bill Allotment Name	Curent Allotment Name	Billed AUMs	
1995	AZ06010	BLANCO WASH	BLANCO WASH	196	
1995	AZ06029	CLAFLIN	CLAFLIN	437	
1995	AZ06068	SAWTOOTH MOUNTAIN	SAWTOOTH MOUNTAIN	2,256	
1995	AZ06075	EL TIRO	EL TIRO	199	
1995	AZ06077	TEJON PASS	TEJON PASS	502	
1995	AZ06102	OLD SASCO	OLD SASCO	922	
1995	AZ06183	AGUA BLANCO	AGUA BLANCA	921	
1995	AZ06203	SILVER BELL	SILVERBELL	350	
1995					5,783
1996	AZ06010	BLANCO WASH	BLANCO WASH	195	
1996	AZ06020	COCORAQUE	COCORAQUE	366	
1996	AZ06029	CLAFLIN	CLAFLIN	312	
1996	AZ06060	MORNING STAR	MORNING STAR	692	
1996	AZ06068	SAWTOOTH MOUNTAIN	SAWTOOTH MOUNTAIN	2,256	
1996	AZ06075	EL TIRO	EL TIRO	199	
1996	AZ06077	TEJON PASS	TEJON PASS	505	
1996	AZ06102	OLD SASCO	OLD SASCO	384	
1996	AZ06126	AGUA DULCE	AGUA DULCE	318	
1996	AZ06183	AGUA BLANCA	AGUA BLANCA	918	
1996	AZ06203	SILVER BELL	SILVERBELL	245	
1996					6,390
1997	AZ06010	BLANCO WASH	BLANCO WASH	195	
1997	AZ06029	CLAFLIN	CLAFLIN	437	
1997	AZ06060	KEARNY	MORNING STAR	108	
1997	AZ06060	MORNING STAR	MORNING STAR	223	
1997	AZ06068	SAWTOOTH MOUNTAIN	SAWTOOTH MOUNTAIN	540	
1997	AZ06075	EL TIRO	EL TIRO	199	
1997	AZ06077	TEJON PASS	TEJON PASS	90	
1997	AZ06102	OLD SASCO	OLD SASCO	447	
1997	AZ06183	AGUA BLANCA	AGUA BLANCA	516	
1997	AZ06203	SILVER BELL	SILVERBELL	110	
1997					2,865
1998	AZ06010	BLANCO WASH	BLANCO WASH	100	
1998	AZ06020	COCORAQUE	COCORAQUE	256	
1998	AZ06029	CLAFLIN	CLAFLIN	104	
1998	AZ06029	CLAFLIN	CLAFLIN	51	
1998	AZ06060	MORNING STAR	MORNING STAR	632	
1998	AZ06068	SAWTOOTH MOUNTAIN	SAWTOOTH MOUNTAIN	1,874	
1998	AZ06075	EL TIRO	EL TIRO	199	
1998	AZ06077	TEJON PASS	TEJON PASS	293	
1998	AZ06102	OLD SASCO	OLD SASCO	873	
1998	AZ06126	AGUA DULCE	AGUA DULCE	473	
1998	AZ06183	AGUA BLANCA	AGUA BLANCA	774	
1998	AZ06203	SILVER BELL	SILVERBELL	350	
1998					5,979
1999	AZ06010	BLANCO WASH	BLANCO WASH	90	

1999	AZ06020	COCORAQUE	COCORAQUE	527	
1999	AZ06029	CLAFLIN	CLAFLIN	156	
1999	AZ06060	MORNING STAR	MORNING STAR	220	
1999	AZ06075	EL TIRO	EL TIRO	199	
1999	AZ06077	TEJON PASS	TEJON PASS	132	
1999	AZ06102	OLD SASCO	OLD SASCO	384	
1999	AZ06126	AGUA DULCE	AGUA DULCE	543	
1999	AZ06183	AGUA BLANCA	AGUA BLANCA	485	
1999	AZ06203	SILVER BELL	SILVERBELL	182	
1999	AZ06068	SAWTOOTH MOUNTAIN	SAWTOOTH MOUNTAIN	0	
1999					2,918

Fee Year	Bill Allotment	Bill Allotment Name	Curent Allotment Name	Billed AUMs	Annual Total
2000	AZ06010	BLANCO WASH	BLANCO WASH	195	
2000	AZ06020	COCORAQUE	COCORAQUE	527	
2000	AZ06029	CLAFLIN	CLAFLIN	156	
2000	AZ06060	MORNING STAR	MORNING STAR	221	
2000	AZ06068	SAWTOOTH MOUNTAIN	SAWTOOTH MOUNTAIN	46	
2000	AZ06075	EL TIRO	EL TIRO	199	
2000	AZ06077	TEJON PASS	TEJON PASS	187	
2000	AZ06102	OLD SASCO	OLD SASCO	429	
2000	AZ06126	AGUA DULCE	AGUA DULCE	318	
2000	AZ06183	AGUA BLANCA	AGUA BLANCA	660	
2000	AZ06203	SILVER BELL	SILVERBELL	154	
2000					3,092
2001	AZ06010	BLANCO WASH	BLANCO WASH	195	
2001	AZ06020	COCORAQUE	COCORAQUE	527	
2001	AZ06029	CLAFLIN	CLAFLIN	234	
2001	AZ06060	MORNING STAR	MORNING STAR	184	
2001	AZ06068	SAWTOOTH MOUNTAIN	SAWTOOTH MOUNTAIN	397	
2001	AZ06075	EL TIRO	EL TIRO	199	
2001	AZ06077	TEJON PASS	TEJON PASS	319	
2001	AZ06102	OLD SASCO	OLD SASCO	384	
2001	AZ06126	AGUA DULCE	AGUA DULCE	318	
2001	AZ06183	AGUA BLANCA	AGUA BLANCA	619	
2001	AZ06203	SILVER BELL	SILVERBELL	178	
2001					3,554
2002	AZ06010	BLANCO WASH	BLANCO WASH	195	
2002	AZ06020	COCORAQUE	COCORAQUE	527	
2002	AZ06029	CLAFLIN	CLAFLIN	234	
2002	AZ06068	SAWTOOTH MOUNTAIN	SAWTOOTH MOUNTAIN	2,328	
2002	AZ06075	EL TIRO	EL TIRO	199	
2002	AZ06102	OLD SASCO	OLD SASCO	384	
2002	AZ06126	AGUA DULCE	AGUA DULCE	801	
2002	AZ06183	AGUA BLANCA	AGUA BLANCA	619	
2002	AZ06203	SILVER BELL	SILVERBELL	350	
2002					5,637
2003	AZ06010	BLANCO WASH	BLANCO WASH	195	
2003	AZ06020	COCORAQUE	COCORAQUE	527	
2003	AZ06029	CLAFLIN	CLAFLIN	234	
2003	AZ06060	MORNING STAR	MORNING STAR	111	
2003	AZ06068	SAWTOOTH MOUNTAIN	SAWTOOTH MOUNTAIN	2,328	
2003	AZ06075	EL TIRO	EL TIRO	199	
2003	AZ06077	TEJON PASS	TEJON PASS	67	
2003	AZ06102	OLD SASCO	OLD SASCO	384	
2003	AZ06126	AGUA DULCE	AGUA DULCE	318	
2003	AZ06183	AGUA BLANCA	AGUA BLANCA	1,352	
2003	AZ06203	SILVER BELL	SILVERBELL	350	
					6,065
2004	AZ06010	BLANCO WASH	BLANCO WASH	195	

2004	AZ06020	COCORAQUE	COCORAQUE	527	
2004	AZ06029	CLAFLIN	CLAFLIN	234	
2004	AZ06060	MORNING STAR	MORNING STAR	120	
2004	AZ06068	SAWTOOTH MOUNTAIN	SAWTOOTH MOUNTAIN	2,328	
2004	AZ06075	EL TIRO	EL TIRO	199	
2004	AZ06077	TEJON PASS	TEJON PASS	124	
2004	AZ06126	AGUA DULCE	AGUA DULCE	318	
2004	AZ06183	AGUA BLANCA	AGUA BLANCA	1,352	
2004	AZ06203	SILVER BELL	SILVERBELL	350	
2004					5,747
2005	AZ06010	BLANCO WASH	BLANCO WASH	195	
2005	AZ06020	COCORAQUE	COCORAQUE	527	
2005	AZ06029	CLAFLIN	CLAFLIN	234	
2005	AZ06060	MORNING STAR	MORNING STAR	74	
2005	AZ06068	SAWTOOTH MOUNTAIN	SAWTOOTH MOUNTAIN	2,328	
2005	AZ06075	EL TIRO	EL TIRO	199	
2005	AZ06077	TEJON PASS	TEJON PASS	43	
2005	AZ06126	AGUA DULCE	AGUA DULCE	318	
2005	AZ06183	AGUA BLANCA	AGUA BLANCA	413	
2005	AZ06203	SILVER BELL	SILVERBELL	350	
2005					4,681
2006	AZ06010	BLANCO WASH	BLANCO WASH	195	
2006	AZ06020	COCORAQUE	COCORAQUE	527	
2006	AZ06029	CLAFLIN	CLAFLIN	234	
2006	AZ06060	MORNING STAR	MORNING STAR	442	
2006	AZ06068	SAWTOOTH MOUNTAIN	SAWTOOTH MOUNTAIN	2,328	
2006	AZ06075	EL TIRO	EL TIRO	199	
2006	AZ06077	TEJON PASS	TEJON PASS	254	
2006	AZ06126	AGUA DULCE	AGUA DULCE	318	
2006	AZ06183	AGUA BLANCA	AGUA BLANCA	413	
2006	AZ06203	SILVER BELL	SILVERBELL	350	
2006					5,260
2007	AZ06010	BLANCO WASH	BLANCO WASH	195	
2007	AZ06020	COCORAQUE	COCORAQUE	527	
2007	AZ06029	CLAFLIN	CLAFLIN	234	
2007	AZ06060	MORNING STAR	MORNING STAR	442	
2007	AZ06068	SAWTOOTH MOUNTAIN	SAWTOOTH MOUNTAIN	2,328	
2007	AZ06075	EL TIRO	EL TIRO	199	
2007	AZ06077	TEJON PASS	TEJON PASS	254	
2007	AZ06102	OLD SASCO	OLD SASCO	384	
2007	AZ06126	AGUA DULCE	AGUA DULCE	318	
2007	AZ06183	AGUA BLANCA	AGUA BLANCA	413	
2007	AZ06203	SILVER BELL	SILVERBELL	350	
2007					5,644
2008	AZ06010	BLANCO WASH	BLANCO WASH	60	
2008	AZ06020	COCORAQUE	COCORAQUE	527	
2008	AZ06029	CLAFLIN	CLAFLIN	234	
2008	AZ06060	MORNING STAR	MORNING STAR	442	
2008	AZ06068	SAWTOOTH MOUNTAIN	SAWTOOTH MOUNTAIN	2,328	

2008	AZ06075	EL TIRO	EL TIRO	199	
2008	AZ06102	OLD SASCO	OLD SASCO	384	
2008	AZ06126	AGUA DULCE	AGUA DULCE	318	
2008	AZ06183	AGUA BLANCA	AGUA BLANCA	516	
2008	AZ06203	SILVER BELL	SILVERBELL	350	
2008					5,358
2009	AZ06010	BLANCO WASH	BLANCO WASH	90	
2009	AZ06020	COCORAQUE	COCORAQUE	527	
2009	AZ06029	CLAFLIN	CLAFLIN	234	
2009	AZ06060	MORNING STAR	MORNING STAR	442	
2009	AZ06068	SAWTOOTH MOUNTAIN	SAWTOOTH MOUNTAIN	2,328	
2009	AZ06075	EL TIRO	EL TIRO	199	
2009	AZ06077	TEJON PASS	TEJON PASS	254	
2009	AZ06102	OLD SASCO	OLD SASCO	384	
2009	AZ06126	AGUA DULCE	AGUA DULCE	318	
2009	AZ06183	AGUA BLANCA	AGUA BLANCA	413	
2009	AZ06203	SILVERBELL	SILVERBELL	350	
2009					5,539
2010	AZ00112	KING	KING	1,452	
2010	AZ06010	BLANCO WASH	BLANCO WASH	195	
2010	AZ06020	COCORAQUE	COCORAQUE	527	
2010	AZ06029	CLAFLIN	CLAFLIN	234	
2010	AZ06060	MORNING STAR	MORNING STAR	442	
2010	AZ06068	SAWTOOTH MOUNTAIN	SAWTOOTH MOUNTAIN	2,328	
2010	AZ06075	EL TIRO	EL TIRO	199	
2010	AZ06077	TEJON PASS	TEJON PASS	254	
2010	AZ06102	OLD SASCO	OLD SASCO	384	
2010	AZ06126	AGUA DULCE	AGUA DULCE	814	
2010	AZ06183	AGUA BLANCA	AGUA BLANCA	206	
2010	AZ06203	SILVERBELL	SILVERBELL	350	
2010					7,385
2011	AZ06010	BLANCO WASH	BLANCO WASH	24	
2011	AZ06020	COCORAQUE	COCORAQUE	527	
2011	AZ06029	CLAFLIN	CLAFLIN	234	
2011	AZ06060	MORNING STAR	MORNING STAR	442	
2011	AZ06068	SAWTOOTH MOUNTAIN	SAWTOOTH MOUNTAIN	2,328	
2011	AZ06075	EL TIRO	EL TIRO	199	
2011	AZ06077	TEJON PASS	TEJON PASS	254	
2011	AZ06126	AGUA DULCE	AGUA DULCE	814	
2011	AZ06183	AGUA BLANCA	AGUA BLANCA	206	
2011	AZ06203	SILVERBELL	SILVERBELL	350	
2011					5,378
2012	AZ00112	KING	KING	1,452	
2012	AZ06010	BLANCO WASH	BLANCO WASH	195	
2012	AZ06020	COCORAQUE	COCORAQUE	527	
2012	AZ06029	CLAFLIN	CLAFLIN	234	
2012	AZ06060	MORNING STAR	MORNING STAR	442	
2012	AZ06068	SAWTOOTH MOUNTAIN	SAWTOOTH MOUNTAIN	2,328	
2012	AZ06075	EL TIRO	EL TIRO	199	

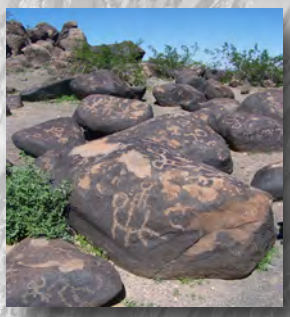
2012	AZ06077	TEJON PASS	TEJON PASS	254	
2012	AZ06102	OLD SASCO	OLD SASCO	384	
2012	AZ06126	AGUA DULCE	AGUA DULCE	318	
2012	AZ06183	AGUA BLANCA	AGUA BLANCA	206	
2012	AZ06203	SILVERBELL	SILVERBELL	350	
2012					6,889
2013	AZ00112	KING	KING	1,452	
2013	AZ06010	BLANCO WASH	BLANCO WASH	195	
2013	AZ06020	COCORAQUE	COCORAQUE	527	
2013	AZ06029	CLAFLIN	CLAFLIN	234	
2013	AZ06060	MORNING STAR	MORNING STAR	442	
2013	AZ06068	SAWTOOTH MOUNTAIN	SAWTOOTH MOUNTAIN	2,328	
2013	AZ06075	EL TIRO	EL TIRO	199	
2013	AZ06077	TEJON PASS	TEJON PASS	254	
2013	AZ06102	OLD SASCO	OLD SASCO	384	
2013	AZ06126	AGUA DULCE	AGUA DULCE	318	
2013	AZ06183	AGUA BLANCA	AGUA BLANCA	206	
2013	AZ06203	SILVERBELL	SILVERBELL	350	
2013					6,889
2014	AZ00112	KING	KING	1,452	
2014	AZ06010	BLANCO WASH	BLANCO WASH	195	
2014	AZ06020	COCORAQUE	COCORAQUE	527	
2014	AZ06060	MORNING STAR	MORNING STAR	442	
2014	AZ06068	SAWTOOTH MOUNTAIN	SAWTOOTH MOUNTAIN	2,328	
2014	AZ06075	EL TIRO	EL TIRO	199	
2014	AZ06077	TEJON PASS	TEJON PASS	254	
2014	AZ06102	OLD SASCO	OLD SASCO	384	
2014	AZ06126	AGUA DULCE	AGUA DULCE	318	
2014	AZ06183	AGUA BLANCA	AGUA BLANCA	382	
2014	AZ06203	SILVERBELL	SILVERBELL	350	
2014					6,831
2015	AZ00112	KING	KING	1,452	
2015	AZ06010	BLANCO WASH	BLANCO WASH	195	
2015	AZ06020	COCORAQUE	COCORAQUE	527	
2015	AZ06060	MORNING STAR	MORNING STAR	442	
2015	AZ06068	SAWTOOTH MOUNTAIN	SAWTOOTH MOUNTAIN	2,328	
2015	AZ06075	EL TIRO	EL TIRO	199	
2015	AZ06077	TEJON PASS	TEJON PASS	254	
2015	AZ06102	OLD SASCO	OLD SASCO	384	
2015	AZ06183	AGUA BLANCA	AGUA BLANCA	1,352	
2015	AZ06203	SILVERBELL	SILVERBELL	350	
2015					7,483
2016	AZ00112	KING	KING	1,452	
2016	AZ06010	BLANCO WASH	BLANCO WASH	195	
2016	AZ06020	COCORAQUE	COCORAQUE	527	
2016	AZ06060	MORNING STAR	MORNING STAR	442	
2016	AZ06068	SAWTOOTH MOUNTAIN	SAWTOOTH MOUNTAIN	2,328	
2016	AZ06075	EL TIRO	EL TIRO	199	
2016	AZ06077	TEJON PASS	TEJON PASS	254	

2016	AZ06102	OLD SASCO	OLD SASCO	384	
2016	AZ06126	AGUA DULCE	AGUA DULCE	361	
2016	AZ06183	AGUA BLANCA	AGUA BLANCA	1,352	
2016	AZ06203	SILVERBELL	SILVERBELL	350	
2016					7,844

Allotment Number	Allotment Name	Permitted Active AUMs
AZ00112	KING	1,452
AZ06010	BLANCO WASH	200
AZ06020	COCORAQUE	527
AZ06029	CLAFLIN	437
AZ06060	MORNING STAR	Ephemeral
AZ06068	SAWTOOTH MOUNTAIN	2,328
AZ06077	TEJON PASS	Ephemeral
AZ06102	OLD SASCO	384
AZ06126	AGUA DULCE	814
AZ06183	AGUA BLANCA	1,356
AZ06203	SILVERBELL	351
TOTAL		7,849

BLM

September 2012



Sonoran Desert National Monument Record of Decision & Approved Resource Management Plan

U.S. Department of the Interior
Bureau of Land Management
Lower Sonoran Field Office, Phoenix, Arizona

MISSION STATEMENT

"The Bureau of Land Management is responsible for stewardship of our public lands. The BLM is committed to manage, protect, and improve these lands in a manner to serve the needs of the American people. Management is based upon the principles of multiple use and sustained yield of our Nation's resources within the framework of environmental responsibility and scientific technology. These resources include recreation, rangelands, timber, minerals, watershed, fish and wildlife habitat, wilderness, air, and scenic quality, as well as scientific and cultural values."

BLM/AZ/PL-12/008

SONORAN DESERT NATIONAL MONUMENT
RECORD OF DECISION AND
APPROVED RESOURCE MANAGEMENT PLAN

Lead Agency: US Department of the Interior (DOI), Bureau of Land Management (BLM)

Cooperating Agencies: Arizona Game and Fish Department, Arizona Department of Transportation

Location: Arizona

Contacts: *Requests for additional information regarding the Record of Decision and Approved Resource Management Plan:*

Rich Hanson, Sonoran Desert National Monument Manager, 623-580-5500

Requests for copies of the document:

blm_az_ls_sdnm_plan@blm.gov or call the Phoenix District Office Receptionist, 623-580-5500

Project Web site: http://www.blm.gov/az/st/en/prog/planning/son_des.html

Abstract: The Sonoran Desert National Monument Record of Decision and Approved Resource Management Plan (ROD/ARMP) is a project of BLM Arizona that supports the BLM's Mission. The Approved RMP was prepared under the authority and regulations implementing Presidential Proclamation 7397 and the Federal Land Policy and Management Act (FLPMA) of 1976 (43 Code of Federal Regulations [CFR], 1600). It includes broad land use plan decisions that provide the overall direction for managing resources and resource uses in the Sonoran Desert National Monument (SDNM). Land use plan decisions are expressed as goals and objectives (desired outcomes), allowable uses, and management actions anticipated to achieve desired outcomes. The Approved RMP also includes implementation-level decisions for travel management.

The SDNM is located in Maricopa and Pinal Counties, Arizona, approximately 50 miles southwest of Phoenix, and contains 486,400 acres of BLM-administered lands. The decisions in the RMP only apply to the BLM-administered lands within the Monument.

This plan represents years of ongoing coordinated efforts on the part of the BLM Phoenix District, SDNM staff, BLM Arizona State Office staff, representatives of communities in the Planning Area, cooperating agencies, special interest and user groups, and hundreds of concerned citizens. The decisions outlined in this document will enable the BLM to manage and protect the resources on public lands within the SDNM to achieve desired future conditions and management objectives in compliance with the Presidential Proclamation, in partnership with communities and citizens.

Land use plan decisions identified in the Approved RMP are final and become effective upon the Arizona's State Director's signing of the ROD.

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United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Phoenix District
Sonoran Desert National Monument
21605 North 7th Avenue
Phoenix, Arizona 85027
www.blm.gov/az/

TAKE PRIDE IN AMERICA

In Reply Refer To:

2000/2010 (P010)

Dear Reader/Interested Party:

I am pleased to announce that, after several years of hard work and collaboration, the Sonoran Desert National Monument Resource Management Plan (RMP) is complete. This document will provide guidance for the management of about 496,400 acres of Federal surface and mineral estate administered by the Bureau of Land Management (BLM) in Maricopa, and Pinal Counties in south-central Arizona.

The attached Record of Decision (ROD) and Approved RMP have been prepared in accordance with the Federal Land Policy and Management Act (FLPMA) and the National Environmental Policy Act (NEPA). The ROD/Approved RMP is available to members of the public and will be sent to pertinent local, State, Tribal and Federal government entities. The ROD finalizes the proposed decisions presented in the Proposed RMP/Final Environmental Impact Statement (FEIS) that was released on June 15, 2012 and subject to a 30-day protest period that ended on July 16, 2012. Nine protest letters with standing were received. The protests were reviewed by the BLM Director in Washington, D.C. After careful consideration of all points raised in these protests, the Director concluded the responsible planning team and decision makers followed all applicable laws, regulations, policies, and pertinent resource considerations in developing the proposed plan. Minor adjustments or points of clarification are incorporated into the Approved RMP in response to issues raised in the protest process and final BLM review. These minor changes are discussed in the ROD under the section titled Clarifications and Modifications, but the protest review did not result in any significant changes from the Proposed RMP.

The approval of this ROD by the BLM Arizona State Director serves as the final decision for all land use plan decisions described in the attached Approved RMP. Implementation-level decisions in the Approved RMP, relating to route designations, are subject to appeal. Appeal procedures for these implementation decisions are described in section 1.4.2 of the attached ROD. Future implementation of land use plan decisions will not be undertaken without suitable further NEPA analysis, including appropriate public involvement.

Notification of the approval of this ROD/Approved RMP will be announced via local news releases and on the BLM website at: http://www.blm.gov/az/st/en/prog/planning/son_des.html. CD-ROM versions of the ROD/Approved RMP may be obtained by contacting the Lower Sonoran Field Office by phone at (623) 580-5500; by sending a request by email to BLM_AZ_LSFO_SDNM@blm.gov ; or at the following address:

Bureau of Land Management
Lower Sonoran Field Office
21605 N. 7th Avenue
Phoenix, Arizona 85027

A limited number of Hard Copy documents will be available at a later date and may be requested from the same locations.

The BLM is pleased to provide this copy of the Sonoran Desert National Monument ROD/Approved RMP for your reference. We greatly appreciate the efforts of all who contributed to completion of this RMP, including the State of Arizona, Maricopa County, The towns of Buckeye and Gila Bend, and numerous Federal and State government agencies that worked closely with us to complete this important effort. We also appreciate the extensive public involvement during this time by local communities, organizations, and individuals. Public input informed and improved this planning document. We look forward to continuing to work with our partners and citizens as we implement the decisions in this RMP.

Sincerely,

Richard B. Hanson

Richard B. Hanson
National Monument Manager

Enclosure

Sonoran Desert National Monument

Record of Decision and

Approved Resource Management Plan

ERRATA SHEET

The following corrections have been made to the document:

1. Page 1-5: At the end of the first paragraph on the page, the referenced decision number was incorrect. It was corrected to read, "Upon recalculation, the AUMs increased to 3,318; this revised AUM decision is the final AUM allocation in the SDNM Approved RMP (see GR-2.1.4)."
2. Page 2-66: Grazing decision GR-2.1.4 incorrectly noted the number of AUMs permitted. It was corrected to read, "GR-2.1.4: 3,318 AUMs are permitted in the SDNM."

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D. Best Management Practices and Standard Operating Procedures
E. Travel Management Plan
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G. Route Rationales
H. Route Mitigations

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1. RECORD OF DECISION

1.1 INTRODUCTION

This Record of Decision (ROD) approves the United States (US) Department of the Interior, Bureau of Land Management's (BLM's) proposal to manage the BLM-administered lands in the Sonoran Desert National Monument (SDNM) as presented in the attached Approved Resource Management Plan (RMP). This RMP was described as Alternative E in the Lower Sonoran and Sonoran Desert National Monument Proposed RMP and Final Environmental Impact Statement (PRMP/FEIS), which was released on June15, 2012. While the PRMP/FEIS also addressed management of the Lower Sonoran Decision Area, which is also administered by the Lower Sonoran Field Office, this ROD applies only to those decisions for management of the SDNM.

On January 17, 2001, Presidential Proclamation 7397 created the Sonoran Desert National Monument to ensure protection of a spectacular diversity of biological resources, and archaeological and historic sites. These monument objects include abundant saguaro cactus forests; a rich diversity, density, and distribution of plants in the Sand Tank Mountains area; rare patches of desert grasslands; a wide variety of desert wildlife, such as the desert bighorn sheep and Sonoran desert tortoise; and significant archaeological resources, such as large village sites, rock art sites, and lithic quarries.

The SDNM is located in Maricopa and Pinal Counties, Arizona, and contains 486,400 acres of BLM-administered lands. The decisions in the RMP only apply to the BLM-administered lands within the Monument.

This ROD provides an overview of the alternatives considered; a summary of protests received and clarifications made in response; management considerations and rationale for the decisions; and an overview of public involvement in the planning process.

1.2 THE DECISION

The decision is hereby made to approve the attached RMP for the SDNM. The RMP was prepared under the authority and regulations implementing the Federal Land Policy and Management Act (FLPMA)

of 1976 (43 Code of Federal Regulations [CFR] 1600), and includes broad land use plan decisions that provide overall direction for management of resources and resource uses within the SDNM decision area. Land use plan decisions are expressed as goals and objectives (desired outcomes), allowable uses, and management actions anticipated to achieve desired outcomes. Although land use plan decisions identified in the RMP are final and effective upon signing of this ROD, some implementation-level decisions to implement the ROD may require additional steps before on-the-ground activities can begin. The RMP also includes new implementation-level decisions related to travel management. The RMP does not include implementation-level decisions related to grazing.[1]

The decisions included in this ROD and RMP supersede all of the previous RMPs and interim management direction that guided management within the boundaries of the SDNM.

1.2.1 Protest Resolution

An environmental impact statement (EIS) was prepared for this RMP in compliance with the National Environmental Policy Act (NEPA) of 1969. The Approved RMP is nearly identical to the PRMP set forth in the Lower Sonoran-SDNM PRMP/FEIS, published June 2012.

The BLM received nine protest letters during the 30-day protest period provided for the proposed land use plan decisions in the PRMP/FEIS in accordance with 43 CFR Part 1610.5-2. Protesting parties are listed below:

- Arizona State Senator Gail Griffin
- Ronald G. Martin
- Dawn Meidinger, Fennemore-Craig on behalf of Freport-McMoRan Corporation
- Greta Anderson, Western Watersheds Project and Sandy Bahr, Sierra Club – Grand Canyon Chapter
- Michael DeRosier, Beloat Allotment
- The Wilderness Society, Arizona Wilderness Coalition, National Trust for Historic Preservation, Archeology Southwest, Sierra Club – Grand Canyon Chapter, Western Watersheds Project
- Jason Keith, Conley Allotment
- Ron Henry, Mayor, and Colby Turner, Parks and Recreation Director, Town of Gila Bend
- Patrick Bray, Arizona Cattle Growers' Association

Protest resolution is the responsibility of the BLM Washington Office, with input from the Lower Sonoran Field Office and the Arizona State Office. Once the standing of the protesters was determined, protest letters were reviewed for valid protest issues. Valid protest issues are:

[1] The decision document for the implementation-level decision regarding grazing management will be issued separately in compliance with 43 CFR § 4160.

- Land use planning level decisions. Implementation-level decisions are not protestable under the planning regulations.
- Information already raised in comment sometime during the planning process. No new issues can be brought up for protest.
- A concise statement explaining why the State Director's decision is believed to be wrong. A difference of opinion or disagreement is not sufficient to constitute a protest issue.

Protest issues are "parsed" out of letters and then combined into common issues. These issues are then summarized and responded to as issue groups. While the protest process considers the whole letter sent by protesters, this document responds to only those statements that constitute valid protest issues. Responses are then published to the BLM website as a Director's Protest Resolution Report.

The BLM responded to the following protest issues raised by protesting parties:

Impacts Analysis: The BLM failed to analyze the direct and indirect effects of the proposed action, including the proposed closure of public lands to mineral entry and the effects of Areas of Critical Environmental Concern (ACECs) and other special management areas on minerals development.

Cumulative Effects Analysis: The BLM failed to adequately analyze the cumulative effects of the proposed action for minerals management and livestock grazing.

Scoping: The public scoping process for the Lower Sonoran-SDNM RMP was insufficient, as BLM failed to reinitiate scoping in response to significant changes in the Planning Area subsequent to the publication of the Notice of Intent in 2002.

Range of Alternatives: The range of alternatives presented in the PRMP/FEIS failed to explore the opportunity for the enhanced development of mineral resources and to consider an ephemeral grazing alternative.

ACECs: The Cuerda de Lena ACEC did not meet the requisite statutory and regulatory criteria for designation, and BLM failed to fully disclose the proposed management actions and mitigation features for the Cuerda de Lena ACEC.

Air Resources: The PRMP/FEIS does not comply with the requirements of Secretarial Order 3289, and did not adequately analyze impacts on climate change.

Cultural Resources: The BLM failed to adequately analyze impacts on cultural resources under NEPA and did not complete Section 106 consultation with the State Historic Preservation Office for route designations.

Fish, Wildlife, Plants, and Special Status Species: The BLM did not complete consultation as required under Section 7 of the Endangered Species Act (ESA).

Lands, Realty: The PRMP/FEIS did not recognize valid existing rights.

Livestock Grazing: The BLM did not adequately analyze impacts from livestock grazing on wildlife and special status species, visual resource management (VRM), air quality, climate change, vegetation, and

socioeconomics. Additionally, the BLM did not use the best available information as baseline data for the impact analysis. Specific to the SDNM, protesters suggested that BLM did not adequately protect the monument's objects in violation of the Presidential Proclamation.

Department of the Interior Policy for the Integrity of Scientific and Scholarly Activities: During the development of the PRMP/FEIS, the BLM violated the Department of the Interior's Policy for the Integrity of Scientific and Scholarly Activities by committing scientific and scholarly misconduct by changing data and intentionally omitting data relevant to the impact analysis.

Administrative Procedures Act: Aspects of the RMP/EIS process violated the Administrative Procedures Act.

Recreation, Visitor Services: The BLM did not analyze the impacts from allowing recreational target shooting within the SDNM and arbitrarily proposed to allow recreational target shooting in the SDNM.

Wilderness Characteristics: The BLM failed to follow agency policy on managing lands with wilderness characteristics.

The BLM Director's decisions on the protests are summarized in the *Director's Protest Resolution Report, Sonoran Desert National Monument and Lower Sonoran Resource Management Plans*, released on September 14, 2012 and available on the BLM Web site. The Director dismissed the protests from Senator Gail Griffin, Ronald Martin, and the Arizona Cattle Growers' Association because they contained only comments and no valid protest issues. The director dismissed protests from Michael DeRosier and the Town of Gila Bend because the protests cite only implementation decisions. Implementation decisions are not subject to protest under the planning regulations. However, any party adversely affected by an implementation decision may appeal such decision to the Interior Board of Land Appeals after the ROD is signed. The Director denied the protest from Fennemore-Craig, Western Watersheds Project, The Wilderness Society et al., and Jason Keith, and provided responses to their protests in the Director's Protest Resolution Report. In summary, the Director concluded that the BLM Arizona State Director followed the applicable laws, regulations, and policies, and considered all relevant resource information and public input in developing the PRMP. Each protesting party was notified in writing of the Director's findings and the disposition of their protests.

The BLM Director resolved the protests without making significant changes to the PRMP, though minor clarifications were made and have been explained in the Clarifications and Modifications section below.

1.2.2 Clarifications and Modifications

As the result of continued internal review, the BLM made several clarifications between the PRMP/FEIS and the Approved RMP. Minor grammatical or editorial edits were made and are not described here.

The implementation-level grazing decisions are not included in this ROD and Approved RMP. These decisions will be implemented under the authority of BLM grazing regulations at 43 CFR Subpart 4160. The implementation-level decisions for livestock grazing will be issued before the start of the grazing year. See **Sections 1.4.2** and **1.5.1** for additional details.

During review of the livestock grazing AUM decision for the SDNM, the BLM discovered mathematical errors in the original formulas used to calculate the AUM number. In the PRMP/FEIS, the number of AUMs was noted as 3,114 (see Alternative E in Table 2-24 of the Lower Sonoran-SDNM PRMP/FEIS). Upon recalculation, the AUMs increased to 3,318; this revised AUM decision is the final AUM allocation in the SDNM Approved RMP (see GR-2.1.4).

As a point of clarification, a protesting party noted that information regarding baseline information for the grazing analysis was incorrectly stated in the PRMP/FEIS on page 6-251. BLM stated that baseline information was collected through 2010, which is incorrect. The BLM completed data collection in 2009; no new data was collected after 2009. The BLM analyzed and interpreted the data in 2010.

Eight appendices that were in the PRMP/FEIS have been brought forward and renumbered for the Approved RMP, as follows: **Appendix A**, Presidential Proclamation, **Appendix B**, Guidelines for Grazing, **Appendix C**, Recreation Setting and Worksheets, **Appendix D**, Best Management Practices and Standard Operating Procedures, **Appendix E**, Travel Management Plan, **Appendix F**, Possible Easement Locations, **Appendix G**, Route Rationales, and **Appendix H**, Route Mitigations.

Some decisions presented in the PRMP/FEIS were repeated in multiple program areas. In the Approved RMP, these decisions are coded only once. The code reflects the program that is most affected.

1.3 THE ALTERNATIVES

NEPA requires the development and consideration of a reasonable range of management alternatives, including a No Action Alternative, to analyze impacts and guide decision-makers in developing and selecting the RMP. All alternatives must be viable and reasonable. They must reflect the requirements of the Presidential Proclamation; be responsive to issues identified by the public, stakeholders, and BLM specialists and managers during the scoping period; and meet established planning criteria, as well as applicable federal and state laws, regulations, and BLM policies.

1.3.1 Alternatives Considered, but Not Analyzed

The following alternatives and management options were considered as possible ways of resolving resource management issues and conflicts but were eliminated from detailed analysis; rationale for the alternative's elimination is provided under each heading.

Public Safety

There was a recommendation to prohibit the carrying of weapons. By law, US citizens may carry weapons on or through public lands for a number of legitimate purposes including hunting and self-protection. Alternatives for managing recreational target shooting activities were considered in the PRMP for public safety and resource protection purposes, but a prohibition against the possession of firearms was not analyzed.

Driving in Washes

A proposal was submitted requesting that driving be allowed in all washes large enough to accommodate a four-wheel-drive vehicle as a long-standing, traditional use. This alternative was not carried forward into an action alternative because allowing vehicular travel in washes not specifically designated as a BLM asset, such as a primitive road, would force drivers to determine whether the wash was open for travel. Such ambiguity could lead to situations of unlawful driving and resource damage. The travel route inventory conducted by the BLM included routes in washes.

In addition, authorizing unlimited driving in washes at the driver's discretion would essentially open hundreds of miles of wash system to all-terrain or four-wheel drive vehicles, as this action would include currently traveled washes as well as untraveled washes. This type of travel is inconsistent with Presidential Proclamation 7397, which expressly prohibits, with the exception of emergency or authorized administrative use, all off-road motorized and mechanized vehicle use in the Monument. Due to potentially adverse resource impacts on wildlife habitat, soils, and vegetation, unlimited driving in washes is inconsistent with the resource protection and management goals established for the SDNM Decision Area.

Livestock Grazing

For livestock grazing allotments within the SDNM Decision Area, the SDNM proclamation requires the BLM to determine whether livestock grazing is compatible with the paramount purpose of protecting the Monument objects. During the land health evaluation process, the BLM did not determine if the allotments meet the criteria described in the Special Ephemeral Rule; therefore, an alternative to convert all allotments to ephemeral was not analyzed. However, in the future, the BLM could modify the designation based on their future findings, and in coordination and cooperation with the permittee and interested publics, as required by NEPA.

1.3.2 Alternatives Considered in Detail

The general scope and key highlights of each alternative considered in the FEIS for the SDNM RMP are summarized below.

Alternative A, No Action Alternative

Selection of the No Action Alternative for the Monument would continue current management under the existing land use plans, except as changed by Presidential Proclamation 7397, which established the Monument and specified certain management provisions. Alternative A continued current public use and resource protection/conservation prescriptions without change. It neither set desired outcomes for resource management or most uses, nor addressed new issues unforeseen or nonexistent when the current management plans were prepared.

Alternative B

The management decisions in Alternative B generally identified the areas of the Monument that would be most suitable for the largest number of potential uses and emphasized opportunities for those uses.

Alternative B set desired outcomes and allocations for resources discussed in the proclamation, including natural, cultural, and visual, while providing appropriate human use/influence and an array of visitor experiences and opportunities. It focused on proactive techniques for ecosystem restoration, resource management, and scientific research and likely required more intensive use management to avoid or mitigate any adverse effects.

Alternative C

The management decisions in this alternative generally represented an attempt to balance resource protection and human use and influence. As in Alternative B, it set desired outcomes and allocations for the resources discussed in the Monument's proclamation, including natural, cultural, and visual. It proposed a moderate amount of open roads and trails and a mix of recreational opportunities. It proposed a mix of natural processes and proactive techniques for ecosystem restoration, resource management, and scientific research and would likely reduce the need for intensive use management to avoid or mitigate any adverse effects.

Alternative D

Alternative D placed the greatest emphasis on minimal human use and influence and the maintenance of primitive landscapes. It focused on natural processes and other unobtrusive methods for ecosystem restoration, resource management, and scientific research, while emphasizing resource protection and conservation. As in the other alternatives, it set desired outcomes and allocations for Monument resources discussed in the proclamation, including natural, cultural, and visual, while allowing a lower level of human use. The need for both intensive use management and proactive resource stabilization and restoration measures would be reduced by the greatest degree under Alternative D.

Alternative E

Alternative E was the BLM's PRMP for the SDNM Decision Area. It incorporated elements from each of the other alternatives, offering a unique prescription for managing public use of the Monument, while providing long-term protection and conservation of resources. It balanced human use and influence with resource protection. The need for both intensive use management and proactive resource stabilization and restoration measures would be reduced by an intermediate degree.

1.3.3 Environmentally Preferable Alternative

Alternative E, the Approved RMP, is considered by the BLM to be the environmentally preferable alternative when taking into consideration the human (social and economic) environment and the natural environment. The US Council on Environmental Quality has defined the environmentally preferable alternative as the alternative that will promote national environmental policy as expressed in Section 101 of NEPA. The six broad policy goals for all federal plans, programs, and policies are listed below:

- Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.

- Ensure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings.
- Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences.
- Preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment that supports diversity and variety of individual choice.
- Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities.
- Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

In comparison with the other alternatives analyzed, Alternative E best meets the above NEPA goals for the future management of the SDNM. It provides long-term protection and resource conservation, and balances human use and influence with resource protection.

The No Action Alternative, Alternative A, would have no specific special status species or cultural resource provisions or allocations, no management actions specific to wildlife movement corridors, no areas managed to protect wilderness characteristics, and grazing would continue to have undesirable effects. For these reasons, the No Action Alternative is not preferable from an environmental perspective.

The management decisions in Alternative B identified the areas of the Monument that would be most suitable for the largest number of potential uses and emphasized opportunities for those uses. Alternative B set desired outcomes and allocations for resources discussed in the proclamation, including natural, cultural, and visual, while providing opportunities for appropriate human use and influence and an array of visitor experiences and opportunities. It focused on proactive techniques for ecosystem restoration, resource management, and scientific research and likely required more intensive use management to avoid or mitigate any adverse effects. However, Alternative B has the least amount of resource protections and would not achieve balance between resource uses and preserving important historic, cultural, and natural aspects of the SDNM.

The management decisions in Alternative C represented an attempt to balance resource protection and human use and influence. As in Alternative B, it set desired outcomes and allocations for the resources discussed in the Monument's proclamation, including natural, cultural, and visual. Alternative C proposed a moderate amount of open roads and trails and a mix of recreational opportunities. It also proposed a mix of natural processes and proactive techniques for ecosystem restoration, resource management, and scientific research and would likely reduce the need for intensive use management to avoid or mitigate any adverse effects. Alternative C does not attain the widest range of beneficial uses of the environment without degradation or reduction in visitor experience.

Alternative D placed the greatest emphasis on limiting human use and influence and maintaining primitive landscapes. It focused on natural processes and other unobtrusive methods for ecosystem restoration, resource management, and scientific research, while emphasizing resource protection and conservation. As in the other alternatives, Alternative D set desired outcomes and allocations for Monument resources discussed in the proclamation, including natural, cultural, and visual, while allowing a lower level of human use. The need for both intensive use management and proactive resource stabilization

and restoration measures would be reduced by the greatest degree under Alternative D. For these reasons, Alternative D did not achieve a balance between population and resource use, resource protection that permitted enhancement of resource conditions and visitor experience.

Alternative E was the BLM's PRMP for the SDNM Decision Area. It incorporated elements from each of the other alternatives, offering a unique prescription for managing public use of the Monument, while providing long-term protection and conservation of resources. Alternative E balanced human use and influence with resource protection. The need for both intensive use management and proactive resource stabilization and restoration measures would be reduced by an intermediate degree. Overall, Alternative E best meets the requirements of Section 101 of NEPA. The BLM has selected Alternative E as the environmentally preferable alternative.

1.4 LAND USE PLAN DECISIONS, IMPLEMENTATION DECISIONS, AND ADMINISTRATIVE ACTIONS

The Approved RMP provides overall direction for management of all resources on BLM-administered land in the Monument. Many land use plan decisions are implemented or become effective upon publication of the ROD for the Approved RMP and may include desired future conditions, land use allocations (allowable uses) or designations, and special designations.

Land use plan decisions represent the desired outcomes and the actions needed to achieve them. Such decisions were attained using the planning process found in 43 CFR 1600 and guide future land management actions and subsequent site-specific implementation decisions. When presented to the public as proposed decisions, land use plan decisions can be protested to the BLM Director; however, they cannot be appealed to Interior Board of Land Appeals.

Implementation decisions and management actions that require additional site-specific project planning, as funding becomes available, will require further environmental analysis. Some implementation decisions (e.g., route designations) are finalized with this ROD and thus require no further environmental analysis. Administrative actions are not land use planning or implementation decisions, but are a key component of the overall plan because they describe the BLM's day-to-day actions to help meet desired future conditions. The BLM will continue to involve and collaborate with the public during implementation of the Approved RMP. Brief descriptions of the types of decisions are presented below.

1.4.1 Land Use Plan Decisions

Desired Outcomes

Land use plans identify desired outcomes expressed in terms of specific goals and objectives. Goals and objectives direct the BLM's actions in most effectively meeting legal mandates; numerous regulatory responsibilities; national policy, including the Department of the Interior Strategic Plan goals; State Director guidance (see 43 CFR 1610.0-4[b]); and other resource or social needs. Desired outcomes should be identified for and pertain to resources such as natural, biological, and cultural; resource uses such as energy and livestock grazing; and other factors such as social and economic conditions. Land use

plans are designed to most effectively meet these desired outcomes through special designations, allowable uses, land use allocations, and management actions.

Special Designations

Special designations are designated by Congress for special protection, such as wilderness areas (see the Approved RMP). Such designations are not land use plan decisions; however, recommendations for designation can be made at the land use plan level. Congress may then act on these recommendations at a later time.

Administrative designations made by the BLM, such as ACECs, are also considered special designations and can be made in the land use plan (see the Approved RMP).

Allowable Uses (Land Use Allocations)

Land use plans must identify uses, or allocations, that are allowable, restricted, or prohibited on the public lands and mineral estate. These allocations identify surface lands or subsurface mineral interests where uses are allowed, including any restrictions that may be needed to meet goals and objectives. Land use plans also identify lands where specific uses are excluded to protect resource values. Certain lands may be open or closed to specific uses based on legislative, regulatory, or policy requirements or criteria to protect sensitive resource values. If land use plan decisions close areas of 100,000 acres or greater in size to a principal or major use for two years or more, Congress must be notified of the closure upon its implementation as prescribed in 43 CFR 1610.6.

Management Actions

Land use plans for National Monuments must identify the actions anticipated to achieve desired outcomes, including actions to maintain, conserve, protect, restore, or improve land health. These actions include proactive measures (e.g., measures that will be taken to enhance watershed function and condition), as well as measures or criteria that will be applied to guide day-to-day activities on public land. Land use plans also establish administrative designations such as ACECs, recommend proposed withdrawals, land tenure zones, and recommend or make findings of suitability for congressional designations such as components of the National Wild and Scenic Rivers System.

1.4.2 Implementation Decisions

Implementation decisions (or activity-level decisions) are management actions tied to a specific location that implement land use plan decisions. Implementation decisions generally constitute the BLM's final approval allowing on-the-ground actions to proceed and require appropriate site-specific planning and NEPA analysis. Such decisions may be incorporated into implementation plans (activity or project plans) or may exist as stand-alone decisions.

Unlike land use plan decisions, implementation decisions are not subject to protest under the planning regulations. Instead, implementation decisions are subject to various administrative remedies, including, in most cases, appeal to the Interior Board of Land Appeals (under 43 CFR 4.410). Where implementation decisions are made as part of the land use planning process, they are subject to an

administrative review process as prescribed by the specific resource program regulations. For example, the designation of a specific route is an implementation-level decision, rather than a land use plan decision. Consequently, individual route designations are subject to an administrative review process that is described below.

Implementation-level decisions in the PRMP/FEIS are the SDNM route designations for approved motorized and non-motorized public use (see **Section 2.3.1**, Travel Management). All route designations (i.e., routes designated as open, see attached Approved RMP) are finalized with this ROD, and may be appealed at this time.

Grazing Implementation Decisions

The implementation-level grazing decisions are not included in this ROD. These decisions will be implemented under the authority of BLM grazing regulations at 43 CFR Subpart 4160. The BLM expects to issue implementation level decisions for livestock grazing before the start of the grazing year consistent with these regulations, which describe the intended livestock grazing administrative and management actions or series of actions, and provides an avenue by which applicants, permittees, lessees, states having land or resource management responsibilities within the area, and the interested public may challenge and seek further review of the decision.

Appeal Procedures for Travel Management Implementation Decisions

The following procedures describe the appeal process for the implementation decisions related to travel management. Implementation decisions related to Travel Management (see **Section 2.3.1** of the Approved RMP) will be available for appeal immediately upon public release of this ROD/Approved RMP.

Any party adversely affected by an implementation decision may appeal within 30 days of receipt of this decision in accordance with the provisions of 43 CFR Part 4.4. The appeal must include a statement of reasons or file a separate statement of reasons within 30 days of filing the appeal. The appeal must state if a stay of the decision is being requested in accordance with 43 CFR 4.21 and must be filed with the Lower Sonoran Field Manager at the following address:

Field Manager, Lower Sonoran Field Office
21605 North 7th Avenue
Phoenix, AZ 85027-2929

A copy of the appeal, statement of reasons, and all other supporting documents shall be sent to the Field Solicitor at the following address:

Field Solicitor
US Department of the Interior
Office of the Solicitor
401 West Washington Street, SPC 44
Phoenix, AZ 85003

If the statement of reasons is filed separately, it must be sent to the following address:

United States Department of the Interior
Office of Hearings and Appeals
Interior Board of Land Appeals
801 N. Quincy Street, Suite 300
Arlington, Virginia 22203

Request for Stay

Any party wishing to file a request for stay pending the outcome of an appeal of one or more implementation decisions must show sufficient justification based on the following standards under 43 CFR 4.21:

- The relative harm to the party if the stay is granted or denied
- The likelihood of the appellant's success on the merits of the stay
- The likelihood of immediate and irreparable harm if the stay is not granted
- Whether the public interest favors granting the stay

As noted above, the request for stay must be filed with the BLM Field Manager at the address listed above.

1.4.3 Administrative Actions

Although the BLM's intent and commitment to accomplish administrative actions is generally addressed in an EIS, such activities are neither management nor implementation decisions. Administrative actions are day-to-day activities conducted by the BLM, often required by FLPMA, but do not require NEPA analysis or a written decision by a responsible official. Examples of administrative actions include mapping, surveying, conducting inventory or monitoring, scientific research, other studies, partnering and collaborating with partners, developing educational materials, and working with local communities or interest groups.

1.5 MANAGEMENT CONSIDERATIONS FOR SELECTING THE APPROVED RMP

In developing the Approved RMP, the BLM had the discretion to select an alternative in its entirety, or to combine aspects of the various alternatives presented in the Draft RMP/Draft EIS (DRMP/EIS) or the PRMP/FEIS, including considering management approaches presented during the comment period that do not result in significant changes from what the DRMP/EIS considered. The NEPA Handbook (H-1790-1) states, "Various parts of separate alternatives that are analyzed in the draft can also be 'mixed and matched' to develop a complete alternative in the final" (see also 43 CFR 1503.4(a)).

Based on the input received during the planning process, there was both support and opposition to many components of the PRMP. However, the BLM did not receive comments from federal or state agencies, or from tribal governments indicating that the PRMP was inconsistent with other existing plans or policies. Additionally, no inconsistencies with state plans, policies, or programs were identified during

the Governor's consistency review of the PRMP/FEIS. The BLM considered all comments and protests received on the PRMP/FEIS and input from the Governor's consistency review. This ROD serves as the final decision for the land use plan decisions for the Approved RMP. The Approved RMP will become effective on the date this ROD is signed.

1.5.1 Compatibility of Grazing in the SDNM

The Presidential Proclamation establishing the Sonoran Desert National Monument (**Appendix A**, Presidential Proclamation) directed the BLM "…that grazing on Federal lands north of Interstate 8 shall be allowed to continue only to the extent that the Bureau of Land Management determines that grazing is compatible with the paramount purpose of protecting the objects identified in this proclamation." Appendices E and F of the PRMP/FEIS presented the studies that assessed whether grazing is compatible with protecting the objects of the Monument. Methodologies employed in the compatibility analysis included a rigorous land health evaluation process, a thorough literature review, technical reports and guidance, and a comprehensive evaluation of the effects of grazing on Monument objects and their indicators within the SDNM.

In Appendix E of the Lower Sonoran-SDNM PRMP/FEIS, the Lower Sonoran Field Office Manager determined that:

> In some locations, current conditions on the six allotments within the SDNM are not achieving Standard 3 (see Map E-2 of the Lower Sonoran-SDNM PRMP/FEIS, Appendix E). Monument lands not achieving Standard 3 total 127,550 acres, representing 50.5 percent of all Monument lands north of I-8. Livestock use pattern mapping and monitoring data indicate that non-achievement of Standard 3 cannot be attributed to current livestock-grazing practices on 96.6 percent of Monument lands located north of I-8. There may be several contributing factors to non-achievement of Standard 3 aside from livestock grazing.
>
> The results of the analysis indicate that livestock grazing is a causal factor for non-achievement of Standard 3 on 8,498 acres (Map E-2 of the Lower Sonoran-SDNM PRMP/FEIS, Appendix E). This represents 3.4 percent of the 252,500 acres of the Monument north of I-8, and 6.76 percent of the 127,550 acres not achieving Standard 3.
>
> Areas where livestock grazing was determined to be the causal factor for not achieving Standard 3 include portions of the following Monument objects or indicators: palo verde-mixed cacti (1 percent of plant community), the saguaro cactus forest (1 percent of plant community), creosote bush-bursage (5 percent of plant community) or desert wash (2 percent, or 12 miles of the plant community) and its associated wildlife objects (identified in Table E-7, Results of the Land Health Evaluation [LHE Objectives by Monument Object]) and a small portion (1.4 percent, or 10-acres) of the Anza National Historic Trail (NHT).
>
> Currently, the grazing preference for perennial forage is not supported by monitoring and inventory data. Field observations and use compliance checks indicate that operators graze the majority of their permitted animal unit months (AUMs) during the early winter and spring months, which are periods of high levels of ephemeral forage.

> Concentrated livestock use around North Tank (10 acres) is not consistent with past use during historic time periods, and it negatively affects the protection of the archaeological and historic site within the SDNM. Elsewhere, known rock art sites in the SDNM are not near areas of grazing concentration and have not been impacted by grazing. Artifact scatters have not yielded any definitive evidence of grazing impacts that would affect site setting or integrity.

Based on this determination, the PRMP contained both planning and implementation level decisions for livestock grazing. This ROD addresses only the planning level decisions for livestock grazing. The planning level decision for livestock grazing make those areas where grazing has been determined to be incompatible with the paramount purpose of protecting the objects identified in the Proclamation unavailable to grazing. The grazing decisions identified as "implementation-level decisions" in the PRMP/FEIS – decisions regarding level of use and season of use – must be implemented consistent with the BLM regulations at 43 CFR Subpart 4160. In order to comply with these regulations, the BLM has determined not to address the implementation-level decisions for grazing previously identified in the PRMP/FEIS in this ROD. BLM expects to issue a decision for grazing implementation decisions before the next grazing year

1.6 MITIGATION MEASURES

In developing the alternatives, the BLM used a variety of management methods and tools, including the identification of allowable uses, temporal, spatial, and restrictions on uses, where specific uses will be prohibited, and specific actions needed to achieve desired outcomes. Restrictions on uses include seasonal closures, limitations on surface disturbance, and application of best management practices.

1.7 PLAN MONITORING – RMP-LEVEL DECISIONS

BLM planning regulations (43 CFR Part 1610.4-9) call for the monitoring of RMPs on a continual basis with a formal evaluation done at five year intervals. Land use plan monitoring is the process of tracking the implementation of land use planning decisions (implementation monitoring) and collecting the information necessary to evaluate the effectiveness of land use planning decisions (effectiveness monitoring). Monitoring is the process of following up on management actions and documenting the BLM's progress toward full implementation of the land use plan and the achievement of desired outcomes.

Implementation monitoring is the process of tracking and documenting the implementation (or the progress toward implementation) of land use plan decisions. The BLM tracks what management actions have been proposed or undertaken to implement land use plan decisions, documents which management actions were completed, and sets out what further actions are needed to continue implementing land use plan decisions.

Effectiveness monitoring is the process of collecting data and information in order to determine whether desired outcomes (the goals and objectives in the land use plan) are being met, or progress is being made toward meeting them, as the allowable uses and management actions are being implemented. The level and intensity of monitoring will vary, depending on the sensitivity of the resource or area and the scope of the proposed management activity.

Evaluation is the process of reviewing the land use plan and any plan monitoring reports to determine whether the SDNM Approved RMP-level decisions and NEPA analysis are still valid and whether the plan is being implemented. The SDNM Approved RMP will be evaluated to determine if decisions remain relevant to current issues; decisions are effective in achieving, or making progress toward achieving, desired outcomes; any decisions need to be revised; any decisions need to be dropped from further consideration; and any areas require new decisions.

The SDNM Approved RMP will be evaluated at a minimum every five years; special or unscheduled evaluations may be required to review unexpected management actions or significant changes in the related plans of Indian tribes, other federal agencies, and state and local governments, or to evaluate legislation or litigation that has the potential to trigger an RMP amendment or revision.

1.8 IMPLEMENTATION OF THE MANAGEMENT PLAN

Planning decisions of the Approved RMP will begin to be implemented upon signature of the ROD. Some planning level decisions require immediate action and will be implemented upon publication of the ROD and Approved RMP; other decisions will be implemented over a period of years based on priorities and available funding. The rate of implementation is tied, in part, to the BLM's budgeting process. The implementation of the Approved RMP will also occur in accordance with an adaptive management framework.

1.9 PUBLIC INVOLVEMENT

1.9.1 Public Scoping

The Notice of Intent to initiate planning on the SDNM Decision Area was published in the Federal Register on April 24, 2002 (Vol. 67, No. 79, Page 20158, [AZ-400-02-1610-DO-089A]). The opportunity to comment was also publicized through news releases, mail notification, flyers, and other methods. Eleven public scoping meetings were held, and the public was invited to submit written comments. Overall, more than 6,000 comments were received on both the SDNM and Lower Sonoran Decision Areas during the scoping period. Following scoping, the BLM held additional public workshops throughout the Lower Sonoran Field Office to collaborate on planning criteria, RMP goals and objectives, the range of alternatives, and preliminary alternatives.

1.9.2 Public Review of and Comment on the DRMP/EIS

The EPA published a Notice of Availability of the DRMP/EIS on August 25, 2011. The Notice of Availability initiated the 90-day public comment period required for planning actions. In preparing the PRMP/FEIS, the BLM considered all comments received or postmarked during the public comment period. The DRMP/EIS was made available for viewing, downloading, and commenting by a variety of methods, including as a PDF on the BLM Web site, CD, paper copies, and on the BLM's ePlanning system.

The BLM held eight public meetings throughout the Lower Sonoran Field Office in October 2011. Meeting locations included Phoenix, Ajo, Gila Bend, Mesa, Casa Grande, and Buckeye. Over 200 people

attended the public meetings. The largest number of attendees was from non-affiliated individuals, followed by non-profit organizations, local clubs, and government agencies.

Over 250 organizations, government agencies, industry representatives, and individuals responded during the comment period. Most of the written submissions contained multiple comments on different topics, and over 500 unique comments were made. Comments on the DRMP/EIS pertained to a number of issues including the scope of the document, NEPA adequacy of the baseline data and impact analysis, information related to consultation and coordination on the project, and policies and guidance the BLM needed to follow. In addition, comments were received on a number of resource topics, including air quality, cultural resources, fish and wildlife, livestock grazing, land use and special designations, minerals and energy, noise, national scenic and historic trails, recreation, socioeconomics, special status species, tribal interests, vegetation, visual resources, and water resources.

1.9.3 Public Review of and Protest on the PRMP/FEIS

A 30-day protest period was provided on the land use plan decisions contained in the PRMP/FEIS in accordance with 43 CFR Part 1610.5-2. The BLM received nine protest letters that were subsequently resolved by the BLM Director, whose decision constitutes final agency action for the Department of the Interior. The issues raised in the protest letters covered a broad range of topics with differing opinions, sometimes completely opposite opinions, on how the protesting party felt the BLM erred in the planning process. All protests were dismissed or denied.

1.9.4 Agency Consultations – US Fish and Wildlife Service (USFWS) and State Historic Preservation Office

In accordance with the requirements of Section 7 of the ESA, the BLM consulted with the US Fish and Wildlife Service (USFWS) to ensure that the BLM's proposed action would not jeopardize the continued existence of any listed threatened, endangered, or proposed species or critical habitat. The Biological Opinion (BO) on the Lower Sonoran-SDNM RMP/EIS project included four conservation recommendations to minimize or avoid possible adverse effects on listed species or their critical habitat. See **Section 2.1.8**, Consultation and Collaboration for additional details.

In accordance with the requirements of Section 106 of the National Historic Preservation Act, the BLM has consulted with and obtained comment from the Arizona State Historic Preservation Office (SHPO) concerning the content of this RMP. These comments have been taken into account by the BLM during the development of this RMP. Further consultation with the SHPO will take place as specific actions implementing the RMP are developed.

1.10 RATIONALE FOR SELECTION OF THE APPROVED RMP

The PRMP/FEIS described and analyzed five alternatives, including Alternative A (the No Action Alternative) and Alternatives B, C, D, and E (the Proposed Alternative), each of which represented varying management actions for each resource and resource use for achieving the stated goals and objectives. The BLM has the discretion to select an alternative in its entirety, to combine aspects of the various alternatives that were presented in the PRMP/FEIS, or to consider management approaches

resulting from protest resolution. In this PRMP/FEIS, Alternative E has been identified as the Approved RMP.

The Approved RMP uses Alternative E from the PRMP/FEIS with adjustments made due to clarifications and edits. Alternative E was chosen because it resolves the major issues posed by managing resources in the SDNM while providing for common ground among conflicting opinions and multiple uses of public lands in a sustainable fashion. It provides the best balance of resource protection and use within legal constraints. The Approved RMP:

- Satisfies statutory requirements (true for all alternatives);
- Reflects what the BLM believes to be the best combination of actions to achieve the stated goals;
- Represents the best solution for the purpose and need as described in Chapter 1, Purpose and Need for the Resource Management Plan;
- Provides the best approach to address the key resource and planning issues; and
- Includes input from cooperating agencies, collaborating partners, stakeholders, and the public, and BLM specialists.

The Approved RMP represents the BLM's final decision; upon signing of the ROD/Approved RMP, the decisions become final.

1.11 Availability and Approval of the Plan

Copies of the Record of Decision and the Sonoran Desert National Monument Approved Resource Management Plan may be obtained by viewing or downloading the document from the BLM Web site located at www.blm.gov/az or by obtaining a hard copy or CD at the BLM Phoenix District Office, Lower Sonoran Field Office at 21605 N. 7th Avenue, Phoenix, Arizona 85027. Copies will also be available for review at local community libraries near the SDNM.

Field Manager Recommendation

Having considered a full range of alternatives, associated impacts, and public and agency input, I recommend the adoption and implementation of the Sonoran Desert National Monument Approved Resource Management Plan.

Recommended:

Emily Garber
Field Manager
Lower Sonoran Field Office

9/14/12
Date

District Manager Concurrence

I concur with the adoption and implementation of the Sonoran Desert National Monument Approved Resource Management Plan.

Concurrence:

Scott Cooke
Acting District Manager
Phoenix District Office

9/14/12
Date

State Director Approval

In consideration of the foregoing, I approve the Sonoran Desert National Monument Approved Resource Management Plan.

Approved:

Ray Suazo
Arizona State Director

9/14/12
Date

2. APPROVED RESOURCE MANAGEMENT PLAN

2.1 INTRODUCTION

The United States (US) Department of the Interior, Bureau of Land Management (BLM), Phoenix District Office has prepared the Sonoran Desert National Monument Resource Management Plan (RMP) to provide comprehensive current and future management of BLM-administered lands in the Sonoran Desert National Monument (SDNM). The monument is located approximately 50 miles southwest of Phoenix, immediately east of Gila Bend, Arizona, in eastern Maricopa County and western Pinal County. Its boundaries encompass 496,400 acres, including 486,400 BLM-administered acres, with the remaining lands consisting of privately owned and state-administered parcels (**Map 1**, Surface Management).

The RMP was prepared in compliance with the Sonoran Desert National Monument Proclamation (Proclamation 7397, "the Proclamation") and the BLM's planning regulations Title 43 Code of Federal Regulations (CFR) 1600 under the authority of the Federal Land Policy and Management Act of 1976 (FLPMA). This document also meets the requirements of the National Environmental Policy Act of 1969 (NEPA), the Council on Environmental Quality Regulations for Implementing the NEPA (40 CFR 1500-1508), and requirements of the BLM's NEPA Handbook 1790-1.

This plan represents years of ongoing, coordinated efforts on the part of BLM Phoenix District, Lower Sonoran Field Office and SDNM staff, the BLM Arizona State Office staff, representatives of communities near the Planning Area, cooperating agencies, special interest and user groups, and hundreds of concerned citizens. The decisions outlined in this document will enable the BLM to manage and protect the unique resources and monument objects on public lands within the SDNM to achieve desired future conditions and management objectives in partnership with communities, organizations, and citizens.

2.1.1 Purpose and Need

The Monument proclamation assigns responsibility to protect objects for which the Monument was established to the BLM and requires that an RMP be prepared to ensure that the management actions needed to do so are identified and implemented. The Monument Proclamation is the principal direction

for management of the SDNM; all other considerations are secondary to that edict. In the absence of such a plan, current management for the SDNM falls under interim Monument guidance and the various existing RMPs and amendments. These documents do not address many management issues and direction given in the Presidential Proclamation. To address these issues, the BLM needed to prepare a new SDNM RMP.

The purpose of the SDNM RMP is to provide guidance for managing the use of BLM-administered lands and to provide a framework for future land management actions within the National Monument. The SDNM RMP will consolidate and replace the current management guidance for the SDNM.

2.1.2 Decision Area Description

The Lower Sonoran and SDNM planning process was conceived as a combined effort, analyzing two decision areas, the SDNM and the Lower Sonoran Field Office area surrounding the SDNM. The consolidated Planning Area encompassed nearly 8.9 million acres of south-central Arizona and included much of Maricopa County, as well as sections of Gila, Pima, Pinal, and Yuma counties. Population centers within or adjacent to the Planning Area include metropolitan Phoenix and the communities of Goodyear, Buckeye, Gila Bend, Ajo, Globe-Miami, Tonopah, Mobile, Maricopa, Casa Grande, and Sells.

The SDNM Decision Area covers approximately 496,400 acres of south-central Arizona and includes much of eastern Maricopa County, as well as a portion of western Pinal County. Population centers within or adjacent to the Planning Area include metropolitan Phoenix and the communities of Goodyear, Buckeye, Gila Bend, Mobile, Maricopa, and Stanfield. The Decision Area encompasses BLM-administered lands only.

As stated in Presidential Proclamation 7397, the SDNM was designated to protect "a magnificent example of untrammeled Sonoran desert landscape" with an "extraordinary array of biological, scientific, and historic resources" (**Appendix A**, Presidential Proclamation). The Monument is considered a geographic area (Area 8 on **Map 1**, Surface Management), which contains one sub-area, the Sand Tank Mountains, formerly known as "Area A" (Area 9 on **Map 1**, Surface Management), located in the southwest corner of the Monument.

2.1.3 Scoping Issues

Development of this RMP was formally initiated with publication of a Notice of Intent in the Federal Register on April 24, 2002 (67 Federal Register 20158, April 24, 2002 [AZ-400-02-1610-DO-089A]). Following scoping, the BLM held additional public workshops throughout the Lower Sonoran Field Office, which includes the SDNM, to collaborate on planning criteria, RMP goals and objectives, the range of alternatives, and preliminary alternatives. One of the most important outcomes of the scoping process was the identification of significant issues to be addressed in the planning effort. For planning purposes, an "issue" is defined as a matter of controversy or dispute over potential land and resource allocations, levels of resource use, production, and related management practices. Issues help determine what decisions will be made in the RMP and what the EIS must address as required by NEPA.

Based on the more than 6,000 scoping comments received for both the Lower Sonoran and SDNM Decision Areas and subsequent analysis and evaluation, six major planning issues were identified within the scope of this planning effort. All six issues center on balancing resource use and human activity with the mandated level of resource protection.

2.1.4 Issues Addressed

1. How will the BLM manage travel and public access?

Travel management is an important issue for the public and presents a management challenge for the BLM. Many who commented during the public scoping process felt that existing roads and trails should be kept open for public use and, where necessary, maintained, upgraded, or improved to provide safe and efficient public access. Others were opposed to the creation of new roads or believed that unnecessary roads should be closed for the protection of resources, particularly those roads that might fragment wildlife habitat or damage archaeological sites or riparian areas.

Additionally, members of the public expressed concern with the type of motor vehicle use that should be allowed to access the SDNM, with viewpoints falling into two general categories: 1) those who valued off-highway vehicle (OHV) use and favored no or minimal further limitations on such use, and 2) those who expressed concern for the adverse effects from unregulated or increased OHV activities.

The SDNM proclamation specifically states that all off-road motorized and mechanized vehicle use will be prohibited except for emergency or authorized administrative purposes; therefore, only a limited ranged of alternatives were considered.

2. How will the BLM manage wilderness characteristics in the Decision Area?

A number of individuals and groups voiced their concern for protecting areas with wilderness characteristics in the SDNM. During the public scoping period, a number of citizen groups and individuals suggested additional wilderness designations, including the establishment of new wilderness study areas (WSAs). Other commenters felt that there is an abundance of existing wilderness, national monuments, wildlife refuges, and other restricted access lands in the region and were opposed to the additional wilderness-related allocations.

The discussion concerning recommending the designation of additional wilderness areas was outside the scope of the RMP/EIS. Only Congress can designate wilderness areas, the current Department of the Interior and BLM policies do not provide for designation of additional WSAs. However, areas that contain wilderness characteristics can be managed by the BLM to protect those characteristics and were considered in the alternatives in compliance with FLPMA and Washington Office Instruction Memorandum (IM) 2011-154.

3. How will the BLM address wildlife management, including special status species and wildlife water developments in the Decision Area?

Many of those who provided scoping comments on general wildlife and wildlife habitat also commented on special status species. These comments focused on the protection of threatened and endangered species and their habitats. Some comments were general in nature, while others mentioned particular species (e.g., Sonoran pronghorn, cactus ferruginous pygmy-owl, desert tortoise) or management concerns (e.g., fawning/nesting sites, impacts of grazing, effects of off-road driving, etc.) Comments on wildlife management specific to the Lower Sonoran Decision Area concerned Sonoran pronghorn management in the Ajo area.

Various wildlife water development programs, initiated in the 1940s and 1950s throughout the western US, have provided sources of freestanding water under the assumption that this is a key limiting factor on wildlife populations in arid habitats. Critics have suggested that wildlife water developments have not yielded expected benefits and could negatively influence wildlife by increasing predation, competition, and disease transmission. The scientific community in Arizona, led by the efforts of Arizona Game and Fish Department (AGFD), is studying whether water developments are necessary for wildlife, what effect developments might have on populations of non-target animals (e.g., predators), and the development of additional wildlife waters. Scoping comments received regarding wildlife water developments represent both sides of the debate. Some individuals advocated that no new wildlife waters be developed while others stressed the importance of allowing the continued access, maintenance, redevelopment, and construction of wildlife waters.

Wildlife corridors have also arisen as an important issue related to wildlife. Due to urban growth, existing rights-of-way (ROWs), and the preponderance of wildlife corridors lying outside of BLM jurisdiction in the Planning Area, there is concern about maintenance of sufficient wildlife movement corridors within the SDNM Decision Area. Addressing and resolving these concerns were considered in the range of alternatives.

4. How will livestock grazing be addressed in the SDNM?

The scoping process identified livestock grazing as an important issue for a number of people. Many comments pertained to better management of livestock grazing or were in favor of ending livestock grazing on public lands. There were some who advocated prohibiting certain kinds of grazing (e.g., year-round, domestic animals, stock grazing) and those who advocated prohibiting grazing in certain areas (e.g., Sonoran pronghorn and/or desert tortoise habitat, riparian areas) or under certain conditions (e.g., drought, when not sustainable).

The SDNM proclamation mandates that grazing permits on public lands within the Monument south of I-8 will not be renewed at the end of their current term. All of these permits expired in 2008 and 2009. The proclamation also states that grazing on public lands north of I-8 will be allowed to continue only to the extent that the BLM determines that grazing is compatible with the paramount purpose of protecting the Monument objects identified in the proclamation. The RMP considers grazing in its analysis of use allocations.

5. How will renewable and traditional energy facilities and transmission corridors be managed?

Given the growth in renewable energy interest in the Sonoran Desert, much concern was expressed regarding utility corridors, and some concern was expressed regarding renewable energy, particularly utility-scale solar sites. Energy-generating and transmission industries urged the BLM to consider the importance of providing additional utility corridors to meet growing demands for electrical energy requirements in Arizona. Others urged the BLM to consolidate requests for new transmission lines within existing utility corridors and to refrain from granting ROWs) for new corridors. One exception to the opposition to new corridors was a proposal that new transmission lines be accommodated within corridors established within 400 feet of each side of highways. Given public concern and increased demand for energy, several alternatives for transmission corridors and land use authorizations were discussed in the alternatives.

6. How will public recreation activities be managed?

During public scoping, people reported that they enjoy a wide variety of activities in the SDNM Decision Area, including hiking, hunting, sightseeing, camping, observing wildlife, and OHV use. They expressed desires for continued opportunities for such activities. Many of the comments overlapped with the travel management issues, particularly with regard to OHV use. Some disagreed with the types of recreational activities that should be allowed in the Monument. Many expressed concern for the management of certain types of recreation to minimize environmental impacts. Some commenters advocated for dispersed recreation, while others advocated for the development of various types of recreational services (e.g., interpretive sites, restrooms, recreational vehicles areas, equestrian facilities, etc.). Some individuals advocated the development of non-motorized recreational opportunities, while others preferred motorized forms of recreation. There were comments in support of dispersed, primitive-type camping as well as comments in support of having more developed camping with services and facilities.

While some people indicated that they enjoy recreational shooting within the SDNM Decision Area, others expressed their opposition to recreational shooting due to its resource impacts as well as noise and public safety concerns.

Given the proximity of the SDNM to the Phoenix metro area and the increased participation of people in recreation pursuits on public lands over time, ineffective management of visitor activities is recognized as potentially having profound environmental effects on the SDNM. These possible effects, along with potential user conflicts, make appropriate management of recreational activities crucial to protecting public resources. Decisions such as where and what kind of recreational facilities to provide, how to minimize potential user conflicts, and what types of recreation settings should be maintained in specific areas were addressed in the alternatives.

2.1.5 Issues Considered but not Further Analyzed

The issues identified during public scoping (discussed above) shaped the alternatives carried forward in the RMP process. Other issues identified during public scoping were also considered but were not

analyzed further in the planning process because they fell outside of BLM jurisdiction or were beyond the scope of the RMP. The issues and the rationale for not analyzing them further are provided below.

Water

Local aquifers are being depleted, and mineral-laden water is being pumped to the surface, polluting waterways and killing vegetation.

Rationale: The BLM does not have the authority to permit or deny pumping of groundwater in Arizona. Such authority lies with the Arizona Department of Water Resources.

Biological Resources

Protect and restore native fish populations impacted by dams and non-native species.

Rationale: The BLM does not manage any suitable perennial aquatic habitat for native fish species in the Planning Area. Streams within the Planning Area are typically dry and flow only in response to storms.

Protect and manage Sonoran pronghorn and Sonoran pronghorn habitat within the SDNM.

Rationale: The SDNM is outside the current range of Sonoran pronghorn. The BLM will, however, coordinate with the Sonoran pronghorn recovery team during the RMP process and take any necessary measures for protection of historic habitat, as well as consider possible reintroduction of Sonoran pronghorn into the Monument.

Livestock Grazing

Increase grazing fees and use the money to hire more staff to study and protect the land

Rationale: The BLM has no authority to adjust or change the grazing fee. It is set by a formula contained in law, as is the disbursement of the fees collected.

Wild Horse & Burro Management

Do not implement wild horse and burro management in the SDNM

Rationale: There are no wild, free-roaming horses or burros within the Monument, and no herd areas have been designated or recognized, making it unnecessary to address their management. Any burros or horses on the Monument are considered in trespass and are addressed under the BLM's trespass regulations at 43 CFR 4150.

Minerals Management

Allow mining in the Monument; do not grant new mineral leases; ensure any new mining claims are valid and limit to small-scale operation; study and regulate coal-bed methane wells; limit or prohibit resource use in the Monument except for strategic and low-impact mineral extraction

Rationale: Lands within the SDNM are closed to mineral development, subject to valid existing rights, by Monument proclamation. There is no coal in either the SDNM or Lower Sonoran Decision Area.

It is inappropriate that hard rock mining on public lands is governed by outdated laws such as the General Mining Law of 1872

Rationale: The BLM does not have discretionary authority to disregard existing laws. Rather, a course of action that complies with existing laws, such as the General Mining Law of 1872, must be pursued.

Land Tenure Adjustment and Withdrawals

Within the SDNM, sell BLM holdings only as an absolute last resort

Rationale: According to the Monument proclamation, the BLM does not have the authority to sell public lands in the SDNM and can only exchange such lands when it furthers the purposes of the Monument.

Use zoning laws to establish a balance between property rights and conservation of natural resources

Rationale: The BLM does not have jurisdiction over zoning laws. Rather, local and county governments are responsible for establishing zoning laws and controlling land use through zoning. However, the potential for acquisition, disposal, and exchange of public lands could indirectly affect zoning and development and is considered further in the RMP.

Special Area Designations

Designate areas in the Sand Tank Mountains, Margie's Peak, and Butterfield Pass units as WSAs as outlined in the Arizona Wilderness Coalition proposal. Do not designate any additional wildernesses or WSAs; these misguided preservation designations have detrimental impacts on wildlife populations because of unwarranted burdens

Rationale: Only Congress has the authority to designate wilderness, and the current Department of the Interior and BLM policy does not provide for designation of additional WSAs. However, areas that contain wilderness characteristics can be actively managed by the BLM to protect those characteristics, and various alternatives for this management were considered by the BLM.

Visual Resources

Protect the viewsheds through zoning and other mechanisms

Rationale: Local and county governments control land use through zoning; however, the BLM can address the protection of viewsheds through other means. The BLM considers viewshed protection through the VRM program. Various degrees of such protection have been incorporated into the alternatives and were considered by the BLM.

Travel Management

Provide additional motorized public access in wilderness areas for people who are unable to walk long distances

Rationale: Wilderness areas are designated by Congress and must be managed in accordance with the Wilderness Act of 1964, which expressly prohibits motorized vehicle use by the public for recreational purposes. The BLM thus has no authority to develop new or open old motorized vehicle routes within designated wilderness.

Within the SDNM, designate OHV use areas in locations with low wildlife habitat values or where OHV use is already popular; keep each OHV use area to about 30 acres with twisting and interlaced trails

Rationale: Presidential Proclamation 7397 prohibits off-road use in the SDNM; consequently, OHV areas cannot be designated within the Monument.

Airspace

Consider how wilderness designations could adversely affect military overflights

Rationale: As identified above in **Section 2.1.4**, Issues Addressed, the BLM does not have the authority to designate new WSAs or wilderness areas. There would thus be no potential for conflicts to emerge between military airspace use and new WSA/wilderness designations. In terms of conflicts with existing wilderness areas in the SDNM, the Monument proclamation establishing the SDNM provides for continued military use of airspace over the SDNM, including over existing wilderness areas.

Work closely with nearby military bases and airports to schedule flights and design flight paths that are the least intrusive to wildlife populations and the Monument

Rationale: The Monument proclamation does not address the need for the BLM to dictate flight paths, and the many and varied uses by the military of the airspace over the Monument preclude establishing specific flight paths. The military already has specific high altitude flight paths, but they are very wide and have little impact on Monument resources.

Socioeconomics

Include a full identification of the social and economic impacts on all of the approved regional extra-high-voltage electric system components

Rationale: The EIS evaluated economic impacts of the alternatives, including those regarding corridors and ROWs, as needed at a programmatic level to assess the potential environmental impacts. Cumulative economic impacts (i.e., the impacts of the alternatives when combined with past, present, and reasonably foreseeable actions) were also addressed. A full social and economic impact analysis of the regional extra-high-voltage electric system components, however, was beyond the scope of the EIS.

Undocumented Immigrants and Drug Smuggling

Manage illegal immigration and drug smuggling

Rationale: BLM law enforcement is predominantly responsible for visitor safety and resource protection. US Customs and Border Protection, under the Department of Homeland Security, has the mission and responsibility for securing the US Border and enforcing federal immigration and drug laws. While the BLM can respond to crime and resource impacts from border activity, jurisdiction of illegal immigration and international drug smuggling lies with the Customs and Border Protection and Department of Homeland Security. In coordination with Customs and Border Protection, Department of Homeland Security, and state and local law enforcement agencies, the BLM:

- Develops integrated resource and law enforcement goals and priorities on National Landscape Conservation System units and other borderlands locales;
- Coordinates resource rehabilitation and mitigation with deployment of law enforcement resources to maximize effectiveness of both within the borderlands;
- Monitors smuggling activity levels, resource impacts, and mitigation efforts through existing and developing technologies;
- Communicates and coordinates effectively with agency partners and public, including sharing of funding and intelligence;
- Works with partners to identify key areas for increased enforcement, closure, restoration, protection efforts, and visitor safety;
- Actively deploys and collaborates on enhanced communication technologies; and
- Implements coordinated safety measures for agency staff, fire and law enforcement personnel, and public visitors.

2.1.6 Planning Criteria

Planning criteria are the standards, rules, and guidelines that helped guide the RMP/EIS process. The BLM developed planning criteria principally from FLPMA and other applicable laws and, in the case of the SDNM, from Presidential Proclamation 7397, as well as collaboration with partner agencies, American Indian tribes, and the public. The planning criteria were provided to the public for review during the scoping process and were included in the scoping report. General planning criteria and criteria specific to planning in the SDNM are presented below.

General Planning Criteria

- The planning process will include an EIS that will comply with NEPA standards. Two records of decision will be issued: one for the Lower Sonoran Decision Area and one for the SDNM Decision Area.
- The RMP will be completed in compliance with FLPMA, the ESA (16 USC 1531 et seq.), NEPA, the Archaeological Resources Protection Act, and all other relevant federal laws and executive orders, as well as the management policies of the BLM.
- Where previous planning decisions still apply, those decisions will be carried forward into the RMP. The BLM will also use information developed and management alternatives proposed in previous studies of the Planning Area, including the proposed Amendment and Environmental

Assessment to the Lower Gila North Management Framework Plan and the Lower Gila South RMP (BLM 2005a).

- Planning decisions will be made in the context of the best-available data, including information specific to public lands. Regional contextual data may also be used to identify the regional importance of public lands for resource use and protection.
- The planning team will work collaboratively with the State of Arizona; Maricopa, Pinal, Pima, Gila, and Yuma counties; tribal governments; municipal governments; other federal agencies; the Resource Advisory Council; and all other interested groups, agencies, and individuals. Decisions in the plans will strive to be compatible with existing plans and policies of adjacent local, state, tribal, and federal agencies, consistent with federal law and regulations. Opportunities to coordinate management with adjoining landowners for resource protection and public uses will be considered.
- The RMP will be developed to be flexible and adaptable to new and emerging issues and opportunities. During implementation of the RMP, the BLM will continue to work in partnership with the public and with local, state, and tribal governments and agencies to identify priority implementation projects and to identify and resolve emerging issues.
- Native American tribes will be consulted in accordance with policy, and tribal concerns will be given due consideration. The planning process will include the consideration of any impacts on Indian trust assets.
- Consultation with the USFWS will take place throughout the planning process in accordance with Section 7 of the ESA and the National Memorandum of Agreement (August 30, 2000) to identify conservation actions and measures for inclusion in the plans.
- Coordination with the Arizona State Historic Preservation Office (SHPO) will be conducted throughout the planning process.
- The plans will recognize the state's authority to manage wildlife populations, including hunting and fishing, within the Planning Area. Coordination with AGFD will occur in accordance with the statewide memorandum of understanding (MOU; March 1987).
- The plans will set forth a framework for managing recreational and commercial activities in order to maintain existing natural landscapes and to provide for the enjoyment and safety of the visiting public.
- The lifestyles of area residents, including the wide variety of uses of the public lands, will be considered in the RMP.
- Any lands, or interests therein, acquired by the BLM within the Planning Area boundary will be managed consistently with the RMP, subject to any constraints associated with the acquisition.
- The RMP will address travel management for the public lands. Areas will be identified as open to vehicles, closed to vehicles, or limited to designated roads. Within the Monument and in other areas identified in the RMP, motorized and mechanized routes will be designated.
- The RMP will recognize valid, existing rights.
- Federal Geographic Data Committee standards and other applicable BLM standards will be followed in the development and management of data.
- Management of existing wilderness will continue. The RMP will not address reduction or elimination of existing wilderness, changes in boundaries of existing wilderness, or opening of roads or mechanized or motorized access into existing wilderness.

Criteria Specific to the SDNM

Planning criteria for the SDNM were derived from Presidential Proclamation 7397. The proclamation states that the BLM will manage the Monument "pursuant to applicable legal authorities, to implement the purposes of the proclamation." Thus, any BLM planning criteria developed for the SDNM were inextricably tied to protecting the objects identified in the proclamation. The following SDNM criteria were used in addition to the general planning criteria noted above:

- The SDNM RMP will establish guidance upon which the BLM will manage the SDNM and will replace and supersede all other BLM RMPs for the lands covered by the SDNM RMP.
- The SDNM RMP will meet the requirements of the Presidential Proclamation 7397, dated January 17, 2001, to conserve, protect, and restore the objects of geological, archaeological, historical, and biological value within the Monument.
- In accordance with the proclamation, acquired lands and interests within the Monument's boundary will be added to the Monument and will be managed consistently with the SDNM RMP.
- To maintain the existing natural and cultural landscapes of the SDNM to the maximum extent possible, facilities will be located outside the Monument's boundary or in neighboring communities. Facilities that must be located within the Monument's boundaries will be placed in such a way that they are unobtrusive, to the extent practicable.
- The SDNM RMP will not address Monument boundary adjustments or proposals to change the Proclamation.

2.1.7 Planning Process

The SDNM RMP was initiated under the authority of Section 202(f) of FLPMA and guided by BLM planning regulations in 43 CFR 1600. Additionally, the EIS is subject to Section 202(c) of NEPA and guided by the Council on Environmental Quality regulations in 40 CFR 1500.

BLM uses a multi-step planning process when developing RMPs as required by 43 CFR Part 1600 and illustrate in the BLM's Land Use Planning Handbook (H-1601-1). The planning process is designed to help BLM identify the uses of BLM-administered lands desired by the public and to consider these uses to the extent they are consistent with the laws established by Congress and the policies of the executive branch of the federal government. The planning process is issue-driven. The BLM used the public scoping process to identify planning issues, noted above, to direct the development of the SDNM RMP. The scoping process also was used to introduce the public to planning criteria.

Title II, Section 202, of FLPMA directs BLM to coordinate planning efforts with Native American tribes, other federal departments, and agencies of the state and local governments as part of its land use planning process. The BLM is also directed to integrate NEPA requirements with other environmental review and consultation requirements to reduce paperwork and delays (40 CFR Part 1500.4-5). The BLM accomplished coordination with Native American tribes, other agencies, and consistency with other plans through ongoing communications, meetings, and collaborative efforts with an interdisciplinary team, which includes BLM specialists and federal, state, and local agencies.

2.1.8 Consultation and Collaboration

BLM land use planning regulations (43 CFR 1610.3), FLPMA (43 USC 1712), and regulations for implementing NEPA (40 CFR 1501.5 and 1501.6) guide the BLM in coordinating and cooperating with other federal and state agencies, local governments, and American Indian tribes during the land use planning process. This collective guidance instructs the BLM to:

- Stay informed of federal, state, local, and tribal plans;
- Ensure that it considers these plans in its own planning;
- Help resolve inconsistencies between such plans and BLM planning; and
- Cooperate with other agencies and tribal governments during the development of RMPs and NEPA analysis.

The USFWS reviewed the biological assessment and developed a biological opinion, the purpose of which is to prevent unacceptable harm to an ESA-listed species or its habitat. A biological opinion is a scientific judgment about a proposed action, not a policy document. The biological opinion on the Lower Sonoran-SDNM RMP/EIS project included four conservation recommendations to minimize or avoid possible adverse effects on listed species or their critical habitat. The USFWS recommended the following four conservation measures:

Sonoran Pronghorn

1. BLM continue to monitor the condition of fences on and adjacent to BLM lands in the action area to address unauthorized cattle use and identify opportunities to improve SPH [Sonoran pronghorn] passage across fence lines.
2. BLM coordinate with CBP [Cabeza Prieta Wildlife Refuge] to identify opportunities for alternatives to the Bates Well FOB to re-establish a pronghorn movement corridor to the Valley of the Ajo from adjacent lands.

Southwestern Willow Flycatcher

1. BLM monitor the condition of fences on BLM lands in the action area to address unauthorized cattle use of Gila River bottom lands.
2. BLM participate in planning efforts along the Gila River to integrate BLM efforts with the Flood Control District of Maricopa County and local jurisdictions to improve habitat conditions along the Gila River.

Agency coordination efforts included reviewing numerous plans that provide the policies and guide the activities of these agencies and governments.

The BLM has coordinated with federal, state, and county agencies throughout the planning and EIS process. The BLM gathered issues, ideas, and concerns, and discussed the role of agencies in the process. A full listing of the agencies that the BLM coordinated with can be found in the Scoping Report (available from the BLM Phoenix District Office).

A letter introducing the RMP/EIS, identifying data-gathering efforts, and offering agencies the opportunity to become cooperating agencies in the planning efforts was sent to more than 200 agencies, followed by a cooperating agency meeting at the Arizona State Office. The meeting agenda included discussions on the BLM's planning process, collaborative planning, the meaning and responsibilities of cooperating agency status, and opportunities for involvement in the BLM's planning process without becoming a cooperating agency. The BLM's goal was to encourage involvement by all interested parties using whatever methods the parties wished.

For those agencies choosing to be a cooperating agency, MOUs were developed that outlined the roles and responsibilities of the cooperating agencies and the BLM throughout the planning process. The BLM signed MOUs with the Arizona Game and Fish Department and Arizona Department of Transportation discussed below.

Specific Agreements

The BLM and AGFD have agreed to work cooperatively to manage wildlife resources on public lands throughout Arizona. The master MOU (AZ-930-0703) between the BLM's Arizona State Office and the Arizona Game and Fish Commission, which sets policy for the management, preservation, and harvest of wildlife and fish resources, establishes the BLM's responsibility for managing wildlife habitat on public lands and the AGFD's public trust responsibility to manage fish and wildlife populations through the authority of the Commission. As stated in the MOU, the BLM and the AGFD "consider the management of fish and wildlife resources as a high priority and agree to work cooperatively to achieve a shared goal to actively manage, sustain, and enhance those resources."

The BLM, Arizona Department of Transportation, and Arizona Division of Federal Highway Administration have agreed to establish and improve cooperative working relationships (MOU No. AZ-931-0309, Amendment 2). This MOU provides for a coordinated approach to accomplish land and resource management along with transportation development and operation management. The MOU is designed to reduce or eliminate duplication of work, establish procedures for streamlining work processes, ensure that each agency is provided with sufficient lead-time, share available resources, and develop and execute action programs that maximize responsiveness to public needs and concerns. Per the MOU, the BLM will coordinate with responsible agencies to develop design features that minimize the fragmenting effect of the planned roadway and evaluate/incorporate safe and effective wildlife crossings. Where planned roadways potentially fragment other resources, the BLM will work with the responsible agency to provide continued connectivity for those purposes. The BLM will also work with the agency to provide continued safe access to public lands from any developed roadway for recreation and other public land users.

Tribal Government-to-Government Consultation

The BLM has a long history of consultation on this RMP. Beginning in 2002 until late in 2011, BLM staff and managers held and documented 17 face-to-face meetings with tribal staff, legislative council members, or tribal council members about the RMP.

The BLM began by contacting the following tribes to initiate consultation, and invite them to the scoping meetings at the start of the RMP process as well as to participate as a cooperating agency in the planning process:

Ak-Chin Indian Community
Fort McDowell Yavapai Nation
Fort Sill Apache Tribe
Gila River Indian Community
Hopi Tribe
Pascua Yaqui Tribe
Salt River Pima-Maricopa Indian Community
San Carlos Apache Tribe
Tohono O'odham Nation
Tonto Apache Tribe
White Mountain Apache Tribe
Yavapai-Apache Indian Community
Yavapai-Prescott Indian Tribe

The BLM met with interested tribes on 17 occasions to describe and discuss the planning process and Planning Area. A total of five formal letters were sent to the Tribal Chairs with courtesy copies sent to the cultural staff at each and every tribal government. These were sent with return receipt requested. A few reply letters from some tribes were received. Follow-up telephone calls were made to tribal staff in order to make sure that the letters and accompanying documents arrived and to inquire whether there were any concerns that needed to be addressed. On two occasions, the BLM offered field tours that Tribal staff and elders attended. These field tours allowed time for discussion of planning issues at particular sites and particular broad landscapes. Several telephone calls and emails were exchanged at various times in order to provide more detailed information or to have a more in-depth discussion.

Topics covered during consultation included formal consultation, cooperating agency status, and community involvement and collaboration. Tribal staff emphasized the importance of ongoing and regular consultation, and voiced concerns regarding protection of cultural and natural resources, grazing management, law enforcement, with regard to cultural resource site protection, route access, undocumented immigrants, and drug smuggling, and possible land exchanges and acquisitions. The BLM kept the tribes informed on RMP development throughout the planning process via meetings, telephone conversations, letters, faxes, email, personal communication, and news releases, including how to participate in commenting on the DRMP/EIS. These important topics are issues that will continue to be worked on with the tribes throughout Plan implementation.

Section 7 Consultation

In accordance with the requirements of Section 7 of the ESA, the BLM consulted with the USFWS to ensure that the BLM's proposed action would not jeopardize the continued existence of any listed threatened, endangered, or proposed species or critical habitat.

BLM wrote a biological assessment and held a meeting with the USFWS to explain the proposed action and the format used for the effects determinations. The assessment discussed the effects on four listed species in the Lower Sonoran-SDNM Biological Assessment from the PRMP (Alternative E in the PRMP/FEIS). The BLM delivered the completed biological assessment to the USFWS for comments and clarification.

The USFWS reviewed the biological assessment and developed a Biological Opinion; the purpose of a biological opinion is to prevent unacceptable harm to an ESA-listed species or its habitat: it is a scientific

judgment about a proposed action, not a policy document. The biological opinion on the Lower Sonoran-SDNM RMP/EIS project included conservation recommendations to minimize or avoid possible adverse effects on listed species or their critical habitat. It also imposed reasonable and prudent measures needed to minimize any harmful impacts, and required monitoring and reporting to ensure adequate protection compliance.

Section 106 Consultation

In accordance with the requirements of Section 106 of the National Historic Preservation Act, the BLM coordinated with and solicited input from the Arizona SHPO. The BLM and Arizona SHPO followed the coordination protocols in the Arizona Protocol relating to resource management plans; the protocol provides for a phased consultation process related to historic, traditional, and cultural resources for an EIS and subsequent activities that could tier from a ROD. Per these procedures, the BLM Arizona initiated consultation with the Arizona SHPO by written correspondence in 2003. The letter described the Lower Sonoran-SDNM RMP/EIS and specified the need to consult on information presented in the EIS.

Over the course of the planning process, the BLM met with or contacted the SHPO to share updates and information on the planning effort. In October 2011, the BLM send a letter to the SHPO detailing the history of the planning effort and requesting review and comment on the DRMP/EIS by the SHPO. In November 2011, the BLM received the SHPO's comments on the DRMP/EIS noting comments regarding impacts on cultural resources and associated mitigation outlined in the plan.

On July 26, 2012, the BLM sent a letter to the SHPO outlining the need for specific comments on the implementation-level decisions presented in the Travel Management section in accordance with BLM IM No. 2012-067, "Clarification of Cultural Resource Considerations for Off-Highway Vehicle Designations and Travel Management". On August 27, 2012, a letter was received from the SHPO, noting they had no additional comments.

Federal and Military Coordination

The BLM coordinated with other federal agencies and military installations within the Planning Area, including the National Park Service (NPS) and US Air Force. The BLM and NPS met to discuss management options in the Ajo Block area, specifically regarding land tenure adjustments, land use authorizations, ROWs, borderland and associated law enforcement issues, national park access, boundary management, endangered species management, recreation, and comprehensive travel management decisions. The BLM coordinated with the Base Executive Council and Interagency Executive Committee regarding the planning efforts and military involvement for borderlands, travel and recreation management, land restoration, and threatened and endangered species management on Luke Air Force Base and the Barry M. Goldwater Air Force Range military installations, and management of public lands in the Ajo Block, Sentinel Plain, and SDNM.

The BLM also worked with the Borderlands Management Taskforce, which coordinates all federal agencies involved with borderlands management. The BLM's responsibility is to manage and protect natural resources, protect employees and public land users, and coordinate with all other law enforcement agencies (e.g., county, state, and federal agencies, including Immigration and Customs

Enforcement). Issues discussed included impacts related to undocumented immigration, drug and human trafficking, and coordinated management and mitigation measures.

Arizona Governor's Office Coordination

The BLM coordinated and consulted with the Arizona governor and governor's office and other state agencies. The BLM met with the Arizona Department of Transportation to review regional transportation plans and discuss the agency's concerns and questions. Additionally, the BLM had extensive coordination with the AGFD to discuss wildlife management, public access route designations, and wildlife movement corridors.

The Arizona governor was given the opportunity to identify any inconsistencies between the proposed plan and state or local plans, policies, and programs, and to provide recommendations in writing during a 60-day consistency review period, a requirement of the BLM's planning process. The Governor's Office did not note any inconsistency with state policies or plans.

Local Government

The BLM coordinated and consulted with local governments throughout the planning process. The BLM met with the Maricopa County Department of Transportation regarding regional transportation issues, including discussion of anticipated highway planning projects. The BLM also met with the Maricopa County and Pinal County Park and Recreation departments to discuss recreation-related land management coordination efforts for the Saddle Mountain, Buckeye Hills, and San Tan Mountains areas. The BLM also met with the Town of Gila Bend regarding their recreation and development interests.

Additionally, the BLM reviewed numerous county planning documents, including the Pinal County Comprehensive Plan, the Pinal County Open Space and Trails Master Plan, and the City of Maricopa's Parks, Trails, and Open Space Master Plan. The BLM's planning guidance notes that RMPs shall be consistent with other federal, state, and local plans to the maximum extent consistent with federal law and FLPMA provisions, and ensure that consideration is given to those state and local plans relevant to the development of land use plans for public lands. The BLM has reviewed these county plans for consistency and found that the actions in the RMP are generally consistent with the intent and actions in the county plans.

Local governments submitted scoping comments when BLM initiated the planning effort and reviewed and commented on the DRMP/EIS. The BLM will continue to coordinate with local governments after the ROD is signed.

Public Outreach and Local Constituency Groups

In an effort to provide outreach to the local communities in the Planning Area, the BLM contacted constituency groups with interests in several of the planning issues. The BLM contacted several shooting groups to discuss the target shooting analysis, including the Table Mesa Coalition, the Arizona State Rifle and Pistol Association, and the AGFD. The Table Mesa Coalition provided feedback on the shooting analysis, including information on safe shooting practices and distances and areas that should remain open for shooting activities.

2.1.9 Policy

This plan is consistent with and incorporates requirements identified in various laws, regulation and policy. These include Executive Orders, legislative designations, and court settlements and rulings. The policies and decisions that existed prior to this plan being written are outside the scope of the plan but have influenced the decisions, constrained the alternatives, and are needed to understand management of the area.

2.2 PLANNING DECISIONS

This section of the RMP presents the Goals, Objectives, Land Use Allocations, and Management Actions established for BLM-administered lands in the SDNM. Most of the desired future conditions are long-range in nature and will not be achieved immediately, but rather are assumed to require a period of time to achieve. These management decisions are presented by program area. Not all types of decisions were identified for each program.

Implementation- or activity-level decisions are decisions that take action to implement land use plan decisions. These types of decisions require appropriate site-specific planning and NEPA analysis. Implementation decisions generally constitute the BLM's final approval allowing on-the-ground actions to proceed and are generally appealable to the Interior Board of Land Appeals under 43 CFR 4.410. This RMP contains appealable implementation decisions for route designations. This decision is presented separately in **Section 2.3**, Implementation Decision – Travel Management. Please note that all acreages presented in the RMP are estimations, even when presented to the nearest acre.

Complete consideration of the RMP also includes Administrative Actions that outline the objectives, basic management policy, and program direction. Administrative Actions are not land use plan decisions; however, these are day-to-day activities that are not ground-disturbing and are an important component when considering program activities.

2.2.1 Air Quality

Goals, Objectives, and Management Actions

AQ-1: Protect, maintain, and improve the quality of air resources associated with authorized uses and activities on public lands.

AQ-1.1: Maintain existing air quality and air quality-related values (e.g., visibility) by ensuring that authorized uses on public lands comply with and support federal, state, and local laws and regulations for protecting air quality.

AQ-1.1.1: State and local agencies and adjacent land managers will be consulted to address emissions that affect public lands.

AQ-1.1.2: Appropriate management techniques and practices will be applied to all authorized surface-disturbing projects and activities as needed to ensure compliance with standards.

AQ-1.2: Apply mitigation measures for uses and activities within and near adjoining communities, wilderness areas, and large particulate-matter (PM_{10}) (i.e., dust) non-attainment and maintenance areas, especially as they pertain to unpaved roads that traverse public lands.

AQ-1.2.1: Excessive fugitive-dust generation from unpaved roads, construction sites, recreation activity areas, and other areas will be managed to ensure emissions do not exceed air quality standards, particularly those more rigid requirements in non-attainment areas.

AQ-1.2.2: Fugitive-dust emissions from unpaved roads will be mitigated through appropriate control methods, including, but not limited to:

- Lowering speed limits by creating obstacles such as speed bumps;
- Using fugitive-dust control measures such as dust. suppressants, gravel, or pavement;
- Installing cattle guards where unpaved roads meet paved roads;
- Reducing vehicle-use intensity or duration, reducing route density, or re-routing travel routes to more stable soils;
- Limiting the vehicle type on roads or in areas that are susceptible to excessive dust due to unstable soils;
- Closing high-use areas during high-pollution days;
- Closing areas that frequently exceed PM_{10} standards to non-compliant recreation and other projects until mitigation measures are implemented.
- Implementing temporary, seasonal, or permanent route closures when other methods are unsuccessful at controlling fugitive dust that exceeds regulatory limits.

Administrative Actions

Review projects requiring nonmajor permits within 10 kilometers of the SDNM to determine their effects on air quality and affected resources and provide comments to the appropriate regulatory agency.

- Work with adjoining land managers and users and county or municipal authorities to mitigate air quality effects on the SDNM. Make control of fugitive dust emissions from unpaved roads, construction sites, or other activity areas within 10 kilometers of SDNM a priority of this effort.
- Coordinate with county or municipal authorities to encourage control of fugitive dust emissions from unpaved roads that affect attainment of air quality standards in the SDNM.
- Increase public awareness and appreciation of air quality resources and visibility through interpretative displays as part of the public outreach program and visitor facilities planning for SDNM.
- Work with federal, state, and local agencies to monitor air quality in the SDNM. Air quality monitoring should include visibility, ozone, acid deposition, or other relevant air quality indicators.

- Promote the study of air quality conditions in the SDNM, including the effects of ozone, acid deposition and other related pollutants on plants and the supporting ecosystems. Cooperate and promote such activity with academic institutions and other interested parties.

2.2.2 Cave Resources

Goals, Objectives, and Management Actions

CR-1: Protect and conserve caves and karst resources as they are discovered on the public lands.

Objective CR-1.1: Manage caves and karst resources to maintain or enhance their physical integrity and scientific interest.

CR-1.1.1: Evaluate and inventory caves and karst resources, as they are discovered, to determine if the cave contains significant cultural, scientific, biological, geological, hydrological, educational, or recreational values.

CR-1.1.2: Protect and manage significant caves and karst resources for cultural, scientific, biological, geological, hydrological, educational, and recreational values.

CR-1.1.3: Public access to all caves within this Decision Area will be by permission of the authorized officer unless public entry is signed as open. Federal, state and local government employees operating within the scope of their authorizations will be exempt from permit issuance.

2.2.3 Cultural and Heritage Resources Goals, Objectives, and Management Actions

Allocation Summaries

Table 2-1
Cultural and Heritage Site Use Allocation

Cultural and Heritage Site Uses	BLM Acres	Management Action
Big Horn Station – Public and Scientific Use	<5	CH-1.1.1
Christmas Camp – Public and Scientific Use	<5	CH-1.1.1
Happy Camp (Desert Station) – Public and Scientific Use	<5	CH-1.1.1
Selected segments of Butterfield Overland Stage Route (Butterfield Pass) – Public and Scientific Use	3,600	CH-1.1.1
Sonoran Desert Historic Trails SCRMA	16,200	CH-1.1.2

Goals, Objectives, and Management Actions

CH-1: Identify, preserve, and protect important cultural resources and Monument objects. Ensure they are available for appropriate uses by present and future generations.

CH-1.1: Allocate 90 percent of known and evaluated cultural resource sites to one of five use categories: (1) scientific use, (2) conservation for future use, (3) traditional use, (4) public use or (5) experimental use, or classify as "discharged from management," within one year of recording.

CH-1.1.1: Anza-Butterfield Interpretive Trail (a high potential use segment of the Juan Bautista de Anza NHT and Butterfield Overland Stage Route within the SDNM, totaling 3,600 acres), Happy Camp (<5 acres), Christmas Camp (<5 acres), and Big Horn Station (<5 acres) will be allocated as public or scientific use sites.

Management prescriptions for public use sites will follow those set forth in the applicable special designation sections of the RMP when more restrictive. Inventory, recordation, documentation, and preparation of all sites for increased public visitation must be accomplished prior to implementing interpretive developments. Big Horn Station will only be allocated if stabilization measures are taken, critical safety issues are addressed, and legal access is obtained (**Map 2**, Cultural Resources Allocations).

CH-1.1.2: Allocate the Sonoran Desert Historic Trails Special Cultural Resources Management Area (16,200 acres).

CH-1.1.3: Camping within 100 feet of centerline along the Anza-Butterfield Interpretive Trail high potential use segment will be limited to designated campsites as determined in activity-level planning. See also SL-2.1.3, RM-1.1.4, and TM-6.1.1.

CH-1.2: Encourage appropriate scientific use of cultural resources.

CH-1.2.1: Provide opportunities for scientific research and inventory at selected sites, including excavation by qualified researchers.

CH-2: Reduce threats, reduce or prevent damage, and resolve potential conflicts from naturally occurring or unauthorized human-caused damage or deteriorations.

CH-2.1: Impacts by erosion, natural processes, or those due to vandalism, visitation, vehicle traffic, or other unauthorized human activity will be reduced.

CH-2.1.1: Potential conflicts from other resource uses will be minimized, reduced, or unauthorized by complying with Section 106 of the National Historic Preservation Act, and using mitigation or avoidance strategies as prescribed by law, regulation, or the BLM 8100 Manual.

CH-2.1.2: Sites suffering damage or deterioration resulting from natural or human causes will be restored or stabilized.

CH-2.1.3: Sites and Monument objects will be protected from degradation due to erosion and other natural processes by using a wide variety of techniques and tools, such as wash bank stabilization, rip rap, and vegetation restoration.

CH-2.1.4: Sites and Monument objects damaged by vandalism, excessive visitation, vehicle traffic, or other causes will be restored by using signing, fencing, gating, trail re-routing, or other measures.

CH-2.1.5: Special recreation permit (SRP) holders will be required to provide archaeological site etiquette and resource conservation information to all participants, employees, and volunteers associated with permitted activities. See also RM-2.1.10.

CH-2.1.6: The number of visitors at cultural or historic sites will be limited to 25 people at the site at any one time to emphasize resource protection. Some sites may require further limitations to protect the resource. Casual use or group limits for SRPs may be higher on a case-by-case basis if determined to be acceptable in site specific evaluations and the activity/action can be designed to have a minor or negligible impact to cultural resources. See also RM-2.1.11.

CH-3: Manage assemblages of sites within the Decision Areas as cultural landscapes.

CH-3.1: Distinct cultural landscapes will be described and mapped as defined by human use of the environment to protect the physical integrity, enhance visitor experience, and maintain or enhance visual settings. Cultural landscapes are a new and holistic land use concept that attempts to understand human interaction with each other and their environment through time on a landscape scale.

CH-3.1.1: The age, function, and interrelationship of sites attributed to historic indigenous populations in different environmental settings will be identified when possible.

CH-3.1.2: Cumulative impacts on the cultural landscape, as well as impacts on individual sites, will be analyzed as part of the project assessment when projects are proposed.

Administrative Actions

State Historic Preservation Office/National Historic Preservation Act

- Continue to regularly communicate with the SHPO to share information and obtain technical advice on issues relating to compliance with Sections 106 and 110 of the National Historic Preservation Act, in accordance with the Arizona State Protocol.
- Focus proactive (Section 110) inventories on areas defined as Special Cultural Resource Management Areas, and areas along historic trail routes.

Tribal Consultation and Concerns

- Continue to consult with the Gila River Indian Community, the Ak-Chin Indian Community, the Salt River Pima-Maricopa Indian Community, the Tohono O'odham Nation, the Hopi Tribe and other interested Indian tribes to identify places of traditional importance and associated access needs. Develop measures for management and protection of such places that may be identified by tribes during the life of the RMP.
- Identify sacred areas in consultation with Indian tribes and, where practicable, limit land uses to those that do not conflict with ascribed values.
- Honor tribal requests to protect the confidentiality of sensitive information to the extent permitted by law.
- Provide opportunities for participation by Indian tribes in research and interpretation.
- Develop specific management prescriptions for sites allocated to the Traditional Use category in consultation with the Indian tribes to which they are culturally important.
- Restrict public information about the locations of sites that are not allocated to public use as allowed by law and regulation.

Research Opportunities

- Complete documentary research and oral histories to gain a better understanding of cultural resources from homesteading, mining, ranching, and other historical period activities.
- Establish collaborative research partnerships with academic institutions, tribes, professional and nonprofit organizations, vocational organizations, and other entities for an orderly process of cultural research, recordation, and education.
- Work with researchers, tribes, interested members of the public, contractors, local communities, and published materials to define specific cultural landscapes. Work with tribal groups and individuals to define temporal, functional, and inter-relationships of sites within certain landscape settings.
- Provide opportunities for training and participation in site documentation, research, protection, and education projects by tribal members, students, and volunteers. Ensure adequate professional oversight of work conducted by tribal members, students, and volunteers.

Interpretation and Education

- Map and document sites before interpretive development for public use, as needed, to preserve archeological data, plan for interpretive data, and provide a baseline condition assessment for monitoring changes resulting from visitor use.
- Complete interpretive plans for public use sites selected for interpretive development.
- Develop interpretive materials and facilities for selected sites. Provide educational opportunities to the public, including resource protection and appreciation, education, and stewardship.
- Continue to participate in Arizona Archaeology Awareness Month events and other educational outreach programs to highlight the values of cultural heritage resources and the need to protect these resources.
- Provide opportunities for tribal and interested public participation in interpretation.

Monitoring

- Continue to work with and support the Arizona Site Steward Program.
- Develop a monitoring scheme to evaluate the condition of cultural resources.
- Implement procedures for systematic monitoring of all sites developed or authorized for public visitation.

Planning

- Develop Cultural Resource Project Plans for protection or interpretation projects that require precise descriptions of implementation procedures, workforce, scheduling, equipment, and supplies. Implement planning following the guidance in BLM's Manual 8130, Planning for Uses of Cultural Resources.

Special Programs/Cultural Landscapes

- Work with researchers, tribes, concerned members of the public, contractors, local communities, and other stakeholders to make use of previously published materials to define certain cultural landscapes.
- Develop a strategy to identify, assess, and monitor the viewsheds along the historic trail corridor and other important cultural landscapes on the SDNM. Use Geographical Information System (GIS) technology to create viewshed studies and collect information for the monitoring program.

2.2.4 Paleontological Resources

Goals, Objectives, and Management Actions

PL-1: Protect and manage any paleontological resources, including all vertebrate fossils, traces, and invertebrate or plant fossils of paleontological interest, found on public lands for scientific, educational, or recreational values.

PL-1.1: Manage paleontological resources to maintain or enhance their physical integrity, educational values, and scientific interest while avoiding all surface-disturbing activities to the extent possible that will damage paleontological resources.

PL-1.1.1: Collection of paleontological resources for personal use will be prohibited except where intended for legitimate scientific uses and for which written authorization is obtained from the BLM authorized officer.

PL-1.1.2: Standard discovery stipulations will be included in any permit approval that is likely to affect significant paleontological resources. Stipulations will require the user or operator to:

- Suspend operations immediately upon discovery of paleontological resources that will disturb them,

- Contact the authorized officer as soon as reasonably possible,
- Bear the cost of required mitigation.

PL-1.1.4: Upon notification of discovery by a permit user or operator, the BLM will:

- Evaluate the discovery and inform the user/operator within 5 days,
- Allow resumption of use/operations only after completion of mitigation.

Administrative Actions

- Geologic units will be assigned and entered into the Potential Fossil Yield Classification System (per IM No. 2008-009) using geological maps and professional consideration. Assign a separate class ranking to each recognized geologic formation or member present at the surface in accordance with the guidelines provided in the IM.
- All assigned units entered into the Potential Fossil Yield Classification System will be integrated onto a GIS-based geologic map.

2.2.5 Soil Resources

Goals, Objectives, and Management Actions

SL-1: Ensure watersheds are functioning appropriately and are consistent with Land Health Standards. Characteristics of a properly functioning watershed include channels that are stable and in balance with the landscape; erosion and sediment deposition appropriate for the ecological site; infiltration of surface water in soils sufficient to support desired future conditions and minimize erosion from runoff; and flood frequencies, durations, and magnitudes appropriate for the landscape.

SL-1.1: Maintain or restore upland, channel, and riparian components of watersheds that help stabilize or improve watershed conditions. Major indicators of watershed health include maintaining total cover (vegetation and litter) consistent with desired future conditions, riparian areas in proper function condition, and erosion and sedimentation rates appropriate to the ecological site.

SL-1.1.1: Priorities for restoration will be established for disturbed areas. Priorities will be based on the potential for soil erosion and loss, damage to cultural or ecologically sensitive sites, and effects on water quality and quantity.

SL-1.1.2: Degraded sites will be stabilized and restored to slow or stop accelerated soil erosion and sedimentation and limit erosion to the natural rate for the ecological site.

SL-1.1.3: Benefits and risks of retaining the Vekol Valley spreader dike system will be evaluated along with benefits and risks of retaining or implementing vehicle closures in areas with eroded or otherwise degraded roads and trails.

SL-1.1.4: Soil erosion at cultural and ecologically sensitive sites will be evaluated. Soil erosion or degradation at these sites will be mitigated.

SL-1.1.5: Any management-caused soil erosion or degradation of the protected objects of the SDNM will be mitigated and restored to the extent possible.

SL-1.1.6: New or redeveloped facilities not related to water management will be constructed:

- Outside the 100-year floodplain of washes or water ways. Water catchment facilities for wildlife waters could be developed or redeveloped in riparian areas or in the 100-year floodplain or if needed to meet wildlife objectives and no other options are viable.
- In a manner that avoids changing natural water flow or watershed dynamics, and consistent with other resource and public safety goals.
- Existing facilities could be relocated or modified if they are significantly affecting watershed or floodplain function. Where water management facilities are necessary, the BLM will pursue options that minimize changes to natural water flow and watershed dynamics. Any activities in the 100-year floodplain will be planned for compliance with any county or federal floodplain regulations.

SL-2: Maintain or improve sensitive soils to avoid accelerated erosion rates.

SL-2.1: Disturbance of sensitive soil surfaces, including those classified as highly susceptible to wind and water erosion and those with protective desert pavement or well-developed cryptogamic crust, will be avoided. If disturbance occurs, damage will be mitigated.

SL-2.1.1: Developments and ground-disturbing activities will be located away from areas of significant desert pavement, cryptogamic crust, and other sensitive or fragile soils that are vulnerable to disruption or have high wind or water erosion potential unless project goals cannot be met in another location. Where facilities or projects cannot be relocated, mitigation measures will be taken, including application of ground cover, to minimize erosion.

SL-2.1.2: Motorized vehicle use will be limited to designated roads, primitive roads, and trails. Specific designations will occur within this plan for the SDNM.

SL-2.1.3: Vehicle parking and camping will be limited to reasonable use of the shoulder or adjacent area. Designated sites in such locations will be inventoried, mapped, and signed. If monitoring results show effects that exceed limits of acceptable change, motorized vehicles will not be allowed to pull off a designated route. See also CH-1.1.3, RM-1.1.4, and TM-6.1.1.

SL-2.1.4: Surface-disturbing activities – including vehicle camping, parking, and recreation facilities – will be prohibited on undisturbed desert pavement or well-developed cryptogamic crusts.

Administrative Actions

- Update existing soils database on public lands that were formerly part of the Barry M. Goldwater Range (BGR).
- Implement watershed improvement projects to increase ground cover to reduce erosion, sediment yield, and salinity contributions.

2.2.6 Vegetation Resources

Goals, Objectives, and Management Actions

VM-1: The natural diversity and abundance of native vegetation will occur as expected for landform and ecological site, and within the SDNM protect the vegetative objects of the Monument.

VM-1.1: Maintain or restore vegetative communities to achieve desired future conditions as identified in **Table 2-2**, Desired Future Conditions for Vegetation Resources.

Table 2-2
Desired Future Conditions for Vegetation Resources

Vegetative Community*	Acres/Miles in Planning Area	Desired Future Condition
All	N/A	Vegetative communities will provide appropriate cover levels, as described in Natural Resources Conservation Service Ecological Site Descriptions, to protect soils from wind and water erosion. This will ensure properly functioning watersheds and ecological processes in order to sustain healthy biotic populations and communities (biological objects within the SDNM Planning Area).
All		Each vegetation community will be maintained within its natural range of variation in plant composition, structure, and cover at the landscape level. Site potentials (soil, climate, topography) establish the natural limits on what can be produced in terms of vegetation and related resource values like forage, wildlife habitat, and watershed characteristics.
Creosote Bush–Bursage	179,600 acres	The potential of this community is a shrub dominated site with desert scrub species, cacti, and annual forbs and grasses.
Palo Verde-Mixed Cacti	303,300 acres	This vegetative community should consist of more diverse vegetative composition and structure than that of the creosote bush- bursage community. It includes vegetation varying from small shrubs to large trees (such as ironwood, palo verde, and mesquite) interspersed with a variety of cacti, such as mammalaria (*Mammalaria* spp.), prickly pear (*Opuntia* spp.), cholla (*Opuntia* spp.), barrel cactus (*Ferocactus wislizenii*), hedgehog (*Echinocereus* spp.), and saguaro (*Carnegiea gigantea*). Where

Table 2-2
Desired Future Conditions for Vegetation Resources

		potential exists, saguaro cactus forests will support appropriate densities of saguaro, with all age classes represented to ensure recruitment.
Riparian	0 acres	Riparian habitats should contain a diversity of native riparian obligate trees (such as cottonwood [*Populus* spp.] and willow [*Salix* spp.]) of various age and size classes and herbaceous plants adapted to hydric soils to restore ecological conditions and function.
Apacherian-Chihuahuan Upland Scrub	400 acres	The potential for this community is a shrubland dominated community consisting of large desert scrub/trees, including mesquites, acacias or junipers, and cacti. Perennial grass cover is typically low.
Sonoran Mid-Elevation Desert Scrub (Woodlands)	2,000 acres	This vegetative community should consist of a diverse vegetative composition and structure, similar to that of the palo verde-mixed cacti community, but with an increase of perennial grasses, forbs, and large shrub species (jojoba, crucifixion thorn, etc.) due to the increased precipitation.
Mogollon Chaparral	100 acres	This vegetative community should consist of woody species such as shrub live oak, mountain mahogany, desert ceanothus, and cliffrose interspersed with an understory of perennial grasses along with small shrub and forb species.
Desert Grassland	1,054 acres	Manage this plant community as a tobosa (*Pleuraphis mutica*)-dominated grassland while limiting the encroachment of mesquites and other shrubs.
Desert Washes (xeroriparian)	970 miles **	This community should have a multi-layered vegetative structure, as provided by perennial vegetation.
Diverse Composition	N/A	Diverse vegetative composition and structure will include such species as foothills palo verde (*Cercidium microphyllum*), blue palo verde (*Cercidium floridum*), desert willow (*Chilopsis linearis*), ironwood (*Olneya tesota*), mesquite (*Prosopis* spp.), smoke tree (*Psorothamnus spinosus*), and catclaw acacia (*Acacia greggii*) of various sizes and growth forms appropriate to the ecological site.
All	N/A	Ensure sufficient bank and floodplain vegetation (including along braided channel floodplains) provides for hydrologic function of the site.

* The desired future conditions described are general descriptions of the expected plant community makeup. Site potentials (based on ecological sites) and the development of specific desired plant community objectives for each vegetation type should be determined through the use of the Natural Resources Conservation Service ecological site descriptions, rangeland health reference sheets, or information collected from reference or comparison areas or a combination of the above. The ecological site descriptions that correspond to each vegetation community can be found at http://esis.sc.egov.usda.gov.

The vegetative communities listed that occur within the SDNM are identified as biological objects of the Monument. Within the SDNM, specific desired plant community objectives and site potentials were developed for

Table 2-2
Desired Future Conditions for Vegetation Resources

each ecological site and corresponding vegetation type (biological object) through the land health evaluation process. These site potentials were determined through the use of a combination of the information collected from the BGR and Area A (comparison areas), the Natural Resources Conservation Service's ecological site descriptions, and the rangeland health reference sheets for the ecological sites. Achievement of these desired plant community objectives will ensure that the biological objects of the Monument are being protected.
** Based on US Geological Survey 1:100K scale topographic quadrangles

VM-1.1.1: Activities will be evaluated on a case-by-case basis and impacts minimized, mitigated, or avoided to achieve land-health standards and vegetation community desired future conditions, and ensure protection of the vegetative objects of the Monument.

VM-1.1.2: Vegetation treatments could be conducted in order to make progress toward achieving land health standards. Treatments will include, but will not be limited to, seeding, transplanting, watering, seasonal closures, and seasonal use restrictions.

VM-2: Populations of endangered, threatened, and special status plants will be stable and/or increasing and suitable habitat is available for future establishment and maintenance of the populations.

VM-2.1: Identify and protect occupied and potential habitats for maintenance, restoration, or reestablishment of acuña pineapple cactus and other endangered, threatened, or special status plants. Maintain the diversity and properly functioning ecological processes of natural plant communities that support rare or special status plant species.

VM-2.1.1: Authorized surface-disturbing activities within occupied acuña cactus habitat areas will be minimized, mitigated, or avoided. Currently, the only known areas of location are within the very southern portion of the SDNM.

VM-2.1.2: Authorized surface-disturbing activities within habitat areas of any endangered, threatened, or special status plants will be minimized, mitigated, or avoided to ensure stable populations.

VM-3: Noxious and undesirable plant species will not occur on the landscape or, if they occur, they will make up a sufficiently small percentage of the vegetative community that they do not affect ecological processes.

Objective VM-3.1: Control invasive species using an integrated weed-management approach, including prevention, restoration, mechanical, chemical, biological control methods, and prescribed fire, where appropriate.

VM-3.1.1: Proposed projects will use practices that minimize the introduction and spread of invasive species.

VM-3.1.2: Priority will be assigned to the control of invasive species that have a substantial and apparent impact on native plant communities and wildlife. When infestations are identified, they will be evaluated for their potential threat and scheduled for removal accordingly.

VM-3.1.3: Monitoring for invasive species will focus on likely vectors of invasion such as linear features (roads, canals, railroads, utility corridors, etc.), disturbed areas (construction or development areas), and areas where water is available or may pond (water-control structures, etc.).

VM-3.1.4: Certified weed-free feed will be required for all equestrian and stock animal uses authorized under special recreation permits. The general public will be encouraged to provide weed-free feed for their equestrian and stock animals.

VM-4: Protect native plants from collecting and other uses.

VM-4.1: Protect SDNM vegetation by managing collection and uses consistent with the Monument proclamation.

VM-4.1.1: Collecting or removing living or dead native vegetation, including plant byproducts and woodcutting for commercial and personal uses, will be prohibited within the SDNM without written authorization. Examples of authorizations include vegetation removal for Native American traditional uses, scientific research, educational uses, salvage, or meeting management objectives. Authorizations must be in accordance with the Arizona Native Plant Law.

VM-5: Native plants will occur at a natural abundance and distribution.

VM-5.1: Rehabilitate native plant communities after land-disturbing activities, where appropriate. Rehabilitation will be designed to achieve vegetative conditions (cover, composition, etc.) necessary to stabilize the site.

VM-5.1.1: Rehabilitation practices will be used to stabilize and rehabilitate sites impacted from new surface-disturbing activities. Long-term restoration will occur through natural processes. In most cases, lands previously disturbed by historical uses will be allowed to recover through natural processes. Sites that may be appropriate for rehabilitation practices include:

- Recently disturbed sites that may respond quickly to rehabilitation practices, including damage caused by wildfire, immigrant traffic, or other illegal activities;
- Severely damaged, rapidly deteriorating, or rapidly expanding sites;
- Placing adjacent resources at risk;
- Prone to invasion by nonnative species;
- Heavily disturbed, such as mining sites;
- Capable of improving habitat for threatened and endangered species;

- Management priorities that require accelerated restoration to meet selected management objectives.

VM-5.1.2: Native plants will be used as the first priority for all rehabilitation projects. Non-invasive, nonnative plants may be used in limited urgent situations where it may be necessary to protect the resources or when taking no action will further degrade the resources. In these situations, short-lived species (i.e., weed-free nurse crop species) will be preferentially used and will be combined with native species to facilitate the establishment of native species.

VM-5.1.3: Rehabilitation and reclamation plans that describe the site restoration goals, considering the starting condition of the site, and restoration methods will be required for all surface-disturbing activities commensurate with the amount of surface disturbance.

VM-5.1.4: Preliminary success criteria for a site will be considered achieved when soil conditions are stabilized and approximately 50 percent or more of the plant composition and cover are present based on appropriate Ecological Site Descriptions. Trees and shrubs will be considered established when they have survived (without assistance such as watering) for two consecutive years. Livestock will not be turned out on rehabilitated sites until it was determined by an interdisciplinary team that the re-established forage could sustain livestock grazing.

Administrative Actions

- Seed from regionally native or sterile alien (nonnative) species of grasses and herbaceous vegetation will be used in areas where reseeding is necessary following ground disturbance to stabilize soils and prevent erosion by both wind and water.
- Prioritize monitoring for invasive species to determine if weeds not immediately being treated are becoming a greater threat to the resources of concern.

2.2.7 Visual Resources

Allocations Summary

The following VRM classes will be allocated for each alternative to support management objectives for the various resources, such as designated wilderness, areas with wilderness characteristics, NHT segments, and back country recreation settings.

Table 2-3
VRM Classes

VRM Class	BLM Acres	Management Action
Class I	157,700	VR-1.1.1
Class II	248,200	VR-1.1.2
Class III	80,500	VR-1.1.3
Class IV	0	VR-1.1.4

Goals, Objectives, and Management Actions

VR-1: Manage public lands that will maintain scenic quality, natural landscapes, undisturbed views, and other high-quality visual resources.

VR-1.1: Visual resources will be managed according to the class objectives set in the Visual Resource Inventory Handbook H-8410-1 and BLM Guidelines for a Quality Built Environment.

VR-1.1.1: Designated wilderness areas will be allocated as VRM class I (157,700 acres).

VR-1.1.2: 248,200 acres are allocated as VRM class II.

VR-1.1.3: 80,500 acres are allocated as VRM class III.

VR-1.1.4: Zero (0) acres are allocated as VRM class IV.

VR-1.1.5: All surface-disturbing projects or activities, regardless of size or potential impact, will incorporate visual design considerations consistent with the Visual Resource Contrast Rating Manual H-8431-1 to meet VRM class objectives for the area. Even activities in VRM Class IV will consider designs that help reduce visual contrast between a proposed project and landscape settings (color, texture, line, and form). Measures to mitigate potential visual impacts could include the use of natural materials, screening, painting, project design, location sighting, or restoration.

VR-1.1.6: Restoration projects will ensure that visual impacts are minimized in the short term (5 years) and that VRM objectives in the project area are met in the long term (life of the project) when such projects are a) considered essential for public safety, achieving desired future conditions, or reducing hazardous fuels buildups, and b) expected to be visually prominent.

VR-1.1.7: The viewshed of the Juan Bautista de Anza NHT, Highway 238, and Interstate 8 would be managed in a manner that exceeds or maintains the VRM objectives. VRM and scenic management prescriptions would be applied for their preservation and enhancement. The viewshed of the Anza NHT would be managed to maintain the historic landscape setting. See also **Section 2.2.18**.

VR-2: Maintain night sky condition.

VM-2.1: Manage activities and projects on public lands that will contribute light or air pollution to maintain or improve dark, clear skies for stargazing and nighttime military training.

VR-2.1.1: Permanent outdoor lighting will not be allowed in VRM Class I areas.

VR-2.1.2: Development on public lands will be required to use dark-sky-friendly technologies in VRM Classes I through IV to provide opportunities for stargazers and amateur astronomers and to maintain conditions favorable to nighttime military operations. Measures may include, but will not be limited to directing all light

downward, using shielded lights, using only the minimum illumination necessary, using lamp types such as sodium lamps (less prone to atmospheric scattering), using circuit timers, using motion sensors, or using flight proximity detectors.

VR-3: The natural splendor for which the SDNM was designated shall be maintained.

VR-3.1: Visual resources of the SDNM will be managed to preserve or to retain the existing character of the landscape. The visual character of management activities will be managed according to the objectives described above and in VRM Handbook H-8410-1.

VR-3.1.1: Public lands within the Monument will be allocated to the VRM classes as depicted in **Map 3**, Visual Resource Management to ensure visual landscapes as described in the Monument proclamation are protected. See also RM-1.2.3.

Administrative Actions

- Incorporate visual design considerations for all surface-disturbing projects or activities, regardless of size or potential impact, consistent with the Visual Resource Contrast Rating Manual H-8431-1 to meet VRM class objectives for the area.
- Participate in regional planning initiatives and comment on proposals for development on adjacent non-federal lands to encourage future development to be compatible with VRM designations and protection of dark night skies on public lands.
- Develop user facilities (trailheads, non-motorized trails, campgrounds, roads, utilities, interpretive areas) to take advantage of views of scenic and historic landscapes in such a way that visual quality is protected.

2.2.8 Water Resources

Goals, Objectives, and Management Actions

WR-1: Ensure physical and legal availability of water in sufficient quantity and quality to meet the management needs of the Sonoran Desert National Monument.

WR-1.1: New water source developments will not adversely affect existing sources and uses. This will be determined prior to any new development activity, including issuance of landowner's permission to drill required by the Arizona Department of Water Resources.

WR-1.1.1: All proposed new water uses and developments will be assessed to determine whether they will adversely affect springs, streams, tinajas, or seeps; decrease water availability at existing wells; or conflict with other resource management goals.

WR-1.1.2: Groundwater exploration and development will be restricted and damage mitigated in areas with ecological or cultural resources that are sensitive to disturbance.

WR-1.1.3: The only proposed water developments allowed will be those that are consistent with the proclamation.

WR-1.1.4: Groundwater exploration and development will be restricted and damage mitigated in areas with ecological or cultural resources that are sensitive to disturbance.

WR-1.2: The BLM will take necessary steps to acquire all water rights allowed by law to properly manage the SDNM, and to protect the natural resources of the SDNM and objects of the SDNM. Inventory work and at least one-half of water-rights filings will be completed within 5 years of issuing this plan.

WR-1.2.1: Water will be inventoried and appropriate applications and claims filed for state water rights for all water sources and beneficial uses on public land in accordance with state law to ensure water availability to meet management needs and protect ecological functions.

WR-1.2.2: Inventory all water sources, including groundwater sources, within the three wilderness areas of the SDNM for quantification and assertion of federal reserved water rights, and provide notice of these rights to Arizona Department of Water Resources.

WR-2: All surface water in the SDNM will meet appropriate state water quality standards or will have state-approved plans for water quality improvement.

WR-2.1: Impaired water quality in stretches of the Gila River that run through the Planning Area will be improved or corrected within 5 years; the BLM will commit to the state schedule for water quality improvement.

WR-2.1.3: No new water development that will divert water out of SDNM will be allowed.

Administrative Actions

- Identify, evaluate, and assign priorities for restoring disturbed areas considering the potential for soil erosion and loss, damage to cultural or ecologically sensitive sites, and effects on water quality and quantity.
- Evaluate proposals for groundwater withdrawals on BLM-administered lands within an AMA in coordination with the Arizona Department of Water Resources and incorporate any restrictions or guidelines for the AMA.
- Work with county, state, and federal agencies to monitor surface and groundwater quantity and quality on public lands. Correct problems as they are identified.
- Coordinate with the AGFD to be sure all wells within the BGR are registered with Arizona Department of Water Resources. Inventory all water sources on BGR and enter them into the BLM water data management system. Coordinate water rights filings for water sources with the US Air Force and AGFD (applicable to the three relinquished BGR parcels).
- Work with county, state, and federal agencies and other partners to evaluate the quantity of groundwater available and predict the effect of future potential water withdrawals on the ability to provide adequate water availability for natural resource and multiple use goals within SDNM.
- Begin a dialogue with appropriate State of Arizona policy, legal, and water resources staff on the development of a cooperative agreement on the protection of water resources on SDNM.

2.2.9 Wilderness Characteristics

Allocations Summary

Under the approved management action, approximately 107,800 acres of BLM lands in SDNM will be managed to protect wilderness characteristic (WC-1.1.1).

Goals, Objectives, and Management Actions

WC-1: Areas to be managed to protect wilderness characteristics should retain a high degree of naturalness where the imprint of humans on lands and resources is substantially unnoticeable. Furthermore, outstanding opportunities for solitude and primitive or unconfined types of recreation should be maintained or enhanced.

WC-1.1: Manage lands managed to protect wilderness characteristics to maintain a high degree of naturalness and offer outstanding opportunities for solitude or primitive, unconfined recreation by reducing impacts on these values while considering manageability and competing resource demands.

WC-1.1.1: 107,800 acres of public lands will be designated as lands managed to protect wilderness characteristics (**Map 4**, Lands Managed to Protect Wilderness Characteristics).

WC-1.1.2: Private or state in-holdings, including subsurface, will be acquired when available from willing owners. See also LR-2.1.5.

WC-1.1.3: Lands managed to protect wilderness characteristics will be managed as avoidance areas for minor and nonlinear land use authorizations (LUAs) with the exception for law enforcement, public safety or administrative purposes as approved by the authorized officer.

WC-1.1.4: Any potential new minor and nonlinear LUAs, and maintenance of existing facilities, will be evaluated and allowed under the following circumstances:

- When compatible with maintaining or enhancing wilderness characteristics or when needed to protect, manage, or improve natural or heritage resource conditions;
- When meeting law enforcement, agency, or public safety needs;
- When reconstruction, replacement, or major maintenance of existing facilities, or development of new projects, is consistent with this plan's objectives, VRM classes, and desired recreation, social, and managerial settings;
- When the project site can be restored to its previous condition after the project is completed.

WC-1.1.5: Existing facilities and projects no longer active will be removed if practicable.

WC-1.1.6: Sites and locales with human-caused disturbances will be rehabilitated if such actions maintain or enhance wilderness characteristics and natural/heritage resources, are practicable, meet management prescriptions and SOPs, and are addressed in a restoration plan.

WC-1.1.7: Measurement standards will be developed and adopted for:

- Trail conditions,
- Facility conditions,
- Visitor-to-visitor encounters,
- Vegetation changes,
- Vegetation and wildlife desired resource conditions, and
- Other approved activities

WC-1.1.8: Lands managed to protect wilderness characteristics will be designated limited OHV use areas.

WC-1.1.9: Public or commercial collection of plant and mineral materials will be prohibited.

WC-1.1.10: Wheeled game carriers will be allowed.

WC-1.1.11: Closed vehicle routes could be converted, where appropriate, for use as equestrian and/or hiking trails.

WC-1.1.12: New equestrian and/or hiking trails will be established when consistent with this plan's objectives; desired recreation, social, and managerial settings; and VRM classes.

WC-1.1.13: Special recreation permits, commercial recreation and vending operations, guided hunts, and concession leases will be allowed when they are landscape- and wilderness-character resource-dependent activities consistent with this plan's objectives; desired recreation, social, and managerial settings; and VRM classes. See also RM-2.1.10

Administrative Actions

- Employ the lowest-impact methods for development that can be reasonably applied:
- Use design methods that cause the facility to blend into the landscape, including consideration of site selection and use of a low profile;
- Design facilities that will require minimal maintenance;
- Use best management practices to minimize surface and vegetation disturbance during construction;
- Decrease the visual effect of existing facilities during reconstruction, replacement, or major maintenance;
- Establish baseline standards to protect proper levels of recreational and landscape disturbance to protect wilderness characteristics.

2.2.10 Wildland Fire Management

Goals, Objectives, and Management Actions

WF-1: Ensure firefighter and public safety is the highest priority in every fire or fuels management activity.

WF-1.1: Set priorities among protecting residences, community infrastructure, and other manmade property and improvements.

WF-1.1.1: Management Response to unplanned ignitions will be full suppression for all lands within the SDNM.

WF-1.1.2: Implement a hazardous fuels reduction program that creates conditions conducive for safe and effective firefighting.

WF-1.1.3: With community partners, implement the Pinal County Community Wildfire Protection Plans.

WF-2: Wildland fuels are managed to protect wildland-urban interface (WUI) areas and meet resource management objectives.

WF-2.1: Fuels within WUI areas are proactively managed to improve the protection of life and property.

WF-2.1.1: Hazardous fuels around communities at risk and utility infrastructure (e.g., roads, power lines, and communication sites) within the WUI are reduced using mechanical, chemical, biological, and prescribed fire treatments, where applicable.

WF-2.1.2: Identify, prioritize, and implement WUI fuels treatments in the Planning Area. Fuels treatments to reduce wildland fire risk will focus on the WUI areas identified in the Planning Area Community Wildfire Protection Plans and those that are developed collaboratively with SDNM partners.

WF-2.1.3: In consultation with cultural resource specialists, develop fuels treatments to protect cultural resources that are susceptible to damage from wildfire.

WF-2.1.4: Analyze and implement where needed, hazardous fuels reduction in and around recreation sites to improve public and firefighter safety.

WF-3: Limit the extent of wildfires and the impact of fire suppression efforts on wildlife, plant communities, and natural and cultural features.

WF-3.1: Reduce the frequency of human-caused wildland fires and minimize the total number of acres burned within the SDNM.

WF-3.1.1: Management Response to unplanned ignitions will be full suppression for all lands within the SDNM.

WF-3.1.2: Identify, prioritize, and implement non-WUI fuels treatments within the SDNM. Prioritization will be given to fuels treatments that maintain areas in Fire Regime Condition Class I or have the ability to improve areas characterized as Fire Regime Condition Class II and III.

WF-3.1.3: Implement fuels treatments, suppression activities, and prevention activities that target reducing the size and number of human-caused wildland fires.

WF-3.2: For all fire management activities (wildfire suppression, prescribed fire, and mechanical, chemical, and biological vegetation treatments), a focus will be to maintain or improve habitat for federally threatened, endangered, proposed, and candidate (federally protected) species.

WF-3.2.1: Identify and implement post-fire stabilization and rehabilitation actions in burned areas to restore a functional landscape to meet the resource management objectives.

WF-3.2.2: Use prescribed fire, chemical, mechanical, manual, and biological treatments in areas of the SDNM that fall in Fire Regimes 2 and 4 to reduce shrub and tree components.

WF-3.2.3: Protect known locations of habitat occupied by federally listed species. Minimum impact suppression tactics (MIST) will be followed in all areas with known federally protected species or habitat.

WF-3.2.4: Construction of permanent roads, primitive roads, or trails will not be permitted during fire-suppression activities in habitat occupied by federally protected species. Construction of temporary roads, primitive roads, or trails is approved only if necessary for safety or the protection of property or resources, including federally protected species habitat. Temporary road construction should be coordinated with the USFWS, through the resource advisor.

WF-3.2.5: Crew camps, equipment staging areas, and aircraft landing and fueling areas should be located outside of listed species habitats, preferably in locations that have previously been disturbed. If camps must be located in listed species habitat, the resource advisor will be consulted to ensure habitat damage and other effects to listed species are minimized and documented. The resource advisor should also consider the potential for indirect effects to listed species or their habitat from the siting of camps and staging areas (e.g., if an area is within the water flow pattern, there may be indirect effects to aquatic habitat or species located off-site).

WF-3.2.6: Use of motorized vehicles during prescribed burns or other fuels treatment activities in suitable or occupied listed species habitat will be restricted, to the extent feasible, to existing roads, trails, washes, and temporary fuel breaks or site-access

routes. If off-road travel is deemed necessary, any cross-country travel paths will be surveyed prior to use and will be closed and rehabilitated after the prescribed burn or fuels treatment project is completed.

WF-3.2.7: Use of motorized vehicles during rehabilitation or restoration activities in suitable or occupied listed species habitat will be restricted, to the extent feasible, to existing roads, trails, or washes, and to temporary access roads or fuel breaks created to enable the fire suppression, prescribed burn, or fuels treatment activities to occur. If off-road travel is deemed necessary, any cross-country travel paths will be surveyed prior to use and will be closed and rehabilitated after rehabilitation or restoration activities are completed.

WF-3.2.8: All temporary roads, vehicle tracks, skid trails, and OHV trails resulting from fire suppression and the proposed fire management activities will be rehabilitated (water bars, etc.), and will be closed or made impassible for future use.

WF-3.2.9: When using water from sources supporting federally protected species, care must be taken to ensure adverse impacts on these species are minimized or prevented. Unused water from fire abatement activities will not be dumped in sites occupied by federally protected aquatic species to avoid introducing nonnative species, diseases, or parasites.

WF-3.2.10: If water is drafted from a stock tank or other body of water for fire suppression, it will not be refilled with water from another tank, lakes, or other water sources that may support nonnative fishes, bullfrogs, crayfish, or salamanders.

WF-3.2.11: Use of containment systems for portable pumps to avoid fuel spills in riparian or aquatic systems will be required.

WF-3.2.12: For priority fire/fuels management areas (e.g., WUI) with federally protected species or designated critical habitat downstream, BLM biologists and other resource specialists, as appropriate, in coordination with USFWS and AGFD, will determine:

- The number of acres and the number of projects or phases of projects to occur within one watershed per year.
- Where livestock grazing occurs in areas that have been burned, specialists will determine when grazing can be resumed. Such deferments from grazing will only occur when necessary to protect streams from increased ash or sediment flow into streams.

WF-3.2.13: To the extent possible, maintain habitat features necessary to support breeding populations of the pygmy-owl within their historic range and review ongoing fire management activities for effects on essential habitat features needed by cactus ferruginous pygmy-owls. Modify activities, where necessary, to sustain the overall suitability of the habitat for the owls. Priority will be given to activities in or near occupied or recently (within the last 10 years) occupied habitat.

WF-3.2.14: Minimize use of chainsaws or bulldozers to construct fire lines through occupied or found to be occupied listed species habitat except where necessary to reduce the overall acreage of occupied habitat or other important habitat areas that will otherwise be burned.

WF-3.2.15: Avoid developing access roads that will result in fragmentation or a reduction in habitat quality for listed species. Close and rehabilitate all roads that were necessary for project implementation (see RR-5).

