



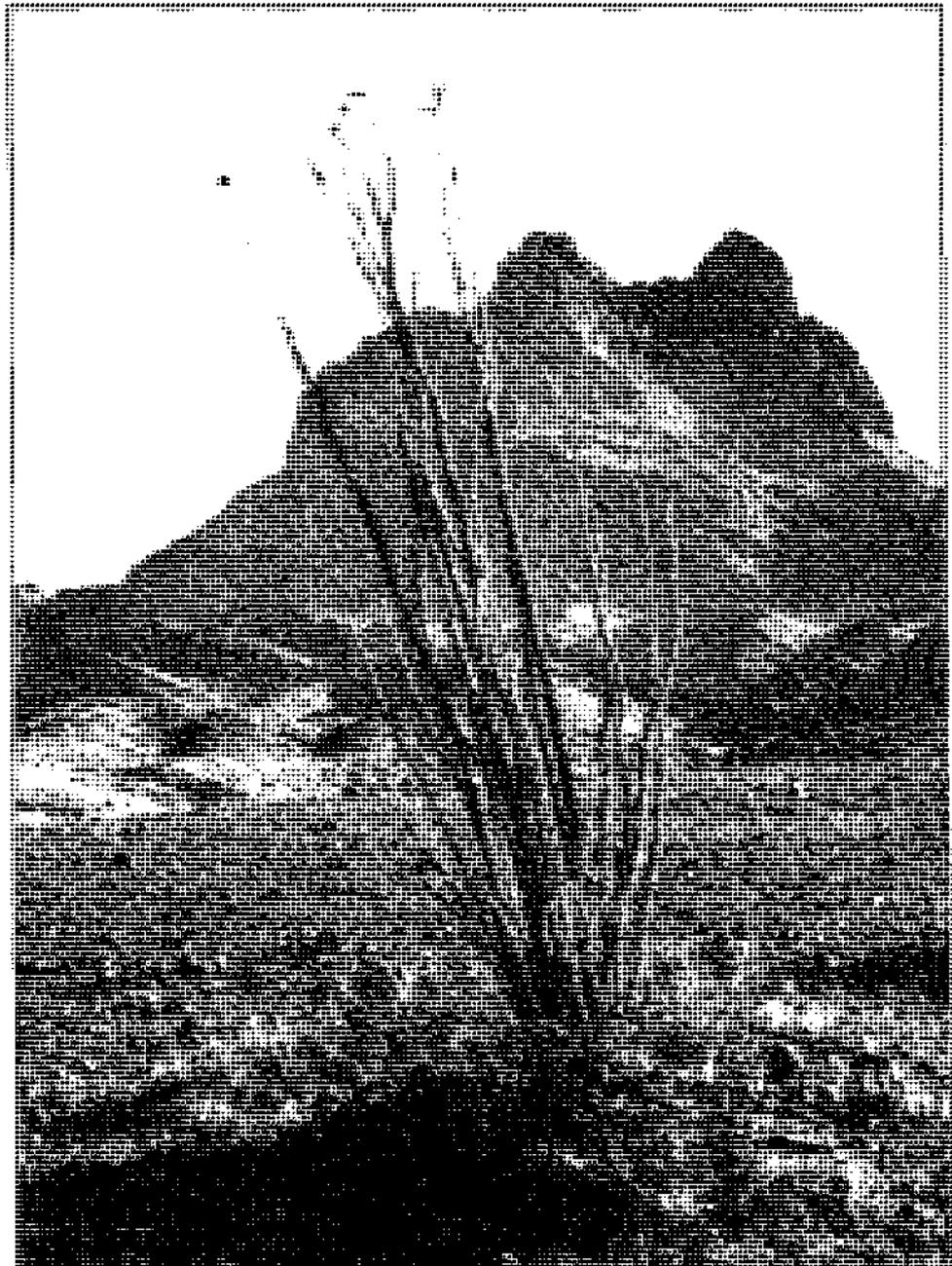
U.S. Department of the Interior
Bureau of Land Management
Arizona State Office

Yuma Resource Area

September 1994



Muggins Mountains Wilderness Management Plan, Environmental Assessment, and Decision Record



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BLM/AZ/PL-94/010+4332

Muggins Mountains Wilderness Management Plan and Environmental Assessment

U. S. Department of the Interior

Bureau of Land Management

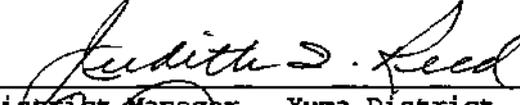
Yuma District

Yuma Resource Area

Yuma County, Arizona

EA Number: EA-AZ-055-94-39

Recommended by:  8/18/94
Area Manager, Yuma Resource Area Date

Recommended by:  8/18/94
District Manager, Yuma District Date

Approved by:  8-26-94
State Director, Arizona Date
(Acting)

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Part I — Introduction

Plan Purpose

This plan will provide direction for management of the Muggins Mountains Wilderness (the wilderness) over the next 10 years. Management direction will be guided by: the Arizona Desert Wilderness Act of 1990 (the Wilderness Act); the Wilderness Act of 1964; Bureau of Land Management (BLM) Manual 8560; and Title 43, Code of Federal Regulations, Subpart 8560 (43 CFR 8560).

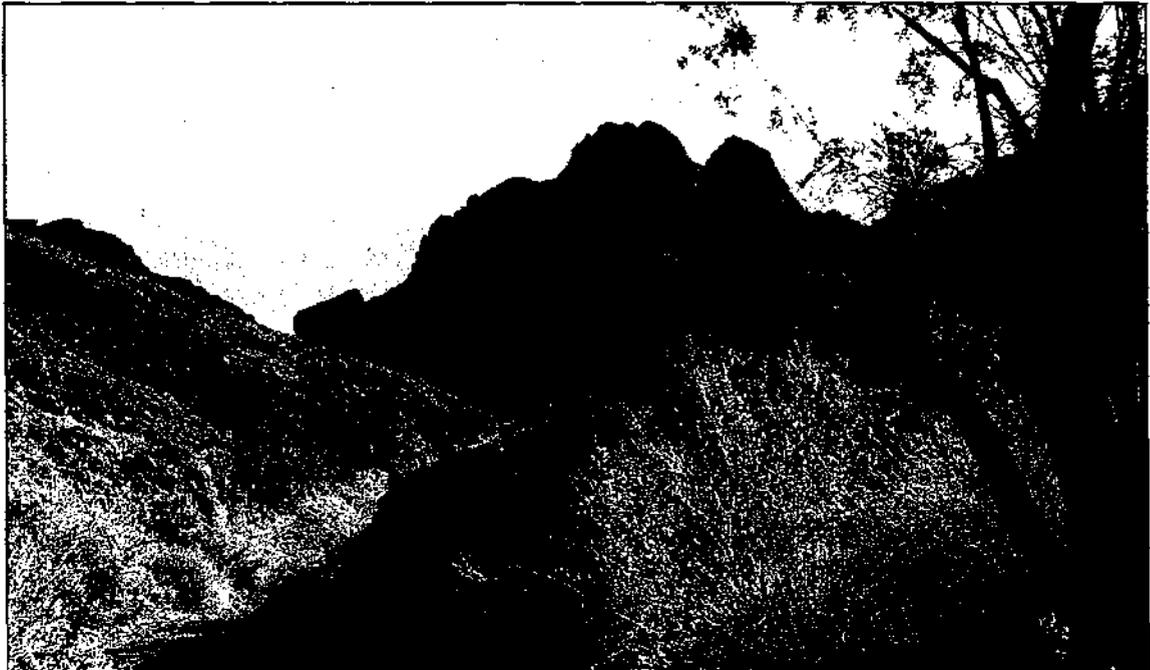
The Yuma District Resource Management Plan (1987), and the Yuma District Wilderness Environmental Impact Statement (1989), specify that site specific wilderness management plans be developed to cover each designated wilderness area. The Muggins Mountains Wilderness Management Plan conforms with both land use planning documents and with the requirements of the Federal Land Policy and Management Act (FLPMA) of 1976 (43 U.S.C. 1701, *et seq.*) that provide for the protection of public land resources and values.