WF-3.2.16: During fire management activities in habitat occupied by federally protected plant species, no staging of equipment or personnel will be permitted within 100 meters of identified individuals or populations, nor will off-road vehicles be allowed within the 100-meter buffer area, unless necessary for firefighter or public safety or the protection of property, improvements, or other resources (see FS-7). Primary threats to many of these plant species are trampling or crushing from personnel and vehicles.

WF-3.2.17: No prescribed burning will be implemented within 100 meters of identified locations or unsurveyed suitable habitat for federally protected and sensitive plant populations unless specifically designed to maintain or improve the existing population.

WF-3.2.18: Prior to implementing any fuels treatment activities (prescribed fire, vegetation treatments), pre-project surveys will be conducted for paniculate agaves and saguaros that may be directly affected by fuels management activities.

WF-3.2.19: Protect long-nosed bat forage plants—saguaros and high concentrations of agaves—from wildfire and fire-suppression activities, and from modification by fuels treatment activities (prescribed fire, vegetation treatments), to the greatest extent possible. Agave concentrations are contiguous stands or concentrations of more than 20 plants per acre. Avoid driving over plants, piling slash on top of plants, and burning on or near plants. Staging areas for fire crews or helicopters will be located in disturbed sites, if possible.

WF-3.2.20: No seeding/planting of nonnative plants will occur in any wildfire rehabilitation site or fuels treatment site with paniculate agaves or saguaros.

WF-3.3: For all fire management activities efforts will be made to reduce the impacts on natural and cultural resources.

WF-3.3.1: Conduct all fire management activities within the SDNM, and along the Anza NHT in a manner that will avoid or minimize degradation of these areas and values that have been identified in the respective legislative designations for these areas.

WF-3.3.2: Ensure fire management activities in wilderness areas are compatible with the applicable wilderness plan.

Administrative Actions

- Designate resource advisors from the BLM to coordinate natural resource concerns, including federally protected species. They will also serve as a field contact representative responsible for coordination with the USFWS. Duties will include identifying protective measures endorsed by the field office manager, and delivering these measures to the incident commander; surveying prospective campsites, aircraft landing, and fueling sites; and performing other duties necessary to ensure adverse effects on federally protected species and their habitats are minimized. On-the-ground monitors will be designated and used when fire-suppression activities occur within identified occupied or suitable habitat for federally protected species.
- Brief and educate all fire management personnel (firefighters and support personnel) about listed species and the importance of minimizing impacts on individuals and their habitats. All personnel will be informed of the conservation measures designed to minimize or eliminate take of the species present by resource advisors or designated supervisors. This information is best identified in the incident objectives.
- Evaluate the effectiveness of fire-suppression activities and conservation measures for federally protected species after a fire, when practical, and share the results with the USFWS and AGFD. Revise future fire-suppression plans and tactical applications as needed and as practical.
- Involve biologists in the development of prescribed burn plans and vegetation treatment plans to minimize effects on federally protected species and their habitats within, adjacent to, and downstream of proposed project sites. Biologists will consider the protection of seasonal and spatial needs of federally protected species (e.g., avoiding or protecting important use areas or structures and maintaining adequate patches of key habitat components) during project planning and implementation.
- Require pre-project surveys and clearances (biological evaluations/assessments) for federally protected species for each project site before implementation. All applicable conservation measures will be applied to areas with unsurveyed suitable habitat for federally protected species, until a survey has been conducted by qualified personnel to clear the area for the treatment activity.
- Minimize short-term and long-term impacts when rehabilitating important areas for federally listed species that have been damaged by fire or other fuels treatments. Someone who is familiar with fire impacts and the needs of the affected species will contribute to rehabilitation plan development. Appropriate timing of rehabilitation and spatial needs of federally listed species will be addressed in rehabilitation plans.
- Monitor burned area emergency rehabilitation activities and long-term restoration activities, and share the results with the USFWS and AGFD. Section 7 consultation for burned area emergency rehabilitation activities will be conducted independently, if necessary.
- Develop public education plans that discourage or restrict fires and fire-prone recreation uses during high-fire-risk periods. Develop brochures, signs, and other interpretive materials to educate recreationists about the ecological role of fires, and the potential dangers of accidental fires.
- Develop mitigation plans in coordination with the USFWS for fuels treatment projects (prescribed fire; vegetation treatments) that may adversely affect cactus ferruginous pygmy-owls or their habitat. Mitigation plans for prescribed fire shall limit to the extent practicable the

possibility that fire will spread to riparian habitats. Mitigation plans will be approved by the USFWS.

- Instruct all crew bosses fire personnel (wildfire suppression, wildland fire use, prescribed fire, and vegetation treatments) in the identification of agave and columnar cacti and the importance of their protection.
- Map known locations and potential habitat for plant populations to facilitate planning for wildland fire use, prescribed fires, and vegetation treatments, and to ensure protection of these populations during fire suppression.
- Coordinate with USFWS to delineate buffer areas around plant populations prior to prescribed fire and vegetation treatment activities. The BLM will coordinate with USFWS during any emergency response and wildland fire use activities to ensure protection of plant populations from fire and fire-suppression activities.
- Develop a mitigation plan in coordination with the USFWS for prescribed fires or fuels management projects (mechanical, chemical, biological treatments) within ½ mile of bat roosts or in areas that support paniculate agaves or saguaros. The mitigation plan will ensure that effects on bat roosts and forage plants are minimized and will include monitoring of effects on forage plants. The plan will be approved by the USFWS.
- Examine concentrations of agaves (including shindagger [*A. schottii*]) within each proposed fuels treatment area, and blackline or otherwise protect from treatments any significant concentrations of agaves that appear to be amidst fuel loads that could result in mortality greater than 20 percent (greater than 50 percent *for A. schottii*). The BLM personnel should use their best judgment, based on biological and fire expertise, to determine which significant agave stands are prone to mortality greater than 20 percent (greater than 50 percent for *A. schottii*).
- Support and cooperate in the investigations of agave relationships to livestock grazing, and of the effects of prescribed fire on paniculate agaves.
- Coordinate invasive-species management, monitoring, control, and education efforts with the appropriate federal, state, county, municipal, and tribal agencies and other partners. Efforts will be coordinated through the Borderlands Cooperative Weed Management Area and other similar groups.
- Conduct floristic surveys and monitoring for populations of sensitive, candidate threatened, endangered, rare, or unique species (applicable to the three relinquished BGR parcels).
- Update the existing botanical resources database and vegetation map (applicable to the three relinquished BGR parcels).
- Adhere to the intent of the Arizona Native Plant Law, ESA, and all other applicable laws and regulations to protect vegetative resources.
- Focus invasive species monitoring efforts on likely vectors of invasion such as linear features (roads, canals, railroads, utility corridors, etc.), disturbed areas (construction or development areas), and areas where water is available or may pond (water control structures, etc.).
- Control of noxious weeds required by law will not be subject to a benefit-cost analysis; however, the most economical and efficient method will be analyzed along with the safety of the proposed kind of treatment.
- Follow the Phoenix District Reclamation Plan for rehabilitation procedures.
- (Environmental Assessments) Conduct an environmental analysis at the time of the pretreatment survey. An interdisciplinary team will review any analysis needed on individual projects or group of projects.

- (Cost-Benefit Analysis) Subject land treatments proposed for livestock forage improvement to a cost-benefit analysis to ensure total benefits gained will equal or exceed the cost of the treatments.
- Develop effective interagency and community interactions and cooperation to meet wildland-fire and fuel-management strategies and landscape-scale resource condition objectives across administrative boundaries.
- Include wildfire hazard mitigation strategies in the Fire Management Plan for the Planning Area by identifying appropriate areas for prescribed fire and mechanical, manual, biological, or chemical treatments to reduce hazardous fuels to minimize the adverse effects of uncharacteristic wildland fires and meet resource objectives. The plan will also identify areas for exclusion from fire (through fire suppression), chemical, mechanical, and biological treatments.
- Protect human life (both firefighters' and the public) and communities, property, and the natural resources on which they depend. Firefighter and public safety are the highest priority in all fire management activities.
- Improve public awareness of the role of fire in ecosystem restoration, wildfire risk and mitigation strategies, and wildfire safe community, preparedness, and response planning.

2.2.11 Wildlife and Special Status Species

Goals, Objectives, and Management Actions

WL-1: (Lesser Long Nosed Bat): Maintain, protect, and make accessible to lesser long-nosed bats, roosts and contiguous foraging habitat.

WL-1.1: Protect known roosting habitat for lesser long-nosed bat on public land and maintain contiguous foraging habitat at its current range and distribution.

WL-1.1.1: Mitigation could occur for facility development, including those for recreation purposes, within 4 miles of known lesser long-nosed bat roosts as long as the action does not impact roost sites. In the event that mitigation is not sufficient, the development will be relocated at least 4 miles from roost sites.

WL-1.1.2: Activities with the potential to impact lesser long-nosed bats or their habitats will be evaluated on a case-by-case basis and impacts will be mitigated or avoided.

WL-1.1.3: Medium to high density columnar cactus habitat (≥ 30 saguaro/acre) within 40 miles of known roost sites will be maintained and/or restored.

WL-1.1.4: Protect long-nosed bat forage plants-saguaros and high concentrations of agaves-from modification by treatment activities (prescribed fire, vegetation treatments), to the greatest extent possible. Saguaros and high concentrations of agaves will be excluded from treatments. Agave concentrations are contiguous stands or concentrations of more than 20 plants per acre.

WL-2: (Sonoran Pronghorn): Protect and enhance Sonoran pronghorn habitat and manage to support suitable habitat so it is available for future occupancy based on recovery goals.

WL-2.1: Manage to maintain or improve habitat for future populations of experimental/ nonessential Sonoran pronghorn within the SDNM.

WL-2.1.1: Sonoran pronghorn habitat within the SDNM will be managed to achieve recovery goals.

WL-2.1.2: The Monument will be identified as a potential reintroduction site for an experimental/nonessential population of Sonoran pronghorn. See **Map 5**, Sonoran Pronghorn Classification Areas.

WL-3: (Sonoran Desert Tortoise): Manage tortoise habitat so habitats provide sufficient forage and shelter for a viable population.

WL-3.1: Achieve the following objectives in desert tortoise habitat, as identified by habitat category:

- Category I - Maintain stable, viable populations and protect existing tortoise habitat values and increase populations where possible.
- Category II - Maintain stable, viable populations and halt further declines in tortoise habitat values.
- Category III - Limit tortoise habitat and population declines to the extent possible through mitigation.
- Retain natural shelter sites (boulders or caliche caves or similar features used by tortoises for sheltering) in Category I and II desert tortoise habitats, and
- Maintain or restore a diverse mixture of forage species and adequate cover of vegetation for desert tortoise habitat as recommended by the 1988 Rangewide Plan (BLM 1988b).

WL-3.1.1: Public lands currently allocated for management as Category I, II, and III Sonoran Desert tortoise habitat, as described in **Table 2-4**, Sonoran Desert Tortoise Habitat by Category, will be managed according to the objectives listed above.

Table 2-4
Sonoran Desert Tortoise Habitat by Category

Category	Sonoran Desert Tortoise Habitat (BLM Acres)
I	166,000
II	124,700
III	3,500

The criteria for Category I tortoise habitat areas are as follows:

- Habitat areas are essential to the maintenance of large, viable populations;
- Conflicts are resolvable;
- Populations are medium- to high-density or low-density contiguous with medium- or high-density;
- Populations are increasing, stable, or decreasing.

The criteria for Category II tortoise habitat areas are as follows:

- Habitat areas may be essential to maintenance of viable populations;
- Most conflicts are resolvable;
- Populations are medium- to high-density or low-density contiguous with medium- or high-density;
- Populations are stable or decreasing.

The criteria for Category III tortoise habitat areas are as follows:

- Habitat areas are not essential to maintenance of viable populations;
- Most conflicts are not resolvable;
- Populations are low- to medium-density and not contiguous with medium- or high-density;
- Populations are stable or decreasing.

WL-3.1.2: Habitat-management categories and boundaries may be revised as new population information becomes available. The criteria that will be used in revising categories and boundaries are those in the 1988 Rangewide Plan (BLM 1988b).

WL-3.1.3: No net loss will occur in the quality or quantity of Category I and II desert tortoise habitat. Mitigation for impacts will be permissible to achieve no net loss in quantity or quality of desert tortoise habitat in accordance with the Desert Tortoise Rangewide Plan and other applicable policy guidance.

WL-3.1.4: In Category I and II tortoise habitats, all motorized competitive speed races will be prohibited from March 31 through October 15. All other use requests during this time will be reviewed on a case-by-case basis and could be denied or adjusted to avoid conflict with tortoise activity and habitat. Mitigation for conflicts will be permissible to achieve no net loss in quantity or quality of desert tortoise habitat. Development and uses must be compatible with wildlife objectives.

WL-4: (Cactus Ferruginous Pygmy Owls): Maintain or restore habitats to support cactus ferruginous pygmy owls.

WL-4.1: Protect cactus ferruginous pygmy-owls from disturbance during the breeding and nesting seasons. Maintain or improve a complex, multi-layered vegetative structure provided by

perennial plants within the range of the cactus ferruginous pygmy-owl. Structure should consist of approximately 30 percent each of grasses and forbs, shrubs, and trees as dictated by site conditions. Maintain current or improve interconnected habitat patches of sufficient quality (diversity, density, and structure) and quantity (≥ 3 acres) to support cactus ferruginous pygmy-owls. Maintain sufficient vegetation between patches to allow for dispersal.

WL-4.1.1: Activities will be managed to protect, maintain, or improve occupied, or found to be occupied, cactus ferruginous pygmy-owl habitat.

WL-4.1.2: Surface-disturbing activities authorized or permitted by the BLM will be avoided within ½ mile of a known active cactus ferruginous pygmy-owl nest site from February 1 through July 31. All actions will be mitigated and managed to ensure consistency with management objectives, with an emphasis to maintain available habitat. Development planned to occur within 100 meters/330 feet of any known or found to be occupied cactus ferruginous pygmy-owl nest site will be evaluated on a site-specific basis, but significant modification of habitat within these areas should be avoided year round. Uses will be concentrated in less sensitive resource areas or in areas already disturbed.

WL-4.1.3: Use of motorized vehicles on routes within washes in the SDNM that are occupied or found to be occupied by cactus ferruginous pygmy-owls will be prohibited from April 15 to August 31 to protect pygmy-owls during their nesting seasons. Exceptions to the prohibitions will be authorized only for personnel engaged in constructing, maintaining, or repairing facilities; conducting research or surveys; for authorized law-enforcement or fire-suppression emergencies.

WL-4.1.4: Treatment of desert wash habitat, Sonoran desert/desert scrub, or mesquite-invaded grasslands under 4,000 feet in elevation that may support nesting cactus ferruginous pygmy-owls will only occur during the non-nesting season of August 1 to January 31, unless pre-project surveys indicate the area does not support pygmy-owls or mitigation plans approved by the USFWS have alleviated negative consequences.

WL-5: (General Bats): Manage to encourage the natural abundance and diversity of bat habitats so they are stable or increasing.

WL-5.1: Protect bat roosts associated with natural caves and abandoned mine features that are necessary to provide roosting locations for existing bat populations and opportunities for expansion.

WL-5.1.1: In cooperation with AGFD, important bat roosts will be protected where practicable and mitigation measures will be used to resolve potential resource conflicts.

WL-5.1.2: New water developments will be configured to allow for safe use by bats.

WL-5.1.3: Hazardous mine features occupied by bats will be remediated in coordination with the AGFD by installing bat gates or, if other roosts are readily available, by backfilling.

WL-6: (Migratory Birds): Manage migratory bird habitats so they are maintained and/or improving to meet the needs of migratory birds in general.

WL-6.1: Avoid take of migratory birds (adults, nests, eggs, and chicks) to comply with the Migratory Bird Treaty Act, Executive Order 13186, and the BLM-USFWS Memorandum of Understanding.

WL-6.1.1: Applications for activities on public lands will evaluate the effects of the BLM's actions on migratory birds during the NEPA process, if any, and identify where take reasonably attributable to agency actions may have a measurable negative effect on migratory bird populations, focusing first on species of concern, priority habitats, and key risk factors. In such situations, the BLM will implement approaches lessening such take.

WL-7: (Raptor Habitats): Manage raptor habitats so they are maintained and/or improving to meet the needs of raptors in general.

WL-7.1: Manage activities that could reduce raptor nest production.

WL-7.1.1: Authorized developments, uses, and activities within ¼ mile of known occupied raptor nests will be avoided, relocated, or seasonally limited.

WL-7.1.2: Authorized developments, uses, and activities within ½ mile of communal raptor nesting areas will be avoided.

WL-8: (Bighorn Sheep/Big Game): Manage bighorn sheep and other big game habitats so they are maintained and/or improving.

WL-8.1: Provide water for bighorn sheep and protect them from communicable diseases.

WL-8.1.1: Additional waters may be installed in high elevations of bighorn sheep habitat to improve habitat suitability.

WL-8.1.2: Domestic sheep and goat use will be prohibited on all allotments within nine miles of bighorn sheep habitat.

WL-9: (Wildlife Movement Corridors): Manage wildlife movement corridors so they contain ample habitat to assist wildlife in moving from one area to another in a relatively safe manner.

WL-9.1: Manage wildlife movement corridors in a manner that will assist wildlife in safe passage from one area to another.

WL-9.1.1: All new roads and primitive roads where average speeds may be greater than 45 miles per hour, or highways crossing public land, will be designed to facilitate movement of wildlife to reduce mortality of wildlife from vehicle collisions.

WL-9.1.2: Maintenance or expansion of existing roads will incorporate measures to maintain or restore wildlife habitat connectivity and will incorporate, where appropriate, wildlife underpasses or overpasses.

WL-9.1.3: Existing and/or designated roads and/or trails will be subject to seasonal closures if conflicts with wildlife cannot be mitigated.

WL-9.1.4: New surface disturbance within 100 meters of the edge of large washes located in the desert washes vegetative community (those depicted on US Geological Survey 1:24,000 maps) will be mitigated as needed to protect the integrity of washes as corridors.

WL-9.1.5: Density of roads, primitive roads, and motorized trails will be limited to 3 miles of road per section or less within the wildlife movement corridors in accordance with the Habitat Guidelines for Mule Deer (Mule Deer Working Group 2006).

WL-9.1.6: Treatments of invasive plant species will be allowed.

WL-10: (Priority Species Management Guidance): Manage wildlife habitats so they are maintained and/or improved.

WL-10.1: Manage habitats for wildlife species so they are maintained and/or improving to meet the needs of wildlife in general.

WL-10.1.1: Reintroductions, transplants, and supplemental stockings of native wildlife populations (as defined in BLM Manual 1745 or subsequent guidance) could occur in their current or historic range with collaboration between the AGFD and USFWS.

WL-10.1.2: The release of rehabilitated or displaced wildlife on public lands will be allowed, which could involve constructing artificial habitats where appropriate, for species that are compatible with other resource-management and use objectives.

WL-10.1.3: Acquisitions of non-federal lands and disposals of federal land that have, or potentially have, priority species or habitats will include the potential to:

- Enhance the conservation and management of threatened, endangered or special status species habitat, riparian habitat, desert tortoise habitat, key big game habitat;
- Improve the overall manageability of wildlife habitat;
- Improve habitat connectivity in and around the wildlife habitat areas and wildlife movement corridors.
- The BLM will not transfer (dispose of) from federal ownership the following:

- Designated or proposed critical habitat for a listed or proposed threatened, endangered or special status species;
- Lands supporting listed or proposed threatened or endangered species if such transfer will be inconsistent with recovery needs and objectives or conservation measures or will likely affect the recovery of the listed or proposed species, and lands supporting federal candidate species if such action will contribute to the need to list the species as threatened or endangered.
- Retain Category I and II tortoise habitat unless it is in the general public interest to dispose of them, and losses in habitat quality and quantity can be mitigated.

Exceptions to the above could occur if:

- The recipient of the lands agrees to protect the species or critical habitat under the ESA, such as disposal to a non-federal governmental agency or private organization;
- If conservation of the habitat will still be achieved and ensured; or
- In a land exchange if a net gain in the value of species habitat or protection is achieved.

WL 10.1.4: Treatments of invasive species will be allowed to benefit visual resources or wildlife habitat unless otherwise restricted.

WL-10.1.5: Designated roads, primitive roads, and/or trails within washes will be closed from April 15-August 31 to address the forage, shelter, breeding, and thermal cover protection provided by washes as a component of wildlife habitat. This management action will apply to routes 8013, 8018 and 8019.

WL-11: (Wildlife Waters): Provide wildlife with safe, usable, year-round access to water.

WL-11.1: Increase, improve or maintain the density and distribution of wildlife waters on public lands throughout the Planning Area to sustain and enhance wildlife populations across their range.

WL-11.1.1: Maintain and re-develop existing and develop additional wildlife waters in cooperation with AGFD. Increase the density and/or restore the distribution of wildlife waters throughout the Planning Area to sustain and enhance native wildlife populations across their range. All existing wildlife waters will be maintained or improved as needed to maintain the presence of perennial water for native wildlife. New wildlife waters will be built when needed to maintain, restore, or enhance native wildlife population numbers or distributions.

WL-11.1.2: In the event that range water developments are no longer needed for livestock use, the BLM, in consultation with the AGFD, will determine if the water development will be beneficial to meet wildlife distribution goals or other objectives. If it is deemed that the water development is not useful for such purposes, the water source will be removed.

WL-12: (Nonnative Invasive Animal Species Guidance): Manage to reduce or eliminate undesirable nonnative animal species so they do not occur in the Decision Areas or so their presence does not adversely affect ecological processes.

WL-12.1: Limit the distribution and abundance of invasive animal species to current levels. Reduce the impact of invasive species on native ecosystems from current levels.

WL-12.1.1: Non-native, invasive animal species will not be allowed except for biological controls for which peer-reviewed scientific literature states that the introduced species will have no detrimental effects to any native wildlife or plant species in the Planning Area.

Administrative Actions

- Work in partnership with AGFD to manage wildlife and wildlife habitat to achieve AGFD's wildlife population goals. Cooperatively develop habitat management plans to meet Sikes Act requirements and address site-specific habitat management objectives consistent with other natural resource objectives. Wildlife management activities administered by AGFD include, but are not limited to, surveys, telemetry, transplants, water management, vegetation restoration and enhancement, invasive species control, research, law enforcement activities, setting and administering hunting permits, and other wildlife or habitat management projects as identified in the Master MOU between the Arizona Game and Fish Commission and the BLM.
- Work in partnership with AGFD to manage wildlife and wildlife habitat to achieve AGFD's wildlife population goals and other activities as identified in the Master MOU between AGFD and the BLM.
- Work with other land owners within wildlife movement corridors to maintain or improve vegetative connectivity and prevent actions that will obstruct the movement of wildlife through the areas. Fences may be removed when no longer needed or other options meet the need and as funding and opportunities allow.
- Emphasize maintaining and restoring ecological connectivity through land acquisition, partnerships with local landowners, and vegetation resources. If opportunities for wildlife movement cannot be adequately maintained, then mitigation to maintain isolated wildlife populations will be adopted.
- Eliminate unauthorized grazing by cattle, sheep, goats, burros, and other non-native animals and construct wildlife-passable fences where unauthorized use is a problem. Fences may be removed when no longer needed or other options meet the need and as funding and opportunities allow.
- Manage livestock waters to provide safe, usable water for wildlife, where possible. As funding and opportunities permit, existing facilities will be modified for safe wildlife use. The above-ground height of livestock troughs and tanks will not exceed 20 inches. The BLM will install wildlife escape ladders in each facility and provide ramps for small bird and mammal access as funding permits. Storage tanks will be configured to reduce evaporation and prevent wildlife from drowning.
- Contact the appropriate USFWS biologist as soon as practical once a wildfire starts and a determination is made that a federally protected species or its habitat could be affected by the fire or by fire-suppression activities.

- Work with USFWS during the emergency response to apply the appropriate conservation measures.
- If conservation measures cannot be applied during the suppression activities, consult with the responding agency after the fact on any suppression actions that may have affected the federally protected species or its habitat.
- If conservation measures are adhered to, report to the USFWS on the actions taken and the effects on the species and its habitat following the fire; no further consultation on that incident will be required.

Threatened and Endangered Species

- Initiate formal Section 7 consultation with USFWS on all actions that may affect federal listed threatened and endangered species or critical habitat as required by the Endangered Species Act of 1973, as amended.
- Adhere to conservation measures for threatened and endangered species outlined in the ESA and BLM Manual 6840. The ESA provides for the protection of threatened and endangered and proposed threatened and endangered species of plants and animals. Specifications of the ESA pertain to both the Lower Sonoran and SDNM Decision Areas. BLM Manual 6840 prescribes conservation measures for threatened and endangered species, including conservation measures for fire management activities and species-specific conservation measures. To a large extent, these measures have been built in to the RMP alternatives evaluated in this FEIS.
- Monitor existing populations and inventory for additional populations of threatened and endangered species as funding permits.

Wildlife Species

- Maintain and develop a proactive public education program on the desert tortoise and its habitat requirements, including participation in public events with tortoise habitat information.
- Continue to work with and support other agencies and public entities in desert tortoise conservation.
- Coordinate invasive animal species control and education efforts with AGFD.
- Design fences to reduce adverse impacts on wildlife movement. Specifications in BLM Manual 1741 and in local BLM directives will be used. The BLM will consult with AGFD on the design and location of new fences. Where existing fences in wildlife habitat do not meet BLM specifications, they will be modified according to BLM Manual 1741 when they are scheduled for replacement or major maintenance as funding permits. Special consideration will be given to placement, type, and installation of fences in Category I and II desert tortoise habitat to facilitate desert tortoise movement, dispersal, and protection. Before installing facilities, the BLM will conduct a site evaluation for special status and state-protected animals and will develop mitigation to protect these species and their habitats. Such mitigation might include project relocation, redesign, and abandonment.
- Inventory for federally listed, proposed, and candidate species. Implement monitoring programs on known populations of listed, proposed, and candidate species and other special status species (as defined in BLM Manual 6840) to document population levels and status. Where monitoring finds threats to these populations, actions will be taken to protect the species and their habitats.

- Standardize desert tortoise management throughout its habitat. Management will be consistent with the following documents:
    - Desert Tortoise Habitat Management on Public Lands: A Range wide Plan (BLM 1988b).
    - Strategy for Desert Tortoise Habitat Management on Public Lands in Arizona, IM No. AZ-91-16 (BLM 1990a).
    - Strategy for Desert Tortoise Habitat Management on Public Lands in Arizona: New Guidance on Compensation for the Desert Tortoise, IM No. AZ-92-46 (BLM 1992).
    - Instructional Memorandum No. 94-018 Ephemeral Grazing Policy in Desert Tortoise Habitat Supplemental Guidance for Desert Tortoise Compensation, IM No. AZ-99-008 (BLM 1999).
    - Desert Tortoise Mitigation Policy, IM No. AZ-2009-010 (BLM 2009)
- Establish additional desert tortoise study plot(s) or other monitoring methods, as necessary. Read plots at five-year intervals, or as necessary, as funding permits.

2.2.12 Lands and Realty

Goals, Objectives, and Management Actions

LR-1: Manage lands and realty actions to effectively support public needs and resource management objectives.

LR-1.1: The entire SDNM is an exclusion area for utility-scale renewable energy development and communication sites Land Use Authorizations.

LR-1.2 (Major Linear LUAs): Authorize major linear LUAs in locations that utilize designated multiuse utility corridors effectively.

LR-1.2.1: No existing or future multiuse utility corridors will be designated within the Monument.

LR-1.3 (Minor Linear and Nonlinear LUAs): Authorize minor linear and nonlinear LUAs in locations that minimize resource impacts, are compatible with multiple use objectives, and do not compromise the existing rights of current holders.

LR-1.3.1: Proposed minor linear and nonlinear LUAs will be prohibited in SDNM, a designated LUA Exclusion Area, unless they allow for:

- Access to private property in holdings when there is no other reasonable access alternative across non-federal land,
- Authorized emergency, public safety and administrative uses, and
- Uses that will further enhance the goals and objectives of the allocation, as permitted by the authorizing official.

LR-2: Manage land tenure to meet natural resource management objectives, community needs, and to promote agency efficiency.

LR-2.1: Determine interests in lands for consolidation, retention, disposal, and acquisition. Evaluate land tenure actions in accordance with the criteria established in the Arizona Land Tenure Adjustment Strategy.

LR-2.1.1: All 486,400 acres of public land will be retained.

LR-2.1.2 The BLM will continue to eliminate split estate situations by acquiring non-federal subsurface estates that lies beneath federal lands when there is a willing seller.

LR-2.1.3: The BLM will continue to eliminate split estate situations by disposing of federal subsurface estates when there are no known mineral values

LR-2.1.4: The BLM will not dispose of any subsurface mineral estates that lie under BLM managed surface estate.

LR-2.1.5: The BLM will seek land owners who are willing to sell private land interests within the Monument and proceed with acquiring these inholdings (surface and subsurface) as funding opportunities arise. See also WC-1.1.2.

LR-2.1.6: The BLM will seek landowners who are willing to sell partial private land interests (i.e., "easements") within the Monument in cases where the BLM cannot acquire fee-simple ownership in land interests, and proceed with securing the easements as funding opportunities arise.

LR-2.1.7: No lands are designated as being suitable for disposal within the Monument. Exchanges for lands within the Monument for other private lands within the Monument's boundaries will be permitted if they further improve the management of Monument objects and present no net loss to existing objects that will be impacted by the exchange.

Administrative Actions

- Continue to coordinate with the Maricopa County Department of Transportation, the Maricopa Association of Governments, Pinal County, the Arizona Department of Transportation, and the Federal Highway Administration for transportation activities that may affect public lands.
- Cooperate with the Western Utility Group and other industry groups to facilitate the exchange of information and coordinate planning efforts between federal agencies and utility providers through the western US.
- Promptly communicate new designations for land use, resource protection, safety, and security to the public and other agencies, as necessary.
- Activities to maintain existing facilities will be evaluated on a case-by-case basis, and if SDNM resources can be protected, approved.

2.2.13 Livestock Grazing

Allocations Summary

Table 2-5
Livestock Grazing Allocations for the SDNM

Allocation	BLM Acres	Management Action
Total Acres within SDNM	486,400	
Unavailable Acres from Proclamation [1]	155,900	
Unavailable Acres from Area A[2]	78,000	
Unavailable Acres[3] from RMP Decisions	95,290[3]	GR-2.1.3
Total Unavailable Acres	329,190	
Total Available Acres (see summary breakdown for each allotment in Table 2-7 below)	*157,210*	
Total AUMs[4]	3,318	GR-2.1.4

[1] Relinquished lands in BGR south of I-8.

[2] In accordance with the Monument Proclamation the allotments or portions of allotments south of I-8, within SDNM, were made unavailable to livestock grazing when the permits expired.

[3] Acreage includes approximately 8,500 acres (or 3.4%) of the area north of I-8 determined to be unavailable for livestock grazing through the Compatibility Analysis, plus 36,300 acres connected to or surrounding those acres, using a combination of fencing and topographic barriers and wilderness boundaries. Additionally, The Conley Allotment within the Monument boundaries will be unavailable for livestock grazing. These areas encompass a total of 95,290 acres that will be unavailable for livestock grazing.

[4] AUMs shown are prorated and reduced by 7,884 from the total permitted use due to the allotment closures south of I-8. AUMs were further prorated using current data compared to forage allocations suggested in the Lower Gila South RMP Resource Protection Alternative.

Table 2-6
Livestock Grazing Acres[1] for the SDNM North of Interstate 8 Only

Allotments	Available (BLM Acres)	Unavailable (BLM Acres)[2] (GR-2.1.3)
Arnold	1,610	0
Beloat	33,600	0
Big Horn	75,230	16,970
Conley	0	77,710
Hazen	31,930	0
Lower Vekol	14,800	610
Total	157,170	95,290

[1] These numbers reflect the numbers from the Land Health Evaluations and are estimated. The acreage totals shown in **Table 2-5**, Livestock Grazing Allocations for the SDNM, were rounded up for the land use plan-level decisions.

[2] Unavailable numbers come from the acres determined to be incompatible with Monument objects from the Compatibility Analysis, Proposed Compatibility Analysis:

Table 2-6
Livestock Grazing Acres[1] for the SDNM North of Interstate 8 Only

Livestock Grazing on the Sonoran Desert National Monument, and the acreage determined to become unavailable due to the projected boundary closures of the area based on fencing and topographic boundaries.

Goals, Objectives, and Management Actions

GR-1: Manage livestock grazing in the SDNM to provide for multiple uses while maintaining healthy ecosystems.

GR-1.1: Livestock grazing use and associated practices will be managed in a manner consistent with other multiple use needs and other desired resource condition objectives to ensure that the health of rangeland resources and ecosystems are maintained or improved. Management will achieve, or make significant progress toward achieving, Land Health Standards and produce a wide range of public values such as wildlife habitat, livestock forage, recreation opportunities, clean water, and functional watersheds.

General Management Actions

GR-1.1.1: All existing water developments will be evaluated, and modified as necessary, to provide the maximum benefit and minimum impact to priority wildlife and special status species.

GR-1.1.2: Grazing management on allotments categorized as "Maintain" and "Improve" may include rest rotation, deferred rotation, deferred, seasonal, short duration or other management practices to be implemented where needs are identified through monitoring. On "Custodial" allotments, grazing systems or season of use will be coordinated with the permittee, Arizona State Land Department, and/or Natural Resources Conservation Service.

GR-1.1.3: If grazing availability or classification differs for the Big Horn, Conley, Lower Vekol, Hazen, Beloat, and Arnold allotments outside SDNM versus inside the Monument boundaries, fencing or other control mechanisms will be installed to allow for management of Monument lands separately from the rest of the allotment before grazing could continue.

GR-1.1.4: Allotments may be classified as ephemeral in accordance with the Special Ephemeral Rule published December 7, 1968 through Rangeland Health Assessments during the permit renewal process. The BLM has established criteria and SOPs (see **Appendix D**, Best Management Practices and Standard Operating Procedures) based upon the Special Rule through which allotments can be classified and managed as ephemeral. These criteria include:

- Rangelands are within the hot desert biome;

- Average annual precipitation is less than eight inches;
- Rangelands produce less than 25 pounds per acre of desirable perennial forage;
- The vegetative community is composed of less than five-percent desirable forage species;
- The rangelands are generally below 3,500 feet in elevation;
- Annual production is highly unpredictable and forage availability is of a short duration;
- Usable forage production depends on abundant moisture and other favorable climatic conditions; and
- Rangelands lack potential to improve existing ecological status and produce a dependable supply of forage through intensive rangeland management practices.

GR-1.1.5: The Arizona Guidelines for Grazing Administration, as approved in the Arizona Standards for Rangeland Health and Guidelines for Grazing Administration (1997), will apply where appropriate to all livestock grazing activities (**Appendix B**, Guidelines for Grazing).

GR-1.1.6: Land not allocated for livestock use will remain unallocated for this use and its forage and other vegetation will be reserved for wildlife and non-consumptive uses.

GR-1.1.7: If an evaluation of land health standards identifies an allotment where land health standards cannot be achieved under any level or management of livestock use and where current grazing use has been identified as the causal factor, then decisions identifying those areas as available for livestock grazing will be revisited.

GR-1.1.8: Should a livestock grazing permit be relinquished, the allotment and associated resources, and public uses will be evaluated to determine the appropriate allocation of available forage.

GR-1.1.9: One-time travel off of designated routes may be approved with written authorization from the authorized officer to access sick or injured livestock. See also TM-4.2.3.

GR-1.1.10: Construction of new livestock waters in Category I and Category II desert tortoise habitat and in bighorn sheep habitat will be addressed on a case-by-case basis.

GR-1.1.11: Range improvement permits and cooperative range improvement agreements shall specify the standards, design, construction and maintenance criteria for the range improvements and other additional conditions and stipulations or modifications deemed necessary. The extent, location and timing of such actions will be based on allotment-specific management objectives adopted through the evaluation process, interdisciplinary development and analysis of proposed actions, and funding.

GR-2: Manage livestock grazing in the SDNM Decision Area to provide for multiple uses while maintaining healthy ecosystems and protecting the Monument's biological and cultural resources.

GR-2.1: Public lands in SDNM north of I-8 available to livestock use will be managed to achieve or make significant progress toward achieving Land Health Standards to ensure that the health of the biological resources are maintained or improved. Livestock grazing use and associated practices will be managed in a manner consistent with other multiple use needs and other desired resource condition objectives to ensure that the health of rangeland resources and ecosystems are maintained or improved.

GR-2.1.1: Pursuant to the Monument Proclamation, the grazing permits for the allotments south of I-8, within SDNM, were not renewed upon expiration. The public lands South of I-8, within SDNM, will remain unavailable for livestock use and the grazing preferences, attached to the base properties, for permitted use on the allotments will be cancelled. Forage previously allocated for livestock grazing (7,255 AUMs) will be available for other resource uses such as wildlife habitat, watershed values, recreation, etc.

GR-2.1.2: Domestic goats or sheep will not be permitted.

GR-2.1.3: 95,290 acres will become unavailable to livestock grazing use within allotments north of I-8 through a combination of fencing and natural barriers. Allotment-specific unavailable acres (rounded to nearest 10 acres):

- 16,970 acres within the Big Horn allotment
- 77,710 acres within the Conley allotment, and
- 610 acres within the Lower Vekol allotment.

(Total of 8,500 incompatible acres, 36,300 pasture fencing acres and remaining 50,490 acres in Conley allotment). See **Map 6**, Livestock Grazing.

GR-2.1.4: 3,318 AUMs are permitted in the SDNM.

Administrative Actions

- Existing range developments in areas not allocated for livestock use may be removed if not necessary for management of other resources.
- Develop a monitoring plan for allotments as needed to determine and track ecological condition and trend.
- Livestock management changes may be made based on assessment, inventory, or monitoring data. Develop and implement a monitoring plan on the SDNM to determine and track ecological condition and trend. The plan will include:

Monitoring previously established study sites in allotments that will continue to be grazed, and establishing new key areas as needed. Data will be used to support grazing management decisions.

Monitoring previously-established study sites in the allotments not to be grazed and establishing new sites as needed. Location of sites should be established based on resource management goals. Data will be used for comparison to grazed areas and historical data to track resource responses to management changes.

- Establish frequency and intensity of monitoring effort.
- BLM will develop a monitoring program based upon the land health evaluation methodology to determine any effects on Monument objects, not limited to livestock use.

2.2.14 Minerals Management

Allocations Summary

As stated in the Proclamation, the SDNM is withdrawn from all mineral entry and closed to all leasable and salable minerals.

Administrative Actions

- Recognize the superior right to explore for and mine mineral resources on those split estate lands where the BLM manages the surface and the subsurface estate is owned by the State of Arizona or private entities. Develop an MOU with the state to establish procedures to protect SDNM resources from the effects of exploration and mining on SDNM to the greatest extent possible.

2.2.15 Recreation Management

Allocations Summary

Table 2-7
Recreation Allocations

Recreation Management Area / Zone	BLM Acres	Management Action
Sonoran Desert ERMA	486,400 (100%)	RM-1.2
Desert Back Country RMZ	433,600	RM-1.2.4
Juan Bautista de Anza NHT RMZ	52,800	RM-1.2.1
Undesignated Lands	0	
Total Acres	*486,400 (100%)*	

Goals, Objectives, and Management Actions

RM-1: Establish Extensive Recreation Management Areas (ERMAs) and associated zones where specific management considerations are necessary to address recreation use,

demand, or recreation program investments commensurate with the management of other resources and resource uses while sustaining the principal recreation activities and associated qualities and conditions of the area.

RM-1.1 (General Recreation): Through the life of the plan, 90% of sampled visitors report satisfaction with their recreation experience.

General Recreation Management Actions and Allowable Uses

RM-1.1.1: All proposed management actions will conform to the settings described for each recreation allocation.

Camping, Parking, Facilities, and Other

RM-1.1.2: Camping on all lands open to the public will be allowed in accordance with 43 CFR 8365 unless otherwise closed.

RM-1.1.3: Except where otherwise specified, camping will continue to be limited to no more than a period of 14 days within any period of 28 consecutive days and, after the 14th day of occupation, the camper will be required to move outside of at least a 25-mile radius of the previous location until the 29th day since initial occupation.

RM-1.1.4: Vehicle-based camping and parking along roads and primitive roads will be strongly encouraged through visitor information, education, and signing to assist visitors in selecting and using existing camp and parking sites that show clear evidence of prior use. Existing and suitable sites is indicated or evidenced by the following: vehicle access to the site, lack of vegetation, bare mineral soils, and other dispersed campsite amenities such as fire rings. Existing vehicle parking and camping sites must be large enough to accommodate the group size without increasing the disturbed area. See also CH-1.1.3, SL-2.1.3, and TM-6.1.1.

RM-1.1.5: Camping facilities and length-of-stay limits will be developed and adjusted to sustain the prescribed settings and attain the desired objectives of the recreation management area(s) (RMA) or undesignated lands for dispersed camping or managed camping areas.

RM-1.1.6: Long term visitor areas will not be designated.

Geocaching Activities

RM-1.1.7: The placement of geocaches is prohibited in archaeological and raptor nesting sites. Virtual caches may be allowed within archaeological sites with prior written authorization from the authorized officer.

RM-1.2. (SDNM ERMA): Provide modest facilities, educational opportunities, and visitor information to the extent that 90% of sampled visitors report satisfaction with their recreation experience. The Sonoran Desert National Monument ERMA will be designated (486,400 acres)

to provide for recreation opportunities and outcomes that derive from the objects for which the National Monument was designated.

RM-1.2.1 (Juan Bautista de Anza NHT Recreation Management Zone [RMZ]): To provide recreation and educational opportunities directed at visitors seeking to discover, tour, and learn about the Juan Bautista de Anza National Historic Trail (NHT), Arizona history, and natural history of the Sonoran Desert.

RM-1.2.1.1: The Juan Bautista de Anza NHT (Anza) RMZ will be designated within the SDNM ERMA (approximately 52,800 acres).

RM-1.2.1.2: The physical, social and administrative settings for the Anza RMZ will be managed for 72% Front Country, 28% Back Country and <1% Passage. See **Appendix C**, Recreation Setting and Worksheets, for definitions.

RM-1.2.1.3: physical, social and administrative settings for the Anza RMZ will be managed for 31% Front Country, 68% Back Country and <1% Passage.

RM-1.2.1.4: Physical, social and administrative settings for the Anza RMZ will be managed for 45% Front Country, 55% Back Country and <1% Passage

RM-1.2.1.5: The motor vehicle travel system will consist primarily of primitive roads maintained at levels 1-3 with up to 20% maintained at level 5 to provide two-wheel-drive passenger car access to public use cultural sites, day use areas and camping facilities.

RM-1.2.2: In the Anza RMZ, vehicle-based camping (including RVs) will be allowed at designated sites only. A maximum of 100 sites could be designated over the life of the plan, subject to site-specific analysis and monitoring. Cross country travel to access campsites will be prohibited. Specific sites identified as open and/or available for camping will be periodically reviewed and modified based on public demand and resource protection needs within the SDNM.

RM-1.2.3: The zone will be managed mostly for VRM Class II with small portions of Class III near high use recreation areas (see **Map 3**, Visual Resource Management). See also VR-3.1.1.

RM-1.2.4. (Desert Back Country RMZ): To provide recreation opportunities for visitors seeking a remote, undeveloped, back country experience with resource-dependent activities such as hunting, camping, hiking, sightseeing, and four-wheel-drive touring.

RM-1.2.4.1: The Desert Back Country RMZ will be designated (433,600 acres; see **Map 7**, Recreation Management).

RM-1.2.4.2: The physical, social and administrative settings for the Desert Back Country RMZ will be managed for 12% Front Country, 88% Back Country and <1% Passage.

RM-1.2.4.3: The motor vehicle travel system will consist primarily of primitive roads maintained at levels 1-3 with up to 5% maintained at level 5 to provide two-wheel-drive passenger car access to public use cultural sites, day use areas and camping facilities.

RM-1.2.4.4: In the Desert Back Country RMZ, dispersed vehicle-based camping (including RVs) will be allowed on existing or suitable sites as defined in RM-3.1.9. Cross country travel to access campsites will be prohibited. Over the life of the plan, designated sites will be established as the need arises to ensure the protection of Monument objects and other sensitive resources.

RM-2.1.2.5: The zone will be managed shown on **Map 7**, Recreation Management.

RM-2.1. (SDNM General Recreation): Manage for recreation opportunities that derive from the vast, undeveloped, and remote character of the SDNM landscape, providing for the minimum of visitor assistance necessary to ensure visitor health and safety to the extent that 90% of sampled visitors report satisfaction with their recreation experience.

RM-2.1.1: The Sand Tanks Mountains area of the SDNM commonly known as "Area A" will be designated as a Special Management Area. Access to the area will continue to require the Barry M. Goldwater Air Force Range entry and public safety permit (for the BLM, these are managed as Individual Special Recreation Permits).

RM-2.1.2: Motorized and mechanized use will be limited to areas within designated roads, primitive roads, and trails with reasonable use of the shoulder and immediate roadside allowing for vehicle passage, emergency stopping, or parking unless otherwise posted.

RM-2.1.3: Collection of native vegetation as firewood will be prohibited in Front Country and Passage settings. Visitors will be encouraged to bring firewood for campfires from sources outside the Monument. The burning of pallets, crates, and similar materials will be prohibited to prevent the accumulation of nails and staples at campsites.

RM-2.1.4: Visitor and management infrastructure will be constructed and maintained to accommodate visitation in balance with protection of Monument objects; will be modest in scope and scale; and will be designed to blend with the dominant features of the landscape.

RM-2.1.5: Visitor and management infrastructure will be placed on non-Monument lands, where possible.

RM-2.1.6: Activities, vehicles, and group sizes will be limited to designated sites and lengths of stay; types and speeds; and numbers as deemed necessary to protect Monument objects.

RM-2.1.7: The designated motorized travel system will consist primarily of existing vehicle routes; however, construction of short segments of new vehicle routes to provide experience opportunities consistent with the outcome objective(s) of management zones will be allowed.

RM-2.1.8: Standards for the management of recreation impacts on objects of the SDNM will be established and monitored by the limits of acceptable change (LAC) method.

Recreational Target Shooting

RM-2.1.9: Recreational target shooting will be allowed on National Monument lands except as specifically restricted in this land use plan or prohibited by federal and state law. This activity may be or may become restricted or prohibited in specific areas where public safety and resource conflicts exist or become identified if active management and cooperative efforts fail to meet resource and safety goals, including the need to protect Monument objects. For the protection of Monument objects, to avoid undue degradation of natural resources, and for the safety of visitors, supplementary rules will be developed to allow enforcement of actions as described in the Administrative Actions following the Recreation Section of this plan. Shooters are encouraged to follow best management practices as outlined in **Appendix D**, Best Management Practices and Standard Operating Procedures.

Special Recreation Permits (SRPs)

RM-2.1.10: At the discretion of the authorized officer, SRPs will be authorized on a case-by-case basis as outlined in 43 CFR 2930.5; in subsequent policies and guidance (See **Appendix D**, Best Management Practices and Standard Operating Procedures); and in the decisions below. See also CH-2.1.5, WC-1.1.13.

RM-2.1.11: Organized groups numbering greater than 25 participants will require a special recreation permit. See also CH-2.1.6.

RM-2.1.12: To ensure protection of Monument objects, permits will not be issued for organized groups of more than 200 participants at one site.

RM-2.1.13: Competitive motor sports will not be allowed in the SDNM.

RM-2.1.14: All commercial, other competitive, and vendor activities will be permitted on a case-by-case basis if Monument objects are protected.

RM-2.1.15: Certified weed-free feed will be required for all equestrian and stock animal uses authorized under SRPs.

Paintball Activities

RM-2.1.16: Paintball activities will be prohibited.

Administrative Actions

- Coordinate with partners and nearby land owners and managers to develop joint campgrounds on and off public lands to provide for public camping needs.
- Develop partnerships and volunteer opportunities with local clubs, organizations, and communities to maintain and monitor routes, recreation sites, and other areas.
- Develop brochures, maps, and information sheets to disseminate recreation use information to the public.
- Coordinate with adjoining landowners; Maricopa, Pima, and Pinal counties; and local communities to enhance visitor and resident safety, improve resource protection, and manage recreation use and access that is compatible with protecting resources.
- Plan, designate, and develop recreation areas, routes, trails, tours, and management strategies through interdisciplinary plans with community and user input. Project plans will establish use indicators and standards for monitoring and evaluation. All development must be compatible with ERMA and RMZs, VRM classes, and resource management objectives. Areas may be developed as needed for the following purposes:
    - Protecting resources,
    - Improving visitor safety, and
    - Maintaining desired recreational setting and experiences.
- The BLM will collaborate with the Wildlife and Hunting Heritage Conservation Council, other interested stakeholders, and the public to implement management of recreational target shooting in the future.
- Coordinate with partners and nearby land owners/managers to develop regional shooting ranges outside the SDNM boundaries to support concentrated recreational target-shooting activities.
- Coordinate with interested shooting enthusiasts to develop partnerships for educating the shooting public in appropriate recreational and shooting behaviors and ethics.
- Work collaboratively with adjoining landowners, local communities, and interested individuals and organizations to incorporate the allowable uses and desired outcomes of this land use plan into comprehensive, activity-level recreation planning for the SDNM. Such activity-level planning and related site-specific projects will be designed to protect Monument objects, resources and visitor safety while providing desired recreation experiences and settings. For example, the BLM may consider recreational target shooting with further travel management planning (e.g. locating roads, trails and facilities that support motorized and non-motorized travel in the SDNM) hiking trails and trailheads, or other visitor facilities. Additional planning will include appropriate NEPA analysis to address potential site specific impacts.
- Develop educational materials and signage to inform the public about how to conduct target shooting activities in ways that avoid impacts on natural resources and monument objects. These materials will also educate visitors about the laws concerning littering, unnecessary damage to natural resources, "'Leave No Trace!" principles, and Arizona Cactus and native plant laws as they apply. These materials will be developed and installed or distributed to the public as soon as possible.
- Dedicate sufficient law enforcement to the National Monument to ensure continued illegal conduct will cease and Monument objects will be protected. This will be particularly important until users become accustomed to the new rules created by this RMP and until the partnerships

described above are able to assist with management of recreational target shooting on the Monument.

- Prepare supplementary rules, closure or restriction orders, and arrange for enforcement of the rules of conduct applicable to public lands in order to minimize any adverse impacts of recreational shooting. The monument will remain open to recreational target shooting.
- Prepare supplementary rules in order to provide BLM Law Enforcement full authority to enforce certain restrictions on the monument with regard to target shooting pursuant to the BLM's authority under 43 CFR 8365.1-6 (including appropriate environmental analysis in compliance with NEPA). For example, a future supplementary rule could include, although not be limited to, the following:
    (a) Only retrievable, freestanding paper targets or targets commercially manufactured for the specific purpose of target shooting are allowed.
    (b) Shooting glass objects, electronic items and waste, and items that may contain hazardous materials (i.e. paint, spray paint, gasoline, Freon, propane, etc.) is prohibited.
    (c) Depositing or shooting appliances, furniture, electronic gear, toys, trash, household or construction products/refuse, or other debris determined to be garbage, refuse or waste by law enforcement or other authorized officers is prohibited.
    (d) Attaching or placing targets on or in front of plants, rocks, or solid objects, signs and public infrastructure is prohibited.
    (e) Shooting, injuring, defacing, harming or destroying plants, signs, outbuildings, public property, or other objects on federal lands that are for the public's enjoyment is prohibited.
    (f) Shooting across or along any numbered BLM road, primitive road, vehicle route or trail, or within any BLM-designated recreation site, facility, trailhead, parking or staging area is prohibited.
    (g) Persons engaged in target shooting shall pick up and remove shell casings, brass, targets, shrapnel, clay pigeon fragments, and all other debris resulting from target shooting activities.
    (h) Discharge of a firearm is prohibited from 30 minutes after sunset to 30 minutes before sunrise.
    (i) Using bullets to detonate explosives or an explosive device is prohibited.
- Patrol and monitor recreational target shooting sites. Monitoring will include a range of possibilities from regular periodic visits to take pictures and document visible changes, to repeated measurement of site characteristics including vegetation, soils, barren areas, trash, or other characteristics as appropriate. BLM will collaborate with interested publics to develop monitoring standards and methodologies for recreation activities on the Monument that address protection of Monument objects. Monitoring of activities such as recreational target shooting, camping, motorized recreation, visitation in wilderness areas, and others, will be conducted to ensure future protection of Monument objects and to inform appropriate changes in Monument management.
- Exercise authority pursuant to 43 CFR. 8364.1 (including appropriate environmental analysis in compliance with NEPA) to close areas or restrict recreational target shooting in order to protect persons, property, and public lands and resources.

- As set forth in the BLM's regulations at 43 CFR Subpart 8365, the rules of conduct applicable to the public lands apply in the SDNM. Violation of these regulations will result in penalties as set forth in 43 CFR 8360.0-7.

2.2.16 Travel Management

Allocations Summary

Table 2-8
Off-Highway Vehicle Area Designations (BLM Acres)

Allocation	Acres	Management Action
Open	0	TM-1.1
Closed	157,700	TM-1.2.1
Limited to Designated Routes	328,700	TM-1.3.1
Total	486,400	

Goals, Objectives, and Management Actions

TM-1: All public land will be classified as open, closed or limited per 43 CFR 8342.1. See Map 8, Travel Management.

TM-1.1: No areas within the SDNM will be allocated open (zero acres).

TM-1.2: Close areas of the SDNM to motorized-vehicle activities for the purposes of protecting Monument objects and resources; and meeting associated conservation, restoration, and public safety goals over the lifetime of the plan.

TM-1.2.1: Approximately 157,700 acres of designated wilderness will remain closed to motorized use.

TM-1.3: Limit motorized vehicle use in SDNM to designated roads or primitive roads to minimize impacts on Monument objects; other resources; and to reduce or eliminate resource, visitor, and behavior-based conflicts over the lifetime of the plan.

TM-1.3.1: Approximately 328,700 acres will be limited to designated roads, primitive roads and trails. All other vehicles (e.g., bicycles, stock drawn carts/wagons, and other devices for conveyance) will be limited to primitive roads designated as open for such use.

TM-1.3.2: Motorized vehicles will be required to be "street legal" (licensed and registered), display a valid Arizona OHV sticker, be compliant with current or future state, county or local licensing, certification or authorization requirements, and be operated by licensed drivers.

TM-1.3.3: Restrictions from other resource section management actions will apply including, WL-1.1. 4.

TM-2: Public use, resource management, and regulatory needs are met by development of a travel management plan and implementation of a travel management system (see Appendix E, SDNM Travel Management Plan, and Map 9, SDNM Route Designations.).

TM-2.1: Delineate areas where community interests or a manageable geographic boundary exists and address landscape issues in a programmatic manner.

TM-3: Protect Monument objects from human impacts associated with motorized and non-motorized travel within the SDNM.

TM-3.1: Manage areas for resource protection, conservation, restoration, and public safety using the OHV area allocation closed.

TM-3.1.1: Camping will be allowed in closed areas when accessed by non-motorized, non-mechanized means.

TM-3.1.2: The use of wheeled game carriers will be prohibited in wilderness areas. Elsewhere, non-motorized, hand-powered, wheeled game carriers will be permitted to travel cross-country for the purpose of retrieving downed game. Retrieval of downed game by cross-country motor vehicle use is prohibited.

TM-3.2: Manage areas by structuring travel for visitor use and enjoyment, resource protection, conservation, and restoration using the OHV area allocation limited over the lifetime of the plan.

TM-3.2.1: Camping would be allowed in closed areas when accessed by non-motorized, non-mechanized means.

TM-3.2.2: The use of wheeled game carriers would be prohibited in wilderness areas. Elsewhere, non-motorized, hand-powered, wheeled game carriers would be permitted to travel cross-country for the purpose of retrieving downed game. Retrieval of downed game by cross-country motor vehicle use is prohibited.

TM-3.3: Manage areas by structuring travel for visitor use and enjoyment, resource protection, conservation, and restoration using the OHV area allocation limited over the lifetime of the plan.

TM-3.3.1: Designated routes within washes are closed from April 15-August 31 to address the forage, shelter, breeding, and thermal cover protection provided by washes as a component of wildlife habitat.

TM-4: Provide a comprehensive travel management system that supports protection of Monument objects, facilitates resource protection, and provides sustainable public use and enjoyment.

TM-4.1: Pursue and secure legal access when possible over the lifetime of the plan.

TM-4.1.1: Legal or permissive access will be secured to all identified access points to designated routes within 10 years of final route designation. Identified access points including legal descriptions may be found in **Appendix F**, Possible Easement Locations.

TM-4.1.2: Access to public lands will be restricted along urban interface as needed to protect Monument values and objects or at the request of adjoining land owners.

TM-4.2: Assign BLM road maintenance intensity levels on designated roads as a part of travel management planning and make adjustments as needed as maintenance of the travel management plans.

TM-4.2.1: Roads and primitive roads could be redeveloped to meet either Level 5 maintenance intensity (the highest BLM standard) or the Level 3 standard as necessary to satisfy Objective 4.2 and prescriptions in TM- 4.2.2 or TM 4.2.3. Level 1 roads are primitive and will not be maintained except to correct safety hazards or resource problems such as erosion.

TM-4.2.2: Up to 10 percent of designated Monument roads/primitive roads may be assigned to Level 5 maintenance standards (passenger-car access) or Level 3 maintenance standards. Level 5 and 3 maintenance level assignments may be adjusted or assigned as necessary to ensure that motorized travel routes:

- Are compatible with protection of Monument objects and resources;
- Achieve the Monument's desired social and managerial recreation settings;
- Meet established limits of acceptable change indicators and standards;
- Satisfy biological and ecological land health standards;
- Protect or mitigate effects on cultural resources;
- Ensure visitor and agency staff safety;
- Resolve erosion, air quality, or resource damage issues;
- Offer sustainable access to popular Monument features, as well as recreation and national historic trail attractions; and
- Meet water quality standards for influenced drainages and watersheds.

TM-4.2.3: One-time travel off of designated routes may be approved with authorization from the authorized officer to access sick or injured livestock. Use of vehicles for livestock herding is prohibited. See also GR-1.1.9.

TM-4.3: Minimize the effects of the route system on the Monument and its objects and implement mitigation strategies as needed to resolve conflicts.

TM-4.3.1: Mitigation strategies will be identified and required to reduce the effects of routes and their use. Examples of typical actions are shown in **Appendix H**, Route Mitigations.

TM-5: Manage the travel management system to protect resources and maintain desired recreation experiences.

TM-5.1: Determine the compatibility of emerging issues such as new vehicle technology or new or proposed recreation uses or use areas such as technical vehicle-use sites or motorcycle-observed trials. Proposals for using new recreation technologies or activities will be evaluated and a decision made to proceed or deny the use or proposal as funding and staffing allows.

TM-5.1.1: Travel management assets or their maintenance intensity shall not be changed without NEPA and a travel plan amendment. Road maintenance activities can only be completed with approval of the authorized BLM officer. This includes all permitted activities that use designated routes such as ranching, mining and other authorized activities.

TM-5.1.2: Adjustments to the designated route network may be requested by the public following the process set forth in **Appendix S**, Route Evaluation Methodology from the Lower Sonoran-SDNM PRMP/FEIS.

TM-5.1.3: Areas affected by legal off-route travel, such as law enforcement-pursuit and wildfire suppression, will be restored within one year of the incident.

TM-5.2: All travel modes and uses on the SDNM travel system must be consistent with the travel management plan and Monument objects and resources. The BLM shall respond promptly to proposals for additional travel modes and uses (as funding and staffing allows).

TM-5.2.1: New travel technologies and uses will be evaluated on a case-by-case basis with community and user input. Compatibility evaluations will be developed as needed to ensure protection of Monument objects and resources, provide compatible and sustainable experiences based on Monument Objects and resources, and visitor safety. The compatibility analysis will establish limits of acceptable change indicators and standards. All uses will be compatible with protection of Monument objects, the Monument's social and managerial recreation settings and VRM standards; the Monuments biological and ecological land health standards; protection of cultural resources; and water quality standards for influenced drainages and watersheds.

TM-6: Protect Monument objects and resources, meet conservation and restoration goals, ensure sustainable public use and enjoyment, and satisfy public safety and regulatory requirements by developing a travel management plan and implementing a sustainable and compatible travel management system.

TM-6.1: Implement a networked system of roads, primitive roads and trails within 1 year of plan completion.

TM-6.1.1: The use of motorized or mechanized vehicles off designated roads or primitive roads will be prohibited with the following management restriction:

- Motorized and mechanized use will be limited to areas within the designated route with reasonable use of the shoulder and immediate roadside allowing for vehicle passage, emergency stopping, or parking unless otherwise posted
- Non-motorized, hand-powered wheeled game carriers will be permitted to travel cross-country (except in wilderness areas) for the purpose of retrieving downed game on public lands. See also CH-1.1.3, SL-2.1.3, and RM-1.1.4.

TM-6.1.2: A travel management plan will be implemented upon plan approval, including designating roads, primitive roads and trails that are open, closed or limited by use type or time, and allocating maintenance class. See **Appendix E**, Travel Management Plan.

Administrative Actions

- Develop of standards for monitoring the route system to be compliant with laws, regulations, and travel management plan goals and objectives
- Establish agreements with local interest groups and communities for long-term route maintenance and community support.
- Participate in regional or municipal transportation planning and promote appropriate legal access consistent with the land use plan.
- Establish a framework for reviewing the travel management program and make necessary changes to meet land health standards, area management, and recreation goals.
- Address casual and authorized recreational uses of the travel system when authorizing actions. Where major arteries in the recreational route network will be truncated or considerably altered by the authorization, mitigation will be required
- Consider adjustments to route designations, including adding, removing, and redeveloping routes and access, when necessary. Criteria for route designation adjustments can be found in **Appendix S**, Route Evaluation Methodology from the Lower Sonoran-SDNM PRMP/FEIS, and **Appendix D**, Best Management Practices and Standard Operating Procedures, Travel Management subsection.
- Develop brochures, maps, access guides, and information sheets to disseminate targeted recreation opportunity information to the public.
- Develop and maintain a monitoring system to support implementation and management of motorized and non-motorized use of the public lands, including routes and access points.
- Implement route-mitigation techniques when designing and implementing the route system.
- In areas where access permits are required, coordinate with other agencies that issue use permits on public lands to provide reasonable access for their permitted activities. For example, the BLM and AGFD will coordinate hunter access into permit-required access areas for hunters with valid hunting licenses for the affected hunting unit.

Support the development and implementation of regional or municipal transportation plans that protect or promote appropriate legal access to public lands and are consistent with resource and use objectives.

- Establish relationships and enter into agreements with local OHV groups and other groups and communities for long-term route maintenance and community support.
- Respect valid existing rights.

- Support development and implementation of regional and municipal transportation plans that protect or provide appropriate legal access to the SDNM and protect its resources and management objectives.
- Where needed, identify the SDNM boundary with appropriate fencing, signs, and other structures.
- Portions of the SDNM may be closed as needed to accommodate safety, weather, resource protection, specific projects, or staffing constraints.

2.2.17 National Byways

Allocations Summary

Table 2-9
Potential Byway Designations (BLM Miles)

Allocation	BLM Miles	Management Action
Interstate 8	21	NB-1.1.3
H-238 Maricopa Road (paved)	18	NB-1.1.2

Goals, Objectives, and Management Actions

NB-1: Provide opportunities for the American public to see and enjoy unique scenic and historic landscapes on public lands deemed to have state or national significance.

NB-1.1: Identify and evaluate potential roads that meet nomination criteria for BLM National Scenic or Back Country Byway designation.

NB-1.1.2: Approximately 18 miles of Highway 238 (Maricopa Road) will be evaluated as a scenic byway (**Map 10**, Special Designations).

NB-1.1.3: Approximately 21 miles of I-8 will be evaluated as a scenic byway (**Map 10**, Special Designations).

NB-2: Promote regional development of eco- and recreational tourism through designation of BLM National Scenic and Back Country Byways and by managing public lands along potential byway corridors to protect the quality of scenic values.

NB-2.1: Maintain open space and the undeveloped natural character of landscapes within the specified byway corridor. Desert landscapes provide visitors with unique scenic and back country experience while traversing the diverse Sonoran Desert, including saguaro cactus stands, rugged mountains, and vast valleys. These landscapes also offer glimpses of traditional western uses, including historic trail corridors, mining, agriculture, and ranching.

NB-2.1.1: Surface-disturbing uses and activities along byways will exceed or at minimum maintain the visual quality consistent with the established VRM setting through project design or mitigation.

NB-2.1.2: Protective measures will be provided in wildlife-movement corridors to protect wildlife. Measures may include setting speed limits, installing speed bumps or other speed-limiting devices, and installing cautionary signs.

NB-2.1.3: No motorized competitive speed events will be authorized on the byways.

2.2.18 National Trails

Goals, Objectives, and Management Actions

NT-1: Manage the Juan Bautista de Anza National Historic Trail corridor through the SDNM through focused management strategies.

NT-1.1: Manage the historic trail corridor on the SDNM to enhance the experience of visitors, maintain the integrity of the historic trail and associated trail sites, and the visual setting throughout the life of the plan. See also VR-1.1.7.

NT-1.1.1: The Juan Bautista de Anza NHT corridor (Anza NHT) will be managed consistent with the National Park Service (NPS) management plan and in cooperation with the NPS (**Map 10**, Special Designations).

NT-1.1.2: Allocate one Juan Bautista de Anza NHT Management Area (**Map 10**, Special Designations).

NT-1.1.3: Retain public lands and acquire available state and private lands from willing sellers and/or easements to ensure long-term use, protection, and access to areas along the Juan Bautista de Anza NHT corridor and within the Anza NHT Management Area.

NT-1.1.4: The Anza NHT corridor and the Anza NHT Management Areas will remain closed to all minerals actions.

NT-1.1.5: The Anza NHT corridor and the Anza NHT Management Area will be an exclusion area for major utility-scale renewable energy development and new major linear LUAs.

NT-1.1.6: The Anza NHT corridor will be an exclusion area for all minor linear and nonlinear LUAs except as described in the Lands and Realty section (see **Section 2.2.12**). LUAs will be mitigated to be consistent with management objectives and prescriptions, and only if impacts are determined to have a negligible to minor effect to resources.

NT-1.1.7: Identify and obtain rights-of-way on selected areas along the Anza NHT corridor and within the Anza NHT Management Area to support National Trail purposes and further trail management objectives.

NT-1.1.8: Cultural sites along the NHT and the Anza NHT Management Area will be identified and developed as allocated in the appropriate use categories and according to management actions and prescriptions identified in the Cultural and Heritage Resources section for all use categories (**Section 2.2.3**, Cultural and Heritage Resources).

NT-1.1.9: Recreation opportunities will be provided consistent with the Anza NHT objectives. Facilities will be developed and placed outside the trail corridor to protect resource values, provide for visitor safety, and support selected use opportunities. Facilities will be developed within the trail corridor only when needed to protect trail integrity and resources, or to establish an Anza NHT recreation retracement route.

NT–1.1.10: Access points and routes needed to access the Anza NHT corridor and the Anza NHT Management Area will be identified and prioritized during travel management planning. Legal access will be secured within 5 years of route designation to ensure public access to the areas.

NT-1.1.11: The Anza NHT corridor and the Anza NHT Management Area will be managed in concert with the Sonoran Desert SCRMA and the Anza Historic Trail RMZ as identified in the Cultural and Heritage Resource and Recreation Management sections (see **Sections 2.2.3** and **2.2.15**, respectively).

NT-1.1.12: The historic landscape and visual values of the Anza NHT corridor and the Anza NHT Management Area will be protected to provide the visitor with an opportunity to appreciate the historic character of the area.

NT-1.1.13: Vegetation will be rehabilitated and restored in the Anza NHT corridor and the Anza NHT Management Area consistent with the natural resource restoration objectives to restore or maintain the integrity of the landscape.

NT-1.1.14: A strategy will be developed to encourage scientific and historical research within the Anza NHT corridor and the Anza NHT Management Area as appropriate with management prescriptions and only if designed to have a negligible or minor effect on resources.

NT-1.1.15: Scientific and historical studies of cultural landscapes, sites, historic trails, and other resources, including excavation, will be allowed by qualified researchers on a case-by-case basis within the Anza NHT corridor and the Anza NHT Management Area and with written authorization from the BLM.

NT-1.1.16: Heritage tourism will only be allowed along the Anza NHT auto route when such use is compatible with protecting the cultural and historical resources and visual values.

NT-1.1.17: The Anza NHT auto route will be marked and promoted as appropriate and consistent with Cultural and Heritage Resource and Travel Management actions designations and prescriptions identified in this plan (see **Sections 2.2.3** and **2.2.15**, respectively).

NT-1.1.18: The Anza NHT corridor and the Anza NHT Management Area will be managed to retain, and restore where appropriate, the physical integrity of the sites and trails through inventory, evaluation, rehabilitation and restoration of vegetation.

NT-1.1.19: Acquire parcels that exhibit characteristics consistent with the landscape setting, or important to management of the National Historic Trail, from willing buyers when funds are available and the parcels are reasonable priced.

Administrative Actions

Inventory

- Perform field inventories, document, and map historic trail resources and associated cultural resources along the Anza NHT.
- Perform recreational inventories along the Anza NHT to identify high potential sites and segments. Make determinations of suitability for installation of recreational trail tread and interpretive developments.
- Perform viewshed analysis on selected Anza NHT segments with priority given to high potential route segments.
- Collect GPS data to Federal Trails Data Standards on the Anza NHT resources and use GIS mapping.

Monitoring

- Perform condition assessments on selected segments of the Anza NHT, with a priority on the high potential route segments.
- Implement procedures for systematic monitoring of the Anza NHT management corridor, including associated sites and trail resources.

Restoration

- Perform mitigation and/or landscape restoration in priority areas along the Anza NHT, where incompatible activities have altered the historic landscape and visual setting of the trail.

Research

- Perform archival research on the history and subsequent uses of the Anza NHT.
- Establish collaborative partnerships with academic institutions, professional and non-profit organizations, individual scholars, tribes, and other entities to perform research on Anza NHT related topics.

Interpretation and Education

- Develop interpretive materials and facilities for selected sites.
- Provide educational materials and opportunities to the public pertaining to the Anza NHT.

Tribal Consultation

- Continue to consult with the Gila River Indian Community, the Ak-Chin Indian Community, the Salt River Pima-Maricopa Indian Community, the Tohono O'odham Nation, the Hopi Tribe, and other interested Indian tribes to identify places of traditional importance.

Partnerships

- Coordinate with partner groups, interest groups, interested individuals, local communities, and other stakeholders on Anza NHT issues and projects.
- Consult and collaborate with the NPS, the administrator of the Anza NHT.

2.2.19 Hazardous Materials and Public Safety

Goals, Objectives, and Management Actions

PS-1: Manage hazards and public use to protect public health and safety.

PS-1.1: Identify naturally occurring or manmade public safety hazards on public lands and take appropriate action to protect public health and safety.

PS-1.1.1: Priorities for remediation of physical safety hazards will be set using the following criteria:

- Where a death or injury has occurred;
- Where site is on or in immediate proximity to a recreation site or a known high use area;
- Where a formal risk assessment has determined a high or extremely high risk level.
- The site is eligible for listing in the Abandoned Mines Cleanup Module of Protection and Response Information System

PS-1.1.2: Priorities for remediation due to water quality issues will be set using the following criteria:

- The state has identified the watershed as a priority based on: water laws or regulations, threat to public health or safety, threat to environment;
- The project is a collaborative effort among multiple agencies or jurisdictions.

PS-1.1.3: Post signs to identify hazardous situations when warranted to protect public safety. Emphasize the risks to visitors of entering public lands and taking responsibility for their own safety.

PS-1.1.4: If illegal activities threaten the safety of the public or BLM employees, or damage Monument objects, areas can be closed to access by the authorized officer. The area can be closed for up to 90 days pending a study or review of the level of impacts and longer term actions may be necessary to provide public safety.

PS-1.1.5: The Sand Tank Mountains south of I-8, formerly known as "Area A," is restricted to entry by permit only

PS-2: Protect public safety by dealing with all hazardous materials and solid wastes on public lands.

PS-2.1: Investigate all reported hazardous-materials and solid-wastes sites. Plan necessary containment and/or cleanup responses on a case-by-case basis as soon as possible upon report.

PS-2.1.1: Establish priorities for investigating releases and planning/implementing responses based on the order in which releases are discovered unless other factors, such as the immediacy of the public-health threat, elevate the response urgency.

PS-2.1.2: Identify the probable scope of needed containment and clean-up efforts.

PS-2.1.3: Rank all sites according to relative priority for treatment planning and action. Priorities to consider include:

- High levels of heavy metals in waste,
- Ground- or surface-water quality degradation,
- Ongoing, active resource damage,
- Safety hazards near established recreation areas or other areas frequented by public land users,
- Other site-specific factors

PS-2.1.4: Inspect mining and milling sites to determine appropriate management for hazardous materials.

PS-2.1.5: Conduct active investigations to identify potentially responsible parties and recover planning, containment, cleanup, monitoring, investigation, and enforcement costs associated with spill/release responses.

PS-2.1.6: Complete site-specific inventories when lands are being disposed or acquired. It is departmental policy to minimize potential liability of the Department of the Interior and its bureaus by acquiring property that is not contaminated unless directed by Congress, court mandate, or as determined by the Secretary.

PS-3: Minimize or eliminate the potential for intentional or accidental releases of hazardous materials or wastes and solid waste.

PS-3.1: Pursue locations of solid waste and wildcat dumpsites. Remove hazardous materials and solid waste, remediate, and, if appropriate, restore sites.

PS-3.1.1: Investigate all reported hazardous-materials and solid-waste sites.

PS-3.1.2: Establish a reporting system and encourage other agencies and citizens to report suspected spill and dump sites or suspected dumping activities.

PS-3.1.3: Establish an inventory of known historic and active mining sites and other areas on public lands where hazardous materials or solid wastes are known or suspected to be present.

PS-3.1.4: Evaluate all BLM actions (including land use authorizations, mining and milling activities, and unauthorized land uses) for their potential to prevent production or dumping of hazardous or solid wastes on public lands by doing the following:

- Minimize releases of hazardous materials through compliance with current regulations.
- Identify appropriate mitigation for activities associated with all types of hazardous materials and waste management and all types of fire management.

Administrative Actions

- Provide public safety information through BLM visitor-use brochures, websites, the BGR/Cabeza Prieta National Wildlife Refuge/Sand Tank Mountains visitor-entry permit system, and various direct contacts with members of the public. Include information on hazards associated with abandoned mines, recreational shooting, unexploded ordnance, smuggler and undocumented alien traffic, other criminal activities, natural resource conditions, or other conditions.
- Post signs in the field to identify certain hazardous situations when warranted to protect public safety. Emphasize visitor acceptance of the risks of entering public lands and responsibility for their own safety.
- To reduce human-caused fires, the BLM will undertake education, enforcement, and administrative fire-prevention measures. Education measures will include various outreach efforts, including a signing program, information as to the natural role of fire within local ecosystems, and participation in fairs, parades, and public contacts. Enforcement will be accomplished by providing training opportunities for employees interested in fire cause determination. Administration includes expanded prevention and education programs with other cooperator agencies.

2.2.20 Scientific Research, Education, and Public Outreach

Scientific Research

The BLM will partner with agencies and the academic and scientific community to develop a strategy for orderly scientific research on the National Monument. Scientific research will be evaluated and approved on a case-by-case basis. A priority will be placed on research likely to enhance management and understanding of public land resources and public uses. Researchers will be required to coordinate with the BLM, including providing a research plan, on proposed research and provide reports and supporting data that describe the outcome of the research.

Approved scientific research will contribute to management of natural and cultural resources and achieving desired future conditions. The collection of any objects in the Monument is authorized only by permit for scientific research or use to ensure compatibility and reporting of results. A reasonable amount of disturbance to soils and/or vegetation may occur during approved research activities in order to meet the research goals. Effects of disturbance are likely to be transient or may require mitigation or rehabilitation of sites.

Collaborative research partnerships will be established with interested organizations, such as local scientific museums or organizations, agencies, academic institutions, professional and nonprofit organizations, vocational organizations, and other entities, for an orderly process of research, recordation, and education about public land resources and uses. These partnerships will support survey, evaluation, recordation, mitigation, protection, and management of various resources, including biological, cultural, scenic, paleontological, geologic, and caves, and public uses including recreation, grazing, mining, and others.

By developing a strategy to encourage scientific research and inventory, the understanding of resources and management needs will improve. A priority will be placed on the development and implementation for inventory, recording, and evaluation of the Monument, and other sensitive areas and resources.

Increased monitoring of public use, vegetation and wildlife habitat, cultural sites, and other resources, with particular focus on sensitive resources and easily accessible and regularly visited areas, will help to ensure the integrity of resources are maintained. Monitoring of public uses, wildlife, and other resources will be enhanced by the use of volunteers, scientific and academic organizations, and other interested groups.

Interpretation, Environmental Education, and Outreach

The BLM will work with partners in agencies, academia, and other organizations to develop an effective environmental education and outreach strategy to enhance public understanding and appreciation of public land resources, and help the BLM achieve its mission and the desired outcomes of this PRMP.

The BLM will support existing educational and interpretive programs and initiatives such as Project Archaeology, Leave No Trace, Tread Lightly!™, Project Learning Tree, and other proven national, state, regional, and local programs. An emphasis will be placed on reuse of existing educational materials.

Additionally, the BLM will work with partners to pursue interpretation and environmental education opportunities, outreach, development, and implementation of on-site and off-site programs for adults and children. The office will work with willing staff from schools, school districts, and other learning institutions to develop curricula that incorporate various learning styles in program design and delivery and focus on the BLM's mission.

To help disseminate information to the public, websites, brochures, maps, access guides, and information sheets will be developed. BLM personnel will also participate in public events, such as fairs and open houses, with information and displays showing public land management. Information will emphasize Leave No Trace and Tread Lightly!™ practices.

Topics may include:

- Resource protection and management,
- Recreational and public access,
- Land use ethics,
- Recreational target shooting
- OHV rules and regulations,
- Public safety,
- Fire,
- OHV and special recreation vehicle information,
- Other information as needed.

Resources Education

Throughout the area, (with particular focus sensitive resource areas, including the Monument, SCRMAs, and threatened and endangered species habitat), emphasis will be placed on resource importance through interpretation, education, signing, and/or brochures.

A public education program will accomplish the following:

- Provide information about resources and their importance,
- Provide information directly related to procedures to be followed if sensitive resources are found,
- Provide safety information to the public and identify any resource protection actions required for public use,
- Specify any pertinent fines for resource damage.

Public Uses and Visitor Information

Visitor information will be developed to guide recreational uses in the SDNM. Information could include identifying recreational opportunities, locations where certain uses are or are not appropriate, an appreciation and respect for other public land users and uses, and methods to avoid conflict.

Public Safety and Fire Education

Educational material will be available regarding public safety, definitions of hazardous materials and solid wastes, and regulations controlling the use and disposal of hazardous materials and solid wastes on public lands. Methods to disseminate information may include brochures at recreational sites, websites, signs at known or likely dumping sites, BGR/Cabeza Prieta National Wildlife Refuge/Sand Tank Mountains visitor entry permit system, and various types of direct contact with visitors. Information on hazards associated with abandoned mines, recreational shooting, unexploded ordnance, smuggler and undocumented alien traffic, natural resource or other conditions also may be included.

To protect public safety, when warranted, signs will be posted to identify certain hazardous situations.

Visitor acceptance of the risks of entering public land and responsibility for their own safety will be emphasized.

The BLM will undertake education, enforcement, and administrative fire prevention mitigation measures to reduce human-caused fires. Education measures may include various media, including signs, information on the natural role of fire within local ecosystems, participation in fairs or parades, and other public contacts. Enforcement will be accomplished by providing training opportunities for employees interested in fire caused determinations. Administration includes expanded prevention and education programs with other cooperating agencies.

2.3 IMPLEMENTATION DECISIONS – TRAVEL MANAGEMENT

As described in **Section 1.4.2**, implementation decisions (or activity-level decisions) are management actions tied to a specific location that are made to implement the land use plan decisions. While BLM normally makes implementation decisions during more detailed planning after completion of an RMP, there are times when it is appropriate to make them as part of the RMP process. In the SDNM RMP, the following implementation-level decisions were made. See **Section 1.4.2**, Implementation Decisions, for a summary of the protest and appeal procedures associated with these decisions.

Implementation-level Allocations Summary for the SDNM

TMI-1: A network of routes are designated upon plan approval to include roads, primitive roads and trails that are open, closed or limited in their use as specified **Table 2-10**, Route Designations (Miles). For route locations, refer to the route maps on the CD, web site, or hard copies by request to the Lower Sonoran Field Office and on **Map 9**, SDNM Route Designations. For route rationales, see **Appendix G**, Route Rationales.

TMI-2: Routes 8013, 8018, and 8019 which are within washes, are closed from April 15-August 31 to address the forage, shelter, breeding, and thermal cover protection provided by washes as a component of wildlife habitat.

TMI-3: Develop legal public access along Interstate 8, in cooperation with Arizona Department of Transportation and Federal Highway Administration, to designated roads and primitive roads in SDNM.

Table 2-10
Route Designations (Miles)

Total Route Inventory	631.7
Total Proposed Route System Available for Public Use[1]	410.9
Roads Closed to General Public Use[2]	220.4
Road Closure Percentage[3]	35%
Designated Asset Type	
Road - Maintained	32.6
Open	24.2
Limited to Admin Use Only	0.4
Closed	0

Table 2-10
Route Designations (Miles)

New	8.0
Primitive Road - Unmaintained	570.2
Open	323.8
Seasonally Limited (Closed April 15 to Aug. 31)	26.0
Limited to Non-Motorized Use[4]	8.3
Limited to Admin Use Only	7.8
Closed	204.3
Trail	28.9
Open to non-motorized/ mechanized travel (e.g., bicycles, handcarts, etc.)	3.3
Open to non-motorized/non-mechanized travel (wilderness trails)	25.6

[1]Total Proposed Route System (Miles) equals the sum of open roads, primitive roads, trails (including those limited by season, width, and non-motorized use), and new roads. The total excludes roads and primitive roads limited to administrative use. See **Map 9**, SDNM Route Designations.
[2] Road Closures (Miles) equals the sum of closed roads and primitive roads, roads and primitive roads limited to administrative use, and primitive roads limited to non-motorized use.
[3] Road Closure Percentage equals the miles of road closure divided by the total route inventory (631.5 miles). Note: Primitive roads limited to non-motorized use are included here because no vehicular use will be permitted.
[4] Applies to the Anza NHT, where bicycles and handcarts will be allowed, but not motor vehicles.

2.4 PUBLIC INVOLVEMENT

The BLM will continue to work with existing partners, cultivate new partnerships, and actively seek the views of the public. Using techniques such as news releases, website postings, and mass mailings, the BLM will inform the public of new and ongoing management actions and site-specific planning, and provide opportunities and timeframes for comment and other participation. The public is encouraged to contact the BLM (Sonoran Desert National Monument at 21605 N. 7th Avenue, Phoenix, Arizona 85027) and request that their name be placed in the field office mailing list along with their specific area of interest (e.g., wildlife, cultural resources, etc.) for plan implementation. The public may also make this request by calling (623) 580-5500.

The BLM will also continue to coordinate, both formally and informally, with the numerous federal and state agencies, Native American tribes, local agencies, and officials interested and involved in the management of public lands in the SDNM.

2.5 MANAGEMENT PLAN IMPLEMENTATION

The RMP will be implemented as funding and workforce allow. Most of the land use plan decisions are effective upon approval of this document. However, some decisions will take a number of years to be fully implemented. Implementation monitoring will track which decisions have been implemented and when.

After issuing the ROD/Approved RMP, the BLM will establish implementation priorities based on the goals, objectives and management actions detailed in the RMP. The implementation planning process will assist BLM managers and staff in preparing budget requests and in scheduling work priorities. However, the proposed schedule must be considered tentative and will be affected by future funding, changing program priorities, nondiscretionary workloads, and cooperation by partners and the public. Periodic review of the implementation plan will provide consistent tracking of accomplishments and provide information that can be used to develop annual budget requests to continue implementation. Plan implementation is a continuous and active process.

Interdisciplinary impact analysis on implementation actions will be based on the PRMP/FEIS and other applicable EISs. If the analysis prepared for site-specific projects finds potential for significant impacts not already described in an existing EIS, another EIS or a supplement to an existing EIS may be warranted.

Site-specific environmental analyses and documentation, including the use of categorical exclusions and determinations of NEPA adequacy where appropriate, may be prepared for one or more individual projects in accordance with management objectives and decisions established in the approved land use plan. In addition, the BLM will ensure that the environmental review process includes evaluation of all critical elements, including cultural resources and threatened and endangered species, and completes required USFWS Section 7 consultations and coordination with the SHPO.

2.6 PLAN EVALUATION AND MAINTENANCE

2.6.1 Plan Evaluation

Plan evaluation is a process in which the plan and monitoring data are reviewed to determine if management goals and objectives are being met and if management direction is sound. Land use plan evaluations determine if decisions are being implemented, if mitigation measures are satisfactory, if there are significant changes in the related plans of other entities, if there is new data of significance, and if decisions should change through amendment or revision. Monitoring data gathered over time is examined and used to determine whether management actions are meeting objectives. Conclusions are then used to make recommendations on whether to continue current management or to identify what changes need to be made in management practices to meet RMP objectives.

BLM will use land use plan evaluations to determine if the decisions in the RMP, supported by the accompanying NEPA analysis, are still valid in light of new information and monitoring data. Evaluation of the RMP will generally be conducted every five years, unless unexpected actions, new information, or significant changes in other plans, legislation, or litigation triggers an evaluation.

Evaluations will follow the protocols established by the BLM's Land Use Planning Handbook (H-1601-1) and 43 CFR Part 1610.4-9 or other appropriate guidance in effect at the time the evaluation is initiated.

2.6.2 Plan Maintenance

Land use plan decisions and supporting information can be maintained to reflect minor changes in data, but maintenance is limited to refining, documenting, and clarifying previously approved decisions. Some examples of maintenance actions include:

- Correcting minor data, typographical, mapping, or tabular data errors;
- Refining baseline information as a result of new inventory data (e.g., changing the boundary of an archaeological district; refining the known habitat of special status species; or adjusting the boundary of a fire management unit based on updated fire regime condition class inventory, fire occurrence, monitoring data, or demographic changes); and
- Applying an existing fluid mineral lease stipulation to a new area prior to the lease sale based on new inventory data (e.g., applying an existing protective stipulation for tortoise to a newly discovered tortoise habitat area.)

Plan maintenance will be documented in supporting records. Plan maintenance does not require formal public involvement, interagency coordination, or the NEPA analysis required for making new land use plan decisions.

2.7 MONITORING AND ADAPTIVE MANAGEMENT

2.7.1 Monitoring

The BLM expects that new information gathered from field inventories and assessments, research, other agency studies, and other sources will update baseline data and/or support new management techniques, best management practices, and scientific principles. Monitoring the RMP involves tracking the implementation and effectiveness of land use plan decisions (implementation monitoring) identified in **Section 2.2**, Management Decisions. Implementation monitoring tracks the completion of land use plan decisions whereas effectiveness monitoring helps determine whether completion of land use plan decisions achieves anticipated desired outcomes. If implementation of land use plans does not achieve anticipated desired outcomes, adaptive management may be necessary.

Management actions identified for the SDNM are based on studies and the best scientific and commercial information available. However, conditions may change over time. Experience has shown that implemented management actions can be improved as new technology and new information become available. It is also possible that changes in land use will require a different management action to protect the resources. To address the changing conditions and provide management flexibility using best management practices, the SDNM staff will monitor and evaluate the RMP using a process that provides the optimum means of checking the effectiveness of management actions. This process will measure the effectiveness of existing actions by monitoring these actions and applying the results of new scientific research. The process will analyze the current resource conditions resulting from implemented actions and identify and recommend alternatives or modified actions, as necessary, to reach established objectives and goals.

Because the capability to conduct monitoring and analysis at the optimum level can vary from year to year, the actions to be monitored will be prioritized. If monitoring indicates the goals and objectives are not being met, the adaptive management process will be implemented to adjust actions and improve resource condition.

2.7.2 Adaptive Management

Adaptive management is a system of management practices based on clearly identified outcomes, monitoring to determine if management actions are meeting outcomes, and, if not, facilitating management changes that will best ensure that outcomes are met or to re-evaluate the outcomes. The SDNM managers will implement the adaptive management process for decisions appropriate to be adapted in order to meet resource goals and objectives. Monitoring, reports, documents, and timelines associated with the adaptive management process will be subject to the Monument's budget and staffing constraints.

3. GLOSSARY

ABIOTIC: The nonliving, material components of the environment, such as air, rocks, soil, water, coal, peat, and plant litter. See BIOTIC.

ACCELERATED EROSION: Soil loss above natural levels resulting directly from human activities. Because of the slow rate of soil formation, accelerated erosion can permanently reduce plant productivity.

ACQUIRED PUBLIC LANDS: Lands in federal ownership that the government obtained as a gift or by purchase, exchange, or condemnation. See PUBLIC LANDS.

ALLOTMENT: An area of land designated and managed for the grazing of livestock where one or more operators are authorized to graze their livestock. An allotment generally consists of federal rangelands but may include intermingled parcels of private, state, or federal lands. The BLM stipulates the number of livestock and season of use for each allotment.

ANIMAL UNIT: One mature (1,000 pound) cow or the equivalent based upon an average daily forage consumption of 26 pounds of dry matter per day.

ANIMAL UNIT MONTH (AUM): The amount of forage needed to sustain one cow, five sheep, or five goats for one month.

ANNUAL PLANT: A plant that completes its life cycle and dies in one year or less. Also see PERENNIAL PLANT.

AQUATIC HABITAT (COMPONENTS): Habitats confined to streams, rivers, springs, lakes, ponds, reservoirs, and other water bodies.

AQUIFER: A water-bearing bed or layer of permeable rock, sand, or gravel capable of yielding large amounts of water.

ARCHAEOLOGICAL FEATURE: A non-portable object not recoverable from its matrix (usually in an archeological site) without destroying its integrity. Examples are rock paintings, hearths, post holes, floors, and walls.

AREA OF CRITICAL ENVIRONMENTAL CONCERN (ACEC): A designated area on public lands where special management attention is required (1) to protect and prevent irreparable damage to fish and wildlife; (2) to protect important historic, cultural, or scenic values, or other natural systems or processes; or (3) to protect life and safety from natural hazards.

ARIZONA STANDARDS FOR RANGELAND HEALTH AND GUIDELINES FOR GRAZING ADMINISTRATION: Standards and guidelines developed collaboratively by BLM and the Arizona Resource Advisory Council (RAC) to address the minimum requirements of the Department of the Interior's final rule for Grazing Administration, effective Aug. 21, 1995.

ASSETS (TRAVEL MANAGEMENT): An engineering term utilized to describe roads, primitive roads, and trails that are included in Facility Asset Management System (FAMS). Assets are maintained through the maintenance program.

AUTHORIZED OFFICER: Any employee of the BLM who has been delegated the authority to perform duties related to public lands, public purposes, conveyances, hazardous substances, and solid wastes.

BACK COUNTRY BYWAY: A component of the national scenic byway system which focuses primarily on corridors along back country roads which have high scenic, historic, archeological, or other public interest values. The road may vary from a single track bike trail to a low speed, paved road that traverses back country areas (BLM Handbook H-8357-1, B 2).

BACK COUNTRY SETTING: Areas with undeveloped, primitive, and self-directed visitor experience without provisions for motorized or mechanized access, except for identified routes.

BENEFIT (RECREATION/SOCIETAL): A benefit is defined as an improved condition or the prevention of a worse condition. Benefits of leisure and recreation engagements can be realized by individuals (e.g., improved physical and psychological well-being), groups of individuals (strengthened bonds among family and friends), communities (economic gain from tourism), society (the cumulative effects of individual and group benefits), and the environment (a result of a stronger environmental ethic among individuals).

BIG GAME: Large species of wildlife that are hunted, such as elk, deer, bighorn sheep, and pronghorn.

BIGHORN SHEEP HABITAT: Area is open to non-vehicular traffic year around (e.g., hiking, biking, and equestrian). Restrictions vary by location and are listed in RMP. Typically, roads are closed during lambing season (January 1 through June 30).

BIOLOGICAL ASSESSMENT: Information prepared by or under the direction of a federal agency to determine whether a proposed action is likely to harm threatened or endangered species or designated critical habitat, jeopardize the existence of species that are proposed for listing, or adversely

modify proposed critical habitat. Biological assessments must be prepared for major construction activities. The outcome of a biological assessment determines whether formal Section 7 consultation or a conference is needed. Also see BIOLOGICAL OPINION.

BIOLOGICAL DIVERSITY (BIODIVERSITY): The full range of variability within and among living organisms and the ecological complexes in which they occur. Biological diversity encompasses ecosystem or community diversity, species diversity, and genetic diversity.

BIOLOGICAL EVALUATION: The gathering and evaluation of information on proposed endangered and threatened species and critical and proposed critical habitat for actions that do not require a biological assessment. Also see BIOLOGICAL ASSESSMENT.

BIOLOGICAL OPINION: A document that includes the following- (1) the opinion of the US Fish and Wildlife Service or the National Marine Fisheries Service as to whether a federal action is likely to jeopardize the existence of a species listed as threatened or endangered or destroy or adversely modify designated critical habitat; (2) a summary of the information on which the opinion is based; and (3) a detailed discussion of the effects of the action on listed species or designated critical habitat.

BIOLOGICAL VEGETATION TREATMENT: Methods of vegetation treatment that employ living organisms to selectively suppress, inhibit, or control herbaceous and woody vegetation. Examples of such methods include insects; pathogens; and grazing by cattle, sheep, or goats.

BIOTIC: Pertaining to life or living; the living components of the environment. Also see ABIOTIC.

BRAIDING: A pattern of an interlacing or tangled network of several branching and reuniting stream channels separated by branch islands or channel bars.

BROWSE: The part of leaf and twig growth of shrubs, woody vines, and trees available for animal consumption.

CANCELLED/CANCELLATION: A permanent termination of a grazing permit, grazing lease, grazing preference, free-use grazing permit, or other grazing authorization in whole or in part.

CANDIDATE SPECIES: Species not protected under the ESA, but being considered by the US Fish and Wildlife Service for inclusion on the list of federally threatened and endangered species.

CASUAL USE (MINING): Mining that only negligibly disturbs federal lands and resources and does not include the use of mechanized earth moving equipment or explosives or motorized equipment in areas closed to off-highway vehicles. Casual use generally includes panning, non-motorized sluicing, and collecting mineral specimens using hand tools.

CASUAL USE (RECREATION): Non-commercial or non-organized group or individual activities on public land that do the following: Comply with land use decisions and designations (i.e. special area designations), do not award cash prizes; are not publicly advertised; pose minimal risk for damage to public land or related water resources; and generally require no monitoring. If the use goes beyond those conditions, the activity should be treated as any other organized recreational group or

competitive activity or event for which BLM will require the event organizer to obtain a special recreation permit (SRP).

CASUAL USE OF MINERAL MATERIALS: Extracting mineral materials for limited personal (noncommercial) uses.

CATEGORICAL EXCLUSION: A category of actions (identified in agency guidance) that do not individually or cumulatively have a significant effect on the human environment and for which neither an environmental assessment nor an EIS is required (40 CFR 1508.4).

CATTLE GUARD: A device placed in a road, usually a grate or series of metal bars placed perpendicular to the flow of traffic, which allows free passage of vehicles but which livestock will not cross.

CHANNEL: A natural or artificial watercourse with a definite bed and banks to confine and conduct continuously or periodically flowing water.

CHEMICAL VEGETATION TREATMENTS: The applying of chemicals to control unwanted vegetation.

COMMUNICATION SITE: An area of Public Land or National Forest System lands designated for communications use through the land and resource management planning process.

COMMUNITY: A collective term used to describe an assemblage of organisms living together; an association of living organisms having mutual relationships among themselves and with their environment and thus functioning at least to some degree as an ecological unit.

COMPETITIVE RACES: For purposes of this plan, all competitive events that have an element of speed as a component, including, motorcycle enduros, OHV desert racing, and equestrian endurance rides.

COMPOSITION: The proportions of various plant species in relation to the total on a given area. It may be expressed in terms of cover, density, weight, etc.

COOPERATING AGENCY: Assists the lead federal agency in developing an environmental assessment or EIS. The Council on Environmental Quality regulations implementing NEPA define a cooperating agency as any agency that has jurisdiction by law or special expertise for proposals covered by NEPA (40 CFR 1501.6). Any federal, state, local government jurisdiction with such qualifications may become a cooperating agency by agreement with the lead agency.

CORRIDOR: See DESIGNATED MULTIUSE UTILITY CORRIDOR.

COVER: (1) Plants or plant parts, living or dead, on the surface of the ground; (2) plants or objects used by wild animals for nesting, rearing of young, escape from predators, or protection from harmful environmental conditions.

CRITERIA AIR POLLUTANTS: Air pollutants for which acceptable levels of exposure can be determined and for which an ambient air quality standard has been set. Examples of such pollutants are ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, and PM_{10} and $PM_{2.5}$.

CRITICAL HABITAT, DESIGNATED: Specific parts of an area (1) that are occupied by a federally listed threatened or endangered plant or animal at the time it is listed and (2) that contain physical or biological features essential to the conservation of the species or that may require special management or protection. Critical habitat may also include specific areas outside an area occupied by a federally listed species if the Secretary of the Interior determines that these areas are essential for conserving the species.

CULTURAL HERITAGE VALUES: The irreplaceable qualities that are embodied in cultural resources, such as scientific information about prehistory and history, cultural significance to Native Americans and other groups, and the potential to enhance public education and enjoyment of the Nation's rich cultural heritage. Section 1 of the National Historic Preservation Act states that "the preservation of this irreplaceable heritage is in the public interest so that its vital legacy of cultural, educational, aesthetic, inspirational, economic and energy benefits will be maintained and enriched for future generations of Americans."

CULTURAL RESOURCE: A location of human activity, occupation, or use identifiable through field inventory, historical documentation, or oral evidence. Cultural resources include archaeological and historical sites, structures, buildings, objects, artifacts, works of art, architecture, and natural features that were important in past human events. They may consist of physical remains or areas where significant human events occurred, even though evidence of the events no longer remains. And they may include definite locations of traditional, cultural, or religious importance to specified social or cultural groups.

CULTURAL RESOURCE DATA: Cultural resource information embodied in material remains such as artifacts, features, organic materials, and other remnants of past activities. An important aspect of data is context, a concept that refers to the relationships among these types of materials and the situations in which they are found.

CULTURAL RESOURCE DATA RECOVERY: The professional application of scientific techniques of controlled observation, collection, excavation, and/or removal of physical remains, including analysis, interpretation, explanation, and preservation of recovered remains and associated records in an appropriate curatorial facility used as a means of protection. Data recovery may sometimes employ professional collection of such data as oral histories, genealogies, folklore, and related information to portray the social significance of the affected resources. Such data recovery is sometimes used as a measure to mitigate the adverse impacts of a ground-disturbing project or activity.

CULTURAL RESOURCE INTEGRITY: The condition of a cultural property, its capacity to yield scientific data, and its ability to convey its historical significance. Integrity may reflect the authenticity of a property's historic identity, evidenced by the survival or physical characteristics that existed during its historic or prehistoric period, or its expression of the aesthetic or historic sense of a particular period of time.

CULTURAL RESOURCE INVENTORY (SURVEY): A descriptive listing and documentation, including photographs and maps of cultural resources. Included in an inventory are the processes of locating, identifying, and recording sites, structures, buildings, objects, and districts through library and archival research, information from persons knowledgeable about cultural resources, and on-the-ground surveys of varying intensity.

Class I: A professionally prepared study that compiles, analyzes, and synthesizes all available data on an area's cultural resources. Information sources for this study include published and unpublished documents, BLM inventory records, institutional site files, and state and National Register files. Class I inventories may have prehistoric, historic, and ethnological and sociological elements. These inventories are periodically updated to include new data from other studies and Class II and III inventories.

Class II: A professionally conducted, statistically based sample survey designed to describe the probable density, diversity, and distribution of cultural properties in a large area. This survey is achieved by projecting the results of an intensive survey carried out over limited parts of the target area. Within individual sample units, survey aims, methods, and intensities are the same as those applied in Class III inventories. To improve statistical reliability, Class II inventories may be conducted in several phases with different sample designs.

Class III: A professionally conducted intensive survey of an entire target area aimed at locating and recording all visible cultural properties. In a Class III survey, trained observers commonly conduct systematic inspections by walking a series of close-interval parallel transects until they have thoroughly examined an area.

CULTURAL RESOURCE PROJECT PLAN: For cultural resource projects, a detailed design plan that defines the procedures, budget, and schedule for such activities as structure stabilization, recordation, interpretive development, and construction of facilities such as trails. These plans include estimates on workforce, equipment, and supply needs.

CULTURAL SITE: A physical location of past human activities or events, more commonly referred to as an archaeological site or a historic property. Such sites vary greatly in size and range from the location of a single cultural resource object to a cluster of cultural resource structures with associated objects and features.

CUMULATIVE IMPACTS: As stated in 40 CFR 1508.8, "...is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time."

DATA RECOVERY: See CULTURAL RESOURCE DATA RECOVERY.

DECISION RECORD: A manager's decision on a categorical exclusion review or an environmental assessment. Comparable to the record of decision for an environmental impact statement, the decision record includes- (1) a finding of no significant impact, (2) a decision to prepare an environmental impact statement, or (3) a decision not to proceed with a proposal.

DEFERMENT: A period of non-grazing during part of the growing season (see REST ROTATION).

DEFERRED ROTATION GRAZING: Moving grazing animals to various parts of a range in succeeding years or seasons to provide for seed production, plant vigor, and seedling growth.

DESERT TORTOISE HABITAT CLASSIFICATIONS: Three categories of desert tortoise habitat based on population, viability, size, density, and manageability and derived from BLM inventories of desert tortoise habitat throughout the planning areas between 1989 and 1999. The categories are as follows:

Category I. Medium to high tortoise density. Habitat area essential for maintaining large, viable populations.

Category II. Low to moderate tortoise density. Habitat is manageable.

Category III. Isolated patches of good habitat exist but are difficult to manage. Most management conflicts are not resolvable.

DESIGNATED MULTIUSE UTILITY CORRIDOR: See MULTIUSE UTILITY CORRIDOR

DESIRED FUTURE CONDITION: A detailed description of the particular resource condition to be achieved sometime in the future. These serve as resource standards which management is intended to achieve. These are analogous to resource objectives.

DESIRED OUTCOMES: A type of land use plan decision expressed as a goal or objective.

DESIRED PLANT COMMUNITY (DPC): The plant community that has been determined through a land use or management plan to best meets the plan's objectives for a site. A real, documented plant community that embodies the resource attributes needed for the present or potential use of an area, the desired plant community is consistent with the site's capability to produce the required resource attributes through natural succession, management intervention, or a combination of both.

DESTINATION RECREATION-TOURISM MARKET: National or regional recreation-tourism visitors and other constituents who value public lands as recreation-tourism destinations. Major investments in facilities and visitor assistance are authorized within SRMAs where the BLM's strategy is to target demonstrated destination recreation-tourism market demand. Here, recreation management actions are geared toward meeting primary recreation-tourism market demand for specific activity, experience, and benefit opportunities. These opportunities are produced through maintenance of prescribed natural resource setting character and by structuring and implementing management, marketing, monitoring, and administrative actions accordingly.

DEVELOPED RECREATION SITES AND AREAS: Those sites and areas that contain structures or capital improvements primarily used by the public for recreation purposes. Such sites or areas may include such features as: delineated spaces for parking, camping, or boat launching; sanitary facilities; potable water; grills or fire rings; or controlled access.

DIKE: (1) An upright or steeply dipping sheet of igneous rock that has solidified in a crack or fissure in the earth's crust; (2) a human-made structure used to control stream flow.

DISPERSED RECREATION: Recreation that does not require developed sites or facilities.

DISPOSAL: See LAND DISPOSAL.

DRAINAGE AREA: Area or watershed that drains naturally to a particular point on a river, stream, or creek.

DRAINAGE BASIN: Drainage system that consists of a surface stream or body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

EASEMENT: The right to use land in a certain way granted by a landowner to a second party.

ECOLOGICAL CONDITION: See ECOLOGICAL SITE RATING (ECOLOGICAL CONDITION/ ECOLOGICAL STATUS).

ECOLOGICAL INTEGRITY: The quality of a natural unmanaged or managed ecosystem in which the natural ecological processes are sustained, with genetic, species, and ecosystem diversity ensured for the future.

ECOLOGICAL SITE: A distinctive kind of land that has specific physical characteristics and that differs from other kinds of land in its ability to produce a characteristic natural plant community.

ECOLOGICAL SITE DESCRIPTIONS: Descriptions of the following characteristics of an ecological site- soils, physical features, climatic features, associated hydrologic features, plant communities possible on the site, plant community dynamics, annual production estimates and distribution of production throughout the year, associated animal communities, associated and similar sites, and interpretations for management.

ECOLOGICAL SITE INVENTORY: The basic inventory of present and potential vegetation on BLM rangeland.

ECOLOGICAL SITE RATING (ECOLOGICAL CONDITION/ ECOLOGICAL STATUS): The present state of vegetation of an ecological site in relation to the potential natural community for the site. Independent of the site's use, the ecological site rating is an expression of the relative degree to which the kinds, proportions, and amounts of plants in a community resemble those of the potential natural community. The four ecological status classes correspond to 0-25 percent, 25-50 percent, 51-75 percent, or 76-100 percent similarity to the potential natural community and are called early-seral, mid-seral, late-seral, and potential natural community, respectively.

ECOSYSTEM: Organisms, together with their abiotic environment, forming an interacting system and inhabiting an identifiable space.

ENDANGERED SPECIES: Any animal or plant species in danger of extinction throughout all or a significant portion of its range as designated by the US Fish and Wildlife Service under the ESA.

ENVIRONMENTAL ASSESSMENT (EA): As per 40 CFR 1508.9:

"(a) Means a concise public document for which a federal agency is responsible that serves to:

Briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact.

Aid an agency's compliance with the Act when no environmental impact statement is necessary.

Facilitate preparation of a statement when one is necessary.

(b) Shall include brief discussions of the need for the proposal, of alternatives as required by section 102 (2) (E), of the environmental impacts of the proposed action and Alternatives, and a listing of agencies and persons consulted."

ENVIRONMENTAL IMPACT STATEMENT (EIS): As per 40 CFR 1508.11 "means a detailed written statement as required by section 102 (2) (C) of the Act" (referring to the National Environmental Policy Act.)

EPHEMERAL RANGELAND: Areas of the hot desert biome (region) that do not consistently produce enough forage to sustain a livestock operation but may briefly produce unusual volumes of forage that may be utilized by livestock.

EXCAVATION: The scientific examination of an archaeological site through layer-by-layer removal and study of the contents within prescribed surface units, e.g. square meters.

EXISTING PARKING, STAGING, AND CAMPING AREAS AND DISTURBED AREAS: Sites and areas previously used for overnight stays, parking and staging. Existing sites must have bare mineral earth areas clear of vegetation, other indications include tent pads, camp fire rings, camper and vehicle pullouts, rock alignments and other signs of overnight and long-term use and occupation.

EXTENSIVE RECREATION MANAGEMENT AREA (ERMA): A public lands unit identified in land use plans containing all acreage not identified as a SRMA. Recreation management actions within an ERMA are limited to only those of a custodial nature.

EXTIRPATED SPECIES: A locally extinct species; a species that is no longer found in a locality but exists elsewhere.

FEDERAL LAND POLICY AND MANAGEMENT ACT (FLPMA): The act that (1) set out, for the Bureau of Land Management, standards for managing the public lands including land use planning, sales, withdrawals, acquisitions, and exchanges; (2) authorized the setting up of local advisory councils representing major citizens groups interested in land use planning and management, (3) established criteria for reviewing proposed wilderness areas, and (4) provided guidelines for other aspects of public land management such as grazing.

FINE PARTICULATE MATTER ($PM_{2.5}$): Particulate matter that is less than 2.5 microns in diameter.

FIRE INTENSITY: The rate of heat release for an entire fire at a specific time.

FIRE MANAGEMENT: The integration of fire protection, prescribed burning, and fire ecology knowledge into multiple use planning, decision making, and land management.

FIRE MANAGEMENT PLAN: A plan that defines a program to manage wildland and prescribed fires and documents the fire management program in the approved land use plan.

FIRE SUPPRESSION: All the work of extinguishing or confining a fire, beginning with its discovery.

FIRE SUPPRESSION RESOURCES: People, equipment, services, and supplies available or potentially available for assignment to incidents.

FLOODPLAIN: Nearly level land on either or both sides of a channel that is subject to overflow flooding.

FORAGE: All browse and herbage that is available and acceptable to grazing animals or that may be harvested for feed.

FORB: An herbaceous plant that is not a grass, sedge, or rush.

FRAGILE SOILS: Soils having a shallow depth to bedrock, minimal surface layer of organic material, textures that are more easily detached and eroded, or are on slopes over 35 percent.

FREE USE PERMIT: A permit that allows the removal of mineral materials from public lands free of charge to any federal, state, or territorial agency, unit, or subdivision.

FRONT COUNTRY SETTING: Front Country offers the main setting and locations for intensive resource-dependent recreation uses and facilities. Motorized and mechanized vehicles must remain on existing or designated routes. The lands are generally natural in appearance and may see minor to moderate alterations over the life of the land use plan due to land use authorizations and BLM management actions.

FUEL LOAD (IN FIRE SUPPRESSION): The oven-dry weight of fuel per unit area usually expressed in tons/acre.

FUEL LOADING: The amount of fuel present expressed by weight of fuel per unit area.

FUEL MOISTURE CONTENT (IN FIRE SUPPRESSION): The water content of a fuel expressed as a percentage of the fuel's oven-dry weight. For dead fuels, which have no living tissue, moisture content is determined almost entirely by relative humidity, precipitation, dry-bulb temperature, and solar radiation. The moisture content of live fuels is physiologically controlled within the living plant.

FUGITIVE DUST: Dust particles that are introduced into the air through certain actions such as soil cultivation or vehicles crossing open fields or driving on dirt roads or trails.

FUNCTIONING WATERS (WILDLIFE): A well, catchment, spring, reservoir, or other feature (human made or natural) that provides a reliable source of potable water on a year-long basis. For such a source of water to be considered functional, the quality and quantity of water must be sufficient to sustain native wildlife populations in the local area. For example, a reservoir that fills up during monsoon rains but goes dry in a few weeks is not functional from a wildlife standpoint.

FUNDAMENTALS OF RANGELAND HEALTH: As Described in 43 CFR 4180, the conditions in which (1) rangelands are in proper functioning physical condition, (2) ecological process are supporting healthy biotic populations and communities, (3) water quality is meeting state standards and BLM objectives, and (4) special status species habitat is being restored or maintained.

GENETIC DIVERSITY: The variation in genes in a population pool that contributes to the ability of organisms to evolve and adapt to new conditions.

GEOGRAPHIC INFORMATION SYSTEM (GIS): An information system that integrates, stores, edits, analyzes, shares, and displays geographic information for informing decision making.

GOAL: The desired state or condition that a resource management policy or program is designed to achieve. Broader and less specific than objectives, goals are usually not measurable and may not have specific dates by which they must be reached. Objectives are developed by first understanding one's goals.

GRANT: A document authorizing the use of public or federal lands for the construction, operation, maintenance, and termination of a project.

GRAZING CAPACITY (CARRYING CAPACITY): The highest livestock stocking rate possible without damaging vegetation or related resources. Grazing capacity may vary from year to year or in the same area because of fluctuating forage production.

GRAZING CYCLE: The amount of time required for livestock to rotate completely through all the pastures under an allotment management plan.

GRAZING DISTRICT: The specific area within which the public lands are administered under section 3 of the Taylor Grazing Act of June 1934, as amended (43 USC 315). Public lands outside grazing district boundaries are administered under section 15 of the Act.

GRAZING PERMIT/LICENSE/LEASE: A written document authorizing use of the public lands within an established grazing district. Grazing permits specify all authorized use, including livestock grazing, suspended use, and conservation use. Permits also specify the total number of AUMs apportioned, the area authorized for grazing use, or both.

GRAZING PREFERENCE: A superior or priority position against others for the purpose of receiving a grazing permit or lease. This priority is attached to base property owned or controlled by the permittee or lessee.

GRAZING PRIVILEGES: The use of public land for livestock grazing under permits or leases.

GRAZING REST: Any period during which no livestock grazing is allowed within an area.

GRAZING SEASON: An established period for which grazing permits are issued.

GRAZING SYSTEM: A systematic sequence of grazing use and non-use of an allotment to meet multiple use goals by improving the quality and amount of vegetation.

GROUND COVER: See COVER.

GROUND LITTER: See LITTER.

GROUNDWATER: Subsurface water and underground streams that supply wells and springs. Use of groundwater in Arizona does not require a water right, but must only be "reasonable." Groundwater is separated from surface water by the type of alluvium in which the water is found. Water in the younger, floodplain alluvium is considered surface water. Water in the older, basin-fill alluvium is considered groundwater.

GROUNDWATER RECHARGE: Adding water to an aquifer, a process that occurs naturally from the infiltration of rainfall and from water flowing over earth materials that allow it to infiltrate below the land surface.

HABITAT: An area that provides an animal or plant with adequate food, water, shelter, and living space.

HABITAT FRAGMENTATION: Process by which habitats are increasingly subdivided into smaller units resulting in their increased insularity and losses of total habitat area.

HABITAT MANAGEMENT PLAN: A site-specific wildlife habitat plan.

HAZARDOUS MATERIALS (HAZMAT): An all-encompassing term that includes hazardous substances; hazardous waste; hazardous chemical substances; toxic substances; pollutants and contaminants; and imminently hazardous chemical substances and mixtures that can pose an unreasonable risk to human health, safety, and property.

HERBACEOUS: Of, relating to, or having the characteristics of a vascular plant that does not develop woody tissue.

HERD AREA (HA): Geographic areas of the public lands identified as habitat used by wild horses and/or wild burros at the time the Wild Free-Roaming Horses and Burros Act of 1971 was enacted.

HERITAGE TOURISM: Programs that seek to stimulate economic development by promoting the use of historic properties. Management concerns include ensuring the long-term preservation and sustainable use of properties. Best-management practices also encourage economic partnerships between the BLM and the state, tribal and local tourism programs.

HIGH POTENTIAL HISTORIC SITE: Those historic sites related to the route of the National Historic Trail, or sites in close proximity thereto, which provide opportunity to interpret the historic

significance of the trail during the period of its major use. Criteria for consideration as high potential sites include historic significance, presence of visible historic remnants, scenic quality, and relative freedom from intrusion. (From Section 12 of The National Trails System Act).

HIGH POTENTIAL ROUTE SEGMENT: Those segments of a trail which would afford high quality recreation experience in a portion of the route having greater than average scenic values or affording an opportunity to vicariously share the experience of the original users of a historic route. (From Section 12 of The National Trails System Act).

HISTORICAL SITE: A location that was used or occupied after the arrival of Europeans in North America (ca. A.D. 1492). Such sites may consist of physical remains at archaeological sites or areas where significant human events occurred, even though evidence of the events no longer remains. They may have been used by people of either European or Native American descent.

HYDRIC: Characterized by, relating to, or requiring an abundance of moisture.

HYDROLOGIC CYCLE: The circuit of water movement from the atmosphere to the earth and its return to the atmosphere through various stages or processes, such as precipitation, interception, runoff, infiltration, percolation, storage, evaporation, and transpiration.

IGNEOUS ROCK: Rock, such as granite and basalt, which has solidified from a molten or partially molten state.

IMPLEMENTATION DECISIONS: Decisions that take action to implement land use plan decisions; generally appealable to Interior Board of Land Appeals under 43 CFR 4.410.

INDICATORS: Elements of the human environment affected, or potentially affected, by a change agent. An indicator can be a structural component, a functional process or an index. A key indicator integrates several system elements in such a way as to indicate the general health of that system.

INFILTRATION: The downward entry of water into the soil or other material.

INFRASTRUCTURE: The set of systems and facilities that support a region or community's social and economic structures. Examples of such systems include energy, transportation, communication, education, medical service, and fire and police protection.

INHOLDING: Parcels of land owned or managed by someone other than BLM but surrounded in part or entirely by BLM-administered land.

INTERDISCIPLINARY TEAM: A team of varied land use and resource specialists formed to provide a coordinated, integrated information base for overall land use planning and management.

INTERESTED PUBLIC: An individual, group, or organization that has submitted a written request to the authorized officer to be provided an opportunity to be involved in the decision-making process for the management of livestock grazing on specific grazing allotments or has submitted written comments to the authorized officer regarding the management of livestock grazing on a specific allotment.

INVASIVE SPECIES (INVADERS): Plant species that were either absent or present only in small amounts in undisturbed portions of a specific range site's original vegetation and invade following disturbance or continued overuse.

KEY AREA: A key area is a relatively small portion of an allotment selected because of its location, proximity to water, livestock and wildlife habitat values, and value as a long-term monitoring point.

KEY FORAGE SPECIES: Forage species whose use serves as an indicator of the degree of use of associated species.

LAND DISPOSAL: A transaction that leads to the transfer of title to public lands from the federal government.

LANDFORM: A discernible natural landscape that exists as a result of geological activity such as a plateau, plain, basin, or mountain.

LANDS MANAGED TO PROTECT WILDERNESS CHARACTERISTICS: An allocation resulting from a land use plan management decision for the purpose of protecting lands with wilderness characteristics. A wider range of actions and activities may be allowed than can occur in designated wilderness.

LAND TENURE ADJUSTMENT: The transfer of land or interest in land (e.g., easement) between the United States and private individuals, entities, state or local governments.

LAND USE ALLOCATION: The identification in a land use plan of the activities and foreseeable development that are allowed, restricted, or excluded for all or part of the planning area, based on desired future conditions.

LAND USE AUTHORIZATION (LUA): The BLM's authorization; through leases, permits, and easements; of uses of the public land. Land use authorizations may allow occupancy, recreational residences and cabin sites, farming, manufacturing, outdoor recreation concessions, National Guard maneuvers, and many other uses.

LAND USE PLAN: A set of decisions that establish management direction for land within an administrative area as prescribed under the planning provisions of FLPMA; an assimilation of land-use-plan-level decisions developed through the planning process outlined in 43 CFR 1600, regardless of the scale at which the decisions were developed. The term includes both Resource Management Plans and Management Framework Plans.

LEASABLE MINERALS: Minerals whose extraction from federally managed land requires a lease and the payment of royalties. Leasable minerals include coal, oil and gas, oil shale and tar sands, potash, phosphate, sodium, and geothermal steam.

LEASE: An authorization to possess and use public lands for a fixed period of time.

LEAVE NO TRACE: A nationwide (and international) program to help visitors with their decisions when they travel and camp on America's public lands. The program strives to educate visitors about the nature of their recreational impacts as well as techniques to prevent and minimize such impacts.

LITTER: The uppermost layer of organic debris on the soil surface, essentially freshly fallen or slightly decomposed vegetal material.

LIVESTOCK/KIND OF LIVESTOCK: The species of domestic livestock, i.e., cattle, sheep, horses, burros, and goats.

LOCATABLE MINERALS: Minerals that may be acquired under the Mining Law of 1872, as amended.

LOCATION: The act of taking or appropriating a parcel of mineral land, including the posting of notices, the recording thereof when required, and marking the boundaries so they can be readily traced.

LUA AVOIDANCE AREA: Areas with sensitive resource values where minor linear and non-linear land use authorizations would be strongly discouraged and therefore "avoided."

LUA EXCLUSION AREAS: Areas with sensitive resource values where minor linear and non-linear land use authorizations would not be authorized.

MAINTENANCE (ROAD): From BLM 9100 Manual: The work required keeping a facility in such a condition that it may be continuously utilized at its original or designed capacity and efficiency, and for its intended purposes. Road or trail maintenance actions include (a) signage, (b) minor repairs, e.g. correction of drainage, erosion, or vegetation interference problems. Upon performance of condition assessment, maintenance could also be construed as (c) allowing road or trail to remain in present state for regular and continuous use.

MAINTENTANCE INTENSITIES: Maintenance intensities provide a range of consistent objectives and standards for the care and maintenance of BLM routes based on identified management objectives consistent with land-use planning resource management objectives. These intensities provide operational guidance to field personnel on the appropriate intensity, frequency, and type of maintenance activities that should be undertaken to keep the route in acceptable condition and provide guidance for the minimum standards of care for the annual maintenance of a route. Four levels of objectives and standards are provided which are labeled as follows: Level 0 (routes to remove from transportation system), Level 1 (low intensity) , Level 3 (moderate intensity) and Level 5 (high intensity).

MAJOR LINEAR LAND USE AUTHORIZATION: Land use authorizations that include transmission lines (consisting of 115 kV or higher), water and gas pipelines (greater than 10 inches in diameter), roads (wider than 200 feet), as well as significant canals.

MANAGEMENT ACTIONS/PRACTICES (FROM RANGELAND STANDARDS & GUIDES): Actions or practices that improve or maintain basic soil and vegetation resources. Rangeland practices typically consist of watershed treatments (planting, seeding, burning, rest, vegetation manipulation, grazing management) in an attempt to establish desired vegetation species or communities.

MANUAL VEGETATION TREATMENTS: The use of hand-operated power tools and hand tools to cut, clear, or prune herbaceous and woody plants. In manual treatments, workers cut plants above ground level; pull, grub, or dig out plant root systems to prevent later sprouting and regrowth; scalp at ground level or remove competing plants around desired vegetation; or place mulch around desired vegetation to limit the growth of competing vegetation. Manual vegetation treatments cause less ground disturbance and generally remove less vegetation than prescribed fire or mechanical treatments.

MECHANICAL VEGETATION TREATMENTS: The use of mechanical equipment to suppress, inhibit, or control herbaceous and woody vegetation. The BLM uses wheeled tractors, crawler-type tractors, mowers, or specially designed vehicles with attached implements for such treatments.

MINERAL ENTRY: The filing of a claim on public land to obtain the right to any minerals it may contain.

MINERALIZATION: Evidence of the presence of minerals.

MINERAL MATERIAL DISPOSAL: The disposal through sale or free use permit of sand, gravel, decorative rock, or other materials defined in 43 CFR 3600.

MINERAL MATERIALS: Materials such as common varieties of sand, stone, gravel, pumice, pumicite, and clay that are not obtainable under the mining or leasing laws but that can be acquired under the Mineral Materials Act of 1947, as amended.

MINING DISTRICT: An area, usually designated by name, with described or understood boundaries, where minerals are found and mined under rules prescribed by the miners, consistent with the Mining Law of 1872.

MINOR LINEAR LAND USE AUTHORIZATIONS: Land use authorizations which consist of transmission lines (consisting of 115 kV or less), water and gas pipelines (less than 10 inches in diameter), roads (less than 200 feet wide), and other minor utility systems.

MONITORING: The periodic observation and orderly collection of information to determine (1) the effects of resource management actions by tracking changing resource trends, needs, and conditions; and (2) the effectiveness of actions in meeting management objectives.

MOTORIZED TRAIL: A designated route that allows the use of motorcycles.

MULTIPLE USE: A combination of balanced and diverse resource uses that considers long-term needs for renewable and nonrenewable resources including recreation, wildlife, rangeland, timber, minerals, and watershed protection, along with scenic, scientific, and cultural values.

MULTIUSE UTILITY CORRIDOR: The BLM's preferred route for placing MAJOR LINEAR LAND USE AUTHORIZATION for utilities (i.e. pipelines and power lines) and transportation (i.e. highways and railroads).

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA): The federal law, effective January 1, 1970, that established a national policy for the environment and requires federal agencies to become

aware of the environmental ramifications of their proposed actions, to fully disclose to the public proposed federal actions and provide a mechanism for public input to federal decision-making, and to prepare environmental impact statements for every major action that would significantly affect the quality of the human environment.

NATIONAL HISTORIC PRESERVATION ACT OF 1966, AS AMENDED (NHPA): A federal statute that established a federal program to further the efforts of private agencies and individuals in preserving the Nation's historic and cultural foundations. The National Historic Preservation Act authorized the National Register of Historic Places, established the Advisory Council on Historic Preservation and a National Trust Fund to administer grants for historic preservation, and authorized the development of regulations to require federal agencies to consider the effects of federally assisted activities on properties included on or eligible for the National Register of Historic Places.

NATIONAL HISTORIC TRAIL: One of the three categories of national trails defined in the National Trails System Act of 1968 that can only be established by act of Congress and are administered by federal agencies, although part or all of the land base may be owned and managed by others. National historic trails are generally more than 100 miles long and follow as closely as possible and practicable the original trails or routes of travel of national historic significance. Their purpose is identifying and protecting the historic route and its remnants and artifacts for public use and enjoyment.

NATIONAL HISTORIC TRAIL CORRIDOR CONCEPT: Federal Trails Data Standards (FTDS) have been developed in order to describe several types of components of National Historic Trails. The codes NHT^1, NHT^2, and NHT^3 are the labels used to describe these aspects. The National Historic Trail corridor may be comprised of two or even three of these aspects.

NHT^1 is defined as the congressionally designated NHT route and any associated NHT heritage sites.

NHT^2 is defined as the historic route and sites where history occurred.

NHT^3 is defined as the recreation aspect of the National Trail: where the trail and/or sites can be used for interpretive and recreational purposes.

NATIONAL HISTORIC TRAIL MANAGEMENT AREA: This is an allocation based on the congressionally designated NHT route (NHT^1), BLM inventories, and GIS view shed analysis. A National Historic Trail Management Area encompasses the area identified along a portion of the National Historic Trail that meets certain criteria. The area must include a segment of National Historic Trail that qualifies as a "high potential route segment" and/ or has a "high potential historic site" within or along it (NHT^2). The width of the National Historic Trail Management Area is defined as an area extending to the visual horizon from the NHT corridor on either side.

NATIONAL MONUMENT: An area designated to protect objects of scientific and historic interest by public proclamation of the President under the Antiquities Act of 1906, or by Congress for historic landmarks, historic and prehistoric structures, or other objects of historic or scientific interest on public lands. Designation also provides for the management of these features and values.

NATIONAL REGISTER DISTRICT: A group of significant archaeological, historical, or architectural sites, within a defined geographic area, that is listed on the National Register of Historic Places.

NATIONAL REGISTER ELIGIBLE PROPERTIES: Cultural resource properties that meet the National Register criteria and have been determined eligible for nomination to the National Register of Historic Places because of their local, state, or national significance. Eligible properties generally are older than 50 years and have retained their integrity. They meet one or more of four criteria- (a) associated with events that have made a significant contribution to the broad patterns of our history; (b) associated with the lives of persons significant in our past; (c) embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master; and (d) have yielded, or may be likely to yield, information important in prehistory or history.

NATIONAL REGISTER OF HISTORIC PLACES: The official list, established by the National Historic Preservation Act, of the Nation's cultural resources worthy of preservation. The National Register lists archeological, historic, and architectural properties (i.e. districts, sites, buildings, structures, and objects) nominated for their local, state, or national significance by state and federal agencies and approved by the National Register Staff. The NPS maintains the National Register.

NATIONAL WILD AND SCENIC RIVERS SYSTEM: A system of nationally designated rivers and their immediate environments that have outstanding scenic, recreational, geologic, fish and wildlife, historical, cultural, and other similar values and are preserved in a free-flowing condition. The system consists of three types of streams- (1) recreation—rivers or sections of rivers that are readily accessible by road or railroad and that may have some development along their shorelines and may have undergone some impoundments or diversion in the past, (2) scenic—rivers or sections of rivers free of impoundments with shorelines or watersheds still largely undeveloped but accessible in places by roads, and (3) wild—rivers or sections of rivers free of impoundments and generally inaccessible except by trails with watersheds or shorelines essentially primitive and waters unpolluted.

NATIVE DIVERSITY: The diversity of species that have evolved in a given place without human influence.

NATIVE SPECIES: A species that is part of an area's original flora and fauna.

NITROGEN OXIDES (OXIDES OF NITROGEN, NO_2): A general term for compounds of nitric oxide (NO), nitrogen dioxide (NO_2), and other oxides of nitrogen. Nitrogen oxides are typically created during combustion and are major contributors to smog formation and acid deposition. NO_2 is a criteria air pollutant and may have many adverse health effects.

NON-ATTAINMENT AREA: An area in which the level of a criteria air pollutant is higher than the level allowed by the federal standards. A single area may have acceptable levels of one criteria air pollutant but unacceptable levels of one or more other criteria air pollutants. Therefore, an area can be both attainment and nonattainment at the same time.

NON-FUNCTIONAL: Riparian-wetland areas are considered to be in nonfunctioning condition when they don't provide adequate vegetation, landform, or large woody debris to dissipate stream energy associated with high flows and thus are not reducing erosion, improving water quality, or other normal

characteristics of riparian areas. The absence of certain physical attributes, such as a flood plain where one should be, is indicators of nonfunctioning conditions.

NON-LINEAR LAND USE AUTHORIZATIONS: LUAs that are not linear in fashion and do not exceed five acres of total surface disturbance. These LUAs do not produce or store more than 100 MW.

NOXIOUS WEED: The Federal Noxious Weed Act, 1974 (PL 930629) defines a noxious weed as, "any living stage (including seeds and reproductive parts) of a parasitic or other plant of a kind which is of foreign origin, is new to or not widely prevalent in the US, and can directly or indirectly injure crops, other useful plants, livestock, poultry or other interests of agriculture, including irrigation, navigation, fish and wildlife resources, or the public health."

OBJECTIVES: The planned results to be achieved within a stated time period. Objectives are subordinate to goals, narrower in scope, and shorter in range. Objectives must specify time periods for completion, and products or achievements that are measurable. See also GOAL.

OBLIGATE: Essential, necessary, unable to exist in any other state, mode, or relationship.

OFF-HIGHWAY VEHICLE (OHV): Any motorized vehicle capable of, or designed for, travel on or immediately over land, water, or other natural terrain, excluding: (1) any non-amphibious registered motorboat; (2) any military, fire, emergency, or law enforcement vehicle while being used for emergency purposes; (3) any vehicle whose use is expressly authorized by the authorized officer, or otherwise officially approved; (4) vehicles in official use; and (5) any combat or combat support vehicle when used for national defense.

OFF ROAD: Cross country travel between designated routes.

ON ROAD: Travelling on designated routes.

PALEONTOLOGICAL RESOURCES: The remains of plants and animals preserved in soils and sedimentary rock. Paleontological resources are important for understanding past environments, environmental change, and the evolution of life.

PARTICULATE MATTER: Fine liquid or solid particles suspended in the air and consisting of dust, smoke, mist, fumes, and compounds containing sulfur, nitrogen, and metals. Also see $PM_{2.5}$ PARTICULATES and PM_{10} PARTICULATES.

PASSAGE SETTING: Passage setting provides a motorized travel corridor traversing the Back Country setting. This corridor is 200 feet wide (100 feet each side), centered on a motorized travel route designated for public use, and is available for management infrastructure in response to resource concerns and visitor demand. The lands are generally natural in appearance and may see minor to moderate alterations over the life of the land use plan due to land use authorizations and BLM management actions.

PASTURE: A grazing area that is separated from other areas by fencing or natural barriers.

PERENNIAL PLANT: A plant that has a life cycle of three or more years. Also see ANNUAL PLANT.

PERENNIAL STREAM: A stream that flows from source to mouth throughout the year; a stream that normally has water in its channel at all times.

PERMIT: A short-term revocable authorization to use public lands for specified purposes.

PERMITTED USE: The forage allocated by, or under the guidance of, an applicable resource-management plan for livestock grazing in an allotment under a permit or lease and is expressed in animal unit months (AUMs).

PERMITTEE: A person or company permitted to graze livestock or conduct commercial recreation on public land.

PLANNING CRITERIA: The standards, rules, and other factors developed by managers and interdisciplinary teams for their use in forming judgments about decision making, analysis and data collection during planning. Planning criteria streamline and simplify the resource management planning actions.

PLANT SUCCESSION: The process of vegetation development by which an area becomes successively occupied by different plant communities of higher ecological order.

PLANT VIGOR: The relative wellbeing and health of a plant as reflected by its ability to manufacture enough food for growth and maintenance.

PM_{10} PARTICULATES: A criteria air pollutant consisting of small particles with an aerodynamic diameter of 10 microns or less. Their size allows them to enter the air sacs deep within the lungs where they may be deposited in have adverse health effects. These particles include dust, soot, and other tiny bits of solid materials in the air.

$PM_{2.5}$ PARTICULATES: Tiny particles with an aerodynamic diameter of 2.5 microns or less. These particles penetrate most deeply into the lungs.

POPULATION: A group of interbreeding organisms of the same kind occupying a particular space; a group of individuals of a species living in a certain area.

POTENTIAL NATURAL COMMUNITY (PNC): The stable biotic community that would become established on an ecological site if all succession stages were completed without human interference under present environmental conditions. The PNC is the vegetation community best adapted to fully use the resources of an ecological site.

PRESCRIBED FIRE (BURNING): The planned applying of fire to rangeland vegetation and fuels under specified conditions of fuels, weather, and other variables to allow the fire to remain in a predetermined area to achieve such site-specific objectives as controlling certain plant species; enhancing growth, reproduction, or vigor of plant species; managing fuel loads; and managing vegetation community types.

PRIMITIVE RECREATION: Recreation that provides opportunities for isolation from the evidence of humans, a vastness of scale, feeling a part of the natural environment, having a high degree of challenge and risk, and using outdoor skills. Primitive recreation is characterized by meeting nature on its own terms, without comfort or convenience of facilities.

PRIMITIVE ROAD: A linear route managed for use by four-wheel drive or high-clearance vehicles. Primitive roads do not normally meet any BLM road design standards.

PRIMITIVE ROUTE: Any transportation linear feature located within areas that have been identified as having wilderness characteristics and not meeting the wilderness inventory road definition.

PRIORITY HABITAT: Includes fish and wildlife habitats requiring protective measures and/or management guidelines to ensure habitat availability.

PRIORITY WILDLIFE SPECIES: Includes fish and wildlife species requiring protective measures and/or management guidelines to ensure their perpetuation. Moreover, priority wildlife species includes State Endangered, Threatened, Sensitive, and Candidate species; animal aggregations considered vulnerable; and those species of recreational, commercial, or tribal importance that are vulnerable.

PROPERLY FUNCTIONING CONDITION: Riparian-wetland areas are functioning properly when enough vegetation, landform, or large woody debris is present to dissipate stream energy associated with high water flows, thereby reducing erosion and improving water quality; filter sediment, capture bed-load, and aid floodplain development; improve floodwater retention and groundwater recharge; develop root masses that stabilize stream banks against cutting action; develop diverse ponding and channel characteristics to provide the habitat and the water depth, duration, and temperature necessary for fish production, waterfowl breeding, and other uses; and support greater biodiversity. The functioning condition of riparian-wetland areas is influenced by geomorphic features, soil, water, and vegetation.

Uplands function properly when the existing vegetation and ground cover maintain soil conditions capable of sustaining natural biotic communities. The functioning condition of uplands is influenced by geographic features, soil, water, and vegetation.

PUBLIC LANDS: Land or interest in land owned by the United States and administered by the Secretary of the Interior through the BLM without regard to how the United States acquired ownership, except lands located on the Outer Continental Shelf, and land held for the benefit of Indians, Aleuts, and Eskimos.

RANGE IMPROVEMENT: An authorized physical modification or treatment which is designed to improve production of forage; change vegetation composition; control patterns of use; provide water; stabilize soil and water conditions; restore, protect and improve the condition of rangeland ecosystems to benefit livestock, wild horses and burros, and fish and wildlife. Range improvements may be structural or nonstructural. A structural improvement requires placement or construction to facilitate the management or control the distribution and movement of animals. Such improvements may include fences, wells, troughs, reservoirs, pipelines, and cattle guards. Nonstructural improvements consist of practices or treatments that improve resource conditions. Such improvements include seedings;

chemical, mechanical, and biological plant control; prescribed burning; water spreaders; pitting; chiseling; and contour furrowing.

RANGELAND: A kind of land on which the native vegetation, climax, or natural potential consists predominately of grasses, grass like plants, forbs, or shrubs. Rangeland includes lands revegetated naturally or artificially to provide a plant cover that is managed like native vegetation. Rangelands may consist of natural grasslands, savannas, shrub lands, moist deserts, tundra, alpine communities, coastal marshes, and wet meadows.

RANGELAND STUDIES: Any study methods accepted by the authorized officer for collecting data on actual use, utilization, climatic conditions, other special events, and trends to determine whether management objectives are being met.

RAPTORS: Birds of prey.

RECORD OF DECISION: A document signed by a responsible official recording a decision that was preceded by the preparing of an environmental impact statement.

RECREATIONAL TARGET SHOOTING: The discharge of any firearm for any lawful, recreational purpose other than the lawful taking of a game animal. Recreational target shooting does not include firearms use employed in accordance with state hunting regulations and policy regarding recreational target shooting does not apply to hunters in pursuit of game with firearms that are being employed in accordance with such regulations.

RECREATION AND PUBLIC PURPOSES ACT of 1926 (44 Stat. 741, as amended; 43 USC 869 et seq.): An act of Congress that allows lease or acquisition of public land to be used for recreation or public purposes by local government entities (county or city governments) and nonprofit organizations.

RECREATION EXPERIENCES: Psychological outcomes realized either by recreation-tourism participants as a direct result of their onsite leisure engagements and recreation-tourism activity participation or by non-participating community residents as a result of their interaction with visitors and guests within their community and/or interaction with the BLM and other public and private recreation-tourism providers and their actions.

RECREATION MANAGEMENT ZONES (RMZs): Subunits within a special recreation management area or ERMA managed for distinctly different recreation products. Recreation products are comprised of recreation opportunities, the natural resource and community settings within which they occur, and the administrative and service environment created by all affecting recreation-tourism providers, within which recreation participation occurs.

RECREATION NICHE: The place or position within the strategically targeted recreation-tourism market for each special recreation management area that is most suitable (i.e., capable of producing certain specific kinds of recreation opportunities) and appropriate (i.e., most responsive to identified visitor or resident customers), given available supply and current demand, for the production of specific recreation opportunities and the sustainable maintenance of accompanying natural resource and/or community setting character.

RECREATION OPPORTUNITIES: Favorable circumstances enabling visitors' engagement in a leisure activity to realize immediate psychological experiences and attain more lasting, value-added beneficial outcomes.

RECREATION OPPORTUNITY SPECTRUM (ROS): One of the existing tools for classifying recreation environments (existing and desired) along a continuum ranging from primitive, low-use, and inconspicuous administration to urban, high-use, and a highly visible administrative presence. This continuum recognizes variation among various components of any landscape's physical, social and administrative attributes; and resulting descriptions (of existing conditions) and prescriptions (of desired future conditions) define recreation setting character. Descriptions of settings follow:

Primitive:

- Remoteness: An area designated by a line generally 3 miles from all open roads, railroads, and motorized trails.
- Evidence of Humans: Setting is essentially an unmodified natural environment. Evidence of humans would be unnoticed by an observer wandering through the area.
- Evidence of trails is acceptable but should not exceed standard to carry expected use.
- Structures are extremely rare.
- Social: Usually less than six parties per day encountered on trails and less than three parties visible at campsites.
- Managerial: Onsite regimentation is low with controls primarily offsite.

Semi-primitive Non-motorized:

- Remoteness: An area designated by a line generally ½ mile from any road, railroad, or trail open to public motorized use. (The guideline for applying the ½ mile criterion is to use ½ mile except where topographic or physical features closer than ½ miles adequately screen out the sights and sounds of humans and make access more difficult and slower. For example, if a ridge is ¼ mile from the road, use the ridge instead of the ½ mile.)
- Any roads, railroads, or trails within the semi-primitive non-motorized areas will have the following characteristics:
- Closed to public motorized use, and
- Are reclaimed, or in the process of reclaiming (when reclaiming will harmonize with the natural appearing environment). Some examples are old logging roads, old railroad beds, old access routes to abandoned campsites, temporary roads, and gated roads that are used for occasional administrative access.
- Evidence of Humans: Natural setting may have subtle modifications that would be noticed but not draw the attention of an observer wandering through the area.
- Little or no evidence of primitive roads and the motorized use of trails and primitive roads.
- Structures are rare and isolated.
- Social: Usually 6-15 parties per day encountered on trails and six or fewer parties visible from campsite.
- Managerial: Onsite regimentation and controls present but subtle.

Semi-Primitive Motorized:

- Remoteness: An area designed by a line generally ½ mile from open better than primitive roads. (The guideline for applying the ½ mile criterion is to consistently use ½ mile where topographic or physical features closer than ½ mile adequately screen out the sights and sounds of humans, e.g. a ridge ¼ mile from the road).
- Contains open primitive roads that are not maintained for the use of standard passenger-type vehicles, normally OHVs and high-clearance vehicles, e.g. an old pickup with high clearance. These open roads are generally tracks, ruts, or rocky-rough surface and upgraded and not drained. The roadbeds and cuts are mostly vegetated with grass or native material unless they are too rocky for vegetation. The roads harmonize with the natural environment. Examples include old logging roads from before specified road years, old revegetated railroad beds, old access roads to abandoned home-sites, temporary logging roads that are revegetated, and low standard administrative roads (normally used for access to wildlife openings).
- Evidence of Humans: Natural setting may have moderately dominant alterations but would not draw the attention of motorized observers on trails and primitive roads within the area. Any closed improved roads must be managed to revegetate and harmonize with the natural environment.
- Strong evidence of primitive roads and the motorized use of trails and primitive roads.
- Structures are rare and isolated.
- Social: Low to moderate contact frequency.
- Managerial: Onsite regimentation and controls present but subtle.

Roaded Natural:

- Remoteness: No criteria.
- Evidence of Humans: Natural setting may have modifications, which range from being easily noticed to strongly dominant to observers within the area. But from sensitive travel routes and use areas these alterations would remain unnoticed or visually subordinate.
- There is strong evidence of designed roads, highways, or both.
- Structures are generally scattered, remaining visually subordinate or unnoticed to the sensitive travel route observer. Structures may include utility corridors or microwave installations.
- Social: Frequency of contact is- Moderate to High on roads; Low to Moderate on trails and away from roads.
- Managerial: Onsite regimentation and controls are noticeable but harmonize with the natural environment.

Rural:

- Remoteness: No criteria.
- Evidence of Humans: Natural setting is culturally modified to the point that it is dominant to the sensitive travel route observer. This setting may include pastoral, agricultural, intensively managed wild landscapes, or utility corridors. Pedestrian or other slow-moving observers are constantly within view of culturally changed landscape.
- There is strong evidence of designed roads, highways, or both.

- Structures are readily apparent and may range from scattered to small dominant clusters, including utility corridors, farm buildings, microwave installations, and recreation sites.
- Social: Frequency of contact is: Moderate to High developed sites, on roads and trails, and water surfaces; Moderate away from developed sites.
- Managerial: Regimentation and controls obvious and numerous, largely in harmony with the human-made environment.

Urban:

- Remoteness: No criteria.
- Evidence of Humans: Setting is strongly structure dominated. Natural or natural appearing elements may play an important role but be visually subordinate. Pedestrian and other slow moving observers are constantly within view of artificial enclosure of spaces.
- There is strong evidence of designed roads and/or highways and streets.
- Structures and structure complexes are dominant.
- Social: Large numbers of users onsite and in nearby areas.
- Managerial: Regimentation and controls obvious and numerous.

RECRUITMENT: The increase in population caused by natural reproduction or immigration.

RENEWABLE ENERGY: Energy which comes from natural resources such as sunlight, wind, rain, tides, and geothermal heat, which are renewable (naturally replenished).

RESOURCE ADVISORY COUNCIL (RAC): A citizen-based group of 10 to 15 members chartered under the Federal Advisory Committee Act and appointed by the secretary of the interior to forward advice on public land planning and management issues to the BLM. Council membership reflects a balance of various interests concerned with the management of the public lands and users of the public lands.

RESOURCE MANAGEMENT PLAN (RMP): The Federal Land Policy and Management Act (43 CFR 1601.0-5 (k)) details the form and contents of an RMP. It generally establishes that the document will provide guidance on:

- Land areas for limited, restricted or exclusive use; designation, including ACEC designation; and transfer from Bureau of Land Management Administration;
- Allowable resource uses (either singly or in combination) and related levels of production or use to be maintained;
- Resource condition goals and objectives to be attained;
- Program constraints and general management practices needed to achieve the above items;
- Need for an area to be covered by more detailed and specific plans;
- Support action, including such measures as resource protection, access development, realty action, cadastral survey, etc., as necessary to achieve the above;
- General implementation sequences, where carrying out a planned action is dependent upon prior accomplishment of another planned action; and
- Intervals and standards for monitoring and evaluating the plan to determine the effectiveness of the plan and the need for amendment or revision.

- It is not a final implementation decision on actions which require further specific plans, process steps, or decisions under specific provisions of law and regulations.

REST: See GRAZING REST.

RESTORATION (CULTURAL RESOURCE): The process of accurately reestablishing the form and details of a property or portion of a property together with its setting, as it appeared in a particular period of time. Restoration may involve removing later work that is not in itself significant and replacing missing original work. Also see STABILIZATION (CULTURAL RESOURCE).

REST-ROTATION GRAZING: A grazing system in which one part of the range is ungrazed for an entire grazing year or longer while other parts are grazed for a portion or all of a growing season. Distinguished from deferment, in which non-use occurs only during part of the grazing season (see DEFERMENT).

RIGHT-OF-WAY: A permit or easement that authorizes the use of lands for certain specified purposes, commonly for pipelines, roads, telephone lines, or power lines.

RIPARIAN: Pertaining to or situated on or along the bank of streams, lakes, and reservoirs.

RIPARIAN AREA: A form of wetland transition between permanently saturated wetlands and upland areas. Riparian areas exhibit vegetation or physical characteristics that reflect the influence of permanent surface or subsurface water. Typical riparian areas include lands along, adjacent to, or contiguous with perennially and intermittently flowing rivers and streams, glacial potholes, and the shores of lakes and reservoirs with stable water levels. Excluded are ephemeral streams or washes that lack vegetation and depend on free water in the soil.

ROAD (Travel Management definition): A linear route declared a road by the owner, managed for used by low-clearance vehicles having four or more wheels, and maintained for regular and continuous use.

ROAD (Wilderness Inventory definition): A route that has been improved and maintained by mechanical means to insure relatively regular and continuous use. Refer to BLM IM 2011-154, Attachment 1 for additional description of this definition.

ROADSIDE: A general term denoting the area adjoining the outer edge of the road.

ROTATIONAL GRAZING: A grazing system that involves scheduled movement of grazing animals from one pasture to another. Utilizing rotational grazing can improve livestock distribution while incorporating rest period for new forage.

ROUTE: represents a group or set of roads, trails, and primitive roads that represents the BLM transportation system. Generically, components of the transportation system are described as "routes".

RUNOFF: Precipitation, snow melt or irrigation water that appears in uncontrolled surface streams or rivers.

SALABLE MINERALS: Common variety minerals on public lands, such as sand and gravel, which are used mainly for construction and are disposed of by sales or special permits to local governments.

SCIENTIFIC DATA RECOVERY: See CULTURAL RESOURCE DATA RECOVERY.

SCOPING: An early and open process for determining the scope of issues to be addressed in an environmental impact statement and the significant issues related to a proposed action.

SEASONAL GRAZING: A grazing system that allows livestock grazing on a particular area for only part of the year.

SEASON OF USE: The time period when livestock grazing is permitted on a given range area as specified in the grazing permit.

SECTION: 640 acres, 1 mile square.

SECTION 2920 PERMIT: Revocable authorizations, for up to three years to permit land uses that involve either little or no land improvement or construction, or investment which can be amortized within the terms of the permit. A permit conveys no possessory interest. The authorized officer may renew it at his/her discretion or revoke it in accordance with its terms or the provisions of 43 CFR 2920.9-3. There are no limitations on the amount of land that maybe included in a permit; however, the area should be limited to the size justified.

SECTION 7 CONSULTATION: The requirement of Section 7 of the ESA that all federal agencies consult with the US Fish and Wildlife Service or the National Marine Fisheries Service if a proposed action might affect a federally listed species or its critical habitat.

SEDIMENT: Solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water. Sediment includes chemical and biochemical precipitates and decomposed organic material such as humus.

SEDIMENTARY ROCKS: Rocks, such as sandstone, limestone, and shale, that are formed from sediments or transported fragments deposited in water.

SEDIMENTATION: The process or action of depositing sediment.

SEDIMENT LOAD (SEDIMENT DISCHARGE): The amount of sediment, measured in dry weight or by volume, which is transported through a stream cross-section in a given time. Sediment load consists of sediment suspended in water and sediment that moves by sliding, rolling, or bounding on or near the streambed.

SEDIMENT TRANSPORT: The movement of mineral and organic solid materials in a stream.

SEDIMENT YIELD: The amount of sediment removed from a watershed over a specified period, usually expressed as tons, acre-feet, or cubic yards of sediment per unit of drainage area per year.

SEEPS: Wet areas, normally not flowing, arising from an underground water source.

SENSITIVE SOILS: Soil types prone to erosion, such as from surface disturbing activities and vehicle use, and have a low soil loss tolerance rate. A tolerable soil loss is the maximum annual amount of soil, which can be removed before the long term natural soil productivity is adversely affected based on the Universal Soil Loss Equation (USLE) (Ontario Ministry of Agriculture, Food and Rural Affairs web site, http://www.omafra.gov.on.ca/english/engineer/facts/00-001.htm last visited 2/21/2012).

SHOULDER: The portion of the roadway contiguous to the travel way for accommodation of stopped vehicles.

SIKES ACT OF 1974: A federal law that promoted federal-state cooperation in managing wildlife habitats on both BLM and Forest Service lands. The act requires BLM to work with state wildlife agencies to plan the development and maintenance of wildlife habitats and has as its main tool the habitat management plan.

SOIL ERODIBILITY: The predisposition of a particular soil to be transported by wind or water if it is disturbed and exposed to the elements.

SOIL INFILTRATION: The ability of soil to absorb moisture that falls on it as precipitation.

SOIL MOISTURE STORAGE: The water content stored in a soil.

SOIL PRODUCTIVITY: The capacity of a soil in its normal environment to produce a specified plant or sequence of plants under a specified system of management.

SOIL STABILITY: A qualitative term used to describe a soil's resistance to change. Soil stability is determined by intrinsic properties such as aspect, depth, elevation, organic matter content, parent material, slope, structure, texture, and vegetation.

SOIL STRUCTURE: The physical constitution of soil material as expressed by size, shape, and the degree of development of primary soil particles and voids into naturally or artificially formed structural units.

SPECIAL CULTURAL RESOURCE MANAGEMENT AREA (SCRMA): An area containing cultural resources that are of special importance for public use, scientific use, traditional use or other uses as defined in BLM Manual 8110.4.

SPECIAL RECREATION MANAGEMENT AREAS (SRMAs): A public lands unit identified in land use plans to direct recreation funding and personnel to fulfill commitments made to provide specific, structured recreation opportunities (i.e., activity, experience, and benefit opportunities). Both land use plan decisions and subsequent implementing actions for recreation in each special recreation management area are geared to a strategically identified primary market: destination, community, or are undeveloped.

SPECIAL RECREATION PERMIT (SRP): An authorization that allows for specific nonexclusive permitted recreational uses of the public lands and related waters. SRPs are issued to control visitor use, protect recreational and natural resources, provide for the health and safety of visitors, and accommodate commercial recreational uses.

SRP TYPES AND DEFINITIONS:

Commercial Use: The activity, service, or use is commercial if:

- Any person, group, or organization makes or attempts to make a profit, receive money, amortize equipment, or obtain goods or services, as compensation from participants in recreational activities occurring on public lands led, sponsored, or organized by that person, group, or organization;
- Anyone collects a fee or receives other compensation that is not strictly a sharing of actual expenses, or exceeds actual expenses, incurred for the purposes of the activity, service, or use;
- There is paid public advertising to seek participants; or
- Participants pay for a duty of care or an expectation of safety.

Competitive Use: Any organized, sanctioned, or structured use, event, or activity on public land in which two or more contestants compete and either or both of the following elements apply:

- Participants register, enter, or complete an application for the event;
- A predetermined course or area is designated;
- Or, one or more individuals contesting an established record such as for speed or endurance.

Organized Group Activity and Event Use: A structured, ordered, consolidated, or scheduled event on, or occupation of, public lands for the purpose of recreational use that is not commercial or competitive.

Vending: The sale of goods or services, not from a permanent structure, associated with recreation on the public lands or related waters, such as food, beverages, clothing, firewood, souvenirs, filming or photographs (video or still), or equipment repairs.

SPECIAL STATUS SPECIES: Plant or animal species listed as threatened, endangered, candidate, or sensitive by federal or state governments. By policy, the BLM has certain responsibilities for all special status species. BLM sensitive species are not covered by any other "safety net" of status designation; therefore, the Arizona BLM Sensitive Species List does not include species that are already federally listed or state listed.

SPLIT-ESTATE: Land whose surface rights and mineral rights are owned by different entities.

STABILIZATION (CULTURAL RESOURCE): Protective techniques usually applied to structures and ruins to keep them in their existing condition, prevent further deterioration, and provide structural safety without significant rebuilding. Capping mud-mortared masonry walls with concrete mortar is an example of a stabilization technique. Also see RESTORATION (CULTURAL RESOURCE).

STABILIZATION (SOIL): Chemical or mechanical treatment to increase or maintain the stability of a mass of soil or otherwise improve its engineering properties.

STAGING AREA: An area where participants in an activity gather and make final preparations for the activity.

STANDARDS AND GUIDELINES FOR RANGELAND HEALTH: See ARIZONA STANDARDS FOR RANGELAND HEALTH AND GUIDELINES FOR GRAZING ADMINISTRATION.

STANDARD TERMS AND CONDITIONS: Areas may be open to leasing or available for permitted uses with no specific management decisions defined in a Resource Management Plan; however, these areas are subject to lease or permit terms and conditions as defined on the lease form (Form 3100-11, Offer to Lease and Lease for Oil and Gas; and Form 3200-24, Offer to Lease and Lease for Geothermal Resources) or land use authorization permit.

STATE HISTORIC PRESERVATION OFFICER (SHPO): The official within and authorized by each state at the request of the Secretary of the Interior to act as liaison for the National Historic Preservation Act. Also see NATIONAL HISTORIC PRESERVATION ACT OF 1966, AS AMENDED (NHPA).

STIPULATION: A condition of lease or permit issuance that provides a level of protection for other resource values or land uses by restricting surface disturbing activities during certain times or locations or to avoid unacceptable impacts, to an extent greater than standard lease terms or regulations. A stipulation is an enforceable term of the lease contract or land use authorization, supersedes any inconsistent provisions of the standard lease form, and is attached to and made a part of the lease or permit. Stipulations further implement BLM's regulatory authority to protect resources or resource values. Stipulations are developed through the land use planning process.

STOCKING RATE: The number of specific kinds and classes of animals grazing or using a unit of land for a specific time period. Stocking rates may be expressed as a ratio, such as of animal units/section, acres/animal unit, or acres/animal unit month.

STOCK TANK (POND): A water impoundment created by building a dam, digging a depression, or both, to provide water for livestock or wildlife.

STREAM BANK: The portion of a stream channel that restricts the sideward movement of water at normal water levels. The stream bank's gradient often exceeds 45° and exhibits a distinct break in slope from the stream bottom.

STREAM BANK STABILITY: A stream bank's relative resistance to erosion, which is measured as a percentage of alteration to stream banks.

STRUCTURAL DIVERSITY: The diversity of the composition, abundance, spacing, and other attributes of plants in a community.

SUBSURFACE: Of or pertaining to rock or mineral deposits which generally are found below the ground surface.

SUCCESSION: See PLANT SUCCESSION.

SUPPLEMENTAL WILDERNESS VALUES: Resources not required for an area to be designated a wilderness but that are considered in assessing an area's wilderness potential. Such values include ecological, geologic, and other features of scientific, educational, scenic, or historical value.

SURFACE-DISTURBING ACTIVITY: Surface-disturbing activities are those that normally result in more than negligible disturbance to public lands and accelerate the natural erosive process. Surface disturbance may, but does not always, require reclamation. These activities normally involve use or occupancy of the surface, cause disturbance to soils and vegetation, and are usually caused by motorized or mechanical actions. They include, but are not limited to: the use of mechanized earth-moving equipment; truck-mounted drilling and seismic exploration equipment; off-road vehicle travel in areas designated as limited or closed to off-road vehicle use; vegetation treatments; construction of facilities such as power lines, pipelines, oil and gas wells; recreation sites, improvements for range and wildlife; new road construction; and use of pyrotechnics and explosives. Surface disturbance is not normally caused by casual-use activities. Activities that are not considered surface-disturbing include, but are not limited to: livestock grazing, cross-country hiking, minimum impact filming, and vehicular travel on designated routes.

TAKE: As defined by the ESA, "to harass, harm, pursue, hunt, shoot, wound, kill, capture, or collect, or attempt to engage in any such conduct."

TARGET SPECIES: Plant species to be reduced or eliminated by a vegetation treatment.

TEMPORARY NON-USE: The authorized withholding, on an annual basis, of all or a portion of permitted livestock use in response to a request of the permittee or lessee.

TERMS AND CONDITIONS: Stipulations contained in livestock grazing permits and leases as determined by the authorized officer to be appropriate to achieve management and resource condition objectives for the public lands and other lands administered by BLM and to achieve standards for rangeland health and ensure conformance with guidelines for grazing administration. See also STANDARD TERMS AND CONDITIONS.

THREATENED SPECIES: Any plant or animal species likely to become endangered within the foreseeable future throughout all or a part of its range and designated by the U.S. Fish and Wildlife Service under the ESA. Also see ENDANGERED SPECIES.

TINAJA: A small pool in a rocky hollow, usually along an ephemeral water course where it runs through exposed bedrock that holds water into the dry season.

TRAIL: (Interagency definition) Linear route managed for human powered, stock, or off highway vehicle forms of recreation or for historic or heritage values. Trails are not generally managed for use by four wheel drive or high clearance vehicles.

Sonoran Desert National Monument Trail Definition: Linear route managed for foot, horseback, and pack stock. Motorized and mechanized forms of travel are prohibited, except for wheeled game carriers and handcarts.

Designated Wilderness Area Trail Definition: Linear route managed for travel by foot, horseback and, pack stock. Mechanized forms of travel (e.g. mountain bikes, wheeled game carriers, handcarts, and hang gliders) are prohibited in wilderness areas. Motorized travel is prohibited.

TRAILHEAD: The terminus of a hiking, horse, or bicycle trail accessible by motor vehicle and sometimes having parking, signs, a visitor register, and camping and sanitary facilities.

TRANSPORTATION SYSTEM: Represents the sum of the BLM's recognized inventory of linear features (roads, primitive roads, and trails) formally recognized, designated, and approved.

TRAVEL MANAGEMENT AREAS (TMA): The TMAs are polygons or delineated areas where travel management (either motorized or non-motorized) needs particular focus. These areas may be designated as open, closed, or limited to motorized use and will typically have an identified or designated network of roads, trails, ways, and other routes that provide for public access and travel across the planning area. All designated travel routes within TMAs should have a clearly identified need and purpose as well as clearly defined activity types, modes of travel, and seasons or times for allowable access or other limitations.

TREAD LIGHTLY!™: A not-for-profit organization whose mission is to increase awareness of ways to enjoy the great outdoors while minimizing human impacts.

TREND: The direction of change, over time, either toward or away from desired management objectives.

UNAUTHORIZED USE: Any use of the public lands not authorized or permitted.

UNDERSTORY: Plants growing under the canopy of other plants. Understory usually refers to grasses, forbs, and low shrubs under a tree or brush canopy.

UNDEVELOPED RECREATION-TOURISM MARKET: National, regional, and/or local recreation-tourism visitors, communities, or other constituents who value public lands for the distinctive kinds of dispersed recreation produced by the vast size and largely open, undeveloped character of their recreation settings. Major investments in facilities are excluded within special recreation management areas where the BLM's strategy is to target demonstrated undeveloped recreation-tourism market demand. Here, recreation management actions are geared toward meeting primary recreation-tourism market demand to sustain distinctive recreation setting characteristics; however, major investments in visitor services are authorized both to sustain those distinctive setting characteristics and to maintain visitor freedom to choose where to go and what to do—all in response to demonstrated demand for undeveloped recreation.

UPLANDS: Lands at higher elevations than the alluvial plain or low stream terrace; all lands outside the riparian-wetland and aquatic zones.

URBAN INTERFACE (WILDLAND-URBAN INTERFACE): The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetation. This interface creates conflicts and complicates fighting wildfires and conducting prescribed burns, as well as all other natural resource management activities.

USABLE FORAGE: That portion of the forage that can be grazed without damage to the basic resources; may vary with season of use, species, and associated species.

UTILITY CORRIDOR: The BLM's preferred route for placing land use authorizations for major linear utilities (i.e. pipelines and power lines). See also DESIGNATED MULTIUSE UTILITY CORRIDOR.

UTILITY-SCALE RENEWABLE ENERGY DEVELOPMENT: Utility-scale renewable energy facilities (managed as a land use authorization), where the proponent has signed a purchase power agreement with a utility company to sell power. These facilities typically produce more than 100 MW.

UTILIZATION (FORAGE): The proportion of the current year's forage consumed or destroyed by grazing animals. Utilization is usually expressed as a percentage.

VALID EXISTING RIGHTS: Locatable mineral development rights or land use authorizations that existed when the Federal Land Policy and Management Act (FLPMA) was enacted on October 21, 1976. Some areas are segregated from entry and location under the Mining Law to protect certain values or allow certain uses. Mining claims that existed as of the effective date of the segregation may still be valid if they can meet the test of discovery of a valuable mineral required under the Mining Law. Determining the validity of mining claims located on segregated lands requires BLM to conduct a valid existing rights determination.

VANDALISM (CULTURAL RESOURCE): Malicious damage or the unauthorized collecting, excavating, or defacing of cultural resources. Section 6 of the Archaeological Resources Protection Act states that "no person may excavate, remove, damage, or otherwise alter or deface any archaeological resource located on public lands or Indian lands…unless such activity is pursuant to a permit issued under section 4 of this Act."

VEGETATION STRUCTURE: The composition of an area's vegetation--plant species, growth forms, abundance, vegetation types, and spatial arrangement.

VEGETATION TREATMENTS: Treatments that improve vegetation condition or production. Such treatments may include seedings; prescribed burning; or chemical, mechanical, and biological plant control.

VEGETATION TYPE: A plant community with distinguishable characteristics.

VIABILITY: The capability of living, developing, growing, or germinating under favorable conditions.

VIEWSHED: The entire area visible from a viewpoint.

VISITOR DAY: 12 visitor hours, which may be aggregated continuously, intermittently, or simultaneously by one or more people.

VISUAL ASPECT: The visual first impression of vegetation at a particular time or seen from a specific point.

VISUAL RESOURCE MANAGEMENT (VRM): The planning, design, and implementing of management objectives to provide acceptable levels of visual impacts for all BLM resource management activities.

VISUAL RESOURCE MANAGEMENT (VRM) CLASSES: Categories assigned to public lands based on scenic quality, sensitivity level, and distance zones. There are four classes. Each class has an objective which prescribes the amount of change allowed in the characteristic landscape.

Class I: (Preservation) provides for natural, ecological changes only. This class includes wilderness areas, some natural areas, some wild and scenic rivers, and other similar sites where landscape modification should be restricted.

Class II: (Retention of the landscape character) includes areas where changes in any of the basic elements (form, line, color, or texture) caused by management activities should not be evident in the characteristic landscape.

Class III: (Partial retention of the landscape character) includes areas where changes in the basic elements caused by management activities may be evident in the characteristic landscape. But the changes should remain subordinate to the existing landscape character.

Class IV: (Modification of the landscape character) includes areas where changes may subordinate the original composition and character. But the changes should reflect what could be a natural occurrence in the characteristic landscape.

WATER DEVELOPMENTS: Construction of artificial, or modification of natural water sources to provide reliable, accessible water for livestock, wildlife, or people.

WATER QUALITY: Term used to describe the chemical, physical, and biological characteristics of water in respect to its suitability for a particular purpose.

WATER RIGHT: The right to use a specific quantity of water occurring in a water supply, on a specific time schedule, at a specific place and putting it to a specific beneficial use.

WATERSHED (CATCHMENT): A topographically delineated area that is drained by a stream system, that is, the total land area above some point on a stream or river that drains water past that point. The watershed is a hydrologic unit often used as a physical-biological unit and a socioeconomic-political unit for planning and managing natural resources.

WATERSHED CONDITION (WATERSHED HEALTH): The comparison of watershed processes to normal or expected measurements of properties such as soil cover, erosion rate, runoff rate, and groundwater table elevation; an assessment or categorization of an area by erosion conditions, erosion hazards, and the soil moisture/temperature regime.

WATERSHED FUNCTION: The combination of processes attributed to watersheds as part of the hydrologic cycle, including interception of rain by plants, rocks, and litter; surface storage by the soil; groundwater storage; stream channel storage; soil evaporation; plant transpiration; and runoff. These processes affect the following properties of the watershed: runoff rate, water infiltration rate, soil building rate, soil erosion rate, groundwater recharge rate, groundwater discharge rate, water table elevation, and surface water discharge. These properties in turn affect plant communities through soil attributes, including soil parent material, soil moisture, and nutrients; stream and rivers through flooding

duration and magnitude, as well as sediment load, which structures the dimension, pattern, and profile of channels; and lakes and reservoirs through sedimentation and nutrient input.

WEED: Any plant that interferes with management objectives. A weed may be native or non-native, invasive or passive, or non-noxious.

WETLANDS: An area that is inundated or saturated by surface or ground water often and long enough to support and that under normal circumstances supports a prevalence of vegetation typically adapted for life in saturated soil. Wetlands include marshes, shallows, swamps, lake shores, bogs, muskegs, wet meadows, estuaries, cienegas, and riparian areas.

WILD AND SCENIC RIVER CORRIDOR: See NATIONAL WILD AND SCENIC RIVERS SYSTEM.

WILDCAT DUMPSITE: A non-permitted dumping on federally managed land.

WILDERNESS CHARACTERISTICS: Attributes defined in Section 2(c) of the Wilderness Act, including the area's size, its apparent naturalness, and its outstanding opportunities for solitude or a primitive and unconfined type of recreation. Wilderness characteristics may also include supplemental values such as ecological, geological, or other features of scientific, educational, scenic, or historical value that may be present but are not required.

Naturalness: The degree to which an area generally appears to have been affected primarily by the forces of nature with the imprint of people's work substantially unnoticeable.

Solitude: The state of being alone or remote from others; isolation. A lonely or secluded place.

Primitive and Unconfined Recreation: Non-motorized, non-mechanized (except as provided by law), and undeveloped types of recreation activities.

WILDFIRE: The unplanned ignition of a wildland fire (such as a fire caused by lightning, volcanoes, unauthorized and accidental human-caused fires) and escaped prescribed fires.

WILD FREE-ROAMING HORSES AND BURROS: Wild horses and burros are managed in a manner that ensures significant progress is made toward achieving the Land Health Standards for upland vegetation and riparian plant communities, watershed function, and habitat quality for animal populations, as well as other site-specific or landscape-level objectives, including those necessary to protect and manage Threatened, Endangered, and Sensitive Species.

WILDLAND FIRE: A general term describing any non-structure fire, other than prescribed fire, that occurs in the wildland. Wildland fires are categorized into two distinct types:

Wildfires- unplanned ignitions or prescribed fires that are declared wildfires.

Prescribed Fires- Planned ignitions.

WILDLAND-URBAN INTERFACE (WUI): Areas where human structures and natural fuels interface or intermix with each other. This interface occurs mainly within 66 to 200 feet of houses, where fire most directly threatens houses and where a defensible zone can be developed.

WILDLIFE: A broad term that includes birds, reptiles, amphibians, and non-domesticated mammals.

WILDLIFE HABITAT AREAS (WHAs): An area that offers feeding, roosting, breeding, nesting, and refuge areas for a variety of wildlife species native to an area. Referred to as Wildlife Management Areas in prior plans.

WITHDRAWAL: Withholding an area of federal land from settlement, sale, location, or entry under some or all of the general land laws, for the purpose of limiting activities under those laws in order to maintain other public values in the area or reserving the area for a particular public purpose or program; or transferring jurisdiction over an area of federal land, other than property governed by the Federal Property and Administrative Services Act, from one department, bureau, or agency to another department, bureau, or agency. See also SEGREGATION.

XERORIPARIAN: An area in a drainage that supports plant species more characteristic of uplands than wetlands, but that is more densely vegetated than areas removed from the drainage. Any flows in these channels are characteristically ephemeral but water may also be subsurface and the drainage may not flow.

4. LIST OF PREPARERS

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4. LIST OF PREPARERS

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ABBREVIATIONS

ACEC	Areas of Critical Environmental Concern
AGFD	Arizona Game and Fish Department
AUM	animal unit month
BLM	Bureau of Land Management
BGR	Barry M. Goldwater Range
DEIS	draft environmental impact statement
DRMP	Draft Resource Management Plan
EIS	environmental impact statement
ERMA	extensive recreation management area
ESA	Endangered Species Act
FEIS	final environmental impact statement
FLPMA	Federal Land Policy and Management Act
I-8	Interstate 8
I-10	Interstate 10
IM	instruction memorandum
LUA	land use authorization
MOU	memorandum of understanding
NEPA	National Environmental Policy Act
NHT	National Historic Trail
NPS	National Park Service
OHV	off-highway vehicle
PEIS	programmatic environmental impact statement
PM_{10}	particulate matter 10 microns in diameter or less
$PM_{2.5}$	particulate matter 2.5 microns in diameter or less
PRMP	Proposed Resource Management Plan
RMA	recreation management area
RMP	resource management plan
RMZ	recreation management zone
ROD	record of decision
ROW	right-of-way
SCRMA	special cultural resource management area
SDNM	Sonoran Desert National Monument
SRP	special recreation permit
TMA	travel management area
US	United States
USFWS	United States Fish and Wildlife Service
VRM	visual resource management
WSA	wilderness study area
WUI	wildland-urban interface

CHAPTER 5

CONSULTATION AND COORDINATION

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CHAPTER 5
CONSULTATION AND COORDINATION

5.1 INTRODUCTION

This chapter describes the public outreach and participation opportunities made available through the development of this PRMP/EIS and consultation and coordination efforts with tribes, government agencies, and other stakeholders. This chapter also lists the agencies, organizations, and individuals that received a copy of the Draft RMP/EIS.

The BLM land use planning activities are conducted in accordance with NEPA requirements, CEQ regulations, and DOI and BLM policies and procedures implementing NEPA. NEPA and associated laws, regulations, and policies require BLM to seek public involvement early in and throughout the planning process to develop a reasonable range of alternatives to proposed actions and to prepare environmental documents that disclose the potential impacts of proposed actions and alternatives. Public involvement and agency consultation and coordination, which have been at the heart of the planning process leading to this PRMP/FEIS, were achieved through Federal Register notices, public comments on the Draft RMP/EIS, public and informal meetings, individual contacts, media releases, planning bulletins, and the Lower Sonoran-SDNM RMP Web site at: http://www.blm.gov/az/st/en/prog/planning/son_des.html.

5.2 PUBLIC COLLABORATION AND OUTREACH

Active involvement by the public helps to ensure that the alternatives considered address the diversity of public interests, builds trust between BLM and the public, creates public "buy-in" to and understanding of the eventual management decisions, and develops a working relationship that will carry into the shared implementation of those management decisions.

BLM has performed a variety of public outreach programs to increase involvement in the planning process. BLM has taken a two-pronged approach to public involvement. The first has been traditional public involvement through scheduled and announced public meetings, such as the public meetings at the scoping and draft comment periods.

The second approach has been public interaction through BLM participation at community meetings, special interest group meetings, and coordination with elected representatives. BLM staff were invited to speak at meetings in the communities of Tonopah, Buckeye, Gila Bend, Ajo, and Mobile as well as at numerous environmental and recreation groups. These informal meetings have provided the BLM an opportunity to explain the planning process and timeline, and to encourage citizen participation in the planning efforts. These meetings have been very helpful for both the planning effort and to identify issues that need immediate action, independent of the planning process. Several communities also have met independently to discuss public lands and develop recommendations to present to BLM. BLM has continued to actively encourage public involvement through the formal planning process, informal community meetings, and other methods.

5.2.1 SCOPING PROCESS

The Lower Sonoran-SDNM public scoping process began officially with the publication of Notices of Intent (NOIs) in the Federal Register. The NOI to initiate planning on the SDNM Decision Area was published on April 24, 2002 (Vol. 67, No. 79, Page 20158, [AZ-400-02-1610-DO-089A]), and the NOI to initiate planning on the Lower Sonoran (formerly known as the Phoenix South) Decision Area was published on December 9, 2002 (Vol. 67, No. 236, Page 72968, [AZ-020-03-1610-DO-089A]). The BLM also released the following:

- A Planning Bulletin to the entities on BLM's mailing list, including federal, state, county, and local agencies, tribes, organizations and special interest groups, and other interested parties. The Bulletin was published in both English and Spanish;
- Newspaper legal announcements in statewide and local papers; and
- Media and public service announcements in both English and Spanish to local and regional newspapers, television, and radio stations issued January 21-31, 2003.

A complete, detailed listing of the media outlets where information was released is included in the Scoping Report, which can be downloaded from the project Web site found on the Internet at: http://www.blm.gov/pgdata/etc/medialib/blm/az/pdfs/planning/son_des.Par.48097.File.dat/Scoping_Report.pdf.

BLM conducted 11 public scoping meetings during February and March of 2003. The open house scoping meetings were held in the Arizona communities of Maricopa, Gila Bend, Casa Grande, Globe-Miami, Ajo, Sells, Tucson, Buckeye, Mesa, Phoenix, and Yuma. Each of the 11 meetings was conducted in an open house format, allowing meeting participants to review maps and display boards of each planning area and to ask specific questions one-on-one with BLM staff about the RMP/EIS process.

Comments received during the initial scoping period largely fell into the following three categories:

- Public Values – those features or qualities valued by various members of the public, such as an area's natural beauty, the quiet peaceful surroundings, and a place to "get away from it all" without having to travel great distances;
- Public Activities – those activities that the public noted doing on public lands, such as hiking, hunting, sight-seeing, camping, wildlife observation, and driving and motorized touring; and
- Desired Management – the public's ideas and input for how BLM should manage the public lands in the Lower Sonoran Field Office area and Sonoran Desert National Monument, which focused on managing for resource protection and to provide public access to the lands.

Section 1.3.4, Planning Issues Addressed in the RMP Process, summarizes the issues raised during scoping. Additional details can be found in the Scoping Report on the project Web site.

5.2.2 PROJECT WEB SITE

The BLM maintains a project Web site to provide the public with the latest information about the RMP/EIS process. The Web site, available at: http://www.blm.gov/az/st/en/prog/planning/son_des.html, provides background information about the project, a public involvement timeline and calendar, maps and photos of the planning area, copies of documents such as the NOIs, newsletters, the Draft RMP/EIS, and point-of-contact information.

5.2.3 MAILING LIST

The BLM compiled a mailing list of the individuals, agencies, and organizations that had participated in past BLM projects. Attendees at the scoping open houses, and public meetings were added to the mailing list if they wanted to receive or continue to receive project information. In addition, all individuals or organizations who submitted scoping comments and comments on the Draft RMP/EIS were added to the mailing list. Through this process, the mailing list was revised and now includes approximately 500 entries. Requests to be added to or to remain on the official Lower Sonoran-SDNM RMP distribution list will continue to be accepted throughout the planning process.

5.3 CONSULTATION AND COORDINATION

5.3.1 AGENCY COORDINATION

Agency coordination is an important step in a successful collaborative process for several reasons. First, early involvement with other federal, tribal, state, and local governments establishes a solid working relationship with each agency. Next, coordination builds trust and credibility between agencies that can then be transferred to the public. Finally, coordination will help ensure that BLM develops land use decisions that are supported by and conform to other jurisdictions in any given area to the maximum extent possible.

BLM has coordinated with federal, state, and county agencies throughout the planning and EIS process. The BLM has gathered issues, ideas, and concerns, and discussed the role of agencies in the process. A full listing of the agencies that BLM coordinated with can be found in the Scoping Report at: http://www.blm.gov/pgdata/etc/medialib/blm/az/pdfs/planning/son_des.Par.48097.File.dat/Scoping_Report.pdf.

A letter introducing the RMP/EIS, identifying data-gathering efforts, and offering agencies the opportunity to become cooperating agencies in the planning efforts was sent to more than 200 agencies. A cooperating agency meeting was held at the Arizona State Office on October 30, 2002. The purpose of the meeting was to discuss BLM's planning process, collaborative planning, and the meaning and responsibilities of cooperating agency status. Opportunities for involvement in BLM's planning process without becoming a cooperating agency also were discussed. It was made clear that BLM's goal was to encourage involvement by all interested parties using whatever methods the parties wished.

MOUs have been developed for those agencies choosing to be a cooperating agency on the Lower Sonoran-SDNM RMP/EIS to outline the roles and responsibilities of the cooperating agencies and the BLM throughout the planning process. BLM has signed MOUs with the following agencies:

- Arizona Game and Fish Department
- Arizona Department of Transportation

5.3.2 TRIBAL GOVERNMENT-TO-GOVERNMENT CONSULTATION

BLM contacted the following tribes by letter on July 25, 2002, to initiate consultations and to reiterate the opportunity to be a cooperating agency in the planning process:

- Ak-Chin Indian Community
- Fort McDowell Yavapai Nation
- Fort Sill Apache Tribe
- Gila River Indian Community
- Hopi Tribe
- Pascua Yaqui Tribe
- Salt River Pima-Maricopa Indian Community
- San Carlos Apache Tribe
- Tohono O'odham Nation
- Tonto Apache Tribe
- White Mountain Apache Tribe
- Yavapai-Apache Indian Community
- Yavapai-Prescott Indian Tribe

On June 28, 2002, a meeting was held at the Ak-Chin tribal headquarters with the Cultural Resources Committee of the Four Southern Tribes (Ak-Chin Indian Community, Gila River Indian Community, Salt River Pima-Maricopa Indian Community, and the Tohono O'odham Nation). The planning process and planning areas were described, and formal consultation, cooperating agency status, and community involvement and collaboration were discussed. Tribal staff emphasized the importance of ongoing and regular consultation, protection of cultural and natural resources, and the need for law enforcement to protect cultural sites from damage and looting.

On August 21, 2002, Phoenix District Office (PDO) staff met with the Hopi Cultural Preservation Office staff at the Hopi Tribal Government Complex. The primary interest of the staff was the Agua Fria National Monument, but the staff did reiterate the need for continuing consultations for all public lands in Arizona. Hopi staff emphasized the importance of protecting cultural sites, and restricting uses that

may adversely affect those sites. Other concerns included the BLM reburial policy and scientific testing and data recovery.

On September 17, 2002, PDO staff met with Tohono O'odham Nation cultural and natural resources staff, legislative council members, and representatives of the Tribal Chairman. BLM provided a short presentation on the planning process and planning areas, and formal consultation, cooperating agency status, and community involvement and collaboration were discussed. The Tohono O'odham Nation staff was interested in natural and cultural resource protection; grazing management; law enforcement, both with regard to cultural resource site protection, undocumented immigrants, and drug smuggling; and opportunities for co-management of the SDNM. The Tohono O'odham Nation was interested in acquiring two parcels of land: Darby Wells near Ajo (the effort to make this land available is currently underway) and the Florence Cemetery. The Tohono O'odham Nation was also interested in becoming a cooperating agency. On October 18, 2002, a follow-up meeting was held with the Legislative Resource Committee of the Tribal Council to provide information on the planning process and further discuss issues of interest to the Tohono O'odham Nation.

On September 18, 2002, PDO staff met with the Ak-Chin Indian Community Tribal Council. BLM provided a short presentation on the planning process and planning areas; formal consultation, cooperating agency status, and community involvement and collaboration were discussed. The Ak-Chin expressed interest in cultural resource protection, particularly on the SDNM, and requested that BLM keep the Ak-Chin cultural staff informed on progress in the planning process.

On March 28, 2003, a field trip was held with representatives from the Four Southern Tribes on the SDNM. The trip included stops at a petroglyph site, historic Papago site, archaic site, and the Vekol Grasslands ACEC. In addition to discussion of each site and appropriate protection measures, BLM's categorization process for cultural sites and the ongoing Class I Cultural inventory were discussed.

In addition to formal consultation and opportunities to become cooperating agencies, the tribes were invited to attend the agency scoping meeting held on June 5, 2003. Throughout 2004, the BLM presented planning effort updates and information to several tribes and tribal groups, including the Four Southern Tribes Cultural Resources Working Group, the Tohono O'odham Nation, the Ak-Chin Indian Community and the Gila River Indian Community. Topics included updates on the plan's status and discussion of cultural and heritage resource issues. In 2005, the BLM met with the Ak-Chin Indian Community to discuss concerns regarding access into certain tribal lands and BLM reviewed the travel management planning and route designation process for the planning effort. In February 2005, the BLM sent out letters to 13 consulting tribes with draft management alternatives and planning effort status, including information on public workshops for discussing the preliminary alternatives. Additionally, throughout 2005, the BLM was in regular contact with several tribes to discuss cultural resource issues, travel management designations, and route access to tribal lands. Between 2006 and release of the Draft RMP/EIS in August 2011, the BLM had annual meetings with the tribes to discuss the planning efforts status and other issues that concerned the tribes; these issues generally focused on preservation of cultural resources, access to tribal lands, and land tenure adjustments.

In August 2011, BLM held a meeting at the Cultural Resource Working Group of the Four Southern Tribes to discuss the pending release of the Draft RMP/EIS and how the tribes would be able to comment on the document.

5.3.3 SECTION 106 CONSULTATION

In accordance with the requirements of Section 106 of the National Historic Preservation Act, the BLM is coordinating with and soliciting input from the Arizona SHPO. The BLM and Arizona SHPO are following the coordination protocols in the Arizona Protocol relating to amending resource management plans; the protocol provides for a phased consultation process related to historic, traditional, and cultural resources for an EIS and subsequent activities that could tier from a ROD. Per these procedures, the BLM Arizona initiated consultation with the Arizona SHPO by written correspondence in 2003. The letter described the Lower Sonoran-SDNM RMP/EIS and specified the need to consult on information presented in the EIS.

Over the course of the planning process, BLM met with or contacted the SHPO to share updates and information on the planning effort, including sending a copy of the Scoping Report in February 2004 and the Draft RMP/EIS in October 2011. On October 21, 2011, the BLM send a letter to the SHPO detailing the history of the planning effort and requesting review and comment on the Draft RMP/EIS by the SHPO. On November 14, 2011, the BLM received the SHPO's comments on the Draft RMP/EIS noting comments regarding impacts to cultural resources and associated mitigation outlined in the plan.

5.3.4 SECTION 7 CONSULTATION

In accordance with the requirements of Section 7 of the ESA, the BLM is currently consulting with the USFWS to ensure that the BLM's proposed action would not jeopardize the continued existence of any listed threatened, endangered, or proposed species or critical habitat.

BLM is currently working on the BA and has had one meeting with the USFWS to explain the proposed action and the format used for the effects determinations for the four listed species in the Lower Sonoran-SDNM BA from the preferred alternative. Once a draft BA is completed, BLM will deliver the draft to the USFWS for comments and clarification.

From these ongoing consultations, the USFWS will develop a BO which can include conservation recommendations to minimize or avoid possible adverse effects on listed species or their critical habitat. It can also impose reasonable and prudent measures needed to minimize any harmful impacts, and can require monitoring and reporting to ensure adequate protection compliance. A BO prevents unacceptable harm to an ESA-listed species or its habitat, and is purely biological: it is a scientific judgment about a proposed action, not a policy document.

5.3.5 FEDERAL AND MILITARY COORDINATION

The BLM has coordinated with other federal agencies and military installations within the Planning Area, including the National Park Service and US Air Force. The BLM and National Park Service met to discuss management options in the Ajo Block area, specifically regarding land tenure adjustments, land use authorizations, rights-of-way, borderland and associated law enforcement issues, national park access, boundary management, endangered species management, recreation, and comprehensive travel management decisions. The BLM has coordinated with the Base Executive Council and Interagency Executive Committee regarding the planning efforts and military involvement for borderlands, travel and recreation management, land restoration, and threatened and endangered species management on Luke

Air Force Base and the Barry M. Goldwater Air Force Range military installations, and management of public lands in the Ajo Block, Sentinel Plain, and SDNM.

The BLM also works with the Borderlands Management Taskforce, which coordinates all federal agencies involved with borderlands management. BLM's responsibility is to manage and protect natural resources, protect employees and public land users, and coordinate with all other law enforcement agencies (e.g., county, state, and federal agencies, including Immigration and Customs Enforcement). Issues include impacts related to undocumented immigration, drug and human trafficking, and coordinated management and mitigation measures.

5.3.6 ARIZONA GOVERNOR'S OFFICE COORDINATION

The BLM has coordinated and consulted with the Arizona governor and governor's office and other state agencies. BLM met with the Arizona Department of Transportation to review regional transportation plans and discuss the agency's concerns and questions. Additionally, BLM has had extensive coordination with the Arizona Game and Fish Department to discuss wildlife management, public access route designations, and wildlife movement corridors. BLM also invited AGFD to participate in and/or comment on the target shooting analysis; however, BLM has not received a response or comments on this issue.

Prior to approval of the PRMP/FEIS, the governor will be given the opportunity to identify any inconsistencies between the proposed plan and state or local plans, policies, and programs, and to provide recommendations in writing (during the 60-day consistency review period).

5.3.7 LOCAL GOVERNMENT

The BLM has coordinated and consulted with local governments throughout the planning process. BLM met with the Maricopa County Department of Transportation regarding regional transportation issues, including discussion of anticipated highway planning projects. BLM also met with the Maricopa County and Pinal County Park and Recreation departments to discuss recreation-related land management coordination efforts for the Saddle Mountain, Buckeye Hills, and San Tan Mountains areas. BLM also met with the Town of Gila Bend regarding their recreation and development interests.

Additionally, BLM has reviewed numerous county planning documents, including the Pinal County Comprehensive Plan, the Pinal County Open Space and Trails Master Plan, and the City of Maricopa's Parks, Trails, and Open Space Master Plan. BLM's planning guidance notes that RMPs shall be consistent with other federal, state, and local plans to the maximum extent consistent with federal law and FLPMA provisions, and assure that consideration is given to those state and local plans relevant to the development of land use plans for public lands. BLM has reviewed these county plans for consistency and found that the actions proposed in the PRMP are generally consistent with the intent and actions in the county plans.

Local governments submitted scoping comments when BLM initiated the planning effort and reviewed and commented on the Draft RMP/EIS. BLM will continue to coordinate with local governments after the RODs are signed.

5.3.8 PUBLIC OUTREACH AND LOCAL CONSTITUENCY GROUPS

In an effort to provide outreach to the local communities in the planning area, BLM contacted constituency groups with interest in several of the planning issues. BLM contacted several shooting groups to discuss the target shooting analysis, including the Table Mesa Coalition, the Arizona State Rifle and Pistol Association, and the AGFD. The Table Mesa Coalition provided feedback on the shooting analysis, including information on safe shooting practices and distances and areas that should remain open for shooting activities.

5.4 PUBLIC COMMENT ON THE DRAFT RMP/EIS

The EPA published a Notice of Availability (NOA) of the Draft RMP/EIS on August 25, 2011. The NOA initiated the 90-day public comment period required for planning actions. In preparing the PRMP/FEIS, the BLM considered all comments received or postmarked during the public comment period. The DRMP/DEIS was made available for viewing, downloading, and commenting by a variety of methods, including as a PDF on the BLM Web site, CD, paper copies, and on the BLM's ePlanning system.

5.4.1 PUBLIC MEETINGS AND PUBLIC NOTIFICATION

The BLM held 8 public meetings in the Planning Area in October 2011. Meeting locations included Phoenix, Ajo, Gila Bend, Mesa, Casa Grande, and Buckeye.

Over 200 people attended the public meetings. The largest number of attendees was from non-affiliated individuals, followed by non-profit organizations, local clubs, and government agencies.

5.4.2 EPLANNING

The Lower Sonoran-SDNM DRMP/DEIS is one of the first in BLM to use the latest version of ePlanning., It was published in the ePlanning system in order to streamline preparation and organization of the document, and make it more easily accessible to the public for viewing and commenting. Information on ePlanning can be found at Internet Web site:
http://www.blm.gov/wo/st/en/prog/planning/planning_overview/eplanning2.html.

All comments submitted regarding difficulties using the ePlanning application are being considered in the maintenance of the software application and in future upgrades.

5.4.3 SUMMARY OF COMMENTS

The comment period closed on November 25, 2011. All written comments sent prior to midnight (12:00 AM on November 25, 2011) were accepted as official comments. Methods of submitting comments included the ePlanning web platform, letters, facsimiles, and email messages. All comments, regardless of how they were submitted, received equal consideration.

Over 250 organizations, government agencies, industry representatives, and individuals responded during the comment period. Most of the written submissions contained multiple comments on different topics, and over 500 unique comments were made. All information received through these comments has been

evaluated, verified, and incorporated into the Final EIS, as appropriate. If you are interested in reviewing individual letters or the complete set of letters received on the Draft RMP/EIS, they are available for viewing through the PDO web site and on compact disc by request.

Comments on the DRMP/DEIS pertained to a number of issues, including but not limited to scope of the document, NEPA adequacy of the baseline data and impact analysis, information related to consultation and coordination on the project, and policies and guidance the BLM needed to follow. In addition, comments were received for the following resources and resource uses: air quality, cultural resources, fish and wildlife, livestock grazing, land use and special designations, minerals and energy, noise, national scenic and historic trails, recreation, socioeconomics, special status species, tribal interests, vegetation, visual resources, and water resources. BLM responses to the comments are presented in **Chapter 6**, Comments Received on the Draft EIS.

5.5 LIST OF PREPARERS

Table 5-1
List of Preparers

Name	Degree	Role
Preparers: 2011 Draft RMP/EIS and 2012 PRMP/FEIS		
Bureau of Land Management, Management Team		
Angelita S. Bulletts	B.S., Anthropology	Phoenix District Manager
Emily Garber	B.A., Anthropology M.A., Anthropology;	Lower Sonoran Field Manager
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Don Applegate	B.S., Recreation Resources Management	Recreation Program Lead – Arizona State Office
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Table 5-1
List of Preparers

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Name	Degree	Role
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EnviroSystems Management 2011 Draft RMP/EIS		
Lilian Jonas	Ph.D., Sociology; M.A., Applied Sociology; B.S., Biology	Writer/Editor
Environmental Management and Planning Solutions, Inc., Interdisciplinary Team 2012 PRMP/FEIS		
Angie Adams	BA, Biology, English Minor, Drake University, 1995	Transportation, Recreation
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James Bode	BA, Environmental Studies, University of Colorado at Boulder, 2009	Socioeconomics; Technical Editing
Amy Cordle	BS, Civil Engineering, Virginia Polytechnic Institute and State University, 1992	Air Quality, Climate Change
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Carol-Anne Murray	MA, Anthropology, University of Wyoming, 1997; BA, Anthropology, University of California, Los Angeles, 1992	Project Manager, Cultural Resources, Paleontology, Tribal Interests

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Name	Degree	Role
Katie Patterson	JD, Environmental Law, University of Colorado –Boulder 2011; BA, Environmental Policy, Vanderbilt University, 2008	Air Quality, Climate Change
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Drew Vankat	MS, Environmental Policy and Planning, University of Michigan, 2006; BPh, Urban and Environmental Planning, Miami University, 2003	Travel Management, Recreation
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Kate Wynant	BA, Environmental Studies; Spanish; Minor in Political Science; University of Colorado – Boulder, 2006	Visual Resources Management
Meredith Zaccherio	MS, Biology, Boston University, 2005; BS, Biology, SUNY Binghamton, 2001; BS, Environmental Science, SUNY Binghamton, 2001	Plants and Wildlife
Preparers: 2006 Administrative Draft		
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Ralph Costa	B.S., Engineering	Lower Sonoran Acting Associate Field Manager for Lands and Minerals (Retired)
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List of Preparers

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Angel Mayes	A.A., General Studies	Realty Specialist – Sonoran Desert National Monument (Former)
Sally Olivieri	A.S., Forest Technician	Geographic Information Systems and Mapping – Kingman Field Office
Demetrius Purdie-Williams	B.S., Technology	Geographic Information Systems and Mapping – Phoenix District Office (Former)
Kirk N. Rentmeister	B.S., Geology	Geologist – Hassayampa Field Office (Former)
Gregg Simons	B.S., Forest Management	BLM State Planning and Environmental Coordinator – Arizona State Office (Retired)
Christine Tincher	B.A., Communication	External Affairs – Phoenix District Office (Former)
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EnviroSystems Management, Interdisciplinary Team		
Sunny Bush	M.T., Hazardous Materials and Waste Management; B.A., English	Hazardous Materials, Public Health and Safety
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URS Corporation, Interdisciplinary Team		
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List of Preparers

Name	Degree	Role
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Colleen Mahoney	None	Administrative Support
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APPENDIX A

PRESIDENTIAL PROCLAMATION

APPENDIX A
SONORAN DESERT NATIONAL MONUMENT PRESIDENTIAL PROCLAMATION

SONORAN DESERT NATIONAL MONUMENT PROCLAMATION

Proclamation 7397 of January 17, 2001

Establishment of the Sonoran Desert National Monument

By the President of the United States of America.

A Proclamation

The Sonoran Desert National Monument is a magnificent example of untrammeled Sonoran desert landscape. The area encompasses a functioning desert ecosystem with an extraordinary array of biological, scientific, and historic resources. The most biologically diverse of the North American deserts, the Monument consists of distinct mountain ranges separated by wide valleys, and includes large saguaro cactus forest communities that provide excellent habitat for a wide range of wildlife species.

The Monument's biological resources include a spectacular diversity of plant and animal species. The higher peaks include unique woodland assemblages, while the lower elevation lands offer one of the most structurally complex examples of palo verde/mixed cacti association in the Sonoran Desert. The dense stands of leguminous trees and cacti are dominated by saguaros, palo verde trees, ironwood, prickly pear, and cholla. Important natural water holes, known as tinajas, exist throughout the Monument. The endangered acuna pineapple cactus is also found in the Monument.

The most striking aspect of the plant communities within the Monument are the abundant saguaro cactus forests. The saguaro is a signature plant of the Sonoran Desert. Individual saguaro plants are indeed magnificent, but a forest of these plants, together with the wide variety of trees, shrubs, and herbaceous plants that make up the forest community, is an impressive site to behold. The saguaro cactus forests within the Monument are a national treasure, rivaling those within the Saguaro National Park.

The rich diversity, density, and distribution of plants in the Sand Tank Mountains area of the Monument is especially striking and can be attributed to the management regime in place since the area was withdrawn for military purposes in 1941. In particular, while some public access to the area is allowed, no livestock grazing has occurred for nearly 50 years. To extend the extraordinary diversity and overall ecological health of the Sand Tank Mountains area, land adjacent and with biological resources similar to the area withdrawn for military purposes should be subject to a similar management regime to the fullest extent possible.

The Monument contains an abundance of packrat middens, allowing for scientific analysis of plant species and climates in past eras. Scientific analysis of the midden shows that the area received far more precipitation 20,000 years ago, and slowly became more arid. Vegetation for the area changed from juniper oak pinion pine woodland to the vegetation found today in the Sonoran Desert, although a few plants from the more mesic period, including the Kola Mountain barberry, Arizona rosewood, and junipers, remain on higher elevations of north facing slopes.

The lower elevations and flatter areas of the Monument contain the creosote bursage plant community. This plant community thrives in the open expanses between the mountain ranges, and connects the other plant communities together. Rare patches of desert grassland can also be found throughout the Monument, especially in the Sand Tank Mountains. The washes in the area support a much denser vegetation community than the surrounding desert, including mesquite, ironwood, paloverde, desert honeysuckle, chuperosa, and desert willow, as well as a variety of herbaceous plants. This vegetation offers the dense cover bird species need for successful nesting, foraging, and escape, and birds heavily use the washes during migration.

The diverse plant communities present in the Monument support a wide variety of wildlife, including the endangered Sonoran pronghorn, a robust population of desert bighorn sheep, especially in the Maricopa Mountains area, and other mammalian species such as mule deer, javelina, mountain lion, gray fox, and bobcat. Bat species within the Monument include the endangered lesser long nosed bat, the California leaf nosed bat, and the cave myotis. Over 200 species of birds are found in the Monument, including 59 species known to nest in the Vekol Valley area. Numerous species of raptors and owls inhabit the Monument, including the elf owl and the western screech owl. The Monument also supports a diverse array of reptiles and amphibians, including the Sonoran desert tortoise and the red backed whiptail. The Bureau of Land Management has designated approximately 25,000 acres of land in the Maricopa Mountains area as critical habitat for the desert tortoise. The Vekol Valley and Sand Tank Mountains contain especially diverse and robust populations of amphibians. During summer rainfall events, thousands of Sonoran green toads in the Vekol Valley can be heard moving around and calling out.

The Monument also contains many significant archaeological and historic sites, including rock art sites, lithic quarries, and scattered artifacts. Vekol Wash is believed to have been an important prehistoric travel and trade corridor between the Hohokam and tribes located in what is now Mexico. Signs of large villages and permanent habitat sites occur throughout the area, and particularly along the bajadas of the Table Top Mountains. Occupants of these villages were the ancestors of today's O'odham, Quechan, Cocopah, Maricopa, and other tribes. The Monument also contains a much used trail corridor 23 miles long in which are found remnants of several important historic trails, including the Juan Bautista de Anza National Historic Trail, the Mormon Battalion Trail, and the Butterfield Overland Stage Route.

Section 2 of the Act of June 8, 1906 (34 Stat. 225, 16 U.S.C. 431), authorizes the President, in his discretion, to declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest that are situated upon the lands owned or controlled by the Government of the United States to be national Monuments, and to reserve as a part thereof parcels of land, the limits of which in all cases shall be confined to the smallest area compatible with the proper care and management of the objects to be protected.

WHEREAS, it appears that it would be in the public interest to reserve such lands as a national Monument to be known as the Sonoran Desert National Monument.

NOW, THEREFORE, I, WILLIAM J. CLINTON, President of the United States of America, by the authority vested in me by section 2 of the Act of June 8, 1906 (34 Stat. 225, 16 U.S.C. 431), do proclaim that there are hereby set apart and reserved as the Sonoran Desert National Monument, for the purpose of protecting the objects identified above, all lands and interest in lands owned or controlled by the United States within the boundaries of the area described on the map entitled "Sonoran Desert National Monument" attached to and forming a part of this proclamation. The Federal land and interests in land reserved consist of approximately 486,149 acres, which is the smallest area compatible with the proper care and management of the objects to be protected.

For the purpose of protecting the objects identified above, all motorized and mechanized vehicle use off road will be prohibited, except for emergency or authorized administrative purposes. Nothing in this proclamation shall be deemed to enlarge or diminish the jurisdiction of the State of Arizona with respect to fish and wildlife management.

The establishment of this Monument is subject to valid existing rights.

All Federal lands and interests in lands within the boundaries of this Monument are hereby appropriated and withdrawn from all forms of entry, location, selection, sale, or leasing or other disposition under the public land laws, including but not limited to withdrawal from location, entry, and patent under the mining laws, and from disposition under all laws relating to mineral and geothermal leasing, other than by exchange that furthers the protective purposes of the Monument. Lands and interests in lands within the Monument not owned by the United States shall be reserved as a part of the Monument upon acquisition of title thereto by the United States.

This proclamation does not reserve water as a matter of Federal law nor relinquish any water rights held by the Federal Government existing on this date. The Federal land management agencies shall work with appropriate State authorities to ensure that water resources needed for Monument purposes are available.

The Secretary of the Interior shall manage the Monument through the Bureau of Land Management, pursuant to applicable legal authorities, to implement the purposes of this proclamation. That portion identified as Area A on the map, however, shall be managed under the management arrangement established by section 3 of Public Law No. 99 606, 100 Stat. 3460 61, until November 6, 2001, at which time, pursuant to section 5(a) of Public Law No. 99 606, 100 Stat. 3462 63, the military withdrawal terminates. At that time, the Secretary of the Interior shall assume management responsibility for Area A through the Bureau of Land Management.

The Secretary of the Interior shall prepare a management plan that addresses the actions, including road closures or travel restrictions, necessary to protect the objects identified in this proclamation. Laws, regulations, and policies followed by the Bureau of Land Management in issuing and administering grazing permits or leases on all lands under its jurisdiction shall continue to apply with regard to the lands in the Monument; provided, however, that grazing permits on Federal lands within the Monument south of Interstate Highway 8 shall not be renewed at the end of their current term; and provided further, that grazing on Federal lands north of Interstate 8 shall be allowed to continue only to the extent that the Bureau of Land Management determines that grazing is compatible with the paramount purpose of protecting the objects identified in this proclamation.

Nothing in this proclamation shall be deemed to revoke any existing withdrawal, reservation, or appropriation; however, the national Monument shall be the dominant reservation.

Nothing in this proclamation shall preclude low level overflights of military aircraft, the designation of new units of special use airspace, or the use or establishment of military flight training routes over the lands included in this proclamation.

In order to protect the public during operations at the adjacent Barry M. Goldwater Range, and to continue management practices that have resulted in an exceptionally well preserved natural resource, the current procedures for public access to the portion of the Monument depicted as Area A on the attached map shall remain in full force and effect, except to the extent that the United States Air Force agrees to different procedures which the Bureau of Land Management determines are compatible with the protection of the objects identified in this proclamation.

Warning is hereby given to all unauthorized persons not to appropriate, injure, destroy, or remove any feature of this Monument and not to locate or settle upon any of the lands thereof. IN WITNESS WHEREOF, I have hereunto set my hand this seventeenth day of January, in the year of our Lord two thousand one, and of the Independence of the United States of America the two hundred and twenty fifth.

WILLIAM J. CLINTON

New Information Requested on Executive Order on the Review of Designations Under the Antiquities Act

BLM Responses to Additional Questions for Sonoran Desert National Monument

a) Any legislative language, including legislation in appropriations bills

There has been no additional legislative language or legislation in appropriations bills for the Sonoran Desert National Monument (SDNM) since the designation on January 17, 2001; however there are three Wilderness Areas designated by the Arizona Desert Wilderness Act of 1990 (PL 101-628) located within the monument.

b) Alternative options available for protection of resources applicable at each monument, such as Native American Graves Protection and Repatriation Act, Paleontological Resources Preservation Act, Archaeological Resources Protection Act, Historic Preservation Act and agency-specific laws and regulations.

The following could provide some options to protect specific resources found in the SDNM. Protection would likely occur on a site-by-site or resource-by-resource basis and also would take a significant amount of time to accomplish under these various laws. These laws may not provide a mechanism to protect all cultural or tribal resources in SDNM.

1. National Trails System Act (PL 90-543, as amended through PL 109-418) provides for the designation of the Juan Bautista de Anza National Historic Trail and its protection and management both as the trail crosses the SDNM and outside of the monument.

c) Designated wilderness areas (name, acreage), Wilderness Study Areas (name if there is one, acreage, type), and/or areas managed to preserve wilderness or roadless characteristics that are not WSAs.

The SDNM has three wilderness areas: North Maricopa Wilderness (63,639 acres), South Maricopa Wilderness (60,431 acres), and Table Top Wilderness (34,446 acres). These three areas total 158,516 acres, about 33% of the SDNM. These areas were designated by the Arizona Desert Wilderness Act of 1990 (PL 101-628).

Additionally, approximately 108,100 acres of public lands in the SDNM south of Interstate 8 are managed to protect wilderness characteristics.

d) Outstanding R.S. 2477 claims within a monument – type of road claimed and history
There are no R.S. 2477 claims within the SDNM.

e) Maps
Sonoran_Desert_National_Monument map.pdf is in the drive folder.

f) Cultural or historical resources, particularly Tribal, located near a monument but not within the boundary that might benefit from inclusion in the monument
BLM does not have knowledge of any cultural inventories conducted on adjacent lands.

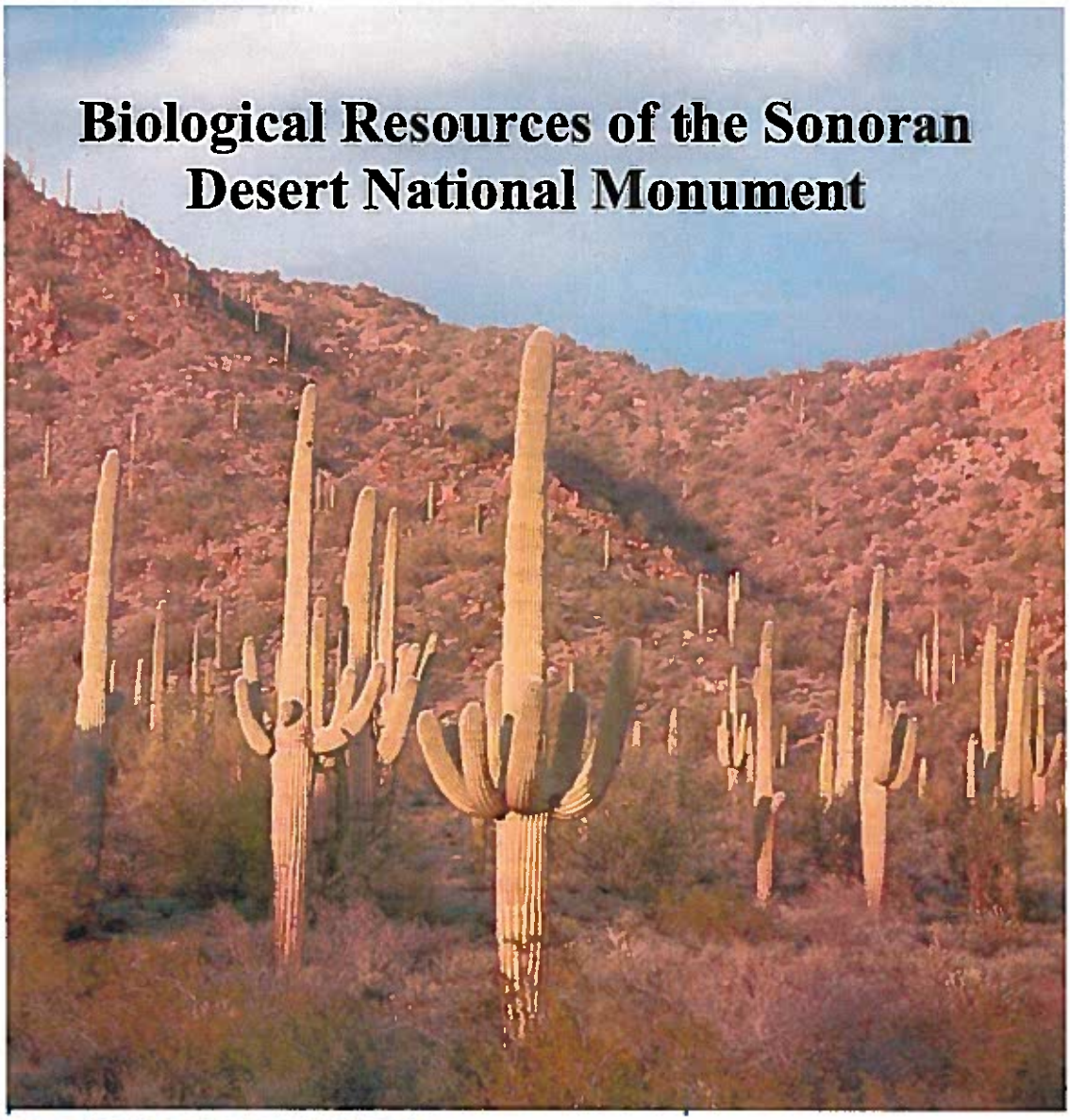
g) Other – general questions or comments

None

Allotment	Pre-Designation Active Use (AUMs)	Post-Designation Active Use (AUMs)	Billed AUMs by Year																				
			1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Arnold	0	0	0	2	166	0	122	83	0	84	44	447	0	0	0	172	0	0	0	0	8	52	0	0
Beloat	776	776	986	995	986	986	1213	1013	253	1196	735	1108	657	247	657	657	657	394	986	986	986	986	986	986
Big Horn	5921	2812	3745	437	183	2653	4149	14891	611	7448	6996	6466	5921	5921	1393	33	0	0	0	0	0	0	0	0
Conley	3403	3406	2491	1028	10524	3534	6236	12383	6080	5087	4556	10050	3534	3534	3534	3534	3534	3534	3534	320	320	3534	823	0
Hazen	886	886	898	1039	1104	898	1368	2266	898	1333	924	898	898	898	898	898	898	898	898	898	898	0	0	0
Lower Vekol	826	826	612	898	169	189	139	193	199	470	466	803	803	0	803	803	803	0	0	199	0	0	0	0
Santa Rosa	0	0	0	25	164	0	0	48	12	0	464	495	0	0	0	0	0	0	0	0	0	0	0	0
South Vekol	1862	0	1863	1645	1862	1274	2322	1862	0	39	1954	2241	0	0	0	0	0	0	0	0	0	0	0	0
Table Top	1927	0	0	0	1548	416	1595	0	422	989	2017	2730	1505	1505	0	0	0	0	0	0	0	0	0	0
Vekol	832	0	594	50	832	512	832	832	0	0	1395	2735	832	832	0	0	0	0	0	0	0	0	0	0

Table 00: SDNM AUMs by Allotment Table

Biological Resources of the Sonoran Desert National Monument



Biological Resources of the Sonoran Desert National Monument, Arizona

Working Draft June 2001

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In memory

of

Constantine S. Niarchos

Acknowledgments

This report is a cooperative effort. Kathryn Mauz contributed the passages on physiography, geology, and geography. Erik Enderson and Robert Bezy contributed the section on amphibians. Dale Turner is responsible for the text on reptiles. Robert X. Barry furnished the section on birds. Botanical information was written primarily by Richard Felger, Kathryn Mauz, Michael F. Wilson, and Carianne Funicelli. Richard Felger, Dale Turner, Kathryn Mauz, Carianne Funicelli and Jim Malusa collaborated on the introduction and overview. Tom Van Devender wrote the deep history of the region. Linda Leigh wrote the systems analysis that is presented in Volume 2 of this document.

Many friends and colleagues provided additional data and insight for this report, including: Charles Bowden, George Bradley, Bill Broyles, Michael Chamberland, Paul Frank, David Griffin, John Gunn, Paul Hardy, Peter Holm, Phil Jenkins, Jeff Maurer, Phil Rosen, Sue Rutman, Sarah Schmidt, Lyn Wilson, Michael Wilson, and Betsy Wirt.

We appreciate the use of image processing facilities at the Arizona Remote Sensing Center, and the resources and generous help of the staff of the University of Arizona Herbarium. We acknowledge support from the Stavros S. Niarchos Foundation, in memory of Constantine S. Niarchos. Drylands Institute also acknowledges support from the Wallace Research Foundation.

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VOLUME 2: Systems Analysis of the Sonoran Desert National Monument

EXECUTIVE SUMMARY

This report is yet a work in progress. It compiles available information about the biological resources present in Sonoran Desert National Monument, located in south central Arizona. We documented the species richness of the Monument by searching the scientific and agency literature, collecting specimen information from the University of Arizona, interviewing biologists who have done field work in the area, and adding the results of our own research activities. We found that the Monument contains a wealth of plants and animals, including at least 10 amphibian, 36 reptile, 28 mammal, and 159 bird species. We determined the presence of at least five species with current state or federal special status: desert tortoise, cactus ferruginous pygmy-owl, Swainson's thrush, lesser long-nosed bat, Sonoran pronghorn, and the Acuña cactus. In addition to large, well-recognized species such as desert bighorn sheep, the area contains a number of unprotected species endemic to the Sonoran Desert which have relatively limited distributions in the U.S. These include the Sonoran green toad, lowland burrowing treefrog, and Abert's towhee.

The documented flora of Sonoran Desert National Monument is based primarily on collections and explorations since 1994, when botanists began to recognize the unique elements of the flora. Our field work during 2000 and 2001 is the first truly extensive botanical work in the Monument. To date, 402 plant species have been documented, representing 260 genera in 71 families. Given the area yet to be explored, we estimate that the Monument holds approximately 500 species of vascular plants.

The Monument ranges in elevation from about 800 to 4300 feet, and lies on the edge of the Arizona Uplands subdivision of the Sonoran Desert. At lower elevations, to the west and northward is the Lower Colorado subdivision. The higher elevations of the Monument hold relict populations of chaparral vegetation, stranded after the last ice age. Rare or endangered plants include the Acuña cactus (*Echinomastus erectocentrus* var. *acunensis*), Kofa Mountain barberry (*Berberis harrisoniana*), and the milkweed vine *Matelea cordifolia*. There are 20 species of cacti, some of them of special biological interest.

Mountains in the Monument harbor important populations of desert tortoise and desert bighorn sheep. Valleys there support unique assemblages of desert amphibians and form important corridors between naturally isolated populations of montane mammals such as bighorn sheep and mountain lion. Major threats to biological resources in the Monument include livestock overgrazing, off-highway vehicle use, utility corridors, increased road traffic or new roads, and invasive non-native species.

The Monument is adjacent to rapidly expanding large urban areas, and adverse impact threats will likely continue for some time. The remoteness of much of the Monument as well as Wilderness Designation are positive factors for habitat protection. The Monument is vast, diverse, awesomely magnificent, and of great cultural, economic, esthetic, and biological significance. There are significant areas of upland desert habitats and interconnected valley corridors. The Monument is contiguous with six and one half million acres of protected, public lands in southwestern Arizona and northwestern Mexico. The Monument offers strong support for a proposed binational peace park embracing seven million acres.

INTRODUCTION

On a warm spring day the desert breeze is alive with buzzing insects and the smell of yellow palo verde flowers. Climb to the top of a desert wilderness mountain – Sand Tanks, Javelina, Table Top, or the Maricopas – and look out across a vast primordial American desert empire. On just a one-day hike, you may encounter more than 100 species of plants, not bad for a desert. It is not a static place. It is a meeting place, an ecotone, of diverse plant communities, resulting from millenia of comings and goings of dynamic plant communities. The valley floors are seemingly endless stretches of creosotebush and bursage. Depending on which mountain in the Sonoran Desert National Monument you choose, and whether you climb from the north, south, east, west, or go up a hanging canyon, or follow a ridge, you pass different arrays of species in a continuum of change.

Biologists tend to find glory whenever they visit the remaining wildlands on this planet, so it should be no surprise that we are keenly interested in the plant and animal life of the Sonoran Desert National Monument. This piece of Sonoran Desert is like no other. The Monument is something different because it encompasses so many different habitats – from grassy valley-bottom floodplains to the strange woodlands of spinescent elfin trees on the mountaintops. On a larger scale, the region is a biological bridge between the torrid summer-rain lowlands to the south in Sonora, Mexico, the hyper-arid lowlands of the Lower Colorado phytogeographic portion of the Sonoran Desert to the west, and the winter-rain desert and chaparral of Arizona's Mogollon Rim. In the jargon of biologists, it's a corridor, for plants and animals and the genes they carry – and hence the future of their species.

Even by itself the Sonoran Desert National Monument is significantly large – a bit less than one half million acres. The half dozen major mountain masses and ranges are complex, each supporting a unique array of plants and animals due to such differences as mass and morphology, elevation, rock and soil type, directional orientation. These differences affect soil moisture – the single overriding limiting factor in the choreography of desert plants and the animal life that depends on them. In addition winter freezing can limit plants of southern or more tropical affinity.

Valley floors are mostly the flats of creosotebush and bursage, an expanse of die-hard shrubs dissected by usually dry watercourses bordered with a trinity of desert legume trees – ironwood, mesquite, and palo verde – and more. These expanses, often considered among the harshest of American desert habitats, have just a few species of long-lived plants (perennials), dominated by creosotebush. Towards the south end of the Monument a vast drainage systems spreads across the wide Vekol Valley, puddling up the valley with deep, poorly draining clay soils. This valley bottom has a unique grassland, and many earthen check dams strewn across the Vekol Wash and its tributaries hold the temporary water for months after the last big rain, or sometimes even the year around. These valley floors explode with life when the summer "monsoon" rains arrive. Desert toads emerge from the soil to breed in the puddles and ponds. On such hot, humid nights the soggy ground is sometimes a solid sea of croaking and breeding frogs and toads. And numerous other desert creatures emerge from their burrows to drink. Swarms of ants and termites fill the air with their nuptial flights.

Here and elsewhere in the Sonoran Desert, the extreme droughts are more ordinary than the times of flowering and greenness. When the unpredictable rains do occur, creosotebush leaves expand and annual plants – the desert wildflowers – spring forth from seed banks in the soil. The desert annuals are called ephemerals, because they complete their life cycles within a single season or less. Each season in each year may bring a different species spectrum: some appear only with summer rains, and others only with cool season rains. A few may grow at any time of the year. The vast majority of species of the valley floors are desert ephemerals or annuals, and you will only see them following sufficient rains. More than 60% of the plant species of these plains and valley floors are desert annuals. And the numbers of annual species are even greater on the rocky upland slopes, canyon bottoms and mountain tops, but in these places there are also many more perennial species than across the desert flats.

Invisible to the casual visitor are the soil surfaces characteristically held in place by cryptogammic crusts of blue-green and green soil algae, bacteria, diatoms, fungi, and lichens, which can contribute significant nitrogen to desert ecosystems. The microphytic crusts are fragile and it is well known that their destruction can be a major factor contributing to global desertification and the great dust storms now spreading across the globe.

Where the groundwater isn't too deep there is an occasional woodland, or *bosque*, of mesquite, seasonally festooned with vines such as desert species of clematis, milkweed, morning glory, and others. In the southern reaches of the Vekol Valley is a dense grassland. The Vekol Valley Grassland Area of Critical Environmental Concern in the southeastern corner of the Monument represents this habitat. The mid-elevations of the Monument are the classic Sonoran Desert Upland landscapes of movie backdrops and calendars. You needn't be a botanist to appreciate the giant cactus forests.

Hike up any of the major mountains in the Monument and you witness a gradual, and then towards the top, an accelerated change in the vegetation. You will find differences between the hot, arid south and west slopes and north-facing slopes where there is longer lingering of soil moisture and seasonally more shade. These mountains, including the Bureau of Land Management (BLM) wilderness areas in the North and South Maricopas and Table Top Mountains, protect islands of complex habitats. Intervening valleys preserve the critical corridors between them.

Botanists have described over thirty distinct plant communities within the Sonoran Desert of Arizona and Mexico, giving them names like the "palo verde-ironwood association." Yet none of these designations describe the strange vegetation at the highest elevations of the Monument, where plants stranded after the last ice age survive just above a mix of species of subtropical origin. Frost-sensitive species like the elephant tree occur on certain south-facing slopes. The canotia crucifixion-thorn, a plant of winter-rain upland desert-margin generally found northward in Arizona is characteristic of the mountan-top vegetation. The highest elevations also harbor relict populations of junipers, oaks, and rosewood typical of cooler mountains, and various rare desert plants such as the Kofa Mountain barberry. This big, glossy-leaved shrub is known from precisely three canyons, and one of them is at the Monument's southern margin in the Sand Tank Mountains. It survives there now not only

because of the peculiar climate, but because of the wilderness. Neither cow nor machine has ever visited the Kofa Mountain barberry.

Wilderness is why you can still find an essentially intact Sonoran Desert ecosystem in the Monument: the giant cactus forests, the forever views across creosote flats, the shockingly luxuriant displays of wildflowers and the hazy green grassy places that show up after a good winter-spring rain. For the last century it has been an accidental wilderness, protected by its distance from population centers, poor roads, and by the permit requirements and no-grazing regulations of the military. Its future will be determined by the deliberate choices of our generation, now made easier by establishment of the Sonoran Desert National Monument.

A brief history of the Sonoran Desert National Monument

The Sonoran Desert National Monument (Figure 1), designated by President Clinton on January 17, 2001, is managed by the Phoenix Field Office of the Bureau of Land Management (BLM). Michael Brown is the Monument's first manager. Creation of the Monument grew out of concern over the disposition of about 75,000 acres of land known as "Area A," controlled and managed by the U.S. Air Force as part of the Barry M. Goldwater Range. This rather unromantic label was hung on the southern and most massive part of the Sand Tank Mountains. By the early part of the year 2000, the military decided to give up Area A. There were immediate concerns for its future conservation and management because it included some of the Sonoran Desert's most magnificent landscapes and natural habitats. The new Monument's southern boundary arbitrarily zig-zags across Area A, leaving about half of the Sand Tank Mountains region with the military and the northeastern half in the new Monument. It is hoped that there will be some minor re-alignment of this boundary to include crucial habitat and populations of animals and plants now just barely excluded from the Monument.

The Sand Tank Mountains of Area A formed the northeastern corner, albeit a large "corner" of the 2.5 million acres of protected lands in southwestern Arizona that many citizens would like see turned into the Sonoran Desert National Park. Most significantly, these lands are contiguous to an additional 4 million acres of protected land in northwestern Mexico (Broyles et al. 2001; Felger and Broyles 1997). The Sand Tank Mountains area includes "upland" desert animals and plants not found elsewhere in this vast linkage of adjacent protected lands.

Many people and organizations contributed to the formation of the new National Monument. The early concept was championed by Dean Bibles and Bill Broyles working with Tom Fry, director of the BLM, as well as Ann Shields and Ken Smith, also of the Department of the Interior (BLM). Bruce Babbitt, Secretary of the Interior, liked the concept and the stage was set. In addition, there were other land issues in large tracts of adjacent BLM lands, much of which was already officially designated as Wilderness (e.g., the Table Top Mountains and the North and South Maricopa Mountains). Following public hearings, Secretary Babbitt set into motion the creation of the Sonoran Desert National Monument, embracing almost one half million acres, nearly all of which were already held by the BLM.

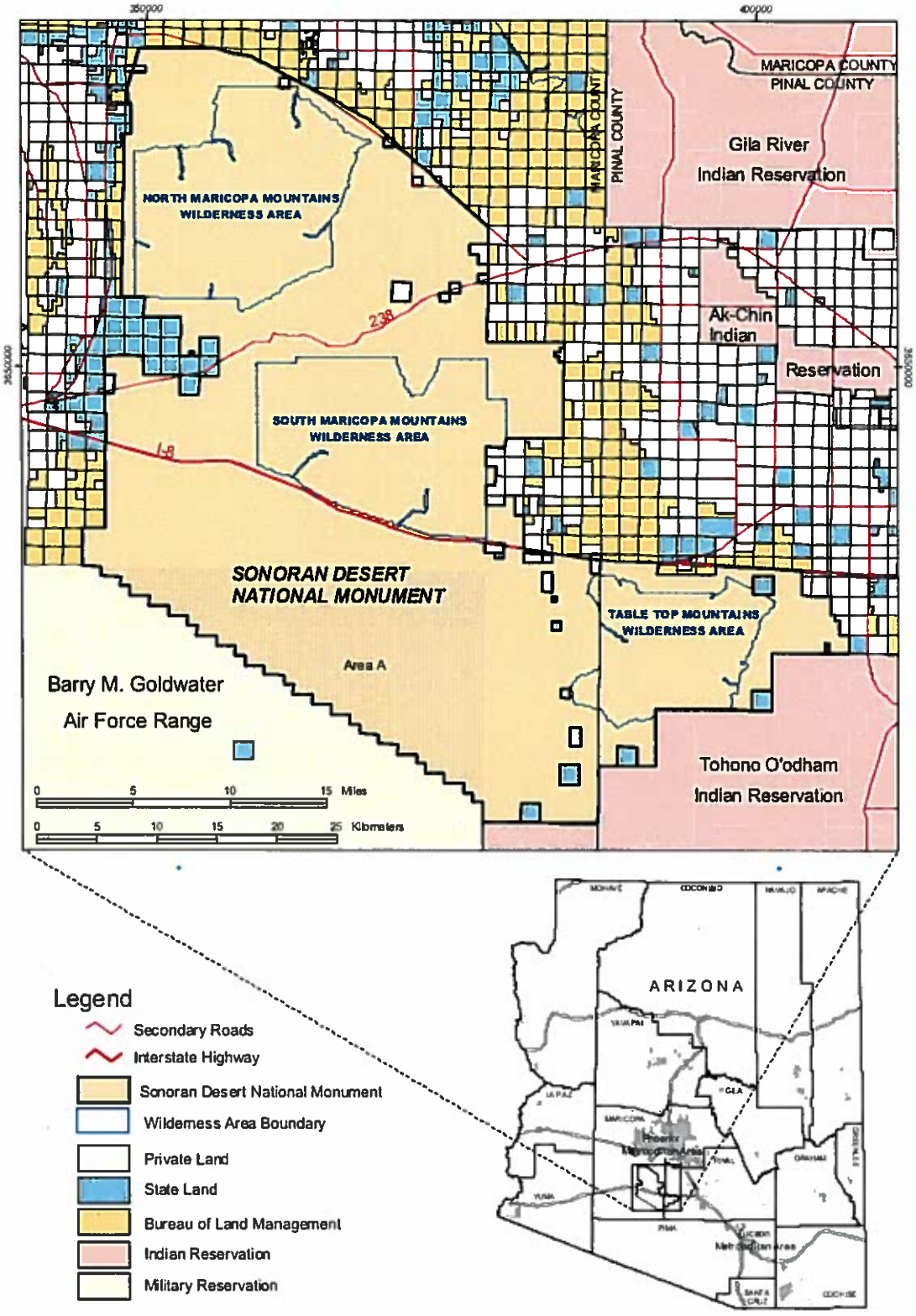

Figure 1. Location and land management status for the vicinity of Sonoran Desert National Monument in Arizona (inset map: with major cities and towns shown in light gray, area of detail is indicated).

A diverse array of conservation organizations championed the popular concept of the Monument: Arizona Archaeological Society, Arizona League of Conservation Voters, Center for Biological Diversity, Defenders of Wildlife, Drylands Institute, Friends of Cabeza Prieta, Hia c'ed O'odham Alliance, Land & Water Fund of the Rockies, National Parks Conservation Association, The Nature Conservancy of Arizona, Sierra Club, Grand Canyon (Arizona) Chapter, Sky Island Alliance, Society for American Archaeology, Sonoran Desert National Park Friends, Sonoran Institute, Southwest Forest Alliance, Tucson Audubon Society, Tucson Herpetological Society, and the Wilderness Society. A preliminary report on the biological resources by Drylands Institute helped provide Secretary Babbitt's office with justification for a Presidential proclamation.

The Sentinel Plain, covering about 25,000 acres to the west of the present Monument, originally was included in the Monument Proposal. There remain strong ecological and archeological reasons to include the Sentinel Plain, but unfortunately this extreme desert plain was, ultimately, omitted. The Sentinel Plain possesses scant potential economic value, but remains an important buffer for training activities on the Goldwater Range. The Monument boundary originally included several thousand acres of Arizona State Trust Lands and it was presumed that these lands would be included in the Monument, but this has not been accomplished to date. Some sections of private land also were removed from inside the Monument. These excluded lands are small in comparison to the total land area of the Monument, but are important to its future integrity.

The significance of the Monument extends far beyond its nearly half million acres. The Monument sits between the southwestern margin of the ever-expanding metropolis of the greater Phoenix area and contiguous millions of acres of protected lands stretching to the south and southwest across the heartland of the Sonoran Desert. The world now has nearly 7 million acres (3 million hectares) of linked preserves. We have the opportunity to create a vast international peace park (Broyles, Felger, and Bowden, 2001). There is nothing like it anywhere else in the world. These lands are yet in near pristine ecological condition – no other desert region in the world can match this ecological wealth.

PHYSICAL LANDSCAPE

Areas within the Monument

Figure 2 illustrates the major physiographic features of Sonoran Desert National Monument, which encompasses 496,337 acres. It includes three distinct mountain ranges – the Maricopa Mountains, the Sand Tank Mountains, and the Table Top Mountains – as well as the Booth Hills and the White Hills. The Sand Tank Mountains are a long and complex series of mountains and hills. Javelina Mountain is a huge, eastern outlier of the Sand Tank Mountains and has its own small foothills. These mountain ranges are separated – and biologically linked – by intervening valleys and desert plains such as the Vekol Valley and the outlying Rainbow Valley, Sauceda Valley, and Gila Plain.

A CLASS I CULTURAL RESOURCES OVERVIEW OF THE PROPOSED

SONORAN DESERT NATIONAL MONUMENT

MARICOPA AND PINAL COUNTIES, ARIZONA

Prepared for: The Coalition for Sonoran Desert National Monument
Prepared by: Jon M. Shumaker, Archaeologist
December 2000

EXECUTIVE SUMMARY

Project Title: A Class I Cultural Resources Overview of the Proposed Sonoran Desert National Monument, Pinal and Maricopa Counties, Arizona

Project Description: This cultural resource records overview was undertaken at the request of the Coalition for Sonoran Desert National Monument to determine the presence or absence of significant cultural resources within the boundaries of the proposed Monument located within western Pinal and south-central Maricopa Counties, Arizona. A portion of the project area containing the Sand Tank Mountains and known as Area A is noted only generally in this study and the importance of its cultural resources has been addressed elsewhere. Another proposed area of the Monument, the non-contiguous Sentinel Plain, is also not discussed here.

Project Location: The project area covers approximately 485,000 acres and lies within both Pinal and Maricopa Counties in Arizona. It is located approximately 30 miles southwest of the Phoenix metropolitan area. The Bureau of Land Management is the major land manager within the project area. There are a few small state and private land in-holdings totaling some 16,970 acres (combined). The Barry M. Goldwater Air Force Range abuts the proposed Monument to the southwest. The area is adjacent to the Tohono O'odham Indian Nation on its southeastern portion. Additionally, it is located within close proximity to the Gila River Indian Community and the Ak-Chin Indian Community.

Personnel and Report Preparation: Jon Shumaker, archaeologist and cultural resources manager for the Ak-Chin Indian Community, and Gayle H. Hartmann, archaeologist collaborated on the project. Hartmann performed site file and record checks at both the Arizona State Museum and the Bureau of Land Management's Phoenix Field Office and Shumaker completed the final report. The work was performed in December 2000.

Number of Archaeological/ Historic Sites: 108, a majority of which are potentially eligible for the National Register of Historic Places under any or all of Criteria (a), (b), (c), and (d), with very high potential for numerous others to be found in the area. Additionally, a large portion of the proposed Monument area contains traditional cultural places (TCPs) of importance to the Four Southern O'odham Tribes of Arizona.

Comments:

This brief cultural resources overview was designed to examine a large area in a short period of time. It is by no means comprehensive. A site file records check with the Arizona State Museum in Tucson, the Bureau of Land Management's Phoenix Field Office, and a discussion with the Phoenix BLM archaeologist found that little systematic survey work has been done within the proposed Monument area. However, the 108 prehistoric and historic sites reported during the current project, in spite of the lack of large regional surveys, suggest an extremely high probability for the presence of numerous others within the project area.

The oral traditions of the Ak-Chin Indian Community and other O'odham groups in the area indicate the entire Monument area has seen substantial prehistoric and historic use that continues into the present day. The copious stands of saguaro cactus and other traditional plant resources within large areas of the proposed Monument also indicate significant potential for prehistoric and historic resource utilization. A number of rock outcroppings and lithic artifacts made of local-appearing materials suggest the probability of prehistoric quarries in the area. A possible Hohokam "ball court" is reported from the Vekol Valley, suggesting a prehistoric settlement of substantial importance and size. Presence of a ball court also suggests a community that may have been the center of a larger regional system in this area. These multiple lines of evidence suggest a very high probability that the project area contains substantial intact evidence important for understanding the lifeways of prehistoric and historic people who lived successfully in a generally arid and somewhat poorly studied portion of the Sonoran Desert.

The northern portion of the proposed Monument contains linear sites that correspond to some of the most important historic period events in the history of both the early Spanish frontier as well as Arizona's territorial days. The cultural and natural landscapes surrounding these important sites survive mostly intact even after the significant passage of time and in spite of the area's perilously close proximity to one of the largest and fastest growing urban areas in the country.

The southern portion of the proposed Monument contains important cultural resources and traditional cultural places (TCPs) including north-south trails utilized by O'odham people during their expeditions to Mexico's Gulf of California to gather salt. These routes were also used by the O'odham during their pilgrimages to Magdalena de Kino, Sonora, Mexico at least as far back as the 19th century. Abandoned O'odham villages are reported to be present in this area. Other O'odham from the Salt River and Gila River areas, as well as the present Tohono O'odham area, utilized this region as well. The Maricopa or Pee Posh utilized the Maricopa Mountains area.

New information critical to the understanding of prehistoric desert cultures would be protected by Monument designation. Large, well-preserved pack rat middens found here can assist both archaeologists and paleoclimatologists. While most research in the region has focused on riverine settlement, the large communities in this project area will help archaeologists reconstruct the successful strategies and lifeways of people whose way of life was more desert-oriented.

The geology of the proposed Monument area is quite interesting in character. In the mountain ranges rocks of great antiquity, some roughly 1.7 billion years of age, are intruded into and in places overlain by more recent lava flows. More recent alluvial sediments and drainages are found throughout the valleys between the mountains. Table Top Mountain, southwest of the City of Casa Grande, is a distinctive and important flat-topped landmark that can be seen for miles throughout the entire region.

Various threats to the area have been noted by the author in numerous visits to the area, and in discussions with local residents. Off-road vehicles have made some impacts in places, and much of this damage appears to be fairly recent. Shooting, littering, wildcat dumping, indiscriminate rock collecting, cattle grazing, artifact collecting, vandalism of archaeological sites, illegal plant collecting, invasive alien plant species, and wildcat road building all are evident to some extent, mostly within the margins and more accessible areas of the project area. Development is fast beginning to encroach on the boundaries to the north, east, and west. In spite of these threats, the proposed Monument area remains wild and remote and offers significant and outstanding opportunities for scientific research as well as for experiencing the natural world in an almost pristine state. The opportunity for quiet and solitude this close to a large metropolitan area is unparalleled, and is becoming a true rarity in this fast-paced and noisy world.

It is suggested that this area deserves the highest level of protection possible. Because of the important cultural, historical, and natural resource values found here, as well as the area's geological uniqueness, opportunities for quiet and solitude, and the stark beauty of these dramatic mountain ranges and their connecting valleys, it is recommended that the entire area be included as part of any National Monument established in this region. Failure to preserve and protect all portions of this area would certainly result in a significant and major degradation of its values and resources in the near future, and the loss would be a great one.

INTRODUCTION

This brief study was performed at the request of the Coalition for Sonoran Desert National Monument. The proposed Monument boundary encloses the Table Top Wilderness area, the Vekol Valley, the Vekol Valley Area of Critical Environmental Concern (ACEC), the Sand Tank Mountains, the North Maricopa Mountain Wilderness area, and the South Maricopa Mountain Wilderness area. There are no large survey reports or comprehensive written summaries of cultural resources within the proposed monument area. The purpose of this report is to evaluate cultural resources that have been documented within the area, as well as to evaluate the archaeological and historical resource potential and to note any other features that make this place unique and worthy of protection under the Antiquities Act of 1906 (16 U.S.C. 431-433). The Antiquities Act authorizes the president to withdraw lands from multiple use status for the purpose of creating national monuments.

PROJECT BACKGROUND

Very little time was available for completion of a full-scale evaluation of such a large, rugged, and diverse area for the presence/absence/significance of cultural resources. It was determined that under these constraints, a Class I archaeological site file and records check was most appropriate in order to summarize what is known about the area at this time. Because the unique and important cultural resources of the Sand Tank Mountains have been dealt with elsewhere (Homburg et al 1993), they will not be addressed here.

Cheryl Blanchard, an archaeologist with the Phoenix office of the Bureau of Land Management, was contacted regarding her knowledge of cultural resources in the area. She verified that substantial archaeological and historical resources are present, but she is personally familiar only with those discovered during "reactive surveys" based on development projects on BLM lands. These surveys have been performed for projects such as roads, cattle tanks, seismic lines, water developments, and ranching improvements. (Blanchard 2000).

An archaeological site file and records check at the Arizona State Museum (ASM) in Tucson showed that little cultural resource work has been done within the proposed Monument area, although a few sites had been recorded.

Further investigations during a visit to the Phoenix BLM Office uncovered a few small survey reports and several more site records for the area.

PROJECT AREA GEOLOGY AND ENVIRONMENT

The geology of the proposed Monument is quite distinctive in character. In the mountain ranges, a mix of early and middle Proterozoic gneisses, schists, and a variety of granitic rocks (including commonly biotite granite with large feldspar crystals) are intruded into and in places overlain by more recent (Pliocene to middle Miocene) volcanic basalt lava flows. These metamorphics are some of the older rocks in Southern Arizona at roughly 1.7 billion years old. In the surrounding valleys, Quaternary sands and gravels overlay thousands of feet of Tertiary stream and lake sediments that are interspersed with volcanic lava and ash layers. Holocene to late Pleistocene sediments are found in surficial contexts across the valleys. The

proposed monument is located within the Basin and Range Tectonic Province (Chronic 1983), (Kamilli and Richard 1998).

A number of areas outside the current project area several miles to the north and to the east are subject to subsidence and fissures from excessive ground-water withdrawal. Agricultural development in the surrounding region, along with an early 20th century irrigation scheme involving the artificial diversion of regional drainage by Colonel William C. Greene have radically altered the surface hydrology of the surrounding valleys to the north and east (Rhoads 1991, Jackson and Comus 1999). It appears that there has been little or no impact upon the proposed Monument area as a result of these changes, aside from some minor floristic changes reported along the Vekol Wash (Hunt 2000).

Elevations in the proposed Monument area run from approximately 800 feet in the low valleys up to a maximum altitude of 4374 feet above mean sea level (AMSL) at the peak of Table Top Mountain. The various mountain ranges present a dramatic jagged skyline with rugged peaks and towering cliffs that slope down to broad sloping bajadas and flat valleys. The main drainage running through the central Monument area is the Vekol Wash which ultimately drains north into the Santa Cruz River. The Santa Rosa Wash receives drainage from the east side of Table Top, while the Gila River receives drainage from the west side of the Maricopas. A number of major and minor ephemeral washes drain the entire area and all drainages and washes in the area currently flow only during times of heavy localized rainfall. The Tohono O'odham Nation borders and protects the southwestern boundary of the Table Top area. The Barry M. Goldwater Air Force Range borders the Sand Tanks (Area A) and the southern portion of the Maricopas where this portion of BLM land is crossed by Interstate 8.

Climate of the project area is characterized by very hot summers and mild winters. Rainfall is bimodal, with long gentle showers spread across a wide area occurring in the winter, and heavy, brief, localized thundershowers occurring in the summer. Elevation can affect temperature and rainfall in localized areas. While the nearby town of Gila Bend is regularly one of the hottest spots in the nation, Table Top Mountain within the project area occasionally receives a delicate white frosting of winter snow. This visual effect of a layer of snow high above the surrounding desert landscape is quite stunning. Temperatures can run from more than 115 degrees F. in the summer to lows just below freezing in the winter, with annual means of 90 degrees F. in summer and 50 degrees F. in winter reported for Gila Bend (Sellers and Hill 1974).

The vegetation of the proposed Monument is classified as part of the Paloverde-Cacti Mixed Scrub Series of the Arizona Upland Division within the Sonoran Desertscrub biogeographic division. The surrounding bajadas and flats are within the Lower Colorado River Valley Subdivision of Sonoran Desertscrub. Mountain vegetation is dominated by the leguminous foothills paloverde, *Cercidium microphyllum*, and the saguaro cactus *Carnegia gigantea*. The lower areas are characterized by open and simple vegetative communities reflecting the intense competition by plants for scarce water resources (Turner and Brown 1982).

(Mauz 1999) presents a comprehensive flora of the Sawtooth Mountains, located some twelve miles east of the current project area, which represents one of the few scientific plant studies completed in this region to date. She collected or observed a total of 208 species or

infraspecific taxa in 46 families. Most of these species are found within the current project area. Native Arizona plants accounted for 185 species (89% of the total), while 23 species represent nonnative species. These nonnatives probably are a result of the intense agriculture carried out within a few miles of the range as well as man-made disturbance along portions of the Greene Wash system— more than half the nonnatives are found near or in the wash. Mauz is currently preparing a flora of the Table Top Mountain area (Mauz 2000). Two unique and important vegetative communities present within the monument include the Vekol Valley ACEC which contains a rare tobosa grassland, and a relict Pleistocene vegetative community found in the Sand Tank Mountains. Botanist Richard Felger is preparing a botanical overview of the current project area (Felger 2000).

The author has observed in the project area a diversity of herpetofauna including collared lizards (*Crotaphytus collaris*), horned lizards (*Phrynosoma* Sp.), whiptail lizards (*Cnemidophorous* sp.), zebratail lizards (*Callisaurus draconoides*), side-blotched lizards (*Uta stansburiana*), desert iguanas (*Dipsosaurus obesus*), red coachwhip snakes (*Masticophis flagellum* subsp. *Piceus*), Sonoran gopher snakes (*Pituophis melanoleucus affinis*), sidewinders (*Crotalus cerastes*), western diamondback rattlesnakes (C. *atrox*), and desert tortoises (*Gopherus agassizii*). The author has also noted a great variety of arthropods, birds, and small mammals, as well as antelope jackrabbits (*Lepus alleni*), coyotes (*Canis latrans*), kit fox (*Vulpes macrotis*), javelina (*Tayassu tajacu*), desert bighorn sheep (Ovis canadensis), ringtail cats (*Bassariscus astutus*), and bobcat (Felis rufus). Numerous raptors can be found here in season. Biologist Dale Turner is currently preparing a faunal resource inventory and assessment for the project area Turner 2000).

It should be noted here that desert bighorn sheep have become extinct in the Rincon, Tortolita, Tucson, and Picacho Mountains of Southern Arizona and the herd in the Santa Catalina Mountains is virtually extinct. Desert bighorn sheep in this region are thought to be a metapopulation, where the various mountain ranges function as nodes of habitat and population for the sheep, and that there is movement and gene flow between these ranges on a regular basis. The fact that there are still resident bighorn sheep within the Sand Tank Mountains, the Table Top Wilderness area, the South Maricopa Mountain Wilderness area, as well as in the nearby Sawtooth and Silverbell Mountain ranges suggest that protection of the current project area is critical if sheep populations are to remain viable within the mountains of south-central Arizona (Krausman 1993). Retaining connectivity through the preservation of habitat corridors between mountain ranges is the only way to guarantee a future for these sheep populations. Simply setting aside islands of mountain habitat without these connecting corridors ultimately dooms the sheep to extinction as demonstrated by recent extinction of the Santa Catalina herd near Tucson. Prehistoric rock art in the area depict bighorn sheep, suggesting they were regionally important to the local residents.

CULTURAL HISTORY

What follows is a very abbreviated and general summary of human history in the region. (Whittlesey et al 1994) offers a comprehensive look at the known history and some of the current controversies and research questions in the area, of which there are far too many to discuss here.

Humans are known to have inhabited the study area for at least 5000 years (Marmaduke 1993, Halbirt and Henderson 1993, Whittlesey et al 1990), and more likely for as long as 7000-12,000 years or even more. This topic is the subject of great debate among archaeologists at the current time. It is likely that these older deposits would be buried quite deeply under the thick alluvial sediments found in the valleys in this area— thus explaining the paucity of very old remains reported from the Vekol Valley and other drainages that pass through the area.

The current archaeological record begins in this area with the Archaic/Early Agricultural Period. This time period represents the transition from a hunting and gathering strategy to a semi-sedentary or seasonally nomadic way of life that fostered the development/adoption of agriculture and pottery. A handful of possible Archaic sites was turned up by the current study project which verify an Archaic presence within the project area, and Archaic sites have also been reported from surrounding areas such as the nearby Santa Cruz Flats (Marmaduke 1993, Halbirt and Henderson 1993). The Archaic sites reported for this project are located in the Maricopa Mountains area and the Vekol Valley, and are characterized by distinctive styles of projectile points and other stone tools, sometimes of exotic non-local materials.

The term Hohokam is used to refer to a post-Archaic prehistoric tradition whose material culture is characterized by a distinctive red-on-brown or red-on-buff pottery, stone pallets, shell jewelry manufactured from raw material collected from the Gulf of California, pyrite mirrors, copper bells, pit houses (often "houses-in-pits), platform mounds, "ball courts," and irrigation agriculture. These artifacts and features are found across Southern Arizona and extend into northern Sonora, Mexico (Gladwin, Haury, Sayles, and Gladwin 1937, Haury 1976). For many years it was believed that the Hohokam represented a single tradition spread across the Arizona desert with a "core area" centered on the Phoenix Basin and featuring red-on-buff ceramics and a "periphery" area centered on Tucson and featuring red-on-brown ceramics. Recent research, however, suggests that perhaps the Hohokam consisted of a number of smaller groups with certain shared material culture traits and/or a shared ideology (Wallace 2000). Hohokam artifacts are reported throughout the current project area, especially along drainages and on the bajada surfaces that slope from the mountains down into the valleys. While the mountain ranges within the project area were utilized for resource procurement, it is the valleys and bajadas connecting the mountain ranges that were the focus of human settlement, travel, and agriculture.

During the period around A. D. 1450 or so, dramatic changes occurred across much of the American Southwest which have not been adequately explained. These changes are reflected in the archaeological record of Southern Arizona as well. Much of the material culture and public architecture that characterized the Hohokam complex for several hundred years appears to vanish and is replaced by something different during this time. There are many possible explanations and much discussion and disagreement about what exactly went on during this time, sometimes referred to as the Protohistoric Period. It is today believed by many archaeologists that whatever happened on a material culture level, the people remained and became the modern-day O'odham that the Spanish encountered upon entering the region. Early O'odham history is complex and shrouded in mystery for non-Indian archaeologists, as is the transition between Hohokam and O'odham. The questions

surrounding this time period have direct bearing on the significance of the archaeological remains located within the proposed Monument area.

The Spanish first entered the American Southwest in the mid-sixteenth century. It wasn't until the very end of the seventeenth century that the Jesuit priest Eusebio Francis Kino passed through the Middle Gila region, passing very near to if not through the current project area. The Spanish controlled the area until 1821 when Mexico won its war for independence. Mexico then controlled the area until 1854, when the Gadsden Purchase of 1854 saw the transfer of the area to the United States.

The proposed monument area has always been an extremely important travel corridor both prehistorically and historically. Numerous prehistoric trails pass through the area and are still mentioned by modern Native American groups. Later, Spanish missionaries and explorers, travelers, gold seeking '49ers, military groups, stagecoach lines, and finally the railroad and even later the Interstate highway system have all established routes or passed through this area.

Various activities took place within the project area during the historic American period, including ranching, homesteading, and ranching. The current wilderness areas were established in 1990 on Federal lands.

RESULTS

The records check of the Arizona State Museum and the Phoenix Office of the Bureau of Land Management revealed records for some 108 archaeological and historic sites currently identified within the proposed National Monument. These are in addition to the more than 100 sites recorded from a portion of the Sand Tank Mountains (Homburg et al 1993). This number is remarkable due to the small amount of systematic archaeological survey that has actually been done within the boundaries of the proposed monument. This suggests a very high probability that many more sites to exist within the Monument area. Another 32 sites were noted just to the west and slightly outside of the North Maricopa Mountain wilderness. Due to the proximity of this area to the Gila River, it is a reasonable expectation that many more sites will be found within the northern areas of the proposed Monument.

The few surveys done within the project area, excluding the Sand Tank Mountains and Sentinel Plain, include a survey of the Butterfield Stage Route (Hackbarth 1995). This survey looked at a 23 mile by 50 meter linear corridor totaling some 247 acres between Gila Bend and Mobile, Arizona. Six potentially National Register-eligible sites were found.

A long, circular, linear survey for the proposed Maricopa site of the Superconducting supercollider (Bostwick and Monterro 1992) found 14 new and 15 previously recorded archaeological sites ranging from the Archaic period into modern Historic times. All of these sites were considered significant and eligible for the National Register for Historic Places for their information potential under Criterion d. The survey loosely circled through both the north and south Maricopa Mountains, and conclusively showed that archaeological remains are common here and distributed across the creosote flats, valleys, and bajadas connecting the mountain ranges in this area.

A survey for a proposed treatment facility (Hackbarth and Green 1986) surveyed 1162 acres of the lower bajada area and recorded three new sites, two prehistoric and one historic. The two prehistoric sites were considered to be potentially eligible for the National Register. The project noted the presence of the Southern Pacific Railroad, a fourth important National Register-eligible site because of its historic contribution to the westward expansion of the United States. It was also reported that archaeological resources in this area may contain significant data for the interpretation of the regions prehistory that would fill major gaps in the archaeological record for the desert areas between the much better known Gila and Santa Cruz basins. In this particular small survey area, the sites found may contain important data regarding wild food resource procurement and processing. This is consistent with modern and historic O'odham accounts of use of this area for gathering food and other raw material resources.

A pair of surveys for an Ak-Chin water supply project (Gasser 1981, Bostwick 1982) were interesting in their results. (Gasser 1981) was a poorly designed random sample survey of parts of the Maricopa Mountains and the Vekol Valley which managed to miss, due to the survey design, almost all areas that a trained professional archaeologist would suspect might contain prehistoric or historic remains. This work conclusively demonstrates once again the importance of 100% full coverage archaeological survey in attempting to look at the archaeology of a region. Random mathematical sampling of an area does not take into account the various factors that people use to guide their decisions and use of a landscape, and consequently almost always fails to identify the important cultural resources in an area. In spite of this poor sampling design, some 23 prehistoric and historic sites were discovered in the Vekol Valley, and a great amount of scattered cultural materials (ceramics etc.) were found in randomly selected units near the Maricopa Mountains.

The other study (Bostwick 1982) noted that "Vekol Valley contains an extraordinary number and variety of cultural resources, considering its dry and remote character." Indeed, BLM archaeologist Cheryl Blanchard noted that, "if you draw a large circle enclosing Table Top Mountain on the east, Javelina Peak in the Sand Tanks on the west, and the Vekol Valley in the middle, you have just enclosed an amazing variety and diversity of sites, situated upon a range of different landforms, from along the washes and creosote flats on up the bajadas and into some surprising and unexpected places in the mountains." This information parallels oral histories from the Ak-Chin Indian Community about substantial use of and travel through the area by Native Americans, particularly the O'odham. Bostwick describes 14 sites that are potentially eligible for the National Register of Historic Places. He also indicates that a number of Patayan ceramics are found in this area and suggests that the Vekol Valley and surrounding mountain ranges may hold important information regarding the nature of this little understood cultural tradition and its relationship with the Hohokam cultural tradition. While the Sentinel Plain area is thought to be the transition zone between the Patayan and Hohokam traditions, the information from sites within the proposed National Monument may hold key information that could revise this thinking.

Data gleaned from archaeological site cards for cultural resource sites within the proposed National Monument show the tremendous diversity of artifacts and features found at these sites, and suggests a local chronology which stretches in age from at least the Archaic Period (2000-5000 years ago) all the way into the recent historic era (the mid 20th century). This kind of time depth within a single area is extraordinary and presents archaeologists with an

opportunity to study questions of change over time and to describe in situ changes in the use of an area across the entire spectrum of cultural history in this region.

Paleo-Indian materials have been found in surrounding areas, but have not yet been described from within the current project area. Further survey work on Pleistocene landform surfaces may turn up these kinds of remains. Archaic materials described from the project area consist primarily of chipped stone artifacts and debitage, sometimes made from exotic non-local materials, including diagnostic projectile points.

Hohokam materials seem to dominate the prehistoric assemblages found within the proposed National Monument. Features range from a number of large village sites to a possible ball court to agricultural fields to rock shelters. Rock rings, pithouses, hearths, roasting pits, chipping stations, rock alignments, and a large number of petroglyphs (rock art) are found throughout the Monument area. Artifacts include plain and decorated pottery, clay figurines, chipped stone tools (including projectile points) and debitage, ground stone objects, shell jewelry and waste material, and bone.

The report of a possible Hohokam ball court in the Vekol Valley is extremely interesting . While the exact nature and use of these large public architectural structures are the subjects of some debate, the existence of one this far south and west extends the range of these features and opens up research questions about their presence and function within this part of the Sonoran Desert (Scarborough and Wilcox 1991). Another possible ball court was recently reported from the Sawtooth Mountains a few miles to the east within the new Ironwood National Monument (Shumaker 2000), and so questions arise about what exactly was the relationship between prehistoric communities within the Vekol Valley and those of the Santa Cruz Flats area. Protection of these important ball court features and their associated communities will assist archaeologists in trying to reconstruct and understand the lifeways of people living in this desert region away from the major rivers.

A few sites are identified as containing Protohistoric materials from the transition period between the Hohokam and the O'odham. Historic Papago artifacts are also identified on some of the sites. Questions about the exact nature of what happened between the major changes in this area during the mid-15th century and the first reports by the Spanish about the native O'odham residents of this area abound. The Ak-Chin Farms Project a few miles north of the proposed Monument during the 1980s recovered a substantial amount of Protohistoric ceramics (Gasser et al 1990). In Volume 4 of that report, William Deaver states, "The Ak-Chin collection represents the largest single collection of protohistoric Indian ceramics from southern Arizona." The traditional use area of the O'odham from Ak-Chin extended from roughly Maricopa Wells on the Gila River to the Gila Bend area, south to Kaka on the present day Tohono O'odham Nation, then as far east as approximately the Santa Cruz River (Narcia 1997). This territory encloses most if not all of the proposed Monument area. It is quite possible that the archaeology within the monument area may hold important clues to this poorly understood time period of great change in Southern Arizona.

Additionally, there are a number of large, important historic linear features, large sections of which would be enclosed and protected by the proposed Monument. In the area north of Interstate 8 and enclosing the North and South Maricopa Mountains, portions of the

expedition route of Juan Bautista de Anza to California, the Gila Trail, a route forged by the Mormon Battalion, the Butterfield Stage route, and the historic route of the Southern Pacific Railway all run east-west through the Monument area. These routes very probably followed trails originally pioneered by Native Americans.

In the area south of Interstate 8, traditional trails used by the Ak-Chin and other O'odham groups to go to Mexico to collect salt and to attend the annual Fiesta de San Francisco in Magdalena, Sonora pass through the area north-south. These important traditional cultural places are still remembered and talked about by the elders of the Ak-Chin Indian Community.

De Anza was a soldier from New Spain who led a group of 198 people and 1000 head of livestock from Sonora, Mexico to California, which eventually led to the founding of the Presidio of San Francisco. In 1990 Congress established the Juan Bautista de Anza National Historic Trail, which passes through the proposed Monument area.

The Mormon Battalion was a group of Mormon soldiers put together to assist during the U.S./Mexico war in 1846. They forged a route on their way to San Diego that passes through the proposed Monument area.

Large numbers of miners passed though this area during the California Gold Rush in the mid-19th century on what became known as the Gila Trail.

The Butterfield Stage route is another linear site, well-preserved in sections, of critical importance based upon its substantial involvement with the westward expansion of American settlement, its ability to evoke images that resonate with the public, its ability to yield information important to historic interpretation, how travel along the route was conducted, the time the site was used, and what items were available to residents of the Arizona Territory (Hackbarth 1995).

Masse notes that "The proposed Monument contains an unusually large number of well-preserved fossil pack-rat middens that contain an exquisite botanical and microfossil record of climate, vegetation, and animal life extending back in time at least 15,000 years." (Masse 2000). Fossil pack-rat middens are used by a number of scientists including archaeologists, botanists, and paleoclimatologists to study ancient climate, environment, and plant communities and to attempt to reconstruct past landscapes. These rare fossilized middens can be a treasure trove of information for researchers.

It is important to note that protection of the natural areas surrounding these routes as they pass through the proposed Monument preserves the broad cultural and natural context of the sites. Visitors to this area can still get a sense of what it was like a hundred years ago or more to have lived here and been a passenger on the stage line, a miner on his way to California, a soldier in the Mormon Battalion, or a member of De Anza's expedition. This is a visually stunning area that is critically important to the preservation of both Arizona's and America's vanishing culture and history. There is a pressing need to protect and preserve portions of these truly important routes before that opportunity is lost. The expansion of the Phoenix metropolitan area and increasing interest in Western history definitely pose threats to the resource without some form of appropriate protective management.

CONCLUSIONS

It should be noted here that this area has always been very important to the Tohono, Akimel, and Hia Ced O'odham, and other people native to this region. This brief report has not adequately represented their views due to severe time constraints and the sensitive nature of some of that information. However, this area has always been a traditional cultural place, as a travel corridor, as a location for the gathering of food and other resources, and as a home. Any management plan should address the Native American people of this area on a government-to-government level. They should have an opportunity to participate as advisors in the management of this place that is so important to their *him-dak*, their traditions and way of life. The cultural and natural resources of this area are precious to the people who lived and who still live in this area. These places deserve the maximum amount of protection and respect that can be afforded.

This very brief study has demonstrated that not only are there significant cultural resources present within the proposed Sonoran Desert National Monument project area, but that there exists great potential for many more sites to be identified through a more systematic Class III survey. The vast majority of these resources appear to be relatively intact and have great potential to provide us with important information about the prehistory and history of this little-studied area. The archaeology of the proposed Sonoran Desert National Monument has the potential to answer certain questions about Phoenix Basin Hohokam versus Tucson Basin Hohokam and what was going on in this area midway between the two. Sites in this area will also give us clues about how people survived in this seemingly dry area adjacent to what was once known as the Ninety-Mile Desert (Tellman et al 1997).

It should be noted here that Hohokam archaeology in southern Arizona has traditionally focused on prehistoric communities along the major rivers and streams of southwestern Arizona. In general, the more arid desert regions have been ignored under the mistaken notion that little was going on out there away from the more obvious sources of water. The archaeology within the boundaries of the proposed Monument demonstrates that this notion was completely wrong. The presence of a number of village sites, massive public architecture like ball courts, and the ethnographic record suggest that the settlement patterns of Hohokam and O'odham people extended well out into these desert areas well away from the larger streams and rivers. People in these areas utilized a different panel of subsistence strategies for living successfully in the desert, such as digging shallow wells as was done both prehistorically and historically not only along the Vekol Wash but a few miles north of the Monument area within the current boundary of the Ak-Chin Indian Community. The archaeology that is present within the proposed Sonoran Desert National Monument will allow researchers to answer a whole new set of questions and fill in some major gaps in our knowledge about how people adapted to and lived successfully in the Sonoran Desert.

While the archaeological remains found in this area is not as visually dramatic as say, the stunning Ancestral Puebloan cliff dwelling sites of northern Arizona, what these sites in the Maricopas, Table Top, the Vekol Valley, and the Sand Tanks do is show us how prehistoric people were able to adapt and thrive in what to modern people seems like a very harsh and difficult environment. The information contained in theses sites is irreplaceable.

There is also great potential in this area to find information that will lead to a better understanding of the mysterious time period when Hohokam material culture changes and becomes something completely different by the time the Spanish arrived on the scene.

Important and unique historic resources exist here that demand immediate protection. As a travel corridor, the proposed Monument has been important from prehistoric times all the way into the present day. Sections of the de Anza Trail, the Mormon Battalion route, the Gila Trail, the Butterfield Stage Route, and the Southern Pacific Railroad and their surrounding cultural and natural landscapes would be protected and preserved so that generations of Americans would still have a link to the dramatic events that occurred on this site that helped make our nation what it is today. Prehistory and history are important, and the proposed Monument is an opportunity to protect several irreplaceable portions of our prehistory, history, and heritage.

In addition to important cultural resources, the project area is home to a broad diversity of plants and animals. The desert tortoise is a species of special concern— little is known of its life history in the in this area range. The mountains are also home to desert bighorn sheep, an animal that is fast disappearing from its historic range in this part of Arizona as its habitat becomes fragmented and torn. The inclusion of the Maricopa Mountains in the proposed National Monument would assist in preserving the continuity that still links the series of mountain ranges west of the middle and lower Santa Cruz Valley and those ranges southeast of the Gila River.

As Pinal and Maricopa Counties continue to grow, resources like the proposed Sonoran Desert National Monument become even more critical to protect and preserve. Without some form of protection, such as designation as a National Monument, this precious resource will come under increasing pressure from off-road vehicles, vandals, rock collectors, cactus rustlers, and so on. For a prime example, one need only look a few miles to the east, where Casa Grande Mountain is steadily being crushed under the weight of unregulated use and abuse. Prehistoric rock art is being chiseled off and taken away, front-end loaders have come in to remove boulders and cacti, prime reptile habitat is being destroyed, native plants are being stolen or shot at, off-road vehicles are destroying fragile soils, wildlife including badgers, Gila monsters, coyotes, and various snakes are being flattened on the roads, and antennae have sprouted on the ridgelines and in the valleys like a strange fungus.

Table Top Mountain, the Vekol Valley, the Sand Tank Mountains, the North and South Maricopa Mountains, and the critically important lands connecting them taken together are a very unique and special place, geologically, archaeologically, historically biologically, botanically, and visually. They comprise a whole unit, and to divide up this unit would compromise their integrity. This area deserves all the protection we can provide for it, and we cannot afford to ignore this historic opportunity to protect a place that is so important to so many people. By creating a National Monument here, we honor that which is good in ourselves.

BIBLIOGRAPHY

Blanchard, Cheryl
2000 *Personal communication.*

Bostwick, Todd
1982 *Class III Archaeological survey in the Vekol Valley, Arizona: Ak-Chin Water Supply Project Phase I Final Report.* Northland Research, Flagstaff AZ.

Bostwick, Todd and Laurene Monterro
1992 *An Archaeological Survey of the Proposed Maricopa Site for the Superconducting Super Collider.* Office of Cultural Resource management, Department of Anthropology, Arizona State University, Tempe..

Chronic, Halka
1983 *Roadside Geology of Arizona.* Mountain Press Publishing, Missoula, MT.

Felger, Richard
2000 *Overview of the Flora of the Proposed Sonoran Desert National Monument.* Report in preparation.

Gasser, Bob
1981 *Final Report for an Archaeological Sample Survey of Alternative Ak-Chin Water Supply Areas, Southern Arizona.* Museum of Northern Arizona, Department of Archaeology.

Gasser, Robert E., C. K. Robinson, and C. D. Breternitz
1990 *Archaeology of the Ak-Chin Indian Community: West Side Farms Project.* Soil Systems in Archaeology # 9. 5 Vols.

Gladwin, Harold S., Haury, Emil W., Sayles, E. B., and Gladwin, Nora
1937 *Excavations at Snaketown: Material Culture.* University of Arizona Press, Tucson.

Hackbarth, Mark
1995 *Survey of the Butterfield Stage Overland Route, Gila Bend to Mobile, Maricopa County, Arizona.*. Northland Research, Flagstaff AZ.

Hackbarth, Mark and Margerie Green
1986 *A Cultural Resource Survey of the Proposed Ensco Hazardous Waste Treatment Facility, Maricopa County, Arizona.* Archaeological Consulting Services Services, Cultural Resources Report 38.

Halbirt, Carl D., and Henderson, T. Kathleen, eds.
1993 *Archaic Occupation on the Santa Cruz Flats.* Northland Research, Inc., Flagstaff, AZ.

Haury, Emil W.

1976 *The Hohokam: Desert Farmers and Craftsmen.* University of Arizona Press, Tucson.

Homburg, Jeffrey A., and J. H. Altscul, and R. Vanderpot
1993 *Intermontane Settlement Trends in the Eastern Papagueria: Cultural Resources Sample Survey in the Northeastern Barry M. Goldwater Range, Maricopa County, Arizona.* Statistical Research Technical Series No. 37, Tucson.

Hunt, Henry
2000 *Personal communication.*

Jackson, Laura L. and Comus, Patricia W.
1999 Ecological Consequences of Agricultural Development in a Sonoran Desert Valley. In Robichaux, Robert H. ed., *Ecology of Sonoran Desert Plants and plant Communities.* University of Arizona Press, Tucson.

Kamilli, R. J. and Richard, S.M., eds.
1998 *Geologic Highway Map of Arizona.* Arizona Geological Society and Arizona Geological Survey, Tucson.

Krausman, Paul R.
1993 Exit of the Last Wild Mountain Sheep. In Nabhan, Gary P., ed. *Counting Sheep: 20 Ways of Seeing Desert Bighorn.* University of Arizona Press, Tucson.

Marmaduke, William S.
1993 *Small Sites on the Santa Cruz Flat.* Northland Research, Inc., Flagstaff, AZ.

Masse, Bruce
2000 *Personal communication.*

Mauz, Kathryn
1999 Flora of the Sawtooth Mountains, Pinal County, Arizona. *Desert Plants* 15(2).

Mauz, Kathryn
2000 *Personal communication.*

Narcia, Carmen
1997 *Personal communication.*

Rhoads, Bruce L.
1991 Impact of Agricultural Development on Regional Drainage in the Lower Santa Cruz Valley, Arizona, U.S.A. *Environmental and Geological Water Science.* 18(2): 119-135.

Scarborough, Vernon L. and David R. Wilcox, eds.e
1991 *The Mesoamerican Ballgame.* Universoty of Arizona Press, Tucson.

Sellers, William, and Richard H. Hill

1974 *Arizona Climate.* University of Arizona Press, Tucson.

Shumaker, Jon M
2000 *A Class II Cultural Resources Survey of the Sawtooth Mountains, Pinal County Arizona, With Notes on A Reconnaissance.* Report prepared for the Coalition for Sonoran Desert Potection, Ironwood National Monument Project.

Tellman, Barbara, Yarde, Richard, and Wallace, Mary G
1997 *Arizona's Changing Rivers: How People Have Affected the Rivers.* Water Resources Research Center, College of Agriculture, University of Arizona, Tucson.

Turner, Dale
2000 *Natural Resources of the Proposed Sonoran Desert National Monument.* Report in preparation.

Turner, R. and Brown, D. E.
1982 Sonoran Desertscrub. In Brown, D. E. *Biotic Communities of the American Southwest-United States and Mexico.* Special Issue of *Desert Plants* 4(1-4).

Wallace, Henry
2000 *Personal communication.*

Whittlesey, Stephanie, M. A. Sterner, and R. S. Ciolek-Torrello
1990 *An Archaeological Overview for the Proposed Western ARNG Aviation Training Site in South-Central Arizona.* Statistical Research Technical Series # 38, Tucson.

Whittlesey, Stephanie, R. S. Ciolek-Torrello, and M. A. Sterner
1994 *A Cultural-Historical Overview for the Western Army National Guard Aviation Training Site.* Statistical Research Technical Series # 48, Tucson.

SUPPLEMENTAL BIBLIOGRAPHY

Anonymous
1990 *Barry M. Goldwater Air Force Range: A Brief History.* Luke Air Force Base.

Arizona Pioneers Historical Society
1958 *Butterfield Overland Mail Across Arizona 1858-1861.* Arizona Silhouettes, Tucson.

Ayres, James E.
1965 *A Summary of Archaeological Sites in Maricopa County.* Unpublished manuscript on file in Archives of Arizona State Museum Library.

Ayres, James E.
1984 The Anglo Period in Archaeological and Historical Perspective. *Kiva* 49 (3-4): 225-232.

Barnes, Will C.
1988 *Arizona Place Names.* University of Arizona Press, Tucson.

Berge, Dale E.
1965 The Gila Bend Stage Station. *Kiva* 33(4), 169-243.

Bolton, Herbert E.
1936 *Rim of Christendom.* Russell and Russell, New York.

Canouts, Veletta
1972 *An Archaeological Survey of the Santa Rosa Wash Project.* Arizona State Museum Archaeological Series #18. University of Arizona, Tucson

Castetter, Edward, and Ruth M. Underhill
1935 *The Ethnobiology of the Papago Indians.* (Reprint) AMS Press, New York.

Conkling, Roscoe P., and Margaret B. Conkling
1947 *The Butterfield Overland Mail 1857-1869.* Arthur H. Clark, Glendale, CA.

Coalition for Sonoran Desert Protection
2000 *Proposal for the Establishment of the Morris K. Udall Ironwood Forest-Upland Corridor National Monument.*

Ezell, Paul
1954 An Archaeological Survey of Northwestern Papagueria. *Kiva* 19: 1-26.

Ezell, Paul

1955 An Archaeological Delineation of a Cultural Boundary in Papagueria. *American Antiquity* 20: 367-374.

Fontana, Bernard, and W. J. Robinson, C. W. Cormack, and E. E. Leavitt Jr.
1965 *Papago Indian Pottery.* University of Washington Press, Seattle.

Gasser, Robert E.
1979 Seeds, Seasons, and Ecosystems: Sedentary Hohokam Groups in the Papagueria. *Kiva* 44: 101-112.

Gladwin, Harold S., Haury, Emil W., Sayles, E. B., and Gladwin, Nora
1936 *Excavations at Snaketown: Material Culture.* University of Arizona Press, Tucson.

Greenleaf, J. Cameron.
1975 The Fortified Hill Site Near Gila Bend, Arizona. *Kiva* 40: 213-218.

Halbirt, Carl D., and Henderson, T. Kathleen, Eds.
1993 *Archaic Occupation on the Santa Cruz Flats.* Northland Research, Inc., Flagstaff, AZ.

Haury, Emil W.
1976 *The Hohokam: Desert Farmers and Craftsmen.* University of Arizona Press, Tucson.

Hayden, Julian D.
1979 Fragile Pattern Areas. *American Antiquity* 31: 272-276.

Hayden, Julian D.
1967 A Summary of the History and Prehistory of the Sierra Pinacate, Sonora. *American Antiquity* 32: 335-344.

Hayden, Julian D.
1970 Of Hohokam Origins and Other Matters. *American Antiquity* 35: 87-94.

Hendricks, Fragile Pattern Areas David M.
1985 . *Arizona Soils.* College of Agriculture, University of Arizona, Tucson.

Kessell, J. L.
1976 *Friars, Soldiers, and Reformers: Hispanic Arizona and the Sonora Mission Frontier: 1767-1856.* University of Arizona Press, Tucson.

Lowe, Charles H.
1979 *Arizona's Natural Environment.* University of Arizona Press, Tucson.

McGuire, Randall, and Micheal B. Schiffer, Eds.
1982 *Hohokam and Patayan: Prehistory of Southwestern Arizona.* Academic Press, New York.

Narcia, Carmen
2000 Oral Historian, Ak-Chin Indian Community. *Personal communication.*

Peters, Elaine
2000 Director, Ak-Chin Him-Dak Eco Museum, Ak-Chin Indian Community. *Personal communication.*

Russell, Frank
1908 *The Pima Indians.* (Reprint). The University of Arizona Press, Tucson.

Shreve, Forrest, and I. L. Wiggins.
1964 Vegetation and Flora of the Sonoran Desert. Stanford University Press, Palo Alto.

Spicer, Edward. H.
1962 *Cycles of Conquest: The Impact of Spain, Mexico, and the United States on the Indians of the Southwest, 1533-1960.* University of Arizona Press, Tucson.

Wasley, William W., and A. E. Johnson
1965 *Salvage Archaeology in the Painted Rocks Reservoir, Arizona.* University of Arizona Anthropological Papers # 9, Tucson.

Executive Summary of Review of National Monuments under EO 13792 (April 26, 2017)

Key Information about Sonoran Desert National Monument (SDNM)
SDNM (486,400 acres) was established by Presidential Proclamation on January 17, 2001. Prior to designation, the area was managed by the BLM and continues to be following designation.

The BLM manages for multiple uses within SDNM, including hunting, recreation, grazing, and valid existing rights such as rights of way, while protecting the vast array of historical and scientific resources identified in the Proclamation and providing opportunities for scientific study of those resources. The resources identified in the Proclamation include the plants and animals that make the Sonoran Desert the most biologically diverse of the North American deserts. The SDNM harbors rare plants, vulnerable wildlife and significant archaeological and historic sites, including rock art sites, lithic quarries, and scattered artifacts.

The SDNM includes three designated wilderness areas (North Maricopa Mountains, South Maricopa Mountains and Table Top - totaling 158,516 acres) and the Sand Tank Mountains, highlighted in the Proclamation as an area of rich diversity, density and distribution of plants having been protected from livestock grazing since 1941 as a concurrent situation of being under military withdrawal until monument designation. The RMP also established decisions protecting wilderness characteristics identified for much of the Sand Tank Mountains area.

Overall, multiple use activities are allowed in SDNM when compatible with the protection of resources and objects identified in the Presidential Proclamation. Multiple use activities are subject to decisions made in current and future BLM resource management planning efforts, which include public participation. National Monuments and other conservation areas managed by the BLM continue to allow for multiple uses according to the Federal Land Policy and Management Act.

Summary of Public Engagement Prior to Designation
Prior to monument designation, the Secretary of the Interior accepted an invitation to tour the potential new monument with local constituents. Several organizations endorsed the proposed SDNM included: Arizona Archaeological Council, Arizona Sonora Desert Museum, Defenders of Wildlife, Desert Botanical Gardens (Phoenix), Friends of Cabeza Prieta, Land and Water Fund of the Rockies, National Parks Conservation Association, The Nature Conservancy of Arizona, The Phoenix Zoo, Sierra Club-Southwest Regional Office, Sky Island Alliance, Sonoran Desert National Park Project, Southwest Forest Alliance, Tucson Audubon Society, Tucson Herpetology Society, and The Wilderness Society.

Summary of Public Scoping in Development of Resource Management Plan

BLM performed a variety of public outreach programs to increase involvement in the planning process. BLM took a two-pronged approach to public involvement. The first has been traditional public involvement through scheduled and announced public meetings, such as the public meetings at the scoping and draft comment periods. The second approach was public interaction through BLM participation at community meetings, special interest group meetings, and coordination with elected representatives. BLM staff were invited to speak at meetings in the communities of Tonopah, Buckeye, Gila Bend, Ajo, and Mobile as well as at numerous environmental and recreation groups. These informal meetings provided the BLM an opportunity to explain the planning process and timeline, and to encourage citizen participation in the planning efforts.

BLM conducted 11 public scoping meetings during February and March of 2003. The open house scoping meetings were held in the Arizona communities of Maricopa, Gila Bend, Casa Grande, Globe-Miami, Ajo, Sells, Tucson, Buckeye, Mesa, Phoenix, and Yuma. Each of the 11 meetings was conducted in an open house format, allowing meeting participants to review maps and display boards of each planning area and to ask specific questions one-on-one with BLM staff about the RMP/EIS process. Comments received during the initial scoping period largely fell into the following three categories:

1. Public Activities – those activities that the public noted doing on public lands, such as hiking, hunting, sight-seeing, camping, wildlife observation, and driving and motorized touring;
2. Desired Management – the public's ideas and input for how BLM should manage the public lands in the Lower Sonoran Field Office area and SDNM, focused on managing for resource protection and to provide public access; and
3. Public Values – those features or qualities valued by various members of the public, such as an area's natural beauty, the quiet peaceful surroundings, and a place to "get away from it all" without having to travel great distances.

Summary of National Monument Activities since Designation

As directed in the SDNM Proclamation, grazing permits on federal lands within the monument south of Interstate Highway 8 were not renewed at the end of their term following monument designation. This affected five grazing allotments and 7,727 AUMs (Animal Unit Months).

Summary of Activities in Area for Five years Preceding Pre-Designation (Fact sheet dated November 30, 2000 in Outreach and correspondence prior to designation.pdf)

NON-MOTORIZED RECREATION
In the five years preceding designation of SDNM, recreation in the area saw a growing number of hikers, backpackers, and birdwatchers evidenced by increased registration at trailheads.

HUNTING
The area was open to hunting for mule deer, desert bighorn, javelina, dove, quail, and other game species. The rugged nature of the terrain and limited roads make hunts challenging.

MOTORIZED RECREATION
Growth of motorized backcountry recreation use was occurring in the area during the five years prior to SDNM designation. 33% of the area was already designated wilderness and thus closed to all motorized recreation. Only vehicles licensed for highway use were permitted in Sand Tank Mountains area, effectively prohibiting use of ATV and dune buggy-type vehicles.

LIVESTOCK GRAZING
In the five years preceding designation of SDNM, BLM administered 11 livestock grazing allotments across the area. Two of the allotments were permitted for "ephemeral grazing", meaning open for grazing only after unusually wet winters. The area contained a number of grazing developments, including fences, corrals and stock ponds.

MINING
The area except for designated wilderness and the Sand Tank Mountains was open for mineral location and entry. No claims were producing significant quantities of minerals. The State of Arizona and Maricopa and Pinal counties operated a small number of gravel pits in proximity to major roadways.

UTILITY CORRIDORS
Prior to designation, one utility corridor along Highway 238 traversed the area that became SDNM.

Summary of Available Economic Information since Designation
The SDNM supported an estimated $4,335,516 of total economic output in 2016. (Sonoran Desert NM-Economic Snapshot (1).pdf)

Summary of Any Boundary Adjustments since Designation
There have been no boundary adjustments since designation.

Call for Data Related to Review of National Monuments under EO 13792 (April 26, 2017)

Sonoran Desert National Monument (SDNM)

1. Documents Requested
    a. Resource Management Plans/Land Use Plans
    The 2012 Sonoran Desert National Monument Resource Management Plan (RMP) and Final EIS is on the BLM ePlanning web site at FEIS PRMP.
    b. Record of Decision
    The RMP Record of Decision (ROD) is titled 01-SDNM_ROD-ARMP_FINAL.pdf within this Drive folder.
    c. Public Scoping Documents
    Consultation and coordination for the RMP and ROD is titled 02-Chapter_5-Consultation_and_Coordination LSFO_SDNM FEIS within this Drive folder.
    d. Presidential Proclamation
    The Presidential Proclamation is titled 03-SDNM-Presidential_Proclamation within this Drive folder.

2. Information on activities permitted at the Monument, including annual levels of activity from the **date of designation to the present** (Proclamation 7397 of January 17, 2001)

    a. Recreation - annual visits to site
    The most common recreational activities on SDNM include hiking, hunting, camping and OHV travel on designated routes. Six trailheads provide access to four established hiking trails within designated wilderness areas. The Anza National Historic Trail passes through the SDNM, providing recreational experiences along this historical resource. The SDNM utilizes the Recreation Management Information System (RMIS) to calculate visitation numbers for the monument. A temporary vehicle closure in a portion of SDNM was implemented due to resource damage in 2008 causing visitation numbers to drop in FY2009. Visitation numbers have continued to increase from that point however, as more people become aware of SDNM through a variety of sources. The SDNM is just outside of the Phoenix metropolitan area and within Maricopa County, having 4.2 million residents and the highest population growth in the country in 2016.

    FY 2002: 17,911 visits
    FY 2003: 21,738 visits
    FY 2004: 18,157 visits
    FY 2005: 30,058 visits

FY 2006: 36,852 visits
FY 2007: 31,328 visits
FY 2008: 34,349 visits
FY 2009: 14,304 visits
FY 2010: 17,287 visits
FY2011: 26,069 visits
FY2012: 26,835 visits
FY 2013: 26,560 visits
FY 2014: 29,894 visits
FY 2015: 40,310 visits
FY 2016: 51,278 visits

b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)
There are no utility corridors inside the Monument boundary.

c. Minerals - annual mineral production on site.

i. No locatable minerals have been produced within the Monument since designation. The Monument was withdrawn from mineral entry by its Proclamation, and it no longer contains any active legacy mining claims, so there can be no future production.

ii. No salable minerals have been produced within the Monument since designation, as the regulation at 43 CFR 3601.12(a) prohibits disposal of mineral materials from national monuments.

iii. Within the Monument, along Interstate 8, there are three authorized Title 23 material site rights-of-way (AZA-27836, AZA-28344, & AZA-30769), issued to the Federal Highway Administration, for the purpose of supplying construction materials to aid federal highway projects. The material sites are sand & gravel pits that are intermittently used to supply highway maintenance projects on Interstate 8.

iv. Since Monument designation, two of the three material sites (AZA-27836 & AZA-30769) have been active sporadically, each producing an annual average of less than 1,000 tons of sand & gravel, for a total of less than 2,000 tons per year within the Monument. The royalty value of that sand & gravel would have been roughly $1.00/ton had the material been sold to a private party, but since it went to aid a federal highway project no royalties were collected by

BLM. The third site (AZA-28344) has not been active since Monument designation. Exact production figures are not available since the Federal Highway Administration is not required to report production to BLM, and so the figures above are estimates based on site inspections and the use of Google Earth.

v. No leasable minerals have been produced within the Monument since designation.

vi. There are no mineral developments or process facilities adjacent to or impacted by the National Monument designation.

d. Timber - annual timber production on site (in board-feet, CCF, or similar measure).
The Sonoran Desert vegetation is dominated by columnar cacti, saguaro, and legume trees like ironwood, mesquite, and palo verde. Currently none of these products are harvested as timber in the area.

e. Grazing - annual grazing on site (AUMs permitted and sold)
   i. Grazing AUMs/ Active and billed (SDNM AUMs by Allotment Table.docx is located within this Drive folder).
   ii. Prior to Monument designation there were 16,433 active AUMs. As permits expired in areas south of Interstate 8, they were not renewed. This reduced the active AUM's to 8,706 on SDNM.
   iii. In the 2012 SDNM RMP/Final EIS, an adjustment in AUM levels was proposed in order to reflect areas closed due to not meeting rangeland health standards. This decision was litigated and the decision was stayed. This prevented permits from being renewed until the litigation is resolved. This litigation is currently unresolved. Today, the remaining active grazing permits on the Monument retain 776 active AUMs.

f. Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available.
Subsistence activities to provide the bare essentials for living: food, water, and shelter. The Federal Subsistence Management Program provides opportunities for subsistence way of life in Alaska on federal public lands and waters. There are no formal subsistence programs outside of Alaska. SDNM provides for the collection of certain natural materials, by Native American Indians, under a free

BLM permit.

g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available

The cultural resources information available for the SDNM derives from project-driven surveys in response to Section 106 undertakings (54 USC, Section 306108) conducted over several decades. At present, the BLM has inventoried approximately 6 percent of the SDNM and has records for 250 sites. This is a small sample compared to the overall size the SDNM. However, in areas where the BLM does have information, site densities of 5 to 15 archaeological sites per square mile are common. Sites range in type from evidence of occupation and upland farming to scatters of lithics and pottery possible indication of other activities, including trading. Based on existing data, and taking consideration of landforms and proximity to reliable water sources, it is probable similar site densities are present throughout the SDNM. The BLM estimates, when completely inventoried, the SDNM may contain more than 5,000 sites.

3. Information on activities occurring during the **5 years prior to designation**

a. Recreation - annual visits to site.

i. Recreational activities in the SDNM prior to designation were much the same as they are today. Hiking, hunting, camping and OHV use accounted for most of the recreation activities in the area before 2001. Only one developed trailhead and hiking trail was present at that time. The SDNM utilizes the Recreation Management Information System (RMIS) calculate visitation numbers for the monument, however RMIS only has visitation data back to 1999.

FY 1999: 14,640 visits
FY 2000: 16,334 visits
FY 2001: 21,003 visits

b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any).

i. There was no energy production from coal, oil, gas, or renewables during the five years prior to designation.

c. Minerals - annual mineral production on site

i. No locatable or salable minerals were produced within the Monument during the 5 years prior to designation.

ii. Records indicate that only one of the three material site rights-of-way locations (AZA-27836) may have produced sand & gravel during the 5 years prior to designation, at an estimated annual average of less than 1,000 tons of sand & gravel.

iii. No leasable minerals were produced within the Monument during the 5 years prior to designation.

iv. There are no mineral developments or processing facilities adjacent to or impacted by the National Monument designation.

d. Timber - annual timber production on site (in board-feet, CCF, or similar measure).
   i. There was no timber production during the five years prior to designation. Typically used wood products do not exist within the Sonoran Desert ecosystem.

e. Grazing - annual grazing on site (AUMs permitted and sold)
   i. Grazing AUMs/ Active and billed (SDNM AUMs by Allotment Table.docx is located within this Drive folder).

   ii. There were 16,433 total AUMs, all of which were active during those 5 years (SDNM AUMs by Allotment Table.docx is located within this Drive folder).

   iii. The grazing management of the area during the 5 years prior to Monument designation abided by all applicable grazing laws and regulations (43 CFR 4100).

   A Standards and Guidelines Allotment Evaluation conducted in that area during the 5 years prior to Monument designation indicated that all Standards for Rangeland Health were being met.

f. Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available.
   Subsistence activities provide the bare essentials for living: food, water, and shelter. The Federal Subsistence Management Program provides opportunities for subsistence way of life in Alaska on federal public lands and waters. There are no formal subsistence programs outside of Alaska. SDNM does provide for the

collection of certain natural materials, by Native American Indians, under BLM permit.

g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available.
   i. A large portion of the SDNM contains traditional cultural places of importance to the Four Southern O'odham Tribes of Arizona. Extensive stands of saguaro cactus and other traditional plant resources within the SDNM indicate significant potential for prehistoric and historic resource utilization. Rock outcroppings and lithic artifacts made of local-appearing materials suggest the probability of prehistoric quarries in the area.
   ii. A Class 1 Cultural Resources Overview titled Class 1 Archaeology survey prior to designation in this Drive folder. 108 prehistoric and historic sites were reported during that project alone, suggesting a high probability for many other sites to be present in the SDNM.

4. Information on activities that likely would have occurred annually from the date of designation to the present **if the Monument had not been designated**

a. Recreation - annual visits to site

As presented above in the response to item 3.a. Recreation, visitation for the two years prior to designation averaged about 15,000. Visitation likely would have slowly increased from that number over the following years. However, the city of Maricopa, 16 miles to the east of the SDNM east boundary, grew from a population of 1,748 in 2000 to nearly 45,000 in 2008. Such growth of a nearby community would have an influence on visitation, regardless of designation status. Research by external parties indicate protected landscapes are a draw for visitors and do result in increased visitation to a region. Thus, it is reasonable to conclude visitation would be less if the lands had not been designated as a monument.

b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)
   i. Though consideration of production or construction of the items listed above would be highly speculative, utility corridors may have changed routes, and in any case, would have had to work around the three Wilderness areas designated in 1990 located inside the present day boundary of the SDNM.

c. Minerals - annual mineral production on site
   i. Regarding locatable minerals, the potential for resources to be discovered within the area that is now SDNM is generally low to moderate. Areas with

moderate potential occur in mountainous terrain, a large portion of this terrain is within the three Wilderness areas described above and in the Additional Information document at c). The southern portion of the SDNM has one area outside designated wilderness with high potential for porphyry copper, and one very small area with high potential for gold. The lack of significant mining and exploration activity prior to designation, it is unlikely any locatable mineral production would have occurred annually had the Monument not been designated.

ii. Regarding salable minerals, essentially all of the Monument has potential for sand & gravel and crushed stone resources. However, these resources are not desirable than similar resources located closer to population centers outside the Monument. Costs to transport salable minerals produced within the Monument area to nearby population centers would be greater than transportation costs associated with mines outside the Monument and closer to population centers. Therefore, it is unlikely annual production of salable minerals would have increased significantly had the Monument not been designated.

iii. Regarding leasable minerals, the Monument has no potential for coal, and a low potential for oil & gas and sodium, except in the Vekol Basin in the southeast part of the Monument, where the potential is moderate. The potential for geothermal resources is generally moderate throughout the Monument, similar to the rest of the region south and west of Phoenix. However, there is no recorded production of leasable minerals from within the Monument area, it is unlikely any leasable mineral production would have occurred annually had the Monument not been designated.

d. Timber - annual timber production on site (in board-feet, CCF, or similar measure).