This is an interdisciplinary plan that amends all previous planning direction for this planning area. Specifically, this plan amends and supersedes the portions of the following plans that address the planning area:

- Yuma District Interim Guidance for Fire Suppression in Wilderness Areas (1992)
- Yuma Resource Area Wildlife Operations and Maintenance Plan (1993)
- Cibola-Trigo Horse and Burro Herd Management Area Plan (1980)
- Laguna-Martinez Habitat Management Plan (1987)

Any future planning effort whose sphere of influence includes the area covered by the Muggins Mountains Wilderness Management Plan shall address the provisions of this document and become an amendment thereto.

The nonwilderness corridor in Muggins Wash is included in the planning area because it is a logical part of the ecological unit covered by the wilderness. Management of the



A view of the top of Muggins Peak from Muggins Wash.

nonwilderness corridor will be guided by the provisions of FLPMA. It is to be noted that the nonwilderness corridor will not be managed under the more restrictive rules and policies that apply to wilderness.

Planning Area Overview

Location

Covering nearly 12 square miles (7,674 acres), the Muggins Mountains Wilderness is located approximately 1 1/2 miles north of the Gila River segment that flows through the Dome Valley (Map 1) in Yuma County, Arizona. The northern boundary of the wilderness is adjacent to the U. S. Army, Yuma Proving Ground. The area is within a 1/2 hour drive east of Yuma. Yuma has a year-round population of approximately 75,000 and a winter population of approximately 130,000.

In January 1992, a cadastral survey of the wilderness boundary was completed. Brass caps with the National Wilderness Preservation System symbol have been placed along the boundary. Carsonite posts have also been used to mark the wilderness perimeter.

Access

The Muggins Mountains Wilderness can be accessed by turning north off Interstate 8 approximately 15 miles east of Yuma at the Dome Valley exit. From the Dome Valley Road proceed north across the Gila River on County Avenue 20E. Turning east on County 7th Street will lead to the main wilderness access point at Muggins Wash. A nonwilderness corridor in Muggins Wash extends approximately 1 1/2 miles into the wilderness and ends within 1/2 mile of Muggins Peak. From County 7th Street, a 1/4 mile road segment crosses private land where there is currently no legal public access to the nonwilderness corridor.

The eastern portion of the wilderness can be accessed by turning east from County

Avenue 20E to County 9th Street and proceeding for approximately 6 1/2 miles. At this point, a vehicle way runs in a northwesterly direction for approximately 3 1/2 miles and ends near the area where Morgans Wash enters the wilderness.

Ownership and Land Uses

The BLM administers all land immediately adjacent to the wilderness except for private land in the southwest portion, a 1/4 mile segment of land withdrawn by the Bureau of Reclamation next to the southernmost wilderness boundary and the U. S. Army Yuma Proving Ground along the north. Between 1952 and 1981, the planning area was withdrawn for military use as part of the Yuma Proving Ground. There are no State or private surface or subsurface inholdings or utility rights-of-way within the wilderness.

General Management Situation

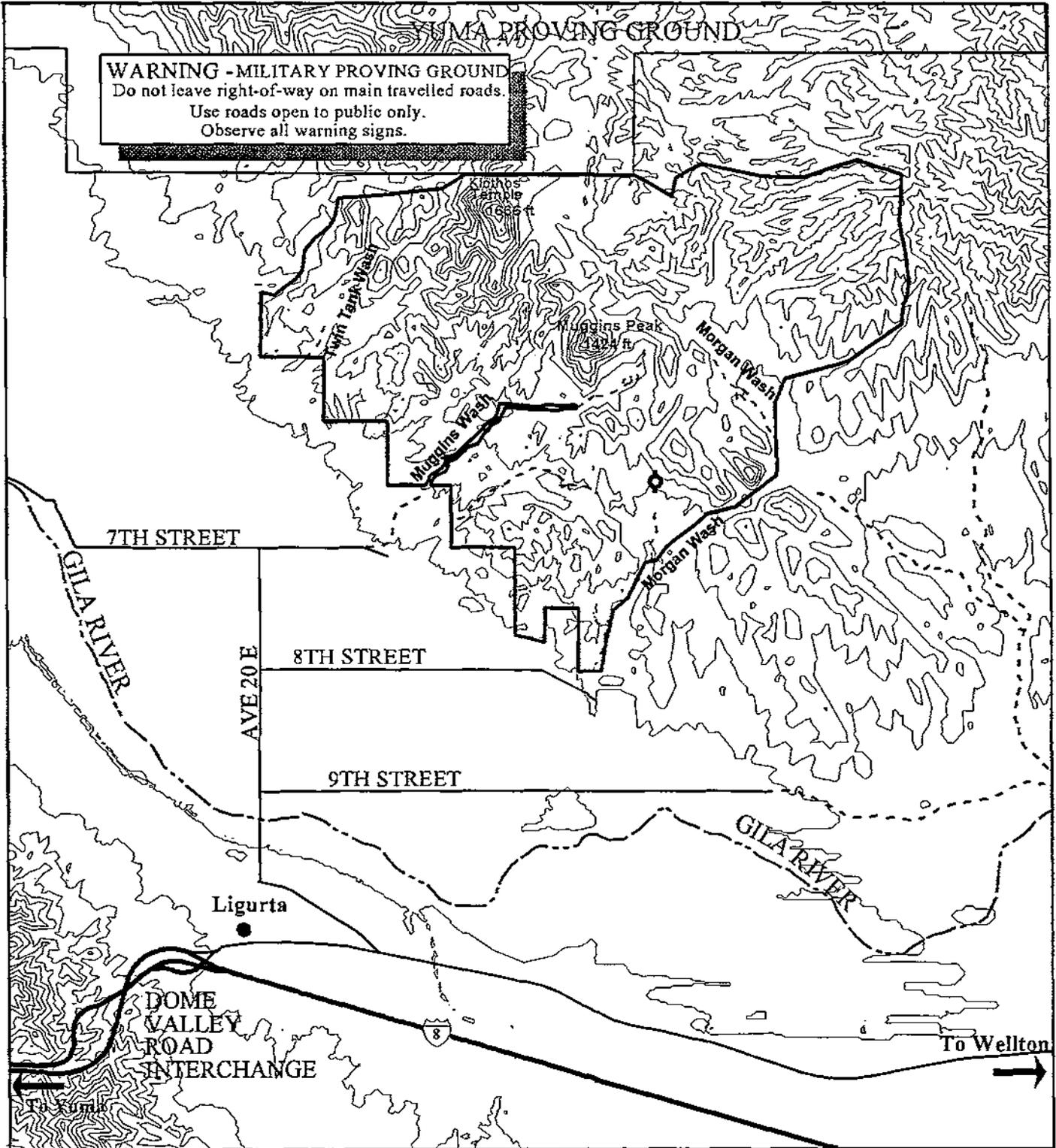
Topography

Several rugged peaks which include Klothos Temple, Muggins Peak, and Long Mountain are prominent in the northwest and southern portion of the area. Twin Tanks Wash, West Wash, and Muggins Wash, along with other deeper drainages, cut between the peaks. Northeast of Morgans Wash the area consists of rolling hills divided by a complexity of shallow drainages. Elevations range from 200 feet near the southernmost portion of the wilderness area to 1,666 feet at Klothos Temple.

Climate

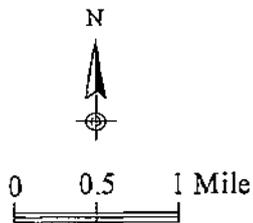
The planning area is characterized by the Tropical-Subtropical Desertland climatic zone and is included within the Lower Colorado River Valley subdivision of the Sonoran Desert. Temperatures range from near 30° F. in the months of December and January to approximately 115° F., during July through September. Annual precipitation generally ranges from 2 to 4 inches per year.

MUGGINS MOUNTAINS WILDERNESS



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
YUMA DISTRICT OFFICE
YUMA RESOURCE AREA
AUGUST 1994

MAP 1



Legend	
	Wilderness Boundary
	Gila River
	Roads
	Interstate Highway
	Trails
	Pothole Contour Lines
	Catchment



Air

The planning area is classified under the Clean Air Act as Class II. No site-specific air quality data exist for the Muggins Mountains. Agricultural aerial chemical applications and dust from soil preparations for crop production on private lands close to the wilderness boundary may affect air quality in the planning area.

Flights over the Muggins Mountains by crop dusters have been documented since wilderness designation. In the event of an accidental spill or other mishap by this type of aircraft, there would be a high potential for soil, water, and air contamination.

Soils

There are two major soil complexes within the planning area. The predominant soil is a Ligurta-Cristobal Complex. These soils are deep, well drained, strongly saline on old alluvium and terraces, and exhibit varnished gravel, or desert pavement, on the surface. The other major soil complex is the Laposas-Rock Outcrop Complex. Rock outcrop typically makes up 25 percent of this complex. The Laposas Soil Series is moderately deep and well drained, with surface textures of extremely gravelly loams. Typically, 75 percent of the surface is covered with pebbles and cobbles. The drainages and associated flood plains are Carrizo, very gravelly sand. These are deep, excessively drained soils.

Permeability on the Ligurta-Cristobal Complex is moderately slow. Surface runoff is rapid, but erosion hazard is slight. The slight erosion hazard is attributable to gravels armor the surface and existing through the profile. The Laposas soil is moderately permeable with rapid surface runoff. Due to the steep slopes this soil occurs on, it has a slight to moderate erosion hazard. The Carrizo soil has very rapid permeability and surface runoff is slow except during heavy rainfall. Available water capacity is low and there is a high erosion hazard with heavy rainfall.

Large areas of the wilderness, especially low terraces along drainage channels, are cov-

ered with basalt pebbles in a thin desert pavement layer. A dark patina formed from metallic oxides coats the exposed desert pavement and most rock surfaces that have not been disturbed. Surface disturbances become very prominent when lighter colored stone facings are exposed.

Water

There are no springs or other permanent natural water sources within the wilderness. Several natural potholes provide wildlife water for several months after substantial rain. The Muggins Tinaja water catchment project provides a more reliable source of wildlife water. A Federal reserve water right was established for the project with the Arizona Desert Wilderness Act of 1990.

Naturalness

The wilderness is natural appearing. There are, however, several areas where the soil has been disturbed by mining activities and a quarry operation. Most of the mining disturbances are located in areas adjacent to the nonwilderness corridor in Muggins Wash and continue beyond the nonwilderness corridor to the east side of Muggins Peak. The quarry site is located in the next major drainage southwest of Muggins Wash (Map 2) near the center of the SE 1/4 of section 13, Township 8 South, Range 20 West.

Other less noticeable surface disturbances consist of former vehicle routes and less noticeable mineral exploration activities. Map 2 shows the location of mining disturbances in the wilderness.

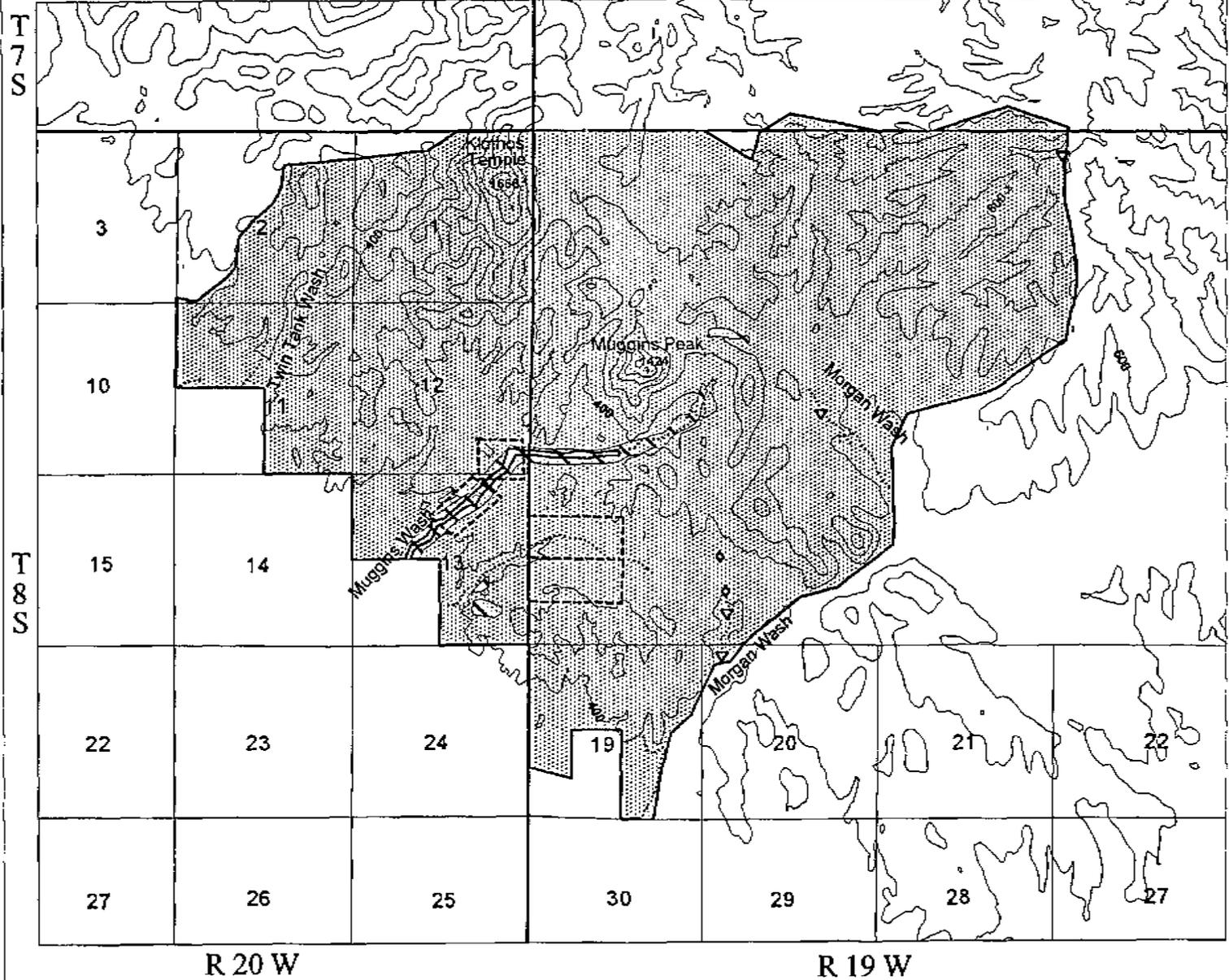
Minerals

The Muggins Mountains Wilderness was withdrawn from mineral entry in November 1990, through wilderness designation. As of July 21, 1994, four active mining claims were listed within the wilderness.

Map 2 indicates the mining claim locations. Since wilderness designation in 1990, minerals validity examinations have been conducted on mining claims under three proposed Mining Plans of Operations in the wilderness.

Muggins Mountains Wilderness

Disturbances, Developments and Mining Claims



Legend

- Closed Vehicle Way
- Wilderness Boundary
- ▨ Mining Disturbance
- ▭ Other Disturbance
- ▨ Wilderness Area
- ▭ Mining Claims
- ▽ Campfire Ring
- ♠ Pothole Catchment



LOCATION DIAGRAM

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
STMA DISTRICT OFFICE

MARCH 1991
MAP 2



Based on conclusions of the validity examinations, the plans of operations were rejected and contests were issued against the 11 claims involved.

Vegetation

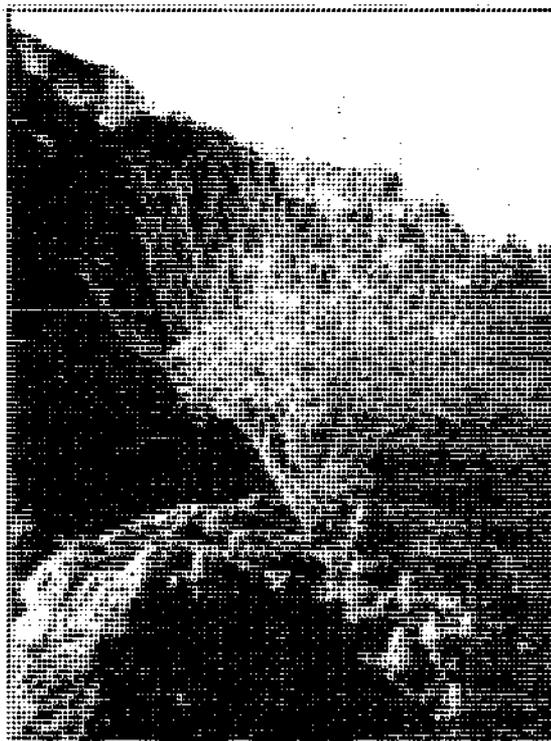
Vegetation components in the area have been affected primarily by the forces of nature and are characterized by minimal species diversity and low productivity. Fire has never played a role in this vegetation type. Since this is not a fire dependent ecosystem, vegetation would be slow to recover from a fire. Vegetative cover is sparse over most of the area, and consists primarily of creosote (*Larrea tridentata*) and bursage (*Ambrosia dumosa*) in association with brittlebush (*Encelia farinosa*). Palo verde (*Cercidium* spp.), ironwood (*Olneya tesota*), smoke tree (*Dalea spinosa*), and desert lavender (*Hyptis emoryi*) can be found in the washes. Other plant species include a scattering of ocotillo (*Fouquieria splendens*) and saguaro (*Carnegiea gigantea*).