The BLM does not have sufficient information to determine how designation of the SDNM has impacted timber production. Typically-used wood products do not exist within the Sonoran Desert ecosystem.

e. Grazing - annual grazing on site (AUMs permitted and sold)

i. Grazing/ AUMs active and billed would likely have remained the same and grazing would have continued to be managed by applicable laws and regulations (43 CFR 4100).

ii. Livestock grazing would have continued to be authorized in the southern

portion of the Monument south of Interstate 8 and the BLM would have not compensated permittees for the range improvements in this area.

iii. Grazing use levels have varied and would have continued to vary considerably from year to year due to factors like drought and ephemeral forage availability.

f. Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available.

The BLM does not have sufficient information to predict how designation of the monument has impacted participation rates in subsistence activities. The collection of certain natural materials by Native American Indians under BLM permit could continue regardless of monument designation.

g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available.

The BLM does not have sufficient information to predict how designation of the monument has impacted cultural uses of the monument. The monument proclamation requires that the BLM provide access by members of Indian tribes for traditional cultural and customary uses, consistent with the American Indian Religious Freedom Act (42 U.S.C. 1996) and Executive Order 13007 of May 24, 1996 (Indian Sacred Sites). Had the SDNM not been designated, that additional protection for such uses would not be provided.

5. Changes to boundaries - dates and changes in size

There have been no changes to boundaries.

6. Public Outreach prior to Designation - outreach activities conducted and opportunities for public comment.

Support for a proposed Sonoran Desert National Monument came largely from individuals and organizations interested in the area. Meetings occurred and written materials were produced. Some public hearings were held. See the following documents in this Drive folder: Biological Resources of the Sonoran Desert National Monument-Drylands Institute (see pages 3 & 5) and Outreach and correspondence prior to designation.pdf.

7. Terms of Designation

Refer to Proclamation for the terms of designation. No additional background. The Presidential Proclamation is titled 03-SDNM-Presidential_Proclamation within this Drive

folder.

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HUMAN HABITATION AND CULTURAL VALUES WITHIN THE PROPOSED MONUMENT

Although information regarding the cultural resources of the proposed Sonoran Desert National Monument is limited, what is known suggests this to be an area of considerable interest. This is especially true regarding prehistory when two major cultural groups, known to archaeologists as Hohokam and Patayan, shared the area in ways that are as yet poorly understood. The earliest documented evidence from the area consists of dart points from the Middle Archaic Period (about 6,000 years ago); however, a Paleoindian presence (10,000-12,000 years ago) is known from nearby areas and is likely to occur within the area encompassed by the monument.

PREHISTORIC USE.

Because of abundant natural resources, there was significant prehistoric use throughout the proposed monument area, especially in and around the Sand Tank Mountain range. Within that range there are two general areas that were particularly favored: the Sand Tank Wash drainage system in the west and the Vekol Wash drainage system in the east. Both areas contain sites that were used primarily for food gathering and processing as well as habitation and rock art.

Interestingly, for such an arid area, long-term habitation sites do occur, generally where water was locally available. At least one of these within the proposed monument appears to have been occupied from prehistoric through historic times, a time period spanning over a thousand years. Such a long continuous occupation at a single location is unusual and of special significance.

Rock art sites found here are of particular interest because they may shed light on social and religious practices. Numerous rock art sites have been documented in the area and at least one pictograph site is unusual for its size and the number of paintings it contains. Artifacts made from sea shells are common throughout the proposed monument. The prehistoric Hohokam passed through the area regularly on their way to Mexico's Gulf of California in order to collect the shells from which they made a variety of elegantly crafted jewelry including bracelets, pendants, and necklaces.

The protohistoric period, from roughly A.D. 1450-1700, was a time of great change throughout the Southwest. The proposed monument may contain important evidence that will help answer key questions about this period. The monument is within the traditional use area of the people of the Ak-Chin Indian Community, composed of Hia Ced O'odham, Maricopa, and Akimel O'odham. Because these people moved seasonally throughout the monument area, it very probably contains archaeological evidence critical to the understanding of the protohistoric period.

HISTORIC USE.

As recently as the early twentieth century, people of the Ak-Chin Indian Community still traveled through this area on their way to the Gulf of California to collect salt and remnants of their trails are still evident. These groups continue to have cultural ties to the land within the proposed monument. Protection of this area will help preserve an important part of Ak-Chin cultural history.

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WILDLIFE

Despite the hot, arid nature of the Sonoran Desert, it teems with wildlife and the half-million acre area encompassing the North and South Maricopa Mountains, Table Top Mountains, the Vekol Valley, and the Sand Tanks Mountains is no exception. In fact this area offers key wildlife habitat because of its expanse and relatively pristine nature. The Nature Conservancy, in a letter to the Bureau of Land Management that identified the ecological significance of the Sand Tank Mountains and adjoining areas, concluded that if properly managed in conjunction with neighboring lands (that include the Barry M. Goldwater Range, Organ Pipe Cactus National Monument, and Cabeza Prieta National Wildlife Refuge), a large portion of this area would serve as a part of an ecological complex for wide-ranging, area-sensitive species, such as desert bighorn sheep and Sonoran pronghorn. Both of these species have declined in part due to fragmentation and loss of habitat. At a much smaller scale, the area south of I-8 apparently provides a stronghold for desert amphibians near the northern limit of their range that rely on seasonal wetlands in the Vekol Valley.

Mammals. An estimated 62 species of mammals populate this area, including: javelina, mule deer, white-tailed deer, mountain lion, kit fox, bobcat, coyote, and badger. In addition, the area provides important habitat for the following species:

Desert bighorn is a regionally vulnerable species extirpated in some mountain ranges of the Sonoran Desert due to habitat fragmentation by roads and urban development. The population of desert bighorn in the proposed monument is so vibrant that it is providing transplant stock to replenish bighorn populations in other areas.

Sonoran pronghorn antelope is a federally listed endangered species that may use the Sentinel Plain and historically probably used areas east of Highway 85, including the Vekol Valley. As recently as the mid-1990s Goldwater natural resource staff documented a pronghorn crossing Highway 85 west to east in the vicinity of the Crater Range, which is a direct connection to the Sauceda Mountains, Vekol Valley, and Sand Tank Mountains. The Vekol Valley may provide an area for transplanting Sonoran pronghorn to re-establish a population there.

Lesser longnose bat is another federally listed endangered species. Bats from Copper Mountain colony, 40 miles to the southwest at Organ Pipe Cactus National Monument, have been documented foraging in the Sand Tanks. Dense palo verde-mixed cacti community, particularly saguaro, serve as important food source for this species.

California leaf-nosed bat and *cave myotis*, two other bat species, are found within this area; both are listed as species of special concern and as BLM "sensitive species" requiring special management.

Birds. More than 200 bird species have been observed in this area, including Gambel's quail, Harris' hawk, numerous other raptors, roadrunner, phainopepla, and cactus wren. In addition, the area provides important habitat for the following species:

Gilded flicker, and the uncommon *Abert's Towhee*, both species endemic to the Sonoran Desert.

Rufous-crowned sparrow, whose global distribution is limited to the Southwestern U.S. and Northwestern Mexico. In the Sonoran Desert, these birds are found only on grassy slopes in higher mountains, such as the Javelina Mountain area, where breeding pairs have been confirmed by the Arizona Game and Fish Department.

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PLANTS AND PLANT COMMUNITIES

EXISTING PLANT COMMUNITIES.

An astonishing array of desert plants and plant communities populate the area that includes the North and South Maricopa Mountains, Table Top Mountains, the Vekol Valley, the Sand Tank Mountains, and the Sentinel Plain. Saguaros - the emblematic cactus of the American West - have been in many places depleted by theft or livestock grazing, or overrun by off-road vehicles. However, within this area, majestic, dense, healthy stands of saguaros abound, particularly in the vicinity of the Sand Tank Mountains and Table Top Mountain. Saguaros are just one of the many species that typify the "Arizona Upland Subdivision" of the Sonoran Desert; others include ocotillo, ironwood, palo verde, and a wide variety of cacti. These species thrive mainly on the foothills and transition zones to the steep mountains. known as *bajadas*. More open plains and alluvial valleys often contain another ubiquitous desert dweller: creosote.

The area south of I-8, from the Sand Tanks to Table Top Mountain, harbors a special variety of natural vegetation communities, including unique woodland assemblages on higher peaks. perhaps the Sonoran Desert's best example of the palo verde-mixed cacti association on the area's *bajadas,* and valley bottom desert grasslands. Experts contacted by The Nature Conservancy repeatedly mentioned that the diversity, density, and evenness in distribution of plants associated with the palo verde-mixed cacti community in the Sand Tank Mountains was probably indicative of what many other areas of the Arizona uplands looked like prior to the introduction of domestic livestock. The summit of Table Top Mountain also contains an unusual, 40-acre, high-elevation desert grassland. A number of rare or declining plants, determined by the BLM to require listing on the agency's "sensitive species" list are also in the area.

Seasonal watercourses that traverse valleys support unique plant associations. Representative species include blue paloverde, desert lavender, catclaw, ironwood, wolfberry, and, in some areas, smoke tree and desert willow.

Unique or high quality (relatively pristine) plant communities found within the Sand Tank Mountains to Table Top Mountain portion of the proposed monument include:

Palo Verde-Mixed Cacti Association. The palo verde-mixed cacti association in the Sand Tank Mountains is one of the most structurally complex examples found in the Sonoran Desert, both in terms of species composition and evenness of plant distribution. Among the outstanding features found here are the high density of leguminous trees (such as mesquite) and cacti and the prominence of grasses, including summer annual grasses (*Bouteloua barbata*), curly mesquite (*Hilaria belangeri*), bush muhly (*Muhlenbergia porteri*), big galleta (*H. rigida*), and tobosa grass (*H. mutica*). Exceptionally dense stands of saguaros are common. Javelina Mountain, also in

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SPECIAL AREAS WITHIN THE PROPOSED MONUMENT

SAND TANK MOUNTAINS (AREA A)

The Sand Tank Mountains, an 80,000-acre area also known as "Area A", is at the northeastern corner of the Barry M. Goldwater Range. The Military Lands Withdrawal Act of 1999 recognized that the military no longer needs this area for its operations and put in place a process for the lands to be relinquished to the Bureau of Land Management no later than November, 2001.

This area is an outstanding example of healthy, vigorous Sonoran desert. This mountainous area contains dense saguaro forests, habitat for bighorn sheep, and outstanding recreational opportunities. Recreationists now use the Sand Tanks for camping, hiking, hunting, and birdwatching, among other activities. Access to the area is controlled to protect the public and to ensure uninterrupted Department of Defense (DOD) operations of the Goldwater Range. DOD and Bureau of Land Management (BLM) regulations currently restrict vehicle use to designated motorized trails and prohibit the use of vehicles not licensed for highway use (i.e., all terrain vehicles). This area contains perhaps the Sonoran Desert's best example of the palo verde-mixed cacti plant community on some of the area's *bajadas,* and northernmost specimens of organ pipe cactus (*Stenocereus thurberi*). It also hosts an unusual combination of plant species at the higher elevations, rarely found in the Sonoran Desert.

NORTH MARICOPA MOUNTAINS WILDERNESS AREA

Designated by the Arizona Desert Wilderness Act of 1990, the 63,200-acre North Maricopa Mountains Wilderness lies in southwestern Maricopa County,12 miles east of Gila Bend and 20 miles southwest of Phoenix. It contains a 10-mile section of the Maricopa Mountains, a low-elevation (1,000 to 2,813 feet) Sonoran Desert range, and extensive surrounding desert plains. The North Maricopa Mountains are a jumble of long ridges and isolated peaks. separated by bajadas and washes. Vegetation includes saguaro, cholla. ocotillo and other Sonoran Desert plant species. Desert bighorn sheep, desert tortoise, coyotes, bobcat, fox, deer, Gambel's quail and raptors inhabit the wilderness.

The wilderness provides outstanding opportunities for solitude and primitive recreation, including hiking, backpacking, horseback riding, camping, wildlife observation and photography. Several trails traverse the heart of the wilderness. The old Butterfield Stage Road forms a portion of the wilderness area's southern boundary.

SOUTH MARICOPA MOUNTAINS WILDERNESS AREA

A few miles to the south lies the 60,100-acre South Maricopa Mountains Wilderness, located in southwestern Maricopa County. 16 miles east of Gila Bend and 30 miles southwest of Phoenix. This wilderness includes 13 miles of the Maricopa Mountain range, a low elevation Sonoran Desert range, and extensive desert plains. The eastern part of the wilderness has an isolated and screened mountainous interior, formed by long ridges and isolated peaks. separated by plains and washes. The western part is dominated by desert flats fronting the east-west trending Maricopa Mountains ridgeline.

This area's size, varied landforms, and wildness provide outstanding opportunities for solitude and primitive recreation. Hiking, backpacking, horseback riding, camping, wildlife observation and

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GEOLOGY, TOPOGRAPHY, and SOILS

The Sonoran Desert National Monument is located within the Desert Region of the Basin and Range geologic province of southwestern Arizona. The region is characterized by steep, rocky, alternating mountain ranges separated by broad, gently sloping to nearly flat, deep, broad valleys formed by faulting that occurred approximately 5 to 15 million years ago. Most of the mountain ranges have been formed by faulting, folding, or volcanism. The broad valleys are generally underlain by thick deposits of gravel, sand and silt.

The proposed monument also contains numerous areas of rocky "desert pavement," where fine alluvial material has been removed by wind erosion. Desert pavements are slow to form and extremely fragile. A thin, hardened surface layer called "desert varnish" may occur on desert pavement. Desert varnish acts as a cement, holding surface soils and protecting them from wind and water erosion. When the crusty layer of desert varnish is disturbed, underlying soils are subject to erosion and compaction of underlying soils. The time required to form desert soils can range from hundreds to thousands of years. Without such soil, most plant life cannot survive.

A unique geologic featured of the proposed monument is the Sentinel Plain. It contains lava cones and volcanic remnants – including the largest lava flow in southern Arizona – that are relatively rare in the US. The volcanic field was active from between 3.3 to 1.3 million years ago.

The "basin and range" country includes numerous high peaks and low valleys. The 4,373-foot, basalt-capped Table Top Mountain dominates the topography on the east end of the proposed Monument. Its flat-topped summit is easily seen and recognized as far away as the outskirts of Phoenix, 45 miles to the north, and Casa Grande, 20 miles to the east.

The Maricopa Mountains are lower, with one peak as high as 3,300 feet, but dozens between 2,000 and 3,000 feet in elevation. The alluvial valleys near the Maricopas descend to as low as 800 feet above sea level. The relief is similar in the Sand Tanks, where the highest point of Javelina Mountain (confusingly named "Maricopa Peak") reaches over 4,000 feet. The wide, flat wash that cuts through the heart of the Vekol Valley descends only about 300 feet in elevation over 12 miles, from the proposed monument's southern boundary to I-8.

The majority of the broken plains and small promontories of the Sentinel Plain range between 700 and 850 feet above sea level. The east side of the Sentinel Plain includes Tartron Flat, which lives up well to the latter part of its name.

FOR MORE INFORMATION CONTACT:
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CURRENT RESOURCE USES

NON-MOTORIZED RECREATION.
The proposed National Monument, including wilderness areas, is used by a growing number of hikers, backpackers, and birdwatchers every year, as evidenced by increased registration at trailheads.

HUNTING.
Most of the areas within the proposed National Monument are open to hunting for, among other things, mule deer, desert bighorn, javelina, dove and quail. The rugged nature of the terrain, the limited number of roads, and the wilderness nature and/or designation of much of the area make hunts here truly challenging.

MOTORIZED RECREATION.
The volume of motorized backcountry recreation is increasing significantly on many BLM land in Arizona. Similar growth in use is found in and around the proposed National Monument. However, about one-third of the proposed monument is wilderness and thus closed to all motorized and mechanized recreation. Only vehicles licensed for highway use are permitted in Sand Tank Mountains and Sentinel Plain areas, which effectively prohibits the use of certain vehicle types (such as ATVs and dune buggies). Throughout almost all of the rest of the proposed National Monument, motorized travel is permitted on existing routes. No areas within the proposed monument are open to unrestricted, cross-country travel off-road. BLM has in the past permitted several vehicle races on designated routes northwest of the Sand Tank Mountains.

LIVESTOCK GRAZING.
Except for the Sentinel Plain and Sand Tank Mountains areas, all of the proposed National Monument is within BLM-administered livestock grazing allotments. Two of the proposed monument's 11 allotments are permitted only for "ephemeral grazing"; that is, open for grazing only after unusually wet winters. These two allotments have seen little grazing since 1995. The proposed National Monument area also contains a number of grazing developments, including fences, corrals, and stock ponds.

MINING.
Except for designated wilderness areas, the Sand Tank, and Sentinel Plain, the proposed National Monument is now generally open for mineral location and entry. According to BLM, few if any claims are producing significant quantities of minerals. The State of Arizona and several counties do operate a small number of gravel pits in proximity to major roadways.

UTILITY CORRIDORS.
One utility corridor traverses the proposed National Monument, between the North and South Maricopa Mountains. The boundaries of the proposed National Monument were drawn to exclude other utility corridors on the area's western and northern boundaries.

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MANAGEMENT RECOMMENDATIONS FOR THE PROPOSED NATIONAL MONUMENT

The land would continue to be managed by BLM, including land the Department of Defense intends to relinquish.

Private landowners with land inside the National Monument boundary (about 5,000 acres) would retain all of their rights to their land. Similarly, state lands within the monument (about 12,000 acres) would continue under state management.

Nothing in the Monument designation would enlarge or diminish the authority of the State of Arizona to manage wildlife or hunting.

Because the Sand Tank Mountains and Sentinel Plain are close to military targets on the Goldwater Range and experience low overflights by military aircraft, public access to these areas would be limited or allowed by permit only, as is the case now. This will both protect the public and control access to the military training range.

The land would remain open to traditional use by all Native American indigenous peoples.

Future mining, geothermal and oil and gas development would be prohibited, although existing rights would be honored.

Livestock grazing would be subject to the same rules and regulations which apply on other public land. Because the Sand Tank Mountains and Sentinel Plain are now closed to livestock grazing, these areas would remain closed.

Unless needed to meet a specific administrative purpose, no new roads would be built within these lands. BLM would be directed to close existing routes found: to damage land or water resources; to conflict with wildlife or habitat protection; to be unnecessary or redundant; and to be inconsistent with the area's managerial purposes. A management planning process, to be initiated after the monument is designated, would identify those routes open for vehicle use.

The Sand Tanks and Sentinel Plain areas would be inventoried for their roadless character.

All motorized and mechanized vehicle use off road would be prohibited, except for emergency or authorized administrative purposes. Existing restrictions on vehicle types in wilderness areas, the Sand Tank Mountains, and Sentinel Plain would remain in effect.

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Land Ownership and Special Designations

Land Owner	Area	Acres
BLM Lands		
	North Maricopa Wilderness Area	63,200
	South Maricopa Wilderness Area	60,100
	Table Top Wilderness Area	34,400
	Vekol Valley Area of Critical Environmental Concern (ACEC)	3,500
	Undesignated	243,800
Relinquished Military Lands		
	Sand Tank Mountains (Area A)	80,000
	Sentinel Plain Special Recreation Management Area (SRMA)	25,000
Total Federal Land		**510,000**
State Trust Land		11,880
Private Land		5,090

FOR MORE INFORMATION CONTACT:
Pam Eaton. The Wilderness Society, 303-650-5818. ext. 103 (pam_eaton@tws.org)
Bill Broyles, Sonoran Desert National Park Friends. 520-292-1487 (bibroyles@aol.com)
Gayle Hartmann, Friends of Cabeza Prieta, 520-325-6974 (gayleh@ix.netcom.com)

For more information on BLM wilderness areas, visit www.az.blm.gov/wildarea.htm.

November 30, 2000

FOR IMMEDIATE RELEASE
Tuesday, November 28, 2000

CONTACT: Sandy Bahr, Sierra Club – 602-253-8633
Andy Laurenzi, The Nature Conservancy of Arizona - 520-622-3861 x3426
Christine Conte, The Nature Conservancy of Arizona 520-622-3861 x3463
Kevin Dahl, Tucson Audubon Society- 520-622-5622
Pam Eaton, The Wilderness Society – 303-650-5818 x103

Conservationists Call for Protection of Threatened Arizona Desert

Interior Secretary Babbitt Accepts Invitation to Visit Sonoran Desert Near Gila Bend This Thursday

Local and national conservationists today called for the protection of a half-million acre area of Sonoran desert in south-central Arizona that harbors rare plants, vulnerable wildlife, and extraordinary and significant archeological resources. Conservationists, who have fought for greater protection of the area for years, were excited that Interior Secretary Bruce Babbitt had accepted an invitation to tour the area, and expressed hope that his visit indicated that the Interior Department would soon recognize and preserve the area's values from threatened development and damage. Babbitt plans to tour the area Thursday afternoon.

"For all of its bristling thorns and searing heat, the Sonoran desert in Arizona is a fragile landscape, which in many areas has been overcome by the effects of mining, off-road vehicles, and run-away development," said Sandy Bahr, Conservation Outreach Director of the Sierra Club's Grand Canyon (Arizona) Chapter, one of about a dozen groups working to protect the area. "We still have a chance to save some of the best of what's left, and we're excited that Secretary Babbitt will get to see the unique and vulnerable biological and historic resources of the area."

The area proposed for greater protection by conservationists includes 480,000 acres of public lands stretching from the North Maricopa Mountains south of Buckeye, to the south across Interstate 8 to the Sand Tank Mountains southwest of Gila Bend, then moving to the east across the Vekol Valley to the lands around the Table Top Mountains southwest of Casa Grande. Last year the federal Bureau of Land Management (BLM), recognizing the area's unique values, proposed heightening the area's protection by designating it as a National Conservation Area. The area includes three designated wilderness areas (North and South Maricopas, and Table Top), and the spectacular Sand Tank Mountains. In addition, conservationists hope to preserve a 25,000-acre parcel, about 20 miles west of Gila Bend that would protect an expanse of the Sentinel Plain.

The area contains an abundance of cultural resources, including evidence of ancient villages, campsites, rock art, and artifacts of the prehistoric Hohokam and other native peoples. In addition, there are trails that extend back in time hundreds or even thousands of years used by local peoples to collect salt and shells from the Gulf of California. More recent history was made here too, as the area contains segments of the Juan Bautista de Anza National Historic trail, the route of the Mormon Battalion and the Butterfield Stage, and the "Gila Trail," traveled by '49ers on their way to the California gold rush.

Preserving this area would also protect a tremendous diversity of landscapes and plant communities – from the pristine, high desert peaks and lush arroyos of the Sand Tank Mountains, to the flat, basalt-capped Table Tops, to the jumble of long ridges and isolated mounts in the Maricopas, to the desert grasslands and seasonal wetlands of the Vekol Valley, to the lunar landscape of lava flows and cinder cones at Sentinel Plain.

-More-

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ORGANIZATIONS ENDORSING THE SONORAN DESERT NATIONAL MONUMENT

Arizona Archeological Council, Prof. Kelly Hayes-Gilpin, President

Arizona Sonoran Desert Museum, Rick Daley, Executive Director

Defenders of Wildlife, William Snape III, Vice President, Law and Litigation

Desert Botanical Grden (Phoenix), Dr. Liz Slauson, Director of Resaerch

Friends of Cabeza Prieta, Gayle H. Hartman, Vice President

Land and Water Fund of the Rockies, Ted Zukoski, Director, Public Lands Program

National Parks & Conservation Association, Dave Simon, Southwest Regional Director

The Nature Conservancy of Arizona, Leslie N. Corey, Jr., Vice President & Executive Director

The Phoenix Zoo, Jeff Williamson, Executive Director

Sierra Club, Southwest Regional Office, Rob Smith, Regional Director

Sky Island Alliance, David Hodges, President

Sonoran Desert National Park Project, Bill Broyles, Coordinator

Southwest Forest Alliance, Martos Hoffman, Executive Director

Tucson Audubon Society, Kevin Dahl, Executive Director

Tucson Herpetological Society, Dale Turner, President

The Wilderness Society, Pamela Pride Eaton, Regional Director, Four Corners States

November 30, 2000

SIERRA CLUB — GRAND CANYON CHAPTER

812 North Third Street • Phoenix, Arizona 85004 • (602) 253-8633 • FAX: (602) 258-6533

Honorable Bruce Babbitt
Secretary of Interior
1849 C Street NW
Washington, DC 20240

Re: *National monument around the Sand Tank Mountains, Arizona*

Dear Secretary Babbitt,

The Grand Canyon Chapter of the Sierra Club strongly supports creation of a new BLM national monument centered around the Sand Tank Mountains. This monument should include (in addition to the Sand Tanks) the Sentinel Plain, Vekol Valley, Table Top Mountains, and North and South Maricopa Mountains. The Sand Tanks and Sentinel Plain are lands being relinquished by the military from the Barry M. Goldwater Range.

Together these lands encompass important critical wildlife habitat, special plants and animals, significant archeological sites, remarkable geology, and expansive Sonoran Desert scenery. Long term protection of these lands is crucial in maintaining and protecting their value for scientific research, study of antiquities and natural history. National monument designation would provide protection from numerous threats while permitting sustainable, environmentally friendly recreation by the nearly four million people who live within a two-hour drive. Monument designation should include elimination or phasing out of mining and grazing activities for best protection of the special resources there.

There is wide spread local support for protection of the Sonoran Desert, as evidenced in the support shown for the recently designated Ironwood Forest National Monument. Furthermore, there would be little opposition, as the Air Force has relinquished their portion and the BLM has recommended retention of these lands.

We urge you to support permanent protection of these lands by designating them as a BLM national monument. This is a rare opportunity that should not be lost.

Sincerely,

David Suda
Wilderness Chair, Grand Canyon Chapter of the Sierra Club
812 N. 3rd. Street
Phoenix, AZ 85004
602-253-8633
davidsuda@earthlink.net

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1510 East Ft. Lowell
Tucson, Arizona 85719
(520) 622-3861 Fax (520) 620-1799

The Nature Conservancy®

ARIZONA CHAPTER
Saving the Last Great Places

PHOENIX CONSERVATION CENTER
333 East Virginia Avenue, Suite 216
Phoenix, Arizona 85004
(602) 712-0048 Fax (602) 712-0059

November 6, 2000

The Honorable Bruce Babbitt
Secretary of the Interior
1849 C Street NW, Mail Stop 7229
Washington, DC 20240

Re: Recommendation to Designate a New National Monument in Southwestern Arizona

Dear Secretary Babbitt:

You have proven yourself time and time again to be a champion for the conservation of threatened natural landscapes, especially in your home state of Arizona. We, the undersigned conservation organizations, ask you now to consider placing additional lands of regional biological and cultural importance into a protected management status.

As you are no doubt aware, the Military Lands Withdrawal Act of 1999 (Public Law 106–65) not only continued military use of the Barry M. Goldwater Range in southwestern Arizona for an additional 25 years, it also removed from withdrawal for military purposes (by November 7, 2001 or earlier) four tracts of land. Two of these tracts are the Sand Tank Mountains (about 83,554 acres) and Sentinel Plain (about 24,756 acres). The Act required that:

> The Secretary of the Interior, in coordination with the Secretary of Defense, shall conduct a study of the lands referred to in subparagraph (C) [the two tracts above, plus two smaller tracts] that have important aboriginal, cultural, environmental, or archaeological significance in order to determine the appropriate method to manage and protect such lands following relinquishment of such lands by the Secretary of the Air Force.

The above Act also required the Secretary of the Interior to report the results of the department's study to Congress. As a result of the preceding process, both an opportunity and a threat present themselves.

The opportunity is to protect some unique examples of relatively undisturbed Sonoran Desert. The Sand Tank Mountains and Sentinel Plain are special places. Each area represents a mix of biological, geological, archaeological, recreational, and scenic values that combined capture important pieces of Arizona's natural and cultural heritage. Both areas served primarily as buffer zones for military training operations. Because they have been closed to entry—for the purposes of livestock grazing, mining, and off-road vehicle use—for six decades, they have been protected from the adverse effects of such activities. As a result, they can provide a wealth of scientific information about relatively undisturbed desert plant communities and their associated plants, animals, and ecological processes. How many opportunities do we have to preserve and study such relics of the Sonoran Desert landscape—a region that is experiencing rapid population growth and development?

The threat is the pending relinquishment of the above tracts from military withdrawal and the potential that once removed from withdrawal the Sand Tank Mountains and Sentinel Plain will be opened up to grazing, mining, and off-road vehicle use. Your report to Congress can consist of, for each tract, a recommended management entity and method, a set of management options, or <u>your decision</u> as to the best management scenario for these tracts. We suggest that if you chose one of the first two approaches, this will leave the fate of the Sand Tank Mountains and Sentinel Plain uncertain and these areas vulnerable to future incompatible uses.

We offer our services to assist you and your staff with drafting the proclamation, defining the appropriate boundaries for the new monument, and writing letters of support for the designation as they are needed. Polls continue to show that a high percentage of Arizonans (high 70th percentiles) support the recent monument designations in Arizona. We feel the public will be behind you again.

Sincerely,

Leslie N. Corey, Jr.
Vice President and Executive Director

And the following additional conservation organizations:

Bill Broyles
Coordinator
Sonoran Desert National Park Project

Rick Daley
Executive Director
Arizona Sonoran Desert Museum

Gayle H. Hartman
Vice President
Friends of Cabeza Prieta

William Snape III
Vice President, Law and Litigation
Defenders of Wildlife

Martos Hoffman
Executive Director
Southwest Forest Alliance

Kevin Dahl
Executive Director
Tucson Audubon Society

Pam Pride Eaton
Regional Director, Four Corners States
The Wilderness Society

David Hodges
President
Sky Island Alliance

Ted Zukoski
Staff Attorney
Land and Water Fund

cc: Tom Fry, Director, BLM

November 27, 2000

To Whom It May Concern:

On behalf of the Board of Directors of the Tucson Herpetological Society, I hereby endorse the proposal to establish a Sonoran Desert National Monument. We strongly encourage permanent protection of the wildlife, habitat, and scenic beauty of the Sand Tank, Tabletop, and Maricopa Mountains, and the Vekol Valley.

Seasonal wetlands in the Vekol Valley provide vital breeding habitat for a unique assemblage of at least seven desert toad and frog species. These include the Sonoran green toad (*Bufo retiformis*), narrowmouth toad (*Gastrophryne olivacea*), and lowland burrowing treefrog (*Pternohyla fodiens*), all of which are rarely found in the United States. The Vekol Valley population of these three species is at the northern limit of their ranges and likely represents an important component of their genetic diversity. We believe a monument would protect the ephemeral pools they depend on, along with the unusual desert grassland which forms the watershed for them.

The proposed monument contains what may be some of the best habitat in the state for the desert tortoise. In addition, six of Arizona's eleven rattlesnake species are found within the proposed monument, along with a wide variety of other reptiles native to the Sonoran Desert.

Amphibians and reptiles form important parts of this region's biological diversity, and like many creatures they have suffered widespread habitat loss. We support this proposal to protect a large and important piece of their habitat.

The Tucson Herpetological Society is a non-profit organization, dedicated to conservation of, education about, and research concerning the amphibians and reptiles of Arizona and Mexico.

Sincerely,

Dale S. Turner
President

P. O. Box 709 TUCSON ARIZONA 85702-0709

THE PHOENIX ZOO · 455 NORTH GALVIN PARKWAY IN PAPAGO PARK · PHOENIX, ARIZONA 85008-34

November 27, 2000

Mr. Rob Smith
The Sierra Club
812 North Third Street
Phoenix, Arizona 85004

Dear Rob:

Specific emphasis needs to be put on the Sand Tanks and Sentinel Plains, which, unlike the Maricopa Mountains and Table Top Mountain, already designated as Wilderness, have no formal protection. Formerly protected as part of the Barry Goldwater Air Force Range, their futures are uncertain. Since the Sand Tanks and Sentinel Plain have been part of an Air Force Range, neither has been subjected to more typical human uses such as grazing, mining or off road vehicle (OVR) use. They are relatively pristine areas supporting a rich diversity of wildlife, and they may serve as a baseline by which to judge human impacts on similar unprotected landscapes. Without formal protection, they would be threatened by development and/or various multiple uses such as grazing and ORV use.

Some plant species at or near the northern limits of their range occur in the Sand Tanks, such as limber bush (Jatropha cardiophylla) and coursetia (Coursetia microphyla) and habitat for at least two endangered plant species, the Tumamoc Globeberry (Tumamoca macdougalii) and Acuna cactus (Echinomastus erectocentra) occurs there.

The Sand Tanks contains some relict grasslands as well as healthy shrub communities, supporting populations of desert tortoise and bighorn sheep. Other large wildlife include a population of desert-dwelling Coues whitetail deer at the northern limit of their range and mule deer, collared peccaries and cougars. The Sand Tanks were formerly within the range of the Sonoran pronghorn, as cited in the Sonoran Pronghorn Recovery Plan, and may be useful in their recovery. It also is good potential habitat for the Cactus Ferruginous Pygmy Owl (Glaucidium brasilianum cactorum), and the Lesser long-nosed bat (Leptonycertis curasoae). Desert tortoise inhabit the area and they have been the object of research there. Other special status species include the Mexican Rosy Boa (*Charina (*Lichanura) *trivirgata*), Organ Pipe Cactus, Elephant Tree (Bursera microphylla) and a population of Harris hawks. There are also unconfirmed sightings of the Sonoran green toad (Bufo retiformis) and night lizards, (Xantusia sp.) from within this area.

THIS SHEET WAS PRINTED USING SOY BASED INK FOR RECYCLABILITY AND RECYCLED PAPER STOCK BECAUSE WE CARE ABOUT THE NATURAL WORLD

Desert Botanical Garden

November 29, 2000

Mr. Rob Smith
Sierra Club, Southwest Office
812 N. Third St.
Phoenix, AZ 85004

Dear Mr. Smith,

The proposed site for the Sonoran Desert National Conservation Area has several natural attributes that we feel would support the preservation of this landscape. It contains some of the most scenic representations of both Arizona Upland and Colorado River subdivisions of the Sonoran Desert in Maricopa and Pinal Counties, natural communities that are disappearing quickly near the Phoenix-Tucson metropolitan areas. Significant (and beautiful) populations of saguaro, palo verde, and ironwood are present within the proposed conservation area. Although the saguaro-palo verde-ironwood plant community is not rare, its ecological importance lies in its role of promoting biodiversity. This community provides habitat for over 500 plant and animal species. In addition, the area contains a remnant tobosa grassland in the Vekol Valley, a plant community that has also suffered from urbanization and habitat degradation. The creation of a large contiguous area that would incorporate existing Wilderness Areas (North and South Maricopa Mountain Wilderness and Table Top Wilderness) would minimize habitat fragmentation and promote management at the landscape level. The establishment of a large preserve near the Phoenix-Tucson metropolitan area will provide people with the opportunity for wilderness experiences and to appreciate and learn about the desert.

Sincerely,

Liz Slauson, Ph.D.
Director of Research

Wendy Hodgson
Research Botanist/Herbarium Curator

1201 N. Galvin Parkway
Phoenix, AZ 85008
602-941-1225

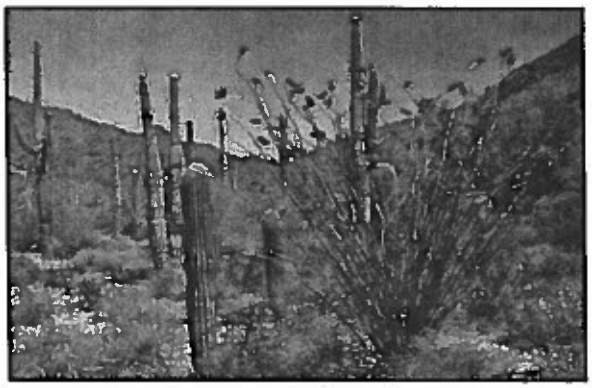
Printed on recycled paper

Images of the Area Proposed For Greater Protection

Images available via e-mail upon request

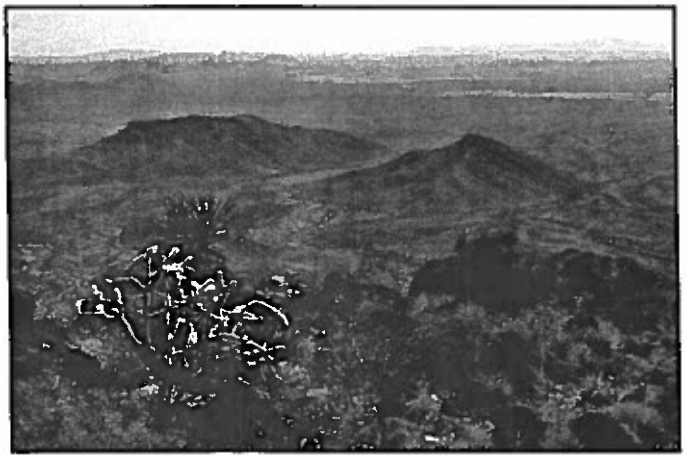
Contact: Leyla Knight, Communications Assistant
The Nature Conservancy of Arizona
Phone: (520) 622-3861, ext. 3432
E-mail: Lknight@tnc.org

Hawk resting on a Saguaro Cactus. (72 dpi)
Photo by Pam Eaton/The Wilderness Society.

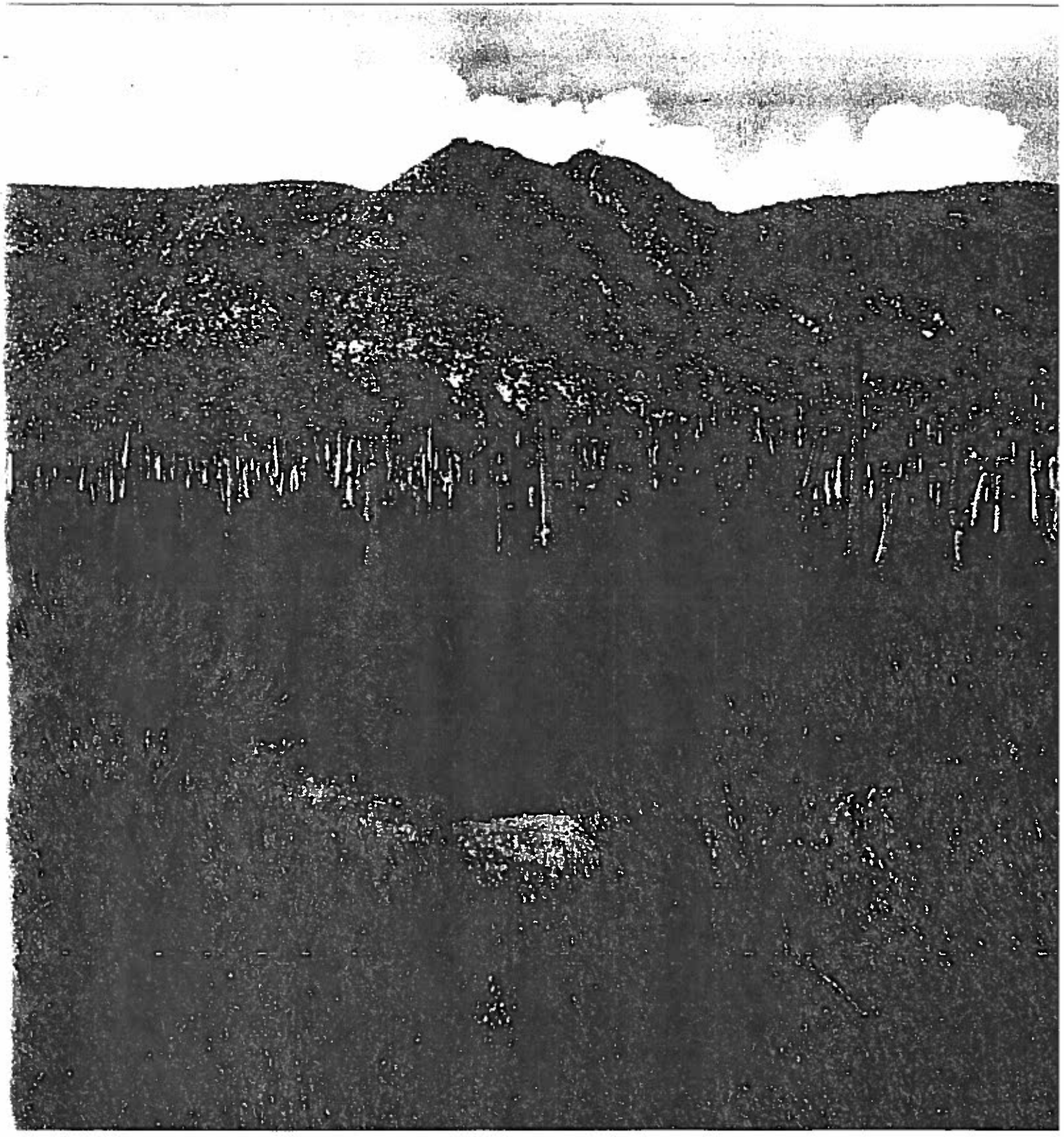


Looking toward Tabletop Mountain, across the valley from Sand Tank Mountains. (150 dpi)
Photo by Rob Marshall/TNC.

Sand Tank Mountains located south east of Gila Bend. (150 dpi)
Photo by Rob Marshall/TNC.

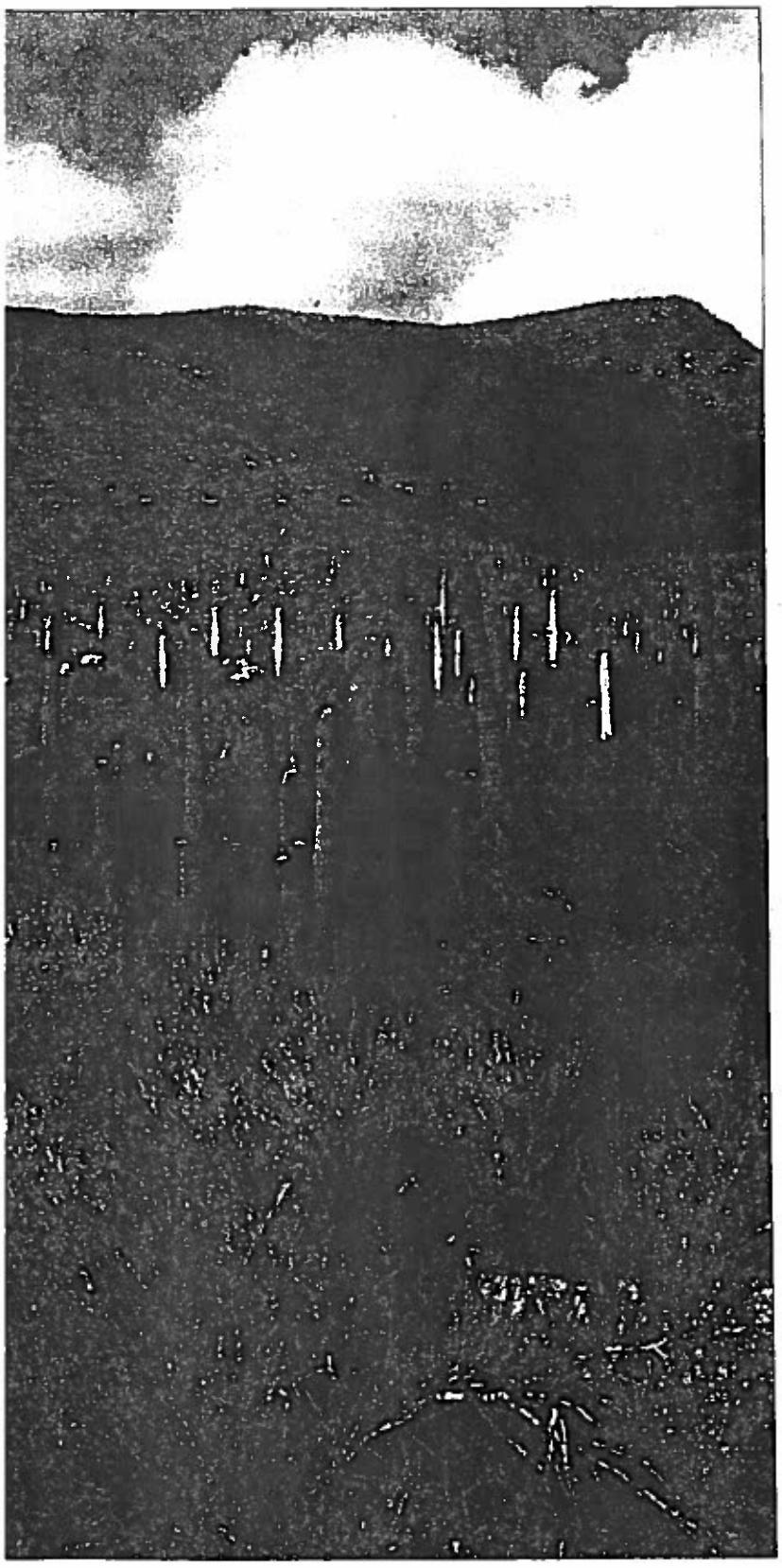


Atop Tabletop Mountains looking down toward Vekol Valley. (150 dpi)
Photo by Rob Marshall/TNC



Text by William Hafford • Photograp

When Yesterday Was Ne



D a v i d E l m s, J r.

hey grew up on the desert near Gila Bend
uring the Great Depression.
ow, more than half a century later,
iey make their own "sentimental journey" home.

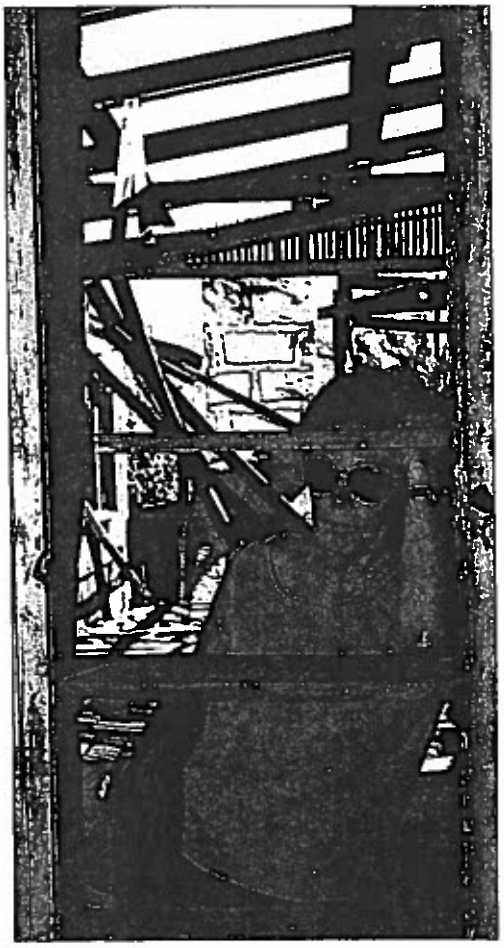
My vehicle, in four-wheel drive, lurches out of the narrow arroyo, its tires tossing fist-size rocks as it fights against gravity and the loose desert soil. The limbs of paloverde trees and low-growing creosote scrape against its sides like fingernails on chalkboard.

We are surrounded by the ragged granite peaks and brush-choked canyons of the Maricopa Mountains in the desert between Casa Grande and Gila Bend.

Letty and I are looking for remnant things out here in the lonely desert: bits and pieces that will tie us to our past, to that Depression-days era of the mid-'30s when the two of us were children, and we lived in this unforgiving land with our struggling parents.

Until early this morning, I had never been in the company of Letty Bender Hofstra or her husband, Pete. Our acquaintance began with a telephone call I received in the spring of 1991. After introducing herself, Letty (calling from Arkansas) said, "I

(LEFT) *The Sand Tank Mountains loom above Vekol Valley where author William Hafford and Letty Hofstra lived as youngsters on opposite sides of a mountain range.*
(BELOW) *Hofstra reminisces in the ruins of her family's Big Horn Service Station.*



was sorry to find that you didn't have anyone to play with when you lived in the Vekol Valley as a small boy. If I had known you were over there on the other side of the mountains, I would have asked my mother to drive me over in the pickup truck, and we could have played hopscotch."

I knew at once that Letty's call had been prompted by an article of mine about my early childhood on a remote desert homestead. (See *Arizona Highways*, March '91) I wrote, "There were no other children for many miles, so Jack, a black Australian sheepdog, was my only playmate."

Letty went on to tell me that she, her parents, and a younger sister had lived to the southwest of the Maricopas. They had occupied a combination house and roadside business known as the Big Horn Service Station, a lonely gas stop by a dirt road that ran west from Casa Grande to Yuma and on into California, a conduit of hope for those fleeing from the nation's financial collapse and the Dust Bowl of the Midwest.

Letty also told me that she and Pete would be spending the coming winter and spring in Arizona. So we made a plan that would take two graying "playmates that never were" on a nostalgic trip back to the land of long ago.

And, now, we are doing it.

"My dad had a gold mine back in there somewhere," I tell Letty and Pete, pointing to the Maricopas. "I don't think he ever found much gold, maybe none, but he spent a lot of time in that dark tunnel — digging and hoping — maybe just staying busy until the Depression passed by."

We bounce southwest over a dozen miles of rough road until we come out on the divided asphalt of Interstate 8, which, in this part of Arizona, overlays the old dirt road (State Route 84) of Letty's childhood.

Near Milepost 136, the Big Horn Service Station — what's left of it — comes into view on the south side of the interstate. We pull off the highway, pass through an opening in a barbed-wire fence, and stop.

More than 50 years of harsh sun, blowing sand, wind, and intermittent rain have contributed greatly to the slow decay of the old building. Travelers, too. Some have needed a board or two, others a sheet of tin. Those with a yen for target practice have blown holes in the plastered inner walls.

Letty walks through the debris as one might walk under the arches of a cathedral. The look in her eyes say memories are flooding back. She po a wall, half torn away. "See the s ribs," she says. "That's what my da for lath in all the inner walls. He go them off of dead saguaros he fou the desert."

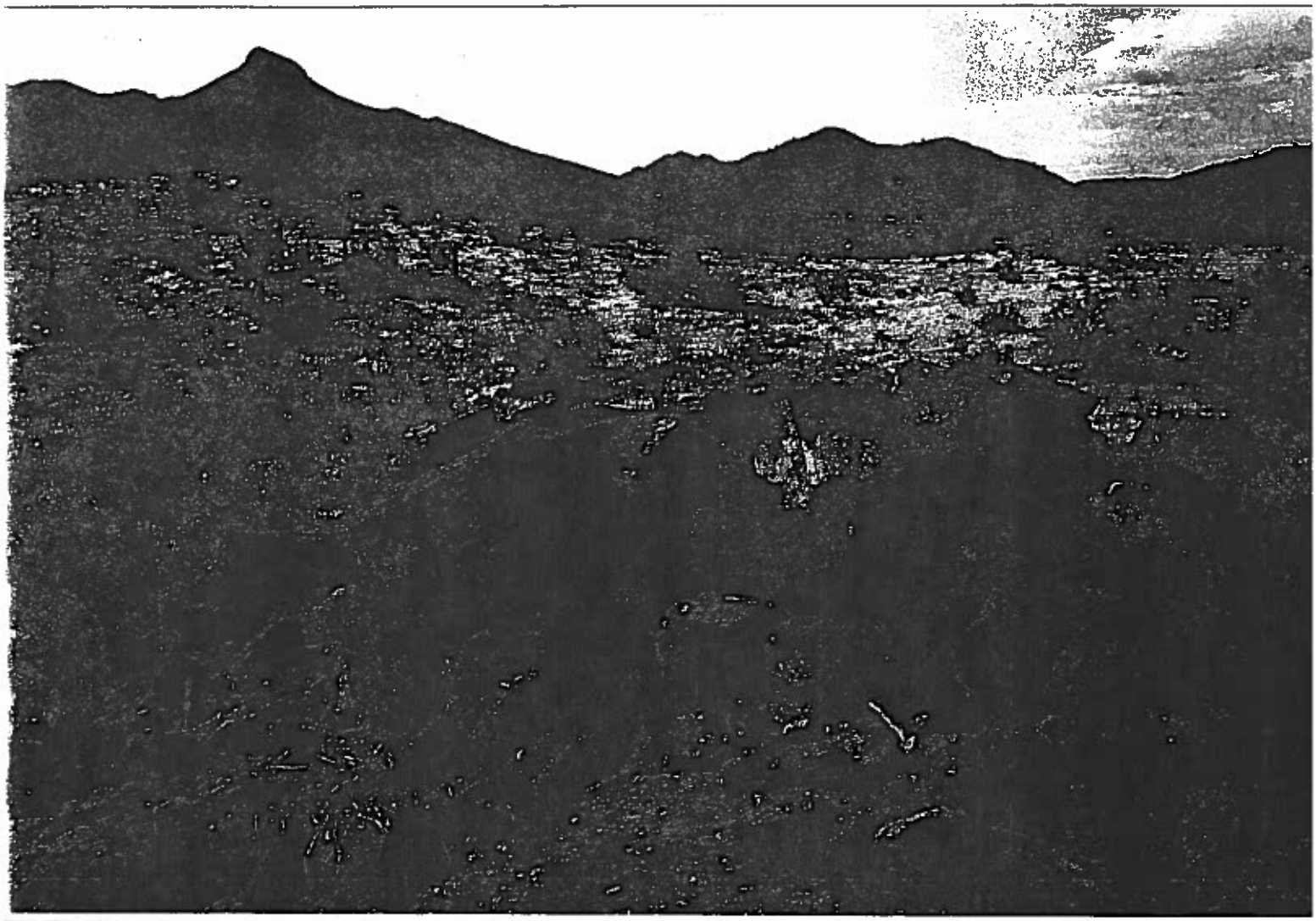
She lays her hand against a soli between the service-station office a living quarters. "Some of the wa made of adobe. Some are rock an tar. He did all of the construction himself."

She walks a few steps and st some rock stairs that lead undergr

"That's the cellar he dug, a pla could go in the heat of the hottes The only place you could stay When we butchered a steer in win would hang the beef outside at then bring it in about dawn, wra blankets and a tarp, and put it in t lar. In hotter months, we cut the me thin strips, salted it, and hung it barbed-wire fence. We ate a lot of j the summer."

"How about sleeping in hot we I inquire.

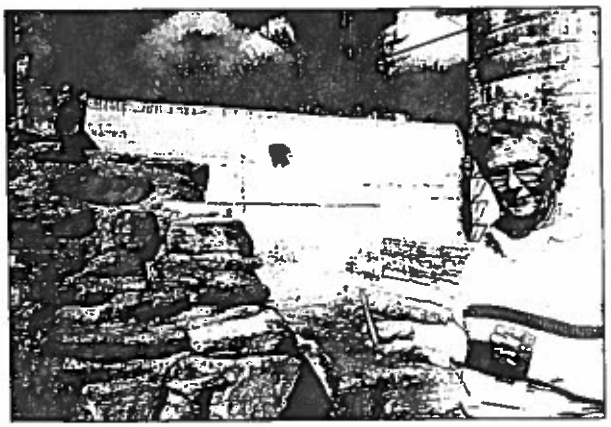
"We never slept inside," she say



d iron cots out back. Slept
tdoors summer and winter.
:ept when it rained, but that
:dly ever happened."
Outside we visit the old
ooden corrals, pass the rust-
remains of a well pump.
en stop by a crude rock-
ed grease pit where me-
anical labor was performed.
"Our mechanic was Old
b, a hobo who came in off
e highway with a pack on
s back," Letty says. "He
as good at fixing things, so.
meals and a little pay, he
yed on for two years or
ore." She points toward a
esquite thicket about 50
rds away. "Old Bob had his
mp out there in the brush.
ck in the Depression days.
yplace you could get a meal
as home."

We sit at the edge of the grease pit
d dangle our legs over the edge. A
ail calls from a distant thicket. Letty
lls me about her family.

"My grandfather, Ormal Allen Bender,
d my father, Les, homesteaded land in
is area, developed wells, and finally ob-
ined grazing rights on nearly 300 square
iles of land, which they called the
zzard X Ranch. That may sound like a
g ranch — 300 square miles — but
ten it took nearly a square mile to sup-
rt one cow. It was a hard way to make
living.



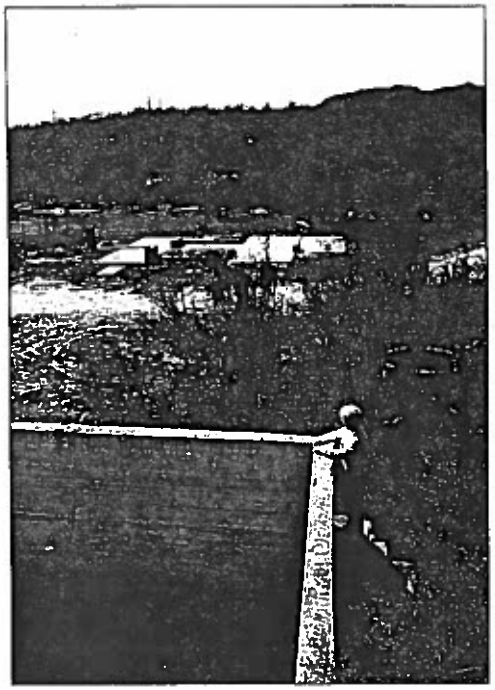
'There were planes racing across the desert nearly every day, shooting at towed targets. One day a shell came in and blew the water tank apart.'

"To make ends meet, my dad also worked as a petroleum products distributor."

"Who ran the station?" I ask.

"My mother. She carried a little pistol in her apron pocket. But in those days, even though many people were broke, most were decent. I tried to help out. My sister, Anita, was a year younger than me."

Letty wrinkles her brow and sighs. "Sometimes it was sort of sad. Some people had no money at all, so they would pay for their gas with their silverware, china, watches — whatever they had.



(OPPOSITE PAGE) *Volcanic rock and plants that require little water are at home in Vekol Valley. Antelope Peak, left, can be seen in the distance.*
(ABOVE, LEFT) *During WWII, a nearby gunnery range made life interesting for Hofstra's family. She holds a shell casing, the bullet from which may have blown out a wall of their water tank.*
(ABOVE) *Hofstra searches the tank's wall to find an inscription her father put there.*
(BELOW) *Except for memories, there's not much left of the Big Horn Service Station.*

"Once a family with a carload of children drove off and left a little boy behind. We never knew if it was accidental or on purpose. He was no more than two or three years old. He stayed with us for several weeks, and I was beginning to think I had a new brother. Then the welfare people came and took him away."

Later we head south over 16 miles of bone-jarring dirt road to the backside of Javelina Mountain where Letty and her family lived after the death of her grandfather, who was killed when his horse bolted in a heavy stand of mesquite trees.

"That was 1939," Letty says. "We sold the northern half of the ranch so my grandmother would have money to live on. The service station was on that property, so we moved down to Javelina Mountain and into an old line shack. My dad added a couple of rooms and built a little place for Grandmother."

There's not much left at the old homesite: patches of concrete flooring, bits of lumber and tin, and the remains of a water tank. It's badly shattered with chunks of concrete strewn about.

"A military plane blew up our water tank," Letty says. "When World War II started, the government established a gunnery range down here. They offered my dad a little money to move, but he said no. There were planes racing across the desert nearly every day, shooting at towed targets. Every once in a while, a geyser of dirt would go up not far from our house. Then, one day, a shell came in and blew the water tank apart. We always kept white sheets hanging on the clothesline, to let the pilots know that people were here."

By late afternoon, we are on a slightly improved dirt road running through the Vekol Valley north of Interstate 8. At one point, Letty calls out, "Stop here." I do. Pete and I get out and follow her into the creosote brush.

"The schoolhouse was right about here," she tells us. "To get a school established back in those days you needed eight students. There were only four school-age children in the whole Vekol Valley area." She glances at me. "You were too young of course."

She walks a few steps and plants toe in the dirt. "The front steps w about here. A little white frame build We got our school because of my dad was an innovative man. He four teacher with four school-age childre

Back at the car, we take a snack br I let my eyes travel across the br sweep of lowland desert, crowded heavy mesquite brush and spiny cl cacti. "Once," I tell Letty and Pet walked across that valley in darkness, me and my mother. I don't recall b frightened, but I know my mother w

"My dad was up at the mine s alone that day. Mother had heard sound of exploding dynamite, and w he hadn't returned by nightfall, she we were going to walk for help. She afraid he had blown himself up."

I point to the distant foothills of Maricopas. "Our place, a little unpai frame building — just two rooms — over there somewhere, and I know nearest house was on the other side o valley, a couple of miles away, ma more. We followed the beam of a s flashlight that my mother carried. T was a coyote pack off in the brush, every time one of them yipped or hov Mother would squeeze my hand and 'They won't hurt us; they only eat rab

"My mother had a terrible fear of tlesnakes. Every once in a while, a kangaroo rat would leap across the b of light. Each time that happened, would gasp and murmur, 'Oh. Lo thought it was a rattlesnake.'"

Letty hands me a can of soda. hoping this story has a happy endin

"Of course it does," I reply. "The ne bors drove us back to our place, and dad was there. His car had been stuc to its frame in a sandy wash. He ha dig his way out."

We continue north on the dirt r Shadows are starting to slant out fron high ridges of the Maricopas. Wher are at a point between the mountains the Indian reservation to the east, Letty and Pete, "Our place was so where around here, but I don't re think we'll find the exact spot."

Back in the late '40s, more th decade after we had moved away the homestead, there was an agricul boom in the desert north and we Casa Grande. My dad had the cleared, put in a deep well and irrig ditches — then sold it. Now, where is, it is surrounded by countless thous of other furrowed look-alike acres.

Finally, with the western sky tur pink, I stop, and we get out of the cle. I swing my arm in a slow half-c "I have an intuitive feeling," I say, "th

somewhere around here. Maybe this field right here." Of course I'm only guessing.

Letty and I walk a few paces into the field. I stoop and pick up a clod of turned soil, crush it in my hand, and let it trickle through my fingers. I look to the west where the rugged upthrust of the Maricopas presents a barrier to development and growth. The land out there is the same as it was when Letty and I lived on it as children.

The tough times finally passed. After we moved from the homestead, my dad finished college and began a career as a civil engineer. Letty's parents stuck with the ranch, built it up, and finally sold it for an amount of money that gave them financial independence.

"Were you happy when you lived out here?" I ask her.

"Oh, yes," she replies. "How about you?"

"The same," I say. "I never knew we were poor. Nobody ever told me."

There is a wide cleared area near the place where I parked the car. When we return, Letty picks up a weathered stick of wood. "If we don't do it now, we maybe never will," she says. Then she proceeds to draw the outline of a square in the dry soil, then another attached to the first.

'Our place was somewhere around here. Maybe this field right here.'

After that she inscribes two horizontal boxes connected to the others. She continues in this fashion until she completes the pattern.

She tosses aside the stick and picks up two rocks. "The dark one is your marker, the light one is mine," she says. Then she explains the rules of the game, a game we could have played together 57 years ago, but never did because Letty didn't know I was on the east side of the mountains, and I didn't know she was on the west side.

Letty tosses her marker into the proper box, and the game begins. Under a flaming desert sunset, two gray-haired children visiting the past, play hopscotch in the Arizona sand.

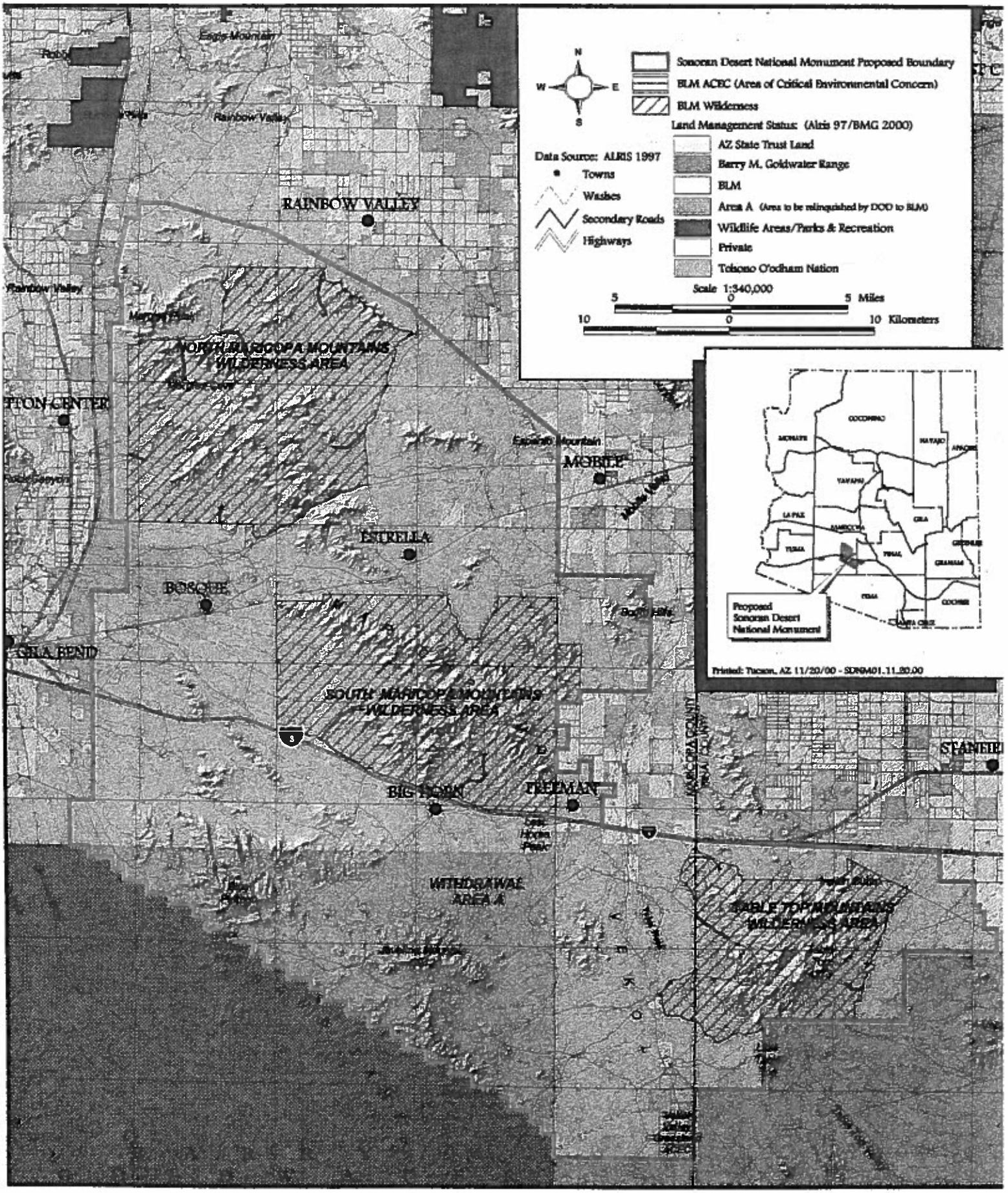
William Hafford, who also wrote about Thanksgiving in Jerome in this issue, died last year. His unpublished stories will continue to appear in the magazine.

The ruggedly beautiful terrain of Arizona is one of David Elms, Jr.'s favorite photographic subjects. He also contributed the photographs for an article about Bear is Falls in this issue.

(OPPOSITE PAGE) *A chimney is all that remains of the house Hofstra's father built near Bender Wash for her grandmother.*

(TOP) *Hafford has more difficulty than Hofstra pinpointing the location of his childhood home. It's probably part of a farm field today.*

(ABOVE) *At the end of their nostalgic return to Vekol Valley, Hafford and Hofstra play that game of hopscotch they missed out on nearly 60 years ago.*


N
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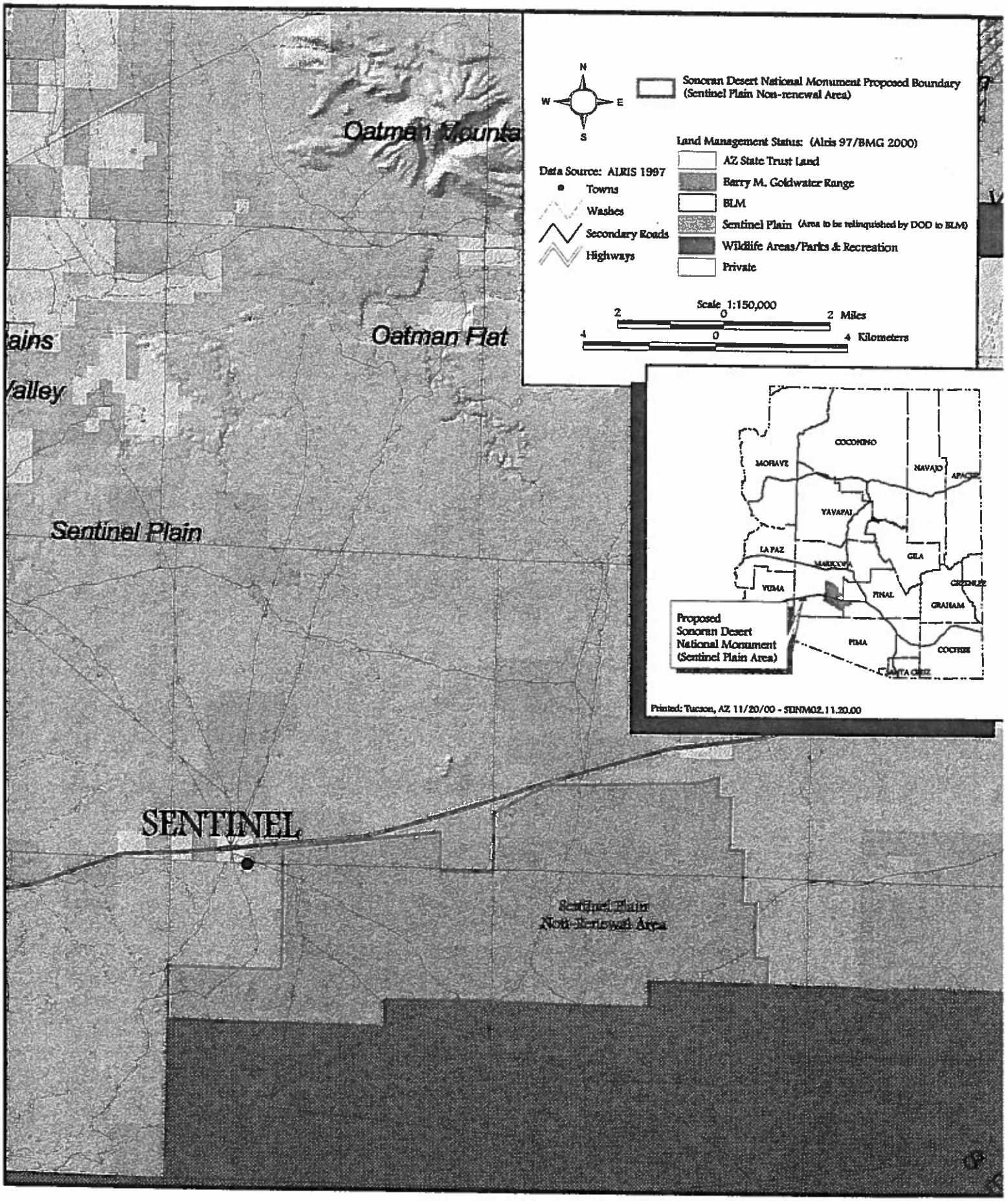
Sonoran Desert National Monument Proposed Boundary
BLM ACEC (Area of Critical Environmental Concern)
BLM Wilderness
Land Management Status: (Alris 97/BMG 2000)
AZ State Trust Land
Barry M. Goldwater Range
BLM
Area A (Area to be relinquished by DOD to BLM)
Wildlife Areas/Parks & Recreation
Private
Tohono O'odham Nation
Data Source: ALRIS 1997
Towns
Washes
Secondary Roads
Highways
Scale 1:340,000
5 0 5 Miles
10 0 10 Kilometers
RAINBOW VALLEY
NORTH MARICOPA MOUNTAINS WILDERNESS AREA
MOBILE
ESTRELLA
BOSQUE
GILA BEND
SOUTH MARICOPA MOUNTAINS WILDERNESS AREA
BIG HORN
FREEMAN
WITHDRAWAL AREA A
TABLE TOP MOUNTAINS WILDERNESS AREA
Proposed Sonoran Desert National Monument
Printed: Tucson, AZ 11/20/00 - SDNM01_11_20.00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Sonoran Desert National Monument Proposed Boundary
(Sentinel Plain Non-renewal Area)
Land Management Status: (Alris 97/BMG 2000)
AZ State Trust Land
Barry M. Goldwater Range
BLM
Sentinel Plain (Area to be relinquished by DOD to BLM)
Wildlife Areas/Parks & Recreation
Private
Data Source: ALRIS 1997
Towns
Washes
Secondary Roads
Highways
Scale 1:150,000
2 0 2 Miles
4 0 4 Kilometers
Oatman Mountains
Oatman Flat
Sentinel Plain
SENTINEL
Sentinel Plain
Non-Renewal Area
COCONINO
MOHAVE
NAVAJO
APACHE
YAVAPAI
LA PAZ
MARICOPA
GILA
YUMA
PINAL
GREENLEE
GRAHAM
PIMA
COCHISE
SANTA CRUZ
Proposed
Sonoran Desert
National Monument
(Sentinel Plain Area)
Printed: Tucson, AZ 11/20/00 - SDNM02.11.20.00

NATIONAL CONSERVATION LANDS

Regional Economic Contributions of National Monuments and National Conservation Areas

Site Name	Sonoran Desert
State	AZ
Designation Date	1/17/2001

Visits (2016)	51,278
15yr Average Annual Visitation Growth	11.94%
15yr Median Annual Visitation Growth	12.55%

Acres	486,600
NPS Comparison Site used for Visitor Characteristics	Organ Pipe Cactus

2016 Visitor Spending by Sector

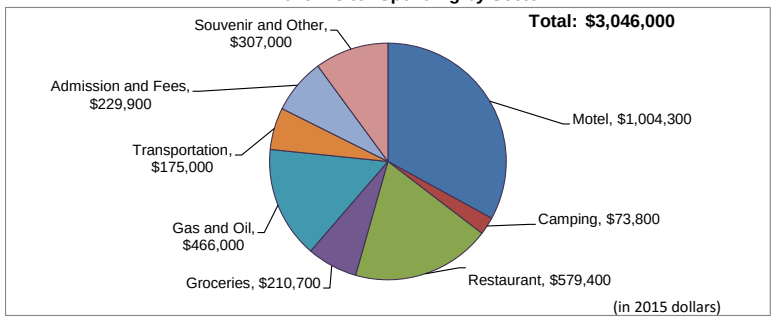


Table 1: Economic Contributions from Visitors to Sonoran Desert

Average Expenditures per Visit	$59.41
Total Expenditures	$3,046,000
Non-BLM Jobs Supported	46
Labor Income Supported	$1,578,000
Value Added	$2,612,000
Total Economic Output Supported	$4,336,000

Table 2: Budget, Volunteer Hours, and Revenue

FY15 Budget	$894,887
Volunteer Hours (2015)	8,313
Value of Volunteer Contributions	$189,786
FY16 Revenue	$8,347

Table 3: Economic Contributions in Context

Economic output supported per $1 of FY15 budget	$4.85
Economic output supported per acre	$8.91

Table 4: Previous Year Economic Contributions	**FY 2014 (in 2013 dollars)**				**FY 2015 (in 2014 dollars)**			
	Visits	**Total Spending**	**Jobs Supported**	**Output Supported**	**Visits**	**Total Spending**	**Jobs Supported**	**Output Supported**
	29,894	$1,710,000	25	$2,309,000	40,310	$2,350,000	35	$3,252,000

Visitation and visitation growth data were gathered from Department of Interior's Recreation Management Information System, as accessed on December 2016. Visitation growth data may be based on fewer than 15 years due to data unavailability. Acreage, budget, and volunteer hours are as reported in BLM FY15 Managers' Reports. The value of volunteer contributions was calculated using state-by-state value per hour of volunteer time from Independent Sector estimates. Economic contributions results were estimated by assigning visitor characteristics and spending patterns based on visitor surveys of the nearest National Park Service unit (Thomas and Koontz 2015). Contribution results were calculated from IMPLAN economic modeling software. Total expenditures, labor income, value added, and economic output have been rounded to the nearest thousand, and sector expenditures are rounded to the nearest hundred.

Call for Data Related to Review of National Monuments under EO 13792 (April 26, 2017)

Sonoran Desert National Monument (SDNM)

1. Documents Requested
    a. Resource Management Plans/Land Use Plans
    The 2012 Sonoran Desert National Monument Resource Management Plan (RMP) and Final EIS is on the BLM ePlanning web site at FEIS PRMP.
    b. Record of Decision
    The RMP Record of Decision (ROD) is titled 01-SDNM_ROD-ARMP_FINAL.pdf within this Drive folder.
    c. Public Scoping Documents
    Consultation and coordination for the RMP and ROD is titled 02-Chapter_5-Consultation_and_Coordination LSFO_SDNM FEIS within this Drive folder.
    d. Presidential Proclamation
    The Presidential Proclamation is titled 03-SDNM-Presidential_Proclamation within this Drive folder.

2. Information on activities permitted at the Monument, including annual levels of activity from the **date of designation to the present** (Proclamation 7397 of January 17, 2001)

    a. Recreation - annual visits to site
    The most common recreational activities on SDNM include hiking, hunting, camping and OHV travel on designated routes. Six trailheads provide access to four established hiking trails within designated wilderness areas. The Anza National Historic Trail passes through the SDNM, providing recreational experiences along this historical resource. The SDNM utilizes the Recreation Management Information System (RMIS) to calculate visitation numbers for the monument. A temporary vehicle closure in a portion of SDNM was implemented due to resource damage in 2008 causing visitation numbers to drop in FY2009. Visitation numbers have continued to increase from that point however, as more people become aware of SDNM through a variety of sources. The SDNM is just outside of the Phoenix metropolitan area and within Maricopa County, having 4.2 million residents and the highest population growth in the country in 2016.

    FY 2002: 17,911 visits
    FY 2003: 21,738 visits

FY 2004: 18,157 visits
FY 2005: 30,058 visits
FY 2006: 36,852 visits
FY 2007: 31,328 visits
FY 2008: 34,349 visits
FY 2009: 14,304 visits
FY 2010: 17,287 visits
FY2011: 26,069 visits
FY2012: 26,835 visits
FY 2013: 26,560 visits
FY 2014: 29,894 visits
FY 2015: 40,310 visits
FY 2016: 51,278 visits

b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)
There are no utility corridors inside the Monument boundary.

c. Minerals - annual mineral production on site.
   i. No locatable minerals have been produced within the Monument since designation. The Monument was withdrawn from mineral entry by its Proclamation, and it no longer contains any active legacy mining claims, so there can be no future production.

   ii. No salable minerals have been produced within the Monument since designation, as the regulation at 43 CFR 3601.12(a) prohibits disposal of mineral materials from national monuments.

   iii. Within the Monument, along Interstate 8, there are three authorized Title 23 material site rights-of-way (AZA-27836, AZA-28344, & AZA-30769), issued to the Federal Highway Administration, for the purpose of supplying construction materials to aid federal highway projects. The material sites are sand and gravel pits that are intermittently used to supply highway maintenance projects on Interstate 8.

   iv. Since Monument designation, two of the three material sites (AZA-27836 & AZA-30769) have been active sporadically, each producing an annual average

of less than 1,000 tons of sand & gravel, for a total of less than 2,000 tons per year within the Monument. The royalty value of that sand and gravel would have been roughly $1.00/ton had the material been sold to a private party, but since it went to aid a federal highway project no royalties were collected by BLM. The third site (AZA-28344) has not been active since Monument designation. Exact production figures are not available since the Federal Highway Administration is not required to report production to BLM, and so the figures above are estimates based on site inspections and the use of Google Earth.

v. No leasable minerals have been produced within the Monument since designation.

vi. There are no mineral developments or process facilities adjacent to or impacted by the National Monument designation.

d. Timber - annual timber production on site (in board-feet, CCF, or similar measure).
The Sonoran Desert vegetation is dominated by columnar cacti, saguaro, and legume trees like ironwood, mesquite, and palo verde. Currently none of these products are harvested as timber in the area.

e. Grazing - annual grazing on site (AUMs permitted and sold)
   i. Grazing AUMs/ Active and billed (SDNM AUMs by Allotment Table.docx is located within this Drive folder).
   ii. Prior to Monument designation there were 16,433 active AUMs. As permits expired in areas south of Interstate 8, they were not renewed. This reduced the active AUM's to 8,706 on SDNM.
   iii. In the 2012 SDNM RMP/Final EIS, an adjustment in AUM levels was proposed in order to reflect areas closed due to not meeting rangeland health standards. This decision was litigated and the decision was stayed. This prevented permits from being renewed until the litigation is resolved. This litigation is currently unresolved. Today, the remaining active grazing permits on the Monument retain 776 active AUMs.

f. Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information

where available.

Subsistence activities to provide the bare essentials for living: food, water, and shelter. The Federal Subsistence Management Program provides opportunities for subsistence way of life in Alaska on federal public lands and waters. There are no formal subsistence programs outside of Alaska. SDNM provides for the collection of certain natural materials, by Native American Indians, under a free BLM permit.

g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available

The cultural resources information available for the SDNM derives from project-driven surveys in response to Section 106 undertakings (54 USC, Section 306108) conducted over several decades. At present, the BLM has inventoried approximately 6 percent of the SDNM and has records for 250 sites. This is a small sample compared to the overall size the SDNM. However, in areas where the BLM does have information, site densities of 5 to 15 archaeological sites per square mile are common. Sites range in type from evidence of occupation and upland farming to scatters of lithics and pottery possible indication of other activities, including trading. Based on existing data, and taking consideration of landforms and proximity to reliable water sources, it is probable similar site densities are present throughout the SDNM. The BLM estimates, when completely inventoried, the SDNM may contain more than 5,000 sites.

3. Information on activities occurring during the **5 years prior to designation**
   a. Recreation - annual visits to site.
      i. Recreational activities in the SDNM prior to designation were much the same as they are today. Hiking, hunting, camping and OHV use accounted for most of the recreation activities in the area before 2001. Only one developed trailhead and hiking trail was present at that time. The SDNM utilizes the Recreation Management Information System (RMIS) calculate visitation numbers for the monument, however RMIS only has visitation data back to 1999.

         FY 1999: 14,640 visits
         FY 2000: 16,334 visits
         FY 2001: 21,003 visits

b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any).
   i. There was no energy production from coal, oil, gas, or renewables during the five years prior to designation.

c. Minerals - annual mineral production on site
   i. No locatable or salable minerals were produced within the Monument during the 5 years prior to designation.

   ii. Records indicate that only one of the three material site rights-of-way locations (AZA-27836) may have produced sand & gravel during the 5 years prior to designation, at an estimated annual average of less than 1,000 tons of sand & gravel.

   iii. No leasable minerals were produced within the Monument during the 5 years prior to designation.

   iv. There are no mineral developments or processing facilities adjacent to or impacted by the National Monument designation.

d. Timber - annual timber production on site (in board-feet, CCF, or similar measure).
   i. There was no timber production during the five years prior to designation. Typically used wood products do not exist within the Sonoran Desert ecosystem.

e. Grazing - annual grazing on site (AUMs permitted and sold)
   i. Grazing AUMs/ Active and billed (SDNM AUMs by Allotment Table.docx is located within this Drive folder).

   ii. There were 16,433 total AUMs, all of which were active during those 5 years (SDNM AUMs by Allotment Table.docx is located within this Drive folder).

   iii. The grazing management of the area during the 5 years prior to Monument designation abided by all applicable grazing laws and regulations (43 CFR 4100).

A Standards and Guidelines Allotment Evaluation conducted in that area during the 5 years prior to Monument designation indicated that all Standards for Rangeland Health were being met.

f. Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available.
Subsistence activities provide the bare essentials for living: food, water, and shelter. The Federal Subsistence Management Program provides opportunities for subsistence way of life in Alaska on federal public lands and waters. There are no formal subsistence programs outside of Alaska. SDNM does provide for the collection of certain natural materials, by Native American Indians, under BLM permit.

g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available.
   i. A large portion of the SDNM contains traditional cultural places of importance to the Four Southern O'odham Tribes of Arizona. Extensive stands of saguaro cactus and other traditional plant resources within the SDNM indicate significant potential for prehistoric and historic resource utilization. Rock outcroppings and lithic artifacts made of local-appearing materials suggest the probability of prehistoric quarries in the area.
   ii. A Class 1 Cultural Resources Overview titled Class 1 Archaeology survey prior to designation in this Drive folder. 108 prehistoric and historic sites were reported during that project alone, suggesting a high probability for many other sites to be present in the SDNM.

4. Information on activities that likely would have occurred annually from the date of designation to the present **if the Monument had not been designated**

a. Recreation - annual visits to site
As presented above in the response to item 3.a. Recreation, visitation for the two years prior to designation averaged about 15,000. Visitation likely would have slowly increased from that number over the following years. However, the city of Maricopa, 16 miles to the east of the SDNM east boundary, grew from a population of 1,748 in 2000 to nearly 45,000 in 2008. Such growth of a nearby community would have an influence on visitation, regardless of designation status. Research by

external parties indicate protected landscapes are a draw for visitors and do result in increased visitation to a region. Thus, it is reasonable to conclude visitation would be less if the lands had not been designated as a monument.

b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)
   i. Though consideration of production or construction of the items listed above would be highly speculative, utility corridors may have changed routes, and in any case, would have had to work around the three Wilderness areas designated in 1990 located inside the present day boundary of the SDNM.

c. Minerals - annual mineral production on site
   i. Regarding locatable minerals, the potential for resources to be discovered within the area that is now SDNM is generally low to moderate. Areas with moderate potential occur in mountainous terrain, a large portion of this terrain is within the three Wilderness areas described above and in the Additional Information document at c). The southern portion of the SDNM has one area outside designated wilderness with high potential for porphyry copper, and one very small area with high potential for gold. The lack of significant mining and exploration activity prior to designation, it is unlikely any locatable mineral production would have occurred annually had the Monument not been designated.

   ii. Regarding salable minerals, essentially all of the Monument has potential for sand and gravel and crushed stone resources. However, these resources are not desirable than similar resources located closer to population centers outside the Monument. Costs to transport salable minerals produced within the Monument area to nearby population centers would be greater than transportation costs associated with mines outside the Monument and closer to population centers. Therefore, it is unlikely annual production of salable minerals would have increased significantly had the Monument not been designated.

   iii. Regarding leasable minerals, the Monument has no potential for coal, and a low potential for oil & gas and sodium, except in the Vekol Basin in the southeast part of the Monument, where the potential is moderate. The potential for geothermal resources is generally moderate throughout the

Monument, similar to the rest of the region south and west of Phoenix. However, there is no recorded production of leasable minerals from within the Monument area, it is unlikely any leasable mineral production would have occurred annually had the Monument not been designated.

d. Timber - annual timber production on site (in board-feet, CCF, or similar measure).
The BLM does not have sufficient information to determine how designation of the SDNM has impacted timber production. Typically-used wood products do not exist within the Sonoran Desert ecosystem.

e. Grazing - annual grazing on site (AUMs permitted and sold)
   i. Grazing/ AUMs active and billed would likely have remained the same and grazing would have continued to be managed by applicable laws and regulations (43 CFR 4100).
   ii. Livestock grazing would have continued to be authorized in the southern portion of the Monument south of Interstate 8 and the BLM would have not compensated permittees for the range improvements in this area.
   iii. Grazing use levels have varied and would have continued to vary considerably from year to year due to factors like drought and ephemeral forage availability.

f. Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available.
The BLM does not have sufficient information to predict how designation of the monument has impacted participation rates in subsistence activities. The collection of certain natural materials by Native American Indians under BLM permit could continue regardless of monument designation.

g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available.
The BLM does not have sufficient information to predict how designation of the monument has impacted cultural uses of the monument. The monument proclamation requires that the BLM provide access by members of Indian tribes for traditional cultural and customary uses, consistent with the American Indian Religious Freedom Act (42 U.S.C. 1996) and Executive Order 13007 of May 24,

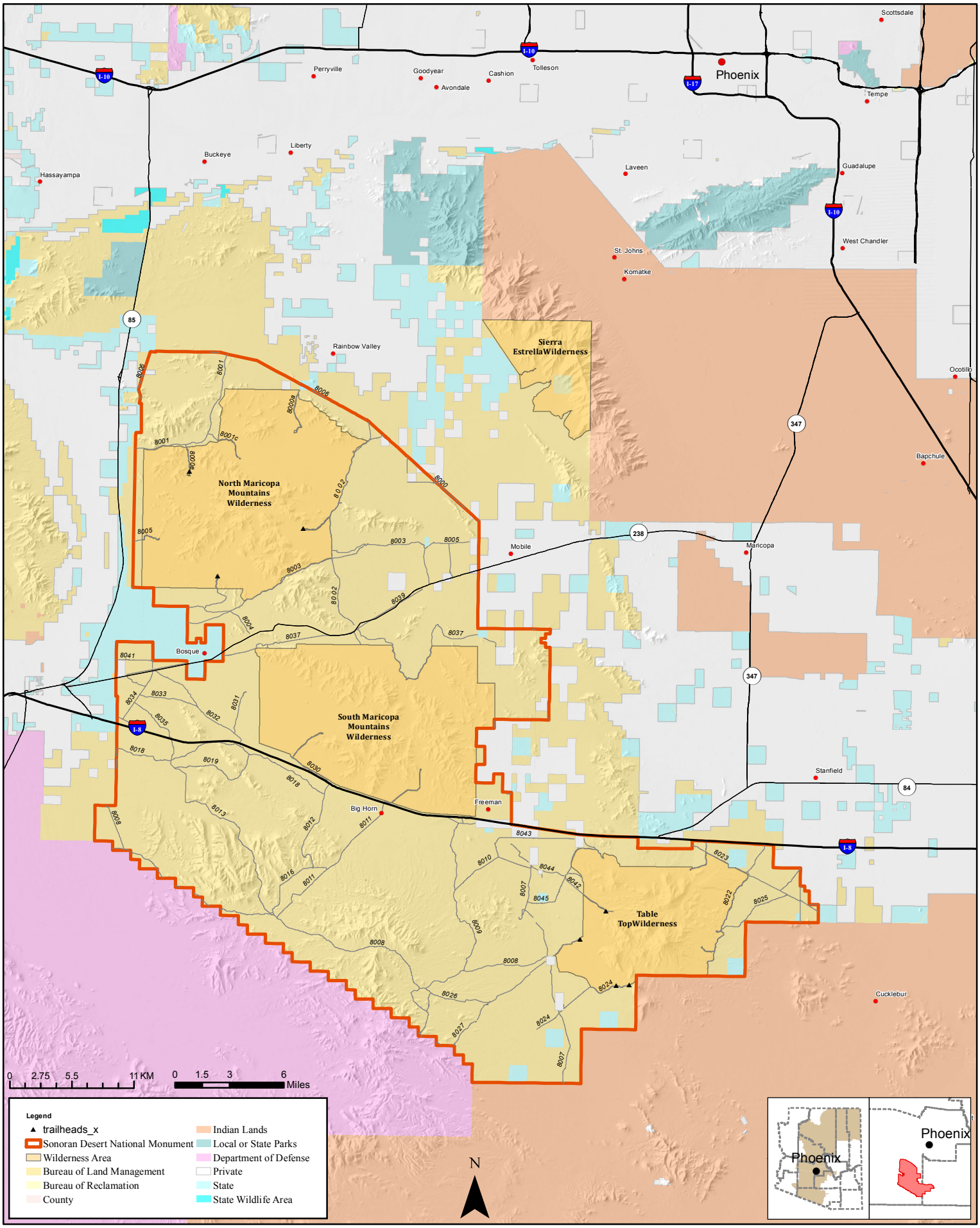
1996 (Indian Sacred Sites). Had the SDNM not been designated, that additional protection for such uses would not be provided.

5. Changes to boundaries - dates and changes in size
   There have been no changes to the monument boundaries.

6. Public Outreach prior to Designation - outreach activities conducted and opportunities for public comment.
   Support for a proposed Sonoran Desert National Monument came largely from individuals and organizations interested in the area. Meetings occurred and written materials were produced. Some public hearings were held. See the following documents in this Drive folder: Biological Resources of the Sonoran Desert National Monument-Drylands Institute (see pages 3 & 5) and Outreach and correspondence prior to designation.pdf.

7. Terms of Designation
   Refer to Proclamation for the terms of designation. The Presidential Proclamation is titled 03-SDNM-Presidential_Proclamation within this Drive folder.

Sonoran Desert National Monument



While every effort has been made to ensure the accuracy of this information, the BLM makes no warranty,expressed or implied, as to the accuracy and expressly disclaims liability for the accuracy thereof. No warranty is made by the BLM for the use of this map for purposes not intended by BLM.

Executive Summary of Review of National Monuments under EO 13792 (April 26, 2017)

Key Information about Sonoran Desert National Monument (SDNM)
SDNM (486,400 acres) was established by Presidential Proclamation on January 17, 2001. Prior to designation, the area was managed by the BLM and continues to be following designation.

The BLM manages for multiple uses within SDNM, including hunting, recreation, grazing, and valid existing rights such as rights of way, while protecting the vast array of historical and scientific resources identified in the Proclamation and providing opportunities for scientific study of those resources. The resources identified in the Proclamation include the plants and animals that make the Sonoran Desert the most biologically diverse of the North American deserts. The SDNM harbors rare plants, vulnerable wildlife and significant archaeological and historic sites, including rock art sites, lithic quarries, and scattered artifacts.

The SDNM includes three designated wilderness areas (North Maricopa Mountains, South Maricopa Mountains and Table Top - totaling 158,516 acres) and the Sand Tank Mountains, Highlighted in the Proclamation as an area of rich diversity, density and distribution of plants, the area has also been under a military withdrawal since 1941.

Overall, multiple use activities are allowed in SDNM when compatible with the protection of resources and objects identified in the Presidential Proclamation. Multiple use activities are subject to decisions made in current and future BLM resource management planning efforts, which include public participation. National Monuments and other conservation areas managed by the BLM continue to allow for multiple uses according to the Federal Land Policy and Management Act.

Summary of Public Engagement Prior to Designation
Prior to monument designation, the Secretary of the Interior accepted an invitation to tour the potential new monument with local constituents. Several organizations endorsed the proposed SDNM included: Arizona Archaeological Council, Arizona Sonora Desert Museum, Defenders of Wildlife, Desert Botanical Gardens (Phoenix), Friends of Cabeza Prieta, Land and Water Fund of the Rockies, National Parks Conservation Association, The Nature Conservancy of Arizona, The Phoenix Zoo, Sierra Club-Southwest Regional Office, Sky Island Alliance, Sonoran Desert National Park Project, Southwest Forest Alliance, Tucson Audubon Society, Tucson Herpetology Society, and The Wilderness Society.

Summary of Public Scoping in Development of Resource Management Plan
BLM performed a variety of public outreach programs to increase involvement in the planning process. BLM took a two-pronged approach to public involvement. The first has been traditional

public involvement through scheduled and announced public meetings, such as the public meetings at the scoping and draft comment periods. The second approach was public interaction through BLM participation at community meetings, special interest group meetings, and coordination with elected representatives. BLM staff were invited to speak at meetings in the communities of Tonopah, Buckeye, Gila Bend, Ajo, and Mobile as well as at numerous environmental and recreation groups. These informal meetings provided the BLM an opportunity to explain the planning process and timeline, and to encourage citizen participation in the planning efforts.

BLM conducted 11 public scoping meetings during February and March of 2003. The open house scoping meetings were held in the Arizona communities of Maricopa, Gila Bend, Casa Grande, Globe-Miami, Ajo, Sells, Tucson, Buckeye, Mesa, Phoenix, and Yuma. Each of the 11 meetings was conducted in an open house format, allowing meeting participants to review maps and display boards of each planning area and to ask specific questions one-on-one with BLM staff about the RMP/EIS process. Comments received during the initial scoping period largely fell into the following three categories:

1. Public Activities – those activities that the public noted doing on public lands, such as hiking, hunting, sight-seeing, camping, wildlife observation, and driving and motorized touring;
2. Desired Management – the public's ideas and input for how BLM should manage the public lands in the Lower Sonoran Field Office area and SDNM, focused on managing for resource protection and to provide public access; and
3. Public Values – those features or qualities valued by various members of the public, such as an area's natural beauty, the quiet peaceful surroundings, and a place to "get away from it all" without having to travel great distances.

Summary of National Monument Activities since Designation

As directed in the SDNM Proclamation, grazing permits on federal lands within the monument south of Interstate Highway 8 were not renewed at the end of their term following monument designation. This affected five grazing allotments and 7,727 AUMs (Animal Unit Months).

Summary of Activities in Area for Five years Preceding Pre-Designation (Fact sheet dated November 30, 2000 in Outreach and correspondence prior to designation.pdf)

NON-MOTORIZED RECREATION

In the five years preceding designation of SDNM, recreation in the area saw a growing number of hikers, backpackers, and birdwatchers evidenced by increased registration at trailheads.

HUNTING

The area was open to hunting for mule deer, desert bighorn, javelina, dove, quail, and other game species. The rugged nature of the terrain and limited roads make hunts challenging.

MOTORIZED RECREATION
Growth of motorized backcountry recreation use was occurring in the area during the five years prior to SDNM designation. 33% of the area was already designated wilderness and thus closed to all motorized recreation. Only vehicles licensed for highway use were permitted in Sand Tank Mountains area, effectively prohibiting use of ATV and dune buggy-type vehicles.

LIVESTOCK GRAZING
In the five years preceding designation of SDNM, BLM administered 11 livestock grazing allotments across the area. Two of the allotments were permitted for "ephemeral grazing", meaning open for grazing only after unusually wet winters. The area contained a number of grazing developments, including fences, corrals and stock ponds.

MINING
The area except for designated wilderness and the Sand Tank Mountains was open for mineral location and entry. No claims were producing significant quantities of minerals. The State of Arizona and Maricopa and Pinal counties operated a small number of gravel pits in proximity to major roadways.

UTILITY CORRIDORS
Prior to designation, one utility corridor along Highway 238 traversed the area that became SDNM.

Summary of Available Economic Information since Designation
The SDNM supported an estimated $4,335,516 of total economic output in 2016. (Sonoran Desert NM-Economic Snapshot (1).pdf)

Summary of Any Boundary Adjustments since Designation
There have been no boundary adjustments since designation.

June 5, 2017
New Information Requested on Executive Order on the Review of Designations Under the Antiquities Act

BLM Responses to Additional Questions for Sonoran Desert National Monument

a) Any legislative language, including legislation in appropriations bills

There has been no additional legislative language or legislation in appropriations bills for the Sonoran Desert National Monument (SDNM) since the designation on January 17, 2001; however there are three Wilderness Areas designated by the Arizona Desert Wilderness Act of 1990 (PL 101-628) located within the monument.

b) Alternative options available for protection of resources applicable at each monument, such as Native American Graves Protection and Repatriation Act, Paleontological Resources Preservation Act, Archaeological Resources Protection Act, Historic Preservation Act and agency-specific laws and regulations.

The following could provide some options to protect specific resources found in the SDNM. Protection would likely occur on a site-by-site or resource-by-resource basis and also would take a significant amount of time to accomplish under these various laws. These laws may not provide a mechanism to protect all cultural or tribal resources in SDNM.

1. National Trails System Act (PL 90-543, as amended through PL 109-418) provides for the designation of the Juan Bautista de Anza National Historic Trail and its protection and management both as the trail crosses the SDNM and outside of the monument.

c) Designated wilderness areas (name, acreage), Wilderness Study Areas (name if there is one, acreage, type), and/or areas managed to preserve wilderness or roadless characteristics that are not WSAs.

The SDNM has three wilderness areas: North Maricopa Wilderness (63,639 acres), South Maricopa Wilderness (60,431 acres), and Table Top Wilderness (34,446 acres). These three areas total 158,516 acres, about 33% of the SDNM. These areas were designated by the Arizona Desert Wilderness Act of 1990 (PL 101-628).

Additionally, approximately 108,100 acres of public lands in the SDNM south of Interstate 8 are managed to protect wilderness characteristics.

d) Outstanding R.S. 2477 claims within a monument – type of road claimed and history
There are no R.S. 2477 claims within the SDNM.

e) Maps
Sonoran_Desert_National_Monument map.pdf is in the drive folder.

f) Cultural or historical resources, particularly Tribal, located near a monument but not within the boundary that might benefit from inclusion in the monument
BLM does not have knowledge of any cultural inventories conducted on adjacent lands.

g) Other – general questions or comments

None

Boshell, Brandon <bboshell@blm.gov>

Vermilion Cliffs National Monument Grazing Data Request

1 message

Boshell, Brandon <bboshell@blm.gov> Fri, May 19, 2017 at 2:48 PM
To: Lynnda Jackson <l50jacks@blm.gov>
Bcc: Brandon Boshell <bboshell@blm.gov>

Lynnda

It was great talking with you and thank you so very much in advance for your help with this request. Attached is a list of allotments that I need you to run the querries for concerning the data request Mark Wimmer requested. We need the querry ran from grazing year 1993 to 2016.

Thanks
Brandon

--
Brandon E. Boshell
Assistant Field Manager / Vermilion Cliffs National Monument Manager
BLM - Arizona Strip Field Office
(435) 688-3241

Vermilion Cliffs National Monument Evaluation Grazing.xlsx
11K

State	Allotment	Allotment Number
AZ	Bunting Well	04847
AZ	Ferry Swale	05336
AZ	Wahweep	05340
AZ	Sand Hills	05328
AZ	Signature Rock	05350
AZ	House Rock	05331
AZ	Soap Creek	05332
AZ	Coyote	05327
AZ	Badger Creek	05341
AZ	Lee's Ferry	05337

Boshell, Brandon <bboshell@blm.gov>

Fwd: Monument Review (IMPORTANT PLEASE READ)

1 message

Boshell, Brandon <bboshell@blm.gov> Mon, May 22, 2017 at 4:17 PM
To: Rody Cox <r8cox@blm.gov>, Amanda Harrington <asharrin@blm.gov>, Shawnna Dao <sdao@blm.gov>, "Thomas, Kendra" <klthomas@blm.gov>

Attached is the executive order concerning the monument review with the initial data request. Highlighted in the word doc are the portions I need your help addressing. The primary work load is for Rody but there is something concerning "energy transmission infrastructure, etc". I know this is very short notice but would appreciate it if you could turn this around asap. I have to have it complete by Friday, but have RMP evals wed and thur.

Thanks
Brandon

---------- Forwarded message ----------
From: **Mahoney, Kenneth** <kmahoney@blm.gov>
Date: Mon, May 15, 2017 at 8:00 PM
Subject: Fwd: Monument Review (IMPORTANT PLEASE READ)
To: "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>, Brandon Boshell <bboshell@blm.gov>, Wayne Monger <dmonger@blm.gov>, Claire Crow <ccrow@blm.gov>
Cc: Timothy Burke <tburke@blm.gov>, Lorraine M Christian <lmchrist@blm.gov>, Leon Thomas Jr <l70thoma@blm.gov>, Edward Kender <ekender@blm.gov>, "Anthony (Scott) Feldhausen" <afeldhausen@blm.gov>, Melissa Warren <mdwarren@blm.gov>, Raymond Suazo <rmsuazo@blm.gov>, Deborah Rawhouser <drawhous@blm.gov>, Roxie Trost <rtrost@blm.gov>, Karen McKinley <kmckinley@blm.gov>

Monument Managers,

Please see the email from State Director Ray Suazo and also the forwarded email from AD-400 Chris McAlear regarding the subject of monument review.

The attached Word document file "Initial Data Request Related to Review of National Monuments" contains a list of items for which information needs to be gathered for your national monument. Please begin to compile the requested information. I will contact each of you on the afternoon of Tuesday May 23 for an interim check on the progress of the data collection. All data collection should be completed and submitted to me by Friday May 26. I will review and upload the data the following week to meet the June 2 due date for the data call.

I will also forward to you the direction from DSD-Communications Amber Cargile regarding media inquiries and public comments relating to Executive Order 13792. Please assure that staff are also aware of this direction.

Let me know of any questions about the monument review. Thank you for your assistance in responding to this information request.

Ken Mahoney <> Program Lead:
National Monuments <> National Conservation Areas
Wilderness <> Wild & Scenic Rivers
Arizona State Office <> Bureau of Land Management
602-417-9238 <> kmahoney@blm.gov

---------- Forwarded message ----------
From: **Suazo, Raymond** <rmsuazo@blm.gov>
Date: Fri, May 12, 2017 at 1:54 PM
Subject: Fwd: Monument Review (IMPORTANT PLEASE READ)
To: Kenneth Mahoney <kmahoney@blm.gov>, Roxie Trost <rtrost@blm.gov>, Karen Mckinley <kmckinley@blm.gov>, Deborah Rawhouser <drawhous@blm.gov>

FYI, I will provide Ken's name as the lead who will coordinate for AZ. My preference is also that Ken be the person that loads the data in an effort to have thorough review and consistency. However, we can consider over the weekend and make a final determination on Monday.

Ray

---------- Forwarded message ----------
From: **McAlear, Christopher** <cmcalear@blm.gov>
Date: Fri, May 12, 2017 at 1:16 PM
Subject: Monument Review (IMPORTANT PLEASE READ)
To: Edwin Roberson <eroberso@blm.gov>, "Bilbao, Anita" <abilbao@blm.gov>, Amy Lueders <alueders@blm.gov>, Aden Seidlitz <aseidlitz@blm.gov>, Jerome Perez <jperez@blm.gov>, Joseph Stout <j2stout@blm.gov>, "Suazo, Raymond" <rmsuazo@blm.gov>, Deb Rawhouser <drawhous@blm.gov>, Ruth Welch <rwelch@blm.gov>, Greg Shoop <gshoop@blm.gov>, Marci Todd <m1todd@blm.gov>, "Petersen, Paul" <ppeterse@blm.gov>, Jamie Connell <jconnell@blm.gov>, Theresa Hanley <thanley@blm.gov>, Timothy Murphy <t50murph@blm.gov>, Peter Ditton <pditton@blm.gov>
Cc: John Ruhs <jruhs@blm.gov>, Sally Butts <sbutts@blm.gov>, Peter Mali <pmali@blm.gov>, Nikki Moore <nmoore@blm.gov>, Timothy Fisher <tjfisher@blm.gov>

State Directors:

National Conservation Lands received a data call to respond to Executive Order 13792 of April 26, 2017 (82 FR 20429, May 1, 2017) directing the Secretary of Interior to review certain National Monument designations or expansions under the Antiquities Act of 1906, 54 U.S.C. 320301-320303 (Act) (see attached).

The timeline for this data call is a short turnaround for all monuments, due by June 2, 2017, with the exception for both Grand Staircase Escalate National Monument and Bears Ears National Monument with an expedited due date of May 17, 2017. WO-410 needs assistance with this data call through the National Conservation Lands State Leads and from the affected Monument Managers, or the State Directors' designee, to gather up the desired information. Please review the attached word document for list of needed information and the list of National Monuments under review. We are expected to provide available data and information but not to create data or information or speculate on responses.

A Google Drive document folder is being established to easily transfer electronic files for each of the National Monuments under review. The desire is to limit access to assure consistent data collection. WO-410 is asking each of the States to provide names needing access for each National Monument and the lead from your state to oversee/coordinate this data call.

The two Utah National Monuments will help us to streamline the process and provide more specific guidance for the other National Monuments and the work load associated with this request. A follow-up email will provide more direction for all other BLM National Monuments under review later next week.

Please provide Timothy Fisher (tjfisher@blm.gov) a list of contacts for each monument who will need access to the google drive folder **by COB Tuesday May 16, 2017**.

The National Conservation Lands program appreciates your support in assisting with this important data call

Thank you!
Chris m

Christopher McAlear
Assistant Director
National Conservation Lands
and Community Partnerships
(W) 202-208-4731
(C) 775-722-9539

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Brandon E. Boshell
Assistant Field Manager / Vermilion Cliffs National Monument Manager
BLM - Arizona Strip Field Office
(435) 688-3241

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2 attachments

DOI ExecOrder 13792.pdf
1732K

Initial Data Request Related to Review of National Monuments (1).docx
19K

DEPARTMENT OF THE INTERIOR

Office of the Secretary

Docket No. DOI-2017-0002

Review of Certain National Monuments Established Since 1996; Notice of Opportunity for Public Comment

AGENCY: Office of the Secretary, Interior.

ACTION: Notice; Request for comments.

SUMMARY: The U.S. Department of the Interior is conducting a review of certain National Monuments designated or expanded since 1996 under the Antiquities Act of 1906 in order to implement Executive Order 13792 of April 26, 2017. The Secretary of the Interior will use the review to determine whether each designation or expansion conforms to the policy stated in the Executive Order and to formulate recommendations for Presidential actions, legislative proposals, or other appropriate actions to carry out that policy. This Notice identifies twenty-seven National Monuments under review and invites comments to inform the review.

DATES: To ensure consideration, written comments relating to the Bears Ears National Monument must be submitted before [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. Written comments relating to all other National Monuments must be submitted before [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may submit written comments online at http://www.regulations.gov by entering "DOI-2017-0002" in the Search bar and clicking "Search," or by mail to Monument Review, MS-1530, U.S. Department of the Interior, 1849 C Street NW, Washington, DC 20240.

FOR FURTHER INFORMATION CONTACT: Randal Bowman, 202-208-1906, RR_Bowman@ios.doi.gov.

SUPPLEMENTARY INFORMATION: Executive Order 13792 of April 26, 2017 (82 FR 20429, May 1, 2017), directs the Secretary of the Interior to review certain National Monuments designated or expanded under the Antiquities Act of 1906, 54 U.S.C. 320301-320303 (Act). Specifically, Section 2 of the Executive Order directs the Secretary to conduct a review of all Presidential designations or expansions of designations under the Antiquities Act made since January 1, 1996, where the designation covers more than 100,000 acres, where the designation after expansion covers more than 100,000 acres, or where the Secretary determines that the designation or expansion was made without adequate public outreach and coordination with relevant stakeholders, to determine whether each designation or expansion conforms to the policy set forth in section 1 of the order. Among other provisions, Section 1 states that designations should reflect the Act's "requirements and original objectives" and "appropriately balance the protection of landmarks, structures, and objects against the appropriate use of Federal lands and the effects on surrounding lands and communities." 82 FR 20429 (May 1, 2017).

In making the requisite determinations, the Secretary is directed to consider:

(i) the requirements and original objectives of the Act, including the Act's requirement that reservations of land not exceed "the smallest area compatible with the proper care and management of the objects to be protected";

(ii) whether designated lands are appropriately classified under the Act as "historic landmarks, historic and prehistoric structures, [or] other objects of historic or scientific interest";

(iii) the effects of a designation on the available uses of designated Federal lands, including consideration of the multiple-use policy of section 102(a)(7) of the Federal Land Policy and Management Act (43 U.S.C. 1701(a)(7)), as well as the effects on the available uses of Federal lands beyond the monument boundaries;

(iv) the effects of a designation on the use and enjoyment of non-Federal lands within or beyond monument boundaries;

(v) concerns of State, tribal, and local governments affected by a designation, including the economic development and fiscal condition of affected States, tribes, and localities;

(vi) the availability of Federal resources to properly manage designated areas; and

(vii) such other factors as the Secretary deems appropriate.

82 FR 20429-20430 (May 1, 2017).

The National Monuments being initially reviewed are listed in the following tables.

NATIONAL MONUMENTS BEING INITIALLY REVIEWED PURSUANT TO CRITERIA IN EXECUTIVE ORDER 13792

Monument	Location	Year(s)	Acreage
Basin and Range	Nevada	2015	703,585
Bears Ears	Utah	2016	1,353,000
Berryessa Snow Mountain	California	2015	330,780
Canyons of the Ancients	Colorado	2000	175,160
Carrizo Plain	California	2001	204,107
Cascade Siskiyou	Oregon	2000/2017	100,000
Craters of the Moon	Idaho	1924/2000	737,525
Giant Sequoia	California	2000	327,760
Gold Butte	Nevada	2016	296,937
Grand Canyon-Parashant	Arizona	2000	1,014,000
Grand Staircase-Escalante	Utah	1996	1,700,000
Hanford Reach	Washington	2000	194,450.93
Ironwood Forest	Arizona	2000	128,917
Mojave Trails	California	2016	1,600,000
Organ Mountains-Desert Peaks	New Mexico	2014	496,330
Rio Grande del Norte	New Mexico	2013	242,555
Sand to Snow	California	2016	154,000
San Gabriel Mountains	California	2014	346,177
Sonoran Desert	Arizona	2001	486,149
Upper Missouri River Breaks	Montana	2001	377,346
Vermilion Cliffs	Arizona	2000	279,568

NATIONAL MONUMENTS BEING REVIEWED TO DETERMINE WHETHER THE DESIGNATION OR EXPANSION WAS MADE WITHOUT ADEQUATE PUBLIC OUTREACH AND COORDINATION WITH RELEVANT STAKEHOLDERS

Katahadin Woods and Waters	Maine	2016	87,563

The Department of the Interior seeks public comments related to: (1) Whether national monuments in addition to those listed above should be reviewed because they were designated or expanded after January 1, 1996 "without adequate public outreach and coordination with relevant stakeholders;" and (2) the application of factors (i) through (vii) set forth above to the listed national monuments or to other Presidential designations or expansions of designations meeting the criteria of the Executive Order. With respect to factor (vii), comments should address other factors the Secretary might consider for this review.

In a separate but related process, certain Marine National Monuments will also be reviewed. As directed by section 4 of Executive Order 13795 of April 28, 2017, "Implementing an America-First Offshore Energy Strategy" (82 FR 20815, May 3, 2017), the Department of Commerce will lead the review of the Marine National Monuments in consultation with the Secretary of the Interior. To assist in that consultation, the Secretary will accept comments related to the application of factors (i) through (vii) in Executive Order 13792 as set forth above to the following Marine National Monuments:

MARINE NATIONAL MONUMENTS BEING REVIEWED PURSUANT TO EXECUTIVE ORDERS 13795 AND 13792

Marianas Trench	CNMI/Pacific Ocean	2009	60,938,240
Northeast Canyons and Seamounts	Atlantic Ocean	2016	3,114,320
Pacific Remote Islands	Pacific Ocean	2009	55,608,320

Papahanaumokuakea	Hawaii	2006/2016	89,600,000
Rose Atoll	American Samoa	2009	8,609,045

Before including your name, address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you may ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

AUTHORITY: E.O. 13792, 82 FR 20429 (May 1, 2017).

James Cason
Special Assistant
Delegated the Functions, Duties, and Responsibilities of the Deputy Secretary

Call for Data Related to Review of National Monuments under EO 13792 (April 26, 2017)

Please help us gather information about each of the items listed below, for each of the National Monuments listed below in Table 1.

1. Documents Requested
   a. Resource Management Plans/Land Use Plans
   b. Record of Decision
   c. Public Scoping Documents
   d. Presidential Proclamation
2. Information on activities permitted at the Monument, including annual levels of activity from the **date of designation to the present**
   a. Recreation - annual visits to site
   b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)
   c. Minerals - annual mineral production on site
   d. Timber - annual timber production on site (in board-feet, CCF, or similar measure)
   e. Grazing - annual grazing on site (AUMs permitted and sold)
   f. Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available
   g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available
2. Information on activities occurring during the **5 years prior to designation**
   a. Recreation - annual visits to site
   b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)
   c. Minerals - annual mineral production on site
   d. Timber - annual timber production on site (in board-feet, CCF, or similar measure)
   e. Grazing - annual grazing on site (AUMs permitted and sold)
   f. Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available
   g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available
3. Information on activities that likely would have occurred annually from the date of designation to the present **if the Monument had not been designated**
   a. Recreation - annual visits to site
   b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)
   c. Minerals - annual mineral production on site
   d. Timber - annual timber production on site (in board-feet, CCF, or similar measure)
   e. Grazing - annual grazing on site (AUMs permitted and sold)

f. Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available
g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available

4. Changes to boundaries - dates and changes in size
5. Public Outreach prior to Designation - outreach activities conducted and opportunities for public comment
6. Terms of Designation

Table 1. List of National Monuments Included in Review (per DoI Press Release dated May 5, 2017)

National Monument	Location	Managing Agency
Basin and Range	Nevada	BLM
Bears Ears	Utah	BLM, USFS
Berryessa Snow Mountain	California	USFS, BLM
Canyons of the Ancients	Colorado	BLM
Carrizo Plain	California	BLM
Cascade Siskiyou	Oregon	#N/A
Craters of the Moon	Idaho	NPS, BLM
Giant Sequoia	California	USFS
Gold Butte	Nevada	BLM
Grand Canyon-Parashant	Arizona	BLM, NPS
Grand Staircase-Escalante	Utah	BLM
Hanford Reach	Washington	FWS, DOE
Ironwood Forest	Arizona	BLM
Mojave Trails	California	BLM
Organ Mountains-Desert Peaks	New Mexico	BLM
Río Grande del Norte	New Mexico	BLM
Sand to Snow	California	BLM, USFS
San Gabriel Mountains	California	USFS
Sonoran Desert	Arizona	BLM
Upper Missouri River Breaks	Montana	BLM
Vermilion Cliffs	Arizona	BLM
Katahdin Woods and Waters	Maine	NPS
Marianas Trench	CNMI/Pacific Ocean	FWS
Northeast Canyons and Seamounts	Atlantic Ocean	NOAA, FWS
Pacific Remote Islands	Pacific Ocean	FWS
Papahānaumokuākea	Hawai'i/Pacific Ocean	NOAA, FWS
Rose Atoll	American Sāmoa/Pacific Ocean	FWS

Boshell, Brandon <bboshell@blm.gov>

Monument Data Call

1 message

Boshell, Brandon <bboshell@blm.gov> Mon, May 22, 2017 at 4:44 PM
To: Krissy Sherman <ksherman@blm.gov>, "Jasper, Jonathan" <jjasper@blm.gov>
Cc: Amanda Harrington <asharrin@blm.gov>

Krissy and Jon

I need you both to tag team this data call and need it done asap. I understand it is last minute but it is due by COB Friday and we have RMP evaluations scheduled this week as well.

Attached is GSENM's responses to this same data call. They submitted their info. last week as they were on a different schedule. It may be of some assistance. Please let me know how I can help.

--
Brandon E. Boshell
Assistant Field Manager / Vermilion Cliffs National Monument Manager
BLM - Arizona Strip Field Office
(435) 688-3241

3 attachments

Additional Information Requested Template_5_22_2017.docx
22K

Initial Data Request Related to Review of National Monuments (2).docx
20K

IDRR_NIM_GSENM.docx
34K

New Information Requested on Executive Order on the Review of Designations Under the Antiquities Act

BLM Responses to Additional Questions for [Name] National Monument

a) Any legislative language, including legislation in appropriations bills

[Identify if there is any related legislation regarding your monument]

b) Alternative options available for protection of resources applicable at each monument, such as Native American Graves Protection and Repatriation Act, Paleontological Resources Preservation Act, Archaeological Resources Protection Act, Historic Preservation Act and agency-specific laws and regulations.

The following could provide some options to protect specific resources found in [Name] National Monument. Protection would likely occur on a site-by-site or resource-by-resource basis and also would take a significant amount of time to accomplish under these various laws. These laws may not provide a mechanism to protect all cultural or tribal resources in [Name] National Monument. [Provide any specific information or examples for your monument.]

National Historic Preservation Act, (NHPA)

Native American Graves Protection and Repatriation Act, (NAGPRA)

Paleontological Resources Preservation Act, (PRPA)

Archaeological Resources Protection Act, (ARPA)

American Indian Religious Freedom Act (AIRFA)

c) Designated wilderness areas (name, acreage), Wilderness Study Areas (name if there is one, acreage, type), and/or areas managed to preserve wilderness or roadless characteristics that are not WSAs.

[Insert monument specific response]

d) Outstanding R.S. 2477 claims within a monument – type of road claimed and history

[Insert monument specific response]

e) Maps
[Insert monument specific response]

f) Cultural or historical resources, particularly Tribal, located near a monument but not within the boundary that might benefit from inclusion in the monument

[Insert monument specific response]

g) Other – general questions or comments

[Insert monument specific response regarding any other information that should be considered in the review of your monument]

Call for Data Related to Review of National Monuments under EO 13792 (April 26, 2017)

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    b. Record of Decision
    c. Public Scoping Documents
    d. Presidential Proclamation
2. Information on activities permitted at the Monument, including annual levels of activity from the **date of designation to the present**
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    b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)
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    g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available
3. Information on activities occurring during the **5 years prior to designation**
    a. Recreation - annual visits to site
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    c. Minerals - annual mineral production on site
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    g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available
4. Information on activities that likely would have occurred annually from the date of designation to the present **if the Monument had not been designated**
    a. Recreation - annual visits to site
    b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)
    c. Minerals - annual mineral production on site
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    f. Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available
    g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available
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6. Public Outreach prior to Designation - outreach activities conducted and opportunities for public comment
7. Terms of Designation

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Bears Ears	Utah	BLM, USFS
Berryessa Snow Mountain	California	USFS, BLM
Canyons of the Ancients	Colorado	BLM
Carrizo Plain	California	BLM
Cascade Siskiyou	Oregon	#N/A
Craters of the Moon	Idaho	NPS, BLM
Giant Sequoia	California	USFS
Gold Butte	Nevada	BLM
Grand Canyon-Parashant	Arizona	BLM, NPS
Grand Staircase-Escalante	Utah	BLM
Hanford Reach	Washington	FWS, DOE
Ironwood Forest	Arizona	BLM
Mojave Trails	California	BLM
Organ Mountains-Desert Peaks	New Mexico	BLM
Río Grande del Norte	New Mexico	BLM
Sand to Snow	California	BLM, USFS
San Gabriel Mountains	California	USFS
Sonoran Desert	Arizona	BLM
Upper Missouri River Breaks	Montana	BLM
Vermilion Cliffs	Arizona	BLM
Katahdin Woods and Waters	Maine	NPS
Marianas Trench	CNMI/Pacific Ocean	FWS
Northeast Canyons and Seamounts	Atlantic Ocean	NOAA, FWS
Pacific Remote Islands	Pacific Ocean	FWS
Papahānaumokuākea	Hawai'i/Pacific Ocean	NOAA, FWS
Rose Atoll	American Sāmoa/Pacific Ocean	FWS

Call for Data Related to Review of National Monuments under EO 13792 (April 26, 2017)

1. Documents Requested
   a. Resource Management Plans/Land Use Plans
      i. The Monument Management Plan (MMP) and Record of Decision (ROD) is located within this Drive folder (1.GSENM_mgmt_plan.pdf).
      ii. The entire GSENM RMP (DEIS/FEIS/ROD) can be accessed here: https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName=dispatchToPatternPage&currentPageId=94418
      iii. The Livestock Grazing EIS/Plan Amendment has been initiated. The DEIS has been reviewed by the BLM Utah State Office and BLM Washington Office and is nearing public release: https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName=dispatchToPatternPage&currentPageId=100826
      iv. The MMP has also been amended for Greater Sage Grouse habitat conservation (2015), for an electrical transmission line Right-of-Way to support local communities (2011), and for an update to fire management (2005).
   b. Record of Decision
      i. The 1999 MMP and ROD is located within this Drive folder (1.GSENM_mgmt_plan.pdf).
   c. Public Scoping Documents
      i. Grand Staircase-Escalante National Monument's (GSENM) Management Plan included substantial outreach, public scoping and comment periods according to land use planning regulations and policies. See Federal Register Notices in Drive folder (1.c.Federal Register, Volume 64 Issue 145 (Thursday, July 29, 1999).pdf).
      ii. Public Comments and Responses for the MMP FEIS are located within this Drive folder (1.c.GSENM_FEIS_Comments.pdf).
      iii. See also Scoping Report for Livestock Grazing EIS (1.c.GSENM_GrazingEISScopingRpt_Final.pdf) and at: https://eplanning.blm.gov/epl-front-office/projects/lup/69026/89803/107384/2014.05.21_GSENM_ScopingRpt_Final_508.pdf.
      iv. GSENM worked with multiple agencies, tribes and communities and individuals

and responded to more than 6,800 letters commenting on the 2000 MMP. Nearly all site-specific NEPA analyses include public comment periods. Additionally, GSENM has offered multiple opportunities for public engagement in the Livestock Grazing Plan Amendment/EIS including:

- Development of a Situation Assessment by National Riparian Service Team
- Hosted 12 public scoping meetings and/or workshops
- Hosted 3 Socio-economic workshops
- Five newsletters developed along with a "Fact Sheet Series"
- Press releases published in five Utah newspapers
- Maintained Project website with project updates
- Hosted a Biological Soil Crust Forum
- Public Release of Draft Alternatives
- The inclusion of two Action Alternatives in the PDEIS that were derived from external sources
- Hosted 27 Cooperating Agency Meetings; 12 Forage Team Meetings
- Outreach to local tribes
- Monument Advisory Committee Input
- Joint BLM/NPS Programmatic Agreement for Cultural Resources
- Broad Consulting Party Process
- Other meetings: County Coordination, State of Utah, Earthfest

GSENM demonstrates a commitment to continued public engagement in land use planning processes.

d. Presidential Proclamation
    i. Proclamation 6920 of September 18, 1996 is in this folder (1.d.Presidential_Proclamation_6920.pdf).

2. Information on activities permitted at the Monument, including annual levels of activity from the **date of designation to the present**

Designation date for GSENM is September 18, 1996.

a. Recreation - annual visits to site

i. To protect Monument resources and objects and to provide economic opportunities in the local communities, major facilities including the four visitor centers are located in the gateway towns of Kanab, Cannonville, Escalante, and Bigwater.

ii. GSENM provides a large variety of multiple-use recreation opportunities including traditional hiking and camping, hunting, fishing, horseback riding, mountain biking, as well as motorized activities for off-highway vehicles.

iii. Commercial recreation activities (Outfitter and Guides) have risen since Monument designation (2.a._GSENM Commercial_SRP.pdf).

iv. In 2016, 926,235 million visitors came to GSENM.
GSENM uses the Recreation Management Information System (RMIS) to report visitor use, which is calculated using data from multiple traffic counters, permits and visitor counts in the four Visitor Centers. BLM's Recreation Management Information System (RMIS) is generally accepted as the agency's official record, however, RMIS was not available until 1999. Prior to 1999, GSENM aggregated data from the Kanab and Escalante offices. (See:
2.a.GSENM_RecreationData_Excel.xls and
3.a.GSENM_Recreation_MMP_DEIS_Tables.pdf)

b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)

i. All Valid Existing Rights for leasable minerals including coal, and oil and gas are continued.

ii. No new leases have been issued since designation. GSENM has no commercial renewable energy.

iii. The annual production of oil and gas in the GSENM is currently limited to lands in or adjacent to the Upper Valley Unit (UVU) in the north-central area of the GSENM (Attachments: 2.b.Upper Valley Unit Map.pdf; 2.b.Upper Valley GSE Production.pdf; 2.b.Upper Valley Wells in GSENM.xls; and 2.b.UDOGM_O&Gprod_data_Upper Valley.pdf). GSENM shares the Upper Valley Oil Field with the Dixie National Forest; this field accounts for all oil and gas production in GSENM. Attached documents disclose production for the Upper Valley Field. Four wells within the GSENM are currently producing oil and a small amount of gas. The UVU was approved in 1962 and production from the wells peaked in 1972 at 183,133 barrels. In the last 20 years (1997-2016) production

has slowly declined from about 65,828 barrels of oil and no gas annually to 45,538 barrels of oil and 2,357 thousand cubic feet (mcf) of gas. There is no other oil and gas production in GSENM, or Kane and Garfield Counties.

iv. No coal lands have been explored or coal produced within the GSENM since the September 18, 1996 designation. Existing coal leases were voluntarily exchanged for Federal payments totaling $19.5 million (not adjusted for inflation) (2.b.GSENM Coal Lease Cancellation Payments.pdf)

v. 34 oil and gas leases (45,894 acres) are in suspension while a Combined Hydrocarbon Lease (CHL) conversion application is processed.

vi. Information related to energy transmission infrastructure and lands and realty actions is included in the table below:

Grand Staircase-Escalante National Monument Existing Rights-of-Way/Permits/Authorized 09/25/1996 – 05/15/2017	
Existing Withdrawals: PSR, PWR, Bureau of Reclamation, Forest Service Wilderness, Power Site, National Park Service, In Trust for Indians	17
Road ROWs	19
Misc. Roads and Associated Uses - Sec 107 Federal Aid Hwy, Revised Statute 2477, Mineral Material Sites	0
Power Transmission Lines and Power Facilities	20
Communication Sites – Telephone, Telegraph, Radio Transmission, Global Positioning Systems	15
Water ROWs, Irrigation Facilities	14
Oil and Gas Pipelines, Oil and Gas Facilities	5

Other FLPMA ROWs, Perpetual Easements, Federal Facilities	2
Airport	0
Permit - 302 FLPMA – Misc.	0
Permits Film - 302 FLPMA (popular location (closed))	54

c. Minerals - annual mineral production on site

i. Mineral materials

- No new Free Use, commercial, or over-the-counter permits have been issued since Monument designation.
- Valid existing permits, including those in Title 23 (3 Federal Highway Rights of Way), continue to be recognized until permit expiration.
- Significant quantities of gravel and riprap from existing pits continue to be provided for Federal Highways projects, primarily to Utah Department of Transportation.
- According to UGS Circular 93, January 1997, "A Preliminary Assessment of Energy and Mineral Resources within the Grand Staircase-Escalante National Monument" (2.c.UGS Circular 93 GS Energy and Mineral Resources.pdf) there were five small mining operations on unpatented mining claims, four of which were active alabaster quarries and one, a suspended operation for petrified wood. Annual production of the alabaster was about 300 tons worth $500 per ton ($150,000/yr). These claimants failed to pay the required annual filings and therefore, the claims were terminated. The BLM's decision to close the claims was upheld by IBLA in March 2008. Since that time, there have been no mining law operations within the monument.

ii. Locatable Minerals

- No new mining claims were issued after Monument designation, however existing claims and active mines were allowed to continue. (List of active mines in MMP DEIS located within this Drive folder 2.c. MMP_DEIS Table 3.10_Locatables.pdf).

d. Timber - annual timber production on site (in board-feet, CCF, or similar measure)
    i. No commercial timber production pre/post Monument designation.
    ii. GSENM does allow continued firewood cutting in two forestry product areas.
e. Grazing - annual grazing on site (AUMs active and billed)
    i. Grazing on the Monument Fact Sheet (2.e_GSENM Grazing EIS Fact Sheet 05-08-2017.pdf).
    ii. Grazing AUMs/ Active and billed (2.e._GSENM Grazing AUMs).
    iii. When the Monument was designated, there were 106,645 total AUMs, with 77,400 of these active. Today, there are 106,202 total AUMs and 76,957 are active. In 1999, an adjustment in AUM levels was made to resolve riparian resources issues and address recreation conflicts. In the current Livestock Grazing EIS/Plan Amendment process the current prefered alternative will have a slight reduction with 105,765 AUM but an increase of total acres for grazing within the monument.

f. Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available
    i. **Subsistence activities** are those that provide the bare essentials for living: food, water, and shelter. The Federal Subsistence Management Program provides opportunities for subsistence way of life in Alaska on federal public lands and waters. There are no formal subsistence programs outside of Alaska. There are no known true subsistence activities occurring on GSENM or prior to its designation. GSENM does provide for the collection of certain natural materials by Native American Indians, under BLM permit. RMIS data provides the number of permitted/guided and recreational hunting activities, fishing activities and gathering activities (See: 2.a.GSENM_RecreationData_Excel.xls). These numbers do not reflect the actual number of licensed hunters/fishermen. That data is available from the State of Utah Division of Wildlife Resources. Outside of developed recreation sites, the entire GSENM is open for hunting and fishing, which is regulated by the State of Utah Division of Wildlife Resources.
g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available
    i. Archeological/cultural data is provided in the following Utah Division of State History Maps in the google drive (2.g.1_GSENM_SiteDensity,

2.g.2_GSENM_Inventories, 2.g.3_GSENM_ArchSites, 2.g.4_GSENM_ArchNumofSites).

ii. Archaeological surveys carried out to date, show extensive use of places within the monument by ancient Native American cultures and a contact point for Anasazi and Fremont cultures. The cultural resources discovered so far in the monument are outstanding in their variety of cultural affiliation, type and distribution. Hundreds of recorded sites include rock art panels, occupation sites, campsites and granaries. Cultural sites include historic and prehistoric sites, Traditional Cultural Properties, Native American Sacred Sites and cultural landscapes.

iii. According to the Utah State Historic Preservation Office (SHPO), as of March 6, 2017, there are 3,985 recorded archaeological sites within the Grand Staircase-Escalante National Monument (GSENM)(2.g.4_GSENM_ArchNumofSites). However, the GSENM staff estimates that there are more likely around 6,000 recorded archaeological sites within the GSENM, due to a records backlog. This is with only five to seven percent of the Monument surveyed.

iv. Cultural Values (Tribal): Prehistoric archaeological sites in the GSENM include pottery and stone tool (lithic) scatters, the remains of cooking features (hearths), storage features such as adobe granaries and subsurface stone lined granaries, prehistoric roads, petroglyphs, pictographs and cliff dwellings. Historic sites include historic debris scatters, roads, trails, fences, inscriptions, and structures. Following the designation of GSENM, consultations were initiated with the Native American tribes associated with the GSENM area, including the Hopi, the Kaibab Paiute, the San Juan Paiute, the Paiute Indian Tribes of Utah, the Zuni, and the Ute, and the Navajo. Over the past 20 years, the Hopi and the Kaibab Paiute have been most closely associated with the Monument and most responsive to continued consultations, as the GSENM area is central to the historic and prehistoric territories of these two tribes. All tribes considered the Monument area to be culturally important; the Hopi (as the modern descendants of the Ancestral Puebloans), for example, can trace the migrations of at least twelve clans through what is today GSENM (Bernardini 2005). The tribal connections to this land are probably best described by an example from the Kaibab Paiute, as related to ethnographers from the University of Arizona, as follows (Stoffle et al 2001): "*The Southern Paiute people continue to maintain a*

strong attachment to the holy lands of their ethnic group as well as to their own local territory. These attachments continued even though Paiute sovereignty has been lost over portions of these lands due to Navajo ethnic group expansion, encroachment by Euro Americans, and Federal government legislation. Despite the loss of Paiute sovereignty over most traditional lands, Southern Paiute people continue to affiliate themselves with these places as symbols of their common ethnic identity. Additionally, all Southern Paiute people continue to perform traditional ceremonies along with the menarche and first childbirth rites of passage rituals. The locations at which these ceremonies and rituals have been or are currently performed become transformed from secular "sites" to highly sacred locations or places. By virtue of the transformation of locations into sacred places, Southern Paiute people reaffirm their ties to traditional lands because they have carried out their sacred responsibilities as given to them by the Creator."

v. **Cultural values (Ranching)** Local ranching began in the 1860s, and became a major focus of area livelihood and increased settlement in the 1870s. Ranching was initially small scale and for local subsistence, but the herds quickly grew so that by the late 1800s the raising of cattle, sheep, and goats was of major economic importance. Ranching and subsistence farming was historically the backbone of the local economies, and this is still reflected in the views of the modern communities surrounding GSENM. In modern times the economic importance of ranching has somewhat diminished, but the culture of, and past history of, livestock grazing and ranching is one of the important "glues" that binds local communities and families in the GSENM area.

3. Information on activities occurring during the **five years prior to designation**

a. Recreation - annual visits to site

i. The BLM transitioned to RMIS in 1999. Data prior to 1999 is not available in the same reporting mechanism as from 1999-Present. GSENM did report visitor use beginning in FY97. (See: 2.a.GSENM_RecreationData_Excel.xls and 3.a.GSENM_Recreation_MMP_DEIS_Tables.pdf).

Overall visitation increased prior to designation and the projecting trends based on the historical information would see a continued rise of visitors seeking recreational opportunities. Just prior to designation Escalante Canyon received

373,200 visitors in 1994, 384,800 visitors in 1995 and 456,400 in 1996.

b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)
   i. The Upper Valley Oil Field was in production prior to designation; no other oil and gas production existed in Kane and Garfield Counties. From 1992 until 1996, 336,313 barrels of oil were produced in the GSENM. No natural gas was produced during that time. (2.b.Upper Valley GSE Production.pdf).
   ii. No coal was produced from the GSENM in the five years preceding designation. A regional analysis/FEIS for mining was completed in 1979 (3.b.FINAL EIS - Dev of Coal Resources in Southern Utah Title Pages.pdf). Exploration activities and planning for mining operations continued from the 1980's until the monument designation.
      - 64 coal leases (~168,000 acres) were committed and a plan was submitted for Andalex Resources' Smoky Hollow Mine. The plan proposed mining on 23,799 acres of the area leased in GSENM. In the mid-1990's an EIS was initiated (3.b.4.b.Warm Springs Smoky Hollow PDEIS December 1995_Coveronly.pdf).
      - 600+ exploration drill holes were completed prior to GSENM designation to defined the coal geology to plan for underground mines (See 3.b.BLM 1996-1997 Kaiparowits Coal Report - DRAFT.pdf and https://pubs.usgs.gov/of/1996/OF96-539)
   iii. Information related to energy transmission infrastructure and lands and realty actions is included in the table below:

Grand Staircase-Escalante National Monument
Existing Rights-of-Way/Permits/All Dispositions
Authorized/Closed/Relinquished/Withdrawn/Expired/Terminated/Cancelled/Pending/Rejected/Void
01/01/1991 – 09/24/1996
(In March 1999, BLM added Case Recordation components to the LR2000 Database System; therefore, some of the pre-LR2000 data may remain in the Status Database)

Existing Withdrawals: PSR, PWR, Bureau of Reclamation, Forest Service Wilderness, Power Site, National Park Service, In Trust for Indians	1
Roads ROWs	8
Misc. Roads - Sec 107 Federal Aid Hwy, RS2477, Mineral Material Sites	1
Power Transmission Lines & Power Facilities	1
Communication Sites – Telephone, Telegraph, Radio Transmission, Global Positioning Systems	1
Water ROWs, Irrigation Facilities	0
Oil & Gas Pipelines, Oil & Gas Facilities	2
Other FLPMA ROWs, Perpetual Easements, Federal Facilities	6
Airport	0
Permit - 302 FLPMA – Misc.	25
Permits Film - 302 FLPMA (popular location (closed))	0

c. Minerals - annual mineral production on site
    i. The alabaster quarries were the only authorized locatable minerals operation (dating to 06/30/1986) in the area prior to designation.
    ii. Mineral materials, primarily sand and gravel and riprap, were extracted from developed pits by counties and commercial entities for local use. There were eight Mineral Material Cases in the monument at designation, and most were Free Use Permits granted to the county.
d. Timber - annual timber production on site (in board-feet, CCF, or similar measure)
    i. No commercial timber production pre/post Monument designation.
    ii. Prior to designation, the Kanab and Escalante Resource Areas were open to firewood cutting.
e. Grazing - annual grazing on site (AUMs active and billed)
    i. Grazing on the Monument Fact Sheet (2.e_GSENM Grazing EIS Fact Sheet 05-08-2017.pdf).
    ii. Grazing AUMs/ Active and billed (2.e._GSENM Grazing AUMs)
    iii. When the Monument was designated, there were 106,645 total AUMs, with 77,400 of these active. Today, there are 106,202 total AUMs and 76,957 are active. In 1999, an adjustment in AUM levels was made to resolve riparian resources issues and address recreation conflicts. The current Livestock Grazing EIS/Plan Amendment process the current prefered alternative will have a slight reduction with 105,765 AUM but an increase of total acres for grazing within the monument.
f. Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available
    i. There are no known true subsistence activities occurring on GSENM or prior to its designation. Recreational fishing, hunting and gathering data from RMIS is not available prior to designation.
g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available
    i. In the five year period prior to designation of GSENM, a total of approximately 358 cultural resource sites were documented in what was to become GSENM, or about 72 sites/year. Following designation, approximately 3,219 sites were documented, or about 161 sites/year. This increase reflects the increased

funding and greater research opportunities following GSENM designation.

ii. In the five year period prior to designation of GSENM, a total of approximately 3991 acres of new cultural resource surveys were conducted in what was to become GSENM, or about 798 acres/year. Following designation, approximately 41, 024 acres of new cultural resource surveys were conducted, or about 2051 acres/year. This increase reflects the increased funding and greater research opportunities following GSENM designation, as well as substantial habitat improvement projects.

4. Information on activities that likely would have occurred annually from the date of designation to the present **if the Monument had not been designated**

The answers to this question are speculative. The question is best answered with qualitative (rather than quantitative) data. As GSENM was designated 20 years ago, the factors affecting such projections are subject to a wide range of variables (many of which are outside of BLM's purview, such as market prices).

a. Recreation - annual visits to site

i. Research by external parties (e.g., Headwaters Economics and Pew Trust reports) indicate that protected landscapes are a draw for visitors and do result in increased visitation to a region. Thus, it is reasonable to conclude that visitation would be less if the lands had not been designated as a monument.

b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)

Commercial speculation depends on the price of commodities.

i. Except for the Upper Valley Field, there have been no oil and gas discoveries within the GSENM. Forty-seven exploratory wells have been drilled; exploration activities were relatively sparse and cover an average of 57 square miles per well (2.c.UGS Circular 93 GS Energy and Mineral Resources.pdf, page iv).

ii. An Application for a Permit to Drill (APD) was submitted for valid existing leases within the Circle Cliffs Unit. The APD was neither approved nor rejected and the lessee allowed the leases to terminate.

iii. Four wildcat oil and gas wells have been drilled on GSENM since designation (1997-1999); none went into production.

iv. Since there have been no discoveries upon which to base production numbers, estimates of the value of production vary widely. The Utah Geological Survey (UGS) projected 2.6 to 10.5 trillion cubic feet (2.6 to 10.5 billion mcf) of coal-bed

methane may be contained in the GSENM. The UGS also projected "…550 million barrels of oil might be contained within tar sands of the monument." In January 1997, it was speculated that total value of coalbed natural gas and petroleum within the GSENM ranged between $2.02 and $18.6 billion (2.c.UGS Circular 93 GS Energy and Mineral Resources.pdf).

v. It is reasonable to conclude absent a national monument designation, the opportunities for additional oil and gas exploration, discovery and development would be based on the viability of development and the economic value and access to distribution.

vi. The Kaiparowits plateau, located within the monument, contains one of the largest coal deposits in the United States. The USGS projected "an original resource" of 62 billion tons of coal with a geologic and mining technology adjusted resource of 30 billion tons (https://pubs.usgs.gov/of/1996/OF96-539). The DEIS for the Smoky Hollow Mine (3.b.4.b.Warm Springs Smoky Hollow PDEIS December 1995_Coveronly.pdf) and the Alton coal mine producing from adjacent private lands provide an example of the development potential.

vii. Andalex coal leases were voluntary sold to the Land and Water Conservation Fund (LWCF) at market value. At the time of designation, the Warm Springs Smoky Hollow DEIS was in progress to analyze the proposed mine. Andalex Resources may or may not have actually decided to develop the coal resources based on varying economic projections for the project, particularly the cost of transporting the coal.

viii. The Utah Geological Service projected 11.36 billion tons are "technologically recoverable" (including 870 million tons in what was previously State of Utah School and Institutional Trust lands (SITLA)(2.c.UGS Circular 93 GS Energy and Mineral Resources.pdf). Recent advances in underground coal mining techniques would likely result in the development of additional large areas of Kaiparowits coal resources not considered minable in the 1990's.

ix. The School Institutional Trust Lands Administration (SITLA) lands were exchanged for cash payments and federal coal and oil and gas properties outside the monument. Absent a monument designation, the federal/SITLA land exchange would likely not have occurred.

x. Applications for rights of way and other energy transmission infrastructure may have continue to occur within the current monument boundaries including

opportunities for mineral development.

c. Minerals - annual mineral production on site
    i. Absent monument designation, it is likely relinquished alabaster claims may have been relocated and additional alabaster mining claims may have been filed. For the alabaster quarries, "Over a 30-year period, the quarries should generate $4.5 million in production." (2.c.UGS Circular 93 GS Energy and Mineral Resources.pdf)
    ii. The Utah Geological Survey mineral report stated, "Various types of metallic-mineral deposits are known to be present in the monument (figure 14). Most of these are small and low-grade with uncertain likelihood of significant development." The report addressed specific minerals with known or potential deposits within the monument, but they determined at that time they were probably not commercial quality due to low, often subeconomic grades and limited tonnage. Thus, it is unlikely that metallic mining would have occurred. (2.c.UGS Circular 93 GS Energy and Mineral Resources.pdf)
    iii. There would most likely be additional mineral material sites for sand and gravel and the existing Free Use Permits granted to Kane County most likely still be in use.

d. Timber - annual timber production on site (in board-feet, CCF, or similar measure)
    i. There is little harvestable lumber on the Monument (a little more than 1,000 acres of ponderosa). The mill harvested trees from the surrounding Dixie National Forest. The closure of the mill in Escalante was not connected to timber harvest on BLM lands.

e. Grazing - annual grazing on site (AUMs Active and billed)
    i. Grazing/ AUMs active and billed would likely have remained the same.
    ii. Grazing is and was managed by applicable laws and regulations. As stated in the Proclamation; "Nothing in this proclamation shall be deemed to affect existing permits or leases for, or levels of, livestock grazing on Federal lands within the monument; existing grazing uses shall continue to be governed by applicable laws and regulations other than this proclamation."
    iii. Although grazing use levels have varied considerably from year to year due to factors like drought, no reductions in permitted livestock grazing use have been made as a result of the Monument designation.

f. Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available
    i. No likely changes or statistically significant differences from the reported RMIS data.

g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available
    i. Less inventory would have likely occurred without the Monument designation. The Resource Areas averaged about 72 sites/year inventoried. After designation, the average was about 161 sites/year.
    ii. More vandalism would have likely occurred without Monument designation. After designation, research, inventory and educational and interpretive outreach programs increased. Between 1996 and 2006, GSENM presented more than 500 talks, classroom visits, field trips and other educational events relating to cultural resources and archeology. Education, increased presence of staff and researchers and improved management likely led to the reduction in numbers of sites looted and rock art panels defaced.
    iii. Less archeological research would have occurred without the Monument Designation. Early GSENM efforts included initiating large, landscape surveys which recorded and documented hundreds of sites.

5. Changes to boundaries - dates and changes in size
    i. Monument Designation September 18, 1996 (1,878,465 acres).
    ii. H.R.3910, Automobile National Heritage Area Act, Public Law 105-355, Nov. 6, 1998, 112 Stat. 3253. 1,884,011 acres, net gain of approximately 5,546 acres (See 5.a.H.R.3910_Automobile National Heritage Area Act Synopsis)
    iii. H.R.377, Public Law 111-11, 2009, Boundary change and purchase for Turnabout Ranch, approximately 25 acres removed from GSENM (See 5.c.GSENM_Boundary_SaleHR3777_PL111-11_Turnabout.pdf)
    iv. Utah Schools and Land Exchange Act 1998: State of Utah School and Institutional Trust Lands Administration lands within the boundaries of GSENM were exchanged. The Federal government received all State inholdings in GSENM (176,699 acres) while the State Received $50 million plus $13 million in unleased coal and approx 139,000 acres including mineral resources. The Federal Government received additional State holdings within other National

Park Service and US Forest Service units. (See 5.1998_Utah school Land Exchange_PL105-335.pdf)

v. Small acquisitions of inholdings, private land located within the Monument boundary, have occurred since designation. The acquisitions have not resulted in boundary adjustments, but have increased total Federal land ownership. More information is available upon request.

6. Public Outreach prior to Designation - outreach activities conducted and opportunities for public comment

i. No public outreach documents specifically related to the designation of Grand Staircase-Escalante National Monument are available. However, the area in southern Utah had long been considered, discussed and evaluated for the possibility of providing greater recognition of and legal protection for its resources. As early as 1936, the National Park Service (NPS) considered making a recommendation to President Roosevelt to designate a 6,968 square mile "Escalante National Monument."

7. Terms of Designation

i. Refer to Proclamation for the terms of designation.

ii. GSENM has additional data describing terms of the designation

- Presidential remarks announcing the designation of GSENM (7.1_Remarks Announcing GSENM_pg1782-2).
- Secretary of the Interior Memo to the President describing the objects and providing a listing of Monument Objects and a bibliography of Monument object data (7.2_8-15-96 Secretarial_Memo).
- Secretary of the Interior Memo to the BLM Director describing Interim Management Direction for GSENM (7.3_11-6-96 Secretarial_Memo).

Boshell, Brandon <bboshell@blm.gov>

Monument Data Call

1 message

Boshell, Brandon <bboshell@blm.gov> Mon, May 22, 2017 at 4:48 PM
To: Rody Cox <r8cox@blm.gov>, Amanda Harrington <asharrin@blm.gov>, Shawnna Dao <sdao@blm.gov>, "Thomas, Kendra" <klthomas@blm.gov>

I just finished wading through the dozen or so emails that have came in and found two additional documents relative to the data call request. The first is an additional information request document I need you to address (items highlighted). The second is GSENM's data call request they submitted last week as they were on a different schedule. Their wording, etc may be of some help.

Thanks

--
Brandon E. Boshell
Assistant Field Manager / Vermilion Cliffs National Monument Manager
BLM - Arizona Strip Field Office
(435) 688-3241

2 attachments

Additional Information Requested Template_5_22_2017.docx
22K

IDRR_NIM_GSENM.docx
34K

New Information Requested on Executive Order on the Review of Designations Under the Antiquities Act

BLM Responses to Additional Questions for [Name] National Monument

a) Any legislative language, including legislation in appropriations bills

[Identify if there is any related legislation regarding your monument]

b) Alternative options available for protection of resources applicable at each monument, such as Native American Graves Protection and Repatriation Act, Paleontological Resources Preservation Act, Archaeological Resources Protection Act, Historic Preservation Act and agency-specific laws and regulations.

The following could provide some options to protect specific resources found in [Name] National Monument. Protection would likely occur on a site-by-site or resource-by-resource basis and also would take a significant amount of time to accomplish under these various laws. These laws may not provide a mechanism to protect all cultural or tribal resources in [Name] National Monument. [Provide any specific information or examples for your monument.]

National Historic Preservation Act, (NHPA)

Native American Graves Protection and Repatriation Act, (NAGPRA)

Paleontological Resources Preservation Act, (PRPA)

Archaeological Resources Protection Act, (ARPA)

American Indian Religious Freedom Act (AIRFA)

c) Designated wilderness areas (name, acreage), Wilderness Study Areas (name if there is one, acreage, type), and/or areas managed to preserve wilderness or roadless characteristics that are not WSAs.

[Insert monument specific response]

d) Outstanding R.S. 2477 claims within a monument – type of road claimed and history

[Insert monument specific response]

e) Maps
[Insert monument specific response]

f) Cultural or historical resources, particularly Tribal, located near a monument but not within the boundary that might benefit from inclusion in the monument

[Insert monument specific response]

g) Other – general questions or comments

[Insert monument specific response regarding any other information that should be considered in the review of your monument]

Call for Data Related to Review of National Monuments under EO 13792 (April 26, 2017)

1. Documents Requested
   a. Resource Management Plans/Land Use Plans
      i. The Monument Management Plan (MMP) and Record of Decision (ROD) is located within this Drive folder (1.GSENM_mgmt_plan.pdf).
      ii. The entire GSENM RMP (DEIS/FEIS/ROD) can be accessed here: https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName=dispatchToPatternPage&currentPageId=94418
      iii. The Livestock Grazing EIS/Plan Amendment has been initiated. The DEIS has been reviewed by the BLM Utah State Office and BLM Washington Office and is nearing public release: https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName=dispatchToPatternPage&currentPageId=100826
      iv. The MMP has also been amended for Greater Sage Grouse habitat conservation (2015), for an electrical transmission line Right-of-Way to support local communities (2011), and for an update to fire management (2005).
   b. Record of Decision
      i. The 1999 MMP and ROD is located within this Drive folder (1.GSENM_mgmt_plan.pdf).
   c. Public Scoping Documents
      i. Grand Staircase-Escalante National Monument's (GSENM) Management Plan included substantial outreach, public scoping and comment periods according to land use planning regulations and policies. See Federal Register Notices in Drive folder (1.c.Federal Register, Volume 64 Issue 145 (Thursday, July 29, 1999).pdf).
      ii. Public Comments and Responses for the MMP FEIS are located within this Drive folder (1.c.GSENM_FEIS_Comments.pdf).
      iii. See also Scoping Report for Livestock Grazing EIS (1.c.GSENM_GrazingEISScopingRpt_Final.pdf) and at: https://eplanning.blm.gov/epl-front-office/projects/lup/69026/89803/107384/2014.05.21_GSENM_ScopingRpt_Final_508.pdf.
      iv. GSENM worked with multiple agencies, tribes and communities and individuals

and responded to more than 6,800 letters commenting on the 2000 MMP. Nearly all site-specific NEPA analyses include public comment periods. Additionally, GSENM has offered multiple opportunities for public engagement in the Livestock Grazing Plan Amendment/EIS including:

- Development of a Situation Assessment by National Riparian Service Team
- Hosted 12 public scoping meetings and/or workshops
- Hosted 3 Socio-economic workshops
- Five newsletters developed along with a "Fact Sheet Series"
- Press releases published in five Utah newspapers
- Maintained Project website with project updates
- Hosted a Biological Soil Crust Forum
- Public Release of Draft Alternatives
- The inclusion of two Action Alternatives in the PDEIS that were derived from external sources
- Hosted 27 Cooperating Agency Meetings; 12 Forage Team Meetings
- Outreach to local tribes
- Monument Advisory Committee Input
- Joint BLM/NPS Programmatic Agreement for Cultural Resources
- Broad Consulting Party Process
- Other meetings: County Coordination, State of Utah, Earthfest

GSENM demonstrates a commitment to continued public engagement in land use planning processes.

d. Presidential Proclamation
    i. Proclamation 6920 of September 18, 1996 is in this folder (1.d.Presidential_Proclamation_6920.pdf).

2. Information on activities permitted at the Monument, including annual levels of activity from the **date of designation to the present**

Designation date for GSENM is September 18, 1996.

a. Recreation - annual visits to site

i. To protect Monument resources and objects and to provide economic opportunities in the local communities, major facilities including the four visitor centers are located in the gateway towns of Kanab, Cannonville, Escalante, and Bigwater.

ii. GSENM provides a large variety of multiple-use recreation opportunities including traditional hiking and camping, hunting, fishing, horseback riding, mountain biking, as well as motorized activities for off-highway vehicles.

iii. Commercial recreation activities (Outfitter and Guides) have risen since Monument designation (2.a._GSENM Commercial_SRP.pdf).

iv. In 2016, 926,235 million visitors came to GSENM.
GSENM uses the Recreation Management Information System (RMIS) to report visitor use, which is calculated using data from multiple traffic counters, permits and visitor counts in the four Visitor Centers. BLM's Recreation Management Information System (RMIS) is generally accepted as the agency's official record, however, RMIS was not available until 1999. Prior to 1999, GSENM aggregated data from the Kanab and Escalante offices. (See:
2.a.GSENM_RecreationData_Excel.xls and
3.a.GSENM_Recreation_MMP_DEIS_Tables.pdf)

b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)

i. All Valid Existing Rights for leasable minerals including coal, and oil and gas are continued.

ii. No new leases have been issued since designation. GSENM has no commercial renewable energy.

iii. The annual production of oil and gas in the GSENM is currently limited to lands in or adjacent to the Upper Valley Unit (UVU) in the north-central area of the GSENM (Attachments: 2.b.Upper Valley Unit Map.pdf; 2.b.Upper Valley GSE Production.pdf; 2.b.Upper Valley Wells in GSENM.xls; and 2.b.UDOGM_O&Gprod_data_Upper Valley.pdf). GSENM shares the Upper Valley Oil Field with the Dixie National Forest; this field accounts for all oil and gas production in GSENM. Attached documents disclose production for the Upper Valley Field. Four wells within the GSENM are currently producing oil and a small amount of gas. The UVU was approved in 1962 and production from the wells peaked in 1972 at 183,133 barrels. In the last 20 years (1997-2016) production

has slowly declined from about 65,828 barrels of oil and no gas annually to 45,538 barrels of oil and 2,357 thousand cubic feet (mcf) of gas. There is no other oil and gas production in GSENM, or Kane and Garfield Counties.

iv. No coal lands have been explored or coal produced within the GSENM since the September 18, 1996 designation. Existing coal leases were voluntarily exchanged for Federal payments totaling $19.5 million (not adjusted for inflation) (2.b.GSENM Coal Lease Cancellation Payments.pdf)

v. 34 oil and gas leases (45,894 acres) are in suspension while a Combined Hydrocarbon Lease (CHL) conversion application is processed.

vi. Information related to energy transmission infrastructure and lands and realty actions is included in the table below:

Grand Staircase-Escalante National Monument Existing Rights-of-Way/Permits/Authorized 09/25/1996 – 05/15/2017	
Existing Withdrawals: PSR, PWR, Bureau of Reclamation, Forest Service Wilderness, Power Site, National Park Service, In Trust for Indians	17
Road ROWs	19
Misc. Roads and Associated Uses - Sec 107 Federal Aid Hwy, Revised Statute 2477, Mineral Material Sites	0
Power Transmission Lines and Power Facilities	20
Communication Sites – Telephone, Telegraph, Radio Transmission, Global Positioning Systems	15
Water ROWs, Irrigation Facilities	14
Oil and Gas Pipelines, Oil and Gas Facilities	5

Other FLPMA ROWs, Perpetual Easements, Federal Facilities	2
Airport	0
Permit - 302 FLPMA – Misc.	0
Permits Film - 302 FLPMA (popular location (closed))	54

c. Minerals - annual mineral production on site

i. Mineral materials

- No new Free Use, commercial, or over-the-counter permits have been issued since Monument designation.
- Valid existing permits, including those in Title 23 (3 Federal Highway Rights of Way), continue to be recognized until permit expiration.
- Significant quantities of gravel and riprap from existing pits continue to be provided for Federal Highways projects, primarily to Utah Department of Transportation.
- According to UGS Circular 93, January 1997, "A Preliminary Assessment of Energy and Mineral Resources within the Grand Staircase-Escalante National Monument" (2.c.UGS Circular 93 GS Energy and Mineral Resources.pdf) there were five small mining operations on unpatented mining claims, four of which were active alabaster quarries and one, a suspended operation for petrified wood. Annual production of the alabaster was about 300 tons worth $500 per ton ($150,000/yr). These claimants failed to pay the required annual filings and therefore, the claims were terminated. The BLM's decision to close the claims was upheld by IBLA in March 2008. Since that time, there have been no mining law operations within the monument.

ii. Locatable Minerals

- No new mining claims were issued after Monument designation, however existing claims and active mines were allowed to continue. (List of active mines in MMP DEIS located within this Drive folder 2.c. MMP_DEIS Table 3.10_Locatables.pdf).

d. Timber - annual timber production on site (in board-feet, CCF, or similar measure)
    i. No commercial timber production pre/post Monument designation.
    ii. GSENM does allow continued firewood cutting in two forestry product areas.
e. Grazing - annual grazing on site (AUMs active and billed)
    i. Grazing on the Monument Fact Sheet (2.e_GSENM Grazing EIS Fact Sheet 05-08-2017.pdf).
    ii. Grazing AUMs/ Active and billed (2.e._GSENM Grazing AUMs).
    iii. When the Monument was designated, there were 106,645 total AUMs, with 77,400 of these active. Today, there are 106,202 total AUMs and 76,957 are active. In 1999, an adjustment in AUM levels was made to resolve riparian resources issues and address recreation conflicts. In the current Livestock Grazing EIS/Plan Amendment process the current prefered alternative will have a slight reduction with 105,765 AUM but an increase of total acres for grazing within the monument.

f. Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available
    i. **Subsistence activities** are those that provide the bare essentials for living: food, water, and shelter. The Federal Subsistence Management Program provides opportunities for subsistence way of life in Alaska on federal public lands and waters. There are no formal subsistence programs outside of Alaska. There are no known true subsistence activities occurring on GSENM or prior to its designation. GSENM does provide for the collection of certain natural materials by Native American Indians, under BLM permit. RMIS data provides the number of permitted/guided and recreational hunting activities, fishing activities and gathering activities (See: 2.a.GSENM_RecreationData_Excel.xls). These numbers do not reflect the actual number of licensed hunters/fishermen. That data is available from the State of Utah Division of Wildlife Resources. Outside of developed recreation sites, the entire GSENM is open for hunting and fishing, which is regulated by the State of Utah Division of Wildlife Resources.
g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available
    i. Archeological/cultural data is provided in the following Utah Division of State History Maps in the google drive (2.g.1_GSENM_SiteDensity,

2.g.2_GSENM_Inventories, 2.g.3_GSENM_ArchSites, 2.g.4_GSENM_ArchNumofSites).

ii. Archaeological surveys carried out to date, show extensive use of places within the monument by ancient Native American cultures and a contact point for Anasazi and Fremont cultures. The cultural resources discovered so far in the monument are outstanding in their variety of cultural affiliation, type and distribution. Hundreds of recorded sites include rock art panels, occupation sites, campsites and granaries. Cultural sites include historic and prehistoric sites, Traditional Cultural Properties, Native American Sacred Sites and cultural landscapes.

iii. According to the Utah State Historic Preservation Office (SHPO), as of March 6, 2017, there are 3,985 recorded archaeological sites within the Grand Staircase-Escalante National Monument (GSENM)(2.g.4_GSENM_ArchNumofSites). However, the GSENM staff estimates that there are more likely around 6,000 recorded archaeological sites within the GSENM, due to a records backlog. This is with only five to seven percent of the Monument surveyed.

iv. Cultural Values (Tribal): Prehistoric archaeological sites in the GSENM include pottery and stone tool (lithic) scatters, the remains of cooking features (hearths), storage features such as adobe granaries and subsurface stone lined granaries, prehistoric roads, petroglyphs, pictographs and cliff dwellings. Historic sites include historic debris scatters, roads, trails, fences, inscriptions, and structures. Following the designation of GSENM, consultations were initiated with the Native American tribes associated with the GSENM area, including the Hopi, the Kaibab Paiute, the San Juan Paiute, the Paiute Indian Tribes of Utah, the Zuni, and the Ute, and the Navajo. Over the past 20 years, the Hopi and the Kaibab Paiute have been most closely associated with the Monument and most responsive to continued consultations, as the GSENM area is central to the historic and prehistoric territories of these two tribes. All tribes considered the Monument area to be culturally important; the Hopi (as the modern descendants of the Ancestral Puebloans), for example, can trace the migrations of at least twelve clans through what is today GSENM (Bernardini 2005). The tribal connections to this land are probably best described by an example from the Kaibab Paiute, as related to ethnographers from the University of Arizona, as follows (Stoffle et al 2001): "*The Southern Paiute people continue to maintain a*

strong attachment to the holy lands of their ethnic group as well as to their own local territory. These attachments continued even though Paiute sovereignty has been lost over portions of these lands due to Navajo ethnic group expansion, encroachment by Euro Americans, and Federal government legislation. Despite the loss of Paiute sovereignty over most traditional lands, Southern Paiute people continue to affiliate themselves with these places as symbols of their common ethnic identity. Additionally, all Southern Paiute people continue to perform traditional ceremonies along with the menarche and first childbirth rites of passage rituals. The locations at which these ceremonies and rituals have been or are currently performed become transformed from secular "sites" to highly sacred locations or places. By virtue of the transformation of locations into sacred places, Southern Paiute people reaffirm their ties to traditional lands because they have carried out their sacred responsibilities as given to them by the Creator."

v. **Cultural values (Ranching)** Local ranching began in the 1860s, and became a major focus of area livelihood and increased settlement in the 1870s. Ranching was initially small scale and for local subsistence, but the herds quickly grew so that by the late 1800s the raising of cattle, sheep, and goats was of major economic importance. Ranching and subsistence farming was historically the backbone of the local economies, and this is still reflected in the views of the modern communities surrounding GSENM. In modern times the economic importance of ranching has somewhat diminished, but the culture of, and past history of, livestock grazing and ranching is one of the important "glues" that binds local communities and families in the GSENM area.

3. Information on activities occurring during the **five years prior to designation**

a. Recreation - annual visits to site

i. The BLM transitioned to RMIS in 1999. Data prior to 1999 is not available in the same reporting mechanism as from 1999-Present. GSENM did report visitor use beginning in FY97. (See: 2.a.GSENM_RecreationData_Excel.xls and 3.a.GSENM_Recreation_MMP_DEIS_Tables.pdf).

Overall visitation increased prior to designation and the projecting trends based on the historical information would see a continued rise of visitors seeking recreational opportunities. Just prior to designation Escalante Canyon received

373,200 visitors in 1994, 384,800 visitors in 1995 and 456,400 in 1996.

b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)
   i. The Upper Valley Oil Field was in production prior to designation; no other oil and gas production existed in Kane and Garfield Counties. From 1992 until 1996, 336,313 barrels of oil were produced in the GSENM. No natural gas was produced during that time. (2.b.Upper Valley GSE Production.pdf).
   ii. No coal was produced from the GSENM in the five years preceding designation. A regional analysis/FEIS for mining was completed in 1979 (3.b.FINAL EIS - Dev of Coal Resources in Southern Utah Title Pages.pdf). Exploration activities and planning for mining operations continued from the 1980's until the monument designation.
      - 64 coal leases (~168,000 acres) were committed and a plan was submitted for Andalex Resources' Smoky Hollow Mine. The plan proposed mining on 23,799 acres of the area leased in GSENM. In the mid-1990's an EIS was initiated (3.b.4.b.Warm Springs Smoky Hollow PDEIS December 1995_Coveronly.pdf).
      - 600+ exploration drill holes were completed prior to GSENM designation to defined the coal geology to plan for underground mines (See 3.b.BLM 1996-1997 Kaiparowits Coal Report - DRAFT.pdf and https://pubs.usgs.gov/of/1996/OF96-539)
   iii. Information related to energy transmission infrastructure and lands and realty actions is included in the table below:

Grand Staircase-Escalante National Monument
Existing Rights-of-Way/Permits/All Dispositions
Authorized/Closed/Relinquished/Withdrawn/Expired/Terminated/Cancelled/Pending/Rejected/Void
01/01/1991 – 09/24/1996
(In March 1999, BLM added Case Recordation components to the LR2000 Database System; therefore, some of the pre-LR2000 data may remain in the Status Database)

Existing Withdrawals: PSR, PWR, Bureau of Reclamation, Forest Service Wilderness, Power Site, National Park Service, In Trust for Indians	1
Roads ROWs	8
Misc. Roads - Sec 107 Federal Aid Hwy, RS2477, Mineral Material Sites	1
Power Transmission Lines & Power Facilities	1
Communication Sites – Telephone, Telegraph, Radio Transmission, Global Positioning Systems	1
Water ROWs, Irrigation Facilities	0
Oil & Gas Pipelines, Oil & Gas Facilities	2
Other FLPMA ROWs, Perpetual Easements, Federal Facilities	6
Airport	0
Permit - 302 FLPMA – Misc.	25
Permits Film - 302 FLPMA (popular location (closed))	0

c. Minerals - annual mineral production on site
    i. The alabaster quarries were the only authorized locatable minerals operation (dating to 06/30/1986) in the area prior to designation.
    ii. Mineral materials, primarily sand and gravel and riprap, were extracted from developed pits by counties and commercial entities for local use. There were eight Mineral Material Cases in the monument at designation, and most were Free Use Permits granted to the county.
d. Timber - annual timber production on site (in board-feet, CCF, or similar measure)
    i. No commercial timber production pre/post Monument designation.
    ii. Prior to designation, the Kanab and Escalante Resource Areas were open to firewood cutting.
e. Grazing - annual grazing on site (AUMs active and billed)
    i. Grazing on the Monument Fact Sheet (2.e_GSENM Grazing EIS Fact Sheet 05-08-2017.pdf).
    ii. Grazing AUMs/ Active and billed (2.e._GSENM Grazing AUMs)
    iii. When the Monument was designated, there were 106,645 total AUMs, with 77,400 of these active. Today, there are 106,202 total AUMs and 76,957 are active. In 1999, an adjustment in AUM levels was made to resolve riparian resources issues and address recreation conflicts. The current Livestock Grazing EIS/Plan Amendment process the current prefered alternative will have a slight reduction with 105,765 AUM but an increase of total acres for grazing within the monument.
f. Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available
    i. There are no known true subsistence activities occurring on GSENM or prior to its designation. Recreational fishing, hunting and gathering data from RMIS is not available prior to designation.
g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available
    i. In the five year period prior to designation of GSENM, a total of approximately 358 cultural resource sites were documented in what was to become GSENM, or about 72 sites/year. Following designation, approximately 3,219 sites were documented, or about 161 sites/year. This increase reflects the increased

funding and greater research opportunities following GSENM designation.

ii. In the five year period prior to designation of GSENM, a total of approximately 3991 acres of new cultural resource surveys were conducted in what was to become GSENM, or about 798 acres/year. Following designation, approximately 41, 024 acres of new cultural resource surveys were conducted, or about 2051 acres/year. This increase reflects the increased funding and greater research opportunities following GSENM designation, as well as substantial habitat improvement projects.

4. Information on activities that likely would have occurred annually from the date of designation to the present **if the Monument had not been designated**

The answers to this question are speculative. The question is best answered with qualitative (rather than quantitative) data. As GSENM was designated 20 years ago, the factors affecting such projections are subject to a wide range of variables (many of which are outside of BLM's purview, such as market prices).

a. Recreation - annual visits to site

i. Research by external parties (e.g., Headwaters Economics and Pew Trust reports) indicate that protected landscapes are a draw for visitors and do result in increased visitation to a region. Thus, it is reasonable to conclude that visitation would be less if the lands had not been designated as a monument.

b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)

Commercial speculation depends on the price of commodities.

i. Except for the Upper Valley Field, there have been no oil and gas discoveries within the GSENM. Forty-seven exploratory wells have been drilled; exploration activities were relatively sparse and cover an average of 57 square miles per well (2.c.UGS Circular 93 GS Energy and Mineral Resources.pdf, page iv).

ii. An Application for a Permit to Drill (APD) was submitted for valid existing leases within the Circle Cliffs Unit. The APD was neither approved nor rejected and the lessee allowed the leases to terminate.

iii. Four wildcat oil and gas wells have been drilled on GSENM since designation (1997-1999); none went into production.

iv. Since there have been no discoveries upon which to base production numbers, estimates of the value of production vary widely. The Utah Geological Survey (UGS) projected 2.6 to 10.5 trillion cubic feet (2.6 to 10.5 billion mcf) of coal-bed

methane may be contained in the GSENM. The UGS also projected "…550 million barrels of oil might be contained within tar sands of the monument." In January 1997, it was speculated that total value of coalbed natural gas and petroleum within the GSENM ranged between $2.02 and $18.6 billion (2.c.UGS Circular 93 GS Energy and Mineral Resources.pdf).

v. It is reasonable to conclude absent a national monument designation, the opportunities for additional oil and gas exploration, discovery and development would be based on the viability of development and the economic value and access to distribution.

vi. The Kaiparowits plateau, located within the monument, contains one of the largest coal deposits in the United States. The USGS projected "an original resource" of 62 billion tons of coal with a geologic and mining technology adjusted resource of 30 billion tons (https://pubs.usgs.gov/of/1996/OF96-539). The DEIS for the Smoky Hollow Mine (3.b.4.b.Warm Springs Smoky Hollow PDEIS December 1995_Coveronly.pdf) and the Alton coal mine producing from adjacent private lands provide an example of the development potential.

vii. Andalex coal leases were voluntary sold to the Land and Water Conservation Fund (LWCF) at market value. At the time of designation, the Warm Springs Smoky Hollow DEIS was in progress to analyze the proposed mine. Andalex Resources may or may not have actually decided to develop the coal resources based on varying economic projections for the project, particularly the cost of transporting the coal.

viii. The Utah Geological Service projected 11.36 billion tons are "technologically recoverable" (including 870 million tons in what was previously State of Utah School and Institutional Trust lands (SITLA)(2.c.UGS Circular 93 GS Energy and Mineral Resources.pdf). Recent advances in underground coal mining techniques would likely result in the development of additional large areas of Kaiparowits coal resources not considered minable in the 1990's.

ix. The School Institutional Trust Lands Administration (SITLA) lands were exchanged for cash payments and federal coal and oil and gas properties outside the monument. Absent a monument designation, the federal/SITLA land exchange would likely not have occurred.

x. Applications for rights of way and other energy transmission infrastructure may have continue to occur within the current monument boundaries including

opportunities for mineral development.

c. Minerals - annual mineral production on site
    i. Absent monument designation, it is likely relinquished alabaster claims may have been relocated and additional alabaster mining claims may have been filed. For the alabaster quarries, "Over a 30-year period, the quarries should generate $4.5 million in production." (2.c.UGS Circular 93 GS Energy and Mineral Resources.pdf)
    ii. The Utah Geological Survey mineral report stated, "Various types of metallic-mineral deposits are known to be present in the monument (figure 14). Most of these are small and low-grade with uncertain likelihood of significant development." The report addressed specific minerals with known or potential deposits within the monument, but they determined at that time they were probably not commercial quality due to low, often subeconomic grades and limited tonnage. Thus, it is unlikely that metallic mining would have occurred. (2.c.UGS Circular 93 GS Energy and Mineral Resources.pdf)
    iii. There would most likely be additional mineral material sites for sand and gravel and the existing Free Use Permits granted to Kane County most likely still be in use.

d. Timber - annual timber production on site (in board-feet, CCF, or similar measure)
    i. There is little harvestable lumber on the Monument (a little more than 1,000 acres of ponderosa). The mill harvested trees from the surrounding Dixie National Forest. The closure of the mill in Escalante was not connected to timber harvest on BLM lands.

e. Grazing - annual grazing on site (AUMs Active and billed)
    i. Grazing/ AUMs active and billed would likely have remained the same.
    ii. Grazing is and was managed by applicable laws and regulations. As stated in the Proclamation; "Nothing in this proclamation shall be deemed to affect existing permits or leases for, or levels of, livestock grazing on Federal lands within the monument; existing grazing uses shall continue to be governed by applicable laws and regulations other than this proclamation."
    iii. Although grazing use levels have varied considerably from year to year due to factors like drought, no reductions in permitted livestock grazing use have been made as a result of the Monument designation.

f. Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available
    i. No likely changes or statistically significant differences from the reported RMIS data.

g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available
    i. Less inventory would have likely occurred without the Monument designation. The Resource Areas averaged about 72 sites/year inventoried. After designation, the average was about 161 sites/year.
    ii. More vandalism would have likely occurred without Monument designation. After designation, research, inventory and educational and interpretive outreach programs increased. Between 1996 and 2006, GSENM presented more than 500 talks, classroom visits, field trips and other educational events relating to cultural resources and archeology. Education, increased presence of staff and researchers and improved management likely led to the reduction in numbers of sites looted and rock art panels defaced.
    iii. Less archeological research would have occurred without the Monument Designation. Early GSENM efforts included initiating large, landscape surveys which recorded and documented hundreds of sites.

5. Changes to boundaries - dates and changes in size
    i. Monument Designation September 18, 1996 (1,878,465 acres).
    ii. H.R.3910, Automobile National Heritage Area Act, Public Law 105-355, Nov. 6, 1998, 112 Stat. 3253. 1,884,011 acres, net gain of approximately 5,546 acres (See 5.a.H.R.3910_Automobile National Heritage Area Act Synopsis)
    iii. H.R.377, Public Law 111-11, 2009, Boundary change and purchase for Turnabout Ranch, approximately 25 acres removed from GSENM (See 5.c.GSENM_Boundary_SaleHR3777_PL111-11_Turnabout.pdf)
    iv. Utah Schools and Land Exchange Act 1998: State of Utah School and Institutional Trust Lands Administration lands within the boundaries of GSENM were exchanged. The Federal government received all State inholdings in GSENM (176,699 acres) while the State Received $50 million plus $13 million in unleased coal and approx 139,000 acres including mineral resources. The Federal Government received additional State holdings within other National

Park Service and US Forest Service units. (See 5.1998_Utah school Land Exchange_PL105-335.pdf)

v. Small acquisitions of inholdings, private land located within the Monument boundary, have occurred since designation. The acquisitions have not resulted in boundary adjustments, but have increased total Federal land ownership. More information is available upon request.

6. Public Outreach prior to Designation - outreach activities conducted and opportunities for public comment

i. No public outreach documents specifically related to the designation of Grand Staircase-Escalante National Monument are available. However, the area in southern Utah had long been considered, discussed and evaluated for the possibility of providing greater recognition of and legal protection for its resources. As early as 1936, the National Park Service (NPS) considered making a recommendation to President Roosevelt to designate a 6,968 square mile "Escalante National Monument."

7. Terms of Designation

i. Refer to Proclamation for the terms of designation.

ii. GSENM has additional data describing terms of the designation

- Presidential remarks announcing the designation of GSENM (7.1_Remarks Announcing GSENM_pg1782-2).
- Secretary of the Interior Memo to the President describing the objects and providing a listing of Monument Objects and a bibliography of Monument object data (7.2_8-15-96 Secretarial_Memo).
- Secretary of the Interior Memo to the BLM Director describing Interim Management Direction for GSENM (7.3_11-6-96 Secretarial_Memo).

Boshell, Brandon <bboshell@blm.gov>

Fwd: Monument Review (IMPORTANT PLEASE READ)

1 message

Boshell, Brandon <bboshell@blm.gov> Tue, May 23, 2017 at 5:17 PM
To: "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>

---------- Forwarded message ----------
From: **Cox, Rody** <r8cox@blm.gov>
Date: Tue, May 23, 2017 at 3:23 PM
Subject: Re: Monument Review (IMPORTANT PLEASE READ)
To: "Boshell, Brandon" <bboshell@blm.gov>

Brandon,

Please see the attached responses for the data call.

--
Rody Cox
Geologist
Arizona Strip Field Office
(435) 688-3244
r8cox@blm.gov

On Mon, May 22, 2017 at 4:17 PM, Boshell, Brandon <bboshell@blm.gov> wrote:

> Attached is the executive order concerning the monument review with the initial data request. Highlighted in the word doc are the portions I need your help addressing. The primary work load is for Rody but there is something concerning "energy transmission infrastructure, etc". I know this is very short notice but would appreciate it if you could turn this around asap. I have to have it complete by Friday, but have RMP evals wed and thur.
>
> Thanks
> Brandon
>
> ---------- Forwarded message ----------
> From: **Mahoney, Kenneth** <kmahoney@blm.gov>
> Date: Mon, May 15, 2017 at 8:00 PM
> Subject: Fwd: Monument Review (IMPORTANT PLEASE READ)
> To: "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>, Brandon Boshell <bboshell@blm.gov>, Wayne Monger <dmonger@blm.gov>, Claire Crow <ccrow@blm.gov>
> Cc: Timothy Burke <tburke@blm.gov>, Lorraine M Christian <lmchrist@blm.gov>, Leon Thomas Jr <l70thoma@blm.gov>, Edward Kender <ekender@blm.gov>, "Anthony (Scott) Feldhausen" <afeldhausen@blm.gov>, Melissa Warren <mdwarren@blm.gov>, Raymond Suazo <rmsuazo@blm.gov>, Deborah Rawhouser <drawhous@blm.gov>, Roxie Trost <rtrost@blm.gov>, Karen McKinley <kmckinley@blm.gov>
>
> Monument Managers,
>
> Please see the email from State Director Ray Suazo and also the forwarded email from AD-400 Chris McAlear regarding the subject of monument review.
>
> The attached Word document file "Initial Data Request Related to Review of National Monuments" contains a list of items for which information needs to be gathered for your national monument. Please begin to compile the requested information. I will contact each of you on the afternoon of Tuesday May 23 for an interim check on the progress of the data collection. All data collection should be completed and submitted to me by Friday May 26. I will review and upload the data the following week to meet the June 2 due date for the data call.

I will also forward to you the direction from DSD-Communications Amber Cargile regarding media inquiries and public comments relating to Executive Order 13792. Please assure that staff are also aware of this direction.

Let me know of any questions about the monument review. Thank you for your assistance in responding to this information request.

Ken Mahoney <> Program Lead:
National Monuments <> National Conservation Areas
Wilderness <> Wild & Scenic Rivers
Arizona State Office <> Bureau of Land Management
602-417-9238 <> kmahoney@blm.gov

---------- Forwarded message ----------
From: **Suazo, Raymond** <rmsuazo@blm.gov>
Date: Fri, May 12, 2017 at 1:54 PM
Subject: Fwd: Monument Review (IMPORTANT PLEASE READ)
To: Kenneth Mahoney <kmahoney@blm.gov>, Roxie Trost <rtrost@blm.gov>, Karen Mckinley <kmckinley@blm.gov>, Deborah Rawhouser <drawhous@blm.gov>

FYI, I will provide Ken's name as the lead who will coordinate for AZ. My preference is also that Ken be the person that loads the data in an effort to have thorough review and consistency. However, we can consider over the weekend and make a final determination on Monday.

Ray

---------- Forwarded message ----------
From: **McAlear, Christopher** <cmcalear@blm.gov>
Date: Fri, May 12, 2017 at 1:16 PM
Subject: Monument Review (IMPORTANT PLEASE READ)
To: Edwin Roberson <eroberso@blm.gov>, "Bilbao, Anita" <abilbao@blm.gov>, Amy Lueders <alueders@blm.gov>, Aden Seidlitz <aseidlitz@blm.gov>, Jerome Perez <jperez@blm.gov>, Joseph Stout <j2stout@blm.gov>, "Suazo, Raymond" <rmsuazo@blm.gov>, Deb Rawhouser <drawhous@blm.gov>, Ruth Welch <rwelch@blm.gov>, Greg Shoop <gshoop@blm.gov>, Marci Todd <m1todd@blm.gov>, "Petersen, Paul" <ppeterse@blm.gov>, Jamie Connell <jconnell@blm.gov>, Theresa Hanley <thanley@blm.gov>, Timothy Murphy <t50murph@blm.gov>, Peter Ditton <pditton@blm.gov>
Cc: John Ruhs <jruhs@blm.gov>, Sally Butts <sbutts@blm.gov>, Peter Mali <pmali@blm.gov>, Nikki Moore <nmoore@blm.gov>, Timothy Fisher <tjfisher@blm.gov>

State Directors:

National Conservation Lands received a data call to respond to Executive Order 13792 of April 26, 2017 (82 FR 20429, May 1, 2017) directing the Secretary of Interior to review certain National Monument designations or expansions under the Antiquities Act of 1906, 54 U.S.C. 320301-320303 (Act) (see attached).

The timeline for this data call is a short turnaround for all monuments, due by June 2, 2017, with the exception for both Grand Staircase Escalate National Monument and Bears Ears National Monument with an expedited due date of May 17, 2017. WO-410 needs assistance with this data call through the National Conservation Lands State Leads and from the affected Monument Managers, or the State Directors' designee, to gather up the desired information. Please review the attached word document for list of needed information and the list of National Monuments under review. We are expected to provide available data and information but not to create data or information or speculate on responses.

A Google Drive document folder is being established to easily transfer electronic files for each of the National Monuments under review. The desire is to limit access to assure consistent data collection. WO-410 is asking each

of the States to provide names needing access for each National Monument and the lead from your state to oversee/coordinate this data call.

The two Utah National Monuments will help us to streamline the process and provide more specific guidance for the other National Monuments and the work load associated with this request. A follow-up email will provide more direction for all other BLM National Monuments under review later next week.

Please provide Timothy Fisher (tjfisher@blm.gov) a list of contacts for each monument who will need access to the google drive folder **by COB Tuesday May 16, 2017**.

The National Conservation Lands program appreciates your support in assisting with this important data call

Thank you!

Chris m

Christopher McAlear
Assistant Director
National Conservation Lands
and Community Partnerships
(W) 202-208-4731
(C) 775-722-9539

--

Brandon E. Boshell
Assistant Field Manager / Vermilion Cliffs National Monument Manager
BLM - Arizona Strip Field Office
(435) 688-3241

--

Brandon E. Boshell
Assistant Field Manager / Vermilion Cliffs National Monument Manager
BLM - Arizona Strip Field Office
(435) 688-3241

Initial Data Request Related to Review of National Monuments RC.docx
15K

Call for Data Related to Review of National Monuments under EO 13792 (April 26, 2017)

Grand Canyon-Parashant National Monument

2. Information on activities permitted at the Monument, including annual levels of activity from the **date of designation to the present**

    b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)

None, there are no renewable resources or known coal, oil and gas resources within the Monument.

    c. Minerals-annual mineral production on site

Locatable minerals – None, although active mining claims are subject to valid existing rights.
Salable minerals – An estimated 2,000 cubic yards per year of gravel is used from existing material sites by the BLM for road maintenance. No new permits or sales contracts were issued.

3. Information on activities occurring during the **5 years prior to designation**

    b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)

None, there are no renewable resources or known coal, oil and gas resources within the Monument.

    c. Minerals-annual mineral production on site

Locatable minerals – None, although there were three notices of intent for exploration that were reclaimed and closed after the Monument was designated. There were no mines or plans of operations.
Salable Minerals – An estimated 2,000 cubic yards per year of gravel was used by the BLM and Mohave County for road maintenance. There were three Free Use Permits for road maintenance that expired and were not renewed after the Monument was designated.

4. Information on activities that likely would have occurred annually from the date of designation to the present **if the Monument had not been designated**

    b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)

None, there are no renewable resources or known coal, oil and gas resources within the Monument.

    c. Minerals-annual mineral production on site

Locatable minerals – None, although it is likely people would stake mining claims and explore for locatable minerals which could lead to mine development and production.
Salable Minerals – An estimated 2,000 cubic yards per year of gravel would be used by the BLM and Mohave County for road maintenance. Also, it is likely new mineral material sites would be permitted.

Vermilion Cliffs National Monument

2. Information on activities permitted at the Monument, including annual levels of activity from the **date of designation to the present**

    b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)

None, there are no renewable resources or known coal, oil and gas resources within the Monument.

    c. Minerals-annual mineral production on site

Locatable minerals – None, although active mining claims are subject to valid existing rights.
Salable Minerals – An estimated 1,000 cubic yards per year of gravel is used from existing material sites by the BLM for road maintenance. No new permits or sales contracts were issued.

3. Information on activities occurring during the **5 years prior to designation**

    b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)

None, there are no renewable resources or known coal, oil and gas resources within the Monument.

    c. Minerals-annual mineral production on site

Locatable minerals – None and there were no exploration notices or mine plans of operations.
Salable Minerals – An estimated 1,000 cubic yards per year of gravel was used by the BLM for road maintenance.

4. Information on activities that likely would have occurred annually from the date of designation to the present **if the Monument had not been designated**

    b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)

None, there are no renewable resources or known coal, oil and gas resources within the Monument.

    c. Minerals-annual mineral production on site

Locatable minerals – None, although it is likely people would stake mining claims and explore for locatable minerals which could lead to mine development and production.
Salable Minerals – An estimated 1,000 cubic yards per year of gravel would be used by the BLM for road maintenance.

Boshell, Brandon <bboshell@blm.gov>

Re: Monument Review (IMPORTANT PLEASE READ)

1 message

Boshell, Brandon <bboshell@blm.gov> Tue, May 23, 2017 at 5:48 PM
To: "Cox, Rody" <r8cox@blm.gov>

Big thanks!!!!

On Tue, May 23, 2017 at 3:23 PM, Cox, Rody <r8cox@blm.gov> wrote:

> Brandon,
>
> Please see the attached responses for the data call.
>
> --
> Rody Cox
> Geologist
> Arizona Strip Field Office
> (435) 688-3244
> r8cox@blm.gov
>
> On Mon, May 22, 2017 at 4:17 PM, Boshell, Brandon <bboshell@blm.gov> wrote:
>
> > Attached is the executive order concerning the monument review with the initial data request. Highlighted in the word doc are the portions I need your help addressing. The primary work load is for Rody but there is something concerning "energy transmission infrastructure, etc". I know this is very short notice but would appreciate it if you could turn this around asap. I have to have it complete by Friday, but have RMP evals wed and thur.
> >
> > Thanks
> > Brandon
> >
> > ---------- Forwarded message ----------
> > From: **Mahoney, Kenneth** <kmahoney@blm.gov>
> > Date: Mon, May 15, 2017 at 8:00 PM
> > Subject: Fwd: Monument Review (IMPORTANT PLEASE READ)
> > To: "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>, Brandon Boshell <bboshell@blm.gov>, Wayne Monger <dmonger@blm.gov>, Claire Crow <ccrow@blm.gov>
> > Cc: Timothy Burke <tburke@blm.gov>, Lorraine M Christian <lmchrist@blm.gov>, Leon Thomas Jr <l70thoma@blm.gov>, Edward Kender <ekender@blm.gov>, "Anthony (Scott) Feldhausen" <afeldhausen@blm.gov>, Melissa Warren <mdwarren@blm.gov>, Raymond Suazo <rmsuazo@blm.gov>, Deborah Rawhouser <drawhous@blm.gov>, Roxie Trost <rtrost@blm.gov>, Karen McKinley <kmckinley@blm.gov>
> >
> > Monument Managers,
> >
> > Please see the email from State Director Ray Suazo and also the forwarded email from AD-400 Chris McAlear regarding the subject of monument review.
> >
> > The attached Word document file "Initial Data Request Related to Review of National Monuments" contains a list of items for which information needs to be gathered for your national monument. Please begin to compile the requested information. I will contact each of you on the afternoon of Tuesday May 23 for an interim check on the progress of the data collection. All data collection should be completed and submitted to me by Friday May 26. I will review and upload the data the following week to meet the June 2 due date for the data call.
> >
> > I will also forward to you the direction from DSD-Communications Amber Cargile regarding media inquiries and public comments relating to Executive Order 13792. Please assure that staff are also aware of this direction.
> >
> > Let me know of any questions about the monument review. Thank you for your assistance in responding to this information request.

Ken Mahoney <> Program Lead:
National Monuments <> National Conservation Areas
Wilderness <> Wild & Scenic Rivers
Arizona State Office <> Bureau of Land Management
602-417-9238 <> kmahoney@blm.gov

---------- Forwarded message ----------
From: **Suazo, Raymond** <rmsuazo@blm.gov>
Date: Fri, May 12, 2017 at 1:54 PM
Subject: Fwd: Monument Review (IMPORTANT PLEASE READ)
To: Kenneth Mahoney <kmahoney@blm.gov>, Roxie Trost <rtrost@blm.gov>, Karen Mckinley <kmckinley@blm.gov>, Deborah Rawhouser <drawhous@blm.gov>

FYI, I will provide Ken's name as the lead who will coordinate for AZ. My preference is also that Ken be the person that loads the data in an effort to have thorough review and consistency. However, we can consider over the weekend and make a final determination on Monday.

Ray

---------- Forwarded message ----------
From: **McAlear, Christopher** <cmcalear@blm.gov>
Date: Fri, May 12, 2017 at 1:16 PM
Subject: Monument Review (IMPORTANT PLEASE READ)
To: Edwin Roberson <eroberso@blm.gov>, "Bilbao, Anita" <abilbao@blm.gov>, Amy Lueders <alueders@blm.gov>, Aden Seidlitz <aseidlitz@blm.gov>, Jerome Perez <jperez@blm.gov>, Joseph Stout <j2stout@blm.gov>, "Suazo, Raymond" <rmsuazo@blm.gov>, Deb Rawhouser <drawhous@blm.gov>, Ruth Welch <rwelch@blm.gov>, Greg Shoop <gshoop@blm.gov>, Marci Todd <m1todd@blm.gov>, "Petersen, Paul" <ppeterse@blm.gov>, Jamie Connell <jconnell@blm.gov>, Theresa Hanley <thanley@blm.gov>, Timothy Murphy <t50murph@blm.gov>, Peter Ditton <pditton@blm.gov>
Cc: John Ruhs <jruhs@blm.gov>, Sally Butts <sbutts@blm.gov>, Peter Mali <pmali@blm.gov>, Nikki Moore <nmoore@blm.gov>, Timothy Fisher <tjfisher@blm.gov>

State Directors:

National Conservation Lands received a data call to respond to Executive Order 13792 of April 26, 2017 (82 FR 20429, May 1, 2017) directing the Secretary of Interior to review certain National Monument designations or expansions under the Antiquities Act of 1906, 54 U.S.C. 320301-320303 (Act) (see attached).

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Please provide Timothy Fisher (tjfisher@blm.gov) a list of contacts for each monument who will need access to the google drive folder **by COB Tuesday May 16, 2017**.

The National Conservation Lands program appreciates your support in assisting with this important data call

Thank you!

Chris m

Christopher McAlear
Assistant Director
National Conservation Lands
and Community Partnerships
(W) 202-208-4731
(C) 775-722-9539

--

Brandon E. Boshell
Assistant Field Manager / Vermilion Cliffs National Monument Manager
BLM - Arizona Strip Field Office
(435) 688-3241

--

Brandon E. Boshell
Assistant Field Manager / Vermilion Cliffs National Monument Manager
BLM - Arizona Strip Field Office
(435) 688-3241

Boshell, Brandon <bboshell@blm.gov>

Re: New Monument Review Cultural Numbers

1 message

Boshell, Brandon <bboshell@blm.gov> Wed, May 24, 2017 at 1:16 PM
To: "Van Alfen, David" <dvanalfe@blm.gov>

Thanks Dave!!!!!

One question for you. The data call states, "d. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available"

Do you have any suggestion or items for the part that states "list of cultural uses/values for site"

On Wed, May 24, 2017 at 8:07 AM, Van Alfen, David <dvanalfe@blm.gov> wrote:

> Morning My Weary Bosses!
>
> Waiting to hear back from the NPS team on what and how they want their data, but for our glorious BLM Monument lands the numbers are as follows:
>
> Parashant 1995-2000: 307 sites recorded
> Parashant 2000-present: 825 sites recorded
>
> Vermilion 1995-2000: 14 sites recorded
> Vermilion 2000-present: 350 sites recorded.
>
> If this still isn't what you need, please let me know and I will get it done toot-sweet!
>
> Thanks!
>
> --
> "Day by day, even minute by minute, the *Past* was brought up to date..."
> - George Orwell

--
Brandon E. Boshell
Assistant Field Manager / Vermilion Cliffs National Monument Manager
BLM - Arizona Strip Field Office
(435) 688-3241

Boshell, Brandon <bboshell@blm.gov>

Re: Monument Data Call- Lands/Realty

1 message

Boshell, Brandon <bboshell@blm.gov> Wed, May 24, 2017 at 1:33 PM
To: "Dao, Shawnna" <sdao@blm.gov>, "Thomas, Kendra" <klthomas@blm.gov>

Thank you so much for getting this done so quickly. Your document is very well organized. I appreciate it.

On Tue, May 23, 2017 at 3:51 PM, Dao, Shawnna <sdao@blm.gov> wrote:

> Here is the location for the lands portion for the Monuments data call.
>
> Amanda, feel free to spot check or let me know if something looks incorrect as we were pretty much relying on reports.
>
> Thanks- Shawnna
>
> S:\Lands\ASFOLandsRealty\2000-Lands_General\MonumentDataCall.xlsx
> --
> ~*~*~*~*~*~*~*~*~*~*~*~*~*~*~*~*~*
> **Shawnna Dao, Realty Specialist**
> BLM, Arizona Strip Field Office
> 345 East Riverside Dr., St. George, UT 84790
> 435.688.3288 sdao@blm.gov

--
Brandon E. Boshell
Assistant Field Manager / Vermilion Cliffs National Monument Manager
BLM - Arizona Strip Field Office
(435) 688-3241

Boshell, Brandon <bboshell@blm.gov>

Monuments Review

1 message

Boshell, Brandon <bboshell@blm.gov> Thu, May 25, 2017 at 5:44 PM
To: "Mahoney, Kenneth" <kmahoney@blm.gov>
Cc: Lorraine Christian <lmchrist@blm.gov>, "Burke, Timothy" <tburke@blm.gov>, "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>
Bcc: Brandon Boshell <bboshell@blm.gov>

Ken,

Just wanted to give you a heads up concerning the Monument's Review. Despite our huge workload this week with our RMP evaluation and other tasks, I believe I have almost finished the Monument Review for Vermilion Cliffs. I have uploaded all documents concerning question one to folders 1a, 1b, 1c and 1d in the Drive folder. In addition, I have uploaded 2 maps, 2 excel spreadsheets entitled (Land Use Authorizations, Grazing AUMs Permitted and Billed), and 2 word documents concerning the Initial Data Request and Additional Information. The information provided is the best to our knowledge. I have a few items to finish up tomorrow morning in the executive summary and then it will be uploaded. Once that document is uploaded, everything will be ready for your review.

I am informing you of this because Lorraine and I will be off around noon tomorrow for the holiday weekend. Next week, I will not be in the office as I will be in Paria Canyon all week, returning June 5th. In addition, Krissy will be on leave starting today until June 5th and Erich is unavailable due to medical reasons.

If you have any questions please feel free to call me on my cell phone at 435-253-0915 until Monday when I will be out of cell phone coverage.

Thanks
Brandon

--
Brandon E. Boshell
Assistant Field Manager / Vermilion Cliffs National Monument Manager
BLM - Arizona Strip Field Office
(435) 688-3241

Boshell, Brandon <bboshell@blm.gov>

Monument Review

1 message

Boshell, Brandon <bboshell@blm.gov> Fri, May 26, 2017 at 3:42 PM
To: Lorraine Christian <lmchrist@blm.gov>
Cc: "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>

Lorraine,

I just got off the phone with Ken Mahoney and he said upon initial glance at VCNM's documents submitted it all looked pretty good. I did inform him of the possibility that Mark may have found some pre-monument designation public outreach documents. Still to be determined by Mark. If so, Mark could you ensure Ken obtains those for Vermilion. Ken also said he would then upload them to Vermilion's drive for us and update the two locations referencing this subject in the data call documents.

I did ask him specifically about the two summary questions in the executive summary and he thought they wanted a summary of the data call documents. I informed him of your opinion but he still thought otherwise. I then told him it was very difficult to summarize those documents because we already summarized them in answering the data call. Per your and Mark's thoughts, I did tell him of another option of uploading the Manager's annual reports but he didn't think it was necessary. If he does call next week after getting further clarification and want them they are located at S:blmshare/Vermilion Cliffs NM/Conservation.Lands.and Managers.Report/Manager's Report and sorted by year. We have 2009 through 2016 available.

I think we are in a good spot and really don't have many concerns.

Brandon

--
Brandon E. Boshell
Assistant Field Manager / Vermilion Cliffs National Monument Manager
BLM - Arizona Strip Field Office
(435) 688-3241

Boshell, Brandon <bboshell@blm.gov>

Re: Thanks and follow-up on Vermilion Cliffs National Monument

1 message

Boshell, Brandon <bboshell@blm.gov> Mon, Jun 5, 2017 at 3:45 PM
To: "Fisher, Timothy" <tjfisher@blm.gov>
Cc: "Mahoney, Kenneth" <kmahoney@blm.gov>

Tim,

I am sorry I can't answer your question with a specific amount of firewood / fuelwood cutting permits issued. We don't have that data. However, we do know that it did occur but to what extent is not possible to answer.

The only thought I have concerning a rewrite would be,

"No timber production occurred in the area that became VCNM in the five years prior to designation. Fuelwood cutting of pinyon pine and juniper for personal, non-commercial use occurred but was not monitored and recorded pertaining to number of permits issued.

Hope this helps
Brandon

On Mon, Jun 5, 2017 at 2:06 PM, Fisher, Timothy <tjfisher@blm.gov> wrote:

> I have just a couple of quick questions hopefully you can answer?
>
> Thanks
>
> https://docs.google.com/document/d/1DUA0xUoMrGb1lXKZcbDtev-T1LnGEWeeTrJvTz9Jq58/edit#
>
> https://docs.google.com/document/d/1zeo5x7Gnor2oOLfYhW0jHZoeV231Hu8T64Pvp9UpE4A/edit#
>
> please see if you can address
>
> Timothy J Fisher, Program Lead
>
> National Monuments and Conservation Areas
> National Conservation Lands
>
> 20 M Street S.E. (wo-410)
> Washington DC 20003
>
> 202-912-7172 Office
> 202-604-0706 Cell
> 202-245-0050 Fax
>
> tjfisher@blm.gov
>
> On Mon, Jun 5, 2017 at 3:58 PM, Wootton, Rachel <rwootton@blm.gov> wrote:
>
> > Thanks again, Ken!
> >
> > Best,
> >
> > Rachel
> >
> > --
> > Rachel Wootton
> > Planning and Environmental Specialist
> > National Conservation Lands (WO-410)
> > Bureau of Land Management

20 M Street SE Washington, DC 20003
rwootton@blm.gov
desk - (202) 912-7398
cell - (202) 774-8791

Visit us online!

On Mon, Jun 5, 2017 at 2:55 PM, Mahoney, Kenneth <kmahoney@blm.gov> wrote:

Rachel,

Just to follow up on our phone call a few minutes ago, thanks again for your review, comments and additions to the VCNM documents. I've read through the documents again and, as we discussed, I'm good with the information as is now included in the documents. If during Tim's review he sees that more information is needed, we'll be available to respond to that.

Ken

On Mon, Jun 5, 2017 at 10:57 AM, Wootton, Rachel <rwootton@blm.gov> wrote:

Hi Ken,

Brandon gave me a call and we worked through the questions that we had regarding Vermilion Cliffs. (Thanks again, Brandon!)

Please let us know when you've had a chance to take a look and, if you're good to go, Tim will do his check and we'll send it up to our leadership and DOI.

Thank you both so much for all of your work on this, I know it was quite a big task to get all of this information together, and I think it looks great!

Best,

Rachel

--
Rachel Wootton
Planning and Environmental Specialist
National Conservation Lands (WO-410)
Bureau of Land Management
20 M Street SE Washington, DC 20003
rwootton@blm.gov
desk - (202) 912-7398
cell - (202) 774-8791

Visit us online!

On Fri, Jun 2, 2017 at 7:38 PM, Fisher, Timothy <tjfisher@blm.gov> wrote:

Ken do not worry about Vermilion Cliffs until Monday. Thanks for working on Sonoran Desert NM. Just as a FYI Grand Parashant and Ironwood Forest are done and forwarded on! Great Work...

Timothy J Fisher, Program Lead

National Monuments and Conservation Areas
National Conservation Lands

20 M Street S.E. (wo-410)
Washington DC 20003

202-912-7172 Office
202-604-0706 Cell
202-245-0050 Fax

tjfisher@blm.gov

On Fri, Jun 2, 2017 at 7:19 PM, Mahoney, Kenneth <kmahoney@blm.gov> wrote:

> Rachel,
>
> I'm working through comments on the Sonoran Desert NM documents and when finished will work on the Vermilion Cliffs NM comments. I'll call you if I need to. You have a good weekend, too.
>
> Ken
>
> On Fri, Jun 2, 2017 at 3:17 PM, Wootton, Rachel <rwootton@blm.gov> wrote:
>
> > Hi Brandon (or Ken!),
> >
> > I hope you both are doing well! Thank you so much for all of your work to provide information for the National Monuments data call. We had a couple of questions come up about the information provided in on Vermilion Cliffs. Could you give me a call when you have a chance? I'm heading out in a little while, but you are welcome to look at my comments and respond in the document or give me a call on my cell (see below)!
> >
> > Have a good weekend!
> >
> > Best,
> >
> > Rachel
> > --
> > Rachel Wootton
> > Planning and Environmental Specialist
> > National Conservation Lands (WO-410)
> > Bureau of Land Management
> > 20 M Street SE Washington, DC 20003
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--
Brandon E. Boshell
Assistant Field Manager / Vermilion Cliffs National Monument Manager
BLM - Arizona Strip Field Office
(435) 688-3241

Call for Data Related to Review of National Monuments under EO 13792 (April 26, 2017)

Vermilion Cliffs National Monument (VCNM)

1. Documents Requested
   a. Resource Management Plans/Land Use Plans
      The 2008 VCNM Resource Management Plan (RMP) and Final EIS is in the 1a_RMP_LUP folder on this drive.
   b. Record of Decision
      The VCNM RMP Record of Decision (ROD) is in the 1b_ROD folder on this drive.
   c. Public Scoping Documents
      VCNM RMP scoping documents are in the 1c_Public_Scoping_Docs folder on this drive.
   d. Presidential Proclamation
      The VCNM Presidential Proclamation is in the 1d_Proclamation folder on this drive.

2. Information on activities permitted at the Monument, including annual levels of activity from the **date of designation to the present**. Designation date is November 2, 2000.

   a. Recreation - annual visits to site

      In 2016, 275,845 visitors came to VCNM. VCNM uses the Recreation Management Information System (RMIS) to report visitor use, by calculating use data from multiple traffic counters and permits. BLM's RMIS is generally accepted as the agency's official record, however, RMIS was not used until 2004. Prior to 2004, VCNM aggregated data from the Arizona Strip Field Office.

Fiscal Year	Visitor Numbers	Remarks
2016	275,845	
2015	188,881	
2014	160,568	
2013	168,917	
2012	119,555	
2011	77,853	
2010	39,886	
2009	60,428	
2008	48,038	
2007	79,003	
2006	29,568	
2005	48,016	
2004	39,093	
2003	45,329	

2002	39,934	
2001	41,884	Monument Designation, November 9, 2000
2000	39,702	
1999	39,704	
1998	42,185	
1997	43,258	
1996	42,349	
1995	42,834	

b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)

None, there are no renewable resources or known coal, oil and gas resources within the Monument. Refer to the spreadsheet titled Land Use Authorizations.xlsx on this Drive.

c. Minerals-annual mineral production on site

Locatable minerals – No production has occurred. Active mining claims are subject to valid existing rights.

Salable Minerals – An estimated 1,000 cubic yards per year of gravel is used from existing material sites by the BLM for road maintenance. No new permits or sales contracts were issued.

There are no mineral developments or processing facilities adjacent to or impacted by the National Monument designation.

d. Timber - annual timber production on site (in board-feet, CCF, or similar measure)

There is no annual timber production of the pinyon pine and juniper community. The RMP ROD contains the following decisions related to timber:

MA-VM-06: No areas are allocated to sustained yield timber harvest.

MA-VM-10: Gathering of dead and downed wood for campsite use is authorized in areas where campfires are allowed.

MA-VM-11: The Monument is closed to the sale of vegetative products.

MA-VM-12: The BLM will authorize limited harvest of posts and/or poles for on-site administrative purposes.

MA-VM-13: Salvage of vegetation that will be destroyed through surface disturbing activities may be authorized where doing so assists in achieving DPCs [Desired Plant

Communities]. Salvage and use will be allowed in the following priority (may require a permit from the State of Arizona):

- Removal and maintenance for replanting during rehabilitation of the site being disturbed.
- Removal and transplanting out of the area to be disturbed, especially to an area needing rehabilitation.
- Removal and salvage by private individuals or to benefit the public (includes schools, churches, nonprofit organizations).

Personal use fuelwood cutting of pinyon pine and juniper trees is the only activity related to timber prior to the RMP and ROD being implemented in January 29, 2008, seven years post-monument designation. The quantity of personal use fuelwood removed is unknown.

d. Grazing - annual grazing on site (AUMs permitted and sold)

The AUMs permitted and sold on VCNM from designation to present are shown on the spreadsheet titled Grazing AUMs Permitted and Billed_VCNM.xlsx on this Drive. Numbers of AUMs vary based on how they are calculated with respect to allotment boundaries, billing offices of record, and available Geographic Information System (GIS) data. The total billed AUMs reported do not exclusively fall within the monument, because the allotment boundaries encompass both Vermillion Cliffs and Arizona Strip Field Office lands.

Sum of Billed AUMs						
Bill Allotment Number	Bill Allotment Name	2012	2013	2014	2015	2016
AZ04847	BUNTING WELL	445	305	538	435	295
AZ05327	COYOTE	864	820	922	924	714
AZ05328	SAND HILLS	2162	2332	2727	702	1734
AZ05331	HOUSE ROCK	1240	1417	1514	1424	1499
AZ05332	SOAP CREEK	1331	1363	1643	1560	671
AZ05336	FERRY SWALE	1255	1469	1594	1300	225
AZ05337	LEE'S FERRY					
AZ05341	BADGER CREEK					
AZ05350	SIGNATURE ROCK	359	70	259	281	339
Grand Total		6593	7367	7965	9219	6684

e. Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available

There are no known true subsistence activities occurring on VCNM or prior to its designation. VCNM does provide for the collection of pinyon pine seeds (pine nuts) for non-commercial, personal use. Personal use quantities of items necessary for traditional, religious, or ceremonial purposes, such as herbals, medicines or traditional use items are also allowed. Licensed Hunter/Fishing data is available from the Arizona Game and Fish Department. The entire VCNM is open for hunting and fishing and is regulated by the Arizona Game and Fish Department.

f. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available

All cultural sites are generally allocated to Scientific Use, other than the few Public Use sites (five and Sun Valley Mine). The number of sites recorded in VCNM from 2000 - Present: 350 sites.

3. Information on activities occurring during the **5 years prior to designation**

a. Recreation - annual visits to site

VCNM uses the Recreation Management Information System (RMIS) to report visitor use, calculated by using data from multiple traffic counters and permits. BLM's RMIS is generally accepted as the agency's official record, however, RMIS was not used until 2004. Prior to 2004, VCNM aggregated data from the Arizona Strip Field Office.

Fiscal Year	Visitor Numbers	Remarks
2001	41,884	Monument Designation, November 9, 2000
2000	39,702	
1999	39,704	
1998	42,185	
1997	43,258	
1996	42,349	
1995	42,834	

b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)

None, there are no renewable resources or known coal, oil and gas resources within the Monument. Refer to the spreadsheet titled Land Use Authorizations.xlsx on this Drive.

c. Minerals-annual mineral production on site

Locatable minerals – No production occurred during that time and there were no exploration notices or mine plans of operations.

Salable Minerals – An estimated 1,000 cubic yards per year of gravel was used by the BLM for road maintenance.

d. Timber - annual timber production on site (in board-feet, CCF, or similar measure)

Timber resources in the area are not of a nature to support commercial production. No commercial timber production occurred in the area that became VCNM in the five years prior to designation. Fuelwood cutting of pinyon pine and juniper for non-commercial, personal use occurred but was not monitored and recorded.

e. Grazing - annual grazing on site (AUMs permitted and sold)

The AUMs permitted and sold on VCNM five years prior to designation are shown on the spreadsheet titled Grazing AUMs Permitted and Billed_VCNM.xlsx on this Drive.

f. Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available

There are no known true subsistence activities occurring on VCNM or prior to its designation. VCNM does provide for the collection of pinyon pine seeds (pine nuts) for non-commercial, personal use. Personal use quantities of items necessary for traditional, religious, or ceremonial purposes, such as herbals, medicines or traditional use items are also allowed. Licensed hunters/fishermen data are available from the Arizona Game and Fish Department. The entire VCNM is open for hunting and fishing, which is regulated by the Arizona Game and Fish Department.

g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available

The number of sites recorded in VCNM from 1995-2000: 14 sites.

4. Information on activities that likely would have occurred annually from the date of designation to the present **if the Monument had not been designated**

Had the Monument not been designated, BLM lands would have been managed under the pre-existing planning documents for the following activities and resources. Activities

occurring prior to designation would have likely continued in a similar manner and degree.

a. Recreation – annual visits to site

Regardless of the designation, visitation may have increased to similar levels to what is seen today due to increasing popularity of the Paria Special Recreation Management Area. In the five years preceding designation, the BLM recorded visitation of approximately 40,000 visitors per year.

b. Energy – annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)

None, there are no renewable resources or known coal, oil and gas resources within the Monument.

c. Minerals – annual mineral production on site

Locatable minerals – None, although it is likely people would stake mining claims and explore for locatable minerals, which could lead to mine development and production.

Salable Minerals – An estimated 1,000 cubic yards per year of gravel would be used by the BLM for road maintenance.

d. Timber – annual timber production on site (in board-feet, CCF, or similar measure)
Timber resources in the area are not of a nature to support commercial production. Some pinyon pine and juniper would likely be cut for non-commercial, personal fuelwood use. Better access to other areas having personal use fuelwood resources in the region would likely mean that little personal use fuelwood cutting would occur on the area that is now the monument.

e. Grazing – annual grazing on site (AUMs permitted and sold)
Activities occurring prior to designation would have likely continued in a similar manner and degree.

f. Subsistence – participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available
There were no known subsistence activities occurring prior to designation, and that would have likely remained the same.

g. Cultural – list of cultural uses/values for site; number of sites; other quantifiable information where available.

It is possible that without designation, less sites would have been recorded.

5. Changes to boundaries – dates and changes in size

   No changes to the VCNM boundaries have been made.

6. Public Outreach prior to Designation – outreach activities conducted and opportunities for public comment

   Public outreach was conducted during the summer of 2000 with various participants. It included meetings with affected ranchers, community leaders, the Page Chamber of Commerce and business owners in the Marble Canyon and Jacob Lake Areas. Documents providing information about VCNM outreach have been placed in the folder titled 6_Public_Outreach on this drive.

7. Terms of Designation

   Refer to the terms of designation found in the VCNM Proclamation in the 1d_Proclamation folder on this Drive.

New Information Requested on Executive Order on the Review of Designations Under the Antiquities Act

BLM Responses to Additional Questions for Vermilion Cliffs National Monument (VCNM)

a) Any legislative language, including legislation in appropriations bills

There is no legislative language associated with the VCNM designation. However, the Paria Canyon-Vermilion Cliffs Wilderness which is located within the monument boundary, was designated by the Arizona Wilderness Act of 1984 - Public Law 98-406.

b) Alternative options available for protection of resources applicable at each monument, such as Native American Graves Protection and Repatriation Act, Paleontological Resources Preservation Act, Archaeological Resources Protection Act, Historic Preservation Act and agency-specific laws and regulations.

The following could provide some options to protect specific resources found in VCNM. Protection would likely occur on a site-by-site or resource-by-resource basis and also would take a significant amount of time to accomplish under these various laws. These laws may not provide a mechanism to protect all cultural or tribal resources in VCNM.

- National Historic Preservation Act, (NHPA)
- Native American Graves Protection and Repatriation Act, (NAGPRA)
- Paleontological Resources Preservation Act, (PRPA)
- Archaeological Resources Protection Act, (ARPA)
- American Indian Religious Freedom Act (AIRFA)

c) Designated wilderness areas (name, acreage), Wilderness Study Areas (name if there is one, acreage, type), and/or areas managed to preserve wilderness or roadless characteristics that are not WSAs.

Designated Wilderness: Paria Canyon-Vermilion Cliffs Wilderness, 265,598 acres

Wilderness Study Areas: None

Areas managed to protect wilderness characteristics: 37,566 acres (White Pocket, Bush Head, Shed Valley, One Toe Ridge, White Knolls).

d) Outstanding R.S. 2477 claims within a monument – type of road claimed and history

There are no R.S. 2477 claims within the VCNM.

e) Maps

Please refer to the following maps located in the Drive folder:

- VCNM_map_12x9_20160705_1700_750dpi_Q95
- VCNM - Visitor Brochure Map 17x23

f) Cultural or historical resources, particularly Tribal, located near a monument but not within the boundary that might benefit from inclusion in the monument

There is nothing to our knowledge concerning cultural or historical resources located near VCNM that might benefit from inclusion in the monument.

g) Other – general questions or comments

No additional information.

Boshell, Brandon <bboshell@blm.gov>

Re: National Monument Review - Draft Economic Reports - Quick Review

1 message

Boshell, Brandon <bboshell@blm.gov> Thu, Jul 13, 2017 at 11:04 AM
To: "Mahoney, Kenneth" <kmahoney@blm.gov>
Cc: Karen McKinley <kmckinley@blm.gov>, Michael Johnson <mdjohnso@blm.gov>, "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>, Wayne Monger <dmonger@blm.gov>, Claire Crow <ccrow@blm.gov>, Raymond Suazo <rmsuazo@blm.gov>, Lorraine Christian <lmchrist@blm.gov>

Ken

Per your request, I have reviewed the draft Economic Report for Vermilion Cliffs National Monument and had a couple changes which are found in track changes of the attached document.

Thanks
Brandon

On Wed, Jul 12, 2017 at 2:58 PM, Mahoney, Kenneth <kmahoney@blm.gov> wrote:

> Please see the message from Sally. If you have comments, use Track Changes as suggested and reply to all when sending them back. If you have no comments, please reply with that message.
>
> I'm out of the office, returning on Wed July 19. Please have your comments in before that day so I can compile and return comments to WO by the following day. Thanks,
>
> Ken
>
> ---------- Forwarded message ----------
> From: **Butts, Sally** <sbutts@blm.gov>
> Date: Wed, Jul 12, 2017 at 8:32 AM
> Subject: National Monument Review - Draft Economic Reports - Quick Review
> To: Raymond Suazo <rmsuazo@blm.gov>, Jerome Perez <jperez@blm.gov>, Edwin Roberson <eroberso@blm.gov>
> Cc: Kenneth Mahoney <kmahoney@blm.gov>, "Ginn, Allison" <aginn@blm.gov>, Chad Schneckenburger <cschneckenburger@blm.gov>, "Sintetos, Michael" <msintetos@blm.gov>, Nikki Moore <nmoore@blm.gov>, "Fisher, Timothy" <tjfisher@blm.gov>, Christopher McAlear <cmcalear@blm.gov>, Mara Alexander <malexander@blm.gov>, Rachel Wootton <rwootton@blm.gov>, Kathleen Benedetto <kathleen_benedetto@ios.doi.gov>, Randal Bowman <randal_bowman@ios.doi.gov>, Michael Nedd <mnedd@blm.gov>, Kristin Bail <kbail@blm.gov>, Timothy Spisak <tspisak@blm.gov>, "Moody, Aaron" <aaron.moody@sol.doi.gov>, "Mali, Peter" <pmali@blm.gov>, Jeff Brune <jbrune@blm.gov>
>
> Hi All,
>
> We have been given the opportunity to do a quick review of the draft Department of Interior economic reports for the eight BLM managed or co-managed National Monuments currently under review. The draft reports are for:
>
> - Grand Canyon-Parashant
> - Grand Staircase-Escalante
> - Sonoran Desert
> - Ironwood Forest
> - Canyons of the Ancients
> - Carrizo Plain

- Mojave Trails
- Vermilion Cliffs

If you would like to provide comments, please compile your state's comments in track changes within the attached reports and provide them on or before **Close of Business Thursday, July 20th**. Please email your state's comments to Rachel Wootton (rwootton@blm.gov) with a copy to me (sbutts@blm.gov) and Nikki Moore (nmoore@blm.gov) as soon as you have completed your comments, so that we can get them reviewed by the deadline and submitted back to the Secretary's office. The comments are due back to the Secretary's office by Friday, July 21st.

We have blocked out Tuesday afternoon, July 18, from 4-5pm EST to answer any questions you may have. The conference line and passcode for the meeting are:

(b) (5) [redacted]

(b) (5) [redacted]

Thank you so much for all the time and energy you and your staff have put in to make sure that we are providing DOI with the information they need. Please contact me with any questions.

Sally

--
Sally R. Butts, J.D., Acting Division Chief
National Conservation Lands
Bureau of Land Management
20 M St. SE, Washington, DC 20003
Office 202-912-7170; Cell 202-695-5889; Fax 202-245-0050; sbutts@blm.gov

--
Brandon E. Boshell
Assistant Field Manager / Vermilion Cliffs National Monument Manager
BLM - Arizona Strip Field Office
(435) 688-3241

VermilionCliffs_7_11_17.docx
326K

Boshell, Brandon <bboshell@blm.gov>

Re: Monument Data Call

1 message

Jasper, Jonathan <jjasper@blm.gov> Mon, May 22, 2017 at 6:22 PM
To: Krissy Sherman <ksherman@blm.gov>
Cc: Amanda Harrington <asharrin@blm.gov>, "Boshell, Brandon" <bboshell@blm.gov>

For visitation numbers, mainly do reports from RMIS. This should match the monument's annual reports. For the previous monument designations dig into this spreadsheets. It will be very lacking. Somewhere around 2010, we switched to TRAFx system and started going crazy on data collection points.

I have done this exercise a few times since I have been here - always for the monuments, but never past 10 years.

I attached a few spreadsheets. You will notice due to turn over and such the monuments did fair well.

Visitation spreadsheets are here:

S:\Recreation\Recreation Monitoring\RMIS

S:\Recreation\Recreation Monitoring\RMIS\Other_things

On Mon, May 22, 2017 at 5:59 PM, Jasper, Jonathan <jjasper@blm.gov> wrote:

> Here's the information for the wilderness question
>
> Paria Canyon-Vermilion Cliffs Wilderness - 265,598 acres (2-77) contains fee area to Paria Canyon, Coyote Buttes North (The Wave) and Coyotes Buttes South.
>
> Areas to be Managed for Wilderness Characteristics - 37,566 acres (2-51)
> White Pocket, Bush Head, Shed Valley, One Toe Ridge, White Knolls_Paria Plateau Rim_One Toe Ridge - Map 2.6 (2-53)
>
> Visitation numbers would take a bit of digging. I'll see if I can work it out with Krissy tomorrow.
>
> On Mon, May 22, 2017 at 4:44 PM, Boshell, Brandon <bboshell@blm.gov> wrote:
>
> > Krissy and Jon
> >
> > I need you both to tag team this data call and need it done asap. I understand it is last minute but it is due by COB Friday and we have RMP evaluations scheduled this week as well.
> >
> > Attached is GSENM's responses to this same data call. They submitted their info. last week as they were on a different schedule. It may be of some assistance. Please let me know how I can help.
> >
> > --
> > Brandon E. Boshell
> > Assistant Field Manager / Vermilion Cliffs National Monument Manager
> > BLM - Arizona Strip Field Office
> > (435) 688-3241
>
> --
> Jon Jasper
> Recreation Specialist
> BLM Arizona Strip Field Office
> (435) 688-3264

--
Jon Jasper
Recreation Specialist
BLM Arizona Strip Field Office
(435) 688-3264

---

2 attachments

alltraffic_2015.xlsx
260K

rmis12.xls
260K

Boshell, Brandon <bboshell@blm.gov>

Re: Monument Review (IMPORTANT PLEASE READ)

1 message

Cox, Rody <r8cox@blm.gov> Tue, May 23, 2017 at 3:23 PM
To: "Boshell, Brandon" <bboshell@blm.gov>

Brandon,

Please see the attached responses for the data call.

--
Rody Cox
Geologist
Arizona Strip Field Office
(435) 688-3244
r8cox@blm.gov

On Mon, May 22, 2017 at 4:17 PM, Boshell, Brandon <bboshell@blm.gov> wrote:

> Attached is the executive order concerning the monument review with the initial data request. Highlighted in the word doc are the portions I need your help addressing. The primary work load is for Rody but there is something concerning "energy transmission infrastructure, etc". I know this is very short notice but would appreciate it if you could turn this around asap. I have to have it complete by Friday, but have RMP evals wed and thur.
>
> Thanks
> Brandon
>
> ---------- Forwarded message ----------
> From: **Mahoney, Kenneth** <kmahoney@blm.gov>
> Date: Mon, May 15, 2017 at 8:00 PM
> Subject: Fwd: Monument Review (IMPORTANT PLEASE READ)
> To: "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>, Brandon Boshell <bboshell@blm.gov>, Wayne Monger <dmonger@blm.gov>, Claire Crow <ccrow@blm.gov>
> Cc: Timothy Burke <tburke@blm.gov>, Lorraine M Christian <lmchrist@blm.gov>, Leon Thomas Jr <l70thoma@blm.gov>, Edward Kender <ekender@blm.gov>, "Anthony (Scott) Feldhausen" <afeldhausen@blm.gov>, Melissa Warren <mdwarren@blm.gov>, Raymond Suazo <rmsuazo@blm.gov>, Deborah Rawhouser <drawhous@blm.gov>, Roxie Trost <rtrost@blm.gov>, Karen McKinley <kmckinley@blm.gov>
>
> Monument Managers,
>
> Please see the email from State Director Ray Suazo and also the forwarded email from AD-400 Chris McAlear regarding the subject of monument review.
>
> The attached Word document file "Initial Data Request Related to Review of National Monuments" contains a list of items for which information needs to be gathered for your national monument. Please begin to compile the requested information. I will contact each of you on the afternoon of Tuesday May 23 for an interim check on the progress of the data collection. All data collection should be completed and submitted to me by Friday May 26. I will review and upload the data the following week to meet the June 2 due date for the data call.
>
> I will also forward to you the direction from DSD-Communications Amber Cargile regarding media inquiries and public comments relating to Executive Order 13792. Please assure that staff are also aware of this direction.
>
> Let me know of any questions about the monument review. Thank you for your assistance in responding to this information request.
>
> Ken Mahoney <> Program Lead:
> National Monuments <> National Conservation Areas

Wilderness <> Wild & Scenic Rivers
Arizona State Office <> Bureau of Land Management
602-417-9238 <> kmahoney@blm.gov

---------- Forwarded message ----------
From: **Suazo, Raymond** <rmsuazo@blm.gov>
Date: Fri, May 12, 2017 at 1:54 PM
Subject: Fwd: Monument Review (IMPORTANT PLEASE READ)
To: Kenneth Mahoney <kmahoney@blm.gov>, Roxie Trost <rtrost@blm.gov>, Karen Mckinley <kmckinley@blm.gov>, Deborah Rawhouser <drawhous@blm.gov>

FYI, I will provide Ken's name as the lead who will coordinate for AZ. My preference is also that Ken be the person that loads the data in an effort to have thorough review and consistency. However, we can consider over the weekend and make a final determination on Monday.

Ray

---------- Forwarded message ----------
From: **McAlear, Christopher** <cmcalear@blm.gov>
Date: Fri, May 12, 2017 at 1:16 PM
Subject: Monument Review (IMPORTANT PLEASE READ)
To: Edwin Roberson <eroberso@blm.gov>, "Bilbao, Anita" <abilbao@blm.gov>, Amy Lueders <alueders@blm.gov>, Aden Seidlitz <aseidlitz@blm.gov>, Jerome Perez <jperez@blm.gov>, Joseph Stout <j2stout@blm.gov>, "Suazo, Raymond" <rmsuazo@blm.gov>, Deb Rawhouser <drawhous@blm.gov>, Ruth Welch <rwelch@blm.gov>, Greg Shoop <gshoop@blm.gov>, Marci Todd <m1todd@blm.gov>, "Petersen, Paul" <ppeterse@blm.gov>, Jamie Connell <jconnell@blm.gov>, Theresa Hanley <thanley@blm.gov>, Timothy Murphy <t50murph@blm.gov>, Peter Ditton <pditton@blm.gov>
Cc: John Ruhs <jruhs@blm.gov>, Sally Butts <sbutts@blm.gov>, Peter Mali <pmali@blm.gov>, Nikki Moore <nmoore@blm.gov>, Timothy Fisher <tjfisher@blm.gov>

State Directors:

National Conservation Lands received a data call to respond to Executive Order 13792 of April 26, 2017 (82 FR 20429, May 1, 2017) directing the Secretary of Interior to review certain National Monument designations or expansions under the Antiquities Act of 1906, 54 U.S.C. 320301-320303 (Act) (see attached).

The timeline for this data call is a short turnaround for all monuments, due by June 2, 2017, with the exception for both Grand Staircase Escalate National Monument and Bears Ears National Monument with an expedited due date of May 17, 2017. WO-410 needs assistance with this data call through the National Conservation Lands State Leads and from the affected Monument Managers, or the State Directors' designee, to gather up the desired information. Please review the attached word document for list of needed information and the list of National Monuments under review. We are expected to provide available data and information but not to create data or information or speculate on responses.

A Google Drive document folder is being established to easily transfer electronic files for each of the National Monuments under review. The desire is to limit access to assure consistent data collection. WO-410 is asking each of the States to provide names needing access for each National Monument and the lead from your state to oversee/coordinate this data call.

The two Utah National Monuments will help us to streamline the process and provide more specific guidance for the other National Monuments and the work load associated with this request. A follow-up email will provide more direction for all other BLM National Monuments under review later next week.

Please provide Timothy Fisher (tjfisher@blm.gov) a list of contacts for each monument who will need access to the google drive folder **by COB Tuesday May 16, 2017**.

The National Conservation Lands program appreciates your support in assisting with this important data call

Thank you!
Chris m

Christopher McAlear
Assistant Director
National Conservation Lands
and Community Partnerships
(W) 202-208-4731
(C) 775-722-9539

--
Brandon E. Boshell
Assistant Field Manager / Vermilion Cliffs National Monument Manager
BLM - Arizona Strip Field Office
(435) 688-3241

Initial Data Request Related to Review of National Monuments RC.docx
15K

Boshell, Brandon <bboshell@blm.gov>

Monument Cultural Data Call

1 message

Van Alfen, David <dvanalfe@blm.gov> Tue, May 23, 2017 at 3:36 PM
To: "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>, "Boshell, Brandon" <bboshell@blm.gov>, Chad Corey <chad_corey@nps.gov>

Afternoon Bosses!

Below are the number of sites for Parashant (for BLM and NPS) and Vermilion, and a high estimate of percentage inventoried for Parashant The percentages are high because of overlapping inventories and "bad" inventories that I haven't had the time to tease out. Brandon- I'll try to get you the percentage inventoried for Vermilion tomorrow. Of course, only the number of sites is asked for, so the percentage inventory is your choice to submit or not,

Parashant (BLM)- 1,980 sites, 8.8% inventoried
Parashant (NPS)- 1,395 sites, 18.9% inventoried

Vermilion- 1,023 sites

Let me know if there is anything else you folks need for this call.

Thanks.

--
"Day by day, even minute by minute, the *Past* was brought up to date..."
- George Orwell

Boshell, Brandon <bboshell@blm.gov>

Monument Data Call- Lands/Realty

1 message

Dao, Shawnna <sdao@blm.gov> Tue, May 23, 2017 at 3:51 PM
To: Amanda Harrington <asharrin@blm.gov>, Brandon Boshell <bboshell@blm.gov>
Cc: Kendra Thomas <klthomas@blm.gov>

Here is the location for the lands portion for the Monuments data call.

Amanda, feel free to spot check or let me know if something looks incorrect as we were pretty much relying on reports.

Thanks- Shawnna

S:\Lands\ASFOLandsRealty\2000-Lands_General\MonumentDataCall.xlsx

--

~*~*~*~*~*~*~*~*~*~*~*~*~*~*~*~*

Shawnna Dao, Realty Specialist
BLM, Arizona Strip Field Office
345 East Riverside Dr., St. George, UT 84790
435.688.3288 sdao@blm.gov

Boshell, Brandon <bboshell@blm.gov>

Re: Monument Cultural Data Call

1 message

Wimmer, Sheldon (Mark) <mwimmer@blm.gov> Tue, May 23, 2017 at 4:05 PM
To: "Van Alfen, David" <dvanalfe@blm.gov>, Brandon Boshell <bboshell@blm.gov>

David,

Thanks for providing the data, I'm sorry I failed to let you know that we needed to have the data split between 5 years prior to the Monument declaration and from the Monument declaration to the present. I know. Is that possible with the database you have?

-Mark

Mark Wimmer
Monument Manager
Grand Canyon-Parashant
National Monument
345 East Riverside Drive
St. George, Utah 84790
Office: 435-688-3202
Fax: 435-688-3388

On Tue, May 23, 2017 at 3:36 PM, Van Alfen, David <dvanalfe@blm.gov> wrote:

> Afternoon Bosses!
>
> Below are the number of sites for Parashant (for BLM and NPS) and Vermilion, and a high estimate of percentage inventoried for Parashant The percentages are high because of overlapping inventories and "bad" inventories that I haven't had the time to tease out. Brandon- I'll try to get you the percentage inventoried for Vermilion tomorrow. Of course, only the number of sites is asked for, so the percentage inventory is your choice to submit or not,
>
> Parashant (BLM)- 1,980 sites, 8.8% inventoried
> Parashant (NPS)- 1,395 sites, 18.9% inventoried
>
> Vermilion- 1,023 sites
>
> Let me know if there is anything else you folks need for this call.
>
> Thanks.
>
> --
> "Day by day, even minute by minute, the *Past* was brought up to date..."
> - George Orwell

Boshell, Brandon <bboshell@blm.gov>

Re: Monument Cultural Data Call

1 message

Van Alfen, David <dvanalfe@blm.gov> Tue, May 23, 2017 at 4:07 PM
To: "Wimmer, Sheldon (Mark)" <mwimmer@blm.gov>
Cc: Brandon Boshell <bboshell@blm.gov>

No problem! I'll get you the new numbers tomorrow!

On Tue, May 23, 2017 at 4:05 PM, Wimmer, Sheldon (Mark) <mwimmer@blm.gov> wrote:

> David,
>
> Thanks for providing the data, I'm sorry I failed to let you know that we needed to have the data split between 5 years prior to the Monument declaration and from the Monument declaration to the present. I know. Is that possible with the database you have?
>
> -Mark
>
> Mark Wimmer
> Monument Manager
> Grand Canyon-Parashant
> National Monument
> 345 East Riverside Drive
> St. George, Utah 84790
> Office: 435-688-3202
> Fax: 435-688-3388
>
> On Tue, May 23, 2017 at 3:36 PM, Van Alfen, David <dvanalfe@blm.gov> wrote:
>
> > Afternoon Bosses!
> >
> > Below are the number of sites for Parashant (for BLM and NPS) and Vermilion, and a high estimate of percentage inventoried for Parashant The percentages are high because of overlapping inventories and "bad" inventories that I haven't had the time to tease out. Brandon- I'll try to get you the percentage inventoried for Vermilion tomorrow. Of course, only the number of sites is asked for, so the percentage inventory is your choice to submit or not,
> >
> > Parashant (BLM)- 1,980 sites, 8.8% inventoried
> > Parashant (NPS)- 1,395 sites, 18.9% inventoried
> >
> > Vermilion- 1,023 sites
> >
> > Let me know if there is anything else you folks need for this call.
> >
> > Thanks.
> >
> > --
> > "Day by day, even minute by minute, the *Past* was brought up to date..."
> > - George Orwell

--
"Day by day, even minute by minute, the *Past* was brought up to date..."
- George Orwell

Boshell, Brandon <bboshell@blm.gov>

Re: Vermilion Cliffs National Monument Grazing Data Request

1 message

Jackson, Lynnda <l50jacks@blm.gov> Tue, May 23, 2017 at 7:57 PM
To: "Boshell, Brandon" <bboshell@blm.gov>

Hi Brandon,

Please see the attached.

Please look them over. I will be hard to catch this week, but please let me know if you have questions.

I did include 1992 in the in the pivot table to show that 1992 was the last year AZ05337 Lee's Ferry was billed.

Below is a link to the BLM wide reports that I filtered to get the data. They may be helpful if you decide that you need data for additional allotments or for some other reason.

chrome-extension://hehijbfgiekmjfkfjpbkbammjbdenadd/nhc.htm#url=http://teamspace/sites-oc/nocna/ras/Shared%20Documents/Forms/AllItems.aspx?RootFolder=%2Fsites%2Doc%2Fnocna%2Fras%2FShared%20Documents%2FBLM%20Wide%2FNational%20Monument%20Data%20Call

Have a great week.

Lynnda

Lynnda Jackson
Rangeland Management Specialist
National Operations Center
Bureau of Land Management
Phone: 303-236-8012
FAX: 303-236-9473

On Fri, May 19, 2017 at 2:48 PM, Boshell, Brandon <bboshell@blm.gov> wrote:

> Lynnda
>
> It was great talking with you and thank you so very much in advance for your help with this request. Attached is a list of allotments that I need you to run the querries for concerning the data request Mark Wimmer requested. We need the querry ran from grazing year 1993 to 2016.
>
> Thanks
> Brandon
>
> --
> Brandon E. Boshell
> Assistant Field Manager / Vermilion Cliffs National Monument Manager
> BLM - Arizona Strip Field Office
> (435) 688-3241

2 attachments

VERMILION CLIFFS NM_Billed_AUMs_2017-5-23.xlsx
42K

VERMILION CLIFFS NM_Permitted_Active_AUMs_2017-5-23.xlsx
10K

Allot Office Name	(All)
Bill Admin Office Cd10	(All)

Sum of Billed AUMs		Fee Year						
Bill Allotment Number	**Bill Allotment Name**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
AZ04847	BUNTING WELL							
AZ05327	COYOTE	479	881	1113	998	1190	1168	1487
AZ05328	SAND HILLS	12294	10341	12740	13645	13045	12462	14749
AZ05331	HOUSE ROCK	563	530	972	943	859	1448	1384
AZ05332	SOAP CREEK	5110	6887	5421	3977	3877	4452	4433
AZ05336	FERRY SWALE	909	979	1062	1285	920	1331	1559
AZ05337	LEE'S FERRY	204						
AZ05340	WAHWEAP	276	276	21	73	98	169	
AZ05341	BADGER CREEK	18				10	21	
AZ05350	SIGNATURE ROCK	256	229	151	166	101	255	296
Grand Total		**20109**	**20123**	**21480**	**21087**	**20100**	**21306**	**23908**

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
	348	553	639	250	482	513	483	530	476	408	398	430	445	305	538
1506	1161	1265	754	10		1	1582	834	578	1348	826	632	864	820	922
13598	11631	10223	8905	3936		11	454	3588	4024	4662	5878	1209	2162	2332	2727
1451	1260	1319	1086	247	292	457	393	594	603	903	619	757	1240	1417	1514
5984	4624	4382	3810	1576			1321	2437	2123	1925	2359	1929	1331	1363	1643
1765	1176	1202	919	699	813	1151	799	1023	1267	944	904	1277	1255	1469	1594
183	148	108	126	30	120 93	96	53	62	64	72	144 7	163	132	144	144
415	280	491	41	25	144	189	295	325	500	174	268	359	70	259	281
24902	**20628**	**19543**	**16280**	**6773**	**1944**	**2418**	**5380**	**9393**	**9635**	**10436**	**11403**	**6756**	**7499**	**8109**	**9363**

2015	2016
435	295
924	714
702	1734
1424	1499
1560	671
1300	225
144	144
339	
6828	**5282**

Auth Admin Office Cd10	Auth Office Name	Allot Admin Office Cd10	Allot Office Name
LLAZA02000	VERMILION CLIFFS NM	LLAZA02000	VERMILION CLIFFS NM
LLAZA02000	VERMILION CLIFFS NM	LLAZA02000	VERMILION CLIFFS NM
LLAZA02000	VERMILION CLIFFS NM	LLAZA02000	VERMILION CLIFFS NM
LLAZA02000	VERMILION CLIFFS NM	LLAZA02000	VERMILION CLIFFS NM
LLAZA02000	VERMILION CLIFFS NM	LLAZA02000	VERMILION CLIFFS NM

Allotment Number	Allotment Name	Permitted Active Aums	Report Date
AZ04847	BUNTING WELL	1,320	5/23/2017
AZ05328	SAND HILLS	15,081	5/23/2017
AZ05336	FERRY SWALE	1,677	5/23/2017
AZ05340	WAHWEAP	276	5/23/2017
AZ05350	SIGNATURE ROCK	382	5/23/2017

Boshell, Brandon <bboshell@blm.gov>

Re: Data Call

1 message

Yardley, Braden <byardley@blm.gov> Wed, May 24, 2017 at 7:02 AM
To: "Wimmer, Sheldon (Mark)" <mwimmer@blm.gov>
Cc: Brandon Boshell <bboshell@blm.gov>

Hi Mark and Brandon,

Here is a spreadsheet that has the TRAFX counter totals for recreation visits throughout the entire Arizona Strip District. I will be the first to admit that a lot of this data is incomplete. Hopefully with more consistency in the ORP positions we can get better figures going into the future.

Braden

On Tue, May 23, 2017 at 4:07 PM, Wimmer, Sheldon (Mark) <mwimmer@blm.gov> wrote:

> I forgot to mention one other thing, and maybe the data will speak for itself, but we need to split the data (if available) into two parts:
>
> 1. Recreation- annual visits to sites from monument designation to the present, and
> 2. Recreation- annual visits to sites five years prior to monument designation.
>
> Let me know if this is possible.
>
> Thanks,
>
> -Mark
>
> Mark Wimmer
> Monument Manager
> Grand Canyon-Parashant
> National Monument
> 345 East Riverside Drive
> St. George, Utah 84790
> Office: 435-688-3202
> Fax: 435-688-3388

--
Braden Yardley
Outdoor Recreation Planner
Grand Canyon-Parashant National Monument
435-688-3386

Traffic Counter Totals.xlsx
260K

Vermilion Cliffs NM (AZ-120)	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Totals	Est Total	
South-House Rock Valley	1,097	795	500	516	528	*695*	*1,337*	*1,037*	604	751	692	*937*	9,489	9,489	Mitch/Tom
North-House Rock Valley	1,211	923	579	436	632								3,781	9,074	Mitch/Tom
Pine Tree													0	-	Mitch/Tom
Lone Tree													0	-	Mitch/Tom
West Bench Pueblo													0	-	Mitch/Tom
Wire Pass (IR)													0	-	Mitch/Tom
The Notch (IR)													0	-	Mitch/Tom
White Pocket Road													0	-	Mitch/Tom
White Pocket Trailhead (IR)													0	-	Mitch/Tom
Cottonwood Cove #1 (IR)													0	-	Mitch/Tom
Cottonwood Cove #2 (IR)													0	-	Mitch/Tom
Condor Viewing															
Paw Hole (IR)													0	-	Mitch/Tom
Dominguez Escalante Wayside (Diamond)													0	-	Mitch/Tom
VCNM Total													**13,270**	**18,563**	

Boshell, Brandon <bboshell@blm.gov>

Re: Monument Cultural Data Call

1 message

Van Alfen, David <dvanalfe@blm.gov> Wed, May 24, 2017 at 7:55 AM
To: "Wimmer, Sheldon (Mark)" <mwimmer@blm.gov>
Cc: Brandon Boshell <bboshell@blm.gov>

OOPS! Sorry, the designation was 2000, not 2001!

On Wed, May 24, 2017 at 7:42 AM, Van Alfen, David <dvanalfe@blm.gov> wrote:

Sorry Bosses,

But just to clarify, you need the total number of sites recorded during the five years prior to designation, and the total number recorded since designation? So in effect, not ALL the sites recorded, just the ones recorded between 1996-2001 and 2001-present?

I'm not sure what they are trying to "measure" here, but I don't think the % inventoried matters, so you can just ignore my earlier email.

Thanks!

On Tue, May 23, 2017 at 4:07 PM, Van Alfen, David <dvanalfe@blm.gov> wrote:

No problem! I'll get you the new numbers tomorrow!

On Tue, May 23, 2017 at 4:05 PM, Wimmer, Sheldon (Mark) <mwimmer@blm.gov> wrote:

David,

Thanks for providing the data, I'm sorry I failed to let you know that we needed to have the data split between 5 years prior to the Monument declaration and from the Monument declaration to the present. I know. Is that possible with the database you have?

-Mark

Mark Wimmer
Monument Manager
Grand Canyon-Parashant
National Monument
345 East Riverside Drive
St. George, Utah 84790
Office: 435-688-3202
Fax: 435-688-3388

On Tue, May 23, 2017 at 3:36 PM, Van Alfen, David <dvanalfe@blm.gov> wrote:

Afternoon Bosses!

Below are the number of sites for Parashant (for BLM and NPS) and Vermilion, and a high estimate of percentage inventoried for Parashant The percentages are high because of overlapping inventories and "bad" inventories that I haven't had the time to tease out. Brandon- I'll try to get you the percentage inventoried for Vermilion tomorrow. Of course, only the number of sites is asked for, so the percentage inventory is your choice to submit or not,

Parashant (BLM)- 1,980 sites, 8.8% inventoried
Parashant (NPS)- 1,395 sites, 18.9% inventoried

Vermilion- 1,023 sites

Let me know if there is anything else you folks need for this call.

> > > Thanks.
> > >
> > > --
> > > "Day by day, even minute by minute, the *Past* was brought up to date..."
> > > - George Orwell
> >
> > --
> > "Day by day, even minute by minute, the *Past* was brought up to date..."
> > - George Orwell
>
> --
> "Day by day, even minute by minute, the *Past* was brought up to date..."
> - George Orwell

--
"Day by day, even minute by minute, the *Past* was brought up to date..."
- George Orwell

Boshell, Brandon <bboshell@blm.gov>

Fwd: link to ras bill data

1 message

Mahoney, Kenneth <kmahoney@blm.gov> Wed, May 24, 2017 at 11:28 AM
To: "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>, Brandon Boshell <bboshell@blm.gov>, Wayne Monger <dmonger@blm.gov>, Claire Crow <ccrow@blm.gov>

See the earlier email from Lynnda Jackson for information on obtaining data for the monuments review. Let me know of any questions.

Ken

---------- Forwarded message ----------
From: **Fisher, Timothy** <tjfisher@blm.gov>
Date: Tue, May 23, 2017 at 3:04 PM
Subject: Fwd: link to ras bill data
To: Jaime Tompkins <jtompkins@blm.gov>, "Magee, Gerald J" <gmagee@blm.gov>, Barbara Keleher <bkeleher@blm.gov>, Chad Schneckenburger <cschneckenburger@blm.gov>, Kenneth Mahoney <kmahoney@blm.gov>, McKinney Briske <mbriske@blm.gov>, Mark Conley <mconley@blm.gov>, Robin Fehlau <rfehlau@blm.gov>

State Leads

Please forward to the specific team members whom are working on the 16 Monuments being reviewed.

Thanks

Timothy J Fisher, Program Lead

National Monuments and Conservation Areas
National Conservation Lands

20 M Street S.E. (wo-410)
Washington DC 20003

202-912-7172 Office
202-604-0706 Cell
202-245-0050 Fax

tjfisher@blm.gov

---------- Forwarded message ----------
From: **Jackson, Lynnda** <l50jacks@blm.gov>
Date: Tue, May 23, 2017 at 1:57 PM
Subject: Fwd: link to ras bill data
To: "Fisher, Timothy" <tjfisher@blm.gov>
Cc: "Hackett, Kimberly" <khackett@blm.gov>

Hi Tim,

Would you please forward this email to the folks who will be responding to the national monument data call?

Below is a link to a report that shows billed use for all BLM allotments by fee year (for example, the 2016 fee year includes grazing use March 1, 2016 through Feb 28. 2017).

Different offices will likely need to filter the data in different ways to get the complete picture.

Those who would like assistance can email me so we can schedule a time to work on how to get the data for their specific situation. The call would have to be before 9 am MDT since I am testing software all week.

Thanks.

Lynnda

PS - I will be posting a file with the permitted active AUMs by allotment tomorrow.

Lynnda Jackson
Rangeland Management Specialist
National Operations Center
Bureau of Land Management
Phone: 303-236-8012
FAX: 303-236-9473

---------- Forwarded message ----------
From: **Jackson, Lynnda** <l50jacks@blm.gov>
Date: Tue, May 23, 2017 at 10:51 AM
Subject: link to ras bill data
To: "Bottomley, Timothy" <tbottoml@blm.gov>, Lynnda Jackson <l50jacks@blm.gov>

http://teamspace/sites-oc/nocna/ras/Shared%20Documents/Forms/AllItems.aspx?RootFolder=%2Fsites%2Doc%2Fnocna%2Fras%2FShared%20Documents%2FBLM%20Wide%2FNational%20Monument%20Data%20Call

Lynnda Jackson
Rangeland Management Specialist
National Operations Center
Bureau of Land Management
Phone: 303-236-8012
FAX: 303-236-9473

Boshell, Brandon <bboshell@blm.gov>

Re: New Monument Review Cultural Numbers

1 message

Van Alfen, David <dvanalfe@blm.gov> Wed, May 24, 2017 at 2:47 PM
To: "Boshell, Brandon" <bboshell@blm.gov>
Cc: "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>

No problem. I'll cc Mark on this also.

All sites generally default to Scientific Use, other than the few Public Use sites Vermilion (5 without Sun Valley Mine) and Parashant (9 BLM, 2 NPS) have. At least that is what I assume they are asking...

Let me know if you need anything else!

On Wed, May 24, 2017 at 1:16 PM, Boshell, Brandon <bboshell@blm.gov> wrote:

> Thanks Dave!!!!!
>
> One question for you. The data call states, "d. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available"
>
> Do you have any suggestion or items for the part that states "list of cultural uses/values for site"
>
> On Wed, May 24, 2017 at 8:07 AM, Van Alfen, David <dvanalfe@blm.gov> wrote:
>
> > Morning My Weary Bosses!
> >
> > Waiting to hear back from the NPS team on what and how they want their data, but for our glorious BLM Monument lands the numbers are as follows:
> >
> > Parashant 1995-2000: 307 sites recorded
> > Parashant 2000-present: 825 sites recorded
> >
> > Vermilion 1995-2000: 14 sites recorded
> > Vermilion 2000-present: 350 sites recorded.
> >
> > If this still isn't what you need, please let me know and I will get it done toot-sweet!
> >
> > Thanks!
> >
> > --
> > "Day by day, even minute by minute, the *Past* was brought up to date..."
> > - George Orwell
>
> --
> Brandon E. Boshell
> Assistant Field Manager / Vermilion Cliffs National Monument Manager
> BLM - Arizona Strip Field Office
> (435) 688-3241

--
"Day by day, even minute by minute, the *Past* was brought up to date..."
- George Orwell

Boshell, Brandon <bboshell@blm.gov>

Monument Data Call

1 message

Sherman, Krissy <ksherman@blm.gov> Wed, May 24, 2017 at 4:06 PM
To: Brandon Boshell <bboshell@blm.gov>

Hey Brandon

I have attached everything you need for the monument data call. Let me know if you need anything else by the end of tomorrow. I will not be working on Friday.

--
Krissy Sherman
Outdoor Recreation Planner
Vermilion Cliffs National Monument
345 East Riverside Drive
St. George, UT 84790
Work: 435-688-3331
Email: ksherman@blm.gov

5 attachments

VCNM SRP And Visitor Numbers.xlsx
9K

VCNM Additional Information Requested _5_22_2017.docx
23K

2a. Recreation.docx
14K

3a. Recreation.docx
14K

4a Recreation.docx
14K

Year	Visitor Numbers	SRP / Hunting Numbers
2016	275,845	54
2015	188,881	50
2014	160,568	44
2013	168,917	43
2012	119,555	31
2011	77,853	23
2010	39,886	17
2009	60,428	10
2008	48,038	9
2007	79,003	10
2006	29,568	17
2005	48,016	17
2004	39,093	18
2003	45,329	15
2002	39,934	14
2001	41,884	13
2000	39,702	8
1999	39,704	11
1998	42,185	8
1997	43,258	5
1996	42,349	7
1995	42,834	5

New Information Requested on Executive Order on the Review of Designations Under the Antiquities Act

BLM Responses to Additional Questions for Vermilion Cliffs National Monument

a) Any legislative language, including legislation in appropriations bills

[Identify if there is any related legislation regarding your monument]

b) Alternative options available for protection of resources applicable at each monument, such as Native American Graves Protection and Repatriation Act, Paleontological Resources Preservation Act, Archaeological Resources Protection Act, Historic Preservation Act and agency-specific laws and regulations.

The following could provide some options to protect specific resources found in Vermilion Cliffs National Monument. Protection would likely occur on a site-by-site or resource-by-resource basis and also would take a significant amount of time to accomplish under these various laws. These laws may not provide a mechanism to protect all cultural or tribal resources in Vermilion Cliffs National Monument.

The Federal Land Policy and Management Act of 1976 (FLPMA), as amended, 43 U.S. Code (U.S.C.) 1701 et seq.

Endangered Species Act of 1973 (ESA), as amended

The National Historic Preservation Act of 1966, as amended (Public Law 89-665; 80 Stat. 915; 16 U.S.C. 470).

The Antiquities Act of 1906, 16 U.S.C. 431-433

The Archeological Resources Protection Act, 16 U.S.C. 470aa.

The National Environmental Policy Act of 1969 (NEPA), as amended, 42 U.S.C. 4321 *et seq.*

The Clean Air Act of 1990, as amended, 42 U.S.C. 7418.

The Outdoor Recreation Act of May 28, 1963 (16 U.S.C. 4601-1).
43 CFR 2930

Secretarial Order 3308

- BLM Handbook – 2930-1 Recreation Permit Administration

Native American Graves Protection and Repatriation Act, (NAGPRA)

Arizona Wilderness Act of 1984

Wilderness Act of 1964

Paleontological Resources Preservation Act, (PRPA)

Archaeological Resources Protection Act, (ARPA)

American Indian Religious Freedom Act (AIRFA)

c) Designated wilderness areas (name, acreage), Wilderness Study Areas (name if there is one, acreage, type), and/or areas managed to preserve wilderness or roadless characteristics that are not WSAs.

Designated wilderness Paria Canyon Vermilion Cliffs Wilderness, 265,598 acres

Wilderness Study Areas (None)

Wilderness Characteristics 37,566 acres (White Pocket, Bush Head, Shed Valley, One Toe Ridge, White Knolls).

d) Outstanding R.S. 2477 claims within a monument – type of road claimed and history

[Insert monument specific response]

e) Maps
[Insert monument specific response]

f) Cultural or historical resources, particularly Tribal, located near a monument but not within the boundary that might benefit from inclusion in the monument

[Insert monument specific response]

g) Other – general questions or comments

[Insert monument specific response regarding any other information that should be considered in the review of your monument]

Designation date for Vermilion Cliffs National Monument is November 9, 2000.

a. Recreation - annual visits to site
    i. VCNM was created to protect monument resources and objects and to provide economic opportunities in the local communities surrounding the monument (Kanab, UT, St. George, UT, & Page, AZ).
    ii. VCNM provides a large variety of multiple-use recreation opportunities including traditional hiking and camping, backpacking, hunting, horseback riding, mountain biking, as well as motorized activities for off-highway vehicles.
    iii. Commercial recreation activities (Outfitter and Guides) have risen since Monument designation (VCNM SRP and visitor numbers.xlsx).
    iv. In 2016, 275,845 visitors came to VCNM.
    VCNM uses the Recreation Management Information System (RMIS) to report visitor use, which is calculated using data from multiple traffic counters and permits. BLM's RMIS is generally accepted as the agency's official record, however, RMIS was not used until 2004. Prior to 2004, VCNM aggregated data from the Arizona Strip Field Office. (See: VCNM SRP and visitor numbers.xlsx).

3. Information on activities occurring during the **five years prior to designation**
    a. Recreation - annual visits to site
        i. VCNM transitioned to RMIS in 2004. Data prior to 2004 is not available in the same reporting mechanism as from 2004-Present. Vermilion Cliffs did report visitor use beginning in FY89. (See: VCNM SRP and visitor numbers.xlsx).

           Overall visitation increased prior to designation and the projecting trends, based on the historical information, would see a continued rise of visitors seeking recreational opportunities.

4. Information on activities that likely would have occurred annually from the date of designation to the present **if the Monument had not been designated**

a. Recreation - annual visits to site

The answers to this question are speculative. The question is best answered with qualitative (rather than quantitative) data. As VCNM was designated 17 years ago, the factors affecting such projections are subject to a wide range of variables (many of which are outside of BLM's purview, such as market prices).

Boshell, Brandon <bboshell@blm.gov>

Follow-up on the Monument Review Data Call

1 message

Fisher, Timothy <tjfisher@blm.gov> Thu, May 25, 2017 at 4:47 PM
To: "Magee, Gerald J" <gmagee@blm.gov>, Joel Brumm <jbrumm@blm.gov>, Alicia Styles <astyles@blm.gov>, Brandon Boshell <bboshell@blm.gov>, Barbara Keleher <bkeleher@blm.gov>, Claire Crow <ccrow@blm.gov>, Chad Schneckenburger <cschneckenburger@blm.gov>, "Darrel (Wayne) Monger" <dmonger@blm.gov>, Johna Hurl <jhurl@blm.gov>, "James (Lee) Kirk" <jkirk@blm.gov>, Jaime Tompkins <jtompkins@blm.gov>, Kenneth Mahoney <kmahoney@blm.gov>, Kyle Sullivan <ksullivan@blm.gov>, McKinney Briske <mbriske@blm.gov>, Mark Conley <mconley@blm.gov>, Kymm Gresset <kgresset@blm.gov>, "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>, Ashley Adams <amadams@blm.gov>, Rebecca Carr <RWong@blm.gov>, David Freiberg <dfreiberg@blm.gov>, "Govan, Jihadda - FS" <jihaddagovan@fs.fed.us>, Mark Albers <malbers@blm.gov>, Holly Crawford <hcrawford@blm.gov>, Robin Fehlau <rfehlau@blm.gov>, Donald Holmstrom <dholmstr@blm.gov>, Terry Austin <taustin@blm.gov>, Brian St George <bstgeorg@blm.gov>, Melanie Barnes <mgbarnes@blm.gov>, Aden Seidlitz <aseidlitz@blm.gov>, Karen Montgomery <k15montg@blm.gov>
Cc: "Butts, Sally" <sbutts@blm.gov>, "Moore, Nikki" <nmoore@blm.gov>, Christopher McAlear <cmcalear@blm.gov>

All,

I just want to touch base and see how the data call is going and to provide some clarification and updates on this process.

1. Please make sure everyone identified to have access to the google doc folder has the ability to upload documents. Again the desire is to limit the number of folks who have access, but if there is a need to to modify key staff personnel in order to meet the deadline please let me know who they are and I can get them into the system.

2. Please begin uploading all public domain documents or active links that are part of the requested documentation as soon as possible to the google drive. This will save time with getting the information added. If your state has a different method on collecting the data please use your state's preferred method.

3. I completed uploading the Economic Report today. The information maybe helpful with the National Monument summaries. Due note the newest monuments do not have a snapshot since the data is from 2016. This will include Gold Butte with limited information for Sand to Snow and Mojave Trails. If any monument has other economic sources please utilize what economic data you have available.

4. WO-410 understands the need to coordinate with your state leadership team with addressing the three word documents: Initial Data Request, Additional Information and the Executive Summary. Please work independently on these documents with the preferred method of your State Leadership Team. This can be separate from the google drive and is perfectly fine until your internal review is complete.

5. Once these documents are approved, along with all the supporting information uploaded to the google drive please let WO-400 know by sending Chris McAlear, Nikki Moore, Sally Butts and myself know your data call package is complete and ready for the WO review. Below is an example of an email from Utah coming from their State Leadership as an example:

BLM-Utah has completed initial responses to the recent data call to respond to Executive Order 13792 of April 26, 2017. Executive summaries, a detailed response for the requested items, and supporting sources of information have been uploaded to the respective Google Drive folders for Bears Ears National Monument and Grand Staircase-Escalante National Monument. BLM-Utah staff are available to answer any follow-up questions.

6. Reminder the deadline for the Data Call is End of Day your time **Wednesday May 31, 2017.**

7. Finally, I have had many ask what are the next steps and what will the final report look like once it is done. I wish I had an exact answer, but the Department is currently working on this, hopefully once the heavy lift is done a more definitive product will emerge. The final report is due to the Secretary in September which will consist of incorporating this data call, the listening sessions with the BIA, and the public comments. If the Utah example is a template of the process I would expect there will be some specific additional questions being asked beyond this data call. The additional information is more monument specific. I expect throughout the summer months the need to coordinate some additional questions. So I ask for patience and will update you as I have more information.

8. I know this is a heavy lift and appreciate all the hard work you are doing. If you have questions - please feel free to contact me either at the office or cell number.

Hopefully I did not miss anyone in this email string - if I did please forward on.

Thanks,

Timothy J Fisher, Program Lead

National Monuments and Conservation Areas
National Conservation Lands

20 M Street S.E. (wo-410)
Washington DC 20003

202-912-7172 Office
202-604-0706 Cell
202-245-0050 Fax

tjfisher@blm.gov

Boshell, Brandon <bboshell@blm.gov>

A Vermilion outreach document I found...

1 message

Wimmer, Sheldon (Mark) <mwimmer@blm.gov> Fri, May 26, 2017 at 6:02 PM
To: "Boshell, Brandon" <bboshell@blm.gov>
Cc: "Mahoney, Kenneth" <kmahoney@blm.gov>

Here is what I found so far, only a brief mention at the bottom of the page about some trips that Babbit made to the area in 2000. See attached. I wonder if there is something on the shared drive or in Richard's files etc... I don't know, but this is at least something. It makes sense that we wouldn't have much on this in our records, but, perhaps there may be records over there. I'll send more if I find them.

-Mark

Mark Wimmer
Monument Manager
Grand Canyon-Parashant
National Monument
345 East Riverside Drive
St. George, Utah 84790
Office: 435-688-3202
Fax: 435-688-3388

Pages from Public Outreach Prior to Designation-2.pdf
119K

Vermilion Cliffs National Monument

Location: The monument is located on the Colorado Plateau in northern Arizona, and includes the Paria Canyon-Vermilion Cliffs Wilderness. It borders the Kaibab National Forest to the west, Glen Canyon National Recreation Area to the east, the state of Utah to the north, and highway 89A to the south.

Description: The monument is remote and unspoiled, qualities essential to the protection of the scientific and historic objects it contains. This 293,000 acre monument is a geologic treasure, containing the majestic Paria Plateau, the brilliant Vermilion Cliffs, and the Paria River Canyon, and spans elevations from 3,100 to 7,100 feet above sea level. Humans have explored and lived on the plateau and surrounding canyons for thousands of years, since the earliest known hunters and gatherers crossed the area 12,000 or more years ago. The area contains high densities of Ancestral Puebloan sites, including remnants of large and small villages, some with intact standing walls, fieldhouses, trails, granaries, burials, and camps.

Many historic expeditions crossed through the monument, including the Dominquez-Escalante expedition of Spanish explorers in 1776, Antonio Armijo's 1829 Mexican trading expedition in 1829, and Mormon exploring parties in the 1860s led by Jacob Hamblin. The settlement of the monument area by Mormon pioneers overlapped with another historic exploration by John Wesley Powell, who passed through the monument during his scientific surveys of 1871. The monument also contains outstanding biological objects which have been preserved by remoteness and limited travel corridors. Its vegetation is a unique combination of cold desert flora and warm desert grassland, and includes one threatened species, Welsh's milkweed. Twenty species of raptors have been documented in the monument, as well as a variety of reptiles and amphibians. California Condors have been reintroduced into the monument, and Desert bighorn sheep, pronghorn antelope, mountain lion, and other mammals roam the canyons and plateaus. The Paria River supports sensitive native fish, including the flannelmouth sucker and the speckled dace.

Management: The federal lands within the monument are managed by the Department of the Interior through the Bureau of Land Management (BLM). This arrangement will continue, but will be subject to the overriding purposes of protecting the identified scientific and historic objects. Currently permitted livestock grazing, hunting, fishing, bicycling, and similar activities will generally not be affected, nor will the designation affect state (approximately 13,000 acres) or private property (450 acres) or other valid existing rights such as water rights or access. Water for the monument is protected by the pre-existing federal water right in the wilderness area. There are no mineral leases and no known potential for oil, natural gas, or geothermal development in the monument.

Process: Approximately 89,000 acres within the monument were designated by Congress as the Paria Canyon-Vermilion Cliffs Wilderness Area in 1984. The Paria Plateau was given the administrative designation of a Resource Conservation Area in the 1992 BLM Arizona Strip Resource Management Plan.

Beginning in June 2000, Secretary Babbitt made three trips to the area and met with local elected officials, lodge owners, ranching interests, chamber of commerce representatives, and other interested groups to discuss protecting the area. On August 11, 2000, Secretary Babbitt recommended to the President that the area being designated a national monument. President Clinton designated the area as a national monument on November 9, 2000.

Boshell, Brandon <bboshell@blm.gov>

Data for VCNM data call

1 message

Wimmer, Sheldon (Mark) <mwimmer@blm.gov> Sat, May 27, 2017 at 7:48 PM
To: "Mahoney, Kenneth" <kmahoney@blm.gov>, Brandon Boshell <bboshell@blm.gov>

Ken/Brandon,

I have attached a file for posting to the google docs site in lieu of what is already there to answer Question #6 in the data call for VCNM. Ken, will you please post this as I do not have access to VCNM data? See attached.

Ken-I am nearly finished with the executive summary, but need a break, so I'll finish it up on Tuesday.

-Mark

Mark Wimmer
Monument Manager
Grand Canyon-Parashant
National Monument
345 East Riverside Drive
St. George, Utah 84790
Office: 435-688-3202
Fax: 435-688-3388

Public Outreach_VCNM.pdf
4655K

Call for Data Related to Review of National Monuments under EO 13792 (April 26, 2017)

Item #6: Public Outreach prior to Designation - outreach activities conducted and opportunities for public comment

Answer: Public outreach was conducted during the summer of 2000 with various participants. Details of the Vermilion Cliffs National Monument outreach are chronicled below:

Date: 7-24-2000

BRIEFING FOR THE SECRETARY

Prepared by: Roger Taylor, Arizona Strip Field Manager
From: Denise Meridith, BLM-Arizona State Director
Subject: Paria Fee Demonstration Project

PURPOSE OF THE BRIEFING DOCUMENT:

To provide information on the Paria Fee Demonstration Project.

ISSUES:

The Paria Canyon/Coyote Buttes Recreation Fee Demonstration Site is one of the original 18 sites chosen for the fee demo pilot project. This particular project began as a rare partnership among the Bureau of Land Management (BLM), the Arizona Strip Interpretive Association (ASIA), and Northern Arizona University (NAU). During the startup period, ASIA handled public information, NAU handled reservations, permits, fee collections, and monitoring, and BLM provided for site enhancements, resource protection projects, and fee demonstration project management and reporting through the agency's Arizona Strip and Kanab Field Offices. Well into the operational period at this time, partnership roles have changed. ASIA now manages the reservations operation, including self-service online and in person reservations, permit distribution, fee collections and public information, while NAU continues to provide resource monitoring and assistance on special projects

BACKGROUND:

The fee demonstration project site consists of Paria Canyon, its tributaries Buckskin Gulch and Wire Pass, and the Coyote Buttes Special Management Area; all part of the larger Paria Canyon-Vermilion Cliffs Wilderness designated in August, 1984. The outstanding opportunities for hiking and viewing geologic formations in the canyons and the buttes have attracted increasing numbers of visitors; from about 800 in 1975 to over 10,000 in 1996. Four trail heads (three in Utah) serve as portals. A permanent visitor contact station, located on U.S. Highway 89 two miles from the main trail head, provides information for hikers and non-hikers. A small semi-primitive campground provides overnight accommodation for many canyon hikers. The area is well known for its back country hiking, wilderness character, slot canyons, and scenic rock formations. The fee demonstration project has been integral in providing the needed support to both establish and manage needed visitor use limits.

BUREAU PERSPECTIVE:

The project continues to provide visitors with real-time, self-service online reservations and permits for the Paria Canyon and Coyote Buttes areas. The Paria Team meets often to discuss operational issues and consider system changes based on public input, operational experience, and changing technological needs. The project has produced average revenues through fees of approximately $70,000 per year. Revenues flow back to the project in four benefit areas: visitor services, site enhancements, resource protection, and monitoring. BLM will continue to improve service and carry out site enhancement and resource protection projects using fee demonstration revenues. Monitoring will continue to provide data with which to make adjustments to visitor use limits with the goal of restoring and preserving high quality wilderness conditions.

POSITION OF INTERESTED PARTIES:

Most visitors support the use limits and enjoy the self-service aspects of the online reservations/information. Some visitors have protested limits, fees, and even the absence of developed trails in the wilderness. Some visitors have also complained about the website design.

Contact: Denise Meridith, BLM-Arizona State Director, (602) 417-9500

SECRETARY BABBITT'S SCHEDULE

THURSDAY, JULY 13

Leave Phoenix by airplane — 3:00 p.m. (All time reflect AZ time)

Secretary Babbitt
Molly McUsic
Jack Lynch
Roy Wright
John Leshy

Arrive Marble Canyon
Accommodations at Cliff Dwellers Lodge

FRIDAY, JULY 14

Breakfast Meeting at Cliff Dwellers — 8:00 a.m. - 9:00 a.m.

Travel to Page — 9:00 a.m. - 9:45 a.m.

Meeting with Mayors — 10:00 a.m. -11:00 a.m.
Glen Canyon NRA, Vermillion Room
691 Scenic View Drive
Page, AZ
520-608-6200

Meeting with Chamber of Commerce — 11:30 - 12:30
644 N Navajo, Suite C
Page, AZ
520-645-2741

Lunch — 12:30 - 1:30 p.m.

Meeting with Lake Powell Chronicle — 1:45 - 2:45 p.m.
3 Elm Street Mall
Page, AZ
520-645-8888

Meeting with KXAZ/KPGE — 3:00 - 4:00 p.m.
91 N 7th Avenue
Page, AZ
520-645-8181

Travel back to Cliff Dwellers

SATURDAY, JULY 15

Leave from Lonely Dell Trail Head	7:00 a.m. (Sharp)
Hike to the top of ridge	
Break and Roundtable Discussion	9:00 a.m.
Hike back to vehicles	12:00
Drive to Cliff Dwellers	
Lunch	
Leave Marble Canyon for Phoenix	3:00 p.m.

Secretary Babbitt
Molly McUsic
Jack Lynch
Roy Wright
John Leshy
Tony Montez

Assignments:

Vehicles- Roger and Ferron- Tahoes,	Bette and Becky- Mini Van
Water and fruit for hike-	Becky
Addresses and telephone numbers to WO-	Bette Done 7/12/00

Contact:

Lee Evans
202-288-7551
877-296-6781 Pager
202-208-4694 Fax

(Kristine needs to be called when the plane arrives and leaves from Marble Canyon)

Sign-in Sheet

Management Principles – Input
Final Map

*Fri Mtg in Page
7:00 pm MST
City Council Chambers

INVITEES 7/14 & 7/15 MEETINGS

FRIDAY BREAKFAST MEETING	
✓John Rich, Jr., Jacob Lake Inn	520-643-7232
✓Maggie Sacher, Lee's Ferry Lodge	520-355-2244
✓ Roger DeWitz, Cliff Dweller's Lodge	520-355-2228
✓Don Foster, Marble Canyon Lodge	520-355-2225
✓Sarah Hatch, Hatch River Expeditions	520-355-2241 2247
✓Russell Sullivan, Lee's Ferry Anglers	520-355-2261
FRIDAY MID-MORNING MEETING IN PAGE	
✓Karen Alvey, Mayor of Kanab	435-644-2937 644 2534 office
✓Bob Bowling, Mayor of Page Tina Holeman-acting mayor	520-645-~~8861~~ 4220
✓Steven Winward, Mayor of Fredonia	520-643-7241
✓ Louise Yellowman, Coconino County Supervisor	~~520-779-6746~~ 520- 779-6699
Vivian Firlein, President, Page Chamber of Commerce	520-353-4290
Sue Shinneman, President Elect, Page Chamber of Commerce	520-353-8888
Steve Ward, Past President, Page Chamber of Commerce	520-353-1001 ~~[illegible]~~
Kathy Neisess, Treasurer, Page Chamber of Commerce	520-353-2918
✓ Lloyd Hammonds, Page Chamber of Commerce	520-353-3987
Rev. Joel Hibbs, Page Chamber of Commerce	520-353-9610
Rich Merolla, Page Chamber of Commerce	520-353-1270
Kathleen Muenzen, Page Chamber of Commerce	520-353-8883
Char Obergh, Page Chamber of Commerce	520-608-6208
Chris Rasmussen, Page Chamber of Commerce	520-608-0254
Bill Robinson, Ex-Officio, Page Chamber of Commerce	520-353-8861
Diane Hansen, Ex-Officio, Page Chamber of Commerce	520-353-8861
✓Joan Nevills Staveley, Page Chamber of Commerce	520-~~353-3465~~ ? 645-2741
✓ Mayor BigWater -	www.pagelakepowell.org FAX 502 645-3181
FRIDAY AFTERNOON MEETING IN PAGE	
Lake Powell Chronicle, Page	520-645-8888
St. George Spectrum, St. George/Kanab	435-674-6238
~~KXAZ/KPGE~~, Page	520-654-8181
~~KONY/KREC~~, St. George/Kanab/Fredonia/Page Southern Utah News	435-673-9815 435-644-2900
SATURDAY MORNING HIKE	
~~Verlin Smith, BLM Kanab Field Office~~ Kanab	435-644-4603
~~Kate Cannon, GSENM Manager~~	435-644-4300
~~Jill Leonard, USFS North Kaibab District Ranger~~	520-643-7395
✓ Jim Matson, UT/AZ Action Committee Kanab	435-644-8841
✓ Mike Gentile, Kane Ranch Working Group Kanab	435-644-2303
(Talked to Lynn) Joe Alston, Glen Canyon NRA Page	520-608-6200
~~Pam Foti, NAU~~	520-523-6196
~~Joan Nevills Staveley, Page Chamber of Commerce~~	520-353-3465

Ranchers - John Schoppmann
Steve Rich
Preston Bunting

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
ARIZONA STRIP FIELD OFFICE

Proposed Paria National Monument Meetings

Meetings were held in Page and Marble Canyon, Arizona, and Kanab, Utah, on July 20, 2000, regarding the Secretary's proposal for a Paria national monument. The meetings were held with affected ranchers, community leaders, the Page Chamber of Commerce and business owners in the Marble Canyon and Jacob Lake areas. Roger Taylor, Field Manager, conducted the meetings, and Becky Hammond, Nonrenewable Resources Advisor, attended. Copies of the draft management principles for the proposed monument were distributed. Maps showing the proposed boundary were available. Thirty-eight people attended the three meetings.

The meetings were contentious. People were outspoken and unanimously opposed to monument designation for the Paria area. Numerous questions were posed.

Summarized below are public comments on the monument proposal, the boundary and draft management principles.

General Public Comments on the Proposed Paria National Monument

Designation and the increase in visitors will cause degradation of cultural resources and the environment.
Scientific and other values will not be protected by designation.
This is a done deal. People don't really have a say.
Don't want the Paria designated as a monument.
Don't designate the Ferry Swale area. Page would like to obtain land for an airport there.
People want to be notified if the boundary changes.
If the BLM will not get any additional resources to manage the lands, then nothing should be done with the Paria.
There is a lack of trust in the government.
BLM should manage the monument.
There should be no road improvements.
All hate to see an increase in use in the area.
Designation will destroy what they're trying to protect.
Safety must be the first priority. Cell phone coverage is needed on the Paria Plateau.
Designation will not help the land or resources.
Meetings on the proposed Paria national monument should be advertised and open to the public.
Anonymity is the best protection for the Paria.
A withdrawal from mineral entry can be accomplished without a monument designation.

Comments on the Boundary

1) Move to inside the wilderness boundary
2) Follow the Paria River on the northeast
3) Leave the Signature Rock allotment out
4) Follow the wilderness boundary not Highway 89A
5) Follow the wilderness boundary in the Ferry Swale area not the powerline
6) Follow the rim of the Paria Plateau
7) Move boundary in the Ferry Swale area south to the cliffs

Comments on the Draft Management Principles

- ❑ The area will be managed to protect its outstanding scientific and historical values and to maintain its remote character.

Change to ...scientific, historic and traditional cultural values such as livestock grazing and to maintain...

- ❑ Livestock grazing will continue, consistent with the laws, regulations, and policies followed by the BLM in issuing and administering grazing permits on all lands under its jurisdiction.

Change to ...consistent with the existing (as of the date of the proclamation) laws...
The area should be designated as a historic ranching district or heritage site in the proclamation to protect the grazing.
Glen Canyon NRA's authorizing legislation requires livestock grazing to continue. Use this same language.

- ❑ The entire area will be withdrawn from mineral entry and leasing.

Mineral materials need to be available for road maintenance.
Borrow pits for use by the state, county, communities and BLM should be available.
The lands on the Paria Plateau could be withdrawn by other means.

- ❑ Vehicular travel will be confined to designated roads.

The language should be the same as that for the Parashant National Monument: vehicular travel will be limited to existing roads and trails.
Permittees need to be allowed to drive to maintain fences and other improvements.
Road access to existing facilities should be guaranteed.
Road access for all (including those with disabilities) should be guaranteed to the overlooks.
Public input is necessary before designation of roads.
There should be no increase in roads.

- ❑ Hunting will continue to be managed by the State of Arizona.

Change to ...continue and will be managed...

Hunters should be allowed to drive to pick up game as allowed by Arizona law.
Change to ....Arizona, and predator control will be allowed.

- ❑ Valid existing rights associated with private property will be protected, including access to private property.

Change to ...including road access to private property.

- ❑ Existing water rights and water developments will be unaffected.

Change to ...Existing water rights, water developments and rights-of-way will be unaffected and the development of new improvements will be allowed. Maintenance of existing facilities will continue.
Monument designation will bring an increase in recreational use and impacts to water sources, transportation and storage facilities. Water right holders must be guaranteed the right to protect the water by fencing or whatever means are necessary.

- ❑ Designated wilderness will continue to be managed pursuant to the Wilderness Act.

Add: No new wilderness will be designated.

- ❑ Visitor facilities will not be developed inside the monument. Instead, visitors will be encouraged to interact with the lodges and existing communities for necessary services.

Private lodges cannot give out information on where to go because of liability issues.
Change to ...interact with the surrounding communities...

Add: Existing partnerships will be maintained.

Add: There will be no fees.

"Vivian Firlein" <warrior@page.az.net> on 07/17/2000 07:26:26 PM

To: <Undisclosed-Recipient:@digit.dcaccess.com;@sc.blm.gov>
cc:

Subject: Paria/VermillionCliffsAdvisoryGroup

Hello,

Your name is on the list of persons who have indicated a desire to participate in continuing discussions concerning the proposed Paria Plateau/ Vermillion Cliffs designation as a National Monument. The first "official" meeting for this group will take place this Friday, July 21 at 7pm in the Page City Hall Council Chambers.

We plan to take notes of each meeting and share them with the participants. That way, those who miss a meeting will keep abreast of what was discussed and accomplished.

Here is a tentative agenda -- please email me with other additions/ corrections.

-Discussion of next meeting: time & place. It has been suggested that we schedule an occasional meeting in Fredonia or Kanab so that those travelling from those areas or St. George would have a reprieve. What is your input?

-Discussion of how best to express our concerted views to the following persons, and perhaps an expansion of that list:
President of the U.S.
Secretary of the Interior
Congressional Delegates from Utah & Arizona
Governors of utah and Arizona
News Media

-The concerns we have which should be considered in formulating a draft proposal for the Natl. Monument
Facilitator: Karen Alvey, Mayor, City of Kanab

Yours, Vivian Firlein

Roger Taylor
07/23/2000 01:23 PM

To: Molly McUsic/SIO/OS/DOI@DOI, SGFO Management Team
cc:

Subject: Re: Proposed Paria National Monument

The only explanation I can offer is that they either said nothing out of respect for the Seceretary or they didn't feel that it would do any good to challenge or question him because they felt that his mind was already made up. At the meeting last Friday night in Page, which by the way was sponsored and held by the Page C of C, there were probably 25-30 people present, more C of C members and local residents than ranchers, they took a vote. The question was who supports the creation of a Monument? There were two who voted in support.

Most of the concern expressed centered around the issues of change and the uncertainity of change aa well as a concern that the creation of a Monument would draw more people into the area thus more human impact. They are happy with the way things are and don't what to see change. How do you deal with that kind of thinking?

Roger

"Vivian Firlein" <warrior@page.az.net> on 07/26/2000 04:54:25 PM

To: <Undisclosed-Recipient:@digit.dcaccess.com;@sc.blm.gov>
cc:

Subject: Paria Monument

Following are the comments recorded by Joan Staveley and Vivian Firlein from citizens input at the Thursday July 20th meeting at the Ntl. Park Service building and the Friday July 21st meeting at City Hall.

Draft Managment Principles for the Proposed Paria National Monument

1.The area will be managed to protect its outstanding scientific and historical values and to maintain its remote character.

Comments:
-Exactly what are these "values?"
-Are the ranches that have been established on the plateau considered historic?
-Won't the monument area beome degraded rather than enhanced by the increased traffic inthe area?
-Are "Signature Rock," "Newspaper Rock," "Honeymoon Trail" and other existing pioneer trails considered historic?
-Aren't the historical and scientific values already protected by the remoteness of the location and its low-profile existence?
-Will enforcement be enhanced/increased to protect these areas? -- Where will that money come from?

2. Livestock grazing will continue, consistent with the laws, regulations and policies followed by the BLM in issuing and administering grazing permits on all lands under its jurisdiction.

Comments:
-Ranchers present at the meetings were concerned that it be made clear that existing policies such as the Taylor Grazing Act continue. It was observed that they have had a good relationship with BLM mangement in the past and hope that this would continue. It was suggested that a portion of the monument be defined as an "Historic District" or "Ranching District" to protect these traditional uses.
-Ranchers also expressed concerns about continuing to be allowed to perform chemical sagebrush controls.
-Ranchers would like to continue to be able to cut wood for firewood or other uses.

3. The entire area will be withdrawn from mineral entry and leasing.

Comments:
-There was little opposition to this item as there do not seem to be any mining claims at this time.
-There was concern that language be drafted to allow mineral materials to be used for roadway maintenance.
-It was observed that this could be accomplished without the Monument designation.

4. Vehicular travel will be confined to designated roads.

Comments:

-The main questions here concerned what "designated roads" refers to. The term "vehicle accessible" was perferred.
-Ranch roads whould be maintained.
-Some primitive roads/trails, although not highly used, offer the only access to some of the more remote areas on the plateau. These should remain open.
-There should be public input on what constitutes these passageways.
-Roads should be destination-oriented. Roads leading "nowhere" should be abandoned. On the other hand, there were arguments that some roads are used only for hunting.
-Where do "Mountain Bicycles" fit in? Will they be allowed only on "designated roads?" What about slickrock? See Red Rock Cyclery for information on historical uses by mountain bikes in the area. Some of these lands are in printed guidebooks avidly read by mountain bikers.
-What about wheelchair access?

5. Hunting will continue to be managed by the State of Arizona.

Comments:

-What about target shooting?
-Ranchers are concerned about being allowed to hunt predators such as coyotes to keep them under control.

6. Valid existing rights associated with private property will be protected, including access to private property.

Comments:
-There was a big concern voiced by property owners that they would experience an increase in property vaues which would result in an increase in property taxes such that they would no longer be able to afford to live there.

7. Existing water rights and water developments will be unaffected.

Comments:
-Change "unaffected" to "protected."
-Change whole sentence to read "Water rights and associated water facilities will be protected."
-The ranchers' concern was to protect their ability to improve, maintain and retrieve water. For instance, horizontal drilling has had to be employed in the past to access an area where the existing water delivery system has failed.
-Future water access must be protected.
-Four critical water delivery systems which need to be protected: Merl's, Coyote, Adams, Headquarters.

8. Designated wilderness will continue to be managed pursuant to the Wilderness Act.

Comments:
-It was suggested that the "Wilderness" Area be made into the Monument, and the other lands be left alone.

9. Visitor facilities will not be developed inside the monument. Instead, visitors will be encouraged to interact with the lodges and existing communities for necssary services.

Comments:
-Many concerns were voiced about liability of providing directions/advice to hikers, and the cost of search and rescue. It was suggested that warning signs be posted at entrances to area, printed collateral provided, and a low-fequency radio transmission be made warning of potential hazards.
-For safety, designations such as "Front country" and "Back Country" should be considered.

Other Comments:
-The consensus was that the area is sufficiently protected now by virtue of its remoteness and anonymity.
-The consensus was that the proposal does not sufficiently address the impact of increased recreational use of the area.

Office of the Secretary

Contact: Tim Ahern (202)208-6416 John Wright

For Immediate Release: August 11, 2000

Babbitt Makes Monument Recommendations to President Clinton

Secretary of the Interior Bruce Babbitt today sent President Clinton recommendations that a new national monument should be created in Arizona, and another existing monument expanded in Idaho, under the Antiquities Act of 1906.

He proposed creation of the Vermilion Cliffs National Monument in northern Arizona, near the Grand Canyon. In addition, the current Craters of the Moon National Monument in central Idaho would be expanded.

"Both of these recommendations cover unique, spectacular landscapes," said Babbitt. "So far, they have been untouched by development or sprawl, but the West is expanding rapidly, and this is the time to act. If we protect these wonderful open spaces now, future generations will be able to marvel at them just as we do."

In recent months, Babbitt has visited both areas a number of times to meet with local residents and officials.

The 1906 Antiquities Act authorizes the President to create national monuments on federal land to protect objects of historic or scientific interest. More than 100 national monuments have been created by almost every president, including some of the nation's best-loved places such as the Grand Canyon.

Vermilion Cliffs - The proposal covers 293,000 acres of federal land on the Colorado Plateau in northern Arizona. The area is a geologic treasure, covering the Paria Plateau and the Vermilion Cliffs and ranging in elevations from 3,100 feet to 7,100 feet. The area contains a number of ancestral human sites. It would be managed by the Bureau of Land Management.

Craters of the Moon - The current Craters of the Moon monument, created by President Coolidge in 1924, covers 54,440 acres of craters and lava flows. The expansion would add an additional 661,000 acres of federal land, primarily south of the current monument, to encompass the entire lave field. The lava flows in the additional land would be managed by the National Park Service, while the rest of the land would continue to be managed by the Bureau of Land Management.

***Note to Editors: Maps of the proposed sites can be viewed* at:**

http://www.doi.gov/doipress/newmonuments.htm

-DOI-

Proposed Vermilion Cliffs National Monument

Location: The proposed monument is located on the Colorado Plateau in northern Arizona, and includes the Paria Canyon-Vermilion Cliffs Wilderness. It borders the Kaibab National Forest to the west, Glen Canyon National Recreation Area to the east, the state of Utah to the north, and highway 89A to the south.

Description: The proposed monument is remote and unspoiled, qualities essential to the protection of the scientific and historic objects it contains. This 293,000 acre proposed monument is a geologic treasure, containing the majestic Paria Plateau, the brilliant Vermilion Cliffs, and the Paria River Canyon, and spans elevations from 3,100 to 7,100 feet above sea level. Humans have explored and lived on the plateau and surrounding canyons for thousands of years, since the earliest known hunters and gatherers crossed the area 12,000 or more years ago. The area contains high densities of Ancestral Puebloan sites, including remnants of large and small villages, some with intact standing walls, fieldhouses, trails, granaries, burials, and camps.

Many historic expeditions crossed through the proposed monument, including the Dominquez-Escalante expedition of Spanish explorers in 1776, Antonio Armijo's 1829 Mexican trading expedition in 1829, and Mormon exploring parties in the 1860s led by Jacob Hamblin. The settlement of the proposed monument area by Mormon pioneers overlapped with another historic exploration by John Wesley Powell, who passed through the proposed monument during his scientific surveys of 1871. The proposed monument also contains outstanding biological objects which have been preserved by remoteness and limited travel corridors. Its vegetation is a unique combination of cold desert flora and warm desert grassland, and includes one threatened species, Welsh's milkweed. Twenty species of raptors have been documented in the proposed monument, as well as a variety of reptiles and amphibians. California Condors have been reintroduced into the proposed monument, and Desert bighorn sheep, pronghorn antelope, mountain lion, and other mammals roam the canyons and plateaus. The Paria River supports sensitive native fish, including the flannelmouth sucker and the speckled dace.