An inventory for special status plants was conducted in 1987 and none were found. However, the planning area contains potential habitat for the special status cactus species, Wiggins cholla (*Opuntia wigginsii*), and barrel cactus (*Ferocactus acanthodes* var. *acanthodes*).

Exotic plant species in the area include red brome (*Bromus rubens*) and Mediterranean grass (*Schismus barbatus*). These two annual grasses are ubiquitous throughout the region and would be impossible to eradicate. In the past, tamarisk seedlings (*Tamarix* spp.) have been removed from a pothole, (natural depression in wash bottom or exposed bedrock that holds rain water for periods varying from several days to several months) located approximately 1/4 mile south of the Muggins Tinaja Project. Currently, there is no tamarisk within the wilderness.

Wildlife

Wildlife species include coyotes (*Canis latrans*), mule deer (*Odocoileus hemionus*),



Brittlebush.

and cottontails (*Sylvilagus auduboni*). The bighorn sheep (*Ovis canadensis*) population is estimated to be 15. These sheep are part of a larger herd outside the planning area. Suitable habitat is also provided for the gila monster (*Heloderma suspectum*) and several special status species which include the spotted bat (*Euderma maculatum*); Loggerhead shrike (*Lanius ludovicianus*); ferruginous hawk (*Buteo regalis*); Rosa boa (*Lichanura trivirgata*); California leaf-nosed bat (*Macrotus californicus*); Yavapai Arizona pocket mouse (*Perognathus amplus amplus*); chuckwalla (*Sauromalus obesus*), and desert tortoise (*Gopherus agassizii*). There is also habitat suitable for the endangered Peregrine falcon (*Falco peregrinus anatum*).

Wildlife management includes two elements. These elements are wildlife habitat management and wildlife population management. A Master Memorandum of Understanding (MOU) between the State of Arizona, Arizona Game and Fish Commission (AGFC), and Department of the Interior, BLM, was developed in 1987 to address wildlife management responsibilities for each

agency. The BLM is responsible for wildlife habitat management and the Arizona Game and Fish Department (AGFD), under authority of the AGFC, is responsible for wildlife population management.

The MOU states that "management emphasis will be on the management of wilderness areas as wilderness, as opposed to the management of a particular resource." The BLM and AGFC also agreed that "all management activities within wilderness will be done without motor vehicles, motorized equipment, or mechanical transport unless such means is the minimum necessary to accomplish the task as determined by the Wilderness Manager." A Wildlife Operations and Maintenance Plan (WOMP) was developed to address wildlife management actions in the interim until this wilderness management plan was completed. For the Muggins Mountains Wilderness, the WOMP addressed aircraft operations and maintenance of the sole existing wildlife development in the area. The AGFD has maintenance responsibilities for the Muggins Tinaja.

In previous years, water augmentation has been necessary at the Muggins Tinaja water catchment project during the summer. The use of motorized vehicles and equipment within the wilderness for water supplementation at the catchment has been avoided by setting up a 1/2 mile portable hose lay from equipment staged at the wilderness boundary to a natural pothole located approximately 1/4 mile south of the Muggins Tinaja.

Additional activities conducted by AGFD include one low-level aerial survey for bighorn sheep every other year. The surveys have occurred between October 1 and November 30.

Livestock Grazing

Grazing of domestic cattle does not occur in the wilderness. The area is not within a BLM grazing allotment.

Burros

The western portion of the planning area is within the Cibola-Trigo Herd Management Area. No evidence has been observed indicating year round burro use. However, in the past, problem burros have been gathered on farmland in Dome Valley, which indicates that the planning area has been used as a travel route between the Yuma Proving Ground and Dome Valley farmlands. Historically, use in this area has been primarily transient and seasonal.

Visitor Use

There are less than 600 recreation visitors to the area annually. The use is divided evenly among the wilderness and nonwilderness corridor. Most recreation visitor use in the wilderness consists of day hikers. There is little evidence of any significant camping activity, although a few campfire rings were found during the planning inventory. The locations of the campfire rings are noted on Map 2.

Overnight camping does occur in the planning area and in the vicinity of the wilderness. It occurs primarily within the Muggins Wash nonwilderness corridor and just outside the wilderness boundary in Morgans Wash.

Drywashing for gold from alluvial soils as a recreational activity increased substantially in the wilderness during the winter of 1993-1994. The increase in this activity resulted when a prospectors guide published information about three mining claims located within the wilderness. This has resulted in surface disturbance and impacts to wilderness values.

Currently, information available for the public at the wilderness includes boundary signs that assist in defining the wilderness boundary. In addition, there is an informational display located outside the wilderness boundary at the nonwilderness corridor entry to provide general information. Some off-site information is available through the Yuma District Office.

Cultural Resources

Cultural resources include Native American trails, sleeping circles, and message stone alignments. Sleeping circles, trails, game blinds, and other evidence indicates that the wilderness served as a hunting site and travel route for Native Americans. There is no evidence that Native Americans ever constructed village sites within the planning area. No cultural properties of religious or traditional cultural importance to Native Americans have been identified.

Rock terraces, northeast of Muggins Peak, are an example of mining operations that probably occurred during the 1930's Great Depression.



A view into the wilderness from the Muggins Wash nonwilderness corridor.

Fire

There are no records of fire incidents within the planning area. Fuels are sparse to none in most areas. Drainages contain most of the vegetation which is mostly not continuous. While there is a very slight possibility of fires occurring in major drainages, there is also a very low risk of fire damage to wilderness resources.

Law Enforcement and Emergency Services

Minor motorized vehicle violations have occurred in the area (approximately ten annually). Vehicles driven beyond the Muggins Wash nonwilderness corridor on an old vehicle route slow natural revegetation. At the point where Morgans Wash leaves the wilderness, vehicles have been driven up the wash on several occasions into the wilderness.

There are no records of incidents requiring the use of emergency services in the planning area. Military explosive ordnance disposal units have conducted at least two surface sweeps to address concerns of ordnance contamination. Department of Defense officials are not willing to attest that the Muggins Mountains were not contaminated during military activities in the early 1940's. There may be a slight possibility of ordnance contamination that would require emergency actions for public safety if discovered.

Nonwilderness Corridor

Two active mining claims that extend into the wilderness are located within the nonwilderness corridor. Placer mining activities currently occur within the portions of these claims that are not within the wilderness. The easternmost 1/2 mile segment of the nonwilderness corridor was placer mined and reclaimed prior to enactment of the Arizona Desert Wilderness Act of 1990.

Part II — National Wilderness Management Goals

Four standard management goals have been established by the BLM for its designated wilderness areas. The goals are as follows:

1. To provide for the long-term protection and preservation of the area's wilderness character under a principle of non-degradation. The area's natural condition, opportunities for solitude, opportunities for primitive and unconfined types of



A lone saguaro watches over the wilderness.

recreation, and any ecological, geological, or other features of scientific, educational, scenic, or historical value present will be managed so that they will remain unimpaired.

2. To manage the wilderness area for the use and enjoyment of visitors in a manner that will leave the area unimpaired for future use and enjoyment as wilderness. The wilderness resource will be dominant in all management decisions where a choice must be made between preservation of wilderness and visitor use.
3. To manage the area using the minimum tool, equipment, or structure necessary to successfully, safely, and economically accomplish the objective. The chosen tool, equipment, or structure should be the one that least degrades wilderness values temporarily or permanently. Management will seek to preserve spontaneity of use and as much freedom from regulation as possible.
4. To manage nonconforming but accepted uses permitted by the Wilderness Act and subsequent laws in a manner that will prevent unnecessary or undue degradation of the area's wilderness character. Nonconforming uses are the exception rather than the rule; therefore, emphasis is placed on maintaining wilderness character.

Part III — Issues

In the scoping process, wilderness management issues were identified by Yuma Resource Area and Yuma District staff. The resulting list of issues was presented to the public through a mailing, the news media, and at a public meeting in Yuma. Members of the public were encouraged to submit issues of concern that they wanted to have addressed.

Identified issues are separated into three main categories: Activity Plan Issues, Issues Solved Through Policy, and Issues Beyond the Scope of This Plan (A, B, and C, respectively, below). Following is the final list of issues that resulted from the scoping process.

A. Activity Plan Issues

1. **Long-Term Protection of Wilderness Values.** The Wilderness Act provides for the long-term preservation of wilderness values. Decisions will be made to answer the following questions:
 - How will boundaries be managed to prevent illegal vehicle use?
 - How will mineral extraction as a recreational activity be managed?
 - To what extent are visitor facilities (trail heads, informational displays, trails, and parking lots) needed to protect wilderness values?
 - Will tamarisk be allowed to become established?
2. **Maintenance of Outstanding Opportunities for Solitude.** Several actions in the area could reduce opportunities for solitude. Decisions will be made to answer the following questions:
 - What actions are needed to maintain solitude?
 - What is the effect of activities in the Muggins nonwilderness corridor on opportunities for solitude? How will activities in the corridor be managed?
- How will low-altitude civilian aircraft overflights, including crop-dusting aircraft, be managed?
3. **Maintenance of Wildlife Facilities.** Activities associated with the maintenance of this development could affect wilderness values and opportunities. The following questions will be addressed:
 - How will the Muggins Tinaja water catchment project be maintained?
 - How can the development be modified to restore visual qualities in the area?
4. **Legal Public Access.** Legal public access is lacking where the most visitor use occurs within the planning area. What action is needed to provide legal public access at Muggins Wash?
5. **Cultural Resources.** The planning area contains cultural resources and the plan will address the following questions:
 - How will prehistoric resources be managed?
 - How will historic resources be managed?
6. **Surface Disturbances.** There are several vehicle ways and a quarry site that affect the area's naturalness. Decisions will be made to answer the following questions:
 - How will the impact of these disturbances be minimized?
 - Which rehabilitation efforts will have the highest priorities?
7. **Wild Burros.** Currently there is no evidence that burros are established in the area. Concerns have been raised about the possible impact on water, vegetation, and soils if burros become established as a resident population. How will burros be managed?

8. **Fire Management.** Fire incidents have never been recorded for the planning area. Decisions will be made to address the following:

- How will fire be managed to maintain natural values?

9. **Nonwilderness Corridor.** A nonwilderness corridor provides access and opportunities for recreation, but use of the corridor could impact wilderness values of the surrounding area. How will the corridor be managed?

B. Issues Solved Through Policy

1. **Law Enforcement and Emergency Services.** Wilderness management policy and regulations (BLM Manual 8560.39 and 43 CFR 8560.3) provide for emergency law enforcement access in the event of fugitive pursuit or to address health and safety concerns during emergencies. Historically, there have been no law enforcement problems in the Muggins Mountains Wilderness that have required mechanized or motorized access. In the unlikely event of a problem, existing policy guidance is adequate.

2. **Location of Wilderness Boundary.** A cadastral survey of the wilderness was completed in 1992. The boundary is monumented in the ground with brass caps. Standard BLM wilderness boundary signs posted along the wilderness boundary assist the wilderness visitor in identifying where wilderness restrictions apply.

3. **Military Ordnance Contamination.** Due to previous military use, there is a slight possibility of ordnance contamination. At least two surface sweeps were conducted by explosive ordnance disposal units. There are no records of ordnance

being found in the wilderness. In the unlikely event that unexploded ordnance is discovered, the Department of Defense will be contacted to remove it using the minimum tool required for the task in accordance with BLM Manual 8560.13.

4. **Threatened, Endangered, or Candidate Species.** Desert tortoise, chuckwalla, and the Gila monster may occur in the area. These species and any other candidate species will be managed under existing policy in BLM Manual 8560.34.

5. **Widespread Exotic Vegetation.** Exotic species, red brome, and Mediterranean grass, are widely dispersed through the area. Removal of these exotic grasses is not ecologically or economically feasible.

6. **Minerals Management.** There is no current mining activity in the wilderness area. Management of ongoing mining activities in the nonwilderness corridor will be guided by the mining regulations at 43 CFR 3809. Management of any future mining in the wilderness will be guided by 43 CFR 3809 and 8560.

7. **Bighorn Sheep.** There are approximately 15 bighorn sheep in the Muggins Mountains. If the population increases in numbers, or if other specific management actions are necessary, the sheep would be managed in cooperation with the AGFD in accordance with BLM Manual 8560.34 and the MOU between AGFC and the BLM.

8. **Scientific Use of Cultural Resources.** Cultural Resources having scientific value are allocated to scientific use. Proposals for study will be authorized on a case by case basis guided by existing policy in BLM Manual 8560.32 and subject to compliance with section 106 of the National Historic Preservation Act of 1966.

C. Issues Beyond the Scope of this Plan

1. **New Powerline Developments in the Utility Corridor Along the North Boundary.** This proposed development is outside the planning area and is not addressed in this plan.
2. **Air Space Management.** Military flight restrictions are addressed in the Arizona Desert Wilderness Act of 1990. The Act states: "Nothing in this title shall preclude low level overflights of military aircraft, the designation of new units of special airspace, or the use or establishment of military flight training routes over wilderness areas designated by this title." The Yuma Resource Area will continue to cooperate with the military in seeking mutually beneficial opportunities to protect the integrity of wilderness airspace.
3. **Civilian Aircraft Overflights.** Military airspace restrictions north and south of the Muggins Mountains Wilderness limit alternatives for civilian flight routes

between Yuma and Phoenix. Flights higher than 2000 feet above ground level are within Federal Aviation Administration guidelines for civilian flights over wilderness areas.



A 6-foot tall desert milkweed.

Part IV — Wilderness Management Program

Introduction

In this section, objectives are established to address activity plan issues. Management actions to meet national wilderness management goals and plan objectives are outlined. Target dates to accomplish the proposed actions are assigned. Monitoring will be conducted to gauge the effectiveness of outlined management actions and to determine if plan objectives are being met.

A rationale is included immediately below several items in this section to provide additional clarification.

Objectives

Objective 1

Maintain or enhance the wilderness values of naturalness, outstanding opportunities for solitude and primitive recreation, and special features in the Muggins Mountains Wilderness by:

- Reducing unauthorized vehicle use from approximately ten violations annually to zero by 1995.
- Restricting mineral extraction as a recreational activity by the end of 1994.
- Minimizing the impacts of recreational use disturbances through the life of the plan.
- Minimizing low-level aircraft use by 1995.
- By 1997, improving water holding capacity and minimizing visual impacts of the Muggins Tinaja water catchment in the SW 1/4 NW 1/4 of section 17, Township 8 South, Range 19 West.
- Avoiding human impacts to cultural resources while making them available for recreation enjoyment through interpretation.

- By the year 2000, reducing visual impacts of 4 miles of vehicle route scars and of the quarry located in the S 1/2 SE 1/4 of section 13, Township 8 South, Range 20 West. Areas receiving the most visitor use will have the highest priority for rehabilitation.
- Preventing the establishment of a resident wild burro population.
- Preventing the establishment of the exotic plant species tamarisk.
- Managing fire to maintain the area's natural values.

Rationale. Objective 1 above addresses activity plan issues 1, 3, 5, 6, 7, and 8, part of 2, and national wilderness management goals 1, 2, and 3 (in Part II of this document). Implementing this objective will assure long-term preservation of the area's wilderness values.

Management Actions

1. By 1995, barricade the east end of the nonwilderness corridor in the SW 1/4 SE 1/4 of section 7, Township 8 South, Range 19 West.
2. By the end of 1994, construct an information display outside the wilderness boundary in the SW 1/4 NW 1/4 of section 16, Township 8 South, Range 20 West, near the point where Morgans Wash exits the wilderness.
3. During 1995, place a barricade where Morgans Wash exits the wilderness in the SW 1/4 NW 1/4 of section 16, Township 8 South, Range 19 West.
4. In areas along the wilderness boundary where illegal vehicle entry problems may develop, the first course of action will be to increase patrols and signing along the

wilderness boundary. If increased patrols and signing are not effective in ending the illegal entry problem, an increased law enforcement effort will be required. Physical barriers will be placed at the wilderness boundary as a resource protection measure if a sustained law enforcement presence is required. Wooden posts and cable will be the preferred materials for constructing barriers.