Management: The federal lands within the proposed monument are managed by the Department of the Interior through the Bureau of Land Management (BLM). This arrangement will continue, but will be subject to the overriding purposes of protecting the identified scientific and historic objects. Currently permitted livestock grazing, hunting, fishing, bicycling, and similar activities will generally not be affected, nor will the designation affect state (approximately 13,000 acres) or private property (450 acres) or other valid existing rights such as water rights or access. Water for the proposed monument is protected by the pre-existing federal water right in the wilderness area. There are no mineral leases and no known potential for oil, natural gas, or geothermal development in the proposed monument.

Process: Approximately 89,000 acres within the proposed monument were designated by Congress as the Paria Canyon-Vermilion Cliffs Wilderness Area in 1984. The Paria Plateau was given the administrative designation of a Resource Conservation Area in the 1992 BLM Arizona Strip Resource Management Plan.

Beginning in June 2000, Secretary Babbitt made three trips to the area and met with local elected officials, lodge owners, ranching interests, chamber of commerce representatives, and other interested groups to discuss protecting the area.

Craters of the Moon National Monument Boundary Enlargement

Boshell, Brandon <bboshell@blm.gov>

Re: Monument Review

1 message

Christian, Lorraine <lmchrist@blm.gov> Tue, May 30, 2017 at 8:35 AM
To: "Boshell, Brandon" <bboshell@blm.gov>
Cc: "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>

Thanks Brandon. He's in charge of the data call, so I'll go with his opinion on the executive summary.

On Fri, May 26, 2017 at 3:42 PM, Boshell, Brandon <bboshell@blm.gov> wrote:

> Lorraine,
>
> I just got off the phone with Ken Mahoney and he said upon initial glance at VCNM's documents submitted it all looked pretty good. I did inform him of the possibility that Mark may have found some pre-monument designation public outreach documents. Still to be determined by Mark. If so, Mark could you ensure Ken obtains those for Vermilion. Ken also said he would then upload them to Vermilion's drive for us and update the two locations referencing this subject in the data call documents.
>
> I did ask him specifically about the two summary questions in the executive summary and he thought they wanted a summary of the data call documents. I informed him of your opinion but he still thought otherwise. I then told him it was very difficult to summarize those documents because we already summarized them in answering the data call. Per your and Mark's thoughts, I did tell him of another option of uploading the Manager's annual reports but he didn't think it was necessary. If he does call next week after getting further clarification and want them they are located at S:blmshare/Vermilion Cliffs NM/Conservation.Lands.and Managers.Report/Manager's Report and sorted by year. We have 2009 through 2016 available.
>
> I think we are in a good spot and really don't have many concerns.
>
> Brandon
>
> --
> Brandon E. Boshell
> Assistant Field Manager / Vermilion Cliffs National Monument Manager
> BLM - Arizona Strip Field Office
> (435) 688-3241

Boshell, Brandon <bboshell@blm.gov>

Fwd: Additional Potential Questions for Monument Review

1 message

Mahoney, Kenneth <kmahoney@blm.gov> Thu, Jun 1, 2017 at 12:31 PM
To: "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>, Brandon Boshell <bboshell@blm.gov>, Wayne Monger <dmonger@blm.gov>, Claire Crow <ccrow@blm.gov>

I think I will only need to consult with Claire regarding the question and related data being requested in the email from Tim Fisher. If I'm wrong about that, let me know. Claire, I call you soon. Thanks,

Ken

---------- Forwarded message ----------
From: **Fisher, Timothy** <tjfisher@blm.gov>
Date: Thu, Jun 1, 2017 at 7:00 AM
Subject: Additional Potential Questions for Monument Review
To: "Magee, Gerald J" <gmagee@blm.gov>, Chad Schneckenburger <cschneckenburger@blm.gov>, Jaime Tompkins <jtompkins@blm.gov>, Robin Fehlau <rfehlau@blm.gov>, Barbara Keleher <bkeleher@blm.gov>, Kenneth Mahoney <kmahoney@blm.gov>, McKinney Briske <mbriske@blm.gov>, Mark Conley <mconley@blm.gov>

Additional Potential Questions

Sorry about this, but this came from DOI late yesterday. You may have already addressed in your monument review, but if not can you look over these questions and address for the appropriate monuments under review.

Are there mines or processing facilities near or adjacent to a National Monument?

If it is a mine or mineral processing facility, they would like some information on:

1. the extent to which activities on the monument (pre and post designation) affected the facility;
2. the type of minerals processed;
3.the permitting entity;
4. and scale of activity.

Again sorry for these broad scale questions so quickly after the deadline, but as I mentioned on the phone there where a number of follow-up questions from the Utah NM Review, but most where specific to those monuments. Then we get some general questions and some they want more information on and others not.

My apologies for adding on to a heavy lift but if you can address in a **word document** and add to the folders I am much appreciative.

Thanks,

Timothy J Fisher, Program Lead

National Monuments and Conservation Areas
National Conservation Lands

20 M Street S.E. (wo-410)
Washington DC 20003

202-912-7172 Office
202-604-0706 Cell
202-245-0050 Fax

tjfisher@blm.gov

Boshell, Brandon <bboshell@blm.gov>

Thanks and follow-up on Vermilion Cliffs National Monument

1 message

Wootton, Rachel <rwootton@blm.gov> Fri, Jun 2, 2017 at 4:17 PM
To: “Brandon Boshell” <bboshell@blm.gov>, Kenneth Mahoney <kmahoney@blm.gov>
Cc: Timothy Fisher <tjfisher@blm.gov>

Hi Brandon (or Ken!),

I hope you both are doing well! Thank you so much for all of your work to provide information for the National Monuments data call. We had a couple of questions come up about the information provided in on Vermilion Cliffs. Could you give me a call when you have a chance? I'm heading out in a little while, but you are welcome to look at my comments and respond in the document or give me a call on my cell (see below)!

Have a good weekend!

Best,

Rachel

--
Rachel Wootton
Planning and Environmental Specialist
National Conservation Lands (WO-410)
Bureau of Land Management
20 M Street SE Washington, DC 20003
rwootton@blm.gov
desk - (202) 912-7398
cell - (202) 774-8791

Visit us online!

Boshell, Brandon <bboshell@blm.gov>

Re: Thanks and follow-up on Vermilion Cliffs National Monument

1 message

Mahoney, Kenneth <kmahoney@blm.gov> Fri, Jun 2, 2017 at 5:19 PM
To: "Wootton, Rachel" <rwootton@blm.gov>
Cc: “Brandon Boshell” <bboshell@blm.gov>, Timothy Fisher <tjfisher@blm.gov>

Rachel,

I'm working through comments on the Sonoran Desert NM documents and when finished will work on the Vermilion Cliffs NM comments. I'll call you if I need to. You have a good weekend, too.

Ken

On Fri, Jun 2, 2017 at 3:17 PM, Wootton, Rachel <rwootton@blm.gov> wrote:

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> Have a good weekend!
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> Best,
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> Rachel
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Boshell, Brandon <bboshell@blm.gov>

Re: Thanks and follow-up on Vermilion Cliffs National Monument

1 message

Mahoney, Kenneth <kmahoney@blm.gov> Fri, Jun 2, 2017 at 5:49 PM
To: "Fisher, Timothy" <tjfisher@blm.gov>
Cc: "Wootton, Rachel" <rwootton@blm.gov>, “Brandon Boshell” <bboshell@blm.gov>

Ok, thanks.

On Fri, Jun 2, 2017 at 4:38 PM, Fisher, Timothy <tjfisher@blm.gov> wrote:

> Ken do not worry about Vermilion Cliffs until Monday. Thanks for working on Sonoran Desert NM. Just as a FYI Grand Parashant and Ironwood Forest are done and forwarded on! Great Work...
>
> Timothy J Fisher, Program Lead
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Boshell, Brandon <bboshell@blm.gov>

Re: Thanks and follow-up on Vermilion Cliffs National Monument

1 message

Wootton, Rachel <rwootton@blm.gov> Mon, Jun 5, 2017 at 11:57 AM
To: "Fisher, Timothy" <tjfisher@blm.gov>
Cc: "Mahoney, Kenneth" <kmahoney@blm.gov>, “Brandon Boshell” <bboshell@blm.gov>

Hi Ken,

Brandon gave me a call and we worked through the questions that we had regarding Vermilion Cliffs. (Thanks again, Brandon!)

Please let us know when you've had a chance to take a look and, if you're good to go, Tim will do his check and we'll send it up to our leadership and DOI.

Thank you both so much for all of your work on this, I know it was quite a big task to get all of this information together, and I think it looks great!

Best,

Rachel

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Rachel

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Boshell, Brandon <bboshell@blm.gov>

Re: Thanks and follow-up on Vermilion Cliffs National Monument

1 message

Fisher, Timothy <tjfisher@blm.gov> Mon, Jun 5, 2017 at 2:06 PM
Cc: "Mahoney, Kenneth" <kmahoney@blm.gov>, “Brandon Boshell” <bboshell@blm.gov>

I have just a couple of quick questions hopefully you can answer?

Thanks

https://docs.google.com/document/d/1DUA0xUoMrGb1lXKZcbDtev-T1LnGEWeeTrJvTz9Jq58/edit#

https://docs.google.com/document/d/1zeo5x7Gnor2oOLfYhW0jHZoeV231Hu8T64Pvp9UpE4A/edit#

please see if you can address

Timothy J Fisher, Program Lead

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tjfisher@blm.gov

On Mon, Jun 5, 2017 at 3:58 PM, Wootton, Rachel <rwootton@blm.gov> wrote:

> Thanks again, Ken!
>
> Best,
>
> Rachel
>
> --
> Rachel Wootton
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On Mon, Jun 5, 2017 at 10:57 AM, Wootton, Rachel <rwootton@blm.gov> wrote:

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Please let us know when you've had a chance to take a look and, if you're good to go, Tim will do his check and we'll send it up to our leadership and DOI.

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Boshell, Brandon <bboshell@blm.gov>

Just need some wood cutting Info or rewrite of paragraph

1 message

Fisher, Timothy <tjfisher@blm.gov> Mon, Jun 5, 2017 at 3:08 PM
To: Kenneth Mahoney <kmahoney@blm.gov>, Brandon Boshell <bboshell@blm.gov>

Hi Ken / Brandon

DOI Initial Data Request Related to Review of National Monuments VCNM.docx

I have just one last comment needing to be addressed and Vermilion Cliffs will be done. It has to do with fire wood.

I appreciate you helping me out so we can wrap this up.

Thanks,

Timothy J Fisher, Program Lead

National Monuments and Conservation Areas
National Conservation Lands

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Washington DC 20003

202-912-7172 Office
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tjfisher@blm.gov

Boshell, Brandon <bboshell@blm.gov>

Re: Thanks and follow-up on Vermilion Cliffs National Monument

1 message

Fisher, Timothy <tjfisher@blm.gov> Mon, Jun 5, 2017 at 3:50 PM
To: "Boshell, Brandon" <bboshell@blm.gov>

Thanks - that works!

Timothy J Fisher, Program Lead

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National Conservation Lands

20 M Street S.E. (wo-410)
Washington DC 20003

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202-604-0706 Cell
202-245-0050 Fax

tjfisher@blm.gov

On Mon, Jun 5, 2017 at 5:45 PM, Boshell, Brandon <bboshell@blm.gov> wrote:

> Tim,
>
> I am sorry I can't answer your question with a specific amount of firewood / fuelwood cutting permits issued. We don't have that data. However, we do know that it did occur but to what extent is not possible to answer.
>
> The only thought I have concerning a rewrite would be,
>
> "No timber production occurred in the area that became VCNM in the five years prior to designation. Fuelwood cutting of pinyon pine and juniper for personal, non-commercial use occurred but was not monitored and recorded pertaining to number of permits issued.
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> Hope this helps
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Thanks again, Ken!

Best,

Rachel

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Rachel Wootton
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Ken

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Brandon E. Boshell
Assistant Field Manager / Vermilion Cliffs National Monument Manager
BLM - Arizona Strip Field Office
(435) 688-3241

Boshell, Brandon <bboshell@blm.gov>

Re: Thanks and follow-up on Vermilion Cliffs National Monument

1 message

Mahoney, Kenneth <kmahoney@blm.gov> Mon, Jun 5, 2017 at 3:55 PM
To: "Boshell, Brandon" <bboshell@blm.gov>, "Fisher, Timothy" <tjfisher@blm.gov>

I've provided some edits and further clarification, included a response to Tim's comment. Does that address the response needed for information about timber use on the VCNM?

On Mon, Jun 5, 2017 at 2:45 PM, Boshell, Brandon <bboshell@blm.gov> wrote:

> Tim,
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> I am sorry I can't answer your question with a specific amount of firewood / fuelwood cutting permits issued. We don't have that data. However, we do know that it did occur but to what extent is not possible to answer.
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On Fri, Jun 2, 2017 at 7:19 PM, Mahoney, Kenneth <kmahoney@blm.gov> wrote:

Rachel,

I'm working through comments on the Sonoran Desert NM documents and when finished will work on the Vermilion Cliffs NM comments. I'll call you if I need to. You have a good weekend, too.

Ken

On Fri, Jun 2, 2017 at 3:17 PM, Wootton, Rachel <rwootton@blm.gov> wrote:

Hi Brandon (or Ken!),

I hope you both are doing well! Thank you so much for all of your work to provide information for the National Monuments data call. We had a couple of questions come up about the information provided in on Vermilion Cliffs. Could you give me a call when you have a chance? I'm heading out in a little while, but you are welcome to look at my comments and respond in the document or give me a call on my cell (see below)!

Have a good weekend!

Best,

Rachel

--

Rachel Wootton
Planning and Environmental Specialist
National Conservation Lands (WO-410)
Bureau of Land Management
20 M Street SE Washington, DC 20003
rwootton@blm.gov
desk - (202) 912-7398
cell - (202) 774-8791

Visit us online!

--

Brandon E. Boshell
Assistant Field Manager / Vermilion Cliffs National Monument Manager
BLM - Arizona Strip Field Office
(435) 688-3241

Boshell, Brandon <bboshell@blm.gov>

Re: Question on Grazing AUMs billed - Vermilion Cliffs

1 message

Mahoney, Kenneth <kmahoney@blm.gov> Tue, Jun 20, 2017 at 3:25 PM
To: "Boshell, Brandon" <bboshell@blm.gov>
Cc: Lorraine Christian <lmchrist@blm.gov>, Amanda Harrington <asharrin@blm.gov>, "Mckinley, Karen" <kmckinley@blm.gov>

Brandon,

Thanks for the quick reply and the information addressing the question of the decrease in AUMs billed. I'll be forwarding this information to WO monuments & conservation areas program lead Tim Fisher.

Tim and I spoke on the phone and he had not been aware of this additional information request. He is going to put out a notice to state leads, and perhaps NM and NCA managers as well, to let him know if any further monuments review information requests go directly out to the field from the department. He'll also let his supervisors know. If you do receive some direct contact requesting more information and it doesn't appear that I'm aware of the request, please also let me know about that.

Thanks again for your good work.

Ken

On Tue, Jun 20, 2017 at 1:59 PM, Boshell, Brandon <bboshell@blm.gov> wrote:

> Ken,
>
> There are two answers to your question. The first answer, is that the Arizona Strip had a very large drought in the 2002 period. This had lasting effects on the rangeland as well as ranching operations. Many operators voluntarily reduced numbers and sold cattle. When situations like this happens it takes some operators many years to build their herds back up. In addition to the drought, the Sand Hills, Soap Creek, Lee's Ferry and Badger Creek allotments were purchased by an individual and subsequently transferred over the years (late 90's early 2000's) to another entity (The Grand Canyon Trust) through North Rim Ranch who take conservation use and do not run at full numbers, not because of a BLM decision to do so.
>
> Brandon
>
> On Tue, Jun 20, 2017 at 11:17 AM, Mahoney, Kenneth <kmahoney@blm.gov> wrote:
>
> > Brandon,
> >
> > This question is coming to us as a follow-up to the information provided for the executive order monuments review. The question from Sarah Cline appears to relate to the "Grazing AUMs Permitted and Billed" spreadsheet that is in the VCNM Google Drive Folder. Since not everyone has access to the Google Drive Folder, I have downloaded the spreadsheet into an Excel file and attached it to this email.
> >
> > Please look at the question in her email and provide information to explain the decreases. I will forward the information to her after I receive it. Thanks,
> >
> > Ken Mahoney <> Program Lead:
> > National Monuments <> National Conservation Areas
> > Wilderness <> Wild & Scenic Rivers
> > Arizona State Office <> Bureau of Land Management
> > 602-417-9238 <> kmahoney@blm.gov

---------- Forwarded message ----------
From: **Cline, Sarah** <sarah_cline@ios.doi.gov>
Date: Tue, Jun 20, 2017 at 8:35 AM
Subject: Question on Grazing AUMs billed - Vermilion Cliffs
To: Kenneth Mahoney <kmahoney@blm.gov>

Hi. I am looking at the grazing data for VCNM and have a question about the billed AUMs. There is a large decrease in billed AUMs beginning in 2003, driven largely by a decrease for the Sand Hills bill allotment. Do you have any additional information on the reason for that decrease in AUMs billed?

Thanks,
Sarah

Sarah Cline, Ph.D.
Economist
Office of Policy Analysis
U.S. Department of the Interior
1849 C St. NW, MS-3530
Washington, DC 20240
202-208-6018
Sarah_Cline@ios.doi.gov

--
Brandon E. Boshell
Assistant Field Manager / Vermilion Cliffs National Monument Manager
BLM - Arizona Strip Field Office
(435) 688-3241

Boshell, Brandon <bboshell@blm.gov>

Re: Question on Grazing AUMs billed - Vermilion Cliffs

1 message

Christian, Lorraine <lmchrist@blm.gov> Tue, Jun 20, 2017 at 3:23 PM
To: "Boshell, Brandon" <bboshell@blm.gov>

Very good response.

On Tue, Jun 20, 2017 at 2:59 PM, Boshell, Brandon <bboshell@blm.gov> wrote:

Ken,

There are two answers to your question. The first answer, is that the Arizona Strip had a very large drought in the 2002 period. This had lasting effects on the rangeland as well as ranching operations. Many operators voluntarily reduced numbers and sold cattle. When situations like this happens it takes some operators many years to build their herds back up. In addition to the drought, the Sand Hills, Soap Creek, Lee's Ferry and Badger Creek allotments were purchased by an individual and subsequently transferred over the years (late 90's early 2000's) to another entity (The Grand Canyon Trust) through North Rim Ranch who take conservation use and do not run at full numbers, not because of a BLM decision to do so.

Brandon

On Tue, Jun 20, 2017 at 11:17 AM, Mahoney, Kenneth <kmahoney@blm.gov> wrote:

Brandon,

This question is coming to us as a follow-up to the information provided for the executive order monuments review. The question from Sarah Cline appears to relate to the "Grazing AUMs Permitted and Billed" spreadsheet that is in the VCNM Google Drive Folder. Since not everyone has access to the Google Drive Folder, I have downloaded the spreadsheet into an Excel file and attached it to this email.

Please look at the question in her email and provide information to explain the decreases. I will forward the information to her after I receive it. Thanks,

Ken Mahoney <> Program Lead:
National Monuments <> National Conservation Areas
Wilderness <> Wild & Scenic Rivers
Arizona State Office <> Bureau of Land Management
602-417-9238 <> kmahoney@blm.gov

---------- Forwarded message ----------
From: **Cline, Sarah** <sarah_cline@ios.doi.gov>
Date: Tue, Jun 20, 2017 at 8:35 AM
Subject: Question on Grazing AUMs billed - Vermilion Cliffs
To: Kenneth Mahoney <kmahoney@blm.gov>

Hi. I am looking at the grazing data for VCNM and have a question about the billed AUMs. There is a large decrease in billed AUMs beginning in 2003, driven largely by a decrease for the Sand Hills bill allotment. Do you have any additional information on the reason for that decrease in AUMs billed?

Thanks,
Sarah

Sarah Cline, Ph.D.
Economist
Office of Policy Analysis

U.S. Department of the Interior
1849 C St. NW, MS-3530
Washington, DC 20240
202-208-6018
Sarah_Cline@ios.doi.gov

--

Brandon E. Boshell
Assistant Field Manager / Vermilion Cliffs National Monument Manager
BLM - Arizona Strip Field Office
(435) 688-3241

Sum of Billed AUMs		Fee Year																								
Bill Allotment Number	**Bill Allotment Name**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
AZ04847	BUNTING WELL									348	553	639	250	482	513	483	530	476	408	398	430	445	305	538	435	295
AZ05327	COYOTE	479	881	1113	998	1190	1168	1487	1506	1161	1265	754	10		1	1582	834	578	1348	826	632	864	820	922	924	714
AZ05328	SAND HILLS	12294	10341	12740	13645	13045	12462	14749	13598	11631	10223	8905	3936		11	454	3588	4024	4662	5878	1209	2162	2332	2727	702	1734
AZ05331	HOUSE ROCK	563	530	972	943	859	1448	1384	1451	1260	1319	1086	247	292	457	393	594	603	903	619	757	1240	1417	1514	1424	1499
AZ05332	SOAP CREEK	5110	6887	5421	3977	3877	4452	4433	5984	4624	4382	3810	1576			1321	2437	2123	1925	2359	1929	1331	1363	1643	1560	671
AZ05336	FERRY SWALE	909	979	1062	1285	920	1331	1559	1765	1176	1202	919	699	813	1151	799	1023	1267	944	904	1277	1255	1469	1594	1300	225
AZ05337	LEE'S FERRY	204																								
AZ05341	BADGER CREEK	18				10	21							93						7						
AZ05350	SIGNATURE ROCK	256	229	151	166	101	255	296	415	280	491	41	25	144	189	295	325	500	174	268	359	70	259	281	339	
Grand Total		**19833**	**19847**	**21459**	**21014**	**20002**	**21137**	**23908**	**24719**	**20480**	**19435**	**16154**	**6743**	**1824**	**2322**	**5327**	**9331**	**9571**	**10364**	**11259**	**6593**	**7367**	**7965**	**9219**	**6684**	**5138**

	Allotments are located partially within the VCNM with the rest of the allotment located in the Arizona Strip Field Office. AUMs were billed as a whole for the allotment which the above numbers represent. The reported AUMs do not differentiate between offices.
	A small portion of these allotments are located within the VCNM with the rest of the allotment located in the Arizona Strip Field Office or Utah. AUMs were billed as a whole for the allotment which the above numbers represent. The reported AUMs do not differentiate between offices.
	No grazing was billed in the Lee's Ferry Allotment since 1992. The allotment is located in Paria Canyon and was made unavailable to grazing in the Record of Decision and Resource Management Plan dated January 29, 2008.

Boshell, Brandon <bboshell@blm.gov>

Fwd: National Monument Review - Draft Economic Reports - Quick Review

1 message

Mahoney, Kenneth <kmahoney@blm.gov> Wed, Jul 12, 2017 at 2:58 PM
To: Karen McKinley <kmckinley@blm.gov>, Michael Johnson <mdjohnso@blm.gov>, "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>, Brandon Boshell <bboshell@blm.gov>, Wayne Monger <dmonger@blm.gov>, Claire Crow <ccrow@blm.gov>
Cc: Raymond Suazo <rmsuazo@blm.gov>

Please see the message from Sally. If you have comments, use Track Changes as suggested and reply to all when sending them back. If you have no comments, please reply with that message.

I'm out of the office, returning on Wed July 19. Please have your comments in before that day so I can compile and return comments to WO by the following day. Thanks,

Ken

---------- Forwarded message ----------
From: **Butts, Sally** <sbutts@blm.gov>
Date: Wed, Jul 12, 2017 at 8:32 AM
Subject: National Monument Review - Draft Economic Reports - Quick Review
To: Raymond Suazo <rmsuazo@blm.gov>, Jerome Perez <jperez@blm.gov>, Edwin Roberson <eroberso@blm.gov>
Cc: Kenneth Mahoney <kmahoney@blm.gov>, "Ginn, Allison" <aginn@blm.gov>, Chad Schneckenburger <cschneckenburger@blm.gov>, "Sintetos, Michael" <msintetos@blm.gov>, Nikki Moore <nmoore@blm.gov>, "Fisher, Timothy" <tjfisher@blm.gov>, Christopher McAlear <cmcalear@blm.gov>, Mara Alexander <malexander@blm.gov>, Rachel Wootton <rwootton@blm.gov>, Kathleen Benedetto <kathleen_benedetto@ios.doi.gov>, Randal Bowman <randal_bowman@ios.doi.gov>, Michael Nedd <mnedd@blm.gov>, Kristin Bail <kbail@blm.gov>, Timothy Spisak <tspisak@blm.gov>, "Moody, Aaron" <aaron.moody@sol.doi.gov>, "Mali, Peter" <pmali@blm.gov>, Jeff Brune <jbrune@blm.gov>

Hi All,

We have been given the opportunity to do a quick review of the draft Department of Interior economic reports for the eight BLM managed or co-managed National Monuments currently under review. The draft reports are for:

- Grand Canyon-Parashant
- Grand Staircase-Escalante
- Sonoran Desert
- Ironwood Forest
- Canyons of the Ancients
- Carrizo Plain
- Mojave Trails
- Vermilion Cliffs

If you would like to provide comments, please compile your state's comments in track changes within the attached reports and provide them on or before **Close of Business Thursday, July 20th**. Please email your state's comments to Rachel

Wootton (rwootton@blm.gov) with a copy to me (sbutts@blm.gov) and Nikki Moore (nmoore@blm.gov) as soon as you have completed your comments, so that we can get them reviewed by the deadline and submitted back to the Secretary's office. The comments are due back to the Secretary's office by Friday, July 21st.

We have blocked out Tuesday afternoon, July 18, from 4-5pm EST to answer any questions you may have. The conference line and passcode for the meeting are:

(b) (5) [redacted]

(b) (5) [redacted]

Thank you so much for all the time and energy you and your staff have put in to make sure that we are providing DOI with the information they need. Please contact me with any questions.

Sally

--
Sally R. Butts, J.D., Acting Division Chief
National Conservation Lands
Bureau of Land Management
20 M St. SE, Washington, DC 20003
Office 202-912-7170; Cell 202-695-5889; Fax 202-245-0050; sbutts@blm.gov

8 attachments

Canyons of the Ancients review DRAFT 7_11_17.docx
952K

Carrizo Plain Review_07_7_17.docx
919K

GrandCanyonParashant_07_10_17.docx
522K

GrandStaircaseEscalanteReviewDRAFT_7_11_17.docx
650K

Ironwood_07_10_17.docx
545K

Mojave Trails Review_07_10_17.docx
693K

Sonoran_07_10_17.docx
488K

VermilionCliffs_7_11_17.docx
325K

Boshell, Brandon <bboshell@blm.gov>

Fwd: TIME SENSITIVE: Monument review question

1 message

Wootton, Rachel <rwootton@blm.gov> Fri, Aug 18, 2017 at 2:23 PM
To: Kenneth Mahoney <kmahoney@blm.gov>, Ronald Tipton <rtipton@blm.gov>, "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>, Claire Crow <ccrow@blm.gov>, "Darrel (Wayne) Monger" <dmonger@blm.gov>, “Brandon Boshell” <bboshell@blm.gov>, "Wong, Rebecca" <rwong@blm.gov>, Johna Hurl <jhurl@blm.gov>, Kyle Sullivan <ksullivan@blm.gov>, Jihadda - FS Govan <jihaddagovan@fs.fed>, Marietta Eaton <meaton@blm.gov>, "Crawford, Holly" <hcrawford@blm.gov>, “Jaime Tompkins” <jtompkins@blm.gov>, Kymm Gresset <kgresset@blm.gov>, “Alicia Styles” <astyles@blm.gov>, "James (Lee) Kirk" <jkirk@blm.gov>, William Childress <wchildre@blm.gov>, John Bailey <jbailey@blm.gov>, Joel Brumm <jbrumm@blm.gov>, Donald Hoffheins <dhoffhei@blm.gov>, Amber Johnson <a2johnson@blm.gov>, Cynthia Staszak <cstaszak@blm.gov>
Cc: "Lydick, Steven" <sdlydick@blm.gov>, Nikki Moore <nmoore@blm.gov>, Sally Butts <sbutts@blm.gov>, Timothy Fisher <tjfisher@blm.gov>, "Sintetos, Michael" <msintetos@blm.gov>, Robin Fehlau <rfehlau@blm.gov>, "Gerald (Jerry) Magee" <gmagee@blm.gov>, Chad Schneckenburger <cschneckenburger@blm.gov>, Allison Ginn <aginn@blm.gov>, "Briske, McKinney" <mbriske@blm.gov>, Barbara Keleher <bkeleher@blm.gov>

Hi Everyone,

I hope you all are doing well! Steve Lydick from the NOC is helping respond to a question from the Department on resources within and outside of National Monuments. We wanted to give you a heads up that Steve or someone from the NOC may be contacting you pertaining to that request. Please review his email below for more information. We understand if some of this information is not available, but we are really appreciative of the help from you all and the folks at the NOC to determine whether that is the case.

Please let Sally Butts know if you have any specific questions.

Thank you and I hope you have a nice weekend!

Best,

Rachel

--
Rachel Wootton
Planning and Environmental Specialist
National Conservation Lands (WO-410)
Bureau of Land Management
20 M Street SE Washington, DC 20003
rwootton@blm.gov
desk - (202) 912-7398
cell - (202) 774-8791

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---------- Forwarded message ----------
From: **Lydick, Steven** <sdlydick@blm.gov>
Date: Fri, Aug 18, 2017 at 3:48 PM
Subject: Re: TIME SENSITIVE: Monument review question
To: "Wootton, Rachel" <rwootton@blm.gov>

Rachel,

As discussed with Nikki Moore, we are doing analyses of ROVs inside the monuments vs. outside the monuments, largely using REA and available wildlife data sets. I plan on contacting at least some of the monument managers to see if they have more precise or complete data sets than are contained in the REAs for the monuments themselves (this will vary by monument and ROV).

I do not intend on having this be a data call, but rather just a basic ask as to whether they have good data on a given ROV readily available, and if so, some coordination with their specialists to get the data to work with. We will not be seeking any cultural resources data, as I realize it is sensitive, and we have nothing available here at the NOC to compare it with anyway.

Would you please forward this email to the appropriate parties (and cc me) by means of introduction?

Thanks,

--Steve

Steve Lydick
Branch Chief - Assessment and Monitoring (OC570)
BLM National Operations Center
sdlydick@blm.gov
303-236-6428

On Fri, Aug 18, 2017 at 1:37 PM, Wootton, Rachel <rwootton@blm.gov> wrote:

> Hi Steve,
>
> Thank you so much for all of your help! If you do send the field a request, could you cc us on that? I am not sure who you would be sending the request to, but let me know if you need specific National Conservation Lands field contacts.
>
> If the email is not to them and you send it my way, I'm happy to forward it out to our field contacts to give them a heads up.
>
> Best,
>
> Rachel
>
> --
> Rachel Wootton
> Planning and Environmental Specialist
> National Conservation Lands (WO-410)
> Bureau of Land Management
> 20 M Street SE Washington, DC 20003
> rwootton@blm.gov
> desk - (202) 912-7398
> cell - (202) 774-8791
>
> Visit us online!
>
> On Fri, Aug 18, 2017 at 3:17 PM, Nikki Moore <nmoore@blm.gov> wrote:
>
> > Hi Steve, that sounds good I would just make sure they know it's not a data call and not intended to be a heavy lift. Just a check to see what's possible.
> >
> > Nikki Moore
> > Acting Deputy Assistant Director,
> > National Conservation Lands and Community Partnerships
> > Bureau of Land Management, Washington DC
> > 202.219.3180 (office)
> > 202.288.9114 (cell)
> >
> > On Aug 18, 2017, at 2:51 PM, Lydick, Steven <sdlydick@blm.gov> wrote:
> >
> > > Nikki,
> > >
> > > I have folks working on the project we discussed, but they raised an important question to me in the process. We have broad data sets that in many cases cover the monuments and areas outside of them, and can in many instances make comparisons between them, as we discussed.

The quandary comes in when the monuments themselves may have better data than exists in our broad data sets. I don't know the sensitivity of this, but we'd like to reach out to the monument managers to see if they have better data to use in our analyses. Otherwise, we risk using something less than the best available information, which would not withstand scrutiny well. Are you comfortable with us reaching out to them on this?

Thanks,

--Steve

Steve Lydick
Branch Chief - Assessment and Monitoring (OC570)
BLM National Operations Center
sdlydick@blm.gov
303-236-6428

Boshell, Brandon <bboshell@blm.gov>

Fwd: National Monument Review - Comments on 8 Draft Economic Reports

1 message

Mahoney, Kenneth <kmahoney@blm.gov> Fri, Sep 1, 2017 at 11:33 AM
To: Raymond Suazo <rmsuazo@blm.gov>, Deborah Rawhouser <drawhous@blm.gov>, Amber Cargile <acargile@blm.gov>, Roxie Trost <rtrost@blm.gov>, Leon Thomas Jr <l70thoma@blm.gov>, Edward Kender <ekender@blm.gov>, Wayne Monger <dmonger@blm.gov>, "Anthony (Scott) Feldhausen" <afeldhausen@blm.gov>, Claire Crow <ccrow@blm.gov>, Timothy Burke <tburke@blm.gov>, "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>, Lorraine M Christian <lmchrist@blm.gov>, Brandon Boshell <bboshell@blm.gov>, "Mckinley, Karen" <kmckinley@blm.gov>

Nikki Moore's email to Randal Bowman of the DOI Office of Policy Analysis with attachments of all "reviewed final" economic reports prepared for the executive order on national monuments review.

Ken Mahoney <> Program Lead:
National Monuments <> National Conservation Areas
Wilderness <> Wild & Scenic Rivers
Arizona State Office <> Bureau of Land Management
602-417-9238 <> kmahoney@blm.gov

Forwarded conversation

Subject: **National Monument Review - Comments on 8 Draft Economic Reports**

From: **Moore, Nikki** <nmoore@blm.gov>
Date: Fri, Jul 21, 2017 at 1:51 PM
To: "Bowman, Randal" <randal_bowman@ios.doi.gov>
Cc: Kenneth Mahoney <kmahoney@blm.gov>, "Ginn, Allison" <aginn@blm.gov>, Chad Schneckenburger <cschneckenburger@blm.gov>, "Sintetos, Michael" <msintetos@blm.gov>, "Fisher, Timothy" <tjfisher@blm.gov>, Christopher McAlear <cmcalear@blm.gov>, Mara Alexander <malexander@blm.gov>, Rachel Wootton <rwootton@blm.gov>, Kathleen Benedetto <kathleen_benedetto@ios.doi.gov>, Michael Nedd <mnedd@blm.gov>, Kristin Bail <kbail@blm.gov>, Timothy Spisak <tspisak@blm.gov>, "Moody, Aaron" <aaron.moody@sol.doi.gov>, "Mali, Peter" <pmali@blm.gov>, Matthew Allen <mrallen@blm.gov>, Raymond M Suazo <rmsuazo@blm.gov>, "Perez, Jerome" <jperez@blm.gov>, Edwin Roberson <eroberso@blm.gov>, John Ruhs <jruhs@blm.gov>

Hi Randy,

The BLM has reviewed the draft Department of Interior economic reports for the eight BLM managed or co-managed National Monuments currently under review (Grand Canyon-Parashant, Grand Staircase-Escalante, Sonoran Desert, Ironwood Forest, Canyons of the Ancients, Carrizo Plain, Mojave Trails, and Vermilion Cliffs). Our suggested edits are compiled and provided in comments and track changes within the attachments. We also had some additional edits on the Bears Ears draft economic report which I've attached.

We really appreciate the opportunity to review and provide feedback on these reports,

Nikki Moore
Acting Deputy Assistant Director
National Conservation Lands and Community Partnerships
Bureau of Land Management, Washington D.C.
202.219.3180 (office)
202.740.0835 (cell)

From: **Bowman, Randal** <randal_bowman@ios.doi.gov>
Date: Fri, Jul 21, 2017 at 2:08 PM

To: "Moore, Nikki" <nmoore@blm.gov>
Cc: Kenneth Mahoney <kmahoney@blm.gov>, "Ginn, Allison" <aginn@blm.gov>, Chad Schneckenburger <cschneckenburger@blm.gov>, "Sintetos, Michael" <msintetos@blm.gov>, "Fisher, Timothy" <tjfisher@blm.gov>, Christopher McAlear <cmcalear@blm.gov>, Mara Alexander <malexander@blm.gov>, Rachel Wootton <rwootton@blm.gov>, Kathleen Benedetto <kathleen_benedetto@ios.doi.gov>, Michael Nedd <mnedd@blm.gov>, Kristin Bail <kbail@blm.gov>, Timothy Spisak <tspisak@blm.gov>, "Moody, Aaron" <aaron.moody@sol.doi.gov>, "Mali, Peter" <pmali@blm.gov>, Matthew Allen <mrallen@blm.gov>, Raymond M Suazo <rmsuazo@blm.gov>, "Perez, Jerome" <jperez@blm.gov>, Edwin Roberson <eroberso@blm.gov>, John Ruhs <jruhs@blm.gov>

Thanks to all of you for the quick response on these.

---

9 attachments

Bears Ears Economic Report_BLM reviewed_Final.docx
709K

Canyons of the Ancients Economic Report_BLM reviewed final.docx
954K

Carrizo Plain Economic Report_BLM reviewed final.docx
928K

GrandCanyonParashant Ecominc Report_BLM reviewed final.docx
429K

GrandStaircaseEscalante Economic Report_BLM reviewed final.docx
658K

Ironwood Forest Economic Report_BLM reviewed final.docx
529K

Mojave Trails Ecomic Report_BLM reviewed final.docx
711K

Sonoran Desert Econmic Report_BLM reviewed final.docx
494K

Vermilion Cliffs Economic Report_BLM reviewed final.docx
463K

Wimmer, Sheldon (Mark) <mwimmer@blm.gov>

Fwd: Monument Review (IMPORTANT PLEASE READ)

1 message

Mahoney, Kenneth <kmahoney@blm.gov> Mon, May 15, 2017 at 8:00 PM
To: "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>, Brandon Boshell <bboshell@blm.gov>, Wayne Monger <dmonger@blm.gov>, Claire Crow <ccrow@blm.gov>
Cc: Timothy Burke <tburke@blm.gov>, Lorraine M Christian <lmchrist@blm.gov>, Leon Thomas Jr <l70thoma@blm.gov>, Edward Kender <ekender@blm.gov>, "Anthony (Scott) Feldhausen" <afeldhausen@blm.gov>, Melissa Warren <mdwarren@blm.gov>, Raymond Suazo <rmsuazo@blm.gov>, Deborah Rawhouser <drawhous@blm.gov>, Roxie Trost <rtrost@blm.gov>, Karen McKinley <kmckinley@blm.gov>

Monument Managers,

Please see the email from State Director Ray Suazo and also the forwarded email from AD-400 Chris McAlear regarding the subject of monument review.

The attached Word document file "Initial Data Request Related to Review of National Monuments" contains a list of items for which information needs to be gathered for your national monument. Please begin to compile the requested information. I will contact each of you on the afternoon of Tuesday May 23 for an interim check on the progress of the data collection. All data collection should be completed and submitted to me by Friday May 26. I will review and upload the data the following week to meet the June 2 due date for the data call.

I will also forward to you the direction from DSD-Communications Amber Cargile regarding media inquiries and public comments relating to Executive Order 13792. Please assure that staff are also aware of this direction.

Let me know of any questions about the monument review. Thank you for your assistance in responding to this information request.

Ken Mahoney <> Program Lead:
National Monuments <> National Conservation Areas
Wilderness <> Wild & Scenic Rivers
Arizona State Office <> Bureau of Land Management
602-417-9238 <> kmahoney@blm.gov

---------- Forwarded message ----------
From: **Suazo, Raymond** <rmsuazo@blm.gov>
Date: Fri, May 12, 2017 at 1:54 PM
Subject: Fwd: Monument Review (IMPORTANT PLEASE READ)
To: Kenneth Mahoney <kmahoney@blm.gov>, Roxie Trost <rtrost@blm.gov>, Karen Mckinley <kmckinley@blm.gov>, Deborah Rawhouser <drawhous@blm.gov>

FYI, I will provide Ken's name as the lead who will coordinate for AZ. My preference is also that Ken be the person that loads the data in an effort to have thorough review and consistency. However, we can consider over the weekend and make a final determination on Monday.

Ray

---------- Forwarded message ----------
From: **McAlear, Christopher** <cmcalear@blm.gov>
Date: Fri, May 12, 2017 at 1:16 PM
Subject: Monument Review (IMPORTANT PLEASE READ)
To: Edwin Roberson <eroberso@blm.gov>, "Bilbao, Anita" <abilbao@blm.gov>, Amy Lueders <alueders@blm.gov>, Aden Seidlitz <aseidlitz@blm.gov>, Jerome Perez <jperez@blm.gov>, Joseph Stout <j2stout@blm.gov>, "Suazo, Raymond" <rmsuazo@blm.gov>, Deb Rawhouser <drawhous@blm.gov>, Ruth Welch <rwelch@blm.gov>, Greg Shoop <gshoop@blm.gov>, Marci Todd <m1todd@blm.gov>, "Petersen, Paul" <ppeterse@blm.gov>, Jamie Connell <jconnell@blm.gov>, Theresa Hanley <thanley@blm.gov>, Timothy Murphy <t50murph@blm.gov>, Peter Ditton <pditton@blm.gov>
Cc: John Ruhs <jruhs@blm.gov>, Sally Butts <sbutts@blm.gov>, Peter Mali <pmali@blm.gov>, Nikki Moore <nmoore@blm.gov>, Timothy Fisher <tjfisher@blm.gov>

State Directors:

National Conservation Lands received a data call to respond to Executive Order 13792 of April 26, 2017 (82 FR 20429, May 1, 2017) directing the Secretary of Interior to review certain National Monument designations or expansions under the Antiquities Act of 1906, 54 U.S.C. 320301-320303 (Act) (see attached).

The timeline for this data call is a short turnaround for all monuments, due by June 2, 2017, with the exception for both Grand Staircase Escalate National Monument and Bears Ears National Monument with an expedited due date of May 17, 2017. WO-410 needs assistance with this data call through the National Conservation Lands State Leads and from the affected Monument Managers, or the State Directors' designee, to gather up the desired information. Please review the attached word document for list of needed information and the list of National Monuments under review. We are expected to provide available data and information but not to create data or information or speculate on responses.

A Google Drive document folder is being established to easily transfer electronic files for each of the National Monuments under review. The desire is to limit access to assure consistent data collection. WO-410 is asking each of the States to provide names needing access for each National Monument and the lead from your state to oversee/coordinate this data call.

The two Utah National Monuments will help us to streamline the process and provide more specific guidance for the other National Monuments and the work load associated with this request. A follow-up email will provide more direction for all other BLM National Monuments under review later next week.

Please provide Timothy Fisher (tjfisher@blm.gov) a list of contacts for each monument who will need access to the google drive folder **by COB Tuesday May 16, 2017**.

The National Conservation Lands program appreciates your support in assisting with this important data call

Thank you!
Chris m

Christopher McAlear
Assistant Director
National Conservation Lands
and Community Partnerships
(W) 202-208-4731
(C) 775-722-9539

---

2 attachments

Initial Data Request Related to Review of National Monuments.docx
19K

DOI ExecOrder 13792.pdf
1732K

Call for Data Related to Review of National Monuments under EO 13792 (April 26, 2017)

Please help us gather information about each of the items listed below, for each of the National Monuments listed below in Table 1.

1. Documents Requested
    a. Resource Management Plans/Land Use Plans
    b. Record of Decision
    c. Public Scoping Documents
    d. Presidential Proclamation
2. Information on activities permitted at the Monument, including annual levels of activity from the **date of designation to the present**
    a. Recreation - annual visits to site
    b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)
    c. Minerals - annual mineral production on site
    d. Timber - annual timber production on site (in board-feet, CCF, or similar measure)
    e. Grazing - annual grazing on site (AUMs permitted and sold)
    f. Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available
    g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available
2. Information on activities occurring during the **5 years prior to designation**
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    b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)
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    g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available
3. Information on activities that likely would have occurred annually from the date of designation to the present **if the Monument had not been designated**
    a. Recreation - annual visits to site
    b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)
    c. Minerals - annual mineral production on site
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f. Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available
g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available

4. Changes to boundaries - dates and changes in size
5. Public Outreach prior to Designation - outreach activities conducted and opportunities for public comment
6. Terms of Designation

Table 1. List of National Monuments Included in Review (per DoI Press Release dated May 5, 2017)

National Monument	Location	Managing Agency
Basin and Range	Nevada	BLM
Bears Ears	Utah	BLM, USFS
Berryessa Snow Mountain	California	USFS, BLM
Canyons of the Ancients	Colorado	BLM
Carrizo Plain	California	BLM
Cascade Siskiyou	Oregon	#N/A
Craters of the Moon	Idaho	NPS, BLM
Giant Sequoia	California	USFS
Gold Butte	Nevada	BLM
Grand Canyon-Parashant	Arizona	BLM, NPS
Grand Staircase-Escalante	Utah	BLM
Hanford Reach	Washington	FWS, DOE
Ironwood Forest	Arizona	BLM
Mojave Trails	California	BLM
Organ Mountains-Desert Peaks	New Mexico	BLM
Río Grande del Norte	New Mexico	BLM
Sand to Snow	California	BLM, USFS
San Gabriel Mountains	California	USFS
Sonoran Desert	Arizona	BLM
Upper Missouri River Breaks	Montana	BLM
Vermilion Cliffs	Arizona	BLM
Katahdin Woods and Waters	Maine	NPS
Marianas Trench	CNMI/Pacific Ocean	FWS
Northeast Canyons and Seamounts	Atlantic Ocean	NOAA, FWS
Pacific Remote Islands	Pacific Ocean	FWS
Papahānaumokuākea	Hawai'i/Pacific Ocean	NOAA, FWS
Rose Atoll	American Sāmoa/Pacific Ocean	FWS

DEPARTMENT OF THE INTERIOR

Office of the Secretary

Docket No. DOI-2017-0002

Review of Certain National Monuments Established Since 1996; Notice of Opportunity for Public Comment

AGENCY: Office of the Secretary, Interior.

ACTION: Notice; Request for comments.

SUMMARY: The U.S. Department of the Interior is conducting a review of certain National Monuments designated or expanded since 1996 under the Antiquities Act of 1906 in order to implement Executive Order 13792 of April 26, 2017. The Secretary of the Interior will use the review to determine whether each designation or expansion conforms to the policy stated in the Executive Order and to formulate recommendations for Presidential actions, legislative proposals, or other appropriate actions to carry out that policy. This Notice identifies twenty-seven National Monuments under review and invites comments to inform the review.

DATES: To ensure consideration, written comments relating to the Bears Ears National Monument must be submitted before [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. Written comments relating to all other National Monuments must be submitted before [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may submit written comments online at http://www.regulations.gov by entering "DOI-2017-0002" in the Search bar and clicking "Search," or by mail to Monument Review, MS-1530, U.S. Department of the Interior, 1849 C Street NW, Washington, DC 20240.

FOR FURTHER INFORMATION CONTACT: Randal Bowman, 202-208-1906, RR_Bowman@ios.doi.gov.

SUPPLEMENTARY INFORMATION: Executive Order 13792 of April 26, 2017 (82 FR 20429, May 1, 2017), directs the Secretary of the Interior to review certain National Monuments designated or expanded under the Antiquities Act of 1906, 54 U.S.C. 320301-320303 (Act). Specifically, Section 2 of the Executive Order directs the Secretary to conduct a review of all Presidential designations or expansions of designations under the Antiquities Act made since January 1, 1996, where the designation covers more than 100,000 acres, where the designation after expansion covers more than 100,000 acres, or where the Secretary determines that the designation or expansion was made without adequate public outreach and coordination with relevant stakeholders, to determine whether each designation or expansion conforms to the policy set forth in section 1 of the order. Among other provisions, Section 1 states that designations should reflect the Act's "requirements and original objectives" and "appropriately balance the protection of landmarks, structures, and objects against the appropriate use of Federal lands and the effects on surrounding lands and communities." 82 FR 20429 (May 1, 2017).

In making the requisite determinations, the Secretary is directed to consider:

(i) the requirements and original objectives of the Act, including the Act's requirement that reservations of land not exceed "the smallest area compatible with the proper care and management of the objects to be protected";

(ii) whether designated lands are appropriately classified under the Act as "historic landmarks, historic and prehistoric structures, [or] other objects of historic or scientific interest";

(iii) the effects of a designation on the available uses of designated Federal lands, including consideration of the multiple-use policy of section 102(a)(7) of the Federal Land Policy and Management Act (43 U.S.C. 1701(a)(7)), as well as the effects on the available uses of Federal lands beyond the monument boundaries;

(iv) the effects of a designation on the use and enjoyment of non-Federal lands within or beyond monument boundaries;

(v) concerns of State, tribal, and local governments affected by a designation, including the economic development and fiscal condition of affected States, tribes, and localities;

(vi) the availability of Federal resources to properly manage designated areas; and

(vii) such other factors as the Secretary deems appropriate.

82 FR 20429-20430 (May 1, 2017).

The National Monuments being initially reviewed are listed in the following tables.

NATIONAL MONUMENTS BEING INITIALLY REVIEWED PURSUANT TO CRITERIA IN EXECUTIVE ORDER 13792

Monument	Location	Year(s)	Acreage
Basin and Range	Nevada	2015	703,585
Bears Ears	Utah	2016	1,353,000
Berryessa Snow Mountain	California	2015	330,780
Canyons of the Ancients	Colorado	2000	175,160
Carrizo Plain	California	2001	204,107
Cascade Siskiyou	Oregon	2000/2017	100,000
Craters of the Moon	Idaho	1924/2000	737,525
Giant Sequoia	California	2000	327,760
Gold Butte	Nevada	2016	296,937
Grand Canyon-Parashant	Arizona	2000	1,014,000
Grand Staircase-Escalante	Utah	1996	1,700,000
Hanford Reach	Washington	2000	194,450.93
Ironwood Forest	Arizona	2000	128,917
Mojave Trails	California	2016	1,600,000
Organ Mountains-Desert Peaks	New Mexico	2014	496,330
Rio Grande del Norte	New Mexico	2013	242,555
Sand to Snow	California	2016	154,000
San Gabriel Mountains	California	2014	346,177
Sonoran Desert	Arizona	2001	486,149
Upper Missouri River Breaks	Montana	2001	377,346
Vermilion Cliffs	Arizona	2000	279,568

NATIONAL MONUMENTS BEING REVIEWED TO DETERMINE WHETHER THE DESIGNATION OR EXPANSION WAS MADE WITHOUT ADEQUATE PUBLIC OUTREACH AND COORDINATION WITH RELEVANT STAKEHOLDERS

Katahadin Woods and Waters	Maine	2016	87,563

The Department of the Interior seeks public comments related to: (1) Whether national monuments in addition to those listed above should be reviewed because they were designated or expanded after January 1, 1996 "without adequate public outreach and coordination with relevant stakeholders;" and (2) the application of factors (i) through (vii) set forth above to the listed national monuments or to other Presidential designations or expansions of designations meeting the criteria of the Executive Order. With respect to factor (vii), comments should address other factors the Secretary might consider for this review.

In a separate but related process, certain Marine National Monuments will also be reviewed. As directed by section 4 of Executive Order 13795 of April 28, 2017, "Implementing an America-First Offshore Energy Strategy" (82 FR 20815, May 3, 2017), the Department of Commerce will lead the review of the Marine National Monuments in consultation with the Secretary of the Interior. To assist in that consultation, the Secretary will accept comments related to the application of factors (i) through (vii) in Executive Order 13792 as set forth above to the following Marine National Monuments:

MARINE NATIONAL MONUMENTS BEING REVIEWED PURSUANT TO EXECUTIVE ORDERS 13795 AND 13792

Marianas Trench	CNMI/Pacific Ocean	2009	60,938,240
Northeast Canyons and Seamounts	Atlantic Ocean	2016	3,114,320
Pacific Remote Islands	Pacific Ocean	2009	55,608,320

Papahanaumokuakea	Hawaii	2006/2016	89,600,000
Rose Atoll	American Samoa	2009	8,609,045

Before including your name, address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you may ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

AUTHORITY: E.O. 13792, 82 FR 20429 (May 1, 2017).

James Cason
Special Assistant
Delegated the Functions, Duties, and Responsibilities of the Deputy Secretary

Wimmer, Sheldon (Mark) <mwimmer@blm.gov>

Fwd: Monument Review (IMPORTANT PLEASE READ)

1 message

Christian, Lorraine <lmchrist@blm.gov> Tue, May 16, 2017 at 9:40 AM
To: "James (Lee) Kirk" <jkirk@blm.gov>
Cc: Timothy Burke <tburke@blm.gov>, Brandon Boshell <bboshell@blm.gov>, "Cutler, Jannice" <jcutler@blm.gov>, "Wimmer, Sheldon (Mark)" <mwimmer@blm.gov>

Lee,

Should we provide you the grazing information for Gold Butte (for that portion of the monument within Lime Spring and Mesquite Community allotments)?

Thanks again for meeting with us last week. It was a nice day out in the field.

Lorraine

---------- Forwarded message ----------
From: **Mahoney, Kenneth** <kmahoney@blm.gov>
Date: Mon, May 15, 2017 at 8:00 PM
Subject: Fwd: Monument Review (IMPORTANT PLEASE READ)
To: "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>, Brandon Boshell <bboshell@blm.gov>, Wayne Monger <dmonger@blm.gov>, Claire Crow <ccrow@blm.gov>
Cc: Timothy Burke <tburke@blm.gov>, Lorraine M Christian <lmchrist@blm.gov>, Leon Thomas Jr <l70thoma@blm.gov>, Edward Kender <ekender@blm.gov>, "Anthony (Scott) Feldhausen" <afeldhausen@blm.gov>, Melissa Warren <mdwarren@blm.gov>, Raymond Suazo <rmsuazo@blm.gov>, Deborah Rawhouser <drawhous@blm.gov>, Roxie Trost <rtrost@blm.gov>, Karen McKinley <kmckinley@blm.gov>

Monument Managers,

Please see the email from State Director Ray Suazo and also the forwarded email from AD-400 Chris McAlear regarding the subject of monument review.

The attached Word document file "Initial Data Request Related to Review of National Monuments" contains a list of items for which information needs to be gathered for your national monument. Please begin to compile the requested information. I will contact each of you on the afternoon of Tuesday May 23 for an interim check on the progress of the data collection. All data collection should be completed and submitted to me by Friday May 26. I will review and upload the data the following week to meet the June 2 due date for the data call.

I will also forward to you the direction from DSD-Communications Amber Cargile regarding media inquiries and public comments relating to Executive Order 13792. Please assure that staff are also aware of this direction.

Let me know of any questions about the monument review. Thank you for your assistance in responding to this information request.

Ken Mahoney <> Program Lead:
National Monuments <> National Conservation Areas

Wilderness <> Wild & Scenic Rivers
Arizona State Office <> Bureau of Land Management
602-417-9238 <> kmahoney@blm.gov

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To: Kenneth Mahoney <kmahoney@blm.gov>, Roxie Trost <rtrost@blm.gov>, Karen Mckinley <kmckinley@blm.gov>, Deborah Rawhouser <drawhous@blm.gov>

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To: Edwin Roberson <eroberso@blm.gov>, "Bilbao, Anita" <abilbao@blm.gov>, Amy Lueders <alueders@blm.gov>, Aden Seidlitz <aseidlitz@blm.gov>, Jerome Perez <jperez@blm.gov>, Joseph Stout <j2stout@blm.gov>, "Suazo, Raymond" <rmsuazo@blm.gov>, Deb Rawhouser <drawhous@blm.gov>, Ruth Welch <rwelch@blm.gov>, Greg Shoop <gshoop@blm.gov>, Marci Todd <m1todd@blm.gov>, "Petersen, Paul" <ppeterse@blm.gov>, Jamie Connell <jconnell@blm.gov>, Theresa Hanley <thanley@blm.gov>, Timothy Murphy <t50murph@blm.gov>, Peter Ditton <pditton@blm.gov>
Cc: John Ruhs <jruhs@blm.gov>, Sally Butts <sbutts@blm.gov>, Peter Mali <pmali@blm.gov>, Nikki Moore <nmoore@blm.gov>, Timothy Fisher <tjfisher@blm.gov>

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The National Conservation Lands program appreciates your support in assisting with this important data call

Thank you!
Chris m

Christopher McAlear
Assistant Director
National Conservation Lands
and Community Partnerships
(W) 202-208-4731
(C) 775-722-9539

2 attachments

Initial Data Request Related to Review of National Monuments.docx
19K

DOI ExecOrder 13792.pdf
1732K

Wimmer, Sheldon (Mark) <mwimmer@blm.gov>

Fwd: Invitation: National Monument Review Data Request @ Mon May 22, 2017 12pm - 1pm (kmahoney@blm.gov)

1 message

Mahoney, Kenneth <kmahoney@blm.gov> Fri, May 19, 2017 at 4:13 PM
To: "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>, Brandon Boshell <bboshell@blm.gov>, Claire Crow <ccrow@blm.gov>, Wayne Monger <dmonger@blm.gov>

Please see the calendar invitation from Tim Fisher regarding the conference call on Monday May 22 to discuss the Monument Review data request. The call will begin at 12 pm in Phoenix and Tucson and at 1 pm in St.George. I don't know whether forwarding this invitation actually adds the item to your calendar. You may need to do that manually. Since the State Director wanted to provide only my name as a point of contact for this data call, your names weren't included on the original conference call invitation. I've checked with Tim and he wants all monument managers involved in the data call to be invited to the phone call. Let me know of any questions.

Ken

---------- Forwarded message ----------
From: **Timothy Fisher** <tjfisher@blm.gov>
Date: Fri, May 19, 2017 at 2:17 PM
Subject: Invitation: National Monument Review Data Request @ Mon May 22, 2017 12pm - 1pm (kmahoney@blm.gov)
To: kmahoney@blm.gov, gmagee@blm.gov, jkirk@blm.gov, jihaddagovan@fs.fed.us, msintetos@blm.gov, rwong@blm.gov, dfreiberg@blm.gov, mgbarnes@blm.gov, nmoore@blm.gov, jihaddagovan@fs.fed, bkeleher@blm.gov, astyles@blm.gov, bstgeorg@blm.gov, aseidlitz@blm.gov, ksullivan@blm.gov, cschneckenburger@blm.gov, mbriske@blm.gov, mconley@blm.gov, sbutts@blm.gov, jhurl@blm.gov, rfehlau@blm.gov

National Monument Review Data Request

more details »

(b) (5) / (b) (5)

Discuss National Monument Review DOI- Data Request

1. Google Docs and Access
2. Guidance
3. Requested Information / Additional Ask
4. Utah Template

When Mon May 22, 2017 12pm – 1pm Mountain Time - Arizona

Where Conference Call (map)

Video call https://plus.google.com/hangouts/_/doi.gov/tjfisher

Calendar kmahoney@blm.gov

Who
- tjfisher@blm.gov - organizer
- gmagee@blm.gov
- jkirk@blm.gov
- jihaddagovan@fs.fed.us
- msintetos@blm.gov
- rwong@blm.gov
- kmahoney@blm.gov
- dfreiberg@blm.gov
- mgbarnes@blm.gov
- nmoore@blm.gov
- jihaddagovan@fs.fed
- bkeleher@blm.gov
- astyles@blm.gov
- bstgeorg@blm.gov
- aseidlitz@blm.gov
- ksullivan@blm.gov
- cschneckenburger@blm.gov
- mbriske@blm.gov
- mconley@blm.gov
- sbutts@blm.gov
- jhurl@blm.gov
- rfehlau@blm.gov

Going? **Yes** - **Maybe** - **No** more options »

Invitation from Google Calendar

You are receiving this email at the account kmahoney@blm.gov because you are subscribed for invitations on calendar kmahoney@blm.gov.

To stop receiving these emails, please log in to https://www.google.com/calendar/ and change your notification settings for this calendar.

Forwarding this invitation could allow any recipient to modify your RSVP response. Learn More.

invite.ics
5K

Wimmer, Sheldon (Mark) <mwimmer@blm.gov>

Re: A few questions on the Monument data call

1 message

Mahoney, Kenneth <kmahoney@blm.gov> Fri, May 19, 2017 at 4:27 PM
To: "Wimmer, Sheldon (Mark)" <mwimmer@blm.gov>
Cc: Timothy Burke <tburke@blm.gov>, Ryan Evans <rkevans@blm.gov>

Mark, Thanks for your comments. Perhaps some answers can be provided on the Monday May 22 conference call (information I forwarded out by email to you a few minutes earlier).

Ken

On Wed, May 17, 2017 at 3:53 PM, Wimmer, Sheldon (Mark) <mwimmer@blm.gov> wrote:

> Please see attached. I don't think we should be speculating on #4 (#3 on the list prior to re-numbering) see attached Word document with comments, since it is unknown what the numbers would be like without monument designation. just a thought...
>
> -Mark
>
> Mark Wimmer
> Monument Manager
> Grand Canyon-Parashant
> National Monument
> 345 East Riverside Drive
> St. George, Utah 84790
> Office: 435-688-3202
> Fax: 435-688-3388

Call for Data Related to Review of National Monuments under EO 13792 (April 26, 2017)

Please help us gather information about each of the items listed below, for each of the National Monuments listed below in Table 1.

1. Documents Requested
   a. Resource Management Plans/Land Use Plans
   b. Record of Decision
   c. Public Scoping Documents
   d. Presidential Proclamation
2. Information on activities permitted at the Monument, including annual levels of activity from the **date of designation to the present**
   a. Recreation - annual visits to site
   b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)
   c. Minerals - annual mineral production on site
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   f. Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available
   g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available
2. Information on activities occurring during the **5 years prior to designation**
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3. Information on activities that likely would have occurred annually from the date of designation to the present **if the Monument had not been designated**
   a. Recreation - annual visits to site
   b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)
   c. Minerals - annual mineral production on site
   d. Timber - annual timber production on site (in board-feet, CCF, or similar measure)
   e. Grazing - annual grazing on site (AUMs permitted and sold)

Commented [WS(M1]: All Plans? Or just most recent…?

Commented [WS(M2]: Related to the plans, I assume, which should be in our administrative record, but depending on which plans the data call are referring to, please clarify.

Commented [WS(M3]: This should be #3

Commented [WS(M4]: This should be #4

Commented [WS(M5]: This question is purely speculative and I would be remiss in attempting to answer these questions.

f. Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available
g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available

4. Changes to boundaries - dates and changes in size
5. Public Outreach prior to Designation - outreach activities conducted and opportunities for public comment
6. Terms of Designation

Commented [WS(M6]: This should be 5, with 6 and 7 to follow

Commented [WS(M7]: Not sure what this means, necessarily, but the proclamation should answer this on its own. How we implement/translate this is found in our RMP/GMP decisions and they should speak for themselves.

Table 1. List of National Monuments Included in Review (per DoI Press Release dated May 5, 2017)

National Monument	Location	Managing Agency
Basin and Range	Nevada	BLM
Bears Ears	Utah	BLM, USFS
Berryessa Snow Mountain	California	USFS, BLM
Canyons of the Ancients	Colorado	BLM
Carrizo Plain	California	BLM
Cascade Siskiyou	Oregon	#N/A
Craters of the Moon	Idaho	NPS, BLM
Giant Sequoia	California	USFS
Gold Butte	Nevada	BLM
Grand Canyon-Parashant	Arizona	BLM, NPS
Grand Staircase-Escalante	Utah	BLM
Hanford Reach	Washington	FWS, DOE
Ironwood Forest	Arizona	BLM
Mojave Trails	California	BLM
Organ Mountains-Desert Peaks	New Mexico	BLM
Río Grande del Norte	New Mexico	BLM
Sand to Snow	California	BLM, USFS
San Gabriel Mountains	California	USFS
Sonoran Desert	Arizona	BLM
Upper Missouri River Breaks	Montana	BLM
Vermilion Cliffs	Arizona	BLM
Katahdin Woods and Waters	Maine	NPS
Marianas Trench	CNMI/Pacific Ocean	FWS
Northeast Canyons and Seamounts	Atlantic Ocean	NOAA, FWS
Pacific Remote Islands	Pacific Ocean	FWS
Papahānaumokuākea	Hawai'i/Pacific Ocean	NOAA, FWS
Rose Atoll	American Sāmoa/Pacific Ocean	FWS

Wimmer, Sheldon (Mark) <mwimmer@blm.gov>

Monument Review Data Call

1 message

Fisher, Timothy <tjfisher@blm.gov> Mon, May 22, 2017 at 10:46 AM
To: "Moore, Nikki" <nmoore@blm.gov>, "Butts, Sally" <sbutts@blm.gov>, Alicia Styles <astyles@blm.gov>, Barbara Keleher <bkeleher@blm.gov>, Chad Schneckenburger <cschneckenburger@blm.gov>, "Magee, Gerald J" <gmagee@blm.gov>, Kenneth Mahoney <kmahoney@blm.gov>, Kyle Sullivan <ksullivan@blm.gov>, Rebecca Carr <RWong@blm.gov>, Sandra McGinnis <smcginni@blm.gov>, Brian St George <bstgeorg@blm.gov>, David Freiberg <dfreiberg@blm.gov>, "James (Lee) Kirk" <jkirk@blm.gov>, "Govan, Jihadda - FS" <jihaddagovan@fs.fed.us>, Johna Hurl <jhurl@blm.gov>, Mark Conley <mconley@blm.gov>, McKinney Briske <mbriske@blm.gov>, Melanie Barnes <mgbarnes@blm.gov>, Michael Sintetos <msintetos@blm.gov>, Robin Fehlau <rfehlau@blm.gov>, "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>, Brandon Boshell <bboshell@blm.gov>, "Darrel (Wayne) Monger" <dmonger@blm.gov>, Claire Crow <ccrow@blm.gov>

June 22, 2017

Monument Review Data Call

3:00 PM Eastern/ 1:00 PM Mountain/ 12:00 Noon Pacific

(b) (5) / (b) (5)

Please review the agenda and attached documents for the call today.

Agenda

1. Executive Order 13792
2. Review Process of Monuments
3. Google Doc Access?
4. Data Call
    a. Initial Data Call information gathering
    b. Additional Questionnaire

c. Executive Summary

5. Utah Example

6. Grazing Information

   a. Lynnda Jackson, l50jacks@blm.gov / 303-236-8012

7. Public Comment / Federal Register Notice:

   a. Send by mail if possible to:

      Monument Review, MS-1530, U.S. Department of the Interior, 1849 C Street NW, Washington, DC 20240

   b. Electronically if time is short to:

      https://www.regulations.gov/ DOI-2017-0002

8. Other Questions

Timothy J Fisher, Program Lead

National Monuments and Conservation Areas
National Conservation Lands

20 M Street S.E. (wo-410)
Washington DC 20003

202-912-7172 Office
202-604-0706 Cell
202-245-0050 Fax

tjfisher@blm.gov

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6 attachments

DOI ExecOrder 13792.pdf
1732K

Initial Data Request Related to Review of National Monuments.docx
19K

Additional Information Requested Template_5_22_2017.docx
21K

Executive Summary Template on Monuments Review_5_22_2017.docx
15K

IDRR_N M_BENM.docx
26K

IDRR_NIM_GSENM.docx
35K

DEPARTMENT OF THE INTERIOR

Office of the Secretary

Docket No. DOI-2017-0002

Review of Certain National Monuments Established Since 1996; Notice of Opportunity for Public Comment

AGENCY: Office of the Secretary, Interior.

ACTION: Notice; Request for comments.

SUMMARY: The U.S. Department of the Interior is conducting a review of certain National Monuments designated or expanded since 1996 under the Antiquities Act of 1906 in order to implement Executive Order 13792 of April 26, 2017. The Secretary of the Interior will use the review to determine whether each designation or expansion conforms to the policy stated in the Executive Order and to formulate recommendations for Presidential actions, legislative proposals, or other appropriate actions to carry out that policy. This Notice identifies twenty-seven National Monuments under review and invites comments to inform the review.

DATES: To ensure consideration, written comments relating to the Bears Ears National Monument must be submitted before [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. Written comments relating to all other National Monuments must be submitted before [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may submit written comments online at http://www.regulations.gov by entering "DOI-2017-0002" in the Search bar and clicking "Search," or by mail to Monument Review, MS-1530, U.S. Department of the Interior, 1849 C Street NW, Washington, DC 20240.

FOR FURTHER INFORMATION CONTACT: Randal Bowman, 202-208-1906, RR_Bowman@ios.doi.gov.

SUPPLEMENTARY INFORMATION: Executive Order 13792 of April 26, 2017 (82 FR 20429, May 1, 2017), directs the Secretary of the Interior to review certain National Monuments designated or expanded under the Antiquities Act of 1906, 54 U.S.C. 320301-320303 (Act). Specifically, Section 2 of the Executive Order directs the Secretary to conduct a review of all Presidential designations or expansions of designations under the Antiquities Act made since January 1, 1996, where the designation covers more than 100,000 acres, where the designation after expansion covers more than 100,000 acres, or where the Secretary determines that the designation or expansion was made without adequate public outreach and coordination with relevant stakeholders, to determine whether each designation or expansion conforms to the policy set forth in section 1 of the order. Among other provisions, Section 1 states that designations should reflect the Act's "requirements and original objectives" and "appropriately balance the protection of landmarks, structures, and objects against the appropriate use of Federal lands and the effects on surrounding lands and communities." 82 FR 20429 (May 1, 2017).

In making the requisite determinations, the Secretary is directed to consider:

(i) the requirements and original objectives of the Act, including the Act's requirement that reservations of land not exceed "the smallest area compatible with the proper care and management of the objects to be protected";

(ii) whether designated lands are appropriately classified under the Act as "historic landmarks, historic and prehistoric structures, [or] other objects of historic or scientific interest";

(iii) the effects of a designation on the available uses of designated Federal lands, including consideration of the multiple-use policy of section 102(a)(7) of the Federal Land Policy and Management Act (43 U.S.C. 1701(a)(7)), as well as the effects on the available uses of Federal lands beyond the monument boundaries;

(iv) the effects of a designation on the use and enjoyment of non-Federal lands within or beyond monument boundaries;

(v) concerns of State, tribal, and local governments affected by a designation, including the economic development and fiscal condition of affected States, tribes, and localities;

(vi) the availability of Federal resources to properly manage designated areas; and

(vii) such other factors as the Secretary deems appropriate.

82 FR 20429-20430 (May 1, 2017).

The National Monuments being initially reviewed are listed in the following tables.

NATIONAL MONUMENTS BEING INITIALLY REVIEWED PURSUANT TO CRITERIA IN EXECUTIVE ORDER 13792

Monument	Location	Year(s)	Acreage
Basin and Range	Nevada	2015	703,585
Bears Ears	Utah	2016	1,353,000
Berryessa Snow Mountain	California	2015	330,780
Canyons of the Ancients	Colorado	2000	175,160
Carrizo Plain	California	2001	204,107
Cascade Siskiyou	Oregon	2000/2017	100,000
Craters of the Moon	Idaho	1924/2000	737,525
Giant Sequoia	California	2000	327,760
Gold Butte	Nevada	2016	296,937
Grand Canyon-Parashant	Arizona	2000	1,014,000
Grand Staircase-Escalante	Utah	1996	1,700,000
Hanford Reach	Washington	2000	194,450.93
Ironwood Forest	Arizona	2000	128,917
Mojave Trails	California	2016	1,600,000
Organ Mountains-Desert Peaks	New Mexico	2014	496,330
Rio Grande del Norte	New Mexico	2013	242,555
Sand to Snow	California	2016	154,000
San Gabriel Mountains	California	2014	346,177
Sonoran Desert	Arizona	2001	486,149
Upper Missouri River Breaks	Montana	2001	377,346
Vermilion Cliffs	Arizona	2000	279,568

NATIONAL MONUMENTS BEING REVIEWED TO DETERMINE WHETHER THE DESIGNATION OR EXPANSION WAS MADE WITHOUT ADEQUATE PUBLIC OUTREACH AND COORDINATION WITH RELEVANT STAKEHOLDERS

Katahadin Woods and Waters	Maine	2016	87,563

The Department of the Interior seeks public comments related to: (1) Whether national monuments in addition to those listed above should be reviewed because they were designated or expanded after January 1, 1996 "without adequate public outreach and coordination with relevant stakeholders;" and (2) the application of factors (i) through (vii) set forth above to the listed national monuments or to other Presidential designations or expansions of designations meeting the criteria of the Executive Order. With respect to factor (vii), comments should address other factors the Secretary might consider for this review.

In a separate but related process, certain Marine National Monuments will also be reviewed. As directed by section 4 of Executive Order 13795 of April 28, 2017, "Implementing an America-First Offshore Energy Strategy" (82 FR 20815, May 3, 2017), the Department of Commerce will lead the review of the Marine National Monuments in consultation with the Secretary of the Interior. To assist in that consultation, the Secretary will accept comments related to the application of factors (i) through (vii) in Executive Order 13792 as set forth above to the following Marine National Monuments:

MARINE NATIONAL MONUMENTS BEING REVIEWED PURSUANT TO EXECUTIVE ORDERS 13795 AND 13792

Marianas Trench	CNMI/Pacific Ocean	2009	60,938,240
Northeast Canyons and Seamounts	Atlantic Ocean	2016	3,114,320
Pacific Remote Islands	Pacific Ocean	2009	55,608,320

Papahanaumokuakea	Hawaii	2006/2016	89,600,000
Rose Atoll	American Samoa	2009	8,609,045

Before including your name, address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you may ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

AUTHORITY: E.O. 13792, 82 FR 20429 (May 1, 2017).

James Cason
Special Assistant
Delegated the Functions, Duties, and Responsibilities of the Deputy Secretary

Call for Data Related to Review of National Monuments under EO 13792 (April 26, 2017)

Please help us gather information about each of the items listed below, for each of the National Monuments listed below in Table 1.

1. Documents Requested
   a. Resource Management Plans/Land Use Plans
   b. Record of Decision
   c. Public Scoping Documents
   d. Presidential Proclamation
2. Information on activities permitted at the Monument, including annual levels of activity from the **date of designation to the present**
   a) Recreation - annual visits to site
   b) Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)
   c) Minerals - annual mineral production on site
   d) Timber - annual timber production on site (in board-feet, CCF, or similar measure)
   e) Grazing - annual grazing on site (AUMs permitted and sold)
   f) Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available
   g) Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available
3. Information on activities occurring during the **5 years prior to designation**
   a) Recreation - annual visits to site
   b) Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)
   c) Minerals - annual mineral production on site
   d) Timber - annual timber production on site (in board-feet, CCF, or similar measure)
   e) Grazing - annual grazing on site (AUMs permitted and sold)
   f) Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available
   g) Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available
4. Information on activities that likely would have occurred annually from the date of designation to the present **if the Monument had not been designated**
   a) Recreation - annual visits to site
   b) Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)
   c) Minerals - annual mineral production on site
   d) Timber - annual timber production on site (in board-feet, CCF, or similar measure)
   e) Grazing - annual grazing on site (AUMs permitted and sold)

f) Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available
g) Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available

5. Changes to boundaries - dates and changes in size
6. Public Outreach prior to Designation - outreach activities conducted and opportunities for public comment
7. Terms of Designation

Table 1. List of National Monuments Included in Review (per DoI Press Release dated May 5, 2017)

National Monument	Location	Managing Agency
Basin and Range	Nevada	BLM
Bears Ears	Utah	BLM, USFS
Berryessa Snow Mountain	California	USFS, BLM
Canyons of the Ancients	Colorado	BLM
Carrizo Plain	California	BLM
Cascade Siskiyou	Oregon	#N/A
Craters of the Moon	Idaho	NPS, BLM
Giant Sequoia	California	USFS
Gold Butte	Nevada	BLM
Grand Canyon-Parashant	Arizona	BLM, NPS
Grand Staircase-Escalante	Utah	BLM
Hanford Reach	Washington	FWS, DOE
Ironwood Forest	Arizona	BLM
Mojave Trails	California	BLM
Organ Mountains-Desert Peaks	New Mexico	BLM
Río Grande del Norte	New Mexico	BLM
Sand to Snow	California	BLM, USFS
San Gabriel Mountains	California	USFS
Sonoran Desert	Arizona	BLM
Upper Missouri River Breaks	Montana	BLM
Vermilion Cliffs	Arizona	BLM
Katahdin Woods and Waters	Maine	NPS
Marianas Trench	CNMI/Pacific Ocean	FWS
Northeast Canyons and Seamounts	Atlantic Ocean	NOAA, FWS
Pacific Remote Islands	Pacific Ocean	FWS
Papahānaumokuākea	Hawai'i/Pacific Ocean	NOAA, FWS
Rose Atoll	American Sāmoa/Pacific Ocean	FWS

New Information Requested on Executive Order on the Review of Designations Under the Antiquities Act

BLM Responses to Additional Questions for [Name] National Monument

a) Any legislative language, including legislation in appropriations bills

[Identify if there is any related legislation regarding your monument]

b) Alternative options available for protection of resources applicable at each monument, such as Native American Graves Protection and Repatriation Act, Paleontological Resources Preservation Act, Archaeological Resources Protection Act, Historic Preservation Act and agency-specific laws and regulations.

The following options could provide some options to protect specific resources found in [Name] National Monument. Protection would likely occur on a site-by-site or resource-by-resource basis and also would take a significant amount of time to accomplish under these various laws. These laws may not provide a mechanism to protect all cultural or tribal resources in [Name] National Monument. [Provide any specific information or examples for your monument.]

National Historic Preservation Act, (NHPA)

Native American Graves Protection and Repatriation Act, (NAGPRA)

Paleontological Resources Preservation Act, (PRPA)

Archaeological Resources Protection Act, (ARPA)

American Indian Religious Freedom Act (AIRFA)

b) Designated wilderness areas (name, acreage), Wilderness Study Areas (name if there is one, acreage, type), and/or areas managed to preserve wilderness or roadless characteristics that are not WSAs.

[Insert monument specific response]

c) Outstanding R.S. 2477 claims within a monument – type of road claimed and history

[Insert monument specific response]

d) Maps

[Insert monument specific response]

e) Cultural or historical resources, particularly Tribal, located near a monument but not within the boundary that might benefit from inclusion in the monument

[Insert monument specific response]

g) Other – general questions or comments

[Insert monument specific response regarding any other information that should be considered in the review of your monument]

Executive Summary of Review of National Monuments under EO 13792 (April 26, 2017)

Key Information about [Name] National Monument

[Name] National Monument was established by Presidential Proclamation on [Insert Date]. Prior to designation, the area was managed by the BLM [Insert other agency if co-managed] and continues to be following designation. The BLM manages for multiple use within the Monument (hunting, fishing, recreation, grazing, and valid existing rights such as oil production, etc.), while protecting the vast array of historic and scientific resources identified in the Proclamation and providing opportunities for scientific study of those resources. The resources identified in the Proclamation include [Insert brief description of Resources, Objects, and Values]. Overall, multiple use activities are allowed in [Name] National Monument that are compatible with the protection of resources and objects identified in the Presidential Proclamation. Multiple use activities are subject to decisions made in current and future BLM resource management planning efforts which include public participation. National Monuments and other conservation areas managed by the BLM continue to allow for multiple uses according to the Federal Land Policy and Management Act (depending on proclamation language).

Summary of Public Engagement Prior to Designation

[Insert Monument-Specific Information]

Summary of Public Scoping in Development of Resource Management Plan

[Insert Monument-Specific Information]

Summary of National Monument Activities since Designation

[Insert Monument-Specific Information]

Summary of Activities in Area for Five years Preceding Pre-Designation

[Insert Monument-Specific Information]

Summary of Available Economic Information since Designation

[Insert Monument-Specific Information]

Summary of Any Boundary Adjustments since Designation

[Insert Monument-Specific Information]

Call for Data Related to Review of National Monuments under EO 13792 (April 26, 2017)

1. Documents Requested
   a. Resource Management Plans/Land Use Plans
      i. Bears Ears National Monument (BENM) has not yet initiated a Monument Management Plan (MMP). The 2008 Monticello RMP will be followed in the interim. The entire Monticello RMP (DEIS/FEIS/ROD) can be accessed here: https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName=renderDefaultPlanOrProjectSite&projectId=68097&dctmId=0b0003e880befb7c. A copy of the 5-year RMP Evaluation is also in this folder (1.a.Monticello_RMP_Evaluation_September_2015.pdf).
   b. Record of Decision
      i. BENM has not yet initiated a Monument Management Plan. The 2008 Monticello RMP will be followed in the interim. The ROD is in this folder (1.b.Monticello_Final_Plan_ROD.pdf) and can be accessed here: https://eplanning.blm.gov/epl-front-office/projects/lup/68097/85493/102694/Monticello_Final_Plan.pdf. Approximately 1,000 acres of BENM is within the Moab Field Office. The Moab RMP is located here: https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName=renderDefaultPlanOrProjectSite&projectId=66098&dctmId=0b0003e880bf5947
   c. Public Scoping Documents
      i. Public scoping has not yet been initiated for a BENM MMP. The first public comment period post- designation associated with BENM is the DOI Notice of Opportunity for Public Comment.
   d. Presidential Proclamation
      i. Proclamation 9558 of December 28, 2016 is in this folder (1.d.Bears Ears Presidential Proclamation.pdf).
2. Information on activities permitted at the Monument, including annual levels of activity from the **date of designation to the present (Designation date for BENM is December 28, 2016 - information is not yet available for most of FY17)**
   a. Recreation - annual visits to site
      i. The BLM uses the Recreation Management Information System (RMIS) to report visitor use. Full reporting for annual visitation 2017 will not be available until the end of September.
      ii. Specific visitation information to the BENM is not available at this time. The

Monticello Field Office confirms that:

- Requests for overnight reservations in the Cedar Mesa area and day use permits for the Mcloyd Canyon/Moonhouse area, which are both popular recreation spots within the BENM, have increased since monument designation.
- Campgrounds in the Moab and Monticello Field Offices have remained full through much of this spring season, even on non-weekend days, and the number of overnight visitors is higher compared to this same time last year.

Detailed visitor data for the Monticello Field Office is available in this folder (2.a.RMISData_SelectInfo_2012_2016.pdf).

iv. The number of recorded visitors to the Kane Gulch ranger station during the months of March and April was higher than in previous years. Included below are visitor numbers from the Kane Gulch ranger station.

- 2013 - 3,484 visitors
- 2014 - 3,730 visitors
- 2015 - 4,344 visitors
- 2016 - 4,848 visitors
- 2017 - 6,535 visitors

b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)

i. There are no producing oil and gas wells and no coal developments in BENM. While public lands in the monument are now withdrawn from mineral leasing, valid existing rights were protected under the proclamation. Therefore, development on existing leases could occur.

ii. There are 25 authorized federal oil and gas leases (29,416 acres) that are partially or wholly contained within the area that is now the BENM. The effective date on these leases ranges from 1972-2012. There are no authorized or pending APDs associated with these leases.

iii. Since 1920, 250 wells have been drilled in the BENM. The last wells were drilled in 1993. Of the 250 wells drilled, three wells have produced economical quantities of oil and gas. The last producing well was drilled in 1984.

iv. Since designation of the BENM, there has been no new construction of energy transmission infrastructure.

c. Minerals - annual mineral production on site

i. There are no active mining operations in the BENM. There is one commercial mineral materials site. The permit for this site was renewed on March 13, 2016,

for a 10-year period. Production over the next 10 years is limited to 200,000 cubic yards (cu yds) at a rate of $1.08 per cu yd. Due to the short timeframe since designation (five months), it is not possible to calculate the annual mineral production since designation.

d. Timber - annual timber production on site (in board-feet, CCF, or similar measure)
    - Timber production in the BENM is limited to non-commercial Christmas tree cutting permits, and permits for the collection of wood products (i.e., posts and firewood). Due to the short timeframe since designation (five months), it is not possible to calculate the annual timber production since designation. Collection of forest products, and firewood for personal noncommercial use is allowed under the monument proclamation.

e. Grazing - annual grazing on site (AUMs permitted and sold)
    i. There are 20 allotments wholly or partially contained within BENM. These allotments include 50,469 permitted Animal Unit Months (AUMs). Allotment boundaries do not coincide with the BENM boundary, and therefore it is not possible to calculate the number of AUMs currently permitted within the monument. Due to the short timeframe since designation (five months), it is not possible to calculate the annual AUMs sold.

f. Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available
    i. Subsistence activities are those that provide the bare essentials for living: food, water, and shelter. The Federal Subsistence Management Program provides opportunities for subsistence way of life in Alaska on federal public lands and waters. There are no formal subsistence programs outside of Alaska. BENM does provide for the collection of certain natural materials, including firewood by Native American Indians, under BLM permit. Information regarding firewood collection is included under the discussion of timber production.
    ii. RMIS data provides the number of permitted/guided and recreational hunting activities and fishing activities (BENM_5YearRecreationData). These numbers do not reflect the actual number of licensed hunters/fishermen. That data is available from the State of Utah Division of Wildlife Resources. The entire BENM is open for hunting and fishing, which is regulated by the State of Utah Division of Wildlife Resources.

g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available

i. The Bears Ears Inter-Tribal Coalition requested designated of the BENM. The Inter-Tribal Coalition, which includes the Hopi, Zuni Tribe, Navajo Nation, Ute Mountain Ute, and Northern Ute, have stated that the entire 1.35 million-acre BENM includes important cultural values. The importance of these values, which was recognized in the monument proclamation, are discussed in the Inter-Tribal Coalitions monument proposal. (2.g.Bears-Ears-Inter-Tribal-Coalition-Proposal.pdf), which was submitted to the department on Oct. 15, 2015. The cultural values of the area are also explained in the proclamation.

ii. Tribes use the BENM for ceremonies and to visit sacred sites. Traditions of hunting, fishing, gathering, and wood cutting are still practiced by tribal members, as is collection of medicinal and ceremonial plants, edible herbs, and materials for crafting items like baskets and footwear. The BLM issues free use permits for collection of materials for ceremonial purposes.

iii. According to the Utah State Historic Preservation Office (SHPO), as of Feb. 6, 2017, there are 8,480 recorded archaeological sites and four archaeological districts within BENM. According to the National Register Bulletin 36: Guidelines for Evaluating and Registering Archeological Properties, a "district" is a grouping of sites, buildings, structures, or objects that are linked historically by function, theme, or physical development or aesthetically by plan. The following archaeological districts are either completely within or partially within the BENM: Butler Wash, Grand Gulch, Natural Bridges, and the Salt Creek Archaeological District.

iv. More than 70 percent of these sites are prehistoric (pre-dating the 1800s). These prehistoric sites include pottery and stone tool (lithic) scatters, the remains of cooking features (hearths), storage features such as adobe granaries and subsurface stone lined granaries, prehistoric roads, petroglyphs, pictographs and cliff dwellings. Historic sites include historic debris scatters, roads, fences, uranium and vanadium mines from World War II and the Cold War.

v. The BLM has not completely surveyed the monument. The total percentage of the BENM that has been surveyed for cultural resources is 9.2 percent.

3. Information on activities occurring during the **5 years prior to designation**

a. Recreation - annual visits to site

i. The BLM uses the RMIS to report visitor use. BENM is a subset of the Monticello Field Office. RMIS data for the Monticello Field Office is included in the folder (2.a.RMISData_SelectInfo_2012_2016.pdf).

b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)

i. There was no energy production from coal, oil, gas, or renewables during the five years prior to designation (2012-2016). The last producing oil and gas well was drilled in 1984. The last well was drilled in 1993.

ii. No energy transmission infrastructure was constructed within the BENM during the five years prior to designation. There are 13 existing power transmission lines that intersect the BENM. These lines were constructed from 1969-1984. There are four oil and gas pipelines or related facilities that were constructed in 1963. Additional information on energy transmission infrastructure and other lands and realty actions is attached (3.b.Lands_and_Realty.pdf).

c. Minerals - annual mineral production on site

i. During the five years prior to designation, mineral production was limited to one mineral material site. The permit for this site was renewed on March 13, 2016, for 10 years. Production over the next 10 years is limited to 200,000 cubic yards (cu yds) at a rate of $1.08 per cu yd. Production numbers for the past five years are included below. This production occurred at a rate of .90 cents per cu yd.

- 2011- 16,000 cu yds
- 2012- 12,000 cu yds
- 2013- 31,622 cu yds
- 2014- 44,444 cu yds
- 2015-2,914 cu yds

d. Timber - annual timber production on site (in board-feet, CCF, or similar measure)

i. During the five years prior to designation, timber production in the BENM was limited to non-commercial Christmas tree permits, and permits for the collection of wood products (i.e., posts and firewood). Production information for the site can be found the folder (3.d.Timber_Production_2012_2016). Information provided is for the entire field office and is not limited to the area that now part of the BENM. The BLM does collect location information.

e. Grazing - annual grazing on site (AUMs permitted and sold)

i. There are 20 allotments wholly or partially contained within BENM. These allotments include 50,469 permitted AUMs. Allotment boundaries do not coincide with the BENM boundary, and therefore it is not possible to calculate the number of AUMs currently permitted within the monument boundary. AUMs sold during the past five years are included below.

- 2012- 27,836 AUMs
- 2013- 29,175 AUMs
- 2014- 32,193 AUMs
- 2015- 32,129 AUMs

- 2016- 36,402 AUMs

f. Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available
   i. As previously mentioned, subsistence activities are those that provide the bare essentials for living: food, water, and shelter. The Federal Subsistence Management Program provides opportunities for subsistence way of life in Alaska on federal public lands and waters. There are no formal subsistence programs outside of Alaska. BENM does provide for the collection of certain natural materials, including firewood by Native American Indians, under BLM permit. Permits issued to American Indians for collection are accounted for in the annual timber production numbers.

g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available
   i. See response to 2.g.

4. Information on activities that likely would have occurred annually from the date of designation to the present **if the Monument had not been designated**

The answer to this question would be highly speculative. The question is best answered with qualitative (rather than quantitative) data. As BENM was designated less than five months ago, there has been very little change in the management of activities since the date of designation.

a. Recreation - annual visits to site
   i. Visitation numbers collected by the Monticello Field Office indicate that visitation in the area that is now designated as Bears Ears National Monument (2.a.RMISData_SelectInfo_2012_2016.pdf) has been steadily increasing. This is consistent with visitation increases also seen in Natural Bridges National Monument and the Needles District of Canyonlands National Park, which can only be accessed by traveling through the BENM.
   ii. The BLM uses the RMIS to report visitor use. Full reporting for annual visitation 2017 will not be available until the end of September.

b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)
   i. Due to the short timeframe since designation, it is unlikely that any activities resulting in production of coal, oil, gas, or renewable energies would have occurred from the date of designation to present.
   ii. A cursory review of mineral potential is included in the Drive folder (4.c.d.Cursory Review of the Mineral Potential Occurrence within the Bears Ears

NM_BLM and 4.c.d.EnergyDevMap_BENM_UDSH).

iii. There are 25 authorized federal oil and gas leases (29,416 acres) that are partially or wholly contained within the area that is now the BENM. The effective date on these leases ranges from 1972-2012. There are no authorized or pending Applications for a Permit to Drill (APDs) associated with these leases.

iv. According to BLM GIS data, there have been approximately 63,657 acres nominated for leasing in the BENM area since 2014. The BLM does not have GIS data for nominations prior to this date. In addition, expressions of interest were considered confidential prior to Jan. 1, 2014. Prior to designation, these leases were deferred because of existing land use plan decisions, cultural resource concerns, or at the State Director's discretion. All nominated parcels that were deferred were within the planning area for the proposed San Juan Master Leasing Plan.

v. Due to the short timeframe since designation, it is unlikely that any activities resulting in development of new energy transmission infrastructure would have occurred from the date of designation to present. Prior to designation, there were no pending applications for construction of new energy transmission infrastructure or proposed energy developments.

c. Minerals - annual mineral production on site

i. Due to the short timeframe since designation, it is unlikely that any additional mineral production would have occurred from the date of designation to present because there were no pending applications or permits.

ii. A cursory review of mineral potential is included in the Drive folder (4.c.d.Cursory Review of the Mineral Potential Occurrence within the Bears Ears NM_BLM and 4.c.d.EnergyDevMap_BENM_UDSH).

iii. Portions of the BENM have potash development potential and historically there have been potash prospecting applications in the area. However, land use planning decisions made prior to the designation of BENM preclude processing of those applications.

d. Timber - annual timber production on site (in board-feet, CCF, or similar measure)

i. The BLM does not have sufficient information to determine how designation of the BENM has impacted timber production (i.e., Christmas tree cutting, wood post cutting, or firewood collection). However, under the monument proclamation theses uses are allowed to continue. Therefore, it is unlikely that designation of the monument has impacted timber production.

e. Grazing - annual grazing on site (AUMs permitted and sold)

i. Designation of the monument has not changed the number of permitted AUMs.

The BLM does not have sufficient information to determine how designation of the BENM has impacted the number of AUMs sold. However, under the monument proclamation, grazing is allowed to continue, subject to laws, regulations, and policies followed by U.S. Forest Service (USFS) or the BLM in issuing and administering grazing permits or leases.

f. Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available
    i. The BLM does not have sufficient information to predict how designation of the monument has impacted participation rates in subsistence activities.

g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available
    i. The BLM does not have sufficient information to predict how designation of the monument has impacted cultural uses of the monument. However, the monument proclamation requires that the BLM and USFS provide access by members of Indian tribes for traditional cultural and customary uses, consistent with the American Indian Religious Freedom Act (42 U.S.C. 1996) and Executive Order 13007 of May 24, 1996 (Indian Sacred Sites).

5. Changes to boundaries - dates and changes in size
    i. There have been no changes to boundaries.

6. Public Outreach prior to Designation - outreach activities conducted and opportunities for public comment
    i. The public process preceding BENM designation is outlined in the document 6.Bears Ears Fact Facts QA.pdf (released with the DOI/USDA joint press release on 12/28/16) in this folder. Secretary Jewell held a public meeting in Bluff, Utah in July 2016. See also: https://www.doi.gov/pressreleases/secretary-jewell-under-secretary-bonnie-join-utah-local-leaders-public-meeting-hear.

7. Terms of Designation
    i. Refer to Proclamation for the terms of designation. No additional background (e.g., legislated land exchanges or Congressional budget provisions, etc.).

Call for Data Related to Review of National Monuments under EO 13792 (April 26, 2017)

1. Documents Requested
   a. Resource Management Plans/Land Use Plans
      i. The Monument Management Plan (MMP) and Record of Decision (ROD) is located within this Drive folder (1.GSENM_mgmt_plan.pdf).
      ii. The entire GSENM RMP (DEIS/FEIS/ROD) can be accessed here: https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName=dispatchToPatternPage&currentPageId=94418
      iii. The Livestock Grazing EIS/Plan Amendment has been initiated. The DEIS has been reviewed by the BLM Utah State Office and BLM Washington Office and is nearing public release: https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName=dispatchToPatternPage&currentPageId=100826
      iv. The MMP has also been amended for Greater Sage Grouse habitat conservation (2015), for an electrical transmission line Right-of-Way to support local communities (2011), and for an update to fire management (2005).
   b. Record of Decision
      i. The 1999 MMP and ROD is located within this Drive folder (1.GSENM_mgmt_plan.pdf).
   c. Public Scoping Documents
      i. Grand Staircase-Escalante National Monument's (GSENM) Management Plan included substantial outreach, public scoping and comment periods according to land use planning regulations and policies. See Federal Register Notices in Drive folder (1.c.Federal Register, Volume 64 Issue 145 (Thursday, July 29, 1999).pdf).
      ii. Public Comments and Responses for the MMP FEIS are located within this Drive folder (1.c.GSENM_FEIS_Comments.pdf).
      iii. See also Scoping Report for Livestock Grazing EIS (1.c.GSENM_GrazingEISScopingRpt_Final.pdf) and at: https://eplanning.blm.gov/epl-front-office/projects/lup/69026/89803/107384/2014.05.21_GSENM_ScopingRpt_Final_508.pdf.
      iv. GSENM worked with multiple agencies, tribes and communities and individuals

and responded to more than 6,800 letters commenting on the 2000 MMP. Nearly all site-specific NEPA analyses include public comment periods. Additionally, GSENM has offered multiple opportunities for public engagement in the Livestock Grazing Plan Amendment/EIS including:

- Development of a Situation Assessment by National Riparian Service Team
- Hosted 12 public scoping meetings and/or workshops
- Hosted 3 Socio-economic workshops
- Five newsletters developed along with a "Fact Sheet Series"
- Press releases published in five Utah newspapers
- Maintained Project website with project updates
- Hosted a Biological Soil Crust Forum
- Public Release of Draft Alternatives
- The inclusion of two Action Alternatives in the PDEIS that were derived from external sources
- Hosted 27 Cooperating Agency Meetings; 12 Forage Team Meetings
- Outreach to local tribes
- Monument Advisory Committee Input
- Joint BLM/NPS Programmatic Agreement for Cultural Resources
- Broad Consulting Party Process
- Other meetings: County Coordination, State of Utah, Earthfest

GSENM demonstrates a commitment to continued public engagement in land use planning processes.

d. Presidential Proclamation
    i. Proclamation 6920 of September 18, 1996 is in this folder (1.d.Presidential_Proclamation_6920.pdf).

2. Information on activities permitted at the Monument, including annual levels of activity from the **date of designation to the present**

Designation date for GSENM is September 18, 1996.

a. Recreation - annual visits to site

i. To protect Monument resources and objects and to provide economic opportunities in the local communities, major facilities including the four visitor centers are located in the gateway towns of Kanab, Cannonville, Escalante, and Bigwater.

ii. GSENM provides a large variety of multiple-use recreation opportunities including traditional hiking and camping, hunting, fishing, horseback riding, mountain biking, as well as motorized activities for off-highway vehicles.

iii. Commercial recreation activities (Outfitter and Guides) have risen since Monument designation (2.a._GSENM Commercial_SRP.pdf).

iv. In 2016, 926,235 million visitors came to GSENM.
GSENM uses the Recreation Management Information System (RMIS) to report visitor use, which is calculated using data from multiple traffic counters, permits and visitor counts in the four Visitor Centers. BLM's Recreation Management Information System (RMIS) is generally accepted as the agency's official record, however, RMIS was not available until 1999. Prior to 1999, GSENM aggregated data from the Kanab and Escalante offices. (See:
2.a.GSENM_RecreationData_Excel.xls and
3.a.GSENM_Recreation_MMP_DEIS_Tables.pdf)

b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)

i. All Valid Existing Rights for leasable minerals including coal, and oil and gas are continued.

ii. No new leases have been issued since designation. GSENM has no commercial renewable energy.

iii. The annual production of oil and gas in the GSENM is currently limited to lands in or adjacent to the Upper Valley Unit (UVU) in the north-central area of the GSENM (Attachments: 2.b.Upper Valley Unit Map.pdf; 2.b.Upper Valley GSE Production.pdf; 2.b.Upper Valley Wells in GSENM.xls; and 2.b.UDOGM_O&Gprod_data_Upper Valley.pdf). GSENM shares the Upper Valley Oil Field with the Dixie National Forest; this field accounts for all oil and gas production in GSENM. Attached documents disclose production for the Upper Valley Field. Four wells within the GSENM are currently producing oil and a small amount of gas. The UVU was approved in 1962 and production from the wells peaked in 1972 at 183,133 barrels. In the last 20 years (1997-2016) production

has slowly declined from about 65,828 barrels of oil and no gas annually to 45,538 barrels of oil and 2,357 thousand cubic feet (mcf) of gas. There is no other oil and gas production in GSENM, or Kane and Garfield Counties.

iv. No coal lands have been explored or coal produced within the GSENM since the September 18, 1996 designation. Existing coal leases were voluntarily exchanged for Federal payments totaling $19.5 million (not adjusted for inflation) (2.b.GSENM Coal Lease Cancellation Payments.pdf)

v. 34 oil and gas leases (45,894 acres) are in suspension while a Combined Hydrocarbon Lease (CHL) conversion application is processed.

vi. Information related to energy transmission infrastructure and lands and realty actions is included in the table below:

Grand Staircase-Escalante National Monument Existing Rights-of-Way/Permits/Authorized 09/25/1996 – 05/15/2017	
Existing Withdrawals: PSR, PWR, Bureau of Reclamation, Forest Service Wilderness, Power Site, National Park Service, In Trust for Indians	17
Road ROWs	19
Misc. Roads and Associated Uses - Sec 107 Federal Aid Hwy, Revised Statute 2477, Mineral Material Sites	0
Power Transmission Lines and Power Facilities	20
Communication Sites – Telephone, Telegraph, Radio Transmission, Global Positioning Systems	15
Water ROWs, Irrigation Facilities	14
Oil and Gas Pipelines, Oil and Gas Facilities	5

Other FLPMA ROWs, Perpetual Easements, Federal Facilities	2
Airport	0
Permit - 302 FLPMA – Misc.	0
Permits Film - 302 FLPMA (popular location (closed))	54

c. Minerals - annual mineral production on site

i. Mineral materials

- No new Free Use, commercial, or over-the-counter permits have been issued since Monument designation.
- Valid existing permits, including those in Title 23 (3 Federal Highway Rights of Way), continue to be recognized until permit expiration.
- Significant quantities of gravel and riprap from existing pits continue to be provided for Federal Highways projects, primarily to Utah Department of Transportation.
- According to UGS Circular 93, January 1997, "A Preliminary Assessment of Energy and Mineral Resources within the Grand Staircase-Escalante National Monument" (2.c.UGS Circular 93 GS Energy and Mineral Resources.pdf) there were five small mining operations on unpatented mining claims, four of which were active alabaster quarries and one, a suspended operation for petrified wood. Annual production of the alabaster was about 300 tons worth $500 per ton ($150,000/yr). These claimants failed to pay the required annual filings and therefore, the claims were terminated. The BLM's decision to close the claims was upheld by IBLA in March 2008. Since that time, there have been no mining law operations within the monument.

ii. Locatable Minerals

- No new mining claims were issued after Monument designation, however existing claims and active mines were allowed to continue. (List of active mines in MMP DEIS located within this Drive folder 2.c. MMP_DEIS Table 3.10_Locatables.pdf).

d. Timber - annual timber production on site (in board-feet, CCF, or similar measure)
    i. No commercial timber production pre/post Monument designation.
    ii. GSENM does allow continued firewood cutting in two forestry product areas.
e. Grazing - annual grazing on site (AUMs active and billed)
    i. Grazing on the Monument Fact Sheet (2.e_GSENM Grazing EIS Fact Sheet 05-08-2017.pdf).
    ii. Grazing AUMs/ Active and billed (2.e._GSENM Grazing AUMs).
    iii. When the Monument was designated, there were 106,645 total AUMs, with 77,400 of these active. Today, there are 106,202 total AUMs and 76,957 are active. In 1999, an adjustment in AUM levels was made to resolve riparian resources issues and address recreation conflicts. In the current Livestock Grazing EIS/Plan Amendment process the current prefered alternative will have a slight reduction with 105,765 AUM but an increase of total acres for grazing within the monument.

f. Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available
    i. **Subsistence activities** are those that provide the bare essentials for living: food, water, and shelter. The Federal Subsistence Management Program provides opportunities for subsistence way of life in Alaska on federal public lands and waters. There are no formal subsistence programs outside of Alaska. There are no known true subsistence activities occurring on GSENM or prior to its designation. GSENM does provide for the collection of certain natural materials by Native American Indians, under BLM permit. RMIS data provides the number of permitted/guided and recreational hunting activities, fishing activities and gathering activities (See: 2.a.GSENM_RecreationData_Excel.xls). These numbers do not reflect the actual number of licensed hunters/fishermen. That data is available from the State of Utah Division of Wildlife Resources. Outside of developed recreation sites, the entire GSENM is open for hunting and fishing, which is regulated by the State of Utah Division of Wildlife Resources.
g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available
    i. Archeological/cultural data is provided in the following Utah Division of State History Maps in the google drive (2.g.1_GSENM_SiteDensity,

2.g.2_GSENM_Inventories, 2.g.3_GSENM_ArchSites, 2.g.4_GSENM_ArchNumofSites).

ii. Archaeological surveys carried out to date, show extensive use of places within the monument by ancient Native American cultures and a contact point for Anasazi and Fremont cultures. The cultural resources discovered so far in the monument are outstanding in their variety of cultural affiliation, type and distribution. Hundreds of recorded sites include rock art panels, occupation sites, campsites and granaries. Cultural sites include historic and prehistoric sites, Traditional Cultural Properties, Native American Sacred Sites and cultural landscapes.

iii. According to the Utah State Historic Preservation Office (SHPO), as of March 6, 2017, there are 3,985 recorded archaeological sites within the Grand Staircase-Escalante National Monument (GSENM)(2.g.4_GSENM_ArchNumofSites). However, the GSENM staff estimates that there are more likely around 6,000 recorded archaeological sites within the GSENM, due to a records backlog. This is with only five to seven percent of the Monument surveyed.

iv. Cultural Values (Tribal): Prehistoric archaeological sites in the GSENM include pottery and stone tool (lithic) scatters, the remains of cooking features (hearths), storage features such as adobe granaries and subsurface stone lined granaries, prehistoric roads, petroglyphs, pictographs and cliff dwellings. Historic sites include historic debris scatters, roads, trails, fences, inscriptions, and structures. Following the designation of GSENM, consultations were initiated with the Native American tribes associated with the GSENM area, including the Hopi, the Kaibab Paiute, the San Juan Paiute, the Paiute Indian Tribes of Utah, the Zuni, and the Ute, and the Navajo. Over the past 20 years, the Hopi and the Kaibab Paiute have been most closely associated with the Monument and most responsive to continued consultations, as the GSENM area is central to the historic and prehistoric territories of these two tribes. All tribes considered the Monument area to be culturally important; the Hopi (as the modern descendants of the Ancestral Puebloans), for example, can trace the migrations of at least twelve clans through what is today GSENM (Bernardini 2005). The tribal connections to this land are probably best described by an example from the Kaibab Paiute, as related to ethnographers from the University of Arizona, as follows (Stoffle et al 2001): "*The Southern Paiute people continue to maintain a*

strong attachment to the holy lands of their ethnic group as well as to their own local territory. These attachments continued even though Paiute sovereignty has been lost over portions of these lands due to Navajo ethnic group expansion, encroachment by Euro Americans, and Federal government legislation. Despite the loss of Paiute sovereignty over most traditional lands, Southern Paiute people continue to affiliate themselves with these places as symbols of their common ethnic identity. Additionally, all Southern Paiute people continue to perform traditional ceremonies along with the menarche and first childbirth rites of passage rituals. The locations at which these ceremonies and rituals have been or are currently performed become transformed from secular "sites" to highly sacred locations or places. By virtue of the transformation of locations into sacred places, Southern Paiute people reaffirm their ties to traditional lands because they have carried out their sacred responsibilities as given to them by the Creator."

v. **Cultural values (Ranching)** Local ranching began in the 1860s, and became a major focus of area livelihood and increased settlement in the 1870s. Ranching was initially small scale and for local subsistence, but the herds quickly grew so that by the late 1800s the raising of cattle, sheep, and goats was of major economic importance. Ranching and subsistence farming was historically the backbone of the local economies, and this is still reflected in the views of the modern communities surrounding GSENM. In modern times the economic importance of ranching has somewhat diminished, but the culture of, and past history of, livestock grazing and ranching is one of the important "glues" that binds local communities and families in the GSENM area.

3. Information on activities occurring during the **five years prior to designation**

a. Recreation - annual visits to site

i. The BLM transitioned to RMIS in 1999. Data prior to 1999 is not available in the same reporting mechanism as from 1999-Present. GSENM did report visitor use beginning in FY97. (See: 2.a.GSENM_RecreationData_Excel.xls and 3.a.GSENM_Recreation_MMP_DEIS_Tables.pdf).

Overall visitation increased prior to designation and the projecting trends based on the historical information would see a continued rise of visitors seeking recreational opportunities. Just prior to designation Escalante Canyon received

373,200 visitors in 1994, 384,800 visitors in 1995 and 456,400 in 1996.

b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)

i. The Upper Valley Oil Field was in production prior to designation; no other oil and gas production existed in Kane and Garfield Counties. From 1992 until 1996, 336,313 barrels of oil were produced in the GSENM. No natural gas was produced during that time. (2.b.Upper Valley GSE Production.pdf).

ii. No coal was produced from the GSENM in the five years preceding designation. A regional analysis/FEIS for mining was completed in 1979 (3.b.FINAL EIS - Dev of Coal Resources in Southern Utah Title Pages.pdf). Exploration activities and planning for mining operations continued from the 1980's until the monument designation.

- 64 coal leases (~168,000 acres) were committed and a plan was submitted for Andalex Resources' Smoky Hollow Mine. The plan proposed mining on 23,799 acres of the area leased in GSENM. In the mid-1990's an EIS was initiated (3.b.4.b.Warm Springs Smoky Hollow PDEIS December 1995_Coveronly.pdf).
- 600+ exploration drill holes were completed prior to GSENM designation to defined the coal geology to plan for underground mines (See 3.b.BLM 1996-1997 Kaiparowits Coal Report - DRAFT.pdf and https://pubs.usgs.gov/of/1996/OF96-539)

iii. Information related to energy transmission infrastructure and lands and realty actions is included in the table below:

Grand Staircase-Escalante National Monument
Existing Rights-of-Way/Permits/All Dispositions
Authorized/Closed/Relinquished/Withdrawn/Expired/Terminated/Cancelled/Pending/Rejected/Void
01/01/1991 – 09/24/1996
(In March 1999, BLM added Case Recordation components to the LR2000 Database System; therefore, some of the pre-LR2000 data may remain in the Status Database)

Existing Withdrawals: PSR, PWR, Bureau of Reclamation, Forest Service Wilderness, Power Site, National Park Service, In Trust for Indians	1
Roads ROWs	8
Misc. Roads - Sec 107 Federal Aid Hwy, RS2477, Mineral Material Sites	1
Power Transmission Lines & Power Facilities	1
Communication Sites – Telephone, Telegraph, Radio Transmission, Global Positioning Systems	1
Water ROWs, Irrigation Facilities	0
Oil & Gas Pipelines, Oil & Gas Facilities	2
Other FLPMA ROWs, Perpetual Easements, Federal Facilities	6
Airport	0
Permit - 302 FLPMA – Misc.	25
Permits Film - 302 FLPMA (popular location (closed))	0

c. Minerals - annual mineral production on site
    i. The alabaster quarries were the only authorized locatable minerals operation (dating to 06/30/1986) in the area prior to designation.
    ii. Mineral materials, primarily sand and gravel and riprap, were extracted from developed pits by counties and commercial entities for local use. There were eight Mineral Material Cases in the monument at designation, and most were Free Use Permits granted to the county.
d. Timber - annual timber production on site (in board-feet, CCF, or similar measure)
    i. No commercial timber production pre/post Monument designation.
    ii. Prior to designation, the Kanab and Escalante Resource Areas were open to firewood cutting.
e. Grazing - annual grazing on site (AUMs active and billed)
    i. Grazing on the Monument Fact Sheet (2.e_GSENM Grazing EIS Fact Sheet 05-08-2017.pdf).
    ii. Grazing AUMs/ Active and billed (2.e._GSENM Grazing AUMs)
    iii. When the Monument was designated, there were 106,645 total AUMs, with 77,400 of these active. Today, there are 106,202 total AUMs and 76,957 are active. In 1999, an adjustment in AUM levels was made to resolve riparian resources issues and address recreation conflicts. The current Livestock Grazing EIS/Plan Amendment process the current prefered alternative will have a slight reduction with 105,765 AUM but an increase of total acres for grazing within the monument.
f. Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available
    i. There are no known true subsistence activities occurring on GSENM or prior to its designation. Recreational fishing, hunting and gathering data from RMIS is not available prior to designation.
g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available
    i. In the five year period prior to designation of GSENM, a total of approximately 358 cultural resource sites were documented in what was to become GSENM, or about 72 sites/year. Following designation, approximately 3,219 sites were documented, or about 161 sites/year. This increase reflects the increased

funding and greater research opportunities following GSENM designation.

ii. In the five year period prior to designation of GSENM, a total of approximately 3991 acres of new cultural resource surveys were conducted in what was to become GSENM, or about 798 acres/year. Following designation, approximately 41, 024 acres of new cultural resource surveys were conducted, or about 2051 acres/year. This increase reflects the increased funding and greater research opportunities following GSENM designation, as well as substantial habitat improvement projects.

4. Information on activities that likely would have occurred annually from the date of designation to the present **if the Monument had not been designated**

The answers to this question are speculative. The question is best answered with qualitative (rather than quantitative) data. As GSENM was designated 20 years ago, the factors affecting such projections are subject to a wide range of variables (many of which are outside of BLM's purview, such as market prices).

a. Recreation - annual visits to site

i. Research by external parties (e.g., Headwaters Economics and Pew Trust reports) indicate that protected landscapes are a draw for visitors and do result in increased visitation to a region. Thus, it is reasonable to conclude that visitation would be less if the lands had not been designated as a monument.

b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)

Commercial speculation depends on the price of commodities.

i. Except for the Upper Valley Field, there have been no oil and gas discoveries within the GSENM. Forty-seven exploratory wells have been drilled; exploration activities were relatively sparse and cover an average of 57 square miles per well (2.c.UGS Circular 93 GS Energy and Mineral Resources.pdf, page iv).

ii. An Application for a Permit to Drill (APD) was submitted for valid existing leases within the Circle Cliffs Unit. The APD was neither approved nor rejected and the lessee allowed the leases to terminate.

iii. Four wildcat oil and gas wells have been drilled on GSENM since designation (1997-1999); none went into production.

iv. Since there have been no discoveries upon which to base production numbers, estimates of the value of production vary widely. The Utah Geological Survey (UGS) projected 2.6 to 10.5 trillion cubic feet (2.6 to 10.5 billion mcf) of coal-bed

methane may be contained in the GSENM. The UGS also projected "…550 million barrels of oil might be contained within tar sands of the monument." In January 1997, it was speculated that total value of coalbed natural gas and petroleum within the GSENM ranged between $2.02 and $18.6 billion (2.c.UGS Circular 93 GS Energy and Mineral Resources.pdf).

v. It is reasonable to conclude absent a national monument designation, the opportunities for additional oil and gas exploration, discovery and development would be based on the viability of development and the economic value and access to distribution.

vi. The Kaiparowits plateau, located within the monument, contains one of the largest coal deposits in the United States. The USGS projected "an original resource" of 62 billion tons of coal with a geologic and mining technology adjusted resource of 30 billion tons (https://pubs.usgs.gov/of/1996/OF96-539). The DEIS for the Smoky Hollow Mine (3.b.4.b.Warm Springs Smoky Hollow PDEIS December 1995_Coveronly.pdf) and the Alton coal mine producing from adjacent private lands provide an example of the development potential.

vii. Andalex coal leases were voluntary sold to the Land and Water Conservation Fund (LWCF) at market value. At the time of designation, the Warm Springs Smoky Hollow DEIS was in progress to analyze the proposed mine. Andalex Resources may or may not have actually decided to develop the coal resources based on varying economic projections for the project, particularly the cost of transporting the coal.

viii. The Utah Geological Service projected 11.36 billion tons are "technologically recoverable" (including 870 million tons in what was previously State of Utah School and Institutional Trust lands (SITLA)(2.c.UGS Circular 93 GS Energy and Mineral Resources.pdf). Recent advances in underground coal mining techniques would likely result in the development of additional large areas of Kaiparowits coal resources not considered minable in the 1990's.

ix. The School Institutional Trust Lands Administration (SITLA) lands were exchanged for cash payments and federal coal and oil and gas properties outside the monument. Absent a monument designation, the federal/SITLA land exchange would likely not have occurred.

x. Applications for rights of way and other energy transmission infrastructure may have continue to occur within the current monument boundaries including

opportunities for mineral development.

c. Minerals - annual mineral production on site
    i. Absent monument designation, it is likely relinquished alabaster claims may have been relocated and additional alabaster mining claims may have been filed. For the alabaster quarries, "Over a 30-year period, the quarries should generate $4.5 million in production." (2.c.UGS Circular 93 GS Energy and Mineral Resources.pdf)
    ii. The Utah Geological Survey mineral report stated, "Various types of metallic-mineral deposits are known to be present in the monument (figure 14). Most of these are small and low-grade with uncertain likelihood of significant development." The report addressed specific minerals with known or potential deposits within the monument, but they determined at that time they were probably not commercial quality due to low, often subeconomic grades and limited tonnage. Thus, it is unlikely that metallic mining would have occurred. (2.c.UGS Circular 93 GS Energy and Mineral Resources.pdf)
    iii. There would most likely be additional mineral material sites for sand and gravel and the existing Free Use Permits granted to Kane County most likely still be in use.

d. Timber - annual timber production on site (in board-feet, CCF, or similar measure)
    i. There is little harvestable lumber on the Monument (a little more than 1,000 acres of ponderosa). The mill harvested trees from the surrounding Dixie National Forest. The closure of the mill in Escalante was not connected to timber harvest on BLM lands.

e. Grazing - annual grazing on site (AUMs Active and billed)
    i. Grazing/ AUMs active and billed would likely have remained the same.
    ii. Grazing is and was managed by applicable laws and regulations. As stated in the Proclamation; "Nothing in this proclamation shall be deemed to affect existing permits or leases for, or levels of, livestock grazing on Federal lands within the monument; existing grazing uses shall continue to be governed by applicable laws and regulations other than this proclamation."
    iii. Although grazing use levels have varied considerably from year to year due to factors like drought, no reductions in permitted livestock grazing use have been made as a result of the Monument designation.

f. Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available
    i. No likely changes or statistically significant differences from the reported RMIS data.

g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available
    i. Less inventory would have likely occurred without the Monument designation. The Resource Areas averaged about 72 sites/year inventoried. After designation, the average was about 161 sites/year.
    ii. More vandalism would have likely occurred without Monument designation. After designation, research, inventory and educational and interpretive outreach programs increased. Between 1996 and 2006, GSENM presented more than 500 talks, classroom visits, field trips and other educational events relating to cultural resources and archeology. Education, increased presence of staff and researchers and improved management likely led to the reduction in numbers of sites looted and rock art panels defaced.
    iii. Less archeological research would have occurred without the Monument Designation. Early GSENM efforts included initiating large, landscape surveys which recorded and documented hundreds of sites.

5. Changes to boundaries - dates and changes in size
    i. Monument Designation September 18, 1996 (1,878,465 acres).
    ii. H.R.3910, Automobile National Heritage Area Act, Public Law 105-355, Nov. 6, 1998, 112 Stat. 3253. 1,884,011 acres, net gain of approximately 5,546 acres (See 5.a.H.R.3910_Automobile National Heritage Area Act Synopsis)
    iii. H.R.377, Public Law 111-11, 2009, Boundary change and purchase for Turnabout Ranch, approximately 25 acres removed from GSENM (See 5.c.GSENM_Boundary_SaleHR3777_PL111-11_Turnabout.pdf)
    iv. Utah Schools and Land Exchange Act 1998: State of Utah School and Institutional Trust Lands Administration lands within the boundaries of GSENM were exchanged. The Federal government received all State inholdings in GSENM (176,699 acres) while the State Received $50 million plus $13 million in unleased coal and approx 139,000 acres including mineral resources. The Federal Government received additional State holdings within other National

Park Service and US Forest Service units. (See 5.1998_Utah school Land Exchange_PL105-335.pdf)

v. Small acquisitions of inholdings, private land located within the Monument boundary, have occurred since designation. The acquisitions have not resulted in boundary adjustments, but have increased total Federal land ownership. More information is available upon request.

6. Public Outreach prior to Designation - outreach activities conducted and opportunities for public comment

i. No public outreach documents specifically related to the designation of Grand Staircase-Escalante National Monument are available. However, the area in southern Utah had long been considered, discussed and evaluated for the possibility of providing greater recognition of and legal protection for its resources. As early as 1936, the National Park Service (NPS) considered making a recommendation to President Roosevelt to designate a 6,968 square mile "Escalante National Monument."

7. Terms of Designation

i. Refer to Proclamation for the terms of designation.

ii. GSENM has additional data describing terms of the designation

- Presidential remarks announcing the designation of GSENM (7.1_Remarks Announcing GSENM_pg1782-2).
- Secretary of the Interior Memo to the President describing the objects and providing a listing of Monument Objects and a bibliography of Monument object data (7.2_8-15-96 Secretarial_Memo).
- Secretary of the Interior Memo to the BLM Director describing Interim Management Direction for GSENM (7.3_11-6-96 Secretarial_Memo).

Wimmer, Sheldon (Mark) <mwimmer@blm.gov>

Re: Monument Review Data Call

1 message

Mahoney, Kenneth <kmahoney@blm.gov> Mon, May 22, 2017 at 2:17 PM
To: "Wimmer, Sheldon (Mark)" <mwimmer@blm.gov>
Cc: Brandon Boshell <bboshell@blm.gov>

Ok, let me know of any questions as they come up. I'll be in the office most of this week. I won't move up the due date because WO did. But I will need your data uploaded no later than end of the week as originally requested. Earlier would be even better so that I can review and work with you as needed for the final information to go to WO by COB Wed 5/31. Mark, you will see that several documents have already been uploaded to the GC-PNM folder by Sarah Gamble of NPS when you receive the permission by email from Ann Miller to open the Google drive folder. Thanks for your work on this data call.

Ken

On Mon, May 22, 2017 at 1:05 PM, Wimmer, Sheldon (Mark) <mwimmer@blm.gov> wrote:

> Ken,
>
> Brandon and I will be in meetings until around 5 pm today (Utah time, 4 pm AZ), but will do our best to fulfill the data call with the time we have.
>
> -Mark
>
> Mark Wimmer
> Monument Manager
> Grand Canyon-Parashant
> National Monument
> 345 East Riverside Drive
> St. George, Utah 84790
> Office: 435-688-3202
> Fax: 435-688-3388
>
> On Mon, May 22, 2017 at 1:58 PM, Mahoney, Kenneth <kmahoney@blm.gov> wrote:
>
> > If any of you would like to get on the phone this afternoon to go over the data call and what we've just heard on the phone, I'm available. We could do a conference call at 1:15 (2:15 in St. George), or suggest another time. Let me know.
> >
> > Ken
> >
> > ---------- Forwarded message ----------
> > From: **Fisher, Timothy** <tjfisher@blm.gov>
> > Date: Mon, May 22, 2017 at 9:46 AM
> > Subject: Monument Review Data Call
> > To: "Moore, Nikki" <nmoore@blm.gov>, "Butts, Sally" <sbutts@blm.gov>, Alicia Styles <astyles@blm.gov>, Barbara Keleher <bkeleher@blm.gov>, Chad

Schneckenburger <cschneckenburger@blm.gov>, "Magee, Gerald J" <gmagee@blm.gov>, Kenneth Mahoney <kmahoney@blm.gov>, Kyle Sullivan <ksullivan@blm.gov>, Rebecca Carr <RWong@blm.gov>, Sandra McGinnis <smcginni@blm.gov>, Brian St George <bstgeorg@blm.gov>, David Freiberg <dfreiberg@blm.gov>, "James (Lee) Kirk" <jkirk@blm.gov>, "Govan, Jihadda - FS" <jihaddagovan@fs.fed.us>, Johna Hurl <jhurl@blm.gov>, Mark Conley <mconley@blm.gov>, McKinney Briske <mbriske@blm.gov>, Melanie Barnes <mgbarnes@blm.gov>, Michael Sintetos <msintetos@blm.gov>, Robin Fehlau <rfehlau@blm.gov>, "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>, Brandon Boshell <bboshell@blm.gov>, "Darrel (Wayne) Monger" <dmonger@blm.gov>, Claire Crow <ccrow@blm.gov>

June 22, 2017

Monument Review Data Call

3:00 PM Eastern/ 1:00 PM Mountain/ 12:00 Noon Pacific

(b) (5) / (b) (5)

Please review the agenda and attached documents for the call today.

Agenda

1. Executive Order 13792
2. Review Process of Monuments
3. Google Doc Access?
4. Data Call
    a. Initial Data Call information gathering
    b. Additional Questionnaire
    c. Executive Summary
5. Utah Example
6. Grazing Information
    a. Lynnda Jackson, l50jacks@blm.gov / 303-236-8012
7. Public Comment / Federal Register Notice:

a. Send by mail if possible to:

Monument Review, MS-1530, U.S. Department of the Interior, 1849 C Street NW, Washington, DC 20240

b. Electronically if time is short to:

https://www.regulations.gov/ DOI-2017-0002

8. Other Questions

Timothy J Fisher, Program Lead

National Monuments and Conservation Areas
National Conservation Lands

20 M Street S.E. (wo-410)
Washington DC 20003

202-912-7172 Office
202-604-0706 Cell
202-245-0050 Fax

tjfisher@blm.gov

Wimmer, Sheldon (Mark) <mwimmer@blm.gov>

National Monuments Review Data Call

1 message

Fisher, Timothy <tjfisher@blm.gov> Mon, May 22, 2017 at 3:18 PM
To: Ann Miller <ann_miller@ios.doi.gov>
Cc: "Darrel (Wayne) Monger" <dmonger@blm.gov>, "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>, Brandon Boshell <bboshell@blm.gov>, Claire Crow <ccrow@blm.gov>, Kenneth Mahoney <kmahoney@blm.gov>

This should be it!

Arizona has expanded the project to the monument managers, please add the following

Please provide Google Doc Access for Sonoran Desert NM to Dwayne Monger, dmonger@blm.gov

Please provide Google Doc Access for Grand Canyon Parashant NM to Mark Wimmer, mwimmer@blm.gov

Please provide Google Doc Access for Vermillion Cliffs NM to Brandon Boshell, bboshell@blm.gov

Please provide Google Doc Access for Ironwood Forest NM to Claire Crow, ccrow@blm.gov

Also please keep Ken Mahoney, kmahoney@blm.gov with access to all four National Monuments as the State Lead.

Thanks!

Timothy J Fisher, Program Lead

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202-604-0706 Cell
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tjfisher@blm.gov

Wimmer, Sheldon (Mark) <mwimmer@blm.gov>

Updated Forms for Monument Review.

1 message

Fisher, Timothy <tjfisher@blm.gov> Mon, May 22, 2017 at 3:37 PM
To: "Magee, Gerald J" <gmagee@blm.gov>, Joel Brumm <jbrumm@blm.gov>, Claire Crow <ccrow@blm.gov>, "Govan, Jihadda - FS" <jihaddagovan@fs.fed.us>, Kyle Sullivan <ksullivan@blm.gov>, Rebecca Carr <RWong@blm.gov>, Mark Conley <mconley@blm.gov>, McKinney Briske <mbriske@blm.gov>, Johna Hurl <jhurl@blm.gov>, Chad Schneckenburger <cschneckenburger@blm.gov>, David Freiberg <dfreiberg@blm.gov>, Kenneth Mahoney <kmahoney@blm.gov>, Brandon Boshell <bboshell@blm.gov>, "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>, "Darrel (Wayne) Monger" <dmonger@blm.gov>, Alicia Styles <astyles@blm.gov>, "James (Lee) Kirk" <jkirk@blm.gov>, Barbara Keleher <bkeleher@blm.gov>, Ashley Adams <amadams@blm.gov>, Jaime Tompkins <jtompkins@blm.gov>, Mark Albers <malbers@blm.gov>, Kymm Gresset <kgresset@blm.gov>

Hello All -

I was able to break the code and update the forms. So both forms are now numbered / lettered correctly.

I appreciate those on the call today and the great questions. As you go through the process please call when/if you hit any road blocks.

Again sorry for the short turn around - the more we can have in our hands in the WO by May 31, 2017 the better. I have to review all documents and then BLM leadership will review before releasing to the DOI.

Timothy J Fisher, Program Lead

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202-604-0706 Cell
202-245-0050 Fax

tjfisher@blm.gov

2 attachments

Initial Data Request Related to Review of National Monuments.docx
20K

Additional Information Requested Template_5_22_2017.docx
22K

Call for Data Related to Review of National Monuments under EO 13792 (April 26, 2017)

Please help us gather information about each of the items listed below, for each of the National Monuments listed below in Table 1.

1. Documents Requested
    a. Resource Management Plans/Land Use Plans
    b. Record of Decision
    c. Public Scoping Documents
    d. Presidential Proclamation
2. Information on activities permitted at the Monument, including annual levels of activity from the **date of designation to the present**
    a. Recreation - annual visits to site
    b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)
    c. Minerals - annual mineral production on site
    d. Timber - annual timber production on site (in board-feet, CCF, or similar measure)
    e. Grazing - annual grazing on site (AUMs permitted and sold)
    f. Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available
    g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available
3. Information on activities occurring during the **5 years prior to designation**
    a. Recreation - annual visits to site
    b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)
    c. Minerals - annual mineral production on site
    d. Timber - annual timber production on site (in board-feet, CCF, or similar measure)
    e. Grazing - annual grazing on site (AUMs permitted and sold)
    f. Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available
    g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available
4. Information on activities that likely would have occurred annually from the date of designation to the present **if the Monument had not been designated**
    a. Recreation - annual visits to site
    b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)
    c. Minerals - annual mineral production on site
    d. Timber - annual timber production on site (in board-feet, CCF, or similar measure)
    e. Grazing - annual grazing on site (AUMs permitted and sold)

    f. Subsistence - participation rates for subsistence activities occurring on site (fishing, hunting, gathering); quantities harvested; other quantifiable information where available
    g. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available
5. Changes to boundaries - dates and changes in size
6. Public Outreach prior to Designation - outreach activities conducted and opportunities for public comment
7. Terms of Designation

Table 1. List of National Monuments Included in Review (per DoI Press Release dated May 5, 2017)

National Monument	Location	Managing Agency
Basin and Range	Nevada	BLM
Bears Ears	Utah	BLM, USFS
Berryessa Snow Mountain	California	USFS, BLM
Canyons of the Ancients	Colorado	BLM
Carrizo Plain	California	BLM
Cascade Siskiyou	Oregon	#N/A
Craters of the Moon	Idaho	NPS, BLM
Giant Sequoia	California	USFS
Gold Butte	Nevada	BLM
Grand Canyon-Parashant	Arizona	BLM, NPS
Grand Staircase-Escalante	Utah	BLM
Hanford Reach	Washington	FWS, DOE
Ironwood Forest	Arizona	BLM
Mojave Trails	California	BLM
Organ Mountains-Desert Peaks	New Mexico	BLM
Río Grande del Norte	New Mexico	BLM
Sand to Snow	California	BLM, USFS
San Gabriel Mountains	California	USFS
Sonoran Desert	Arizona	BLM
Upper Missouri River Breaks	Montana	BLM
Vermilion Cliffs	Arizona	BLM
Katahdin Woods and Waters	Maine	NPS
Marianas Trench	CNMI/Pacific Ocean	FWS
Northeast Canyons and Seamounts	Atlantic Ocean	NOAA, FWS
Pacific Remote Islands	Pacific Ocean	FWS
Papahānaumokuākea	Hawai'i/Pacific Ocean	NOAA, FWS
Rose Atoll	American Sāmoa/Pacific Ocean	FWS

New Information Requested on Executive Order on the Review of Designations Under the Antiquities Act

BLM Responses to Additional Questions for [Name] National Monument

a) Any legislative language, including legislation in appropriations bills

[Identify if there is any related legislation regarding your monument]

b) Alternative options available for protection of resources applicable at each monument, such as Native American Graves Protection and Repatriation Act, Paleontological Resources Preservation Act, Archaeological Resources Protection Act, Historic Preservation Act and agency-specific laws and regulations.

The following could provide some options to protect specific resources found in [Name] National Monument. Protection would likely occur on a site-by-site or resource-by-resource basis and also would take a significant amount of time to accomplish under these various laws. These laws may not provide a mechanism to protect all cultural or tribal resources in [Name] National Monument. [Provide any specific information or examples for your monument.]

National Historic Preservation Act, (NHPA)

Native American Graves Protection and Repatriation Act, (NAGPRA)

Paleontological Resources Preservation Act, (PRPA)

Archaeological Resources Protection Act, (ARPA)

American Indian Religious Freedom Act (AIRFA)

c) Designated wilderness areas (name, acreage), Wilderness Study Areas (name if there is one, acreage, type), and/or areas managed to preserve wilderness or roadless characteristics that are not WSAs.

[Insert monument specific response]

d) Outstanding R.S. 2477 claims within a monument – type of road claimed and history

[Insert monument specific response]

e) Maps
[Insert monument specific response]

f) Cultural or historical resources, particularly Tribal, located near a monument but not within the boundary that might benefit from inclusion in the monument

[Insert monument specific response]

g) Other – general questions or comments

[Insert monument specific response regarding any other information that should be considered in the review of your monument]

Wimmer, Sheldon (Mark) <mwimmer@blm.gov>

Re: National Monument Review

1 message

Fisher, Timothy <tjfisher@blm.gov> Tue, May 23, 2017 at 6:40 AM
To: "Boone, Whitney" <whitney_boone@nps.gov>, "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>, Holly Crawford <hcrawford@blm.gov>

Whitney, Mark and Holly -

To help with the NM Review Data Call I am sharing contact information. Please coordinate as needed with each other for these shared NPS monuments.

For BLM Grand Canyon - Parashant NM the contact is Mark Wimmer, mwimmer@blm.gov

For BLM Craters of the Moon NM the contact is Holly Crawford, hcrawford@blm.gov

NPS contact for both - Whitney Boone, whitney_boone@nps.gov

Timothy J Fisher, Program Lead

National Monuments and Conservation Areas
National Conservation Lands

20 M Street S.E. (wo-410)
Washington DC 20003

202-912-7172 Office
202-604-0706 Cell
202-245-0050 Fax

tjfisher@blm.gov

On Mon, May 22, 2017 at 3:02 PM, Boone, Whitney <whitney_boone@nps.gov> wrote:

> Hi Timothy,
>
> Our plan is to have our Washington-based staff do the initial heavy lifting, then we'll have the superintendents and park staff help to fill any remaining gaps.
>
> For now, I think the best avenue is to send me the contact information for the BLM staff working on Grand Canyon- Parashant and Craters of the Moon; I'll get in touch with them initially and then link them up with other NPS staff as we move through the process.
>
> Thanks!
>
> On Mon, May 22, 2017 at 2:32 PM, Fisher, Timothy <tjfisher@blm.gov> wrote:
>
> > Hi Whitney -

> I have a managers call here in a bit and will discuss the collaborative efforts for Grand Canyon & Parashant and Craters of the Moon for the Monument Review - will you be the counter to BLM staff for NPS? or will other staff from the parks themselves such as superintendents or other park staff are doing the heavy lifting?
>
> I will get clarification on the call today whom will be working on behalf of the BLM for the two monuments. I can forward their contact information to you if that is the best avenue to get the ball rolling.
>
> Thoughts?
>
> Timothy J Fisher, Program Lead
>
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> tjfisher@blm.gov
>
> On Fri, May 19, 2017 at 11:41 AM, Boone, Whitney <whitney_boone@nps.gov> wrote:
>> Monday sounds good. Kudos to you all for pulling so much information together on such a short turn around... looking forward to receiving some pro tips! Good luck!
>>
>> On Fri, May 19, 2017 at 9:14 AM, Fisher, Timothy <tjfisher@blm.gov> wrote:
>>> We may need tro wait until Monday - I have to make sure Bears Ears and Grand Staircase is wrapped up , then they added budget and a specific Secretary Request for another monument on a who different issue. All due today / oh and extra questions and maps, etc.
>>>
>>> Yikes - first out of the blocks. Lots of fun. I am glad NPS is forging ahead and adding documents.
>>>
>>> Timothy J Fisher, Program Lead
>>>
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>>>
>>> tjfisher@blm.gov

On Thu, May 18, 2017 at 7:48 PM, Boone, Whitney <whitney_boone@nps.gov> wrote:

Hi Timothy,

I am working remotely tomorrow, but feel free to give me a call (202- 354-6970) if you want to chat about coordinating efforts on Craters of the Moon and Grand Canyon- Parashant. We have started loading information into the Google folders, but it will be good to coordinate a plan moving forward. No rush- know you're in the middle of a heavy lift!

Thanks,

On Fri, May 12, 2017 at 8:13 AM, Boone, Whitney <whitney_boone@nps.gov> wrote:

Hi Timothy,

Sounds good. How about we tentatively plan for next Friday at 10am? Our office is in the Main Interior Building, so we can plan on a call if that would be easier than a face-to-face.

Hope the Bears Ears and Grand Staircase data collection efforts go smoothly!

Thanks,
Whitney

On Thu, May 11, 2017 at 5:59 PM, Fisher, Timothy <tjfisher@blm.gov> wrote:

Hi Whitney

Thanks for corresponding - it was great meeting you as well. Below you can find my other contact information.

BLM WO staff are going to meet on this assignment tomorrow morning. I expect by end of next week I will have a good handle on Bears Ears and hopefully Grand Staircase so then I can turn my attentions to the other units and like to work with NPS sooner than later.

Maybe we can plan a meeting for next Friday tentatively?

Thanks for being patient, with BLM having the bigger load of the assignment I appreciate what our partnering agencies can do to assist.

Peace,

Timothy J Fisher, Program Lead

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202-604-0706 Cell
202-245-0050 Fax

tjfisher@blm.gov

On Thu, May 11, 2017 at 11:50 AM, Boone, Whitney <whitney_boone@nps.gov> wrote:

Hi Timothy,

Nice meeting you this morning. Are you available tomorrow or some time next week to discuss an approach to the the data call for Craters of the Moon and Grand Canyon-Parashant?

I'm pretty open most mornings, except Thursdays. Know you'll be swamped with the tight Bears Ears/Grand Staircase turnaround, so let me know what works best for you.

Thanks,
Whitney

--
Whitney Boone
Park Planning and Special Studies
National Park Service
202-354-6970

--
Whitney Boone
Park Planning and Special Studies
National Park Service
202-354-6970

--
Whitney Boone
Park Planning and Special Studies
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National Park Service
202-354-6970

Wimmer, Sheldon (Mark) <mwimmer@blm.gov>

Re: National Monument Review

1 message

Boone, Whitney <whitney_boone@nps.gov> Tue, May 23, 2017 at 3:25 PM
To: "Wimmer, Sheldon (Mark)" <mwimmer@blm.gov>

Great- thanks, Mark! I will copy you on the email I send to David.

The organization of the folders looks good and it is easy to follow. Thank you for setting it up. I'll let you know if we run into questions.

Thanks,

On Tue, May 23, 2017 at 4:41 PM, Wimmer, Sheldon (Mark) <mwimmer@blm.gov> wrote:

> Whitney,
>
> Yes, it is David Van Alfen, his email is: dvanalfe@blm.gov
>
> Also, I have been working on folders/data upload, if you see some problems with the organization etc... please let me know and I'll change things up as needed, I've tried to keep it consistent (in terms of lettering/org) with the original requests. Also, I contacted David and found that he does have the NPS cultural data that we need, no need to contact Steve Daron with Lake Mead.
>
> Thanks!
>
> -Mark
>
> Mark Wimmer
> Monument Manager
> Grand Canyon-Parashant
> National Monument
> 345 East Riverside Drive
> St. George, Utah 84790
> Office: 435-688-3202
> Fax: 435-688-3388

On Tue, May 23, 2017 at 2:35 PM, Boone, Whitney <whitney_boone@nps.gov> wrote:

> > Hi Mark,
> >
> > Nice talking with you today. I am trying to send an email to David Van Alphen to link him up with our cultural resources folks, but can't seem to find him in the Bison Connect directory. Are you able to send me his email? I may be misspelling his name.
> >
> > Thanks!
> > Whitney

On Tue, May 23, 2017 at 8:40 AM, Fisher, Timothy <tjfisher@blm.gov> wrote:

Whitney, Mark and Holly -

To help with the NM Review Data Call I am sharing contact information. Please coordinate as needed with each other for these shared NPS monuments.

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For BLM Craters of the Moon NM the contact is Holly Crawford, hcrawford@blm.gov

NPS contact for both - Whitney Boone, whitney_boone@nps.gov

Timothy J Fisher, Program Lead

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Thanks!

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Thoughts?

Timothy J Fisher, Program Lead

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> > tjfisher@blm.gov
> >
> > On Thu, May 18, 2017 at 7:48 PM, Boone, Whitney <whitney_boone@nps.gov> wrote:
> >
> > > Hi Timothy,
> > >
> > > I am working remotely tomorrow, but feel free to give me a call (202- 354-6970) if you want to chat about coordinating efforts on Craters of the Moon and Grand Canyon- Parashant. We have started loading information into the Google folders, but it will be good to coordinate a plan moving forward. No rush- know you're in the middle of a heavy lift!
> > >
> > > Thanks,

On Fri, May 12, 2017 at 8:13 AM, Boone, Whitney <whitney_boone@nps.gov> wrote:

Hi Timothy,

Sounds good. How about we tentatively plan for next Friday at 10am? Our office is in the Main Interior Building, so we can plan on a call if that would be easier than a face-to-face.

Hope the Bears Ears and Grand Staircase data collection efforts go smoothly!

Thanks,
Whitney

On Thu, May 11, 2017 at 5:59 PM, Fisher, Timothy <tjfisher@blm.gov> wrote:

Hi Whitney

Thanks for corresponding - it was great meeting you as well. Below you can find my other contact information.

BLM WO staff are going to meet on this assignment tomorrow morning. I expect by end of next week I will have a good handle on Bears Ears and hopefully Grand Staircase so then I can turn my attentions to the other units and like to work with NPS sooner than later.

Maybe we can plan a meeting for next Friday tentatively?

Thanks for being patient, with BLM having the bigger load of the assignment I appreciate what our partnering agencies can do to assist.

Peace,

Timothy J Fisher, Program Lead

National Monuments and Conservation Areas
National Conservation Lands

20 M Street S.E. (wo-410)
Washington DC 20003

202-912-7172 Office
202-604-0706 Cell
202-245-0050 Fax

tjfisher@blm.gov

On Thu, May 11, 2017 at 11:50 AM, Boone, Whitney <whitney_boone@nps.gov> wrote:

Hi Timothy,

Nice meeting you this morning. Are you available tomorrow or some time next week to discuss an approach to the the data call for Craters of the Moon and Grand Canyon-Parashant?

I'm pretty open most mornings, except Thursdays. Know you'll be swamped with the tight Bears Ears/Grand Staircase turnaround, so let me know what works best for you.

Thanks,

Whitney

--
Whitney Boone
Park Planning and Special Studies
National Park Service
202-354-6970

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Whitney Boone
Park Planning and Special Studies
National Park Service
202-354-6970

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> Park Planning and Special Studies
> National Park Service
> 202-354-6970

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Whitney Boone
Park Planning and Special Studies
National Park Service
202-354-6970

Wimmer, Sheldon (Mark) <mwimmer@blm.gov>

Grand Canyon- Parashant NM data call- cultural resources

1 message

Boone, Whitney <whitney_boone@nps.gov> Tue, May 23, 2017 at 3:26 PM
To: dvanalfe@blm.gov
Cc: Julie Ernstein <julie_ernstein@nps.gov>, Stephanie Toothman <stephanie_toothman@nps.gov>, "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>

Hi David,

I talked with Mark earlier today and he mentioned that you would be helping to gather cultural resources information about Grand Canyon-Parashant in response to the Department's data call. Julie Ernstein and Stephanie Toothman, copied here, are helping the NPS collect cultural resources information for the monument review. I'm not sure whether they've started on information gathering for Grand Canyon-Parashant, but thought it would be good to link you up. Hopefully you can coordinate efforts!