5. Restrict the use of dry washers, rocker boxes, and similar devices for recreational mineral extraction within the wilderness portion of the planning area following procedures outlined in 43 CFR 8364. Allow hobby mineral collecting (BLM Manual 8560.31.E). No digging or prying tools such as shovels or rock hammers will be permitted for hobby mineral collecting.

Rationale. In reference to hobby mineral collecting, BLM 8560.31.E states: "Limit such use to hand methods or detection equipment that does not cause surface disturbance, such as a metal detector or Geiger counter. In addition, methods must not be permitted that in any way adversely affect or degrade the wilderness resource or the experiences of visitors in the area."

Recreational mineral extraction activities using dry washers have caused surface disturbance and impacts to wilderness values. Opportunities for these activities occur in nonwilderness public lands throughout Arizona.

6. At a minimum, monthly wilderness patrols will be conducted. Boundary signs, information displays, and the traffic counter will be maintained as needed.
7. No recreational facilities, including trails, will be constructed within the wilderness. Campfire rings discovered during wilderness patrols will be removed and the area rehabilitated.

Rationale. Recreational facilities, including trails, are not needed. Naturalness and primitive recreation opportunities would be diminished with construction of such facilities. Any signing or information needed to manage the area will be located outside the wilderness.

8. By the end of 1994, develop educational materials about "Leave No Trace", "Tread Lightly" visitor ethics, and appropriate use of cultural resources for the informational displays in the SW 1/4 NW 1/4 of section 16, Township 8 South, Range 19 West, and in the NW 1/4 of section 13, Township 8 South, Range 20 West, at the beginning of the nonwilderness corridor.
9. All BLM flights, with the following exceptions, shall be at least 2,000 feet above ground level (AGL). Fire monitoring flights shall be at least 1,000 feet AGL. Low-level helicopter flights may be conducted for burro census and capture operations.
10. In accordance with the MOU with AGFC, conduct one low-level bighorn sheep monitoring flight between October 1 and November 30 every other year.
11. Seek compliance with the Federal Aviation Administration advisory on airspace over wilderness so that all civilian overflights are at least 2,000 feet AGL.

Rationale. This action not only will improve opportunities for solitude, but it will also reduce the potential for an accidental chemical spill by crop dusting aircraft.

12. By the end of 1997, seal the Muggins Tinaja Project dam to increase water holding capacity and modify the tinaja to prevent wildlife entrapment. Use sealant and mortar colors that blend in with the background. Place rocks to reduce visual contrasts of the dam and gabion.

Rationale. Management action 12 will provide a safe year-round water source for bighorn sheep while minimizing the visual impacts of the Muggins Tinaja Project.

13. Allocate the historic mining-related rock terraces to public use and interpret through informational displays and public contacts.
14. By the year 2000, rehabilitate the quarry site in the southwest portion of section 13, Township 8 South, Range 20 West. Rehabilitation will include removing the stairstep contours. Allow the use of explosives and power drills to place explosives. Use the minimum number of charges and amount of explosive to accomplish the project.
15. Allow natural rehabilitation of the following three vehicle routes:
 - 3/4 mile at the upper end of Morgans Wash in the SE 1/4 of section 8 and the NE 1/4 NE 1/4 of section 16, Township 8 South, Range 19 West.
 - 1/2 mile in the SW 1/4 of section 19, Township 8 South, Range 19 West.
 - 1/2 mile in the N 1/2 of section 11, Township 8 South, Range 20 West.
16. By the end of 1996, use hand tools to minimize the visual impact of 1 1/4 miles of miscellaneous disturbances along the nonwilderness corridor in the S 1/2 of section 7, Township 8 South, Range 19 West, and in the SE 1/4 SE 1/4 of section 12, and the N 1/2 of section 13, Township 8 South, Range 20 West.
17. By the end of 1997, place obstructions and use hand tools to minimize the visual impact of 3/4 mile of former vehicle route that extends beyond the nonwilderness corridor in the SE 1/4 of section 7 and the W 1/2 of section 8, Township 8 South, Range 19 West.
18. During 1998, use hand tools to minimize the visual impact of 1/2 mile of former vehicle route to the Muggins Tinaja project in the SW 1/4 of section 17 and the NW 1/4 NW 1/4 of section 20, Township 8 South, Range 19 West.
19. In 1999, use hand tools to minimize the visual impact of 1 1/2 miles of former vehicle route in the wash southeast of Muggins Wash in the E 1/2 of section 13, Township 8 South, Range 20 West, and section 18, Township 8 South, Range 19 West.
20. Conduct a wild burro census every 3 years. Remove burros that have established identified home ranges in the planning area. Helicopter landings may be permitted for capture operations.

Rationale. Historic data does not indicate year round or significant seasonal use of the wilderness by burros. Because of a lack of habitat components to support a resident herd, burros could become dependent on adjacent farmland crops. Burros will be removed pending completion of necessary inventories and monitoring. Monitoring will determine an appropriate management level for a thriving natural ecological balance.
21. Remove exotic tamarisk. Chemicals may be authorized in accordance with BLM Manual 8560.34.
22. Reported fires will be monitored by air with minimum altitudes of 1000 feet AGL, or by foot access. Fires that exceed or are expected to exceed a 5 chain per hour rate of spread will be suppressed. Use nonmotorized hand tools for suppression activities. Complete the rehabilitation of disturbances caused by fire suppression activities in accordance with BLM Manual 8560.35, before suppression forces are released.

Rationale. There is no history of fires in the area. Plant communities within the planning area are not fire adapted. Suppressing fires that exceed a 5 chain per hour rate of spread will protect wilderness resources.

Monitoring

1. During routine wilderness patrols, inspect the area to monitor for evidence of burro establishment, newly developed campsites, and the presence of tamarisk.
2. Conduct monthly inspections of vehicle barriers to monitor their adequacy and to ensure the continued deterrence of vehicle violations.

Objective 2

Acquire legal public access to the Muggins Wash nonwilderness corridor by 1997.

Rationale. This objective addresses activity plan issue 4, part of issue 9, and national wilderness management goals 1 and 2 which are listed in Part II of this plan. Meeting this objective would also eliminate the potential for a loss of access to the portion of the planning area where most visitor use occurs.

Management Action

Acquire legal access to the Muggins Wash nonwilderness corridor by the end of 1997.

Monitoring

No monitoring is needed for the proposed action in objective 2.

Rationale. Monitoring for completion of the proposed action in this objective will be accomplished during annual plan evaluations.



A globemallow finds a place among the cliffs.

Objective 3

Minimize impacts from the Muggins Wash nonwilderness corridor to the surrounding wilderness while maintaining recreational opportunities.

Rationale. This objective addresses part of activity plan issue 2, issue 9 and national wilderness management goals 1, 2, and 3 listed in Part II of this document. Additionally, this objective ensures that persons seeking primitive recreation will continue to have that opportunity within the planning area. The Yuma District maintains developed recreation sites at nearby locations for other recreation alternatives.



A narrow portion of Muggins Wash within the wilderness.

Management Actions

1. A visitor register and traffic counter will be located at the information display on the access route to Muggins Wash by the end of 1994. Promote "Tread Lightly" land use ethics for nonwilderness corridor.

Rationale. In conjunction with a traffic counter, the register will provide information about visitor use in the nonwilderness corridor that will assist in determining future management actions for this portion of the planning area. Additionally, this will provide visitors with a continuing opportunity to be involved in making recommendations for future management of the area.

2. Review the need to maintain vehicular access in the nonwilderness corridor every 3 years.

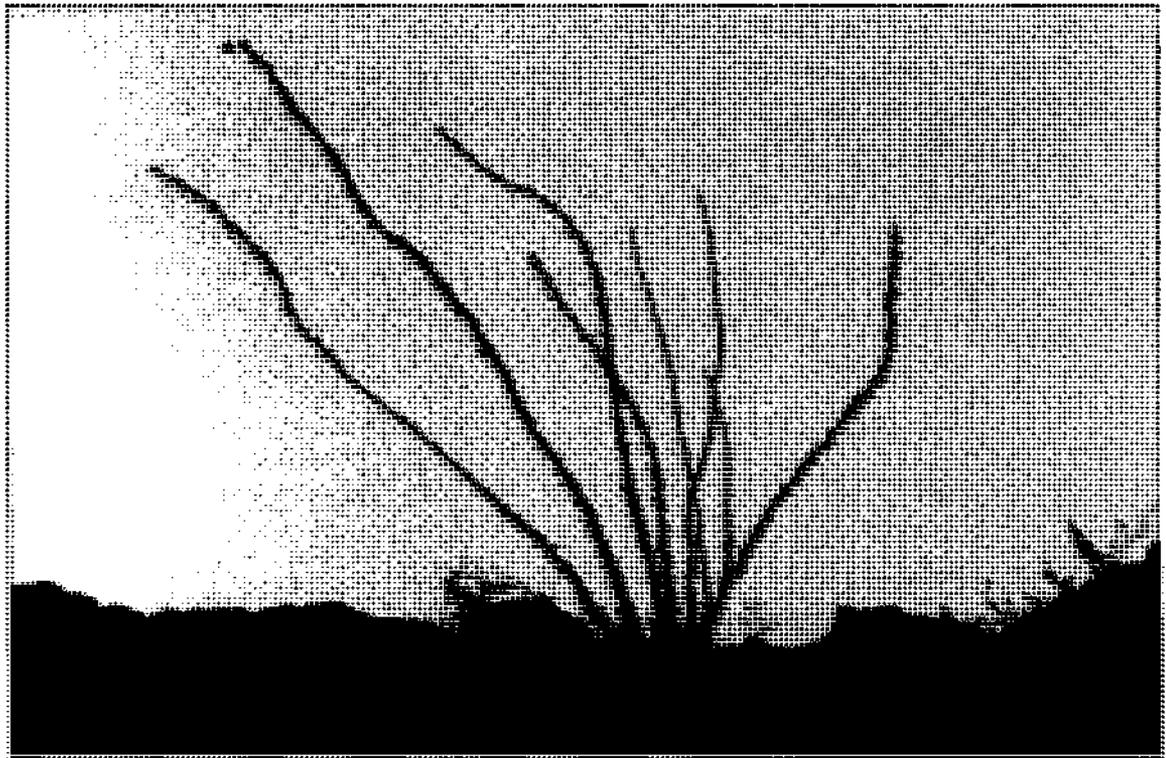
Monitoring

Consolidate visitor register and traffic counter information. Use this information, along with field notes and other input, to review the need to maintain vehicular access in the nonwilderness corridor.

Part V — Plan Evaluation

The Yuma Resource Area will conduct annual evaluations of the plan to:

1. Document completed management actions and adjust schedules for the following year if necessary.
2. Monitor to determine if plan objectives are being met.
3. Recommend new management actions if needed.
4. Determine if the plan needs to be revised.
5. Needed revisions will amend the plan and be available for public review before being implemented.

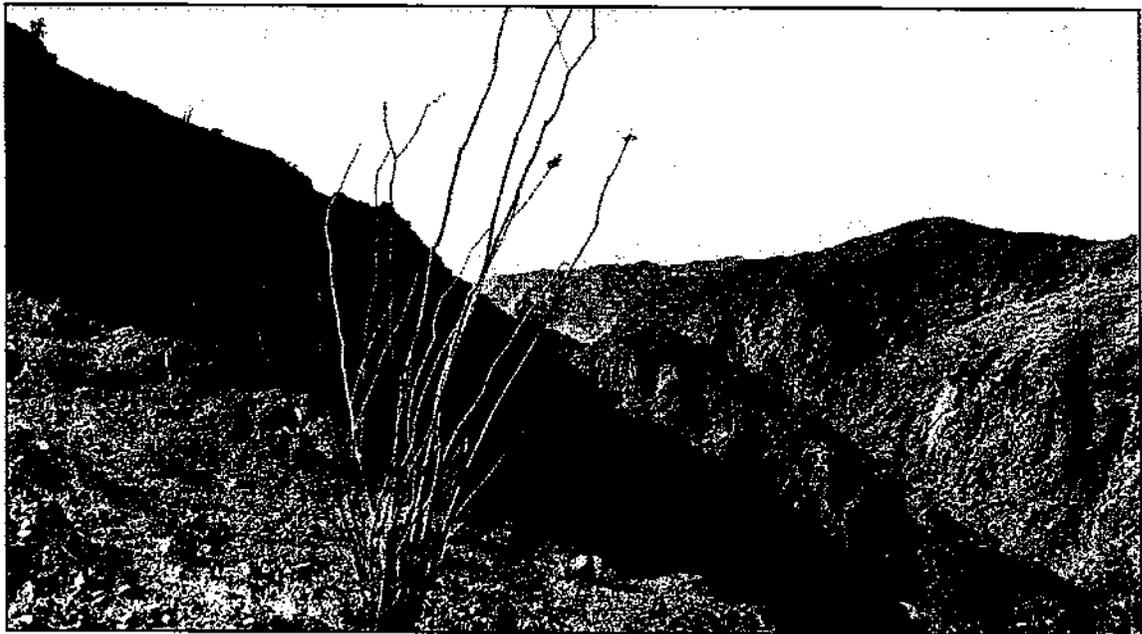


Solitary ocotillo on a ridge.

Part VI — Implementation Schedule and Cost Estimates

Table 1 - Annual Tasks

Management Actions/Monitoring/ Plan Evaluation	Workmonths (\$3400/Mo.)	Task Assignment
Monthly Wilderness Patrols	1	Park Ranger/ Wilderness Specialist
Monitoring - Burros, Campfires, Tamarisk	1	Park Ranger/ Wilderness Specialist/ Range Conservationist/ Biologist
Plan Evaluation	.5	Interdisciplinary Team



The Gila Mountains can be seen in the center.

Table 2 - One Time Tasks

Management Action (In Priority Order)	Target Date	Costs	Task Assignment
1. Restrict recreational mineral extraction in the wilderness	1994	\$ 200	Public Room Staff/ Wilderness Specialist/ Surface Protection Specialist/Area Manager
2. Develop "Leave No Trace" and "Tread Lightly" educational material for information displays	1994	\$ 100	Park Ranger/Wilderness Specialist
3. Establish visitor register and set traffic counter at Muggins Wash information display	1994	\$ 1,500	Park Ranger/Wilderness Specialist
4. Construct information display at Morgan Wash	1995	\$ 600	Park Ranger/Wilderness Specialist
5. Construct vehicle barrier at the east end of the Muggins Wash nonwilderness corridor	1995	\$ 500	Park Ranger/Wilderness Specialist
6. Construct vehicle barrier near area where Morgan Wash exits the wilderness	1995	\$ 500	Park Ranger/Wilderness Specialist
7. Rehabilitate miscellaneous disturbances along the Muggins Wash nonwilderness corridor (1 1/4 miles)	1996	\$10,000	Park Ranger/Wilderness Specialist
8. Seal Muggins Tinaja Project dam and mitigate visual impacts of the dam and gabion	1997	\$ 2,000	Arizona Game and Fish Dept./Wildlife Biologists
9. Rehabilitate and block vehicle route beyond nonwilderness corridor (3/4 mile)	1997	\$10,000	Park Ranger/Wilderness Specialist
10. Acquire legal access to nonwilderness corridor	1997	\$20,000	State Office Access Specialist
11. Rehabilitate vehicle route to Muggins Tinaja Project (1/2 mile)	1998	\$ 1,700	Park Ranger/Wildlife Biologists
12. Rehabilitate vehicle route in wash southeast of Muggins Wash (1 1/2 miles)	1999	\$15,000	Park Ranger/Wilderness Specialist
13. Rehabilitate quarry site	2000	\$ 5,000	Wilderness Specialist

Part VII — Appendices

Appendix A

Plan Participants

Yuma Resource Area

Kent Biddulph	Supervisory Natural Resource Specialist
Dave Daniels	Surface Protection Specialist
Joy Gilbert	Area Manager
Susanna Henry	Wildlife Biologist
Candice Holzer	Land Law Examiner
Ken Howell	Wilderness Specialist
Boma Johnson	Archaeologist
Mark Lowans	Outdoor Recreation Planner
Ron Morfin	Wilderness Specialist
Roger Oyler	Range Conservationist
Dave Smith	Wildlife Biologist
Bill Stoner	Park Ranger
Todd Suess	Outdoor Recreation Planner

Yuma District

Don Applegate	Resource Advisor
Barbara Bowles	Cartographic Technician
Dave Curtis	Environmental Coordinator
Loren DeRosear	Fire Control Officer
Lyn Levitt	Fire Management Officer

Arizona State Office

Jeff Jarvis	National Wilderness Program Leader
Ken Mahoney	Senior Technical Specialist - Wilderness

Appendix B

Public Involvement

Opportunities for the public to document concerns and identify planning issues were presented starting on October 29, 1991, through a mailout, request for participation in the local media, and a public meeting in Yuma. Ultimately, a public Task Force was selected from the interested public. The Task Force represented various organizations in monitoring the planning process, assessing identified issues, making recommendations, and reviewing the Draft Wilderness Management Plan.