Thanks,

--
Whitney Boone
Park Planning and Special Studies
National Park Service
202-354-6970

Wimmer, Sheldon (Mark) <mwimmer@blm.gov>

Monument Cultural Data Call

Van Alfen, David <dvanalfe@blm.gov> Tue, May 23, 2017 at 3:36 PM
To: "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>, "Boshell, Brandon" <bboshell@blm.gov>, Chad Corey <chad_corey@nps.gov>

Afternoon Bosses!

Below are the number of sites for Parashant (for BLM and NPS) and Vermilion, and a high estimate of percentage inventoried for Parashant The percentages are high because of overlapping inventories and "bad" inventories that I haven't had the time to tease out. Brandon- I'll try to get you the percentage inventoried for Vermilion tomorrow. Of course, only the number of sites is asked for, so the percentage inventory is your choice to submit or not,

Parashant (BLM)- 1,980 sites, 8.8% inventoried
Parashant (NPS)- 1,395 sites, 18.9% inventoried

Vermilion- 1,023 sites

Let me know if there is anything else you folks need for this call.

Thanks.

--
"Day by day, even minute by minute, the *Past* was brought up to date..."
- George Orwell

Wimmer, Sheldon (Mark) <mwimmer@blm.gov>

Fwd: Monument Review (IMPORTANT PLEASE READ)

1 message

Boshell, Brandon <bboshell@blm.gov> Tue, May 23, 2017 at 5:17 PM
To: "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>

---------- Forwarded message ----------
From: **Cox, Rody** <r8cox@blm.gov>
Date: Tue, May 23, 2017 at 3:23 PM
Subject: Re: Monument Review (IMPORTANT PLEASE READ)
To: "Boshell, Brandon" <bboshell@blm.gov>

Brandon,

Please see the attached responses for the data call.

--
Rody Cox
Geologist
Arizona Strip Field Office
(435) 688-3244
r8cox@blm.gov

On Mon, May 22, 2017 at 4:17 PM, Boshell, Brandon <bboshell@blm.gov> wrote:

> Attached is the executive order concerning the monument review with the initial data request. Highlighted in the word doc are the portions I need your help addressing. The primary work load is for Rody but there is something concerning "energy transmission infrastructure, etc". I know this is very short notice but would appreciate it if you could turn this around asap. I have to have it complete by Friday, but have RMP evals wed and thur.
>
> Thanks
> Brandon
>
> ---------- Forwarded message ----------
> From: **Mahoney, Kenneth** <kmahoney@blm.gov>
> Date: Mon, May 15, 2017 at 8:00 PM
> Subject: Fwd: Monument Review (IMPORTANT PLEASE READ)
> To: "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>, Brandon Boshell <bboshell@blm.gov>, Wayne Monger <dmonger@blm.gov>, Claire Crow <ccrow@blm.gov>
> Cc: Timothy Burke <tburke@blm.gov>, Lorraine M Christian <lmchrist@blm.gov>, Leon Thomas Jr <l70thoma@blm.gov>, Edward Kender <ekender@blm.gov>, "Anthony (Scott) Feldhausen" <afeldhausen@blm.gov>, Melissa Warren <mdwarren@blm.gov>, Raymond Suazo <rmsuazo@blm.gov>, Deborah Rawhouser <drawhous@blm.gov>, Roxie Trost <rtrost@blm.gov>, Karen McKinley <kmckinley@blm.gov>

Monument Managers,

Please see the email from State Director Ray Suazo and also the forwarded email from AD-400 Chris McAlear regarding the subject of monument review.

The attached Word document file "Initial Data Request Related to Review of National Monuments" contains a list of items for which information needs to be gathered for your national monument. Please begin to compile the requested information. I will contact each of you on the afternoon of Tuesday May 23 for an interim check on the progress of the data collection. All data collection should be completed and submitted to me by Friday May 26. I will review and upload the data the following week to meet the June 2 due date for the data call.

I will also forward to you the direction from DSD-Communications Amber Cargile regarding media inquiries and public comments relating to Executive Order 13792. Please assure that staff are also aware of this direction.

Let me know of any questions about the monument review. Thank you for your assistance in responding to this information request.

Ken Mahoney <> Program Lead:
National Monuments <> National Conservation Areas
Wilderness <> Wild & Scenic Rivers
Arizona State Office <> Bureau of Land Management
602-417-9238 <> kmahoney@blm.gov

---------- Forwarded message ----------
From: **Suazo, Raymond** <rmsuazo@blm.gov>
Date: Fri, May 12, 2017 at 1:54 PM
Subject: Fwd: Monument Review (IMPORTANT PLEASE READ)
To: Kenneth Mahoney <kmahoney@blm.gov>, Roxie Trost <rtrost@blm.gov>, Karen Mckinley <kmckinley@blm.gov>, Deborah Rawhouser <drawhous@blm.gov>

FYI, I will provide Ken's name as the lead who will coordinate for AZ. My preference is also that Ken be the person that loads the data in an effort to have thorough review and consistency. However, we can consider over the weekend and make a final determination on Monday.

Ray

---------- Forwarded message ----------
From: **McAlear, Christopher** <cmcalear@blm.gov>
Date: Fri, May 12, 2017 at 1:16 PM
Subject: Monument Review (IMPORTANT PLEASE READ)
To: Edwin Roberson <eroberso@blm.gov>, "Bilbao, Anita" <abilbao@blm.gov>, Amy Lueders <alueders@blm.gov>, Aden Seidlitz <aseidlitz@blm.gov>, Jerome Perez <jperez@blm.gov>, Joseph Stout <j2stout@blm.gov>, "Suazo, Raymond" <rmsuazo@blm.gov>, Deb Rawhouser <drawhous@blm.gov>, Ruth Welch <rwelch@blm.gov>, Greg Shoop <gshoop@blm.gov>, Marci Todd <m1todd@blm.gov>, "Petersen, Paul" <ppeterse@blm.gov>, Jamie Connell <jconnell@blm.gov>, Theresa Hanley <thanley@blm.gov>, Timothy Murphy <t50murph@blm.gov>, Peter Ditton <pditton@blm.gov>
Cc: John Ruhs <jruhs@blm.gov>, Sally Butts <sbutts@blm.gov>, Peter Mali <pmali@blm.gov>, Nikki Moore <nmoore@blm.gov>, Timothy Fisher

<tjfisher@blm.gov>

State Directors:

National Conservation Lands received a data call to respond to Executive Order 13792 of April 26, 2017 (82 FR 20429, May 1, 2017) directing the Secretary of Interior to review certain National Monument designations or expansions under the Antiquities Act of 1906, 54 U.S.C. 320301-320303 (Act) (see attached).

The timeline for this data call is a short turnaround for all monuments, due by June 2, 2017, with the exception for both Grand Staircase Escalate National Monument and Bears Ears National Monument with an expedited due date of May 17, 2017. WO-410 needs assistance with this data call through the National Conservation Lands State Leads and from the affected Monument Managers, or the State Directors' designee, to gather up the desired information. Please review the attached word document for list of needed information and the list of National Monuments under review. We are expected to provide available data and information but not to create data or information or speculate on responses.

A Google Drive document folder is being established to easily transfer electronic files for each of the National Monuments under review. The desire is to limit access to assure consistent data collection. WO-410 is asking each of the States to provide names needing access for each National Monument and the lead from your state to oversee/coordinate this data call.

The two Utah National Monuments will help us to streamline the process and provide more specific guidance for the other National Monuments and the work load associated with this request. A follow-up email will provide more direction for all other BLM National Monuments under review later next week.

Please provide Timothy Fisher (tjfisher@blm.gov) a list of contacts for each monument who will need access to the google drive folder **by COB Tuesday May 16, 2017**.

The National Conservation Lands program appreciates your support in assisting with this important data call

Thank you!

Chris m

Christopher McAlear
Assistant Director
National Conservation Lands
and Community Partnerships
(W) 202-208-4731
(C) 775-722-9539

--
Brandon E. Boshell
Assistant Field Manager / Vermilion Cliffs National Monument Manager
BLM - Arizona Strip Field Office
(435) 688-3241

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Brandon E. Boshell
Assistant Field Manager / Vermilion Cliffs National Monument Manager
BLM - Arizona Strip Field Office
(435) 688-3241

Initial Data Request Related to Review of National Monuments RC.docx
15K

Call for Data Related to Review of National Monuments under EO 13792 (April 26, 2017)

Grand Canyon-Parashant National Monument

2. Information on activities permitted at the Monument, including annual levels of activity from the **date of designation to the present**

    b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)

None, there are no renewable resources or known coal, oil and gas resources within the Monument.

    c. Minerals-annual mineral production on site

Locatable minerals – None, although active mining claims are subject to valid existing rights.
Salable minerals – An estimated 2,000 cubic yards per year of gravel is used from existing material sites by the BLM for road maintenance. No new permits or sales contracts were issued.

3. Information on activities occurring during the **5 years prior to designation**

    b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)

None, there are no renewable resources or known coal, oil and gas resources within the Monument.

    c. Minerals-annual mineral production on site

Locatable minerals – None, although there were three notices of intent for exploration that were reclaimed and closed after the Monument was designated. There were no mines or plans of operations.
Salable Minerals – An estimated 2,000 cubic yards per year of gravel was used by the BLM and Mohave County for road maintenance. There were three Free Use Permits for road maintenance that expired and were not renewed after the Monument was designated.

4. Information on activities that likely would have occurred annually from the date of designation to the present **if the Monument had not been designated**

    b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)

None, there are no renewable resources or known coal, oil and gas resources within the Monument.

    c. Minerals-annual mineral production on site

Locatable minerals – None, although it is likely people would stake mining claims and explore for locatable minerals which could lead to mine development and production.
Salable Minerals – An estimated 2,000 cubic yards per year of gravel would be used by the BLM and Mohave County for road maintenance. Also, it is likely new mineral material sites would be permitted.

Vermilion Cliffs National Monument

2. Information on activities permitted at the Monument, including annual levels of activity from the **date of designation to the present**

    b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)

None, there are no renewable resources or known coal, oil and gas resources within the Monument.

    c. Minerals-annual mineral production on site

Locatable minerals – None, although active mining claims are subject to valid existing rights.
Salable Minerals – An estimated 1,000 cubic yards per year of gravel is used from existing material sites by the BLM for road maintenance. No new permits or sales contracts were issued.

3. Information on activities occurring during the **5 years prior to designation**

    b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)

None, there are no renewable resources or known coal, oil and gas resources within the Monument.

    c. Minerals-annual mineral production on site

Locatable minerals – None and there were no exploration notices or mine plans of operations.
Salable Minerals – An estimated 1,000 cubic yards per year of gravel was used by the BLM for road maintenance.

4. Information on activities that likely would have occurred annually from the date of designation to the present **if the Monument had not been designated**

    b. Energy - annual production of coal, oil, gas and renewables (if any) on site; amount of energy transmission infrastructure on site (if any)

None, there are no renewable resources or known coal, oil and gas resources within the Monument.

    c. Minerals-annual mineral production on site

Locatable minerals – None, although it is likely people would stake mining claims and explore for locatable minerals which could lead to mine development and production.
Salable Minerals – An estimated 1,000 cubic yards per year of gravel would be used by the BLM for road maintenance.

Wimmer, Sheldon (Mark) <mwimmer@blm.gov>

Re: Monument dates for data call

1 message

Jackson, Lynnda <l50jacks@blm.gov> Tue, May 23, 2017 at 7:59 PM
To: "Wimmer, Sheldon (Mark)" <mwimmer@blm.gov>
Cc: Brandon Boshell <bboshell@blm.gov>

Hi Mark,

Please see the attached.

Please look them over. I will be hard to catch this week, but please let me know if you have questions.

Below is a link to the BLM wide reports that I filtered to get the data. They may be helpful if you decide that you need data for additional allotments or for some other reason.

chrome-extension://hehijbfgiekmjfkfjpbkbammjbdenadd/nhc.htm#url=http://teamspace/sites-oc/nocna/ras/Shared%20Documents/Forms/AllItems.aspx?RootFolder=%2Fsites%2Doc%2Fnocna%2Fras%2FShared%20Documents%2FBLM%20Wide%2FNational%20Monument%20Data%20Call

Have a great week.

Lynnda

Lynnda Jackson
Rangeland Management Specialist
National Operations Center
Bureau of Land Management
Phone: 303-236-8012
FAX: 303-236-9473

On Fri, May 19, 2017 at 1:13 PM, Wimmer, Sheldon (Mark) <mwimmer@blm.gov> wrote:

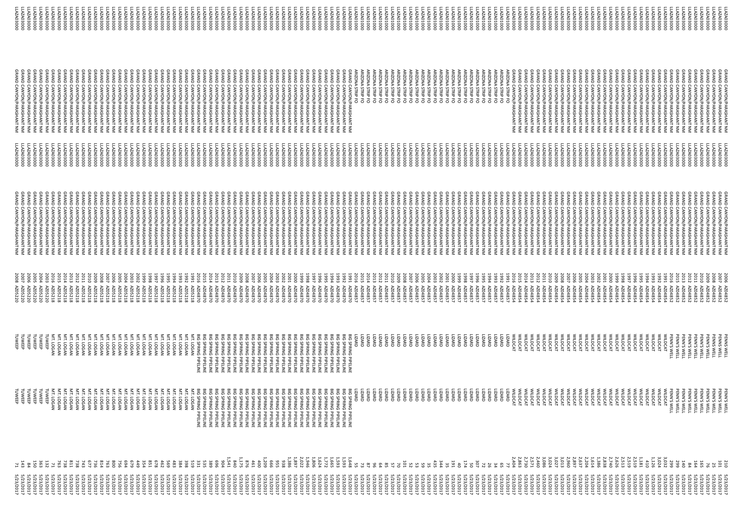
> Parashant National Monument: January 11, 2000
> Vermilion Cliffs: November 9, 2000
>
> So we would AUMs fees from (March) 1993 grazing year to 2016 grazing year (Feb 2016).
>
> Mark Wimmer
> Monument Manager
> Grand Canyon-Parashant

National Monument
345 East Riverside Drive
St. George, Utah 84790
Office: 435-688-3202
Fax: 435-688-3388

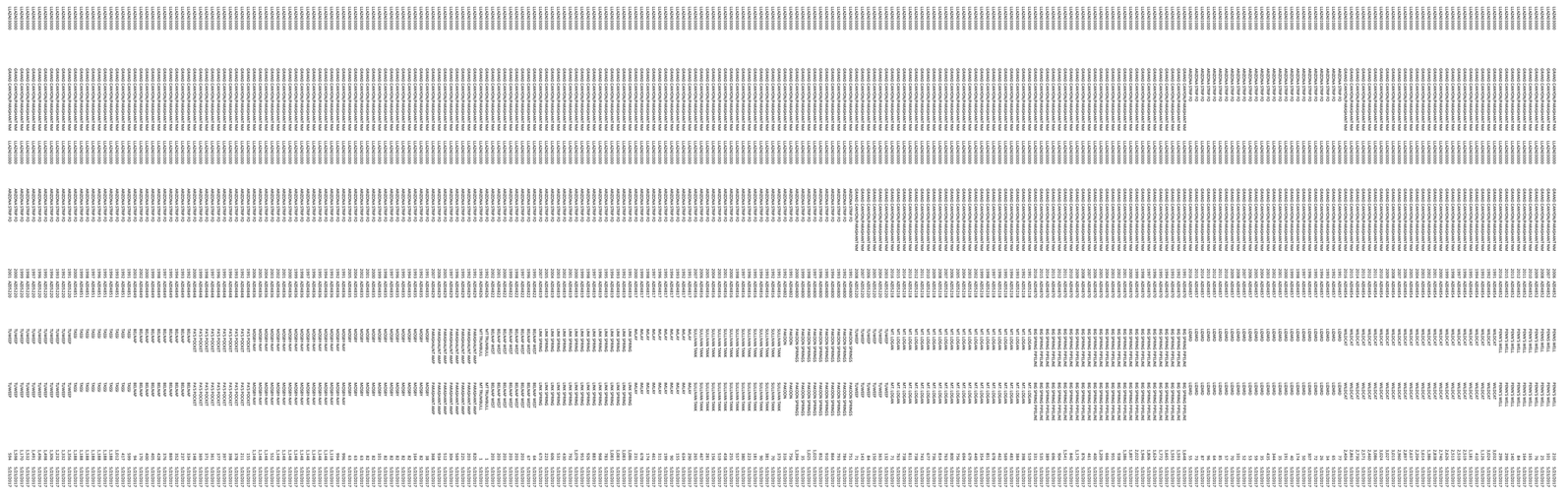
2 attachments

GRAND CANYON-PARASHANT NM_Billed_AUMs_2017-5-23_v2.xlsx
110K

GRAND CANYON-PARASHANT NM_Permitted_Active_AUMs_2017-5-23_v2.xlsx
11K



Allotment Admin Office Cd10	Allot Office Name	Bill Admin Office Cd10	Bill Office Name	Fee Year	Bill Allotment Number	Bill Allotment Name	Curent Allotment Name	Billed AUMs	Report Date
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1991	AZ04800	PAKOON SPRINGS	PAKOON SPRINGS	751	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1992	AZ04800	PAKOON SPRINGS	PAKOON SPRINGS	784	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1993	AZ04800	PAKOON SPRINGS	PAKOON SPRINGS	793	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1994	AZ04800	PAKOON SPRINGS	PAKOON SPRINGS	864	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1995	AZ04800	PAKOON SPRINGS	PAKOON SPRINGS	910	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1996	AZ04800	PAKOON SPRINGS	PAKOON SPRINGS	852	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1997	AZ04800	PAKOON SPRINGS	PAKOON SPRINGS	1,025	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1998	AZ04800	PAKOON SPRINGS	PAKOON SPRINGS	1,025	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1999	AZ04800	PAKOON SPRINGS	PAKOON SPRINGS	35	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2000	AZ04800	PAKOON SPRINGS	PAKOON SPRINGS	1,394	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1991	AZ04802	PAKOON	PAKOON	756	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1992	AZ04802	PAKOON	PAKOON	316	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1991	AZ04816	SULLIVAN TANK	SULLIVAN TANK	373	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1992	AZ04816	SULLIVAN TANK	SULLIVAN TANK	70	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1993	AZ04816	SULLIVAN TANK	SULLIVAN TANK	381	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1994	AZ04816	SULLIVAN TANK	SULLIVAN TANK	90	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1995	AZ04816	SULLIVAN TANK	SULLIVAN TANK	181	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1996	AZ04816	SULLIVAN TANK	SULLIVAN TANK	223	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1997	AZ04816	SULLIVAN TANK	SULLIVAN TANK	380	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1998	AZ04816	SULLIVAN TANK	SULLIVAN TANK	557	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2000	AZ04816	SULLIVAN TANK	SULLIVAN TANK	255	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2001	AZ04816	SULLIVAN TANK	SULLIVAN TANK	458	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2003	AZ04816	SULLIVAN TANK	SULLIVAN TANK	519	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2004	AZ04816	SULLIVAN TANK	SULLIVAN TANK	156	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2005	AZ04816	SULLIVAN TANK	SULLIVAN TANK	281	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2006	AZ04816	SULLIVAN TANK	SULLIVAN TANK	467	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2007	AZ04816	SULLIVAN TANK	SULLIVAN TANK	265	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1991	AZ04817	IMLAY	IMLAY	290	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1992	AZ04817	IMLAY	IMLAY	634	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1993	AZ04817	IMLAY	IMLAY	155	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1994	AZ04817	IMLAY	IMLAY	90	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1995	AZ04817	IMLAY	IMLAY	199	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1996	AZ04817	IMLAY	IMLAY	311	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1997	AZ04817	IMLAY	IMLAY	461	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1998	AZ04817	IMLAY	IMLAY	174	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1999	AZ04817	IMLAY	IMLAY	678	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2000	AZ04817	IMLAY	IMLAY	231	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1991	AZ04819	LINK SPRING	LINK SPRING	1,086	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1992	AZ04819	LINK SPRING	LINK SPRING	1,083	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1993	AZ04819	LINK SPRING	LINK SPRING	1,083	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1994	AZ04819	LINK SPRING	LINK SPRING	1,083	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1995	AZ04819	LINK SPRING	LINK SPRING	783	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1996	AZ04819	LINK SPRING	LINK SPRING	968	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1997	AZ04819	LINK SPRING	LINK SPRING	883	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1998	AZ04819	LINK SPRING	LINK SPRING	926	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1999	AZ04819	LINK SPRING	LINK SPRING	953	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2000	AZ04819	LINK SPRING	LINK SPRING	1,079	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2001	AZ04819	LINK SPRING	LINK SPRING	792	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2002	AZ04819	LINK SPRING	LINK SPRING	430	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2003	AZ04819	LINK SPRING	LINK SPRING	531	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2004	AZ04819	LINK SPRING	LINK SPRING	606	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2005	AZ04819	LINK SPRING	LINK SPRING	223	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2007	AZ04819	LINK SPRING	LINK SPRING	673	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1995	AZ04822	BELNAP WEST	BELNAP WEST	64	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1996	AZ04822	BELNAP WEST	BELNAP WEST	67	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1997	AZ04822	BELNAP WEST	BELNAP WEST	203	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1998	AZ04822	BELNAP WEST	BELNAP WEST	203	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1999	AZ04822	BELNAP WEST	BELNAP WEST	203	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2000	AZ04822	BELNAP WEST	BELNAP WEST	203	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2001	AZ04822	BELNAP WEST	BELNAP WEST	203	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2002	AZ04822	BELNAP WEST	BELNAP WEST	203	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1992	AZ04826	MT TRUMBULL	MT TRUMBULL	1	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1993	AZ04826	MT TRUMBULL	MT TRUMBULL	1	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1991	AZ04829	PARASHAUNT AMP	PARASHANT AMP	820	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1992	AZ04829	PARASHAUNT AMP	PARASHANT AMP	203	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1995	AZ04829	PARASHAUNT AMP	PARASHANT AMP	225	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1996	AZ04829	PARASHAUNT AMP	PARASHANT AMP	569	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1997	AZ04829	PARASHAUNT AMP	PARASHANT AMP	304	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2005	AZ04829	PARASHAUNT AMP	PARASHANT AMP	512	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2006	AZ04829	PARASHAUNT AMP	PARASHANT AMP	934	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2007	AZ04829	PARASHAUNT AMP	PARASHANT AMP	368	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1991	AZ04835	MOSBY	MOSBY	38	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1992	AZ04835	MOSBY	MOSBY	82	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1993	AZ04835	MOSBY	MOSBY	164	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1994	AZ04835	MOSBY	MOSBY	82	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1995	AZ04835	MOSBY	MOSBY	82	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1996	AZ04835	MOSBY	MOSBY	82	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1997	AZ04835	MOSBY	MOSBY	82	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1998	AZ04835	MOSBY	MOSBY	82	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1999	AZ04835	MOSBY	MOSBY	101	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2000	AZ04835	MOSBY	MOSBY	82	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2001	AZ04835	MOSBY	MOSBY	82	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2002	AZ04835	MOSBY	MOSBY	63	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2004	AZ04835	MOSBY	MOSBY	63	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2005	AZ04835	MOSBY	MOSBY	63	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1991	AZ04836	MOSBY-NAY	MOSBY-NAY	996	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1992	AZ04836	MOSBY-NAY	MOSBY-NAY	994	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1993	AZ04836	MOSBY-NAY	MOSBY-NAY	1,118	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1994	AZ04836	MOSBY-NAY	MOSBY-NAY	1,148	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1995	AZ04836	MOSBY-NAY	MOSBY-NAY	1,148	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1996	AZ04836	MOSBY-NAY	MOSBY-NAY	1,148	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1997	AZ04836	MOSBY-NAY	MOSBY-NAY	1,148	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1998	AZ04836	MOSBY-NAY	MOSBY-NAY	1,148	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1999	AZ04836	MOSBY-NAY	MOSBY-NAY	1,148	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2000	AZ04836	MOSBY-NAY	MOSBY-NAY	1,148	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2001	AZ04836	MOSBY-NAY	MOSBY-NAY	1,148	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2002	AZ04836	MOSBY-NAY	MOSBY-NAY	1,148	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2003	AZ04836	MOSBY-NAY	MOSBY-NAY	552	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2004	AZ04836	MOSBY-NAY	MOSBY-NAY	1,148	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2005	AZ04836	MOSBY-NAY	MOSBY-NAY	1,148	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2006	AZ04836	MOSBY-NAY	MOSBY-NAY	1,148	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1991	AZ04848	PA'S POCKET	PA'S POCKET	155	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1992	AZ04848	PA'S POCKET	PA'S POCKET	211	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1993	AZ04848	PA'S POCKET	PA'S POCKET	378	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1994	AZ04848	PA'S POCKET	PA'S POCKET	398	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1995	AZ04848	PA'S POCKET	PA'S POCKET	397	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1996	AZ04848	PA'S POCKET	PA'S POCKET	377	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1997	AZ04848	PA'S POCKET	PA'S POCKET	361	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1998	AZ04848	PA'S POCKET	PA'S POCKET	371	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1999	AZ04848	PA'S POCKET	PA'S POCKET	369	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2000	AZ04848	PA'S POCKET	PA'S POCKET	148	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1992	AZ04849	BELNAP	BELNAP	334	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1993	AZ04849	BELNAP	BELNAP	237	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1994	AZ04849	BELNAP	BELNAP	352	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1995	AZ04849	BELNAP	BELNAP	869	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1997	AZ04849	BELNAP	BELNAP	376	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1998	AZ04849	BELNAP	BELNAP	428	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1999	AZ04849	BELNAP	BELNAP	405	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2000	AZ04849	BELNAP	BELNAP	400	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2002	AZ04849	BELNAP	BELNAP	170	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2003	AZ04849	BELNAP	BELNAP	94	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1991	AZ04851	TASSI	TASSI	599	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1992	AZ04851	TASSI	TASSI	417	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1993	AZ04851	TASSI	TASSI	1,012	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1994	AZ04851	TASSI	TASSI	1,188	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1995	AZ04851	TASSI	TASSI	1,188	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1996	AZ04851	TASSI	TASSI	1,188	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1997	AZ04851	TASSI	TASSI	1,188	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1998	AZ04851	TASSI	TASSI	1,188	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1999	AZ04851	TASSI	TASSI	1,188	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2000	AZ04851	TASSI	TASSI	1,188	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1991	AZ05220	TUWEEP	TUWEEP	1,356	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1992	AZ05220	TUWEEP	TUWEEP	1,332	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1993	AZ05220	TUWEEP	TUWEEP	1,232	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1994	AZ05220	TUWEEP	TUWEEP	1,306	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1995	AZ05220	TUWEEP	TUWEEP	1,498	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1996	AZ05220	TUWEEP	TUWEEP	1,496	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1997	AZ05220	TUWEEP	TUWEEP	1,491	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1998	AZ05220	TUWEEP	TUWEEP	1,532	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1999	AZ05220	TUWEEP	TUWEEP	1,170	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2000	AZ05220	TUWEEP	TUWEEP	1,598	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2001	AZ05220	TUWEEP	TUWEEP	594	5/23/2017



Allot Office Name	(All)
Bill Office Name	(All)

Sum of Billed AUMs		Fee Year																							
Curent Allotment Name	Bill Allotment Num	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
BELNAP	AZ04849	237	352	869		376	428	405	400		170	94		226	527	137	213		82	329	286	167	264	249	74
BELNAP WEST	AZ04822			64	67	203	203	203	203	203	203				90	217	63	271	121	127	155	287	229	150	67
BIG SPRING PIPELINE	AZ04870	1593	1665	1772	1624	1806	1946	2022	1897	1386	938	955	666	1209	400	461	876	1175	840	1541	904	696	389	535	331
BLAKE POND	AZ04813	1414	1122	773	725	855	842	911	847	658	153	367	840	500	845	780	468	924	873	485	968	590	1287	801	1009
COTTONWOOD	AZ04809	1639	1614	1772	1777	1733	1813	1882	1862	1892	1750	1494	1480	1621	1720	1580	1733	1623	1569	1681	1683	1820	1854	1841	1873
DRIPPING SPRING	AZ04818	383	386	394	411	510	430	377	358	377	65				59	107	111	164	285	370	365	414	422	440	341
DUNCAN TANK	AZ04820	414	385	425	382	398	344	382	476	466	345	296	286	323	318	333	400	347	326	289	449	178	167	296	218
HIDDEN HILLS	AZ04825	1801	1771	1605	1774	1717	1507	1628	1430	1393	641	603	948	805	1048	1183	1159	1037	980	928	1208	1286	1181	1213	1216
HIDDEN SPRING	AZ04803	530	530	553	565	576	576	576	807	784	1256	461	795	806	1256	1256	1256	1221	691	726	726	691	1256	1221	704
IMLAY	AZ04817	155	90	199	311	461	174	678	367	302	437	85	318	385	427	481	634	298	386	427	425	444	497	624	369
JUMP CANYON	AZ04801	1037	1092	1404	1118	1089	982	871	787	840	538	474	560	260	259	462	605	652	734	284	118	849	1023	1177	419
LAST CHANCE	AZ04815	326	247	303	224	227	165	150	177	186	192	215	251	12	32	123	139	149	248	534	227	427	427	222	133
LIME SPRING	AZ02012																			190	173	173			155
LINK SPRING	AZ04819	1083	1083	783	968	883	926	953	1079	792	430	531	606	223		673	729	974	933	649	1547	1165	1022	959	
LIZARD	AZ04857	34	26	72	307	50	174	40	191	35	344	435	35	59	53	52	101	70	57	85	64	96	87	73	55
MESQUITE COMMUNITY	AZ04832													513	776										
MOSBY	AZ04835	164	82	82	82	82	82	101	82	82	63		63	63	75		45	82	49	82	82	82	82	82	81
MOSBY-NAY	AZ04836	1118	1148	1148	1148	1148	1148	1148	1148	1148	1148	552	1148	1148	1148	1148	893	979							886
MT TRUMBULL	AZ04826	1243	1277	1382	1375	1378	1453	1424	1358	1334	673	725	733	975	1200	1179	1113	1314	1101	1249	1241	1177	1293	886	1025
MT. LOGAN	AZ05218	384	483	569	462	678	851	354			449	679	694	756	800	763	814	736	677	743	738	811	738	763	71
MUD AND CANE SPRING	AZ04850	3540	3540	3540	3540	3548	3540	3540	3528	3528	3528	1176	4716	2881	1176	2352	2352	2352	2352	2950	2352	2352	2352	2940	3528
MULE CANYON	AZ04821	398	457	197	336	499	523	487	374	414	278	98	95	347	355	205	339	346	381	419	311	354	279	355	156
PAKOON	AZ04802	2674	1974	1745	1288	1951	2087	1971	1255	1766	1067	487	1176	1713	1534	1406	1184	1043	1451	1433	1408	1503	1444	1430	814
PAKOON SPRINGS	AZ04800	793	864	910	852	1025	1025	35	1394																
PARASHANT AMP	AZ04829	2071	2812	1928	569	304		316	1302	1171	276			512	934	368									
PA'S POCKET	AZ04848	378	398	397	377	361	371	369	148	303	132	113	63	503	360	576	336	106	478	235	378	176	107	150	164
PENN'S WELL	AZ04852	292	413	415	431	337	257	436	392	331					210	101	25	76	165	164	84	140		299	299
RED POND	AZ04806	1427	1103	1301	1357	1378	1619	1411	1405	1227	1031	563	1579	920	1128	1211	1390	1411	868	658	1073	1166	1070	1180	1624
SULLIVAN TANK	AZ04816	381	90	181	223	380	557		255	458		519	156	281	467	435	154	415	382	340	367	267	330	354	
TASSI	AZ04851	1012	1188	1188	1188	1188	1188	1188	1188																
TUWEEP	AZ05220	1232	1306	1498	1496	1491	1532	1170	1598	594		132	363	150	84	143	71								
WILDCAT	AZ04854	1126	410	1181	2519	2519	2513	2626	2740	2838	1386	1614	2204	2637	2897	2960	3013	3027	3024	3086	2460	2571	2730	2863	2404
WOLFHOLE LAKE	AZ04823	20	183	193	274	194	194	182	174	322	142	230	133	186	339	142	221	122	295	130	202	296	144	33	58
Grand Total		28899	28091	28843	27770	29345	29450	27836	29222	24830	17635	12898	19908	20014	20517	20834	20437	20914	19348	20134	19994	20178	20674	21136	18074

Allot Office Name	(All)
Bill Office Name	(All)

Sum of Billed AUMs		Fee Year																							
Bill Allotment Number	**Curent Allotment Name**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
AZ02012	LIME SPRING																			190	173	173			155
AZ04800	PAKOON SPRINGS	793	864	910	852	1025	1025	35	1394																
AZ04801	JUMP CANYON	1037	1092	1404	1118	1089	982	871	787	840	538	474	560	260	259	462	605	652	734	284	118	849	1023	1177	419
AZ04802	PAKOON	2674	1974	1745	1288	1951	2087	1971	1255	1766	1067	487	1176	1713	1534	1406	1184	1043	1451	1433	1408	1503	1444	1430	814
AZ04803	HIDDEN SPRING	530	530	553	565	576	576	576	807	784	1256	461	795	806	1256	1256	1256	1221	691	726	726	691	1256	1221	704
AZ04806	RED POND	1427	1103	1301	1357	1378	1619	1411	1405	1227	1031	563	1579	920	1128	1211	1390	1411	868	658	1073	1166	1070	1180	1624
AZ04809	COTTONWOOD	1639	1614	1772	1777	1733	1813	1882	1862	1892	1750	1494	1480	1621	1720	1580	1733	1623	1569	1681	1683	1820	1854	1841	1873
AZ04813	BLAKE POND	1414	1122	773	725	855	842	911	847	658	153	367	840	500	845	780	468	924	873	485	968	590	1287	801	1009
AZ04815	LAST CHANCE	326	247	303	224	227	165	150	177	186	192	215	251	12	32	123	139	149	248	534	227	427	427	222	133
AZ04816	SULLIVAN TANK	381	90	181	223	380	557		255	458		519	156	281	467	435	154	415	382	340	367	267	330	354	
AZ04817	IMLAY	155	90	199	311	461	174	678	367	302	437	85	318	385	427	481	634	298	386	427	425	444	497	624	369
AZ04818	DRIPPING SPRING	383	386	394	411	510	430	377	358	377	65				59	107	111	164	285	370	365	414	422	440	341
AZ04819	LINK SPRING	1083	1083	783	968	883	926	953	1079	792	430	531	606	223		673	729	974	933	649	1547	1165	1022	959	
AZ04820	DUNCAN TANK	414	385	425	382	398	344	382	476	466	345	296	286	323	318	333	400	347	326	289	449	178	167	296	218
AZ04821	MULE CANYON	398	457	197	336	499	523	487	374	414	278	98	95	347	355	205	339	346	381	419	311	354	279	355	156
AZ04822	BELNAP WEST			64	67	203	203	203	203	203	203				90	217	63	271	121	127	155	287	229	150	67
AZ04823	WOLFHOLE LAKE	20	183	193	274	194	194	182	174	322	142	230	133	186	339	142	221	122	295	130	202	296	144	33	58
AZ04825	HIDDEN HILLS	1801	1771	1605	1774	1717	1507	1628	1430	1393	641	603	948	805	1048	1183	1159	1037	980	928	1208	1286	1181	1213	1216
AZ04826	MT TRUMBULL	1243	1277	1382	1375	1378	1453	1424	1358	1334	673	725	733	975	1200	1179	1113	1314	1101	1249	1241	1177	1293	886	1025
AZ04829	PARASHANT AMP	2071	2812	1928	569	304		316	1302	1171	276			512	934	368									
AZ04832	MESQUITE COMMUNITY													513	776										
AZ04835	MOSBY	164	82	82	82	82	82	101	82	82	63		63	63	75		45	82	49	82	82	82	82	82	81
AZ04836	MOSBY-NAY	1118	1148	1148	1148	1148	1148	1148	1148	1148	1148	552	1148	1148	1148	1148	893	979							886
AZ04848	PA'S POCKET	378	398	397	377	361	371	369	148	303	132	113	63	503	360	576	336	106	478	235	378	176	107	150	164
AZ04849	BELNAP	237	352	869		376	428	405	400		170	94		226	527	137	213		82	329	286	167	264	249	74
AZ04850	MUD AND CANE SPRING	3540	3540	3540	3540	3548	3540	3540	3528	3528	3528	1176	4716	2881	1176	2352	2352	2352	2352	2950	2352	2352	2352	2940	3528
AZ04851	TASSI	1012	1188	1188	1188	1188	1188	1188	1188																
AZ04852	PENN'S WELL	292	413	415	431	337	257	436	392	331					210	101	25	76	165	164	84	140		299	299
AZ04854	WILDCAT	1126	410	1181	2519	2519	2513	2626	2740	2838	1386	1614	2204	2637	2897	2960	3013	3027	3024	3086	2460	2571	2730	2863	2404
AZ04857	LIZARD	34	26	72	307	50	174	40	191	35	344	435	35	59	53	52	101	70	57	85	64	96	87	73	55
AZ04870	BIG SPRING PIPELINE	1593	1665	1772	1624	1806	1946	2022	1897	1386	938	955	666	1209	400	461	876	1175	840	1541	904	696	389	535	331
AZ05218	MT. LOGAN	384	483	569	462	678	851	354			449	679	694	756	800	763	814	736	677	743	738	811	738	763	71
AZ05220	TUWEEP	1232	1306	1498	1496	1491	1532	1170	1598	594		132	363	150	84	143	71								
Grand Total		**28899**	**28091**	**28843**	**27770**	**29345**	**29450**	**27836**	**29222**	**24830**	**17635**	**12898**	**19908**	**20014**	**20517**	**20834**	**20437**	**20914**	**19348**	**20134**	**19994**	**20178**	**20674**	**21136**	**18074**

Allot Office Nam (All)
Bill Office Name (All)

Sum of Billed AUMs		Fee Year																						
Bill Allotment N	Curent Allotment Name	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
AZ02012	LIME SPRING																			190	173	173			155
AZ04800	PAKOON SPRINGS	793	864	910	852	1025	1025	35	1394																
AZ04801	JUMP CANYON	1037	1092	1404	1118	1089	982	871	787	840	538	474	560	260	259	462	605	652	734	284	118	849	1023	1177	419
AZ04802	PAKOON	2674	1974	1745	1288	1951	2087	1971	1255	1766	1067	487	1176	1713	1534	1406	1184	1043	1451	1433	1408	1503	1444	1430	814
AZ04803	HIDDEN SPRING	530	530	553	565	576	576	576	807	784	1256	461	795	806	1256	1256	1256	1221	691	726	726	691	1256	1221	704
AZ04806	RED POND	1427	1103	1301	1357	1378	1619	1411	1405	1227	1031	563	1579	920	1128	1211	1390	1411	868	658	1073	1166	1070	1180	1624
AZ04809	COTTONWOOD	1639	1614	1772	1777	1733	1813	1882	1862	1892	1750	1494	1480	1621	1720	1580	1733	1623	1569	1681	1683	1820	1854	1841	1873
AZ04813	BLAKE POND	1414	1122	773	725	855	842	911	847	658	153	367	840	500	845	780	468	924	873	485	968	590	1287	801	1009
AZ04815	LAST CHANCE	326	247	303	224	227	165	150	177	186	192	215	251	12	32	123	139	149	248	534	227	427	427	222	133
AZ04816	SULLIVAN TANK	381	90	181	223	380	557		255	458		519	156	281	467	435	154	415	382	340	367	267	330	354	
AZ04817	IMLAY	155	90	199	311	461	174	678	367	302	437	85	318	385	427	481	634	298	386	427	425	444	497	624	369
AZ04818	DRIPPING SPRING	383	386	394	411	510	430	377	358	377	65				59	107	111	164	285	370	365	414	422	440	341
AZ04819	LINK SPRING	1083	1083	783	968	883	926	953	1079	792	430	531	606	223		673	729	974	933	649	1547	1165	1022	959	
AZ04820	DUNCAN TANK	414	385	425	382	398	344	382	476	466	345	296	286	323	318	333	400	347	326	289	449	178	167	296	218
AZ04821	MULE CANYON	398	457	197	336	499	523	487	374	414	278	98	95	347	355	205	339	346	381	419	311	354	279	355	156
AZ04822	BELNAP WEST			64	67	203	203	203	203	203	203				90	217	63	271	121	127	155	287	229	150	67
AZ04823	WOLFHOLE LAKE	20	183	193	274	194	194	182	174	322	142	230	133	186	339	142	221	122	295	130	202	296	144	33	58
AZ04825	HIDDEN HILLS	1801	1771	1605	1774	1717	1507	1628	1430	1393	641	603	948	805	1048	1183	1159	1037	980	928	1208	1286	1181	1213	1216
AZ04826	MT TRUMBULL	1243	1277	1382	1375	1378	1453	1424	1358	1334	673	725	733	975	1200	1179	1113	1314	1101	1249	1241	1177	1293	886	1025
AZ04829	PARASHANT AMP	2071	2812	1928	569	304		316	1302	1171	276			512	934	368									
AZ04832	MESQUITE COMMUNITY													513	776										
AZ04835	MOSBY	164	82	82	82	82	82	101	82	82	63		63	63	75		45	82	49	82	82	82	82	82	81
AZ04836	MOSBY-NAY	1118	1148	1148	1148	1148	1148	1148	1148	1148	1148	552	1148	1148	1148	1148	893	979							886
AZ04848	PA'S POCKET	378	398	397	377	361	371	369	148	303	132	113	63	503	360	576	336	106	478	235	378	176	107	150	164
AZ04849	BELNAP	237	352	869		376	428	405	400		170	94		226	527	137	213		82	329	286	167	264	249	74
AZ04850	MUD AND CANE SPRING	3540	3540	3540	3540	3548	3540	3540	3528	3528	3528	1176	4716	2881	1176	2352	2352	2352	2352	2950	2352	2352	2352	2940	3528
AZ04851	TASSI	1012	1188	1188	1188	1188	1188	1188	1188																
AZ04852	PENN'S WELL	292	413	415	431	337	257	436	392	331					210	101	25	76	165	164	84	140		299	299
AZ04854	WILDCAT	1126	410	1181	2519	2519	2513	2626	2740	2838	1386	1614	2204	2637	2897	2960	3013	3027	3024	3086	2460	2571	2730	2863	2404
AZ04857	LIZARD	34	26	72	307	50	174	40	191	35	344	435	35	59	53	52	101	70	57	85	64	96	87	73	55
AZ04870	BIG SPRING PIPELINE	1593	1665	1772	1624	1806	1946	2022	1897	1386	938	955	666	1209	400	461	876	1175	840	1541	904	696	389	535	331
AZ05218	MT. LOGAN	384	483	569	462	678	851	354			449	679	694	756	800	763	814	736	677	743	738	811	738	763	71
AZ05220	TUWEEP	1232	1306	1498	1496	1491	1532	1170	1598	594		132	363	150	84	143	71								
Grand Total		28899	28091	28843	27770	29345	29450	27836	29222	24830	17635	12898	19908	20014	20517	20834	20437	20914	19348	20134	19994	20178	20674	21136	18074

Auth Admin Office Cd10	Auth Office Name	Allot Admin Office Cd10	Allot Office Name	Allotment Number	Allotment Name	Permitted Active Aums	Report Date
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04801	JUMP CANYON	1,863	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04802	PAKOON	1,624	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04803	HIDDEN SPRING	1,256	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04806	RED POND	2,793	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04809	COTTONWOOD	1,867	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04815	LAST CHANCE	609	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04816	SULLIVAN TANK	456	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04817	IMLAY	734	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04818	DRIPPING SPRING	448	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04819	LINK SPRING	1,094	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04820	DUNCAN TANK	429	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04821	MULE CANYON	585	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04822	BELNAP WEST	204	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04825	HIDDEN HILLS	1,907	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04826	MT TRUMBULL	1,558	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04835	MOSBY	82	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04836	MOSBY-NAY	1,153	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04848	PA'S POCKET	479	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04849	BELNAP	534	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04850	MUD AND CANE SPRING	4,716	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04852	PENN'S WELL	299	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04854	WILDCAT	4,969	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04870	BIG SPRING PIPELINE	2,557	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ05218	MT. LOGAN	930	5/23/2017

Auth Admin Office Cd10	Auth Office Name	Allot Admin Office Cd10	Allot Office Name	Allotment Number	Allotment Name	Permitted Active Aums	Report Date
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	AZ04813	BLAKE POND	1,317	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	AZ04823	WOLFHOLE LAKE	928	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	AZ04857	LIZARD	210	5/23/2017

Wimmer, Sheldon (Mark) <mwimmer@blm.gov>

Re: Grand Canyon- Parashant NM data call- cultural resources

1 message

Van Alfen, David <dvanalfe@blm.gov> Wed, May 24, 2017 at 7:48 AM
To: "Boone, Whitney" <whitney_boone@nps.gov>
Cc: Julie Ernstein <julie_ernstein@nps.gov>, Stephanie Toothman <stephanie_toothman@nps.gov>, "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>, Steven Daron <Steve_Daron@nps.gov>

Morning all!

I've cc'd Steve Daron at LAKE, since he is still officially responsible for the cultural on NPS-Parashant and would be the person overseeing ASMIS (which I'm assuming you are using to compile data). I was simply doing a search on the Parashant Cultural Database we maintain in order to get a total count of sites recorded on Parashant between 1996-2001 and 2001-present. Our NPS records are current as of last year, so they may be off by a few sites, but probably not important in the bigger picture here.

Let me know what you need and how I can help.

Thanks!

On Tue, May 23, 2017 at 3:26 PM, Boone, Whitney <whitney_boone@nps.gov> wrote:

> Hi David,
>
> I talked with Mark earlier today and he mentioned that you would be helping to gather cultural resources information about Grand Canyon-Parashant in response to the Department's data call. Julie Ernstein and Stephanie Toothman, copied here, are helping the NPS collect cultural resources information for the monument review. I'm not sure whether they've started on information gathering for Grand Canyon-Parashant, but thought it would be good to link you up. Hopefully you can coordinate efforts!
>
> Thanks,
>
> --
> Whitney Boone
> Park Planning and Special Studies
> National Park Service
> 202-354-6970

--
"Day by day, even minute by minute, the *Past* was brought up to date..."
- George Orwell

Vermillion Cliffs National Monument
Existing Rights-of-Way/Permits/Authorized
11/09/2000-5/23/2017

Existing Withdrawals: PSR, PWR, Burea of Reclamation, Forest Service Wilderness, Power Site, National Park Service, In Trust for Indians	0	Note: Wilderness Withdrawal?
Road ROWs	3	
Misc. Roads and Associated Uses- Sec 107 Federal Aid Hwy, Revised Statute 2477, Mineral Material Sites	0	
Power Transmission Lines and Power Facilities	0	
Communication Sites-Telephone, Telegraph, Radio Transmission, Global Positioning Systems	1	
Water ROWs, Irrigation Facilities	0	
Oil and Gas Pipelines, Oil and Gas Facilities	0	
Other FLPMA ROWs, Perpetual Easements, Federal Facilities	0	
Airport	0	
Permit- 302 FLPMA- Misc.(Authorized/expired/closed)	0	
Permits Film- 302 FLPMA (Authorized/expired/closed)	26	

Grand Canyon Parashant National Monument
Existing Rights-of-Way/Permits/Authorized
01/11/2000-5/23/2017

Existing Withdrawals: PSR, PWR, Burea of Reclamation, Forest Service Wilderness, Power Site, National Park Service, In Trust for Indians	4	Note: Wilderness Withdrawal?
Road ROWs	0	
Misc. Roads and Associated Uses- Sec 107 Federal Aid Hwy, Revised Statute 2477, Mineral Material Sites	0	
Power Transmission Lines and Power Facilities	0	
Communication Sites-Telephone, Telegraph, Radio Transmission, Global Positioning Systems	2	
Water ROWs, Irrigation Facilities	1	
Oil and Gas Pipelines, Oil and Gas Facilities	0	
Other FLPMA ROWs, Perpetual Easements, Federal Facilities	1	
Airport	0	
Permit- 302 FLPMA- Misc.(Authorized/expired/closed)	0	
Permits Film- 302 FLPMA (Authorized/expired/closed)	5	

Vermillion Cliffs National Monument
Existing Rights-of-Way/Permits/Authorized
11/9/1995-11/09/2000

Existing Withdrawals: PSR, PWR, Burea of Reclamation, Forest Service Wilderness, Power Site, National Park Service, In Trust for Indians		Note: Wilderness Withdrawal?
Road ROWs	0	
Misc. Roads and Associated Uses- Sec 107 Federal Aid Hwy, Revised Statute 2477, Mineral Material Sites	0	
Power Transmission Lines and Power Facilities	0	
Communication Sites-Telephone, Telegraph, Radio Transmission, Global Positioning Systems	0	
Water ROWs, Irrigation Facilities	0	
Oil and Gas Pipelines, Oil and Gas Facilities	0	
Other FLPMA ROWs, Perpetual Easements, Federal Facilities	0	
Airport	0	
Permit- 302 FLPMA- Misc.(Authorized/expired/closed)	0	
Permits Film- 302 FLPMA (Authorized/expired/closed)	0	

Grand Canyon Parashant National Monument
Existing Rights-of-Way/Permits/Authorized
1/11/1995-1/11/2000

Existing Withdrawals: PSR, PWR, Burea of Reclamation, Forest Service Wilderness, Power Site, National Park Service, In Trust for Indians	4	Note: Wilderness Withdrawal?
Road ROWs	0	
Misc. Roads and Associated Uses- Sec 107 Federal Aid Hwy, Revised Statute 2477, Mineral Material Sites	0	
Power Transmission Lines and Power Facilities	0	
Communication Sites-Telephone, Telegraph, Radio Transmission, Global Positioning Systems	2	
Water ROWs, Irrigation Facilities	0	
Oil and Gas Pipelines, Oil and Gas Facilities	0	
Other FLPMA ROWs, Perpetual Easements, Federal Facilities	1	
Airport	0	
Permit- 302 FLPMA- Misc.(Authorized/expired/closed)	0	
Permits Film- 302 FLPMA (Authorized/expired/closed)	0	

Wimmer, Sheldon (Mark) <mwimmer@blm.gov>

Fwd: link to ras bill data

1 message

Mahoney, Kenneth <kmahoney@blm.gov> Wed, May 24, 2017 at 11:28 AM
To: "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>, Brandon Boshell <bboshell@blm.gov>, Wayne Monger <dmonger@blm.gov>, Claire Crow <ccrow@blm.gov>

See the earlier email from Lynnda Jackson for information on obtaining data for the monuments review. Let me know of any questions.

Ken

---------- Forwarded message ----------
From: **Fisher, Timothy** <tjfisher@blm.gov>
Date: Tue, May 23, 2017 at 3:04 PM
Subject: Fwd: link to ras bill data
To: Jaime Tompkins <jtompkins@blm.gov>, "Magee, Gerald J" <gmagee@blm.gov>, Barbara Keleher <bkeleher@blm.gov>, Chad Schneckenburger <cschneckenburger@blm.gov>, Kenneth Mahoney <kmahoney@blm.gov>, McKinney Briske <mbriske@blm.gov>, Mark Conley <mconley@blm.gov>, Robin Fehlau <rfehlau@blm.gov>

State Leads

Please forward to the specific team members whom are working on the 16 Monuments being reviewed.

Thanks

Timothy J Fisher, Program Lead

National Monuments and Conservation Areas
National Conservation Lands

20 M Street S.E. (wo-410)
Washington DC 20003

202-912-7172 Office
202-604-0706 Cell
202-245-0050 Fax

tjfisher@blm.gov

---------- Forwarded message ----------
From: **Jackson, Lynnda** <l50jacks@blm.gov>
Date: Tue, May 23, 2017 at 1:57 PM

Subject: Fwd: link to ras bill data
To: "Fisher, Timothy" <tjfisher@blm.gov>
Cc: "Hackett, Kimberly" <khackett@blm.gov>

Hi Tim,

Would you please forward this email to the folks who will be responding to the national monument data call?

Below is a link to a report that shows billed use for all BLM allotments by fee year (for example, the 2016 fee year includes grazing use March 1, 2016 through Feb 28. 2017).

Different offices will likely need to filter the data in different ways to get the complete picture.

Those who would like assistance can email me so we can schedule a time to work on how to get the data for their specific situation. The call would have to be before 9 am MDT since I am testing software all week.

Thanks.

Lynnda

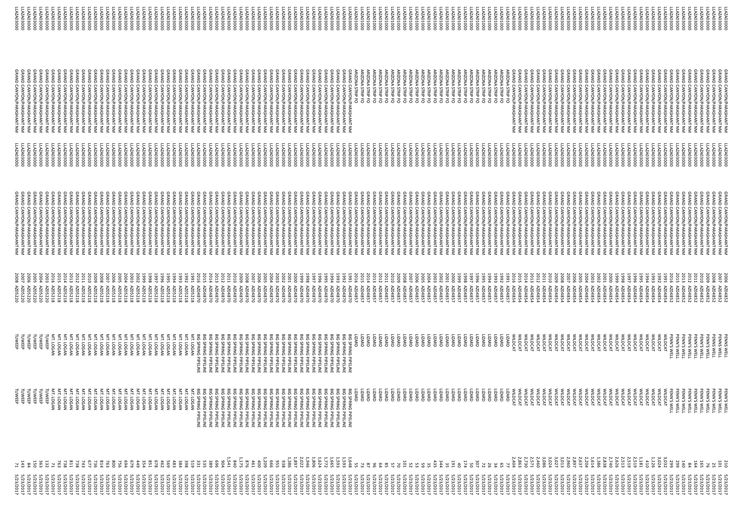
PS - I will be posting a file with the permitted active AUMs by allotment tomorrow.

Lynnda Jackson
Rangeland Management Specialist
National Operations Center
Bureau of Land Management
Phone: 303-236-8012
FAX: 303-236-9473

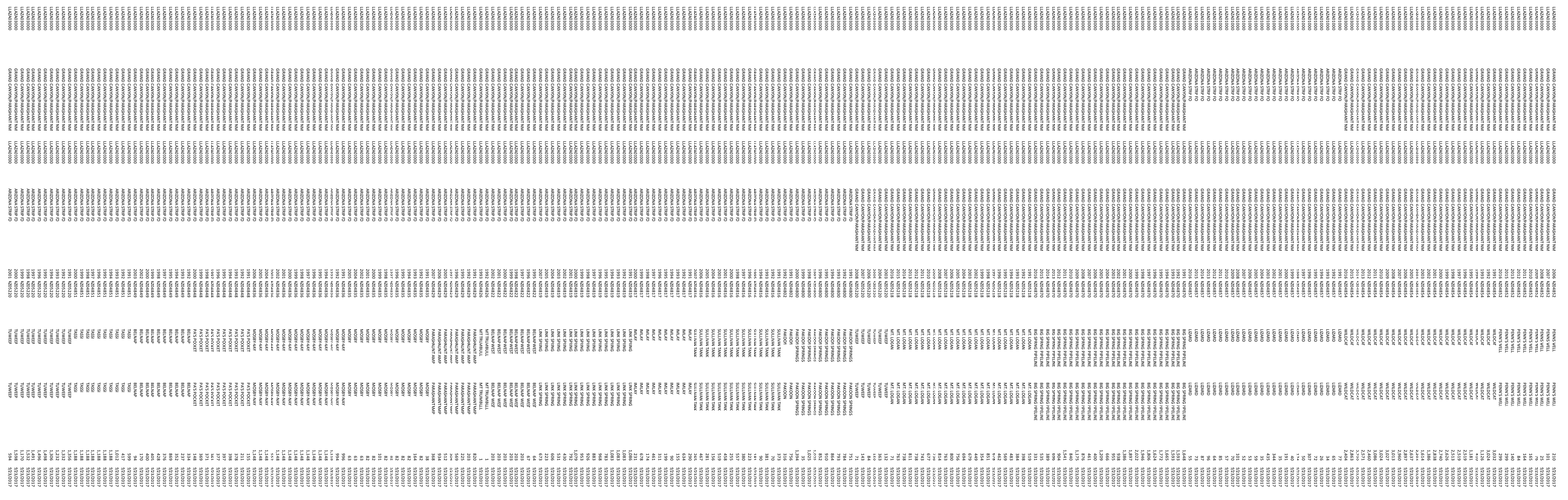
---------- Forwarded message ----------
From: **Jackson, Lynnda** <l50jacks@blm.gov>
Date: Tue, May 23, 2017 at 10:51 AM
Subject: link to ras bill data
To: "Bottomley, Timothy" <tbottoml@blm.gov>, Lynnda Jackson <l50jacks@blm.gov>

http://teamspace/sites-oc/nocna/ras/Shared%20Documents/Forms/AllItems.aspx?RootFolder=%2Fsites%2Doc%2Fnocna%2Fras%2FShared%20Documents%2FBLM%20Wide%2FNational%20Monument%20Data%20Call

Lynnda Jackson
Rangeland Management Specialist
National Operations Center
Bureau of Land Management
Phone: 303-236-8012
FAX: 303-236-9473



Allotment Admin Office Cd10	Allot Office Name	Bill Admin Office Cd10	Bill Office Name	Fee Year	Bill Allotment Number	Bill Allotment Name	Curent Allotment Name	Billed AUMs	Report Date
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1991	AZ04800	PAKOON SPRINGS	PAKOON SPRINGS	751	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1992	AZ04800	PAKOON SPRINGS	PAKOON SPRINGS	784	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1993	AZ04800	PAKOON SPRINGS	PAKOON SPRINGS	793	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1994	AZ04800	PAKOON SPRINGS	PAKOON SPRINGS	864	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1995	AZ04800	PAKOON SPRINGS	PAKOON SPRINGS	910	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1996	AZ04800	PAKOON SPRINGS	PAKOON SPRINGS	852	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1997	AZ04800	PAKOON SPRINGS	PAKOON SPRINGS	1,025	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1998	AZ04800	PAKOON SPRINGS	PAKOON SPRINGS	1,025	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1999	AZ04800	PAKOON SPRINGS	PAKOON SPRINGS	35	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2000	AZ04800	PAKOON SPRINGS	PAKOON SPRINGS	1,394	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1991	AZ04802	PAKOON	PAKOON	756	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1992	AZ04802	PAKOON	PAKOON	316	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1991	AZ04816	SULLIVAN TANK	SULLIVAN TANK	373	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1992	AZ04816	SULLIVAN TANK	SULLIVAN TANK	70	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1993	AZ04816	SULLIVAN TANK	SULLIVAN TANK	381	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1994	AZ04816	SULLIVAN TANK	SULLIVAN TANK	90	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1995	AZ04816	SULLIVAN TANK	SULLIVAN TANK	181	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1996	AZ04816	SULLIVAN TANK	SULLIVAN TANK	223	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1997	AZ04816	SULLIVAN TANK	SULLIVAN TANK	380	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1998	AZ04816	SULLIVAN TANK	SULLIVAN TANK	557	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2000	AZ04816	SULLIVAN TANK	SULLIVAN TANK	255	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2001	AZ04816	SULLIVAN TANK	SULLIVAN TANK	458	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2003	AZ04816	SULLIVAN TANK	SULLIVAN TANK	519	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2004	AZ04816	SULLIVAN TANK	SULLIVAN TANK	156	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2005	AZ04816	SULLIVAN TANK	SULLIVAN TANK	281	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2006	AZ04816	SULLIVAN TANK	SULLIVAN TANK	467	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2007	AZ04816	SULLIVAN TANK	SULLIVAN TANK	265	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1991	AZ04817	IMLAY	IMLAY	290	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1992	AZ04817	IMLAY	IMLAY	634	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1993	AZ04817	IMLAY	IMLAY	155	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1994	AZ04817	IMLAY	IMLAY	90	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1995	AZ04817	IMLAY	IMLAY	199	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1996	AZ04817	IMLAY	IMLAY	311	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1997	AZ04817	IMLAY	IMLAY	461	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1998	AZ04817	IMLAY	IMLAY	174	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1999	AZ04817	IMLAY	IMLAY	678	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2000	AZ04817	IMLAY	IMLAY	231	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1991	AZ04819	LINK SPRING	LINK SPRING	1,086	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1992	AZ04819	LINK SPRING	LINK SPRING	1,083	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1993	AZ04819	LINK SPRING	LINK SPRING	1,083	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1994	AZ04819	LINK SPRING	LINK SPRING	1,083	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1995	AZ04819	LINK SPRING	LINK SPRING	783	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1996	AZ04819	LINK SPRING	LINK SPRING	968	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1997	AZ04819	LINK SPRING	LINK SPRING	883	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1998	AZ04819	LINK SPRING	LINK SPRING	926	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1999	AZ04819	LINK SPRING	LINK SPRING	953	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2000	AZ04819	LINK SPRING	LINK SPRING	1,079	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2001	AZ04819	LINK SPRING	LINK SPRING	792	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2002	AZ04819	LINK SPRING	LINK SPRING	430	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2003	AZ04819	LINK SPRING	LINK SPRING	531	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2004	AZ04819	LINK SPRING	LINK SPRING	606	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2005	AZ04819	LINK SPRING	LINK SPRING	223	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2007	AZ04819	LINK SPRING	LINK SPRING	673	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1995	AZ04822	BELNAP WEST	BELNAP WEST	64	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1996	AZ04822	BELNAP WEST	BELNAP WEST	67	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1997	AZ04822	BELNAP WEST	BELNAP WEST	203	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1998	AZ04822	BELNAP WEST	BELNAP WEST	203	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1999	AZ04822	BELNAP WEST	BELNAP WEST	203	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2000	AZ04822	BELNAP WEST	BELNAP WEST	203	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2001	AZ04822	BELNAP WEST	BELNAP WEST	203	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2002	AZ04822	BELNAP WEST	BELNAP WEST	203	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1992	AZ04826	MT TRUMBULL	MT TRUMBULL	1	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1993	AZ04826	MT TRUMBULL	MT TRUMBULL	1	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1991	AZ04829	PARASHAUNT AMP	PARASHANT AMP	820	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1992	AZ04829	PARASHAUNT AMP	PARASHANT AMP	203	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1995	AZ04829	PARASHAUNT AMP	PARASHANT AMP	225	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1996	AZ04829	PARASHAUNT AMP	PARASHANT AMP	569	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1997	AZ04829	PARASHAUNT AMP	PARASHANT AMP	304	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2005	AZ04829	PARASHAUNT AMP	PARASHANT AMP	512	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2006	AZ04829	PARASHAUNT AMP	PARASHANT AMP	934	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2007	AZ04829	PARASHAUNT AMP	PARASHANT AMP	368	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1991	AZ04835	MOSBY	MOSBY	38	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1992	AZ04835	MOSBY	MOSBY	82	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1993	AZ04835	MOSBY	MOSBY	164	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1994	AZ04835	MOSBY	MOSBY	82	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1995	AZ04835	MOSBY	MOSBY	82	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1996	AZ04835	MOSBY	MOSBY	82	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1997	AZ04835	MOSBY	MOSBY	82	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1998	AZ04835	MOSBY	MOSBY	82	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1999	AZ04835	MOSBY	MOSBY	101	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2000	AZ04835	MOSBY	MOSBY	82	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2001	AZ04835	MOSBY	MOSBY	82	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2002	AZ04835	MOSBY	MOSBY	63	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2004	AZ04835	MOSBY	MOSBY	63	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2005	AZ04835	MOSBY	MOSBY	63	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1991	AZ04836	MOSBY-NAY	MOSBY-NAY	996	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1992	AZ04836	MOSBY-NAY	MOSBY-NAY	994	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1993	AZ04836	MOSBY-NAY	MOSBY-NAY	1,118	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1994	AZ04836	MOSBY-NAY	MOSBY-NAY	1,148	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1995	AZ04836	MOSBY-NAY	MOSBY-NAY	1,148	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1996	AZ04836	MOSBY-NAY	MOSBY-NAY	1,148	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1997	AZ04836	MOSBY-NAY	MOSBY-NAY	1,148	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1998	AZ04836	MOSBY-NAY	MOSBY-NAY	1,148	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1999	AZ04836	MOSBY-NAY	MOSBY-NAY	1,148	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2000	AZ04836	MOSBY-NAY	MOSBY-NAY	1,148	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2001	AZ04836	MOSBY-NAY	MOSBY-NAY	1,148	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2002	AZ04836	MOSBY-NAY	MOSBY-NAY	1,148	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2003	AZ04836	MOSBY-NAY	MOSBY-NAY	552	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2004	AZ04836	MOSBY-NAY	MOSBY-NAY	1,148	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2005	AZ04836	MOSBY-NAY	MOSBY-NAY	1,148	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2006	AZ04836	MOSBY-NAY	MOSBY-NAY	1,148	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1991	AZ04848	PA'S POCKET	PA'S POCKET	155	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1992	AZ04848	PA'S POCKET	PA'S POCKET	211	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1993	AZ04848	PA'S POCKET	PA'S POCKET	378	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1994	AZ04848	PA'S POCKET	PA'S POCKET	398	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1995	AZ04848	PA'S POCKET	PA'S POCKET	397	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1996	AZ04848	PA'S POCKET	PA'S POCKET	377	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1997	AZ04848	PA'S POCKET	PA'S POCKET	361	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1998	AZ04848	PA'S POCKET	PA'S POCKET	371	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1999	AZ04848	PA'S POCKET	PA'S POCKET	369	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2000	AZ04848	PA'S POCKET	PA'S POCKET	148	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1992	AZ04849	BELNAP	BELNAP	334	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1993	AZ04849	BELNAP	BELNAP	237	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1994	AZ04849	BELNAP	BELNAP	352	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1995	AZ04849	BELNAP	BELNAP	869	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1997	AZ04849	BELNAP	BELNAP	376	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1998	AZ04849	BELNAP	BELNAP	428	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1999	AZ04849	BELNAP	BELNAP	405	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2000	AZ04849	BELNAP	BELNAP	400	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2002	AZ04849	BELNAP	BELNAP	170	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2003	AZ04849	BELNAP	BELNAP	94	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1991	AZ04851	TASSI	TASSI	599	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1992	AZ04851	TASSI	TASSI	417	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1993	AZ04851	TASSI	TASSI	1,012	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1994	AZ04851	TASSI	TASSI	1,188	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1995	AZ04851	TASSI	TASSI	1,188	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1996	AZ04851	TASSI	TASSI	1,188	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1997	AZ04851	TASSI	TASSI	1,188	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1998	AZ04851	TASSI	TASSI	1,188	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1999	AZ04851	TASSI	TASSI	1,188	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2000	AZ04851	TASSI	TASSI	1,188	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1991	AZ05220	TUWEEP	TUWEEP	1,356	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1992	AZ05220	TUWEEP	TUWEEP	1,332	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1993	AZ05220	TUWEEP	TUWEEP	1,232	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1994	AZ05220	TUWEEP	TUWEEP	1,306	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1995	AZ05220	TUWEEP	TUWEEP	1,498	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1996	AZ05220	TUWEEP	TUWEEP	1,496	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1997	AZ05220	TUWEEP	TUWEEP	1,491	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1998	AZ05220	TUWEEP	TUWEEP	1,532	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	1999	AZ05220	TUWEEP	TUWEEP	1,170	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2000	AZ05220	TUWEEP	TUWEEP	1,598	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	2001	AZ05220	TUWEEP	TUWEEP	594	5/23/2017



Allot Office Name	(All)
Bill Office Name	(All)

Sum of Billed AUMs		Fee Year																							
Curent Allotment Name	Bill Allotment Num	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
BELNAP	AZ04849	237	352	869		376	428	405	400		170	94		226	527	137	213		82	329	286	167	264	249	74
BELNAP WEST	AZ04822			64	67	203	203	203	203	203	203				90	217	63	271	121	127	155	287	229	150	67
BIG SPRING PIPELINE	AZ04870	1593	1665	1772	1624	1806	1946	2022	1897	1386	938	955	666	1209	400	461	876	1175	840	1541	904	696	389	535	331
BLAKE POND	AZ04813	1414	1122	773	725	855	842	911	847	658	153	367	840	500	845	780	468	924	873	485	968	590	1287	801	1009
COTTONWOOD	AZ04809	1639	1614	1772	1777	1733	1813	1882	1862	1892	1750	1494	1480	1621	1720	1580	1733	1623	1569	1681	1683	1820	1854	1841	1873
DRIPPING SPRING	AZ04818	383	386	394	411	510	430	377	358	377	65				59	107	111	164	285	370	365	414	422	440	341
DUNCAN TANK	AZ04820	414	385	425	382	398	344	382	476	466	345	296	286	323	318	333	400	347	326	289	449	178	167	296	218
HIDDEN HILLS	AZ04825	1801	1771	1605	1774	1717	1507	1628	1430	1393	641	603	948	805	1048	1183	1159	1037	980	928	1208	1286	1181	1213	1216
HIDDEN SPRING	AZ04803	530	530	553	565	576	576	576	807	784	1256	461	795	806	1256	1256	1256	1221	691	726	726	691	1256	1221	704
IMLAY	AZ04817	155	90	199	311	461	174	678	367	302	437	85	318	385	427	481	634	298	386	427	425	444	497	624	369
JUMP CANYON	AZ04801	1037	1092	1404	1118	1089	982	871	787	840	538	474	560	260	259	462	605	652	734	284	118	849	1023	1177	419
LAST CHANCE	AZ04815	326	247	303	224	227	165	150	177	186	192	215	251	12	32	123	139	149	248	534	227	427	427	222	133
LIME SPRING	AZ02012																			190	173	173			155
LINK SPRING	AZ04819	1083	1083	783	968	883	926	953	1079	792	430	531	606	223		673	729	974	933	649	1547	1165	1022	959	
LIZARD	AZ04857	34	26	72	307	50	174	40	191	35	344	435	35	59	53	52	101	70	57	85	64	96	87	73	55
MESQUITE COMMUNITY	AZ04832													513	776										
MOSBY	AZ04835	164	82	82	82	82	82	101	82	82	63		63	63	75		45	82	49	82	82	82	82	82	81
MOSBY-NAY	AZ04836	1118	1148	1148	1148	1148	1148	1148	1148	1148	1148	552	1148	1148	1148	1148	893	979							886
MT TRUMBULL	AZ04826	1243	1277	1382	1375	1378	1453	1424	1358	1334	673	725	733	975	1200	1179	1113	1314	1101	1249	1241	1177	1293	886	1025
MT. LOGAN	AZ05218	384	483	569	462	678	851	354			449	679	694	756	800	763	814	736	677	743	738	811	738	763	71
MUD AND CANE SPRING	AZ04850	3540	3540	3540	3540	3548	3540	3540	3528	3528	3528	1176	4716	2881	1176	2352	2352	2352	2352	2950	2352	2352	2352	2940	3528
MULE CANYON	AZ04821	398	457	197	336	499	523	487	374	414	278	98	95	347	355	205	339	346	381	419	311	354	279	355	156
PAKOON	AZ04802	2674	1974	1745	1288	1951	2087	1971	1255	1766	1067	487	1176	1713	1534	1406	1184	1043	1451	1433	1408	1503	1444	1430	814
PAKOON SPRINGS	AZ04800	793	864	910	852	1025	1025	35	1394																
PARASHANT AMP	AZ04829	2071	2812	1928	569	304		316	1302	1171	276			512	934	368									
PA'S POCKET	AZ04848	378	398	397	377	361	371	369	148	303	132	113	63	503	360	576	336	106	478	235	378	176	107	150	164
PENN'S WELL	AZ04852	292	413	415	431	337	257	436	392	331					210	101	25	76	165	164	84	140		299	299
RED POND	AZ04806	1427	1103	1301	1357	1378	1619	1411	1405	1227	1031	563	1579	920	1128	1211	1390	1411	868	658	1073	1166	1070	1180	1624
SULLIVAN TANK	AZ04816	381	90	181	223	380	557		255	458		519	156	281	467	435	154	415	382	340	367	267	330	354	
TASSI	AZ04851	1012	1188	1188	1188	1188	1188	1188	1188																
TUWEEP	AZ05220	1232	1306	1498	1496	1491	1532	1170	1598	594		132	363	150	84	143	71								
WILDCAT	AZ04854	1126	410	1181	2519	2519	2513	2626	2740	2838	1386	1614	2204	2637	2897	2960	3013	3027	3024	3086	2460	2571	2730	2863	2404
WOLFHOLE LAKE	AZ04823	20	183	193	274	194	194	182	174	322	142	230	133	186	339	142	221	122	295	130	202	296	144	33	58
Grand Total		28899	28091	28843	27770	29345	29450	27836	29222	24830	17635	12898	19908	20014	20517	20834	20437	20914	19348	20134	19994	20178	20674	21136	18074

Allot Office Name	(All)
Bill Office Name	(All)

Sum of Billed AUMs		Fee Year																							
Bill Allotment Number	**Curent Allotment Name**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
AZ02012	LIME SPRING																			190	173	173			155
AZ04800	PAKOON SPRINGS	793	864	910	852	1025	1025	35	1394																
AZ04801	JUMP CANYON	1037	1092	1404	1118	1089	982	871	787	840	538	474	560	260	259	462	605	652	734	284	118	849	1023	1177	419
AZ04802	PAKOON	2674	1974	1745	1288	1951	2087	1971	1255	1766	1067	487	1176	1713	1534	1406	1184	1043	1451	1433	1408	1503	1444	1430	814
AZ04803	HIDDEN SPRING	530	530	553	565	576	576	576	807	784	1256	461	795	806	1256	1256	1256	1221	691	726	726	691	1256	1221	704
AZ04806	RED POND	1427	1103	1301	1357	1378	1619	1411	1405	1227	1031	563	1579	920	1128	1211	1390	1411	868	658	1073	1166	1070	1180	1624
AZ04809	COTTONWOOD	1639	1614	1772	1777	1733	1813	1882	1862	1892	1750	1494	1480	1621	1720	1580	1733	1623	1569	1681	1683	1820	1854	1841	1873
AZ04813	BLAKE POND	1414	1122	773	725	855	842	911	847	658	153	367	840	500	845	780	468	924	873	485	968	590	1287	801	1009
AZ04815	LAST CHANCE	326	247	303	224	227	165	150	177	186	192	215	251	12	32	123	139	149	248	534	227	427	427	222	133
AZ04816	SULLIVAN TANK	381	90	181	223	380	557		255	458		519	156	281	467	435	154	415	382	340	367	267	330	354	
AZ04817	IMLAY	155	90	199	311	461	174	678	367	302	437	85	318	385	427	481	634	298	386	427	425	444	497	624	369
AZ04818	DRIPPING SPRING	383	386	394	411	510	430	377	358	377	65				59	107	111	164	285	370	365	414	422	440	341
AZ04819	LINK SPRING	1083	1083	783	968	883	926	953	1079	792	430	531	606	223		673	729	974	933	649	1547	1165	1022	959	
AZ04820	DUNCAN TANK	414	385	425	382	398	344	382	476	466	345	296	286	323	318	333	400	347	326	289	449	178	167	296	218
AZ04821	MULE CANYON	398	457	197	336	499	523	487	374	414	278	98	95	347	355	205	339	346	381	419	311	354	279	355	156
AZ04822	BELNAP WEST			64	67	203	203	203	203	203	203				90	217	63	271	121	127	155	287	229	150	67
AZ04823	WOLFHOLE LAKE	20	183	193	274	194	194	182	174	322	142	230	133	186	339	142	221	122	295	130	202	296	144	33	58
AZ04825	HIDDEN HILLS	1801	1771	1605	1774	1717	1507	1628	1430	1393	641	603	948	805	1048	1183	1159	1037	980	928	1208	1286	1181	1213	1216
AZ04826	MT TRUMBULL	1243	1277	1382	1375	1378	1453	1424	1358	1334	673	725	733	975	1200	1179	1113	1314	1101	1249	1241	1177	1293	886	1025
AZ04829	PARASHANT AMP	2071	2812	1928	569	304		316	1302	1171	276			512	934	368									
AZ04832	MESQUITE COMMUNITY													513	776										
AZ04835	MOSBY	164	82	82	82	82	82	101	82	82	63		63	63	75		45	82	49	82	82	82	82	82	81
AZ04836	MOSBY-NAY	1118	1148	1148	1148	1148	1148	1148	1148	1148	1148	552	1148	1148	1148	1148	893	979							886
AZ04848	PA'S POCKET	378	398	397	377	361	371	369	148	303	132	113	63	503	360	576	336	106	478	235	378	176	107	150	164
AZ04849	BELNAP	237	352	869		376	428	405	400		170	94		226	527	137	213		82	329	286	167	264	249	74
AZ04850	MUD AND CANE SPRING	3540	3540	3540	3540	3548	3540	3540	3528	3528	3528	1176	4716	2881	1176	2352	2352	2352	2352	2950	2352	2352	2352	2940	3528
AZ04851	TASSI	1012	1188	1188	1188	1188	1188	1188	1188																
AZ04852	PENN'S WELL	292	413	415	431	337	257	436	392	331					210	101	25	76	165	164	84	140		299	299
AZ04854	WILDCAT	1126	410	1181	2519	2519	2513	2626	2740	2838	1386	1614	2204	2637	2897	2960	3013	3027	3024	3086	2460	2571	2730	2863	2404
AZ04857	LIZARD	34	26	72	307	50	174	40	191	35	344	435	35	59	53	52	101	70	57	85	64	96	87	73	55
AZ04870	BIG SPRING PIPELINE	1593	1665	1772	1624	1806	1946	2022	1897	1386	938	955	666	1209	400	461	876	1175	840	1541	904	696	389	535	331
AZ05218	MT. LOGAN	384	483	569	462	678	851	354			449	679	694	756	800	763	814	736	677	743	738	811	738	763	71
AZ05220	TUWEEP	1232	1306	1498	1496	1491	1532	1170	1598	594		132	363	150	84	143	71								
Grand Total		**28899**	**28091**	**28843**	**27770**	**29345**	**29450**	**27836**	**29222**	**24830**	**17635**	**12898**	**19908**	**20014**	**20517**	**20834**	**20437**	**20914**	**19348**	**20134**	**19994**	**20178**	**20674**	**21136**	**18074**

Allot Office Nam (All)
Bill Office Name (All)

Sum of Billed AUMs		Fee Year																						
Bill Allotment N	Curent Allotment Name	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
AZ02012	LIME SPRING																			190	173	173			155
AZ04800	PAKOON SPRINGS	793	864	910	852	1025	1025	35	1394																
AZ04801	JUMP CANYON	1037	1092	1404	1118	1089	982	871	787	840	538	474	560	260	259	462	605	652	734	284	118	849	1023	1177	419
AZ04802	PAKOON	2674	1974	1745	1288	1951	2087	1971	1255	1766	1067	487	1176	1713	1534	1406	1184	1043	1451	1433	1408	1503	1444	1430	814
AZ04803	HIDDEN SPRING	530	530	553	565	576	576	576	807	784	1256	461	795	806	1256	1256	1256	1221	691	726	726	691	1256	1221	704
AZ04806	RED POND	1427	1103	1301	1357	1378	1619	1411	1405	1227	1031	563	1579	920	1128	1211	1390	1411	868	658	1073	1166	1070	1180	1624
AZ04809	COTTONWOOD	1639	1614	1772	1777	1733	1813	1882	1862	1892	1750	1494	1480	1621	1720	1580	1733	1623	1569	1681	1683	1820	1854	1841	1873
AZ04813	BLAKE POND	1414	1122	773	725	855	842	911	847	658	153	367	840	500	845	780	468	924	873	485	968	590	1287	801	1009
AZ04815	LAST CHANCE	326	247	303	224	227	165	150	177	186	192	215	251	12	32	123	139	149	248	534	227	427	427	222	133
AZ04816	SULLIVAN TANK	381	90	181	223	380	557		255	458		519	156	281	467	435	154	415	382	340	367	267	330	354	
AZ04817	IMLAY	155	90	199	311	461	174	678	367	302	437	85	318	385	427	481	634	298	386	427	425	444	497	624	369
AZ04818	DRIPPING SPRING	383	386	394	411	510	430	377	358	377	65				59	107	111	164	285	370	365	414	422	440	341
AZ04819	LINK SPRING	1083	1083	783	968	883	926	953	1079	792	430	531	606	223		673	729	974	933	649	1547	1165	1022	959	
AZ04820	DUNCAN TANK	414	385	425	382	398	344	382	476	466	345	296	286	323	318	333	400	347	326	289	449	178	167	296	218
AZ04821	MULE CANYON	398	457	197	336	499	523	487	374	414	278	98	95	347	355	205	339	346	381	419	311	354	279	355	156
AZ04822	BELNAP WEST			64	67	203	203	203	203	203	203				90	217	63	271	121	127	155	287	229	150	67
AZ04823	WOLFHOLE LAKE	20	183	193	274	194	194	182	174	322	142	230	133	186	339	142	221	122	295	130	202	296	144	33	58
AZ04825	HIDDEN HILLS	1801	1771	1605	1774	1717	1507	1628	1430	1393	641	603	948	805	1048	1183	1159	1037	980	928	1208	1286	1181	1213	1216
AZ04826	MT TRUMBULL	1243	1277	1382	1375	1378	1453	1424	1358	1334	673	725	733	975	1200	1179	1113	1314	1101	1249	1241	1177	1293	886	1025
AZ04829	PARASHANT AMP	2071	2812	1928	569	304		316	1302	1171	276			512	934	368									
AZ04832	MESQUITE COMMUNITY													513	776										
AZ04835	MOSBY	164	82	82	82	82	82	101	82	82	63		63	63	75		45	82	49	82	82	82	82	82	81
AZ04836	MOSBY-NAY	1118	1148	1148	1148	1148	1148	1148	1148	1148	1148	552	1148	1148	1148	1148	893	979							886
AZ04848	PA'S POCKET	378	398	397	377	361	371	369	148	303	132	113	63	503	360	576	336	106	478	235	378	176	107	150	164
AZ04849	BELNAP	237	352	869		376	428	405	400		170	94		226	527	137	213		82	329	286	167	264	249	74
AZ04850	MUD AND CANE SPRING	3540	3540	3540	3540	3548	3540	3540	3528	3528	3528	1176	4716	2881	1176	2352	2352	2352	2352	2950	2352	2352	2352	2940	3528
AZ04851	TASSI	1012	1188	1188	1188	1188	1188	1188	1188																
AZ04852	PENN'S WELL	292	413	415	431	337	257	436	392	331					210	101	25	76	165	164	84	140		299	299
AZ04854	WILDCAT	1126	410	1181	2519	2519	2513	2626	2740	2838	1386	1614	2204	2637	2897	2960	3013	3027	3024	3086	2460	2571	2730	2863	2404
AZ04857	LIZARD	34	26	72	307	50	174	40	191	35	344	435	35	59	53	52	101	70	57	85	64	96	87	73	55
AZ04870	BIG SPRING PIPELINE	1593	1665	1772	1624	1806	1946	2022	1897	1386	938	955	666	1209	400	461	876	1175	840	1541	904	696	389	535	331
AZ05218	MT. LOGAN	384	483	569	462	678	851	354			449	679	694	756	800	763	814	736	677	743	738	811	738	763	71
AZ05220	TUWEEP	1232	1306	1498	1496	1491	1532	1170	1598	594		132	363	150	84	143	71								
Grand Total		28899	28091	28843	27770	29345	29450	27836	29222	24830	17635	12898	19908	20014	20517	20834	20437	20914	19348	20134	19994	20178	20674	21136	18074

Auth Admin Office Cd10	Auth Office Name	Allot Admin Office Cd10	Allot Office Name	Allotment Number	Allotment Name	Permitted Active Aums	Report Date
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04801	JUMP CANYON	1,863	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04802	PAKOON	1,624	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04803	HIDDEN SPRING	1,256	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04806	RED POND	2,793	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04809	COTTONWOOD	1,867	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04815	LAST CHANCE	609	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04816	SULLIVAN TANK	456	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04817	IMLAY	734	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04818	DRIPPING SPRING	448	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04819	LINK SPRING	1,094	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04820	DUNCAN TANK	429	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04821	MULE CANYON	585	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04822	BELNAP WEST	204	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04825	HIDDEN HILLS	1,907	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04826	MT TRUMBULL	1,558	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04835	MOSBY	82	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04836	MOSBY-NAY	1,153	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04848	PA'S POCKET	479	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04849	BELNAP	534	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04850	MUD AND CANE SPRING	4,716	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04852	PENN'S WELL	299	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04854	WILDCAT	4,969	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ04870	BIG SPRING PIPELINE	2,557	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA03000	GRAND CANYON/PARASHANT NM	AZ05218	MT. LOGAN	930	5/23/2017

Auth Admin Office Cd10	Auth Office Name	Allot Admin Office Cd10	Allot Office Name	Allotment Number	Allotment Name	Permitted Active Aums	Report Date
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	AZ04813	BLAKE POND	1,317	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	AZ04823	WOLFHOLE LAKE	928	5/23/2017
LLAZA03000	GRAND CANYON/PARASHANT NM	LLAZA01000	ARIZONA STRIP FO	AZ04857	LIZARD	210	5/23/2017

Wimmer, Sheldon (Mark) <mwimmer@blm.gov>

Re: New Monument Review Cultural Numbers

1 message

Van Alfen, David <dvanalfe@blm.gov> Wed, May 24, 2017 at 2:47 PM
To: "Boshell, Brandon" <bboshell@blm.gov>
Cc: "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>

No problem. I'll cc Mark on this also.

All sites generally default to Scientific Use, other than the few Public Use sites Vermilion (5 without Sun Valley Mine) and Parashant (9 BLM, 2 NPS) have. At least that is what I assume they are asking...

Let me know if you need anything else!

On Wed, May 24, 2017 at 1:16 PM, Boshell, Brandon <bboshell@blm.gov> wrote:

> Thanks Dave!!!!!
>
> One question for you. The data call states, "d. Cultural - list of cultural uses/values for site; number of sites; other quantifiable information where available"
>
> Do you have any suggestion or items for the part that states "list of cultural uses/values for site"
>
> On Wed, May 24, 2017 at 8:07 AM, Van Alfen, David <dvanalfe@blm.gov> wrote:
>
> > Morning My Weary Bosses!
> >
> > Waiting to hear back from the NPS team on what and how they want their data, but for our glorious BLM Monument lands the numbers are as follows:
> >
> > Parashant 1995-2000: 307 sites recorded
> > Parashant 2000-present: 825 sites recorded
> >
> > Vermilion 1995-2000: 14 sites recorded
> > Vermilion 2000-present: 350 sites recorded.
> >
> > If this still isn't what you need, please let me know and I will get it done toot-sweet!
> >
> > Thanks!
> >
> > --
> > "Day by day, even minute by minute, the *Past* was brought up to date..."
> > - George Orwell

--
Brandon E. Boshell
Assistant Field Manager / Vermilion Cliffs National Monument Manager
BLM - Arizona Strip Field Office
(435) 688-3241

--
"Day by day, even minute by minute, the *Past* was brought up to date..."
- George Orwell

Wimmer, Sheldon (Mark) <mwimmer@blm.gov>

Follow-up on the Monument Review Data Call

1 message

Fisher, Timothy <tjfisher@blm.gov> Thu, May 25, 2017 at 4:47 PM
To: "Magee, Gerald J" <gmagee@blm.gov>, Joel Brumm <jbrumm@blm.gov>, Alicia Styles <astyles@blm.gov>, Brandon Boshell <bboshell@blm.gov>, Barbara Keleher <bkeleher@blm.gov>, Claire Crow <ccrow@blm.gov>, Chad Schneckenburger <cschneckenburger@blm.gov>, "Darrel (Wayne) Monger" <dmonger@blm.gov>, Johna Hurl <jhurl@blm.gov>, "James (Lee) Kirk" <jkirk@blm.gov>, Jaime Tompkins <jtompkins@blm.gov>, Kenneth Mahoney <kmahoney@blm.gov>, Kyle Sullivan <ksullivan@blm.gov>, McKinney Briske <mbriske@blm.gov>, Mark Conley <mconley@blm.gov>, Kymm Gresset <kgresset@blm.gov>, "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>, Ashley Adams <amadams@blm.gov>, Rebecca Carr <RWong@blm.gov>, David Freiberg <dfreiberg@blm.gov>, "Govan, Jihadda - FS" <jihaddagovan@fs.fed.us>, Mark Albers <malbers@blm.gov>, Holly Crawford <hcrawford@blm.gov>, Robin Fehlau <rfehlau@blm.gov>, Donald Holmstrom <dholmstr@blm.gov>, Terry Austin <taustin@blm.gov>, Brian St George <bstgeorg@blm.gov>, Melanie Barnes <mgbarnes@blm.gov>, Aden Seidlitz <aseidlitz@blm.gov>, Karen Montgomery <k15montg@blm.gov>
Cc: "Butts, Sally" <sbutts@blm.gov>, "Moore, Nikki" <nmoore@blm.gov>, Christopher McAlear <cmcalear@blm.gov>

All,

I just want to touch base and see how the data call is going and to provide some clarification and updates on this process.

1. Please make sure everyone identified to have access to the google doc folder has the ability to upload documents. Again the desire is to limit the number of folks who have access, but if there is a need to to modify key staff personnel in order to meet the deadline please let me know who they are and I can get them into the system.

2. Please begin uploading all public domain documents or active links that are part of the requested documentation as soon as possible to the google drive. This will save time with getting the information added. If your state has a different method on collecting the data please use your state's preferred method.

3. I completed uploading the Economic Report today. The information maybe helpful with the National Monument summaries. Due note the newest monuments do not have a snapshot since the data is from 2016. This will include Gold Butte with limited information for Sand to Snow and Mojave Trails. If any monument has other economic sources please utilize what economic data you have available.

4. WO-410 understands the need to coordinate with your state leadership team with addressing the three word documents: Initial Data Request, Additional Information and the Executive Summary. Please work independently on these documents with the preferred method of your State Leadership Team. This can be separate from the google drive and is perfectly fine until your internal review is complete.

5. Once these documents are approved, along with all the supporting information uploaded to the google drive please let WO-400 know by sending Chris McAlear, Nikki Moore, Sally Butts and myself know your data call package is complete and ready for the WO review. Below is an example of an email from Utah coming from their State Leadership as an example:

BLM-Utah has completed initial responses to the recent data call to respond to Executive Order 13792 of April 26, 2017. Executive summaries, a detailed response for the requested items, and supporting sources of information have been uploaded to the respective Google Drive folders for Bears Ears National Monument and Grand Staircase-Escalante National Monument. BLM-Utah staff are available to answer any follow-up questions.

6. Reminder the deadline for the Data Call is End of Day your time **Wednesday May 31, 2017.**

7. Finally, I have had many ask what are the next steps and what will the final report look like once it is done. I wish I had an exact answer, but the Department is currently working on this, hopefully once the heavy lift is done a more definitive product will emerge. The final report is due to the Secretary in September which will consist of incorporating this data call, the listening sessions with the BIA, and the public comments. If the Utah example is a template of the process I would expect there will be some specific additional questions being asked beyond this data call. The additional information is more monument specific. I expect throughout the summer months the need to coordinate some additional questions. So I ask for patience and will update you as I have more information.

8. I know this is a heavy lift and appreciate all the hard work you are doing. If you have questions - please feel free to contact me either at the office or cell number.

Hopefully I did not miss anyone in this email string - if I did please forward on.

Thanks,

Timothy J Fisher, Program Lead

National Monuments and Conservation Areas
National Conservation Lands

20 M Street S.E. (wo-410)
Washington DC 20003

202-912-7172 Office
202-604-0706 Cell
202-245-0050 Fax

tjfisher@blm.gov

Wimmer, Sheldon (Mark) <mwimmer@blm.gov>

Monument Review

1 message

Boshell, Brandon <bboshell@blm.gov> Fri, May 26, 2017 at 3:42 PM
To: Lorraine Christian <lmchrist@blm.gov>
Cc: "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>

Lorraine,

I just got off the phone with Ken Mahoney and he said upon initial glance at VCNM's documents submitted it all looked pretty good. I did inform him of the possibility that Mark may have found some pre-monument designation public outreach documents. Still to be determined by Mark. If so, Mark could you ensure Ken obtains those for Vermilion. Ken also said he would then upload them to Vermilion's drive for us and update the two locations referencing this subject in the data call documents.

I did ask him specifically about the two summary questions in the executive summary and he thought they wanted a summary of the data call documents. I informed him of your opinion but he still thought otherwise. I then told him it was very difficult to summarize those documents because we already summarized them in answering the data call. Per your and Mark's thoughts, I did tell him of another option of uploading the Manager's annual reports but he didn't think it was necessary. If he does call next week after getting further clarification and want them they are located at S:blmshare/Vermilion Cliffs NM/Conservation.Lands.and Managers.Report/Manager's Report and sorted by year. We have 2009 through 2016 available.

I think we are in a good spot and really don't have many concerns.

Brandon

--
Brandon E. Boshell
Assistant Field Manager / Vermilion Cliffs National Monument Manager
BLM - Arizona Strip Field Office
(435) 688-3241

Wimmer, Sheldon (Mark) <mwimmer@blm.gov>

Re: Grazing Information for Data Call

1 message

Kirk, James (Lee) <jkirk@blm.gov> Tue, May 30, 2017 at 4:44 PM
To: "Cutler, Jannice" <jcutler@blm.gov>
Cc: "Christian, Lorraine" <lmchrist@blm.gov>, "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>

Thanks!

Thanks,

Lee Kirk
Acting Monument Manager
Gold Butte National Monument
702-515-5026

On Tue, May 30, 2017 at 3:18 PM, Cutler, Jannice <jcutler@blm.gov> wrote:

> Hi,
>
> Attached is information for your data call for the grazing allotments administered by the Arizona Strip FO and Grand Canyon-Parashant NM that are now within the Gold Butte NM.
>
> Jannice Cutler
> Rangeland Management Specialist
> Bureau of Land Management
> Grand Canyon - Parashant National Monument
> 345 East Riverside Drive
> St. George, Utah 84790
> Office: 435-688-3312
> Fax: 435-688-3388
> Email: jcutler@blm.gov
>
> On Tue, May 30, 2017 at 11:41 AM, Kirk, James (Lee) <jkirk@blm.gov> wrote:
>
> > Jannice,
> >
> > Below are the questions from the data call:
> >
> > 1. Information on activities permitted at the Monument, including annual levels of activity from the **date of designation to the present**
> > Grazing - annual grazing on site (AUMs permitted and sold)

2. Information on activities occurring during the **5 years prior to designation**
Grazing - annual grazing on site (AUMs permitted and sold)

3. Information on activities that likely would have occurred annually from the date of designation to the present **if the Monument had not been designated**
Grazing - annual grazing on site (AUMs permitted and sold)

The information is due to the WO by tomorrow COB.

Thanks,

Lee Kirk
Acting Monument Manager
Gold Butte National Monument
702-515-5026

On Tue, May 30, 2017 at 10:33 AM, Cutler, Jannice <jcutler@blm.gov> wrote:

Hi,

What information do you need for your data call? I think Mark Wimmer had Lynda Jackson get range data for the Parashant. Average users can no longer query RAS like we used to. So depending I might be able to get the information for you or you might have to get with Lynda Jackson at the NOC.

Let me know. I'll be here today but I will be in the field Wed. and Thurs.
Thanks

Jannice Cutler
Rangeland Management Specialist
Bureau of Land Management
Grand Canyon - Parashant National Monument
345 East Riverside Drive
St. George, Utah 84790
Office: 435-688-3312
Fax: 435-688-3388
Email: jcutler@blm.gov

On Tue, May 30, 2017 at 9:36 AM, Kirk, James (Lee) <jkirk@blm.gov> wrote:

Lorraine,

Would your office still able to provide me the information needed for the data call regarding grazing in the Gold Butte National Monument?

Thanks,

Lee Kirk
Acting Monument Manager
Gold Butte National Monument

702-515-5026

Gold Butte National Monument – Grazing Data Call Information

5/30/2017

Jannice Cutler Rangeland Management Specialist, BLM Grand Canyon-Parashant National Monument.

Lime Spring Allotment (AZ02012) is currently administered by the Arizona Strip Field Office.

This allotment is wholly within Nevada and within the Gold Butte NM.

#1. Information on activities permitted at the Monument, including annual levels of activity from the **date of designation to the present**

Grazing - annual grazing on site (AUMs permitted and sold)

No application for grazing has been received or approved for the Lime Spring Allotment since the date of monument designation 12/28/2016. Zero AUMs have been authorized or billed since monument designation through the present 5/30/3027.

#2. Information on activities occurring during the **5 years prior to designation**

Grazing - annual grazing on site (AUMs permitted and sold)

Authorized use based on grazing bills in RAS (Rangeland Administration System).

2016: 155 AUMs (ephemeral)

2015: No bill – zero AUMs

2014: Non-use – zero AUMs

2013: 173 AUMs (ephemeral)

2012: 173 AUMs (ephemeral)

2011: 190 AUMs

#3. Information on activities that likely would have occurred annually from the date of designation to the present **if the Monument had not been designated**

Grazing - annual grazing on site (AUMs permitted and sold)

In the Arizona Strip Resource Management Plan (2008), the Lime Spring Allotment is available for grazing. An annual application for grazing use could have been submitted, and grazing could have been approved. Because the allotment is currently classified as ephemeral, there is no set number of AUMs.

Mesquite Community Allotment (AZ04832) is currently administered by the Arizona Strip Field Office.

According to GIS approximately 13% (or 6515 acres) of the total acres in the Mesquite Community Allotment is now within the Gold Butte NM.

Grazing is billed 3/1 – 2/28 annually not by calendar year.

This permittee is billed twice a year. Total permitted active AUMs on the Mesquite Community Allotment within the Gold Butte NM is approximately 313 AUMs from 3/1 – 2/28.

#1. Information on activities permitted at the Monument, including annual levels of activity from the **date of designation to the present**

Grazing - annual grazing on site (AUMs permitted and sold)

Approximately 131 AUMs have been billed based on the acreage of the allotment within the Gold Butte NM from 12/29/2016 to 5/30/2017.

#2. Information on activities occurring during the **5 years prior to designation**

Grazing - annual grazing on site (AUMs permitted and sold)

Authorized use based on grazing bills in RAS and adjusted by the acreage (13%) within the Gold Butte NM.

10/1/2016 – 12/28/2016 = 76 AUMs

3/1/2016 – 5/30/2016 = 78

10/1/2015 – 2/28/2016 = 129

3/1/2015 – 6/1/2015 = 80

10/1/2014 – 2/28/2015 = 129

3/1/2014 – 6/30/2014 = 105

10/1/2013 – 2/28/2014 = 129

3/1/2013 – 5/15/2013 = 65

10/15/2012 – 2/28/2013 = 117

3/1/2012 – 5/31/2012 = 79

10/1/2011 – 2/28/2012 = 129

3/1/2011 – 8/31/2011 = 80

10/1/2010 – 2/28/2011 = 129

#3. Information on activities that likely would have occurred annually from the date of designation to the present **if the Monument had not been designated**

Grazing - annual grazing on site (AUMs permitted and sold)

In the Arizona Strip Resource Management Plan (2008), the Mesquite Community Allotment is available for grazing. The grazing permittee would have had the opportunity to use the entire permitted active AUMs with no reductions in AUMs because of the monument. Approximately 13% of the allotment is now within the Gold Butte NM based on GIS acreage.

Other grazing allotments administered by the Grand Canyon-Parashant National Monument that are now within the Gold Butte NM.

A portion of the Tassi Allotment (AZ04851) is within the Gold Butte National Monument. The entire Tassi Allotment is unavailable for grazing since the 1998 LUP Amendment. It has not and does not have authorized grazing.

A portion of Mosby-Nay Allotment (AZ04836) is within the Gold Butte National Monument and is unavailable for grazing Grand Canyon-Parashant National Monument Resource Management Plan 2008. It has not and does not have authorized grazing.

Wimmer, Sheldon (Mark) <mwimmer@blm.gov>

Fwd: 2017 Economic Assessments for National Monuments

1 message

Mahoney, Kenneth <kmahoney@blm.gov> Thu, Jun 1, 2017 at 12:27 PM
To: Timothy Fisher <tjfisher@blm.gov>
Cc: Ronald Tipton <rtipton@blm.gov>, "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>, Claire Crow <ccrow@blm.gov>, Wayne Monger <dmonger@blm.gov>, Brandon Boshell <bboshell@blm.gov>

Additional information available about the Headwaters Economics assessments of communities near BLM national monuments.

---------- Forwarded message ----------
From: **Johnson, Michael** <mdjohnso@blm.gov>
Date: Thu, Jun 1, 2017 at 11:12 AM
Subject: 2017 Economic Assessments for National Monuments
To: mbarnes@blm.gov, Michael Johnson <mdjohnso@blm.gov>, "Trost, Roxie" <rtrost@blm.gov>, Karen Mckinley <kmckinley@blm.gov>, Jacqueline Neckels <jneckels@blm.gov>, Nancy Favour <nfavour@blm.gov>, Molly Cobbs <mcobbs@blm.gov>, Kenneth Mahoney <kmahoney@blm.gov>, Jennifer Montoya <jamontoy@blm.gov>, Mara Weisenberger <mweisenberger@blm.gov>

Hello all,
As a follow-on to the summary piece from E&E Greenwire I forwarded to everyone, I checked the Headwaters Economics website:

https://headwaterseconomics.org/public-lands/protected-lands/national-monuments/#factsheets

On the web site, Headwaters has Economic Fact Sheets for each of the monuments in the study. I have attached PDF copies of the factsheets for all the AZ and NM momunments that were included for your use.

--
Michael Johnson
Social Scientist, AZ/NM/TX/OK/KS
BLM Arizona State Office
One North Central, Suite 800
Phoenix AZ 85004

602-417-9236
mdjohnso@blm.gov

7 attachments

El Malpais Econ Facts 2017.pdf

599K

OMDP Econ Facts 2017.pdf
791K

Rio Grande Del Norte Econ Facts 2017.pdf
686K

Sonoran Desert Econ Fact 2017.pdf
449K

Vermilion Cliffs Econ Fact 2017.pdf
449K

GC_Parashant Econ Facts 2017.pdf
680K

Agua Fria Econ Facts 2017.pdf
805K

El Malpais National Monument

A Summary of Economic Performance in the Surrounding Communities

HEADWATERS ECONOMICS

El Malpais National Monument, Photo: NPS

BACKGROUND

The 114,000 acre El Malpais National Monument was created in 1987 to protect the landscape that was created by volcanic forces during the past million years. Located in Cibola County, New Mexico the monument is managed by the National Park Service.

PUBLIC ACCESS AND USE OF THE MONUMENT

The monument offers all forms of recreation from scenic drives and overlooks to strenuous trails and rugged backcountry. Each year, El Malpais attracts thousands of visitors who hike, camp, and explore this unique area.

TRAVEL AND TOURISM

Travel and tourism are important to communities in Cibola County, representing about 21% of total private wage and salary employment, or 1,047 jobs, in 2015. In New Mexico, the Outdoor Industry Association reports that recreation contributes more than $6.1 billion annually to the state's economy.[6]

SUMMARY FINDINGS

Research shows that conserving public lands like the El Malpais National Monument helps to safeguard and highlight amenities that draw new residents, tourists, and businesses to surrounding communities.[1]

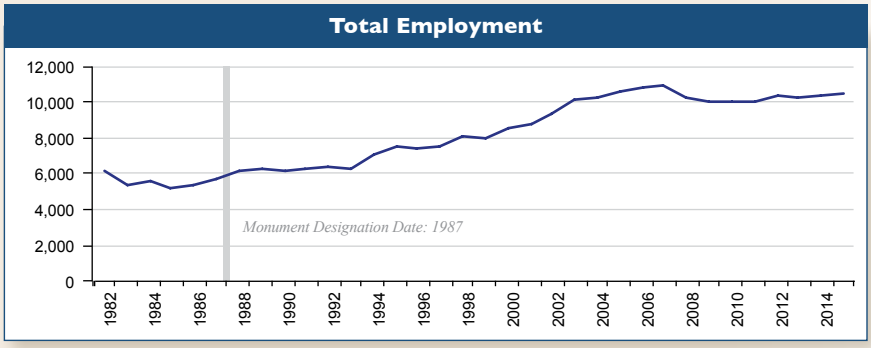
Western counties with protected public lands, like national monuments, have been more successful at attracting fast-growing economic sectors and as a result grow more quickly, on average, than counties without protected public lands.[2] In addition, protected natural amenities—such as the pristine scenery found at El Malpais—also help sustain property values and attract new investment.[3]

ECONOMY GROWS AFTER DESIGNATION

The communities in Cibola County, New Mexico neighboring the El Malpais National Monument experienced strong growth after the designation of the monument, reversing declines in the earlier 1980s.

From 2001 to 2015, in Cibola County:[4]

- **Population grew by 3%**
- **Jobs grew by 20%**
- **Real personal income grew by 36%**
- **Real per capita income grew by 32%**

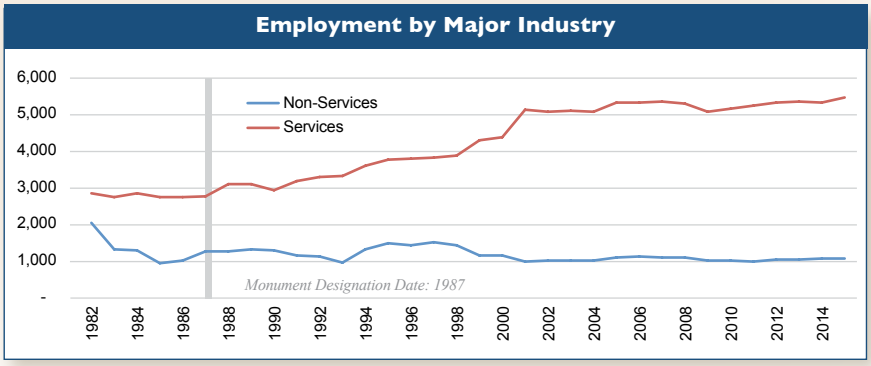


SERVICES JOBS INCREASING ACROSS THE BOARD

Services jobs—such as doctors, engineers, and teachers—account for the majority of employment in Cibola County in recent decades. Services jobs are increasingly mobile, and many entrepreneurs locate their businesses in areas with a high quality of life.

From 2001 to 2015, in Cibola County:[5]

- **Services grew from 5,149 to 5,465 jobs, a 6% increase**
- **Non-Services grew from 983 to 1,076 jobs, a 9% increase**



El Malpais National Monument, Photo: NPS

THE COMMUNITIES IN CIBOLA COUNTY NEIGHBORING THE EL MALPAIS NATIONAL MONUMENT EXPERIENCED STRONG GROWTH SINCE ITS CREATION IN 1987.

THE INCREASES IN POPULATION, JOBS, PERSONAL INCOME, AND PER CAPITA INCOME ALSO MIRROR OTHER WESTERN COUNTIES WITH NATIONAL MONUMENTS OR OTHER PROTECTED LANDS.

METHODOLOGY

This fact sheet is part of a series that assesses the economic performance of local communities that are adjacent to national monuments. The series examines national monuments in the eleven western continental states that are larger than 10,000 acres and were created in 1982 or later.

FOR MORE INFORMATION

Contact Ray Rasker, Ph.D.
Headwaters Economics
ray@headwaterseconomics.org
406-570-7044

Series: The Economic Importance of National Monuments to Local Communities

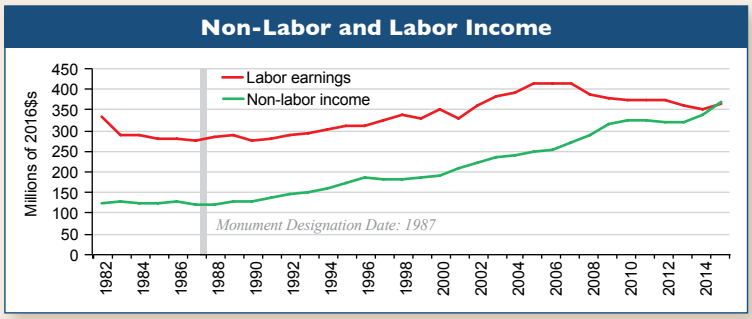
NON-LABOR INCOME GROWS FASTEST

One of the largest and fastest growing sources of new personal income in Cibola County is non-labor income, which is made up of investment income such as dividends, interest and rent, and government transfer payments such as Social Security and Medicare.

For people with investment income and many retirees, protected public lands and recreation provide important aspects of a high quality of life. Non-labor income already represents more than a third of all personal income in the West—and will grow as the Baby Boomer generation retires.[7]

From 2001 to 2015, in Cibola County:

- **Non-labor income grew from $210 million to $369 million, a 76% increase**
- **As a result, in 2008 non-labor income made up 50% of total personal income**



TRADITIONAL JOBS HOLD STEADY

Before the monument's creation, commodity industries (agriculture, mining, timber) in Cibola County were small relative to the overall economy. These industries remain part of the county's economy today.

In 2015, in Cibola County:

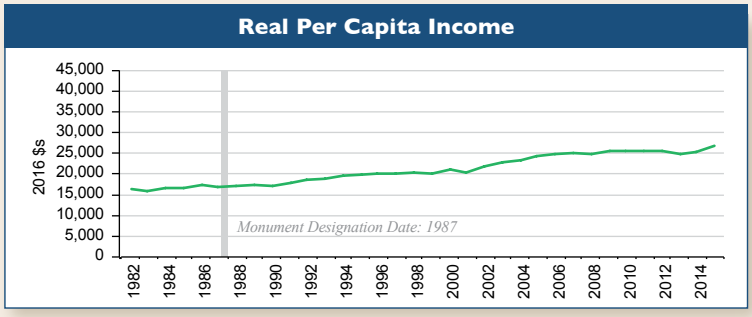
- **Agriculture accounted for 4% of total employment**
- **Mining accounted for 6% of total private employment**
- **Timber accounted for 1% of total private employment**

PROSPERITY ON THE RISE

As the economy has grown since designation of the El Malpais National Monument, per capita income has risen as well. This indicates growing prosperity in the region.

From 2001 to 2015, in Cibola County:

- **Real per capita income grew from $20,343 to $26,803, a 32% increase**



1 Headwaters Economics. The Value of Public Lands; Lorah, P. and R. Southwick. 2003. Environmental Protection, Population Change, and Economic Development in the Rural Western United States. *Population and Environment* 24(3): 255-272; McGranahan, D.A. 1999. Natural Amenities Drive Rural Population Change. ERS, Agric. Econ. Rep. No. 781. USDA: Washington, DC; Haas, W.H. and W.J. Serow. 2002. The Baby Boom, Amenity Retirement Migration, and Retirement Communities: Will the Golden Age of Retirement Continue? *Research on Aging* 24(1): 150-164.

2 Rasker, R., P.H. Gude, and M. Delorey. 2013. The Effect of Protected Federal Lands on Economic Prosperity in the Non-Metropolitan West. *Journal of Regional Analysis and Policy* 43(2): 110-122.

3 Deller, S.C., T.H. Tsai, D.W. Macrouiller, and D.B.K. English. 2001. The Role of Amenities and Quality of Life in Rural Economic Growth. *American Journal of Agricultural Economics* 83(2): 352-365.

4 All economic data come from U.S. Department of Commerce. 2016. Bureau of Economic Analysis, *Regional Economic Accounts*, Washington, DC; U.S. Department of Commerce. 2017. Census Bureau, *County Business Patterns,* Washington, DC.

5 The U.S. Department of Commerce changed the way it classifies industries between 2000 and 2001. To show a continuous timeline for services and non-services employment, we subtracted non-services jobs from total private employment to derive services jobs.

6 Outdoor Industry Association. 2012. The Outdoor Recreation Economy.

7 Headwaters Economics, Non-Labor Income: Large and Growing in Importance Across the West; Frey, W.H. 2006. America's Regional Demographics in the '00s Decade: The Role of Seniors, Boomers, and New Minorities. Washington, DC: The Brookings Institution.

Organ Mountains-Desert Peaks National Monument

A Summary of Economic Performance in the Surrounding Communities

HEADWATERS ECONOMICS

Organ Mountains-Desert Peaks National Monument, Photo: BLM

BACKGROUND

The 496,000 acre Organ Mountains-Desert Peaks National Monument was created in 2014 to protect the historic and biological resources of five mountain chains in southern New Mexico. Located almost entirely in Dona Ana County, New Mexico the monument is managed by the Bureau of Land Management.

PUBLIC ACCESS AND USE OF THE MONUMENT

The Resource Management Plan (RMP) for the monument is under development. In the meantime, visitors can enjoy outdoor recreation such as hiking, hunting, ATV riding, or horseback riding. Traditional and existing rights such as grazing and plant gathering also will continue.

TRAVEL AND TOURISM

Travel and tourism are important to communities in Dona Ana County, representing about 19% of total private wage and salary employment, or 9,571 jobs, in 2015. In New Mexico, the Outdoor Industry Association reports that recreation contributes more than $6 billion annually to the state's economy.[6]

SUMMARY FINDINGS

Research shows that conserving public lands like the Organ Mountains-Desert Peaks National Monument helps to safeguard and highlight amenities that draw new residents, tourists, and businesses to surrounding communities.[1]

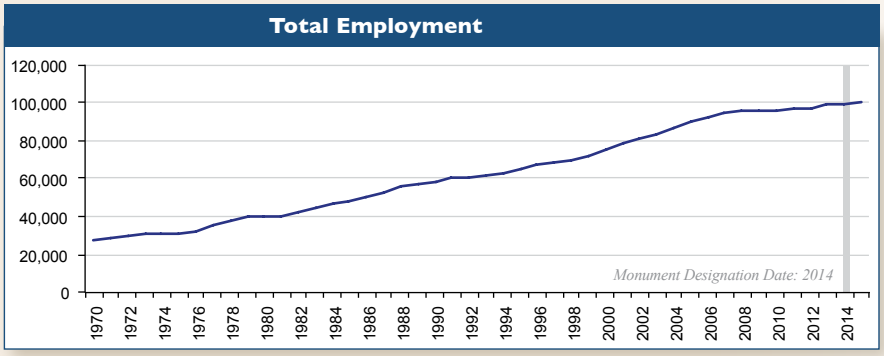
Western counties with protected public lands, like national monuments, have been more successful at attracting fast-growing economic sectors and as a result grow more quickly, on average, than counties without protected public lands.[2] In addition, protected natural amenities—such as the pristine scenery found at Organ Mountain-Desert Peaks—also help sustain property values and attract new investment.[3]

ECONOMY GROWING

The communities in Dona Ana County, New Mexico neighboring the Organ Mountains-Desert Peaks National Monument continue to grow, echoing previous growth trends.

From 2001 to 2015, in Dona Ana County:[4]

- **Population grew by 21%**
- **Jobs grew by 27%**
- **Real personal income grew by 42%**
- **Real per capita income grew by 17%**

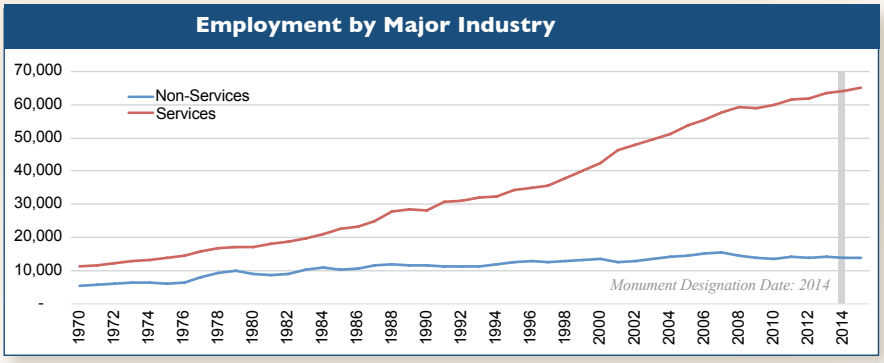


SERVICES JOBS INCREASING ACROSS THE BOARD

Services jobs—such as doctors, engineers, and teachers—account for the majority of employment growth in Dona Ana County in recent decades. These jobs are increasingly mobile, and many entrepreneurs locate their businesses in areas with a high quality of life.

From 2001 to 2015, in Dona Ana County:[5]

- **Services grew from 46,336 to 65,200 jobs, a 41% increase**
- **Non-Services grew from 12,630 to 14,039, an 11% increase**



Organ Mountains-Desert Peaks National Monument, Photo: BLM

THE COMMUNITIES IN DONA ANA COUNTY NEIGHBORING THE MONUMENT HAVE GROWN STEADILY SINCE THE TURN OF THE CENTURY.

THE INCREASES IN POPULATION, JOBS, PERSONAL INCOME, AND PER CAPITA INCOME MIRROR OTHER WESTERN COUNTIES WITH NATIONAL MONUMENTS OR OTHER PROTECTED LANDS.

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FOR MORE INFORMATION

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Series: The Economic Importance of National Monuments to Local Communities

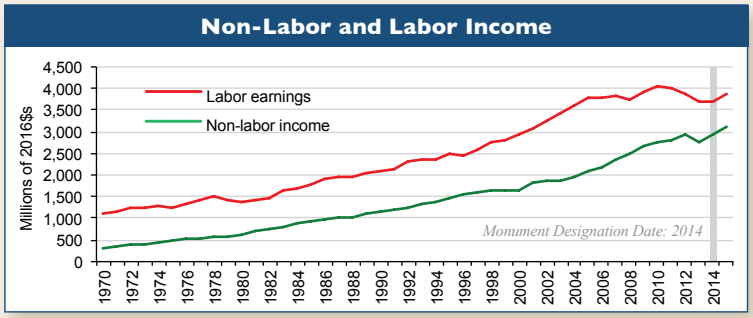
NON-LABOR INCOME GROWING FASTEST

One of the largest and fastest growing sources of new personal income in Dona Ana County is non-labor income, which is made up of investment income such as dividends, interest and rent, and government transfer payments such as Social Security and Medicare.

For people with investment income and many retirees, protected public lands and recreation provide important aspects of a high quality of life. Non-labor income already represents more than a third of all personal income in the West—and will grow as the Baby Boom generation retires.[7]

From 2001 to 2015, in Dona Ana County:

- **Non-Labor income grew from $1.8 billion to $3.1 billion, a 71% increase**
- **As a result, in 2015 non-labor income made up 45% of total personal income**



TRADITIONAL JOBS HOLD STEADY

Long before the monument's creation, commodity industries (agriculture, mining, timber) in Dona Ana County were small relative to the overall economy. These industries remain part of the county's economy today.

In 2015, in Dona Ana County:

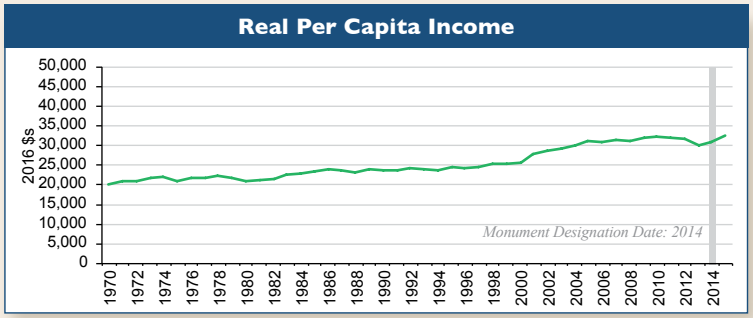
- **Agriculture accounted for 3% of total employment**
- **Mining accounted for 0.1% of total private employment**
- **Timber accounted for 0.3% of total private employment**

PROSPERITY ON THE RISE

As the economy has grown, per capita income has risen as well. This indicates growing prosperity in the region.

From 2001 to 2015, in Dona Ana County:

- **Real per capita income grew from $27,870 to $32,653, a 17% increase**



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Rio Grande del Norte National Monument

A Summary of Economic Performance in the Surrounding Communities

HEADWATERS ECONOMICS

Rio Grande del Norte National Monument, Photo: BLM

BACKGROUND

The 242,500 acre Rio Grande del Norte National Monument was created in 2013 to protect the rugged land of the region, intercut by rivers and steep canyons in northern New Mexico. Located almost entirely in Taos County, the monument is managed by the Bureau of Land Management.

PUBLIC ACCESS AND USE OF THE MONUMENT

The Resource Management Plan (RMP) for the monument is under development. In the meantime, visitors can enjoy a wide variety outdoor recreation such as white water rafting, hiking, hunting, and mountain biking. Traditional and existing rights also will continue.

TRAVEL AND TOURISM

Travel and tourism are important to communities in Taos County, representing about 39% of total private wage and salary employment, or 3,460 jobs, in 2015. In New Mexico, the Outdoor Industry Association reports that recreation contributes more than $6 billion annually to the state's economy.[6]

SUMMARY FINDINGS

Research shows that conserving public lands like the Rio Grande del Norte National Monument helps to safeguard and highlight amenities that draw new residents, tourists, and businesses to surrounding communities.[1]

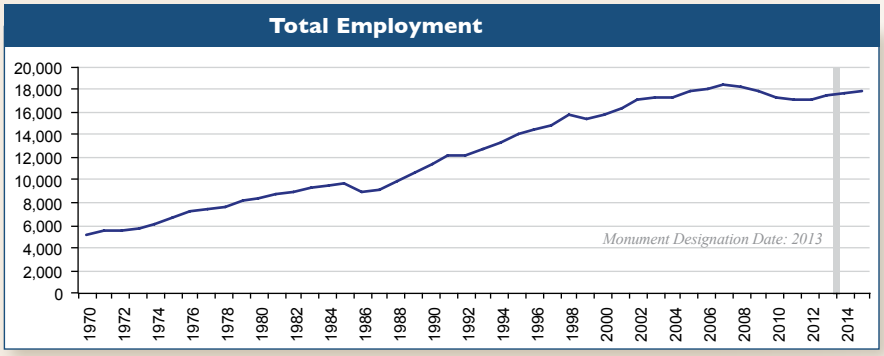
Western counties with protected public lands, like national monuments, have been more successful at attracting fast-growing economic sectors and as a result grow more quickly, on average, than counties without protected public lands.[2] In addition, protected natural amenities—such as the pristine scenery found at Rio Grande del Norte—also help sustain property values and attract new investment.[3]

ECONOMY GROWING

The communities in Taos County, New Mexico neighboring the Rio Grande del Norte National Monument continue to grow, echoing previous growth trends.

From 2001 to 2015, in Taos County:[4]

- **Population grew by 9%**
- **Jobs grew by 8%**
- **Real personal income grew by 38%**
- **Real per capita income grew by 27%**

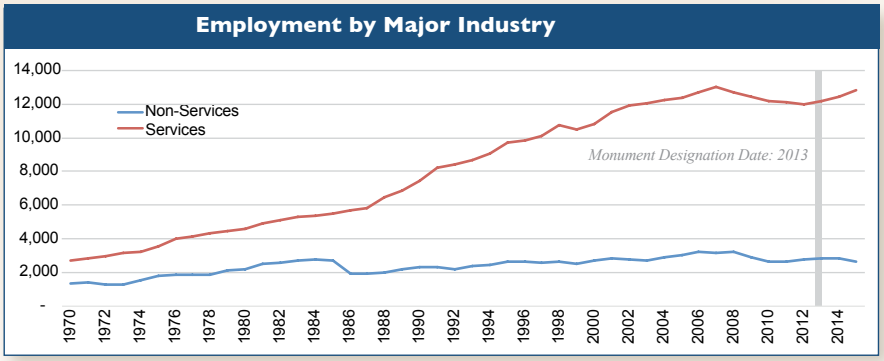


SERVICES JOBS INCREASING ACROSS THE BOARD

Services jobs—such as doctors, engineers, and teachers—account for the majority of employment growth in Taos County in recent decades. These jobs are increasingly mobile, and many entrepreneurs locate their businesses in areas with a high quality of life.

From 2001 to 2015, in Taos County:[5]

- **Services grew from 11,519 to 12,834 jobs, an 11% increase**
- **Non-Services decreased from 2,870 to 2,669, a 7% decrease**



Rio Grande del Norte National Monument, Photo: BLM

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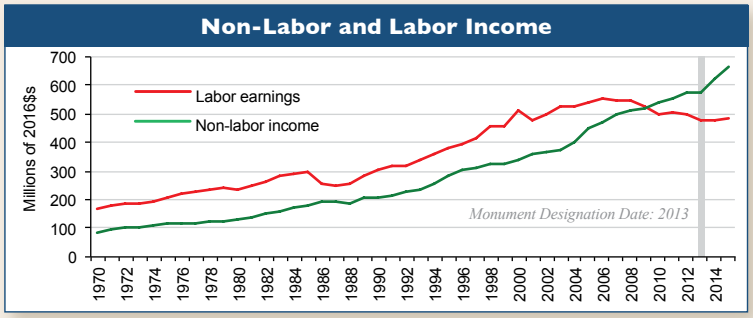
One of the largest and fastest growing sources of new personal income in Taos County is non-labor income, which is made up of investment income such as dividends, interest and rent, and government transfer payments such as Social Security and Medicare.

For people with investment income and many retirees, protected public lands and recreation provide important aspects of a high quality of life. Non-labor income already represents more than a third of all personal income in the West—and will grow as the Baby Boom generation retires.[7]

From 2001 to 2015, in Taos County:

- **Non-Labor income grew from $358 million to $663 million, an 85% increase**
- **As a result, in 2015 non-labor income made up 58% of total personal income**



TRADITIONAL JOBS HOLD STEADY

Long before the monument's creation, commodity industries (agriculture, mining, timber) in Taos County were small relative to the overall economy. These industries remain part of the county's economy today.

In 2015, in Taos County:

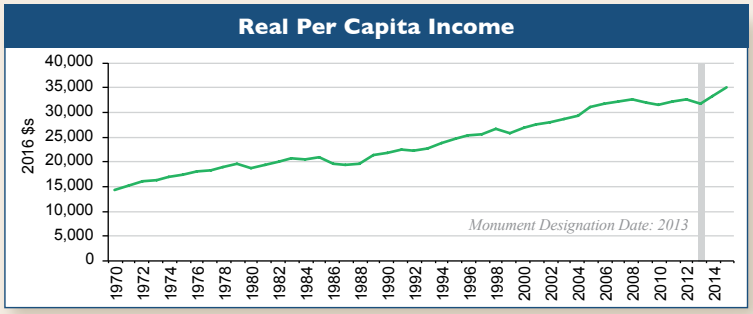
- **Agriculture accounted for slightly more than 5% of total employment**
- **Mining accounted for nearly 4% of total employment**
- **Timber accounted for 0.3% of total employment**

PROSPERITY ON THE RISE

As the economy has grown, per capita income has risen as well. This indicates growing prosperity in the region.

From 2001 to 2015, in Taos County:

- **Real per capita income grew from $27,628 to $34,983, a 27% increase**



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Sonoran Desert National Monument

A Summary of Economic Performance in the Surrounding Communities

HEADWATERS ECONOMICS

Sonoran Desert National Monument, Photo: BLM

BACKGROUND

The 487,000 acre Sonoran Desert National Monument was designated in 2001 to protect part of the most biologically diverse desert in North America. Located in Maricopa and Pinal counties, Arizona the monument is managed by the Bureau of Land Management.

PUBLIC ACCESS AND USE OF THE MONUMENT

The national monument protects hunting, fishing, rights-of-way, and access to inholdings. The monument contains three distinct mountain ranges—the Maricopa, Sand Tank, and Table Top Mountains—and is home to a number of historic and archeological sites. It attracts thousands of visitors each year.

TRAVEL AND TOURISM

Travel and tourism are important to the Sonoran Desert Region, representing about 18% of total private wage and salary employment, or 284,760 jobs, in 2015. In Arizona, the Outdoor Industry Association reports that recreation contributes more than $10 billion annually to the state's economy.[6]

SUMMARY FINDINGS

Research shows that conserving public lands like the Sonoran Desert National Monument helps to safeguard and highlight amenities that draw new residents, tourists, and businesses to surrounding communities.[1]

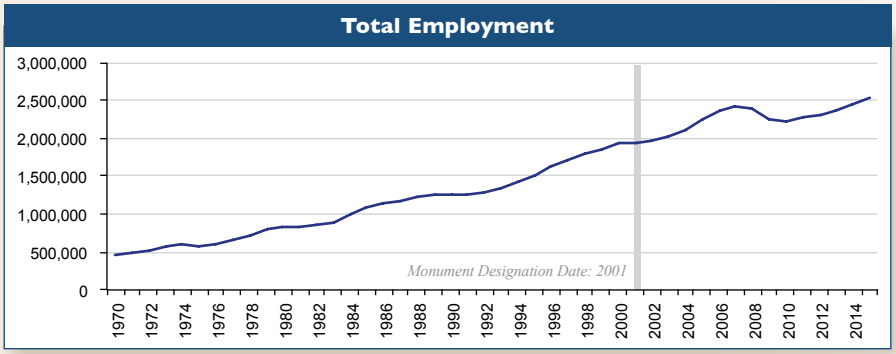
Western counties with protected public lands, like national monuments, have been more successful at attracting fast-growing economic sectors and as a result grow more quickly, on average, than counties without protected public lands.[2] In addition, protected natural amenities—such as the pristine scenery found at Sonoran Desert—also help sustain property values and attract new investment.[3]

ECONOMY GROWS AFTER DESIGNATION

The communities in Maricopa and Pinal counties, Arizona neighboring the Sonoran Desert National Monument (the Sonoran Desert Region) experienced strong growth after its designation, continuing previous growth trends.

From 2001 to 2015, in the Sonoran Desert Region:[4]

- **Population grew by 36%**
- **Jobs grew by 29%**
- **Real personal income grew by 44%**
- **Real per capita income grew by 6%**

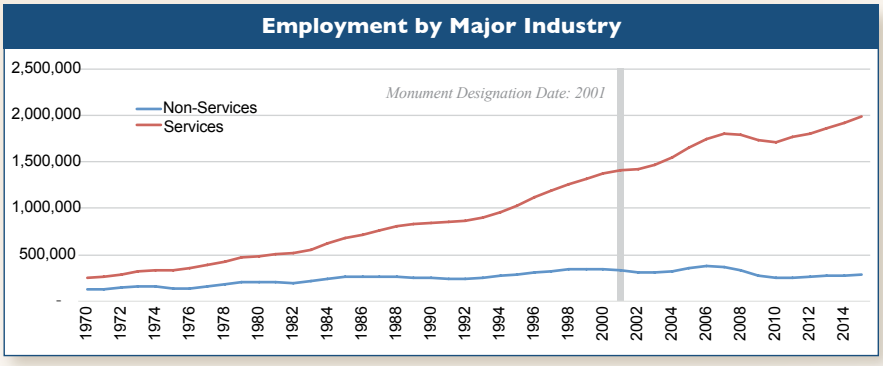


SERVICES JOBS INCREASING ACROSS THE BOARD

Services jobs—such as doctors, engineers, and teachers—account for the majority of employment growth in the Sonoran Desert Region in recent decades. These jobs are increasingly mobile, and many entrepreneurs locate their businesses in areas with a high quality of life.

From 2001 to 2015, in the Sonoran Desert Region:[5]

- **Services grew from 1,410,101 to 1,990,114 jobs, a 41% increase**
- **Non-Services shrank from 330,581 to 284,108 jobs, a 14% decrease**



Sonoran Desert National Monument, Photo: BLM

THE COMMUNITIES IN MARICOPA AND PINAL COUNTIES NEIGHBORING THE NATIONAL MONUMENT EXPERIENCED STRONG GROWTH SINCE ITS DESIGNATION IN 2001.

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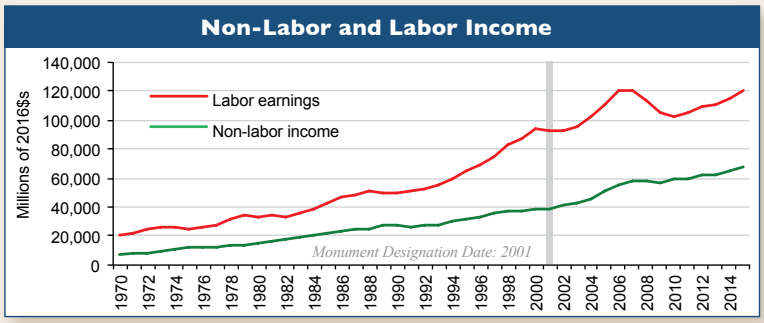
For people with investment income and many retirees, protected public lands and recreation provide important aspects of a high quality of life. Non-labor income already represents more than a third of all personal income in the West—and will grow as the Baby Boomer generation retires.[7]

From 2001 to 2015, in the Sonoran Desert Region:

- **Non-Labor income grew from $39.2 billion to $68.1 billion, a 74% increase**
- **As a result, in 2015 non-labor income made up 36% of total personal income**



TRADITIONAL JOBS HOLD STEADY

Long before the monument's creation, commodity industries (agriculture, mining, timber) in the Sonoran Desert Region were small relative to the overall economy. These industries remain part of the region's economy today.

In 2015, in the Sonoran Desert Region:

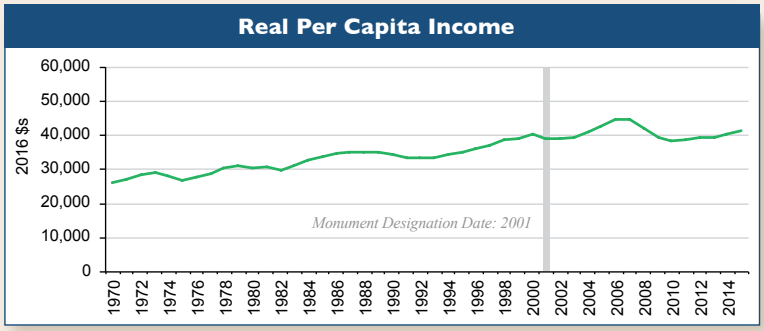
- **Agriculture accounted for 0.4% of total employment**
- **Mining accounted for 0.1% of total private employment**
- **Timber accounted for 0.3% of total private employment**

PROSPERITY ON THE RISE

As the economy has grown since designation of the Sonoran Desert National Monument, per capita income has risen as well. This indicates growing prosperity in the region.

From 2001 to 2015, in the Sonoran Desert Region:

- **Real per capita income grew modestly from $39,158 to $41,342, a 6% increase**



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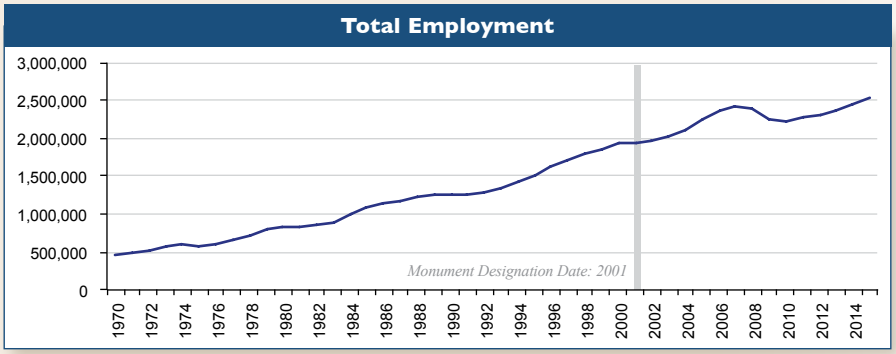

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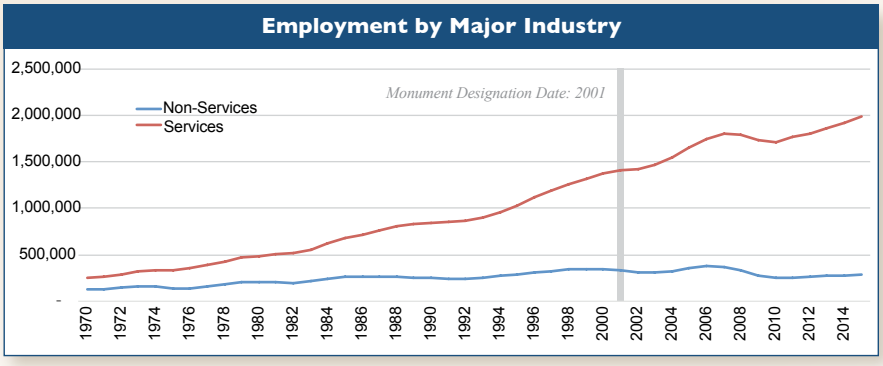

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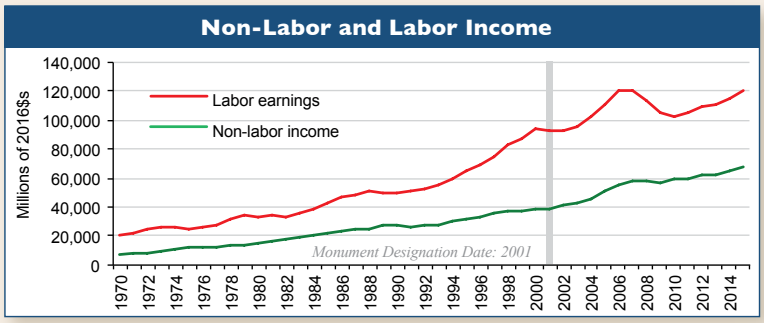

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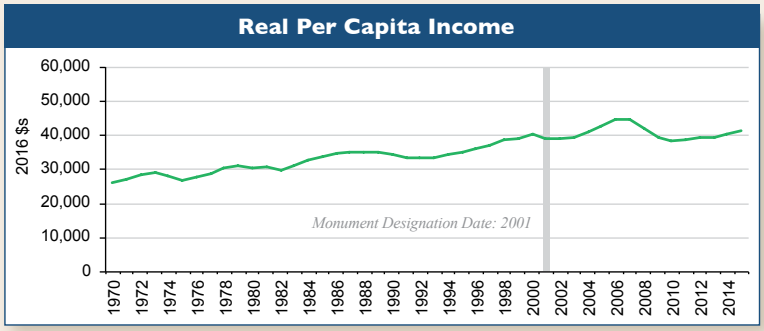

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Grand Canyon-Parashant National Monument

A Summary of Economic Performance in the Surrounding Communities

HEADWATERS ECONOMICS

Grand Canyon-Parashant National Monument, Photo: BLM

BACKGROUND

The 1,017,000 acre Grand Canyon-Parashant National Monument was designated in 2000 to protect the area's expansive landscape located at the junction of the Colorado Plateau, the Mohave Desert, and the Great Basin. Located in Mohave County, Arizona and adjacent to Washington County, Utah the monument is co-managed by the Bureau of Land Management and the National Park Service.

PUBLIC ACCESS AND USE OF THE MONUMENT

The Grand Canyon-Parashant's unique landscape each year attracts thousands of visitors, and the monument is accessible for hunting, fishing, and motorized travel on roads, along with hiking and camping.

TRAVEL AND TOURISM

Travel and tourism are important to communities in the Grand Canyon-Parashant Region, representing about 22% of total private wage and salary employment, or 19,310 jobs, in 2015. In Arizona and Utah, the Outdoor Industry Association reports that recreation contributes more than $10 billion annually to each state's economy.[6]

SUMMARY FINDINGS

Research shows that conserving public lands like the Grand Canyon-Parashant National Monument helps to safeguard and highlight amenities that draw new residents, tourists, and businesses to surrounding communities.[1]

Western counties with protected public lands, like national monuments, have been more successful at attracting fast-growing economic sectors and as a result grow more quickly, on average, than counties without protected public lands.[2] In addition, protected natural amenities—such as the pristine scenery found at Grand Canyon-Parashant—also help sustain property values and attract new investment.[3]

ECONOMY GROWS AFTER DESIGNATION

The communities in Mohave County, Arizona and Washington County, Utah neighboring the Grand Canyon-Parashant National Monument (the Grand Canyon-Parashant Region) experienced strong growth after the designation of the monument, continuing previous growth trends.

From 2001 to 2015, in the Grand Canyon-Parashant Region:[4]

- **Population grew by 41%**
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- **Real personal income grew by 59%**
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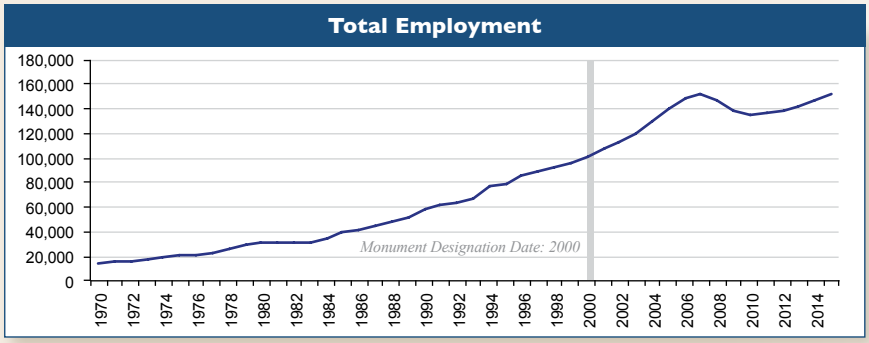

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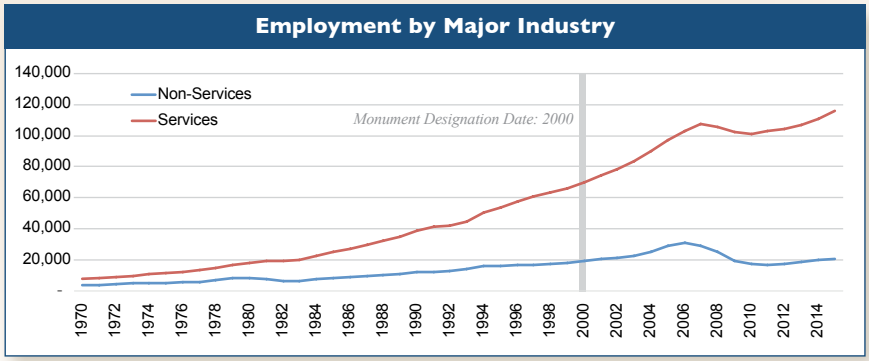

Grand Canyon-Parashant National Monument, Photo: BLM

THE COMMUNITIES NEIGHBORING THE NATIONAL MONUMENT IN MOHAVE AND WASHINGTON COUNTIES EXPERIENCED STRONG GROWTH SINCE ITS DESIGNATION IN 2000.

THE INCREASES IN POPULATION, JOBS, PERSONAL INCOME, AND PER CAPITA INCOME ALSO MIRROR OTHER WESTERN COUNTIES WITH NATIONAL MONUMENTS OR OTHER PROTECTED LANDS.

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This fact sheet is part of a series that assesses the economic performance of local communities that are adjacent to national monuments. The series examines national monuments in the eleven western continental states that are larger than 10,000 acres and were created in 1982 or later.

FOR MORE INFORMATION

Contact Ray Rasker, Ph.D.
Headwaters Economics
ray@headwaterseconomics.org
406-570-7044

Series: The Economic Importance of National Monuments to Local Communities

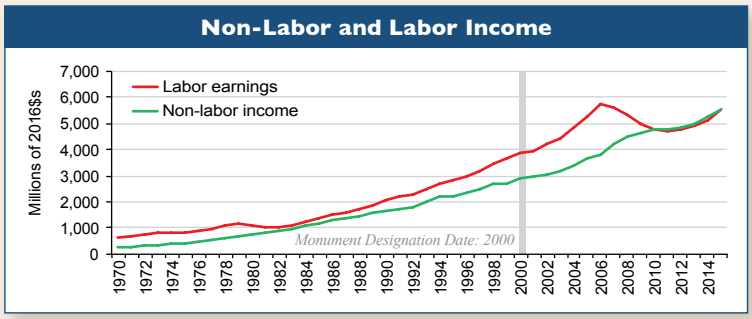
NON-LABOR INCOME GROWS FASTEST

One of the largest and fastest growing sources of new personal income in the Grand Canyon-Parashant Region is non-labor income, which is made up of investment income such as dividends, interest and rent, and government transfer payments such as Social Security and Medicare.

For people with investment income and many retirees, protected public lands and recreation provide important aspects of a high quality of life. Non-labor income already represents more than a third of all personal income in the West—and will grow as the Baby Boomer generation retires.[7]

From 2001 to 2015, in the Grand Canyon-Parashant Region:

- **Non-Labor income grew from $3 billion to $5.5 billion, an 84% increase**
- **As a result, in 2015 non-labor income made up 50% of total personal income**



TRADITIONAL JOBS HOLD STEADY

Long before the monument's creation, commodity industries (agriculture, mining, timber) in the Grand Canyon-Parashant Region were small relative to the overall economy. These industries remain part of the region's economy today.

In 2015, in the Grand Canyon-Parashant Region:

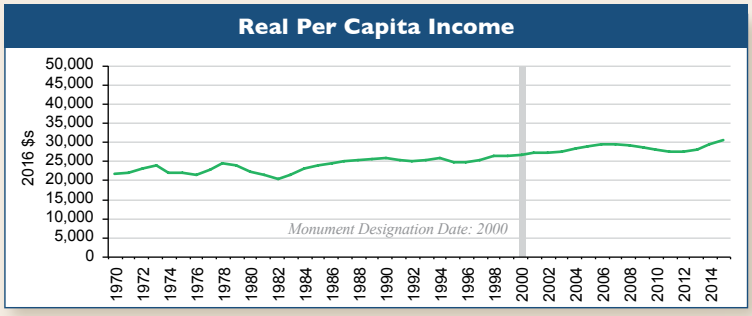
- **Agriculture accounted for 1% of total employment**
- **Mining accounted for 0.2% of total private employment**
- **Timber accounted for 0.3% of total private employment**

PROSPERITY ON THE RISE

As the economy has grown since designation of the Grand Canyon-Parashant National Monument, per capita income has risen as well. This indicates growing prosperity in the region.

From 2001 to 2015, in the Grand Canyon-Parashant Region:

- **Real per capita income grew from $27,324 to $30,703, a 12% increase**



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Agua Fria National Monument

A Summary of Economic Performance in the Surrounding Communities

HEADWATERS ECONOMICS

Agua Fria National Monument, Photo: BLM

BACKGROUND

The 71,000 acre Agua Fria National Monument was created in 2000 to protect the high mesa of semi-desert grasslands, cut by the canyon of the Agua Fria River, and the region's outstanding biological resources. Located in Yavapai County, Arizona the monument is managed by the Bureau of Land Management.

PUBLIC ACCESS AND USE OF THE MONUMENT

The monument allows current existing rights and leases to continue while providing a recreational playground for thousands of visitors each year in the rapidly growing area just north of Phoenix. Hunting, fishing, motorized use on roads, and other recreation all are allowed within the monument.

TRAVEL AND TOURISM

Travel and tourism are important to communities in Yavapai County, representing about 21% of total private wage and salary employment, or 12,283 jobs, in 2015. In Arizona, the Outdoor Industry Association reports that recreation contributes more than $10 billion annually to the state's economy.[6]

SUMMARY FINDINGS

Research shows that conserving public lands like the Agua Fria National Monument helps to safeguard and highlight amenities that draw new residents, tourists, and businesses to surrounding communities.[1]

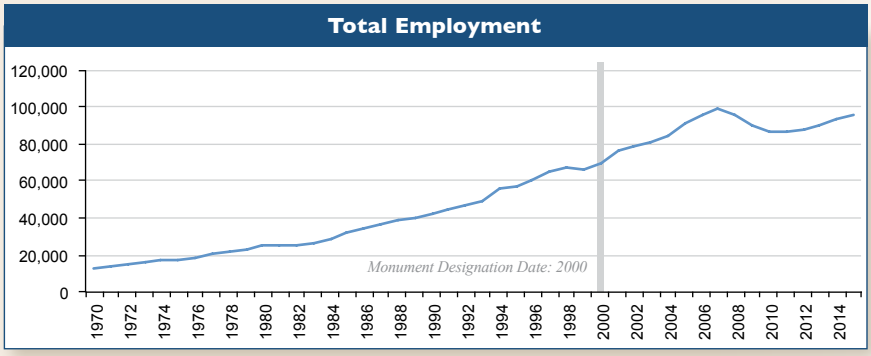
Western counties with protected public lands, like national monuments, have been more successful at attracting fast-growing economic sectors and as a result grow more quickly, on average, than counties without protected public lands.[2] In addition, protected natural amenities—such as the pristine scenery found at Agua Fria—also help sustain property values and attract new investment.[3]

ECONOMY GROWS AFTER DESIGNATION

The communities in Yavapai County, Arizona neighboring the Agua Fria National Monument experienced strong growth after the designation of the monument, continuing previous growth trends.

From 2001 to 2015, in Yavapai County:[4]

- **Population grew by 29%**
- **Jobs grew by 26%**
- **Real personal income grew by 54%**
- **Real per capita income grew by 19%**

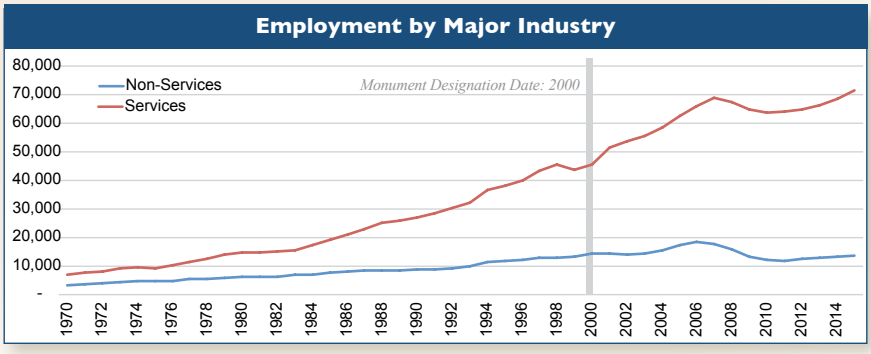


SERVICES JOBS INCREASING ACROSS THE BOARD

Services jobs—such as doctors, engineers, and teachers—account for the majority of employment growth in Yavapai County in recent decades. These jobs are increasingly mobile, and many entrepreneurs locate their businesses in areas with a high quality of life.

From 2001 to 2015, in Yavapai County:[5]

- **Services grew from 51,593 to 71,545 jobs, a 39% increase**
- **Non-Services declined from 14,336 to 13,542 jobs, a 5% decrease**



Hiking in Agua Fria National Monument, Photo: BLM

THE COMMUNITIES IN YAVAPAI COUNTY NEIGHBORING THE AGUA FRIA NATIONAL MONUMENT EXPERIENCED STRONG GROWTH SINCE ITS DESIGNATION IN 2000.

THE INCREASES IN POPULATION, JOBS, PERSONAL INCOME, AND PER CAPITA INCOME ALSO MIRROR OTHER WESTERN COUNTIES WITH NATIONAL MONUMENTS OR OTHER PROTECTED LANDS.

METHODOLOGY

This fact sheet is part of a series that assesses the economic performance of local communities that are adjacent to national monuments. The series examines national monuments in the eleven western continental states that are larger than 10,000 acres and were created in 1982 or later.

FOR MORE INFORMATION

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Series: The Economic Importance of National Monuments to Local Communities

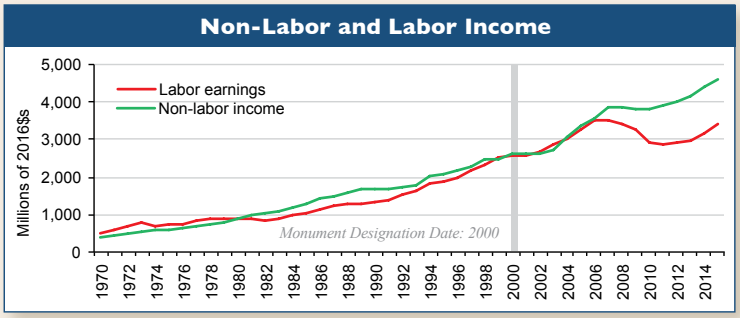
NON-LABOR INCOME GROWS FASTEST

One of the largest and fastest growing sources of new personal income in Yavapai County is non-labor income, which is made up of investment income such as dividends, interest and rent, and government transfer payments such as Social Security and Medicare.

For people with investment income and many retirees, protected public lands and recreation provide important aspects of a high quality of life. Non-labor income already represents more than a third of all personal income in the West—and will grow as the Baby Boomer generation retires.[7]

From 2001 to 2015, in Yavapai County:

- **Non-Labor income grew from $2.6 billion to $4.6 billion, a 75% increase**
- **As a result, in 2015 non-labor income made up 57% of total personal income**



TRADITIONAL JOBS HOLD STEADY

Long before the monument's creation, commodity industries (agriculture, mining, timber) in Yavapai County were small relative to the overall economy. These industries remain part of the county's economy today.

In 2015, in Yavapai County:

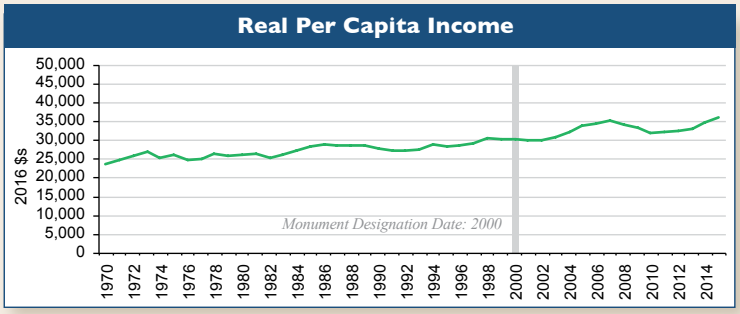
- **Agriculture accounted for 1% of total employment**
- **Mining accounted for 2% of total private employment**
- **Timber accounted for less than 1% of total private employment**

PROSPERITY ON THE RISE

As the economy has grown since designation of the Agua Fria National Monument, per capita income has risen as well. This indicates growing prosperity in the region.

From 2001 to 2015, in Yavapai County:

- **Real per capita income grew from $30,153 to $36,007, a 19% increase**



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Wimmer, Sheldon (Mark) <mwimmer@blm.gov>

Economic Update

1 message

Fisher, Timothy <tjfisher@blm.gov> Thu, Jun 1, 2017 at 1:14 PM
To: "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>, "Boone, Whitney" <whitney_boone@nps.gov>

Please review - possibly upload to the google docs, reference as needed in executive summary.

https://headwaterseconomics.org/wp-content/uploads/GC_Para.pdf

Timothy J Fisher, Program Lead

National Monuments and Conservation Areas
National Conservation Lands

20 M Street S.E. (wo-410)
Washington DC 20003

202-912-7172 Office
202-604-0706 Cell
202-245-0050 Fax

tjfisher@blm.gov

Grand Canyon-Parashant National Monument

A Summary of Economic Performance in the Surrounding Communities

HEADWATERS ECONOMICS

Grand Canyon-Parashant National Monument, Photo: BLM

BACKGROUND

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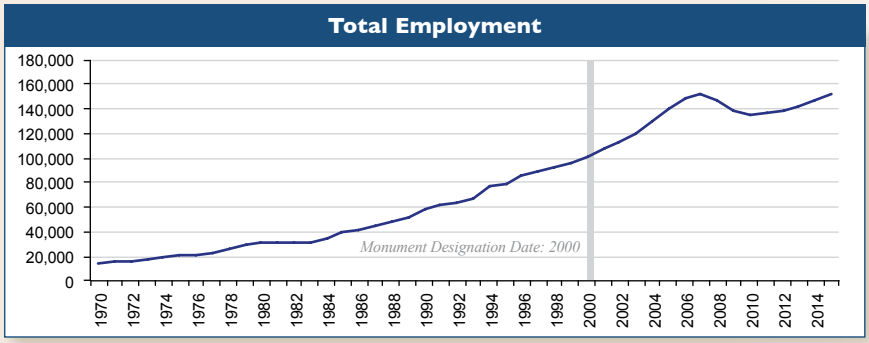

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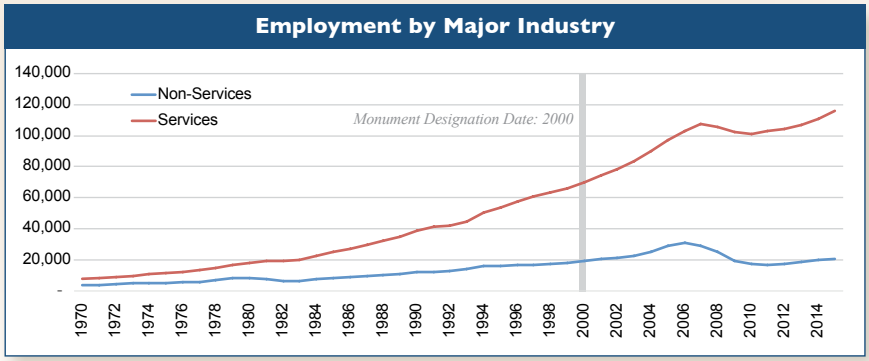

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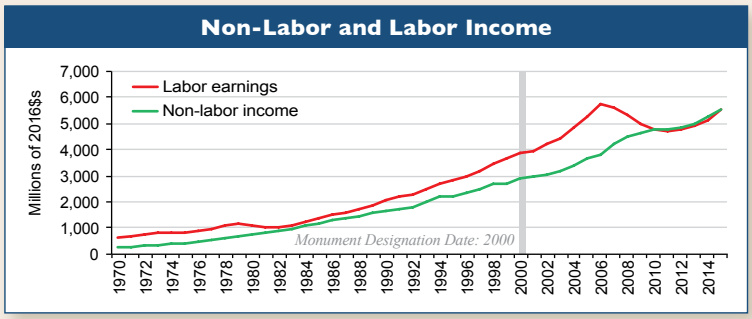

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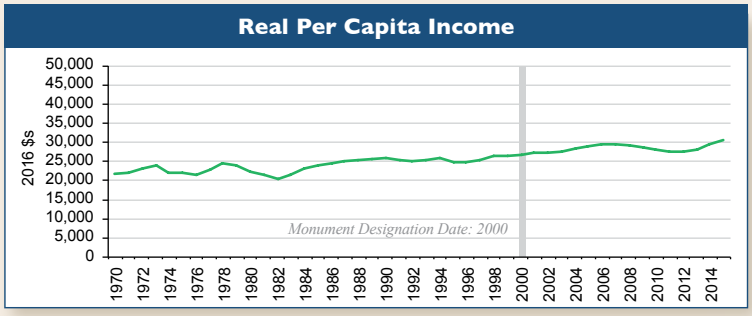

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Wimmer, Sheldon (Mark) <mwimmer@blm.gov>

Re: Data Call

1 message

Boone, Whitney <whitney_boone@nps.gov> Fri, Jun 2, 2017 at 4:05 AM
To: "Wimmer, Sheldon (Mark)" <mwimmer@blm.gov>
Cc: Chad Corey <chad_corey@nps.gov>, "Mahoney, Kenneth" <kmahoney@blm.gov>, Timothy Burke <tburke@blm.gov>

Hi Mark,

Thanks again for doing the heavy lifting here. I made a couple of small tweaks, summarized below.

- Executive summary- add sentence to 'Key Information": "NPS-administered lands within the Monument are part of the Lake Mead National Recreation Area legislated unit, established by Congress in 1964."
- In b_Alternative Forms of Protection- made a few additions (text as re-written is below) and re-uploaded a .pdf (think this questions is meant to apply to all resources, not just CR)
    - "The following options could protect specific resources found in the Grand Canyon-Parashant National Monument. Protection would likely occur on a site-by-site or resource-by-resource basis and also would take a significant amount of time to accomplish under these various laws. These laws may not provide a mechanism to protect all resources in the Monument:
        - American Indian Religious Freedom Act (AIRFA)
        - Archaeological and Historic Preservation Act (AHPA)
        - Archaeological Resources Protection Act (ARPA)
        - Bald and Golden Eagle Protection Act (BGEPA)
        - Endangered Species Act (ESA)
        - Executive Order 13007 (Sacred Lands)
        - Historic Sites Act of 1935
        - National Historic Preservation Act (NHPA)
        - Native American Graves Protection and Repatriation Act (NAGPRA)
        - Paleontological Resources Preservation Act (PRPA)
        - Wilderness Act of 1964
        - If Monument designation were removed, the NPS-administered area would remain Lake Mead NRA and NPS regulations would apply
        - Designate Areas of Critical Environmental Concern (BLM specific) through the Land Use Planning process"
- Added some cultural resources information from our folks-- I added this information and re-uploaded .pdfs in 2g, 3g.
- Loaded a couple of NPS- produced reports to the "Other Information" folder. Also added a note about the ongoing visitor spending case study and contact info for Josh Sidon (BLM).

That's all from me! Thanks again- appreciate the team effort!

Whitney

On Tue, May 30, 2017 at 11:41 AM, Wimmer, Sheldon (Mark) <mwimmer@blm.gov> wrote:

> Chad/Whitney,
>
> I have finished the data call work, if you see anything wrong in there, please let me know and we can work to change it, especially in the executive summary (just a 2 page document). We can make some changes as needed.
>
> Thanks for your work on this!
>
> -Mark
>
> Mark Wimmer
> Monument Manager
> Grand Canyon-Parashant
> National Monument
> 345 East Riverside Drive
> St. George, Utah 84790
> Office: 435-688-3202
> Fax: 435-688-3388

--

Whitney Boone
Park Planning and Special Studies
National Park Service
202-354-6970

Wimmer, Sheldon (Mark) <mwimmer@blm.gov>

Re: 2017 Economic Assessments for National Monuments

1 message

Fisher, Timothy <tjfisher@blm.gov> Fri, Jun 2, 2017 at 7:15 AM
To: "Mahoney, Kenneth" <kmahoney@blm.gov>
Cc: "Wimmer, Sheldon (Mark)" <mwimmer@blm.gov>, "Boone, Whitney" <whitney_boone@nps.gov>

I support your cautiousness, but if a site has no information available at least now you have some data you can utilize; just sight your source.

Timothy J Fisher, Program Lead

National Monuments and Conservation Areas
National Conservation Lands

20 M Street S.E. (wo-410)
Washington DC 20003

202-912-7172 Office
202-604-0706 Cell
202-245-0050 Fax

tjfisher@blm.gov

On Thu, Jun 1, 2017 at 7:54 PM, Mahoney, Kenneth <kmahoney@blm.gov> wrote:

> I would agree with Mark on being cautious about using the Headwaters 'fact sheets' specifically for this data call. While providing economic data for the communities near the monuments, tying that growth to the time frame following monument designation implies that designation is a factor in that economic growth. Designation may contribute to the growth but there are certainly several other factors that also contribute to the positive figures and the monuments' part in that growth is not clearly documented in the fact sheets.
>
> The economic snapshots you provided earlier are more specific to the economic benefits that the monuments generate.
>
> So, I think it's good to have this information but I'm not going to upload the Headwaters fact sheets to the Google Drive folders. Perhaps some of the sources provided in the fact sheets footnotes provide more specifics and connections but I haven't had the time to check that out.
>
> By the way, the file titled Vermilion Cliffs in the earlier email is a second download of Sonoran Desert. I've attached the Vermilion Cliffs fact sheet.
>
> Ken
>
> On Thu, Jun 1, 2017 at 12:43 PM, Wimmer, Sheldon (Mark) <mwimmer@blm.gov> wrote:
>
> > I reviewed some of the information regarding Headwaters, we may not want to start including information from NGOs, it may be a slippery slope because it could set us up for a scenario where other NGOs may not have the same opinion of Headwaters information and we did not include their information in our

data. I would recommend that we hold off on this, even though the group is claiming they are non-partisan, we may want to avoid using such data in an effort to keep our data as neutral as possible.

Mark Wimmer
Monument Manager
Grand Canyon-Parashant
National Monument
345 East Riverside Drive
St. George, Utah 84790
Office: 435-688-3202
Fax: 435-688-3388

On Thu, Jun 1, 2017 at 1:17 PM, Fisher, Timothy <tjfisher@blm.gov> wrote:

All,

I think these reports are good to add to your Google Doc folders, also review and maybe add some content in the executive summary, etc. if appropriate.

Thanks Ken for the great find!

Timothy J Fisher, Program Lead

National Monuments and Conservation Areas
National Conservation Lands

20 M Street S.E. (wo-410)
Washington DC 20003

202-912-7172 Office
202-604-0706 Cell
202-245-0050 Fax

tjfisher@blm.gov

On Thu, Jun 1, 2017 at 2:27 PM, Mahoney, Kenneth <kmahoney@blm.gov> wrote:

Additional information available about the Headwaters Economics assessments of communities near BLM national monuments.

---------- Forwarded message ----------
From: **Johnson, Michael** <mdjohnso@blm.gov>
Date: Thu, Jun 1, 2017 at 11:12 AM
Subject: 2017 Economic Assessments for National Monuments
To: mbarnes@blm.gov, Michael Johnson <mdjohnso@blm.gov>, "Trost, Roxie" <rtrost@blm.gov>, Karen Mckinley <kmckinley@blm.gov>, Jacqueline Neckels <jneckels@blm.gov>, Nancy Favour <nfavour@blm.gov>, Molly Cobbs <mcobbs@blm.gov>, Kenneth Mahoney <kmahoney@blm.gov>, Jennifer Montoya <jamontoy@blm.gov>, Mara Weisenberger <mweisenberger@blm.gov>

Hello all,

As a follow-on to the summary piece from E&E Greenwire I forwarded to everyone, I checked the Headwaters Economics website:

https://headwaterseconomics.org/public-lands/protected-lands/national-monuments/#factsheets

On the web site, Headwaters has Economic Fact Sheets for each of the monuments in the study. I have attached PDF copies of the factsheets for all the AZ and NM momunments that were included for your use.

--
Michael Johnson
Social Scientist, AZ/NM/TX/OK/KS
BLM Arizona State Office
One North Central, Suite 800
Phoenix AZ 85004

602-417-9236
mdjohnso@blm.gov

The Economic Importance of National Monuments to Communities

AUGUST 2017

This UPDATED research and interactive charts show that the local economies adjacent to all 17 national monuments studied in the West expanded following the monument's creation.

- **The updated 2017 results—like the earlier studies in 2011 and 2014—found that the local economies surrounding all 17 of the national monuments studied expanded following the creation of the new national monuments.**
- **Trends in important economic indicators—population, employment, personal income, and per-capita income—increased after creation of the monuments.**
- **Looking at key economic indicators, two-thirds of the communities adjacent to the national monuments studied (13 of 17), grew at the same or a faster pace compared to similar counties in their state, and four were slower.**
- **While the results showing continued growth in nearby communities do not demonstrate a cause-and-effect relationship, the findings show that there is no evidence that the new national monuments prevented economic growth.**

Headwaters Economics recently updated its research that assesses the economic performance of local communities adjacent to national monuments in the West.

The 2017 results—like the earlier studies in 2011 and 2014—found that the local economies surrounding all 17 of the national monuments studied expanded following the creation of the new national monuments.

This research includes **fact sheets for each monument**, an **updated summary**, and a fresh **interactive map**.

Headwaters Economics also created a **digest of permitted uses** for each studied national monument.

Background: National Monuments Study

In 2011, 2014, and again in 2017, Headwaters Economics analyzed the economies surrounding the 17 national monuments in the 11 western continental states that are larger than 10,000 acres and were created between 1982 and 2001. This approach avoids smaller monuments with little potential to impact local economies, and allows an analysis of economic indicators before and after designation using reliable measures of performance.

The new 2017 analysis updates the economic performance of communities surrounding the selected monuments. While the results showing continued growth in nearby communities do not demonstrate a cause-and-effect relationship, the findings do show that national monuments are consistent with economic growth in adjacent local communities.

Trends in important economic indicators—population, employment, personal income, and per-capita income growth—in each of the regions surrounding the national monuments generally grew following a new monument's creation. Overall, the updated analysis by Headwaters Economics again found no evidence that designating these national monuments prevented economic growth.

This year, Headwaters Economics also made two new fact sheets for the Organ Mountains-Desert Peaks and the Rio Grande del Norte National Monuments. Created in 2014 and 2013 respectively, these monuments are too new to be included in the before/after impacts analysis but have generated significant public interest.

Findings

Across the board, trends in important economic indicators either continued or improved in each of the regions surrounding the 17 national monuments studied. Data for per capita income, a widely accepted measure of prosperity, show that this measurement increased for the studied counties adjacent to every national monument in the years following establishment. This rise in personal wealth is significant, particularly in rural areas where average earnings per job are often declining.

The 2017 analysis also compared the economic performance of national monument counties since the turn of the century to similar benchmark counties—either to the Metro or Non-Metro portion of the state where the monument is located.

As in the earlier studies, in most instances the growth in the four key economic indicators—population, employment, real personal income, and real per capita income—was the same or stronger in national monument counties than in comparable peer counties, though this varies by monument. Looking at these four indicators for all 17 national monument regions, 13 grew at similar or faster rates compared to the benchmark and four were slower.

The Headwaters Economics 2017 review confirms that all the regional economies adjacent to the studied national monuments experienced growth following a monument's designation. National monuments help nearby communities diversify economically while increasing quality of life and recreational opportunities that make communities more attractive for new residents, businesses, and investment.

The study found no evidence that designating these national monuments prevented economic growth. Instead, trends in key economic indicators such as population, employment, personal income, and per capita income either continued or improved in each of the regions surrounding the national monuments.

National Monument Fact Sheets

These two-page summaries offer specific economic details for each national monument studied.

- Agua Fria
- Canyons of the Ancients
- Carrizo Plain
- Cascade-Siskiyou
- Craters of the Moon
- El Malpais
- Giant Sequoia
- Grand Canyon-Parashant
- Grand Staircase-Escalante
- Hanford Reach
- Ironwood Forest

- Mount St. Helens
- Newberry Volcanic
- Organ Mountains-Desert Peaks
- Rio Grande del Norte
- Santa Rosa-San Jacinto Mountains
- Sonoran Desert
- Upper Missouri River Breaks
- Vermilion Cliffs

As noted earlier, this year's study includes two new fact sheets for the Organ Mountains-Desert Peaks and the Rio Grande del Norte National Monuments. Created in 2014 and 2013 respectively, these monuments are too new to be included in the before/after impacts analysis but have generated significant public interest.

Additional Resources

Headwaters Economics has developed a number of tools, many of them described below, to help users better understand their local economy and the role of protected public lands.

- **Socioeconomic Profiles:** the Economic Profile System is a free, easy-to-use software that provides detailed reports at the community, county, or state level.
- **National Parks:** Visits, spending, and the number of jobs created in gateway communities for every National Park Service Unit.
- **Federal Lands in the West:** study showing that rural counties in the West with more federal lands or protected federal lands performed better on average than their peers with less federal lands or protected federal lands in four key economic measures.
- **Protected Lands and Income:** study and interactive showing the amount of per capita income explained by protected federal lands for each county in the non-metropolitan western U.S.
- **Economists on Public Lands:** more than 100 economists urged President Obama to "create jobs and support businesses by investing in our public lands infrastructure and establishing new protected areas such as parks, wilderness, and monuments."
- **West Is Best:** this report finds that the West's popular national parks, monuments, wilderness areas and other public lands offer its growing high-tech and services industries a competitive advantage.
- **The Value of Public Lands**: post contains numerous reports, case studies, bibliographies, tools, and research concerning the value of western protected public lands.

https://headwaterseconomics.org/public-lands/protected-lands/national-monuments/

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Wimmer, Sheldon (Mark) <mwimmer@blm.gov>

Review of Grand Parashant

1 message

Fisher, Timothy <tjfisher@blm.gov> Fri, Jun 2, 2017 at 8:24 AM
To: "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>
Cc: Kenneth Mahoney <kmahoney@blm.gov>

Hi Mark,

Great job on the documentation and write-ups! I know you been collaborating with the NPS and you have great documentation. I had a few comments to the two documents; from the Utah experience they like to have some concrete numbers (so when discussing Rec use - state number of users / or grazing state actual number of AUM's permitted). I know you have tables to support but the DOI likes to have the information stated and then they can look at the additional information for more details.

Again great work and I think just a few tweaks and we will be done. Appreciate you going through for one more time and addressing.

Thanks,

Timothy J Fisher, Program Lead

National Monuments and Conservation Areas
National Conservation Lands

20 M Street S.E. (wo-410)
Washington DC 20003

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202-604-0706 Cell
202-245-0050 Fax

tjfisher@blm.gov

Conversation Contents

Monument Review Update - Please Share

"Fisher, Timothy" <tjfisher@blm.gov>

From:	"Fisher, Timothy" <tjfisher@blm.gov>
Sent:	Thu Aug 24 2017 12:05:22 GMT-0600 (MDT)
To:	"Magee, Gerald J" <gmagee@blm.gov>, Jaime Tompkins <jtompkins@blm.gov>, Robin Fehlau <rfehlau@blm.gov>, Barbara Keleher <bkeleher@blm.gov>, Chad Schneckenburger <cschneckenburger@blm.gov>, Kenneth Mahoney <kmahoney@blm.gov>, McKinney Briske <mbriske@blm.gov>, Michael Sintetos <msintetos@blm.gov>, "Ginn, Allison" <aginn@blm.gov>, "Bickauskas, Thomas" <tbickaus@blm.gov>
Subject:	Monument Review Update - Please Share

This is what we know.

https://www.doi.gov/pressreleases/secretary-zinke-sends-monument-report-white-house

https://apnews.com/34f20413a25144428e36b18bd4f101f2?utm_campaign=SocialFlow&utm_source=Twitter&utm_medium=AP

Again, I want to thank you and all the managers, state and field office staff who where asked to gather and supply information, upload data files, etc as requested by DOI.

I truly feel humbled by the hard work everyone put in these past four months.

Timothy J Fisher, Program Lead

National Monuments and Conservation Areas
National Conservation Lands

20 M Street S.E. (wo-410)
Washington DC 20003

202-912-7172 Office
202-604-0706 Cell
202-245-0050 Fax

tjfisher@blm.gov

Conversation Contents

Fwd: TIME SENSITIVE: Monument review question

"Wootton, Rachel" <rwootton@blm.gov>

From:	"Wootton, Rachel" <rwootton@blm.gov>
Sent:	Fri Aug 18 2017 14:23:46 GMT-0600 (MDT)
To:	Kenneth Mahoney <kmahoney@blm.gov>, Ronald Tipton <rtipton@blm.gov>, "Sheldon (Mark) Wimmer" <mwimmer@blm.gov>, Claire Crow <ccrow@blm.gov>, "Darrel (Wayne) Monger" <dmonger@blm.gov>, "“Brandon Boshell”" <bboshell@blm.gov>, "Wong, Rebecca" <rwong@blm.gov>, Johna Hurl <jhurl@blm.gov>, Kyle Sullivan <ksullivan@blm.gov>, Jihadda - FS Govan <jihaddagovan@fs.fed>, Marietta Eaton <meaton@blm.gov>, "Crawford, Holly" <hcrawford@blm.gov>, "“Jaime Tompkins”" <jtompkins@blm.gov>, Kymm Gresset <kgresset@blm.gov>, "“Alicia Styles”" <astyles@blm.gov>, "James (Lee) Kirk" <jkirk@blm.gov>, William Childress <wchildre@blm.gov>, John Bailey <jbailey@blm.gov>, Joel Brumm <jbrumm@blm.gov>, Donald Hoffheins <dhoffhei@blm.gov>, Amber Johnson <a2johnson@blm.gov>, Cynthia Staszak <cstaszak@blm.gov>
CC:	"Lydick, Steven" <sdlydick@blm.gov>, Nikki Moore <nmoore@blm.gov>, Sally Butts <sbutts@blm.gov>, Timothy Fisher <tjfisher@blm.gov>, "Sintetos, Michael" <msintetos@blm.gov>, Robin Fehlau <rfehlau@blm.gov>, "Gerald (Jerry) Magee" <gmagee@blm.gov>, Chad Schneckenburger <cschneckenburger@blm.gov>, Allison Ginn <aginn@blm.gov>, "Briske, McKinney" <mbriske@blm.gov>, Barbara Keleher <bkeleher@blm.gov>
Subject:	Fwd: TIME SENSITIVE: Monument review question

Hi Everyone,

I hope you all are doing well! Steve Lydick from the NOC is helping respond to a question from the Department on resources within and outside of National Monuments. We wanted to give you a heads up that Steve or someone from the NOC may be contacting you pertaining to that request. Please review his email below for more information. We understand if some of this information is not available, but we are really appreciative of the help from you all and the folks at the NOC to determine whether that is the case.

Please let Sally Butts know if you have any specific questions.

Thank you and I hope you have a nice weekend!

Best,

Rachel

--
Rachel Wootton
Planning and Environmental Specialist
National Conservation Lands (WO-410)
Bureau of Land Management
20 M Street SE Washington, DC 20003
rwootton@blm.gov
desk - (202) 912-7398
cell - (202) 774-8791

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---------- Forwarded message ----------
From: **Lydick, Steven** <sdlydick@blm.gov>
Date: Fri, Aug 18, 2017 at 3:48 PM
Subject: Re: TIME SENSITIVE: Monument review question
To: "Wootton, Rachel" <rwootton@blm.gov>

Rachel,

As discussed with Nikki Moore, we are doing analyses of ROVs inside the monuments vs. outside the monuments, largely using REA and available wildlife data sets. I plan on contacting at least some of the monument managers to see if they have more precise or complete data sets than are contained in the REAs for the monuments themselves (this will vary by monument and ROV).

I do not intend on having this be a data call, but rather just a basic ask as to whether they have good data on a given ROV readily available, and if so, some coordination with their specialists to get the data to work with. We will not be seeking any cultural resources data, as I realize it is sensitive, and we have nothing available here at the NOC to compare it with anyway.

Would you please forward this email to the appropriate parties (and cc me) by means of introduction?

Thanks,

--Steve

Steve Lydick
Branch Chief - Assessment and Monitoring (OC570)
BLM National Operations Center
sdlydick@blm.gov
303-236-6428

On Fri, Aug 18, 2017 at 1:37 PM, Wootton, Rachel <rwootton@blm.gov> wrote:

> Hi Steve,
>
> Thank you so much for all of your help! If you do send the field a request, could you cc us on that? I am not sure who you would be sending the request to, but let me know if you need specific National Conservation Lands field contacts.
>
> If the email is not to them and you send it my way, I'm happy to forward it out to our field contacts to give them a heads up.
>
> Best,

Rachel

--
Rachel Wootton
Planning and Environmental Specialist
National Conservation Lands (WO-410)
Bureau of Land Management
20 M Street SE Washington, DC 20003
rwootton@blm.gov
desk - (202) 912-7398
cell - (202) 774-8791

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On Fri, Aug 18, 2017 at 3:17 PM, Nikki Moore <nmoore@blm.gov> wrote:

> Hi Steve, that sounds good I would just make sure they know it's not a data call and not intended to be a heavy lift. Just a check to see what's possible.
>
> Nikki Moore
> Acting Deputy Assistant Director,
> National Conservation Lands and Community Partnerships
> Bureau of Land Management, Washington DC
> 202.219.3180 (office)
> 202.288.9114 (cell)
>
> On Aug 18, 2017, at 2:51 PM, Lydick, Steven <sdlydick@blm.gov> wrote:
>
> > Nikki,
> >
> > I have folks working on the project we discussed, but they raised an important question to me in the process. We have broad data sets that in many cases cover the monuments and areas outside of them, and can in many instances make comparisons between them, as we discussed.
> >
> > The quandary comes in when the monuments themselves may have better data than exists in our broad data sets. I don't know the sensitivity of this, but we'd like to reach out to the monument managers to see if they have better data to use in our analyses. Otherwise, we risk using something less than the best available information, which would not withstand scrutiny well. Are you comfortable with us reaching out to them on this?
> >
> > Thanks,
> >
> > --Steve
> >
> > Steve Lydick
> > Branch Chief - Assessment and Monitoring (OC570)
> > BLM National Operations Center
> > sdlydick@blm.gov
> > 303-236-6428

Conversation Contents

Fwd: Secretary Zinke Recommends No Modifications to Grand Canyon-Parashant National Monument

"Cargile, Amber" <acargile@blm.gov>

From:	"Cargile, Amber" <acargile@blm.gov>
Sent:	Fri Aug 04 2017 14:33:31 GMT-0600 (MDT)
To:	BLM_AZ_SLT <blm_az_slt@blm.gov>, BLM_AZ_PA_Specialists <blm_az_pa_specialists@blm.gov>, Kenneth Mahoney <kmahoney@blm.gov>
Subject:	Fwd: Secretary Zinke Recommends No Modifications to Grand Canyon-Parashant National Monument

FYI

Amber Cargile
Deputy State Director--Communications
Bureau of Land Management
Arizona State Office
One North Central Avenue, Suite 800
Phoenix, Arizona 85004
602.417.9448 (desk)
480.392.1422 (mobile)
www.blm.gov

---------- Forwarded message ----------
From: **U.S. Department of the Interior** <interior_news@updates.interior.gov>
Date: Fri, Aug 4, 2017 at 3:01 PM
Subject: Secretary Zinke Recommends No Modifications to Grand Canyon-Parashant National Monument

OFFICE OF THE SECRETARY
U.S. Department of the Interior

www.doi.gov
News Release

Date: August 4, 2017
Contact: Interior_Press@ios.doi.gov

Secretary Zinke Recommends No Modifications to Grand Canyon-Parashant National Monument

WASHINGTON – Today, U.S. Secretary of the Interior Ryan Zinke announced Arizona's Grand Canyon-Parashant National Monument is no longer under review and that he will recommend that no modifications be made to the monument. The monument was under review in accordance with President Donald J. Trump's April 26, 2017, executive order.

"Today I'm announcing that Grand Canyon-Parashant National Monument's review process has concluded and I am recommending no changes be made to the monument," **said Secretary Zinke**. "The land has some of the most pristine and undeformed geological formations in North America, which show the scientific history of our earth while containing thousands of years of human relics and fossils."

Grand Canyon-Parashant National Monument is located in northwest Arizona, and was designated in 2000. The monument encompasses over a million acres, and is co-managed by the Bureau of Land Management and National Park Service.

###

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"Mahoney, Kenneth" <kmahoney@blm.gov>

From:	"Mahoney, Kenneth" <kmahoney@blm.gov>
Sent:	Fri Aug 04 2017 17:15:04 GMT-0600 (MDT)
To:	Brooke Wheeler <bwheeler@blm.gov>, John Hall <jahall@blm.gov>, Leslie Mead <lmead@blm.gov>, Lisa Thornley <lthornley@blm.gov>, Matthew Basham <mbasham@blm.gov>, Nancy Favour <nfavour@blm.gov>, Aaron Wilkerson <awilkers@blm.gov>, Bill Coulloudon <acoullou@blm.gov>, Elroy Masters <emasters@blm.gov>, Jacqueline Neckels <jneckels@blm.gov>, Karen McKinley <kmckinley@blm.gov>, Maile Adler <madler@blm.gov>, "Mark D'Aversa" <msdaversa@blm.gov>, Michael Johnson <mdjohnso@blm.gov>, Timothy Hughes <thughes@blm.gov>, William Gibson <bgibson@blm.gov>
CC:	Roxie Trost <rtrost@blm.gov>
Subject:	Fwd: Secretary Zinke Recommends No Modifications to Grand Canyon-Parashant National Monument

---------- Forwarded message ----------
From: **Cargile, Amber** <acargile@blm.gov>
Date: Fri, Aug 4, 2017 at 1:33 PM
Subject: Fwd: Secretary Zinke Recommends No Modifications to Grand Canyon-Parashant National Monument
To: BLM_AZ_SLT <blm_az_slt@blm.gov>, BLM_AZ_PA_Specialists <blm_az_pa_specialists@blm.gov>, Kenneth Mahoney <kmahoney@blm.gov>

FYI

Amber Cargile
Deputy State Director--Communications
Bureau of Land Management
Arizona State Office
One North Central Avenue, Suite 800
Phoenix, Arizona 85004
602.417.9448 (desk)
480.392.1422 (mobile)
www.blm.gov

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From: **U.S. Department of the Interior** <interior_news@updates.interior.gov>
Date: Fri, Aug 4, 2017 at 3:01 PM
Subject: Secretary Zinke Recommends No Modifications to Grand Canyon-Parashant National Monument

OFFICE OF THE SECRETARY
U.S. Department of the Interior

www.doi.gov
News Release

Date: August 4, 2017
Contact: Interior_Press@ios.doi.gov

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###

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Microsoft Outlook <MicrosoftExchange329e71ec88ae4615bbc36ab6ce41109e@doi.net>

From:	Microsoft Outlook <MicrosoftExchange329e71ec88ae4615bbc36ab6ce41109e@doi.net>
Sent:	Fri Aug 04 2017 17:15:10 GMT-0600 (MDT)
To:	<kmahoney@blm.gov>
Subject:	Undeliverable: Fwd: Secretary Zinke Recommends No Modifications to Grand Canyon-Parashant National Monument

Delivery has failed to these recipients or groups:

Timothy Hughes (thughes@blm.gov)
The e-mail address you entered couldn't be found. Please check the recipient's e-mail address and try to resend the message. If the problem continues, please contact your helpdesk.

Diagnostic information for administrators:

Generating server: IINDENEX02.doi.net

<p>thughes@blm.gov
#550 5.1.1 RESOLVER.ADR.RecipNotFound; not found ##

Original message headers:

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 (10.85.30.203) with Microsoft SMTP Server (TLS) id 14.3.361.1; Fri, 4 Aug
 2017 17:15:10 -0600
Received: from mail-vk0-f69.google.com (209.85.213.69) by gsmtp1.doi.gov
 (137.227.82.15) with Microsoft SMTP Server (TLS) id 14.3.361.1; Fri, 4 Aug
 2017 17:15:13 -0600
Received: by mail-vk0-f69.google.com with SMTP id g8so11745455vki.14
        for <thughes@blm.gov>; Fri, 04 Aug 2017 16:15:09 -0700 (PDT)
X-Gm-Message-State: AHYfb5hKCCFQMFDjqbpfi3fdvsNf0HXGuOkMTcyQS3KqDx5kXtAuh3Hb
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        Fri, 04 Aug 2017 16:15:09 -0700 (PDT)
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       spf=pass (google.com: domain of kmahoney@blm.gov designates 209.85.213.72 as permitted sender) smtp.mailfrom=kmahoney@blm.gov
Return-Path: <kmahoney@blm.gov>
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 [209.85.213.72])        by mx.google.com with ESMTPS id
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        Fri, 04 Aug 2017 16:15:08 -0700 (PDT)
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Authentication-Results: mx.google.com;
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Received: by mail-vk0-f72.google.com with SMTP id u200so12081754vkd.1
        for <thughes@blm.gov>; Fri, 04 Aug 2017 16:15:08 -0700 (PDT)
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        Fri, 04 Aug 2017 16:15:07 -0700 (PDT)
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 Fri, 04 Aug 2017 16:15:05 -0700 (PDT)
MIME-Version: 1.0
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Received: by 10.31.85.135 with HTTP; Fri, 4 Aug 2017 16:15:04 -0700 (PDT)
In-Reply-To: <CAPuvJ-9Rm+-6FXNh4_4BqHQYu2s8CQ_5yDy1ZuuNWOJDCL3tWQ@mail.gmail.com>
References: <CAPuvJ-9Rm+-6FXNh4_4BqHQYu2s8CQ_5yDy1ZuuNWOJDCL3tWQ@mail.gmail.com>
From: "Mahoney, Kenneth" <kmahoney@blm.gov>
Date: Fri, 4 Aug 2017 16:15:04 -0700
Message-ID: <CAF0kJcrLN1AZmnVpKddEU3BHqTnGhyc53S_9VaMNPW4tpy9YtA@mail.gmail.com>
Subject: Fwd: Secretary Zinke Recommends No Modifications to Grand
 Canyon-Parashant National Monument
To: Brooke Wheeler <bwheeler@blm.gov>, John Hall <jahall@blm.gov>, Leslie Mead
        <lmead@blm.gov>, Lisa Thornley <lthornley@blm.gov>, Matthew Basham
        <mbasham@blm.gov>, Nancy Favour <nfavour@blm.gov>, Aaron Wilkerson
        <awilkers@blm.gov>, Bill Coulloudon <acoullou@blm.gov>, Elroy Masters
        <emasters@blm.gov>, Jacqueline Neckels <jneckels@blm.gov>, Karen McKinley
        <kmckinley@blm.gov>, Maile Adler <madler@blm.gov>, Mark D'Aversa
        <msdaversa@blm.gov>, Michael Johnson <mdjohnso@blm.gov>, Timothy Hughes
        <thughes@blm.gov>, William Gibson <bgibson@blm.gov>
CC: Roxie Trost <rtrost@blm.gov>
Content-Type: multipart/alternative; boundary="001a11437fccdd23cf0555f5aa35"
X-FailoverRoute: 1
X-Gm-Spam: 0
X-Gm-Phishy: 0

---------- Forwarded message ----------
From: **Cargile, Amber** <acargile@blm.gov>
Date: Fri, Aug 4, 2017 at 1:33 PM
Subject: Fwd: Secretary Zinke Recommends No Modifications to Grand Canyon-Parashant National Monument
To: BLM_AZ_SLT <blm_az_slt@blm.gov>, BLM_AZ_PA_Specialists <blm_az_pa_specialists@blm.gov>, Kenneth Mahoney <kmahoney@blm.gov>

FYI

Amber Cargile
Deputy State Director--Communications
Bureau of Land Management
Arizona State Office
One North Central Avenue, Suite 800
Phoenix, Arizona 85004
602.417.9448 (desk)
480.392.1422 (mobile)
www.blm.gov

---------- Forwarded message ----------
From: **U.S. Department of the Interior** <interior_news@updates.interior.gov>
Date: Fri, Aug 4, 2017 at 3:01 PM
Subject: Secretary Zinke Recommends No Modifications to Grand Canyon-Parashant National Monument

OFFICE OF THE SECRETARY
U.S. Department of the Interior

www.doi.gov
News Release

Date: August 4, 2017
Contact: Interior_Press@ios.doi.gov

Secretary Zinke Recommends No Modifications to Grand Canyon-Parashant National Monument

WASHINGTON – Today, U.S. Secretary of the Interior Ryan Zinke announced Arizona's Grand Canyon-Parashant National Monument is no longer under review and that he will recommend that no modifications be made to the monument. The monument was under review in accordance with President Donald J. Trump's April 26, 2017, executive order.

"Today I'm announcing that Grand Canyon-Parashant National Monument's review process has concluded and I am recommending no changes be made to the monument," **said Secretary Zinke**. "The land has some of the most pristine and undeformed geological formations in North America, which show the scientific history of our earth while containing thousands of years of human relics and fossils."

Grand Canyon-Parashant National Monument is located in northwest Arizona, and was designated in 2000. The monument encompasses over a million acres, and is co-managed by the Bureau of Land Management and National Park Service.

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"Neckels, Jacqueline" <jneckels@blm.gov>

From: "Neckels, Jacqueline" <jneckels@blm.gov>
Sent: Mon Aug 07 2017 07:36:02 GMT-0600 (MDT)
To: "Mahoney, Kenneth" <kmahoney@blm.gov>
Subject: Re: Secretary Zinke Recommends No Modifications to Grand Canyon-Parashant National Monument

Yea!....jn

On Fri, Aug 4, 2017 at 4:15 PM, Mahoney, Kenneth <kmahoney@blm.gov> wrote:

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From: **Cargile, Amber** <acargile@blm.gov>
Date: Fri, Aug 4, 2017 at 1:33 PM
Subject: Fwd: Secretary Zinke Recommends No Modifications to Grand Canyon-Parashant National Monument
To: BLM_AZ_SLT <blm_az_slt@blm.gov>, BLM_AZ_PA_Specialists <blm_az_pa_specialists@blm.gov>, Kenneth Mahoney <kmahoney@blm.gov>

FYI

Amber Cargile
Deputy State Director--Communications
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--
Jackie Neckels
State Planning Lead
BLM Arizona State Office
One North Central Ave., Suite 800
Phoenix, AZ 85004-4427
602.417.9262
jneckels@blm.gov
"Have the courage of patience and the strength of persistence." Dad

Conversation Contents

Grand Parashant Question

"Fisher, Timothy" <tjfisher@blm.gov>

From:	"Fisher, Timothy" <tjfisher@blm.gov>
Sent:	Fri Jul 21 2017 12:38:52 GMT-0600 (MDT)
To:	Kenneth Mahoney <kmahoney@blm.gov>
Subject:	Grand Parashant Question

Hi Ken

Great Review of the Monuments Economic Report! I have one quick question on Grand Parashant.....

below you made a comment about there is no oil, gas, coal - is this known for sure? If so I can edit the sentence.

For example, oil, gas, coal [MKL1] and minerals are all non-renewable resources and would only be extracted as long as the resource is economically feasible to produce.

[MKL1]Not present on the Monument.

Timothy J Fisher, Program Lead

National Monuments and Conservation Areas
National Conservation Lands

20 M Street S.E. (wo-410)
Washington DC 20003

202-912-7172 Office
202-604-0706 Cell
202-245-0050 Fax

tjfisher@blm.gov

"Mahoney, Kenneth" <kmahoney@blm.gov>

From:	"Mahoney, Kenneth" <kmahoney@blm.gov>
Sent:	Fri Jul 21 2017 13:26:28 GMT-0600 (MDT)
To:	"Fisher, Timothy" <tjfisher@blm.gov>
Subject:	Re: Grand Parashant Question

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> tjfisher@blm.gov

"Fisher, Timothy" <tjfisher@blm.gov>

From:	"Fisher, Timothy" <tjfisher@blm.gov>
Sent:	Fri Jul 21 2017 13:34:46 GMT-0600 (MDT)
To:	"Mahoney, Kenneth" <kmahoney@blm.gov>
Subject:	Re: Grand Parashant Question

I saw you erased on one of the other reports - so I was thinking consistency

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> > tjfisher@blm.gov

"Mahoney, Kenneth" <kmahoney@blm.gov>

From:	"Mahoney, Kenneth" <kmahoney@blm.gov>
Sent:	Fri Jul 21 2017 14:11:19 GMT-0600 (MDT)
To:	"Fisher, Timothy" <tjfisher@blm.gov>
Subject:	Re: Grand Parashant Question

I'm not remembering which report that was, perhaps Ironwood Forest or Sonoran Desert, which for sure have no oil, gas or coal. I'm pretty sure that's the case with Parashant also, but waiting to hear so we can confirm.

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"Fisher, Timothy" <tjfisher@blm.gov>

From: "Fisher, Timothy" <tjfisher@blm.gov>
Sent: Fri Jul 21 2017 14:18:20 GMT-0600 (MDT)
To: "Mahoney, Kenneth" <kmahoney@blm.gov>
Subject: Re: Grand Parashant Question

OK thanks Ken

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tjfisher@blm.gov

"Mahoney, Kenneth" <kmahoney@blm.gov>

From:	"Mahoney, Kenneth" <kmahoney@blm.gov>
Sent:	Fri Jul 21 2017 14:36:15 GMT-0600 (MDT)
To:	"Fisher, Timothy" <tjfisher@blm.gov>
Subject:	Re: Grand Parashant Question

Confirmed: no coal resource on GCPNM and oil/gas resource is classified as low potential on the Monument. Mark Wimmer said that information is documented in the RMP for the area and he thinks he had put that information in the earlier data call for the monument review, so there should be consistency there. Let me know if that answers the question. Thank for being thorough.

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On Fri, Jul 21, 2017 at 1:18 PM, Fisher, Timothy <tjfisher@blm.gov> wrote:

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>
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"Fisher, Timothy" <tjfisher@blm.gov>

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Sent: Fri Jul 21 2017 14:37:14 GMT-0600 (MDT)
To: "Mahoney, Kenneth" <kmahoney@blm.gov>
Subject: Re: Grand Parashant Question

Thanks! Great

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> > On Fri, Jul 21, 2017 at 3:26 PM, Mahoney, Kenneth <kmahoney@blm.gov> wrote:
> >
> > > I've got calls/emails out to some people here in AZ to get something definitive on that question. I'll let you know as soon as I can. I'd say if the information is coming too late, the default would be just to leave that sentence in the report. It's kind of a "for example" statement anyway.
> > >
> > > Ken
> > >
> > > On Fri, Jul 21, 2017 at 11:38 AM, Fisher, Timothy <tjfisher@blm.gov> wrote:
> > >
> > > > Hi Ken
> > > >
> > > > Great Review of the Monuments Economic Report! I have one quick question on Grand Parashant.....
> > > >
> > > > below you made a comment about there is no oil, gas, coal - is this known for sure? If so I can edit the sentence.
> > > >
> > > > For example, oil, gas, coal [MKL1] and minerals are all non-renewable resources and would only be extracted as long as the resource is economically feasible to produce.
> > > >
> > > > ---
> > > >
> > > > [MKL1]Not present on the Monument.
> > > >
> > > > Timothy J Fisher, Program Lead
> > > >
> > > > National Monuments and Conservation Areas
> > > > National Conservation Lands

20 M Street S.E. (wo-410)
Washington DC 20003

202-912-7172 Office
202-604-0706 Cell
202-245-0050 Fax

tjfisher@blm.gov

Conversation Contents

Oil, gas, coal resources on Grand Canyon-Parashant National Monument

"Mahoney, Kenneth" <kmahoney@blm.gov>

From:	"Mahoney, Kenneth" <kmahoney@blm.gov>
Sent:	Fri Jul 21 2017 13:24:08 GMT-0600 (MDT)
To:	Karen Conrath <kconrath@blm.gov>
Subject:	Oil, gas, coal resources on Grand Canyon-Parashant National Monument

I'm wrapping up a review of a draft economic report on the GCPNM that is being prepared by DOI as part of the monuments review and the question has come up whether there are known oil, gas, or coal resources on the monument. Do you have information on that? WO is trying to wrap up the review this afternoon. Thanks for any assistance you could provide on such short notice.

"Conrath, Karen" <kconrath@blm.gov>

From:	"Conrath, Karen" <kconrath@blm.gov>
Sent:	Fri Jul 21 2017 13:40:32 GMT-0600 (MDT)
To:	"Mahoney, Kenneth" <kmahoney@blm.gov>
Subject:	Re: Oil, gas, coal resources on Grand Canyon-Parashant National Monument

Ken,

Usually, when a monument is designated, the lands are withdrawn from mineral entry, but leasing (oil & gas) could be an exemption written into the language that designates the monument. So check that to see if that is the case. To my knowledge, there are no oil and gas or coal resources within the monument, but it would be worth an email to Rody Cox at the Strip to confirm this.

Karen Conrath
Geologist
Bureau of Land Management
Arizona State Office
(602) 417-9243
kconrath@BLM.gov

On Fri, Jul 21, 2017 at 12:24 PM, Mahoney, Kenneth <kmahoney@blm.gov> wrote:

> I'm wrapping up a review of a draft economic report on the GCPNM that is being prepared by

> DOI as part of the monuments review and the question has come up whether there are known oil, gas, or coal resources on the monument. Do you have information on that? WO is trying to wrap up the review this afternoon. Thanks for any assistance you could provide on such short notice.

"Conrath, Karen" <kconrath@blm.gov>

From:	"Conrath, Karen" <kconrath@blm.gov>
Sent:	Fri Jul 21 2017 13:43:53 GMT-0600 (MDT)
To:	"Mahoney, Kenneth" <kmahoney@blm.gov>
Subject:	Re: Oil, gas, coal resources on Grand Canyon-Parashant National Monument

Also, check with Fred Conrath, he may have some insight as well.

Karen Conrath
Geologist
Bureau of Land Management
Arizona State Office
(602) 417-9243
kconrath@BLM.gov

On Fri, Jul 21, 2017 at 12:24 PM, Mahoney, Kenneth <kmahoney@blm.gov> wrote:

> I'm wrapping up a review of a draft economic report on the GCPNM that is being prepared by DOI as part of the monuments review and the question has come up whether there are known oil, gas, or coal resources on the monument. Do you have information on that? WO is trying to wrap up the review this afternoon. Thanks for any assistance you could provide on such short notice.

"Mahoney, Kenneth" <kmahoney@blm.gov>

From:	"Mahoney, Kenneth" <kmahoney@blm.gov>
Sent:	Fri Jul 21 2017 14:03:26 GMT-0600 (MDT)
To:	"Conrath, Karen" <kconrath@blm.gov>
Subject:	Re: Oil, gas, coal resources on Grand Canyon-Parashant National Monument

Thanks for the information and your quick reply.

On Fri, Jul 21, 2017 at 12:43 PM, Conrath, Karen <kconrath@blm.gov> wrote:

> Also, check with Fred Conrath, he may have some insight as well.
>
> Karen Conrath
> Geologist

Bureau of Land Management
Arizona State Office
(602) 417-9243
kconrath@BLM.gov

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> I'm wrapping up a review of a draft economic report on the GCPNM that is being prepared by DOI as part of the monuments review and the question has come up whether there are known oil, gas, or coal resources on the monument. Do you have information on that? WO is trying to wrap up the review this afternoon. Thanks for any assistance you could provide on such short notice.

Conversation Contents

Invitation: Optional Economic Report Discussion @ Tue Jul 18, 2017 1pm - 2pm (kmahoney@blm.gov)

Attachments:

/18. Invitation: Optional Economic Report Discussion @ Tue Jul 18, 2017 1pm - 2pm (kmahoney@blm.gov)/1.1 invite.ics
/18. Invitation: Optional Economic Report Discussion @ Tue Jul 18, 2017 1pm - 2pm (kmahoney@blm.gov)/1.2 invite.ics

Rachel Wootton <rwootton@blm.gov>

From:	Rachel Wootton <rwootton@blm.gov>
Sent:	Thu Jul 13 2017 11:12:24 GMT-0600 (MDT)
To:	nmoore@blm.gov, sbutts@blm.gov, tjfisher@blm.gov
CC:	kmahoney@blm.gov, rmsuazo@blm.gov, cschneckenburger@blm.gov, jperez@blm.gov, eroberso@blm.gov, msintetos@blm.gov, aginn@blm.gov
Subject:	Invitation: Optional Economic Report Discussion @ Tue Jul 18, 2017 1pm - 2pm (kmahoney@blm.gov)
Attachments:	invite.ics invite.ics

Optional Economic Report Discussion

more details »

Conference Line: (b) (5) Passcode: (b) (5)

This meeting is optional. We have blocked out Tuesday afternoon from 4-5pm EST to answer any questions you may have regarding the Economic Reports for the National Monuments currently under review. We have been given the opportunity to do a quick review of the draft Department of Interior economic reports for the eight BLM managed or co-managed National Monuments currently under review. The draft reports are for:

- Grand Canyon Parashant
- Grand Staircase
- Sonoran
- Ironwood Forest
- Canyons of the Ancients
- San Gabriel
- Giant Sequoia
- Carrizo
- Mojave
- Vermillion

If you would like to provide comments, please compile comments in track changes within the reports and provide them by COB Thursday July 20th. Please email your state's comments to Rachel Wootton (rwootton@blm.gov) with a copy to me (sbutts@blm.gov) as soon as you have completed your comments, so that we can get them reviewed by the deadline and submitted back to the Secretary's office. The comments are due back to the Secretary's office by Friday, July 21st, 2017. Thank you and do not hesitate to contact me with any questions or concerns!

When Tue Jul 18, 2017 1pm – 2pm Mountain Time - Arizona

Where Conference Line: (b) (5) Passcode: (b) (5) (map)

Video call	https://plus.google.com/hangouts/_/doi.gov/rwootton
Calendar	kmahoney@blm.gov
Who	• rwootton@blm.gov - organizer • nmoore@blm.gov • sbutts@blm.gov • tjfisher@blm.gov • rmsuazo@blm.gov - optional • cschneckenburger@blm.gov - optional • jperez@blm.gov - optional • eroberso@blm.gov - optional • msintetos@blm.gov - optional • kmahoney@blm.gov - optional • aginn@blm.gov - optional

Your attendance is **optional**.

Going? **Yes** - **Maybe** - **No** more options »

Invitation from Google Calendar

You are receiving this email at the account kmahoney@blm.gov because you are subscribed for invitations on calendar kmahoney@blm.gov.

To stop receiving these emails, please log in to https://www.google.com/calendar/ and change your notification settings for this calendar.

Forwarding this invitation could allow any recipient to modify your RSVP response. Learn More.

Conversation Contents

Ironwood Forest NM

"Emmett, Tamra" <temmett@blm.gov>

From:	"Emmett, Tamra" <temmett@blm.gov>
Sent:	Tue Jul 11 2017 11:15:19 GMT-0600 (MDT)
To:	"Mahoney, Kenneth" <kmahoney@blm.gov>
CC:	"Werner, Michael" <mwerner@blm.gov>
Subject:	Ironwood Forest NM

Hi Ken,

Do you have any new information on this monument and possible de-listing? Thanks, Tami

Tami Emmett
Realty Specialist
U. S. Bureau of Land Management
Arizona State Office
One North Central Avenue, Suite 800
Phoenix, Arizona 85004-4427
Phone: (602) 417-9248
Fax: (602) 417-9452

"Mahoney, Kenneth" <kmahoney@blm.gov>

From:	"Mahoney, Kenneth" <kmahoney@blm.gov>
Sent:	Tue Jul 11 2017 12:49:37 GMT-0600 (MDT)
To:	"Emmett, Tamra" <temmett@blm.gov>
CC:	"Werner, Michael" <mwerner@blm.gov>
Subject:	Re: Ironwood Forest NM

The public comment period on the executive order to review the monuments just ended yesterday. I have been given no information about a timeline on when the Secretary of the Interior will respond to the comments or provide a recommendation with regard to the Ironwood Forest NM or any monuments under review. You are as likely to see any news release as soon as me.

Ken

On Tue, Jul 11, 2017 at 10:15 AM, Emmett, Tamra <temmett@blm.gov> wrote:

> Hi Ken,
>
> Do you have any new information on this monument and possible de-listing? Thanks, Tami

Tami Emmett
Realty Specialist
U. S. Bureau of Land Management
Arizona State Office
One North Central Avenue, Suite 800
Phoenix, Arizona 85004-4427
Phone: (602) 417-9248
Fax: (602) 417-9452

"Emmett, Tamra" <temmett@blm.gov>

From:	"Emmett, Tamra" <temmett@blm.gov>
Sent:	Tue Jul 11 2017 12:51:31 GMT-0600 (MDT)
To:	"Mahoney, Kenneth" <kmahoney@blm.gov>
CC:	"Werner, Michael" <mwerner@blm.gov>
Subject:	Re: Ironwood Forest NM

Thanks, Ken. I appreciate your response. I'll most likely see it on Facebook...

Tami Emmett
Realty Specialist
U. S. Bureau of Land Management
Arizona State Office
One North Central Avenue, Suite 800
Phoenix, Arizona 85004-4427
Phone: (602) 417-9248
Fax: (602) 417-9452

On Tue, Jul 11, 2017 at 11:49 AM, Mahoney, Kenneth <kmahoney@blm.gov> wrote:

> The public comment period on the executive order to review the monuments just ended yesterday. I have been given no information about a timeline on when the Secretary of the Interior will respond to the comments or provide a recommendation with regard to the Ironwood Forest NM or any monuments under review. You are as likely to see any news release as soon as me.
>
> Ken
>
> On Tue, Jul 11, 2017 at 10:15 AM, Emmett, Tamra <temmett@blm.gov> wrote:
>
> > Hi Ken,
> >
> > Do you have any new information on this monument and possible de-listing? Thanks, Tami
> >
> > Tami Emmett
> > Realty Specialist
> > U. S. Bureau of Land Management
> > Arizona State Office
> > One North Central Avenue, Suite 800
> > Phoenix, Arizona 85004-4427
> > Phone: (602) 417-9248
> > Fax: (602) 417-9452

Conversation Contents

Fwd: Sonoran

Attachments:

/20. Fwd: Sonoran/2.1 SDNM grazing Active & Billed AUMs 1996-2017 by allotment.xlsx

"Wootton, Rachel" <rwootton@blm.gov>

From:	"Wootton, Rachel" <rwootton@blm.gov>
Sent:	Wed Jul 05 2017 07:08:46 GMT-0600 (MDT)
To:	Kenneth Mahoney <kmahoney@blm.gov>, "Darrel (Wayne) Monger" <dmonger@blm.gov>
Subject:	Fwd: Sonoran

Hi Ken and Wayne,

I hope you both are doing well and had a great 4th of July!

We had a question come up regarding the AUM information that the BLM provided for the Sonoran Desert National Monument. Please see Ben's email below for more information. Could you help clarify?

Feel free to call/email me if you have questions. Thank you so much!

Best,

Rachel
--
Rachel Wootton
Planning and Environmental Specialist
National Conservation Lands (WO-410)
Bureau of Land Management
20 M Street SE Washington, DC 20003
rwootton@blm.gov
desk - (202) 912-7398
cell - (202) 774-8791

Visit us online!

---------- Forwarded message ----------
From: **Nikki Moore** <nmoore@blm.gov>
Date: Wed, Jul 5, 2017 at 8:46 AM
Subject: Fwd: Sonoran
To: Rachel Wootton <rwootton@blm.gov>
Cc: Sally Butts <sbutts@blm.gov>

Hi Rachel,

Can you please check in with AZ and check on the discrepancies. Thanks!

Nikki Moore
Acting Deputy Assistant Director,
National Conservation Lands and Community Partnerships
Bureau of Land Management, Washington DC
202.219.3180 (office)
202.288.9114 (cell)

Begin forwarded message:

From: "Simon, Benjamin" <benjamin_simon@ios.doi.gov>
Date: July 5, 2017 at 8:23:26 AM EDT
To: "Moore, Nikki" <nmoore@blm.gov>
Cc: Joshua Sidon <jsidon@blm.gov>, Ann Miller <ann_miller@ios.doi.gov>
Subject: Sonoran

Hi Nikki,

There are a few data discrepancies regarding the grazing information for Sonoran. We would appreciate your help in clarifying.

- The number of billed AUMs exceeds permitted/active levels in some years by a significant amount.
- Based on the Proclamation, info rmation in the FEIS/PRMP, and even information in the Data Summary of the data call, the active use did not drop to 8,706 immediately after designation.
- Billed data reported in the FEIS/PRMP is different.
- The Data Summary states that current active/permitted use is 776 AUMs due to a stay in litigation. This doesn't seem to line up with billed use post RMP approval.

Here is a table showing the discrepancies

	From data call		
Year	Fee Active	Billed	FEIS Billed (T 3-17)
1996	16,433	11,189	
1997	16,433	6,119	
1998	16,433	17,538	7,589
1999	16,433	10,462	6,168
2000	16,433	17,976	5,718
2001	16,433	33,571	8,610
2002	8,706	8,475	1,939
2003	8,706	16,646	5,211
2004	8,706	19,551	5,180
2005	8,706	27,973	10,790
2006	8,706	14,150	9,897
2007	8,706	12,937	
2008	8,706	7,285	
2009	8,706	6,097	
2010	8,706	5,892	
2011	8,706	4,826	
2012	8,706	5,418	
2013	8,706	2,403	
2014	8,706	2,212	

2015 8,706 4,572
2016 8,706 1,809

Ben

--
Benjamin Simon, Ph.D., Chief DOI Economist
Office of Policy Analysis
U.S. Department of the Interior
1849 C St. NW
Washington DC
202 208 4916
benjamin_simon@ios.doi.gov

"Mahoney, Kenneth" <kmahoney@blm.gov>

From:	"Mahoney, Kenneth" <kmahoney@blm.gov>
Sent:	Wed Jul 05 2017 14:50:57 GMT-0600 (MDT)
To:	"Darrel (Wayne) Monger" <dmonger@blm.gov>
CC:	Edward Kender <ekender@blm.gov>, Douglas Whitbeck <dwhitbeck@blm.gov>, Karen McKinley <kmckinley@blm.gov>
Subject:	Re: Sonoran
Attachments:	SDNM grazing Active & Billed AUMs 1996-2017 by allotment.xlsx

Wayne,

Regarding these emails that follow-up to the executive order monuments review, I will have to rely on you and staff to provide clarification on the four bullet items in the forwarded message from Benjamin Simon to Nikki Moore.

I have reviewed the table titled "Attachment_SDNM AUMs by Allotment Table" that was uploaded to the "Sonoran Desert" Google Drive folder created for the monuments review. The numbers Benjamin Simon lists in his email correspond to the totals (when calculated) in the SDNM AUMs by Allotment Table. I copied the data from the table to an Excel spreadsheet and set up the formula to sum the totals. The table as uploaded to the Google Drive folder does not provide the totals. I've attached the Excel spreadsheet.

I also looked at Table 3-17 that Benjamin Simon refers to from Chapter 3 of the SDNM FEIS/PRMP and the figures he provides in his email correspond to those in Table 3-17 (page 83).

The fourth bullet item refers to the "Data Summary" document in the Google Drive folder. It appears the particular portion of that document he is addressing is on activities permitted on the monument annually from designation to present, which for grazing is at 2.e. on page 3. It states:

e. Grazing - annual grazing on site (AUMs permitted and sold)

i. Grazing AUMs/ Active and billed (SDNM AUMs by Allotment Table.docx is located within this Drive folder).

ii. Prior to Monument designation there were 16,433 active AUMs. As permits expired in areas south of Interstate 8, they were not renewed. This reduced the active AUM's to 8,706 on SDNM.

iii. In the 2012 SDNM RMP/Final EIS, an adjustment in AUM levels was proposed in

order to reflect areas closed due to not meeting rangeland health standards. This decision was litigated and the decision was stayed. This prevented permits from being renewed until the litigation is resolved. This litigation is currently unresolved. Today, the remaining active grazing permits on the Monument retain 776 active AUMs.

Let me know if there is any assistance I can provide in responding to this request. Please send the responses to me when completed. Thanks in advance for your work on this.

Ken Mahoney <> Program Lead:
National Monuments <> National Conservation Areas
Wilderness <> Wild & Scenic Rivers
Arizona State Office <> Bureau of Land Management
602-417-9238 <> kmahoney@blm.gov

On Wed, Jul 5, 2017 at 6:08 AM, Wootton, Rachel <rwootton@blm.gov> wrote:

> Hi Ken and Wayne,
>
> I hope you both are doing well and had a great 4th of July!
>
> We had a question come up regarding the AUM information that the BLM provided for the Sonoran Desert National Monument. Please see Ben's email below for more information. Could you help clarify?
>
> Feel free to call/email me if you have questions. Thank you so much!
>
> Best,
>
> Rachel
> --
> Rachel Wootton
> Planning and Environmental Specialist
> National Conservation Lands (WO-410)
> Bureau of Land Management
> 20 M Street SE Washington, DC 20003
> rwootton@blm.gov
> desk - (202) 912-7398
> cell - (202) 774-8791
>
> Visit us online!
>
> ---------- Forwarded message ----------
> From: **Nikki Moore** <nmoore@blm.gov>
> Date: Wed, Jul 5, 2017 at 8:46 AM
> Subject: Fwd: Sonoran
> To: Rachel Wootton <rwootton@blm.gov>
> Cc: Sally Butts <sbutts@blm.gov>
>
> Hi Rachel,

Can you please check in with AZ and check on the discrepancies. Thanks!

Nikki Moore
Acting Deputy Assistant Director,
National Conservation Lands and Community Partnerships
Bureau of Land Management, Washington DC
202.219.3180 (office)
202.288.9114 (cell)

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Date: July 5, 2017 at 8:23:26 AM EDT
To: "Moore, Nikki" <nmoore@blm.gov>
Cc: Joshua Sidon <jsidon@blm.gov>, Ann Miller <ann_miller@ios.doi.gov>
Subject: Sonoran

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There are a few data discrepancies regarding the grazing information for Sonoran. We would appreciate your help in clarifying.

- The number of billed AUMs exceeds permitted/active levels in some years by a significant amount.
- Based on the Proclamation, info rmation in the FEIS/PRMP, and even information in the Data Summary of the data call, the active use did not drop to 8,706 immediately after designation.
- Billed data reported in the FEIS/PRMP is different.
- The Data Summary states that current active/permitted use is 776 AUMs due to a stay in litigation. This doesn't seem to line up with billed use post RMP approval.

Here is a table showing the discrepancies

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2008	8,706	7,285	
2009	8,706	6,097	
2010	8,706	5,892	
2011	8,706	4,826	
2012	8,706	5,418	
2013	8,706	2,403	
2014	8,706	2,212	

2015 8,706 4,572
2016 8,706 1,809

Ben

--
Benjamin Simon, Ph.D., Chief DOI Economist
Office of Policy Analysis
U.S. Department of the Interior
1849 C St. NW
Washington DC
202 208 4916
benjamin_simon@ios.doi.gov

"Whitbeck, Douglas" <dwhitbeck@blm.gov>

From:	"Whitbeck, Douglas" <dwhitbeck@blm.gov>
Sent:	Thu Jul 06 2017 16:00:32 GMT-0600 (MDT)
To:	"Mahoney, Kenneth" <kmahoney@blm.gov>
CC:	"Darrel (Wayne) Monger" <dmonger@blm.gov>, Edward Kender <ekender@blm.gov>, Karen McKinley <kmckinley@blm.gov>
Subject:	Re: Sonoran

- The number of billed AUMs exceeds permitted/active levels in some years by a significant amount.

The AUMs can exceed permitted/active levels during years where ephemeral use was authorized.

- Based on the Proclamation, information in the FEIS/PRMP, and even information in the Data Summary of the data call, the active use did not drop to 8,706 immediately after designation.

The grazing permits and leases for the allotments south of Interstate 8 remained valid until their expiration dates. Once expired, permits and leases were not renewed.

- Billed data reported in the FEIS/PRMP is different.

I pulled the billed data directly from the case files. I'm not sure exactly how the numbers in the FEIS/PRMP were determined.

- The Data Summary states that current active/permitted use is 776 AUMs due to a stay in litigation. This doesn't seem to line up with billed use post RMP approval.

Once again, permits remained valid until their expiration dates.
The 776 AUMs are what is authorized in the FEIS/DRMP on the SDNM for the Beloat allotment. We do not bill the SDNM and LSFO separately. Therefore, the billed use for the SDNM was determined through prorating the Beloat Allotment based on acres in/out of the SDNM.
Only the Vekol and South Vekol allotments were entirely within the SDNM.

I hope this helps. Let me know of any more questions you will have.

Best,

On Wed, Jul 5, 2017 at 1:50 PM, Mahoney, Kenneth <kmahoney@blm.gov> wrote:

> Wayne,
>
> Regarding these emails that follow-up to the executive order monuments review, I will have to rely on you and staff to provide clarification on the four bullet items in the forwarded message from Benjamin Simon to Nikki Moore.
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> Let me know if there is any assistance I can provide in responding to this request. Please send the responses to me when completed. Thanks in advance for your work on this.

Ken Mahoney <> Program Lead:
National Monuments <> National Conservation Areas
Wilderness <> Wild & Scenic Rivers
Arizona State Office <> Bureau of Land Management
602-417-9238 <> kmahoney@blm.gov

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> Feel free to call/email me if you have questions. Thank you so much!
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>
> Rachel
> --
> Rachel Wootton
> Planning and Environmental Specialist
> National Conservation Lands (WO-410)
> Bureau of Land Management
> 20 M Street SE Washington, DC 20003
> rwootton@blm.gov
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> cell - (202) 774-8791
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> Visit us online!
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> Date: Wed, Jul 5, 2017 at 8:46 AM
> Subject: Fwd: Sonoran
> To: Rachel Wootton <rwootton@blm.gov>
> Cc: Sally Butts <sbutts@blm.gov>
>
> Hi Rachel,
>
> Can you please check in with AZ and check on the discrepancies. Thanks!
>
> Nikki Moore
> Acting Deputy Assistant Director,
> National Conservation Lands and Community Partnerships
> Bureau of Land Management, Washington DC
> 202.219.3180 (office)
> 202.288.9114 (cell)
>
> Begin forwarded message:
>
> > **From:** "Simon, Benjamin" <benjamin_simon@ios.doi.gov>
> > **Date:** July 5, 2017 at 8:23:26 AM EDT
> > **To:** "Moore, Nikki" <nmoore@blm.gov>
> > **Cc:** Joshua Sidon <jsidon@blm.gov>, Ann Miller <ann_miller@ios.doi.gov>
> > **Subject: Sonoran**

Hi Nikki,

There are a few data discrepancies regarding the grazing information for Sonoran. We would appreciate your help in clarifying.

- The number of billed AUMs exceeds permitted/active levels in some years by a significant amount.
- Based on the Proclamation, info rmation in the FEIS/PRMP, and even information in the Data Summary of the data call, the active use did not drop to 8,706 immediately after designation.
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2001	16,433	33,571	8,610
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2003	8,706	16,646	5,211
2004	8,706	19,551	5,180
2005	8,706	27,973	10,790
2006	8,706	14,150	9,897
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2008	8,706	7,285	
2009	8,706	6,097	
2010	8,706	5,892	
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2012	8,706	5,418	
2013	8,706	2,403	
2014	8,706	2,212	
2015	8,706	4,572	
2016	8,706	1,809	

Ben

--

Benjamin Simon, Ph.D., Chief DOI Economist
Office of Policy Analysis
U.S. Department of the Interior
1849 C St. NW
Washington DC
202 208 4916
benjamin_simon@ios.doi.gov

--
Doug Whitbeck
Rangeland Management Specialist
Lower Sonoran Field Office
21605 N 7th Ave
Phoenix, AZ 85027
623-580-5524

"Monger, Darrel (Wayne)" <dmonger@blm.gov>

From:	"Monger, Darrel (Wayne)" <dmonger@blm.gov>
Sent:	Thu Jul 06 2017 16:44:36 GMT-0600 (MDT)
To:	rwootton@blm.gov, Kenneth Mahoney <kmahoney@blm.gov>
CC:	Edward Kender <ekender@blm.gov>
Subject:	Fwd: Sonoran

Afternoon Rachel!

I spoke with Doug Whitbeck and attached are his responses to the questions:

- The number of billed AUMs exceeds permitted/active levels in some years by a significant amount.

The AUMs can exceed permitted/active levels during years where ephemeral use was authorized.

- Based on the Proclamation, information in the FEIS/PRMP, and even information in the Data Summary of the data call, the active use did not drop to 8,706 immediately after designation.

The grazing permits and leases for the allotments south of Interstate 8 remained valid until their expiration dates. Once expired, permits and leases were not renewed.

- Billed data reported in the FEIS/PRMP is different.

I pulled the billed data directly from the case files. I'm not sure exactly how the numbers in the FEIS/PRMP were determined.

- The Data Summary states that current active/permitted use is 776 AUMs due to a stay in litigation. This doesn't seem to line up with billed use post RMP approval.

Once again, permits remained valid until their expiration dates.
The 776 AUMs are what is authorized in the FEIS/DRMP on the SDNM for the Beloat allotment. We do not bill the SDNM and LSFO separately. Therefore, the billed use for the SDNM was determined through prorating the Beloat Allotment based on acres in/out of the SDNM.
Only the Vekol and South Vekol allotments were entirely within the SDNM.

Please let me know if you have any questions or concerns.

Thanks, Wayne

Darrel Wayne Monger
Monument Manager | Assistant Field Manager
Sonoran Desert National Monument | Lower Sonoran FO
BLM Phoenix District
623-580-5683

On Wed, Jul 5, 2017 at 1:50 PM, Mahoney, Kenneth <kmahoney@blm.gov> wrote:

> Wayne,
>
> Regarding these emails that follow-up to the executive order monuments review, I will have to rely on you and staff to provide clarification on the four bullet items in the forwarded message from Benjamin Simon to Nikki Moore.
>
> I have reviewed the table titled "Attachment_SDNM AUMs by Allotment Table" that was uploaded to the "Sonoran Desert" Google Drive folder created for the monuments review. The numbers Benjamin Simon lists in his email correspond to the totals (when calculated) in the SDNM AUMs by Allotment Table. I copied the data from the table to an Excel spreadsheet and set up the formula to sum the totals. The table as uploaded to the Google Drive folder does not provide the totals. I've attached the Excel spreadsheet.
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> I also looked at Table 3-17 that Benjamin Simon refers to from Chapter 3 of the SDNM FEIS/PRMP and the figures he provides in his email correspond to those in Table 3-17 (page 83).
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> The fourth bullet item refers to the "Data Summary" document in the Google Drive folder. It appears the particular portion of that document he is addressing is on activities permitted on the monument annually from designation to present, which for grazing is at 2.e. on page 3. It states:
>
> e. Grazing - annual grazing on site (AUMs permitted and sold)
>
> i. Grazing AUMs/ Active and billed (SDNM AUMs by Allotment Table.docx is located within this Drive folder).
> ii. Prior to Monument designation there were 16,433 active AUMs. As permits expired in areas south of Interstate 8, they were not renewed. This reduced the active AUM's to 8,706 on SDNM.
> iii. In the 2012 SDNM RMP/Final EIS, an adjustment in AUM levels was proposed in order to reflect areas closed due to not meeting rangeland health standards. This decision was litigated and the decision was stayed. This prevented permits from being renewed until the litigation is resolved. This litigation is currently unresolved. Today, the remaining active grazing permits on the Monument retain 776 active AUMs.
>
> Let me know if there is any assistance I can provide in responding to this request. Please send the responses to me when completed. Thanks in advance for your work on this.
>
> Ken Mahoney <> Program Lead:
> National Monuments <> National Conservation Areas
> Wilderness <> Wild & Scenic Rivers
> Arizona State Office <> Bureau of Land Management
> 602-417-9238 <> kmahoney@blm.gov

On Wed, Jul 5, 2017 at 6:08 AM, Wootton, Rachel <rwootton@blm.gov> wrote:

> Hi Ken and Wayne,
>
> I hope you both are doing well and had a great 4th of July!
>
> We had a question come up regarding the AUM information that the BLM provided for the Sonoran Desert National Monument. Please see Ben's email below for more information. Could you help clarify?
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> Feel free to call/email me if you have questions. Thank you so much!
>
> Best,
>
> Rachel
> --
> Rachel Wootton
> Planning and Environmental Specialist
> National Conservation Lands (WO-410)
> Bureau of Land Management
> 20 M Street SE Washington, DC 20003
> rwootton@blm.gov
> desk - (202) 912-7398
> cell - (202) 774-8791
>
> Visit us online!
>
> ---------- Forwarded message ----------
> From: **Nikki Moore** <nmoore@blm.gov>
> Date: Wed, Jul 5, 2017 at 8:46 AM
> Subject: Fwd: Sonoran
> To: Rachel Wootton <rwootton@blm.gov>
> Cc: Sally Butts <sbutts@blm.gov>
>
> Hi Rachel,
>
> Can you please check in with AZ and check on the discrepancies. Thanks!
>
> Nikki Moore
> Acting Deputy Assistant Director,
> National Conservation Lands and Community Partnerships
> Bureau of Land Management, Washington DC
> 202.219.3180 (office)
> 202.288.9114 (cell)
>
> Begin forwarded message:
>
> > **From:** "Simon, Benjamin" <benjamin_simon@ios.doi.gov>
> > **Date:** July 5, 2017 at 8:23:26 AM EDT
> > **To:** "Moore, Nikki" <nmoore@blm.gov>
> > **Cc:** Joshua Sidon <jsidon@blm.gov>, Ann Miller <ann_miller@ios.doi.gov>

Subject: Sonoran

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Ben

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Benjamin Simon, Ph.D., Chief DOI Economist
Office of Policy Analysis
U.S. Department of the Interior
1849 C St. NW
Washington DC
202 208 4916
benjamin_simon@ios.doi.gov

--
Doug Whitbeck
Rangeland Management Specialist
Lower Sonoran Field Office
21605 N 7th Ave
Phoenix, AZ 85027
623-580-5524

Rachel Wootton <rwootton@blm.gov>

From:	Rachel Wootton <rwootton@blm.gov>
Sent:	Thu Jul 06 2017 16:52:42 GMT-0600 (MDT)
To:	"Monger, Darrel (Wayne)" <dmonger@blm.gov>
CC:	Kenneth Mahoney <kmahoney@blm.gov>, Edward Kender <ekender@blm.gov>
Subject:	Re: Sonoran

Hi Wayne,

Thank you so much!!! We really appreciate you help looking into this and the detailed response!

I hope you have a good evening and thank you again!

Best,

Rachel Wootton
Planning and Environmental Specialist
National Conservation Lands
Bureau of LandManagement
(202)912-7398

On Jul 6, 2017, at 6:45 PM, Monger, Darrel (Wayne) <dmonger@blm.gov> wrote:

> Afternoon Rachel!
>
> I spoke with Doug Whitbeck and attached are his responses to the questions:
>
> - The number of billed AUMs exceeds permitted/active levels in some years by a significant amount.
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Please let me know if you have any questions or concerns.

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Ken Mahoney <> Program Lead:
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Wilderness <> Wild & Scenic Rivers
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Doug Whitbeck
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623-580-5524

Allotment	Pre-Designation Active Use (AUMs)	Post-Designation Active Use (AUMs)	Billed AUMs by Year																					
			1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Arnold	0	0	0	2	166	0	122	83	0	84	44	447	0	0	0	172	0	0	0	0	8	52	0	0
Beloat	776	776	986	995	986	986	1,213	1,013	253	1,196	735	1,108	657	247	657	657	657	394	986	986	986	986	986	986
Big Horn	5,921	2,812	3,745	437	183	2,653	4,149	14,891	611	7,448	6,996	6,466	5,921	5,921	1,393	33	0	0	0	0	0	0	0	0
Conley	3,403	3,406	2,491	1,028	10,524	3,534	6,236	12,383	6,080	5,087	4,556	10,050	3,534	3,534	3,534	3,534	3,534	3,534	3,534	320	320	3,534	823	0
Hazen	886	886	898	1,039	1,104	898	1,368	2,266	898	1,333	924	898	898	898	898	898	898	898	898	898	898	0	0	0
Lower Vekol	826	826	612	898	169	189	139	193	199	470	466	803	803	0	803	803	803	0	0	199	0	0	0	0
Santa Rosa	0	0	0	25	164	0	0	48	12	0	464	495	0	0	0	0	0	0	0	0	0	0	0	0
South Vekol	1,862	0	1,863	1,645	1,862	1,274	2,322	1,862	0	39	1,954	2,241	0	0	0	0	0	0	0	0	0	0	0	0
Table Top	1,927	0	0	0	1,548	416	1,595	0	422	989	2,017	2,730	1,505	1,505	0	0	0	0	0	0	0	0	0	0
Vekol	832	0	594	50	832	512	832	832	0	0	1,395	2,735	832	832	0	0	0	0	0	0	0	0	0	0
TOTALS	**16,433**	**8,706**	**11,189**	**6,119**	**17,538**	**10,462**	**17,976**	**33,571**	**8,475**	**16,646**	**19,551**	**27,973**	**14,150**	**12,937**	**7,285**	**6,097**	**5,892**	**4,826**	**5,418**	**2,403**	**2,212**	**4,572**	**1,809**	**986**

Conversation Contents

Listening Session Transcript

Attachments:

/22. Listening Session Transcript/2.1 Phoenix, AZ 06-01-17.pdf

"Mahoney, Kenneth" <kmahoney@blm.gov>

From:	"Mahoney, Kenneth" <kmahoney@blm.gov>
Sent:	Tue Jun 13 2017 14:48:43 GMT-0600 (MDT)
To:	Miles Janssen <miles.janssen@bia.gov>
Subject:	Listening Session Transcript

Greetings,

I saw the press release that Secretary Zinke submitted the interim report on Bears Ears National Monument to the President. I'm wondering whether you know when the transcript from the tribal listening session on national monument review in Phoenix will be prepared and posted. I have looked on the Regulations.gov web site and the transcript doesn't appear to be posted there yet. Has the transcript perhaps been posted to somewhere else on the web?

Thank you for any information you may have regarding the availability of the listening session transcript.

Ken Mahoney <> Program Lead:
National Monuments <> National Conservation Areas
Wilderness <> Wild & Scenic Rivers
Arizona State Office <> Bureau of Land Management
602-417-9238 <> kmahoney@blm.gov

"Janssen, Miles" <miles.janssen@bia.gov>

From:	"Janssen, Miles" <miles.janssen@bia.gov>
Sent:	Mon Jun 26 2017 08:57:00 GMT-0600 (MDT)
To:	kmahoney@blm.gov
Subject:	Fwd: Listening Session Transcript
Attachments:	Phoenix, AZ 06-01-17.pdf

Ken,

Here a copy of the transcript. It will also be posted on BIA's website.

Thanks,

Miles
---------- Forwarded message ----------
From: **Appel, Elizabeth** <elizabeth.appel@bia.gov>
Date: Fri, Jun 23, 2017 at 8:54 AM
Subject: Re: Listening Session Transcript
To: "Janssen, Miles" <miles.janssen@bia.gov>

Hi Miles-

The Office of Public Affairs in the process of getting it posted to www.bia.gov, but here is the Phoenix transcript in the meantime if you want to forward it.

Thanks!
Liz

On Thu, Jun 22, 2017 at 7:37 PM, Janssen, Miles <miles.janssen@bia.gov> wrote:

> Do you know when this will be posted?
>
> ---------- Forwarded message ----------
> From: **Mahoney, Kenneth** <kmahoney@blm.gov>
> Date: Tue, Jun 13, 2017 at 4:48 PM
> Subject: Listening Session Transcript
> To: Miles Janssen <miles.janssen@bia.gov>
>
> Greetings,
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>
> --
> Miles Janssen
> Counselor to the Assistant Secretary--Indian Affairs
> Department of the Interior
> 1849 C Street, NW
> Washington, D.C. 20240

Office: (202) 208-7352
Cell: (202) 264-0695

--
Elizabeth K. Appel
Office of Regulatory Affairs & Collaborative Action
Office of the Assistant Secretary - Indian Affairs
(202) 273-4680 - office
(202) 738-6065 - cell

--
Miles Janssen
Counselor to the Assistant Secretary--Indian Affairs
Department of the Interior
1849 C Street, NW
Washington, D.C. 20240
Office: (202) 208-7352
Cell: (202) 264-0695

"Mahoney, Kenneth" <kmahoney@blm.gov>

From:	"Mahoney, Kenneth" <kmahoney@blm.gov>
Sent:	Tue Jun 27 2017 12:00:50 GMT-0600 (MDT)
To:	"Janssen, Miles" <miles.janssen@bia.gov>
Subject:	Re: Listening Session Transcript

Thank you very much for sending it to me.

Ken

On Mon, Jun 26, 2017 at 7:57 AM, Janssen, Miles <miles.janssen@bia.gov> wrote:

> Ken,
>
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>
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> Miles
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> From: **Appel, Elizabeth** <elizabeth.appel@bia.gov>
> Date: Fri, Jun 23, 2017 at 8:54 AM
> Subject: Re: Listening Session Transcript
> To: "Janssen, Miles" <miles.janssen@bia.gov>
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> --
> Miles Janssen
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> 1849 C Street, NW
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Elizabeth K. Appel
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OFFICE OF THE ASSISTANT SECRETARY - INDIAN AFFAIRS

TRIBAL LISTENING SESSION

Executive Order 13792

Review of Designations Under the Antiquities Act

June 1, 2017

Phoenix, Arizona

1:07 p.m.

Prepared for:

Department of the Interior

(Original)

Prepared By:

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Certified Reporter

Certificate No. 50149

CANYON STATE REPORTING

RRF Number R1031

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MR. JANSSEN: I think we'll wait another couple minutes to see if people will trickle in.

Also, there are additional handouts at the door. There were handouts in the morning session, but they are different, in case people didn't pick them up. Thanks.

All right. So I think we're going to start this listening session. So I'm going to call this listening session to order. This listening session is on Executive Order 13792, Review of Designations Under the Antiquities Act.

Executive Order 13792 was issued by President Trump on April 26th, 2017, and requires the Secretary of Interior to review national monuments that have been designated or expanded since January 1st, 1996, where the designation covers more than 100,000 acres or where the Secretary determines that the designation or expansion was made without adequate public outreach and coordination with relevant stakeholders. Twenty-seven monuments have been identified by the Department of Interior for review, and they are listed in the handouts provided at the door.

The Secretary must use several factors in evaluating the national monuments to determine whether each designation or expansion conforms to the policy of

Executive Order 13792. The policy is described in Section 1 of the executive order, and the factors for review are listed in the handout that we provided at the door in this handout sheet.

Some key deadlines. The Secretary must make recommendations to the President on any Presidential actions, legislative proposals, or appropriate actions to carry out the policy of the executive order. The Secretary's interim report to the President is due by June 10th and must make recommendations on Bears Ears. The final report is due to the President on August 24th, 2017, summarizing the findings of the review and providing recommendations.

Written comments are also being accepted for the national monument discussion. The deadline for Bears Ears comments was -- it has passed now, it's May 26th, and for all other monuments it's until July 10th. However, tribal leaders -- even though the deadline has passed, tribal leaders can still submit comments, and the Department is accepting written comments from tribal leaders still at this time.

A couple questions regarding -- or questions to think about today to help guide the conversation, are there any monuments, in addition to the 27 currently being reviewed, that should also be reviewed because they were

designated after July 1st, 1996, without adequate public outreach and coordination with relevant stakeholders?

And additionally, what are your comments or views on the application of the seven factors listed in the executive order that the Secretary of Interior is to use in reviewing the 27 monument designations, or should there be other factors that should be considered?

So that's what we're receiving comments on today, and so at this point in time I will turn to the two people also on this panel.

Thank you.

MS. ORTIZ: Good afternoon, everyone, and welcome to this listening session. My name is Hankie Ortiz. I'm a member of the Kiowa Tribe from Oklahoma, and I am currently acting as the deputy bureau director for field operations. So I work with all 12 regions across the country, and I work directly with the Director of Bureau of Indian Affairs, Bruce Loudermilk.

MR. MAHONEY: Good afternoon. My name is Ken Mahoney. I'm with the Bureau of Land Management here in Phoenix, Arizona. I work at the Arizona state office, which is here in downtown Phoenix. I'm the program lead for the national monuments, national conservation areas, wilderness areas, and wild and scenic rivers in Arizona on BLM lands under BLM management.

We have four of the national monuments that are under review here in Arizona. They are Grand Canyon-Parashant National Monument and Vermilion Cliffs National Monument in the northern part of the state in the Arizona Strip district. We have Sonoran Desert National Monument to the southwest of Phoenix, in the Phoenix district. And we also have Ironwood Forest National Monument between Phoenix and Tucson, to the west of I-10, Silver Bell Mountains that is under the management of the Tucson field office, so the Gila district.

So with that, I'll turn it back.

MR. JANSSEN: Thank you.

And before I forget, my name is Miles Janssen. I'm a counselor to the Assistant Secretary of Indian Affairs. I'm an enrolled member of the Tlingit and Haida Indian Tribes of Alaska. I've been in this position since May of 2015.

So with that, I'd like to open it up for any comments from any tribal leaders. And when you speak, if you could just state your name and your tribal affiliation and also if you could spell your name for the court reporter, that will be helpful as well. So thank you.

MR. BEGAYE: Russell Begaye, Navajo Nation. R-u-s-s-e-l-l, B-e-g-a-y-e. And also President of the Navajo Nation.

So I want to make a statement. First of all, I just want to say that the Navajo Nation with the Navajo Nation Council both approve -- it was off.

Russell Begaye, Navajo Nation President. And I want to say that the Navajo Nation, in concert with the Navajo Nation Council, have been supporting Bears Ears through different legal documents that's been passed by the executive branch and also by the legislative branch of the Navajo Nation.

And I want to provide three documentation. One is what we submitted from the Office of the President, Vice President, supporting the designation of Bears Ears as a national monument. And then secondly, which I want to read, is the resolution that was passed by the Navajo Nation Council, where it states, relating to Naabik'i'ya'ti', supporting the proclamation establishing the Bears Ears National Monument by the President of the United States and oppose congressional action to reverse the Presidential proclamation. A statement of policy, enactment of policy of law and intergovernmental agreements, budget resolution, and reallocation must be reviewed and approved by resolution by the appropriate senate committee and the Navajo Nation Council except as otherwise provided.

Talks about the Navajo Nation has a

government-to-government relationship with the United States of America based on treaty of 1868. The Navajo Nation hereby supports the proclamation establishing the Bears Ears National Monument by the President of the United States, attached hereto as exhibit.

Abundant rock art, ancient cliff dwellings, ceremonial sites, and countless other artifacts provide an extraordinary archaeological and cultural record that is important to us all. But most notably, the land is profoundly sacred to many Native American tribes, including the Ute Mountain Ute Tribe, Navajo Nation, Ute Indian Tribe of the Uintah and Ouray, Hopi Nation, and Zuni Tribe. The protection of Bears Ears area will preserve its cultural, prehistoric, and historic legacy and maintain its diverse array of natural and scientific resources, ensure that the prehistoric, historic, and scientific values of this area remain for the benefit of all Americans.

The Bears Ears area has been proposed for protection by members of congress, Secretaries of the Interior, state and tribal leaders and local conservationists for at least 80 years. The Antiquities Act authorizes the President, in his discretion, to declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of

historic or scientific interest that are situated upon lands owned or controlled by the federal government to be national monuments.

The Navajo Nation opposes any further congressional action to reverse the Presidential proclamation in establishing the Bears Ears National Monument. The people of Utah include many Native American tribes, and to undo the designation would not honor the will of the people of Utah. The Navajo Nation finds it in the best interest of the Navajo people to support the proclamation establishing the Bears Ears National Monument by the President of the United States and oppose further congressional action to reverse the Presidential proclamation.

Now, therefore, be it resolved the Navajo Nation hereby authorizes the Navajo Nation President, the Navajo Nation Speaker, the Navajo Nation Chief Justice and their designee to support the proclamation establishing the Bears Ears National Monument by the President of the United States and to advocate support from the 115th Congress and the Trump Administration to oppose further congressional action to reverse the Presidential proclamation.

And by the Speaker of the Navajo Nation Council, he writes: I hereby certify that the foregoing

resolution was duly considered by the Naabik'i'ya'ti' committee at the 23rd Navajo Nation Council at the duly called meeting in Window Rock, Arizona.

So we want to provide this as exhibit to the -- and also we have also for submission comments that were made by Navajo Nation, the Hopi Nation, by the Ute Mountain Ute Tribe, the Ute Indian Tribe, and the Zuni Pueblo. We will submit these three documents.

And I also want to say that as President of the Navajo Nation we offer thanks and sincere appreciation to the designation of Bears Ears as a national monument, which we believe was in response to Navajo and other tribes' request to protect and secure the Bears Ears area for future generations.

The Bears Ears region is a special, distinctive, and significant place to surrounding Tribes as well as our Navajo Nation. The Bears Ears region is important to our Diné culture and traditions that stem from creation of stories since time immemorial. These places, the rocks, the wind, the land, they are living, breathing things that deserve timely and lasting protection.

Our great leader, Manuelito, was born there. My own family lived there. The Bears Ears is a place of safety and fortitude. It is a place where many Navajo

people, including some of my direct ancestors, hid from and survived persecution by the U.S. cavalry during the Long Walk Period.

It brings me great pleasure to know, to say that now I stand here as President of the Navajo Nation and we have worked with the U.S. President, our neighboring tribal nations, and many local individuals who want to see this land protected and saved. It brings me great pleasure -- Navajo Nation is greatly pleased to see that the Bears Ears has become a federally protected national monument. We are happy that we now have this land protected for all future generations, regardless of if they were Navajo, Ute, European-American, American, African-American, or any other group as long as they are Americans and live on this land.

These were some of the concerns that I expressed. My first concern was the land status of the traditional Navajo land was to protect and preserve sacred places for future generations of Navajo people. My second concern was to ensure Navajo people have access to our sacred land to gather ceremonial herbs as well as our -- as for some central foods such as piñons and other -- and other food products. My third concern was to ensure any new designation creates a new paradigm for tribal nation collaborative management to the fullest extent possible

under the law.

Happy to say that this national monument designation addresses each of these three concerns. The land will be protected for generations to come, our Navajo people will have access to the land for traditional purposes, and our Native nations have helped set a new standard for collaborative management at a national monument. We look forward to the day when all future national monuments on Native lands are collaboratively managed with tribes who have historical and current connection to the land.

And I want to acknowledge the Bears Ears Inter-Tribal Coalition for their work. Without this unprecedented coalition of five tribes, who came together to lead this effort, we would not be -- we would not have the designation today. Also want to acknowledge our Navajo Utah Diné Bikéyah, a group of local leaders on the ground in Utah who worked hard to push for conservation and tribal inclusion. And I want to also acknowledge the Utah congressional delegation. We had a few meetings with the representatives who, like us, saw the need to protect and conserve Bears Ears.

And I just want to say that my personal interests began after numerous public hearings were held in Utah. One was at Monticello, where our people

expressed that they believe that it was set aside for tribal leaders or tribal -- Navajo Nation people and other members of different tribes in the area. In that meeting, a lot of prejudices were expressed, discrimination, discriminatory remarks were made towards my people, the Navajo, meaning that they were told if they want to gather firewood, go hunting, they need to -- they have their own land on which to do so and not Bears Ears. And so with those remarks being made, I knew that we needed to stand together as tribes and be able to defend this land that historically has been used by my people, by my family, and also the need to preserve the whole area.

I did -- I had a conversation with the governor of Utah, with congressional leaders about co-managing the area that was designated, and I told them, I said I am willing to support the PLI, public land initiative, sponsored by Utah and their congressional leaders, state leaders, as long as we were talking about co-managing the area.

And when that did not come forward, in fact an advisory council has been set up with ten people with the PLI initiative that provided ten representatives, only one position being Native American. On the designation side, five commissioners, all members of the five tribes that have significant ties to the region, were selected.

We have one representative and an alternate position that now serve as commissioners on the current designation of Bears Ears. And so we feel that we have now direct cooperation with the United States government in co-managing the Bears Ears area.

The amount of land designated by the PLI was as a conservation -- as a conservatory area was 1.2 million. The Presidential designation is at 1.3 million; 100,000 acres separate the two. And so in talking with our congressional leaders on the Utah side, I said you were willing to do 1.2 million with ten advisors, only one Native American. This side is 1.3 million with five commissioners, all of whom are Native Americans.

It's unprecedented to have that kind of an arrangement over a monument that's been designated. That's why we fully support and stand with the designation, because it's for the first time bringing Native Americans to the table to make sure that all cultural artifacts, sacred sites are protected and that we will take steps necessary to make sure that those -- that those sites are protected and preserved for future generations. We have now that opportunity, we now have that authority to do so.

So with that, we, Navajo Nation, with the Navajo Nation Council, stand in support of the

designation. And any designation moving forward should also consider such an arrangement, especially if it impacts Native American historic land areas. When it is designated as such, should be where -- it should be -- should provide an opportunity for local Native American tribes to serve as commissioners, co-managing the area with the federal government.

Thank you.

MR. JANSSEN: Thank you.

MR. MALDONADO: Hello. Chairman Maldonado, Kaibab Band of Paiute Indians.

I had written a letter to Secretary Zinke expressing my concerns regarding his most recent visit to Grand Staircase-Escalante National Monument, Bears Ears National Monument, and their lack of consultation with tribal entities. The following concerns directly address the issues of consultation in accordance with executive orders.

Executive Order 13175 recognizing Tribal sovereignty and meaningful consultation did not happen. So Executive Order 13007, sacred sites, didn't happen. Executive Order 12898, environmental justice for low income and minority communities, didn't happen. Executive Order 12875, federal government to pay for implementation of federal regulations, that's ongoing. Executive

Order 11593, federal entities are to be leaders in the preservation, restoring, and maintaining of federally owned historical, archaeological, and anthropological sites. And then last, Executive Memorandum 4-29-94, ensure that all federal entities recognize and work with tribal entities in a government-to-government relationship and that federal entities work in unison and cooperatively with tribes. His visit to the area didn't include any of those things.

The fact that you want to open the lands to mining, gas exploration, whatever else, that's why the -- you know, the environmental justice, that's where that comes into play. As the President brought out, working with Grand Staircase-Escalante, the Kaibab Band of Paiute Indians have been working cooperatively in a management -- cooperative management situation since '94, '96, somewhere in there. We were one of the original cooperators trying to establish the Grand Staircase-Escalante. We worked cooperatively with the Grand Canyon-Parashants in the management and use of those things.

As the President brought out, not only plants, medicines, minerals, you know, all these things that we have to collect, we have ongoing uranium on the north side. Uranium mining contaminates a lot of things. It is not contained within their boundaries. Because of

the prevailing winds during the different parts of the year, they blow in different directions. It contaminates everything, affects the water table. You know, these are the kinds of things that we need to take into effect. Animals don't understand our artificial barriers.

And Department of Energy, national nuclear security site, says that the meat is okay, but it's just in the bones and the marrow that they have a problem with. We use all of that so it is a problem. Every piece of it we make use of. Those are things -- excuse me. I'm new to this whole government thing. Sometimes my emotions get away.

But as the President brought out, these things are not about us or our family. We have a long history in this area. This is all of our traditional land mass. As Paiutes, we predate the Hopis in this area. They came through our area. That's how far back as Paiutes we go in this area. We have a long history. We were put here from the very beginning. We've always been here. None of our stories tell of us moving other people out. All of our surrounding tribes, they do not have stories of us displacing them in order to gain land, land base. We've always been here.

The fact that you are continuing, Department of the Interior, United States government, the President,

POTUS himself, in doing these things without talking to us, in violation of your trust responsibilities, in violation of all these executive orders and more -- those are just a few main important ones. We can continue to go through the list of them, from waters of the United States to, you know, every single one of your departments has different statutes and secretarial letters, memorandum in your -- in their individual handbooks that deal with consultation, that deal with how you are supposed to talk to us, how you are supposed to treat us, how you are supposed to respect us. The Constitution of the United States says that treaties are the highest law of the land. How can you ignore these things when they are spelled out so plainly, so bluntly for you to look at and to understand?

As always, we don't want to be confrontational because it doesn't do any good, because then we put up walls in between us. What we want is for you to understand and to take a personal responsibility for all of these things because it affects you. As the President brought out, it doesn't make any difference to us what color you are because in reality there's only one race, that's the human race. We are all a part of this creation.

The water affects all of us. What you do up

here in our land is going to go to the Colorado River. How are Vegas, Phoenix, Tucson, California going to exist if all of this is ruined? Those are the things that you need to understand. That's what you are affecting when you're doing these things.

Secretary Zinke said that he would work tirelessly to ensure our public lands are managed and preserved in a way that benefits everyone for generations to come. We want to know is this still true? Does this still hold water? Is this the way he feels? Is he going to live up to his words? Does the President understand what he is asking, what he is trying to do?

The gravity of it all, how can you put money or any type of a value on these things when you are dealing with millions upon millions upon millions of people's lives? The 5, 6 million people in Phoenix, 11 million in Los Angeles. How many more million in Vegas? And those are just the big cities.

We're from a rural community. We understand the value of what community really means. It's not just us. It's all of our neighbors. It's all the towns around us. We can't have economic development without including everybody. We can't have economic security without including everybody, to -- again, how can you put a monetary value on these things? That's what we want you

to think of.

And look at all of your executive orders. Those are your laws that you need to abide by. Look at the Constitution. That is supposed to be the highest legal instrument that the United States revolves around. Pay attention to it, look at it, refer to it, and then come back and speak to us in a way that is meaningful consultation.

In the letter that I had drafted to the Secretary, I asked him specifically to come and speak to us on a government-to-government basis, respecting that trust responsibility and his obligation as a federal representative, speaking for the government. That is his responsibility. He needs to respond to that. You can't do that because you don't have that authority. You're just here taking comments.

But those are the things that we need to get across to you so you can take it back to him. We want you to understand this and take responsibility, personal responsibility for it, because then you can speak with emphasis and passion to let him know how this affects you and your families. If you live here in Phoenix, your families, your children, your grandchildren, that's the way we look at it. Seven generations out, what are we leaving them? That's what we need to think about.

That's why this is so important to us. That's why we struggle with all these things. That's why in Kaibab we work with the federal entities around us, BLM, National Forest Service, National Park Service, all of those entities that are around, even Department of Interior, Department of Defense, we have that relationship with all of those federal entities because we stress that government to government. We stress those executive orders so they understand how we want to be treated with respect.

That's what this is all about, to be approached and spoken to before the decisions are made, not to come and have you dictate to us and then check off the little box that says consultation. That's not the way it works. You speak to us from the beginning, before you make the decisions, and let us have input to help you make the decisions. That's consultation.

Thank you.

MR. JANSSEN: Thank you.

MR. BURSON: Good afternoon. My name is James Burson, B-u-r-s-o-n. I'm with the Pueblo of Laguna, in-house attorney.

I'm here to read to you the comments that we submitted to the Secretary of Interior for the Bears Ears National Monument review. These are from our governor of

the Pueblo of Laguna, Virgil Siow, as follows: Pueblo of Laguna supports President Obama's designation of Bears Ears National Monument and strongly opposes review of the designation as irresponsible and illegitimate for three reasons:

Designation was lawful and correct on the facts in the first place. Neither the President nor the Secretary have a legal basis to make any modifications to the present designation, and the factual basis for this review has been contrived. The Secretary should either withdraw the review or justly conclude that the designation was appropriate.

The Secretary has not implemented President's Executive Order 13972 consistent with applicable law. The order retroactively imposes constraints on prior national monument designations not authorized by the Antiquities Act of 1906 or any other federal law. The order sets forth a policy for future designations or expansions of national monuments under the Antiquities Act. The order aspires that the designations -- the future designations should appropriately balance protection of landmarks, structures, and objects against appropriate use of federal lands and the effects on surrounding lands and communities.

Arguably, the current President has

authority to set policy for how he will treat future national monument designations; however, the President lacks authority to second-guess and modify past designations. Absent any authority, his order directs that the Secretary should conduct a review of national monuments designated after 1995 where the Secretary determines that the designation was made without adequate public outreach and coordination with relevant stakeholders. The Antiquities Act compels no such criterion on national monument designations made by previous presidents, and the current President lacks authority to require the consideration of superimposed standards on previously designated national monuments.

The Antiquities Act does not authorize the President to abolish national monuments after they have been established. Moreover, the Federal Land Policy and Management Act of 1976 restricts the President's and the Secretary's authority over federal lands in this regard by directing that the Secretary shall not modify or revoke any withdrawal creating national monuments under the Antiquities Act. Accordingly, the Secretary's review cannot, consistent with applicable law, proceed as directed by the order, or as interpreted by the docket DOI-2017-002, and should be withdrawn.

Notwithstanding the illegitimacy of the

current review, Bears Ears National Monument designation received an enormous amount of careful consideration, including years of listening to stakeholders. Dozens of community meetings and public discussions were held throughout 2016, including a well attended public meeting with then-Secretary of the Interior Sally Jewell in Bluff, Utah. The final monument designation boundaries are very close to what was proposed in the Utah delegation's public lands initiative and much smaller than the tribally led proposal.

The record of public outreach in coordination with relevant stakeholders amply supports Bears Ears National Monument were it left to this Administration to designate. Bears Ears is a sacred landscape with more than 100,000 Native American cultural sites, dozens of which were looted and desecrated between 2014 and 2015 alone.

The proposal to establish it was developed by a coalition of five sovereign tribal governments, Hopi, Navajo, Ute Mountain, Ute, and Zuni. Perhaps it is because of this unique circumstance that Bears Ears has been singled out for fast-track illegal reconsideration under this Administration; however, that alone was not the sole impetus for the designation.

Bears Ears is also home to scientific

wonders, irreplaceable wildlife and biodiversity, and recreational opportunities that form a vital base to the local economy. That is why Utah citizens, Americans across the country, and many other Indian tribes, like the Pueblo of Laguna, have all agreed it should be protected for future generations.

Most Americans support the protection of public lands. According to a 2016 study from Harvard's Kennedy School of Government, more than 93 percent of the respondents said that historical sites, public lands, and national parks should be protected for current and future generations.

Reducing the size of Bears Ears will primarily benefit the profiteering extractive industries to the detriment of the important qualities intended for protection by the designation. Any change in the monument will benefit abusers who act as though federal public land is their private domain and those who neither respect nor appreciate Bears Ears' irreplaceable aspects. Any reduction in protection will cause irreparable harm and not adhere to the will of the majority, but benefit only an insignificant minority. The Pueblo of Laguna joins with the majority of Americans in western states that support the protection that national monument status affords to Bears Ears.

While the Pueblo of Laguna is not opposed to sensible energy development, we believe Bears Ears National Monument has greater value as protected wildlife, cultural, recreational, and historical resources than any temporary economic gain from mineral resource extraction. Rather than sacrificing this incomparable place for the removal of low quality energy and mineral resources, which exist in abundance elsewhere, the national park quality landscape deserves permanent protection. Thus, the unauthorized review should be withdrawn or, at a minimum, should recommend national park designation by congress.

Respectfully, Virgil Siow, Governor, Pueblo of Laguna.

Thank you.

MR. JANSSEN: Thank you.

MR. FROST: Good afternoon. My name is Kevin R. Frost, F-r-o-s-t, Southern Ute Indian Tribe of Colorado councilmember.

Today I'm going to be speaking again, as well as with everyone here, on the issue of barriers. The Southern Ute Tribal Council are evoking the divine blessing of the Creator upon our efforts and purposes in order to preserve for ourselves and our descendants the inherent sovereign rights of our Indian Nation, rights reserved and secured under Indian treaties and agreements

with the United States, and all other rights and benefits to which we are entitled under the laws and constitution -- law and Constitution of the United States to enlighten the public toward a better understanding of the Southern Ute people to preserve Southern Ute cultural values and otherwise promote health, safety, and welfare of our Southern Ute people. We submit the following:

The Southern Ute Indian Tribe supports keeping Bears Ears a national monument. The Southern Ute supported designating Bears Ears as a national monument because of the three Ute Tribes' historic and current ties to the land, animals, plants, and resources of San Juan County, Utah. The other two Tribes are the Ute Mountain Ute Tribe and the Ute Indian Tribe.

For more than 12,000 years, Bears Ears was the ancestral home to many tribes, including the Utes, Hopi, Acoma, Zia, Jemez Pueblo, and the White Mountain and Jicarilla Apache Tribes, and they continue to assert their enduring use of these lands. Evidence of many Ute teepee rings exist in the area. The Southern Ute connections to the land support Native life and culture in important life-sustaining ways, including subsistence hunting, fishing, and gathering of nature's materials for medicinal, spiritual, and other uses, preservation of Tribal sacred places and as sources of economic

development.

The Presidential proclamation establishing the national monument acknowledges the strong affiliations that various tribes have to this area. Bears Ears is unsurpassed for its integrity and abundance of archaeological resources. Ute oral histories describe the historic presence of bison, antelope, and abundant bighorn sheep which are depicted in the ancient rock art.

Bears Ears has been under threat of cultural vandalism, looting of cultural sites, and indiscriminate off-road vehicle use that damages these sacred sites. To prevent this rapid destruction of lands in southeastern Utah, its importance to Native peoples, formal protection as a national monument is required. Formal protection will provide important consistency and quality to management of these lands and define principles of management that will positively affect Native values on these lands. Designation as a national monument provides the best formal legal protection to manage these lands and to implement management principles in cooperation with tribes that share ancestral and ongoing ties to the region.

An important factor here as well is that no monument designation has ever been rescinded by a president, and there is no reason to start now; therefore,

the Southern Ute Indian Tribe extends its support for the Bears Ears National Monument designation by President Obama that reflects the will and the values of Native peoples whose identities, histories, cultures, and futures are inextricably tied to these lands.

Thank you.

MR. JANSSEN: Thank you.

And if you have any written submissions, you can submit them to us and they will become part of the record as well, just for your information.

MR. MALDONADO: Can I amend my comment also, or add to it, however you want to put it?

MR. JANSSEN: Absolutely.

MR. MALDONADO: Chairman Maldonado again. First name is Roland, R-o-l-a-n-d, last name Maldonado, M-a-l-d, as in David, o-n-a-d-o, Kaibab Band of Paiute Indians.

In listening to this, a lot of them are talking about Bears Ears specifically or Grand Staircase-Escalante. And in the review, understanding is returning control back to or -- control back to local entities, something that needs to be brought out, Utah's charter, when they gained statehood, was that they relinquish any claim to federal lands in perpetuity. They have no right to those lands at all whatsoever. Their

congressional members that brought out the Secretary, it's illegal. They have no right to those lands. That's part of their charter, their state charter. They gave up those rights permanently.

The fact that they would suggest in the media that we are pawns of environmentalists and other specific or specialty groups is an insult to tribal sovereignty. As I brought out, working with Grand Staircase-Escalante before there were any of those issues, that's the reason that we went to fight for a national monument. That goes back to '96, '94. We're still working with these entities.

But I just wanted to bring out Utah has no right to those lands. Even if you rescind the national monument, they still have no right to those lands. They can't go in there and mine and do whatever they want to do. They still have no right to those lands; in perpetuity they gave up any and all claims to those lands.

Thank you.

MR. JANSSEN: Thank you.

Is there anyone else who would like to provide any public comments regarding Executive Order 13792, Review of Designations Under the Antiquities Act?

MR. LOMAYESVA: I'll say something. Hi. My

name is Fred Lomayesva, and I wanted to make a couple comments regarding Bears Ears.

I think that Chairman Honanie and Vice Chairman Lomahquahu would probably agree with me that they supported the designation of Bears Ears and they support the continued designation, that it has dedicated historic and prehistoric sites there. But aside from that, the Hopi also believe that they have a unique or a special relationship with the area as part of our ancestral areas that we migrated through and that evidence of those migrations continue to exist there today.

I think that we join with other tribes in supporting the designation. We believe it has all the factors that would merit it being a national monument, and we believe that it still merits that designation. We would oppose a revision of that designation, and we support its continued designation as a national monument today.

So thank you.

MR. JANSSEN: And what tribe are you with?

MR. LOMAYESVA: Hopi.

MR. JANSSEN: Thank you.

MR. BEGAYE: Again, Navajo Nation President Russell Begaye.

I'd like to say that our team met with

Secretary Zinke in Salt Lake when he came to visit and to specifically discuss Bears Ears, our concerns that he had heard that the supporters of Bears Ears were all from outside the region, that they were non-Indians that were pushing this designation, and we wanted to make sure that we set history straight that it's not outsiders that pushed this.

For 80 years -- I've stated earlier for 80 years the Tribal leaders, working, talking with president after president, congressional leaders after congressional leaders, finally that designation came, and this is why our people are so passionate about keeping the designation as is. And that was with our vice president, Jonathan Nez, our attorney general, and others met with the Secretary.

And then last week once again meeting with the -- with Deputy Secretary Cason I heard again with a delegation from Navajo Nation, again reiterating our position, strong position, to keep the designation. And we also would like to again make a request that a meeting again be held with Secretary Zinke to make sure any statements are being made out there that are untrue be set straight, and let these statements come directly from our tribal leaders. And we would be willing to go to Washington, D.C., or anywhere in the country to meet with

the Secretary to express once again that it is -- that this designation and that this effort is being driven by tribal leaders but not -- and not by outside interests or by non-tribal leaders, but this is -- this goes to the heart of who we are as Indian Nation.

So we appreciate also the multiple public hearings that were held before the designation came about. And so, again, we just make that request that the Secretary opens his door for us to meet with him as tribal leaders once again.

Thank you.

MR. JANSSEN: Thank you.

So there's going to be one additional listening session for this executive order, but it will occur on Monday, June 12th, at 3:00 p.m. to 5:00 p.m. at Mohegan Sun in Connecticut. That will be in conjunction with NCAI's mid-year conference. So there will be one additional listening session on this issue.

If there are -- oh.

MR. WHITE: Hi. Again, respectfully, welcome everybody in the room, and thank you guys for giving us the opportunity to speak with regards to concerns that I have and my people from the Fort Yuma Quechan Indian Tribe have with regards to this executive order.

My name is Willie White. I'm a councilman. I haven't been at this for very long as far as trying to, you know, be in place in leadership with my community. And, you know, I have to ask how long have -- as individuals have you guys been in your capacities as far as the Department and things like that?

MR. JANSSEN: I've been with the Department for the last two years, but have worked in Indian Country for my entire career.

MR. WHITE: Okay.

MS. ORTIZ: I've been with the Bureau of Indian Affairs since 2012 and also have worked in Indian Country for over 20 years. Prior to that I worked in the Indian Health Service and worked directly with law firms and tribes.

MR. MAHONEY: And I've been with the Bureau of Land Management 36 years and have been in the current position as program leader for monuments, conservation areas, wilderness and wild and scenic rivers for about 15 years.

MR. WHITE: Got it. I ask because, you know, it has to bring you guys as much, you know, pain and concern to learn of, you know, these types of attempts or actions with regards to, you know, some of the battles that have been, you know, going on for as long as, you

know, all of us have been -- myself alive and you guys have been, you know, dedicated in your capacities and your positions.

And, you know, I just -- it just makes me concerned, you know, whether -- for the well-being and the future of, you know, all these protected lands that, you know, many of us hold very, you know, dear and close for reasons that need not even be entered into this -- you know, this testimony. But, you know, what does it indicate for the future of, you know, our ability to protect, you know, what is sacred? And, you know, I think that's part of the intention of, you know, this directive, is to, you know, fend off future efforts.

You know, I also find it very concerning and saddening in the fact that, you know, this is a topic that we are discussing at the same time as we are learning of the news of, you know, the climate -- Paris climate agreements and things like that. It just seems like it's just very sad, and I'd like to put that on the testimony, you know, that it's just -- we can't give up.

Thank you.

MR. JANSSEN: Thank you.

So as I mentioned -- oh.

UNIDENTIFIED SPEAKER: I apologize for getting here late. I am guessing that you are taking some

testimony with respect to --

MR. JANSSEN: We're receiving public -- or comments from tribal leaders on Executive Order 13792. This is a listening session on the Interior's review of national monuments under the Antiquities Act.

UNIDENTIFIED SPEAKER: Tribal leaders only?

UNIDENTIFIED SPEAKER: No.

MR. JANSSEN: Yeah, you can come up and make a comment if you would like.

UNIDENTIFIED SPEAKER: Citizen, that's all I am.

MR. JANSSEN: Okay. One moment. Let me check.

So I guess I'll leave this choice up to the tribal leaders in the room if you would like to open this up for other individuals. But if not, you know, this can remain just tribal leaders, I guess.

So this is actually a listening session for tribal leaders. There is an opportunity for the public to submit comments, and we are receiving written comments until July 10th, 2017, on this executive order. This listening session is part of the government-to-government relationship with tribes, and so we, you know, respectfully keep this to just tribal leaders.

So as I mentioned before, there's going to

be one additional listening session on this executive order on June 12th, at the NCAI mid-year convention at Mohegan Sun in Connecticut.

I'd like to thank everyone today. If there are no more tribal leaders who would like to submit comments, I would like to thank everyone today for their participation in this listening session.

This is part of a continuing dialogue between tribes and the federal government, and so, you know, this is a consultation that's on the record. Any statements or documents that were provided are going to become part of the official record and will be reviewed by the Department before any report or recommendation is made to the President.

So with that, I will call this listening session to a close. Thank you very much.

* * * * * * * *

BE IT KNOWN that the foregoing proceedings were taken before me; that the foregoing pages are a full, true and accurate record of the proceedings, all done to the best of my skill and ability; that the proceedings were taken down by me in shorthand and thereafter reduced to print under my direction.

I CERTIFY that I have complied with the ethical obligations set forth in ACJA 7-206(F)(3) and ACJA 7-206 J(1)(g)(1) and (2). Dated at Glendale, Arizona, this 12th day of June, 2017.

_____

KIMBERLY PORTIK, RPR, CRR
Certified Reporter
Arizona CR No. 50149

* * * * * *

I CERTIFY that Canyon State Reporting Services, LLC, has complied with the ethical obligations set forth in ACJA 7-206 (J)(1)(g)(1) through (6).

_____

Canyon State Reporting Services, LLC
Registered Reporting Firm
Arizona RRF No. R1031

Conversation Contents

Vermilion Cliffs AUM Clarification Question

"Fisher, Timothy" <tjfisher@blm.gov>

From:	"Fisher, Timothy" <tjfisher@blm.gov>
Sent:	Thu Jun 22 2017 07:29:35 GMT-0600 (MDT)
To:	Sarah_Cline@ios.doi.gov
CC:	"Moore, Nikki" <nmoore@blm.gov>, "Butts, Sally" <sbutts@blm.gov>
BCC:	kmahoney@blm.gov
Subject:	Vermilion Cliffs AUM Clarification Question

Hi Sarah,

The Arizona Strip experienced a severe drought in 2002. This drought had lasting impacts on the range land conditions, as well as on the overall ranching operations in the area. Many operators voluntarily reduced the number of cattle grazed and sold off cattle during the drought. It takes several years for operators to rebuild their herds back to pre-drought operation levels. This has had an impact on the reduction in the actual billed AUMs in Vermilion Cliffs National Monument.

In addition, four allotments including the Sand Hills, Soap Creek, Lee's Ferry, and Badger Creek allotments were purchased by an individual and subsequently transferred over the years (late 1990s and early 2000s) to the Grand Canyon Trust through the North Rim Ranch. The North Rim Ranch's current management approach is not to run at full authorized AUM numbers. This also contributes to the lower numbers of billed AUMs on these four allotments.

I hope this information answers your questions. If so, I will add this additional information to the Data Summary to provide better clarity on the changes of AUMs in Vermilion Cliffs National Monument.

Please direct any further questions on the Monument Reviews through myself or Nikki Moore.

Thanks,

Timothy J Fisher, Program Lead

National Monuments and Conservation Areas
National Conservation Lands

20 M Street S.E. (wo-410)
Washington DC 20003

202-912-7172 Office
202-604-0706 Cell
202-245-0050 Fax

tjfisher@blm.gov

Conversation Contents

Follow Up Requests on Monument Review

"Fisher, Timothy" <tjfisher@blm.gov>

From:	"Fisher, Timothy" <tjfisher@blm.gov>
Sent:	Wed Jun 21 2017 11:12:56 GMT-0600 (MDT)
To:	"Magee, Gerald J" <gmagee@blm.gov>, Robin Fehlau <rfehlau@blm.gov>, Jaime Tompkins <jtompkins@blm.gov>, Barbara Keleher <bkeleher@blm.gov>, Chad Schneckenburger <cschneckenburger@blm.gov>, Kenneth Mahoney <kmahoney@blm.gov>, McKinney Briske <mbriske@blm.gov>, Michael Sintetos <msintetos@blm.gov>, Mark Conley <mconley@blm.gov>, "Ginn, Allison" <aginn@blm.gov>
CC:	"Butts, Sally" <sbutts@blm.gov>
Subject:	Follow Up Requests on Monument Review

All

Just a note on addressing questions from DOI on the Monument Review.

The DOI Review Team's chain of command is to run all additional questions or needed information through BLM WO-400. There has been a few instances where DOI went directly to the State level. If this occurs please let me know and when you respond please respond directly to me and Sally Butts. Then we will forward the information up to DOI.

WO-410 needs to stay fully engage in the Monument Review Process. This will allow WO-410 to know what questions are being asked, to assure questions are being answered fully and consistently, the appropriate additional information is being provided, and the appropriate files are being updated in the shared google docs folder. Finally, I and Sally are trying to eliminate requests to the field that can be answered here.

Again, I appreciate all your hard work on the Monument Review Data Call.

Thanks,

Timothy J Fisher, Program Lead

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National Conservation Lands

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Washington DC 20003

202-912-7172 Office
202-604-0706 Cell
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tjfisher@blm.gov

Conversation Contents

Question on Grazing AUMs billed - Vermilion Cliffs

Attachments:

/25. Question on Grazing AUMs billed - Vermilion Cliffs/2.1 Grazing AUMs Permitted and Billed_VCNM.xlsx
/25. Question on Grazing AUMs billed - Vermilion Cliffs/6.1 Grazing AUMs Permitted and Billed_VCNM.xlsx

"Cline, Sarah" <sarah_cline@ios.doi.gov>

From:	"Cline, Sarah" <sarah_cline@ios.doi.gov>
Sent:	Tue Jun 20 2017 09:35:28 GMT-0600 (MDT)
To:	Kenneth Mahoney <kmahoney@blm.gov>
Subject:	Question on Grazing AUMs billed - Vermilion Cliffs

Hi. I am looking at the grazing data for VCNM and have a question about the billed AUMs. There is a large decrease in billed AUMs beginning in 2003, driven largely by a decrease for the Sand Hills bill allotment. Do you have any additional information on the reason for that decrease in AUMs billed?

Thanks,
Sarah

Sarah Cline, Ph.D.
Economist
Office of Policy Analysis
U.S. Department of the Interior
1849 C St. NW, MS-3530
Washington, DC 20240
202-208-6018
Sarah_Cline@ios.doi.gov

"Mahoney, Kenneth" <kmahoney@blm.gov>

From:	"Mahoney, Kenneth" <kmahoney@blm.gov>
Sent:	Tue Jun 20 2017 11:17:55 GMT-0600 (MDT)
To:	Brandon Boshell <bboshell@blm.gov>
CC:	Lorraine M Christian <lmchrist@blm.gov>, Amanda Harrington <asharrin@blm.gov>, Karen McKinley <kmckinley@blm.gov>
Subject:	Fwd: Question on Grazing AUMs billed - Vermilion Cliffs
Attachments:	Grazing AUMs Permitted and Billed_VCNM.xlsx

Brandon,

This question is coming to us as a follow-up to the information provided for the executive order monuments review. The question from Sarah Cline appears to relate to the "Grazing AUMs Permitted and Billed" spreadsheet that is in the VCNM Google Drive Folder. Since not everyone has access to the Google Drive Folder, I have downloaded the spreadsheet into an Excel file and attached it to this email.

Please look at the question in her email and provide information to explain the decreases. I will forward the information to her after I receive it. Thanks,

Ken Mahoney <> Program Lead:
National Monuments <> National Conservation Areas
Wilderness <> Wild & Scenic Rivers
Arizona State Office <> Bureau of Land Management
602-417-9238 <> kmahoney@blm.gov

---------- Forwarded message ----------
From: **Cline, Sarah** <sarah_cline@ios.doi.gov>
Date: Tue, Jun 20, 2017 at 8:35 AM
Subject: Question on Grazing AUMs billed - Vermilion Cliffs
To: Kenneth Mahoney <kmahoney@blm.gov>

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202-208-6018
Sarah_Cline@ios.doi.gov

"Boshell, Brandon" <bboshell@blm.gov>

From:	"Boshell, Brandon" <bboshell@blm.gov>
Sent:	Tue Jun 20 2017 14:59:59 GMT-0600 (MDT)
To:	"Mahoney, Kenneth" <kmahoney@blm.gov>
CC:	Lorraine Christian <lmchrist@blm.gov>, Amanda Harrington <asharrin@blm.gov>, "Mckinley, Karen" <kmckinley@blm.gov>
Subject:	Re: Question on Grazing AUMs billed - Vermilion Cliffs

Ken,

There are two answers to your question. The first answer, is that the Arizona Strip had a very large drought in the 2002 period. This had lasting effects on the rangeland as well as ranching operations. Many operators voluntarily reduced numbers and sold cattle. When situations like this happens it takes some operators many years to build their herds back up. In addition to the drought, the Sand Hills, Soap Creek, Lee's Ferry and Badger Creek allotments were purchased by an individual and subsequently transferred over the years (late 90's early 2000's) to another entity (The Grand Canyon Trust) through North Rim Ranch who take conservation use and do not run at full numbers, not because of a BLM decision to do so.

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> Sarah_Cline@ios.doi.gov

--
Brandon E. Boshell
Assistant Field Manager / Vermilion Cliffs National Monument Manager
BLM - Arizona Strip Field Office
(435) 688-3241

"Mahoney, Kenneth" <kmahoney@blm.gov>

From:	"Mahoney, Kenneth" <kmahoney@blm.gov>
Sent:	Tue Jun 20 2017 15:25:33 GMT-0600 (MDT)
To:	"Boshell, Brandon" <bboshell@blm.gov>
CC:	Lorraine Christian <lmchrist@blm.gov>, Amanda Harrington <asharrin@blm.gov>, "Mckinley, Karen" <kmckinley@blm.gov>
Subject:	Re: Question on Grazing AUMs billed - Vermilion Cliffs

Brandon,

Thanks for the quick reply and the information addressing the question of the decrease in AUMs billed. I'll be forwarding this information to WO monuments & conservation areas program lead Tim Fisher.

Tim and I spoke on the phone and he had not been aware of this additional information request. He is going to put out a notice to state leads, and perhaps NM and NCA managers as well, to let him know if any further monuments review information requests go directly out to the field from the department. He'll also let his supervisors know. If you do receive some direct contact requesting more information and it doesn't appear that I'm aware of the request, please also let me know about that.

Thanks again for your good work.

Ken

On Tue, Jun 20, 2017 at 1:59 PM, Boshell, Brandon <bboshell@blm.gov> wrote:

> Ken,
>
> There are two answers to your question. The first answer, is that the Arizona Strip had a very large drought in the 2002 period. This had lasting effects on the rangeland as well as ranching operations. Many operators voluntarily reduced numbers and sold cattle. When situations like this happens it takes some operators many years to build their herds back up. In addition to the drought, the Sand Hills, Soap Creek, Lee's Ferry and Badger Creek allotments were purchased by an individual and subsequently transferred over the years (late 90's early 2000's) to another entity (The Grand Canyon Trust) through North Rim Ranch who take conservation use and do not run at full numbers, not because of a BLM decision to do so.
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> Sarah Cline, Ph.D.
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> Sarah_Cline@ios.doi.gov

--

Brandon E. Boshell
Assistant Field Manager / Vermilion Cliffs National Monument Manager
BLM - Arizona Strip Field Office
(435) 688-3241

"Boshell, Brandon" <bboshell@blm.gov>

From:	"Boshell, Brandon" <bboshell@blm.gov>
Sent:	Tue Jun 20 2017 15:27:47 GMT-0600 (MDT)
To:	"Mahoney, Kenneth" <kmahoney@blm.gov>
Subject:	Re: Question on Grazing AUMs billed - Vermilion Cliffs

Thanks. I will continue to run everything through you.

On Tue, Jun 20, 2017 at 3:25 PM, Mahoney, Kenneth <kmahoney@blm.gov> wrote:

> Brandon,
>
> Thanks for the quick reply and the information addressing the question of the decrease in AUMs billed. I'll be forwarding this information to WO monuments & conservation areas program lead Tim Fisher.
>
> Tim and I spoke on the phone and he had not been aware of this additional information request. He is going to put out a notice to state leads, and perhaps NM and NCA managers as well, to let him know if any further monuments review information requests go directly out to the field from the department. He'll also let his supervisors know. If you do receive some direct contact requesting more information and it doesn't appear that I'm aware of the request, please also let me know about that.
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"Mahoney, Kenneth" <kmahoney@blm.gov>

From:	"Mahoney, Kenneth" <kmahoney@blm.gov>
Sent:	Wed Jun 21 2017 11:54:31 GMT-0600 (MDT)
To:	Sally Butts <sbutts@blm.gov>, Timothy Fisher <tjfisher@blm.gov>
CC:	Karen McKinley <kmckinley@blm.gov>
Subject:	Fwd: Question on Grazing AUMs billed - Vermilion Cliffs
Attachments:	Grazing AUMs Permitted and Billed_VCNM.xlsx

Sally and Tim,

Please see the email from Vermilion Cliffs NM Manager Brandon Boshell responding to the question from Sarah Cline in her email. Brandon's response has not been sent to Ms. Cline. I'm forward Brandon's response to you for editing and preparing a response to her. Let me know if you need any additional information. I'm attaching the "Grazing AUMs Permitted and Billed" spreadsheet that is in the VCNM Google Drive Folder for quicker access to the information Ms. Cline referred to in her question. Just as some background information for you, the Grand Canyon Trust North Rim Ranches that Brandon mentions are highlighted on their website at the link.

Ken

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From: **Boshell, Brandon** <bboshell@blm.gov>
Date: Tue, Jun 20, 2017 at 1:59 PM
Subject: Re: Question on Grazing AUMs billed - Vermilion Cliffs
To: "Mahoney, Kenneth" <kmahoney@blm.gov>
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From: **Cline, Sarah** <sarah_cline@ios.doi.gov>
Date: Tue, Jun 20, 2017 at 8:35 AM
Subject: Question on Grazing AUMs billed - Vermilion Cliffs
To: Kenneth Mahoney <kmahoney@blm.gov>

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Sarah_Cline@ios.doi.gov

--
Brandon E. Boshell
Assistant Field Manager / Vermilion Cliffs National Monument Manager
BLM - Arizona Strip Field Office
(435) 688-3241

Sum of Billed AUMs		Fee Year																								
Bill Allotment Numbe	Bill Allotment Name	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
AZ04847	BUNTING WELL									348	553	639	250	482	513	483	530	476	408	398	430	445	305	538	435	295
AZ05327	COYOTE	479	881	1113	998	1190	1168	1487	1506	1161	1265	754	10		1	1582	834	578	1348	826	632	864	820	922	924	714
AZ05328	SAND HILLS	12294	10341	12740	13645	13045	12462	14749	13598	11631	10223	8905	3936		11	454	3588	4024	4662	5878	1209	2162	2332	2727	702	1734
AZ05331	HOUSE ROCK	563	530	972	943	859	1448	1384	1451	1260	1319	1086	247	292	457	393	594	603	903	619	757	1240	1417	1514	1424	1499
AZ05332	SOAP CREEK	5110	6887	5421	3977	3877	4452	4433	5984	4624	4382	3810	1576			1321	2437	2123	1925	2359	1929	1331	1363	1643	1560	671
AZ05336	FERRY SWALE	909	979	1062	1285	920	1331	1559	1765	1176	1202	919	699	813	1151	799	1023	1267	944	904	1277	1255	1469	1594	1300	225
AZ05337	LEE'S FERRY	204																								
AZ05341	BADGER CREEK	18				10	21							93						7						
AZ05350	SIGNATURE ROCK	256	229	151	166	101	255	296	415	280	491	41	25	144	189	295	325	500	174	268	359	70	259	281	339	
Grand Total		19833	19847	21459	21014	20002	21137	23908	24719	20480	19435	16154	6743	1824	2322	5327	9331	9571	10364	11259	6593	7367	7965	9219	6684	5138

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	A small portion of these allotments are located within the VCNM with the rest of the allotment located in the Arizona Strip Field Office or Utah. AUMs were billed as a whole for the allotment which the above numbers represent. The reported AUMs do not differentiate between offices.
	No grazing was billed in the Lee's Ferry Allotment since 1992. The allotment is located in Paria Canyon and was made unavailable to grazing in the Record of Decision and Resource Management Plan dated January 29, 2008.

Sum of AUMs Permitted		Fee Year																						
Allotment Number	**Bill Allotment Name**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
AZ04847	BUNTING WELL					1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320
AZ05327	COYOTE	2060	2060	2060	2060	2060	2060	2060	2060	2060	2060	2060	2060	2060	2060	2060	2060	2060	2060	2060	2060	2060	2060	2060
AZ05328	SAND HILLS	15081	15081	15081	15081	15081	15081	15081	15081	15081	15081	15081	15081	15081	15081	15081	15081	15081	15081	15081	15081	15081	15081	15081
AZ05331	HOUSE ROCK	1755	1755	1755	1755	1755	1755	1755	1755	1755	1755	1755	1755	1755	1755	1755	1755	1755	1755	1755	1755	1755	1755	1755
AZ05332	SOAP CREEK	6405	6405	6405	6405	6405	6405	6405	6405	6405	6405	6405	6405	6405	6405	6405	6405	6405	6405	6405	6405	6405	6405	6405
AZ05336	FERRY SWALE	1818	1818	1818	1782	1677	1677	1677	1677	1677	1677	1677	1677	1677	1677	1677	1677	1677	1677	1677	1677	1677	1677	1677
AZ05337	LEE'S FERRY	540	540	540	540	540	540	540	540	540	540	540	540	540	540									
AZ05341	BADGER CREEK					93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93
AZ05350	SIGNATURE ROCK	382	382	382	382	382	382	382	382	382	382	382	382	382	382	382	382	382	382	382	382	382	382	382
Grand Total		**28041**	**28041**	**28041**	**28005**	**29313**	**29313**	**29313**	**29313**	**29313**	**29313**	**29313**	**29313**	**29313**	**29313**	**28773**	**28773**	**28773**	**28773**	**28773**	**28773**	**28773**	**28773**	**28773**

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	A small portion of these allotments are located within the VCNM with the rest of the allotment located in the Arizona Strip Field Office or Utah. AUMs were permitted as a whole for the allotment which the above numbers represent. The reported AUMs do not differentiate between offices.
	No grazing occurred in the Lee's Ferry Allotment since 1992. The allotment is located in Paria Canyon and was made unavailable to grazing in the Record of Decision and Resource Management Plan signed January 29, 2008.
	Missing or incomplete information.
	Land exchange resulting in a 36 AUM reduction.
	Reduction in AUMs due to Utah State Land exchange.

Sum of Billed AUMs		Fee Year																								
Bill Allotment Numbe	Bill Allotment Name	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
AZ04847	BUNTING WELL									348	553	639	250	482	513	483	530	476	408	398	430	445	305	538	435	295
AZ05327	COYOTE	479	881	1113	998	1190	1168	1487	1506	1161	1265	754	10		1	1582	834	578	1348	826	632	864	820	922	924	714
AZ05328	SAND HILLS	12294	10341	12740	13645	13045	12462	14749	13598	11631	10223	8905	3936		11	454	3588	4024	4662	5878	1209	2162	2332	2727	702	1734
AZ05331	HOUSE ROCK	563	530	972	943	859	1448	1384	1451	1260	1319	1086	247	292	457	393	594	603	903	619	757	1240	1417	1514	1424	1499
AZ05332	SOAP CREEK	5110	6887	5421	3977	3877	4452	4433	5984	4624	4382	3810	1576			1321	2437	2123	1925	2359	1929	1331	1363	1643	1560	671
AZ05336	FERRY SWALE	909	979	1062	1285	920	1331	1559	1765	1176	1202	919	699	813	1151	799	1023	1267	944	904	1277	1255	1469	1594	1300	225
AZ05337	LEE'S FERRY	204																								
AZ05341	BADGER CREEK	18				10	21							93						7						
AZ05350	SIGNATURE ROCK	256	229	151	166	101	255	296	415	280	491	41	25	144	189	295	325	500	174	268	359	70	259	281	339	
Grand Total		19833	19847	21459	21014	20002	21137	23908	24719	20480	19435	16154	6743	1824	2322	5327	9331	9571	10364	11259	6593	7367	7965	9219	6684	5138

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Sum of AUMs Permitted		Fee Year																						
Allotment Number	**Bill Allotment Name**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
AZ04847	BUNTING WELL					1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320
AZ05327	COYOTE	2060	2060	2060	2060	2060	2060	2060	2060	2060	2060	2060	2060	2060	2060	2060	2060	2060	2060	2060	2060	2060	2060	2060
AZ05328	SAND HILLS	15081	15081	15081	15081	15081	15081	15081	15081	15081	15081	15081	15081	15081	15081	15081	15081	15081	15081	15081	15081	15081	15081	15081
AZ05331	HOUSE ROCK	1755	1755	1755	1755	1755	1755	1755	1755	1755	1755	1755	1755	1755	1755	1755	1755	1755	1755	1755	1755	1755	1755	1755
AZ05332	SOAP CREEK	6405	6405	6405	6405	6405	6405	6405	6405	6405	6405	6405	6405	6405	6405	6405	6405	6405	6405	6405	6405	6405	6405	6405
AZ05336	FERRY SWALE	1818	1818	1818	1782	1677	1677	1677	1677	1677	1677	1677	1677	1677	1677	1677	1677	1677	1677	1677	1677	1677	1677	1677
AZ05337	LEE'S FERRY	540	540	540	540	540	540	540	540	540	540	540	540	540	540									
AZ05341	BADGER CREEK					93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93
AZ05350	SIGNATURE ROCK	382	382	382	382	382	382	382	382	382	382	382	382	382	382	382	382	382	382	382	382	382	382	382
Grand Total		**28041**	**28041**	**28041**	**28005**	**29313**	**29313**	**29313**	**29313**	**29313**	**29313**	**29313**	**29313**	**29313**	**29313**	**28773**	**28773**	**28773**	**28773**	**28773**	**28773**	**28773**	**28773**	**28773**

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