In addition to attending Task Force meetings, individual members participated on various occasions in conducting inventories and with wilderness monitoring. The time, effort, and patience contributed by the members has been greatly appreciated. Members of the Task Force and the interests they represented were:

Mr. James Estes	Muggins Mountains Mining Interests
Mr. John Fugate	Yuma Rod and Gun Club
Mr. John Hervert	Arizona Game and Fish Department
Mr. Cary Meister	Yuma Audubon Society
Mr. Joe Melton	Arizona Trappers Association
Ms. Kathryn Michel	Yuma Sierra Club

The Draft Muggins Mountains Wilderness Management Plan and Environmental Assessment was distributed to over 400 interested individuals, groups, and governmental organizations by mail on May 18, 1994. During a 45-day public comment period following the distribution of the Draft Plan, the BLM received a total of 7 letters. Comments were received from two individuals, Jim Notestine, and John Pamperin; one organization, The Arizona Desert Bighorn Sheep Society; three State Agencies, the Arizona Department of Commerce, the Arizona Department of Environmental Quality and the Arizona Game and Fish Department; and one Federal Agency, the United States Fish and Wildlife Service.

In general, the comments were positive and supportive of the document as written. Mr. Pamperin suggested that the BLM pick Alternative B as the proposed action. Arizona Game and Fish Department suggested several changes in language. The United States Fish and Wildlife Service also suggested changes to the language of the Draft Plan.

The BLM made several minor changes to the wording of the document in response to these specific suggestions. These changes include additional sensitive species being added to the wildlife section on page 6 as suggested by the United States Fish and Wildlife Service. The phrase "be permitted to" was deleted from page 30 Item 9 in response to a request from the Arizona Game and Fish Department. Also language concerning historic use of the area by Burros on page 7 was changed as a result of a comment from the Arizona Game and Fish Department.

Appendix C Bibliography

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STANKEY, George, H., et al. 1985. The Limits of Acceptable Change (LAC) System for Wilderness Planning, General Technical Report INT-176. U.S. Department of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station. Ogden, UT.

U.S. CONGRESS. 1964. Wilderness Act. Public Law 88-577, 88th Congress.

1976. Federal Land Policy and Management Act of 1976. Public Law 94-579, 94th Congress.

1990. Arizona Desert Wilderness Act. Public Law 101-628. 101st Congress.

U.S. DEPARTMENT OF THE INTERIOR. 1983. Bureau of Land Management. Management of Designated Wilderness Areas - Manual. Washington, D.C.

1987. Bureau of Land Management/State of Arizona. Master Memorandum of Understanding Between State of Arizona, Arizona Game and Fish Commission and Department of the Interior, Bureau of Land Management. Phoenix, AZ.

1989. Bureau of Land Management. Final Yuma District Wilderness Environmental Impact Statement. Yuma, AZ.

Environmental Assessment

Introduction

Background

The Muggins Mountains Wilderness was designated by Congress on November 1990. A management plan was developed to provide management guidance for the area in conformance with the Yuma District Resource Management Plan (1987) and the Yuma District Wilderness Impact Statement (1989). This environmental assessment analyzes the potential impacts of proposed actions and management alternatives that were considered for the plan.

Background information which includes location, access, and general management situation descriptions is provided on pages 1 to 8 of the proposed Muggins Mountains Wilderness Management Plan.

Purpose and Need for the Proposed Action

A series of actions were proposed to accomplish objectives that address BLM national wilderness goals and issues identified during development of the wilderness management plan. Proposed actions comply with mandates of the Federal Land Policy and Management Act of 1976, the Wilderness Act of 1964, and the Arizona Desert Wilderness Act of 1990, and are guided by wilderness management policy as outlined in BLM Manual 8560.

Description of Proposed Action and Alternatives

Proposed Action

The proposed action is the adoption and implementation of the Muggins Mountains Wilderness Management Plan. In general, the

proposed action would provide for the protection and enhancement of wilderness values within a 10 year timeframe. Management actions to restore disturbances resulting from former vehicle trails and a quarry site are addressed. The proposal includes measures to protect existing natural resources and values as well as one existing wildlife development. Under the proposed action, opportunities for solitude and primitive unconfined recreation would be maintained. Scenic qualities and values of naturalness would be enhanced. Proposed management actions that could have environmental effects are listed below.

1. A barricade at the east end of the non-wilderness corridor would be constructed.
2. An informational display outside the wilderness boundary near the point where Morgan Wash exits the wilderness would be constructed.
3. A barricade along the eastern wilderness boundary where Morgans Wash exits the wilderness would be constructed.
4. To deter motorized vehicle violations, increased patrols and signing, a greater law enforcement presence, and as a final resort vehicle barriers would be used. Wooden posts and cable would be the preferred materials for constructing barriers.
5. The use of dry washers, rocker boxes, and similar devices for recreational mineral extraction within the wilderness portion of the planning area would be restricted. Hobby mineral collecting that does not make use of prying tools such as shovels and rock hammers would be allowed.
6. No recreational facilities, including trails, would be constructed within the wilderness. Campfire rings discovered during

- wilderness patrols would be removed and the area rehabilitated.
7. A "Leave No Trace" educational exhibit for use at the informational displays in Muggins Wash and Morgans Wash would be developed.
 8. All BLM flights, with the exception of fire monitoring flights and burro census and capture flights, would be limited to 2,000 feet AGL. Fire monitoring flights would be at least 1,000 feet AGL. Burro flights near the surface would be allowed for marking and capturing burros.
 9. The Arizona Game and Fish Department would conduct one low-level bighorn sheep monitoring flight between October 1 and November 30 every other year.
 10. The Yuma Resource Area would seek compliance with the Federal Aviation Administration advisory on wilderness airspace so that all civilian overflights are at least 2,000 feet AGL.
 11. The Muggins Tinaja water catchment would be sealed to increase water holding capacity and modified to prevent wildlife entrapment. Visual impacts of the catchment would be mitigated.
 12. The historic mining-related rock terraces northeast of Muggins Peak would be allocated to public use.
 13. Natural rehabilitation of 1 3/4 miles of former vehicle routes where surface disturbances are not severe would be allowed.
 14. Using hand tools, visual impacts on 4 miles of former vehicle routes where surface disturbances are substantial would be minimized.
 15. Visual impacts would be minimized at the quarry site in the SW 1/4 of section 13, Township 8 South, Range 20 West using a minimum amount of explosives and number of charges.
 16. Burros that begin to establish identified home ranges in the wilderness would be removed. Helicopter landings would be allowed for burro captures.
 17. Tamarisk discovered in the wilderness would be removed. Chemicals may be authorized in accordance with BLM Manual 8560.34. Site-specific environmental documentation would accompany this action.
 18. Using techniques that result in the least impacts to wilderness resources, fires that exceed a 5 chain per hour rate of spread would be suppressed. Disturbances resulting from fire suppression activities in accordance with BLM Manual 8660.35 would be rehabilitated.
 19. Legal public access to the Muggins Wash nonwilderness corridor would be acquired.
 20. A visitor register and vehicle counter would be located at the informational display in the west end of the Muggins Wash nonwilderness corridor.

Alternative A - No Action

Under the no action alternative, management guidance would be provided by the Wilderness Act of 1964, the Wilderness Arizona Desert Wilderness Act of 1990, and national BLM Wilderness Management Policy. No specific actions would be proposed for the rehabilitation of existing disturbances or the enhancement of wilderness values. In a course that may take several centuries, weathering processes would eventually restore the natural appearance of surface disturbances. Current conditions and values would be maintained under this alternative.

Alternative B - Minimal Human Impacts

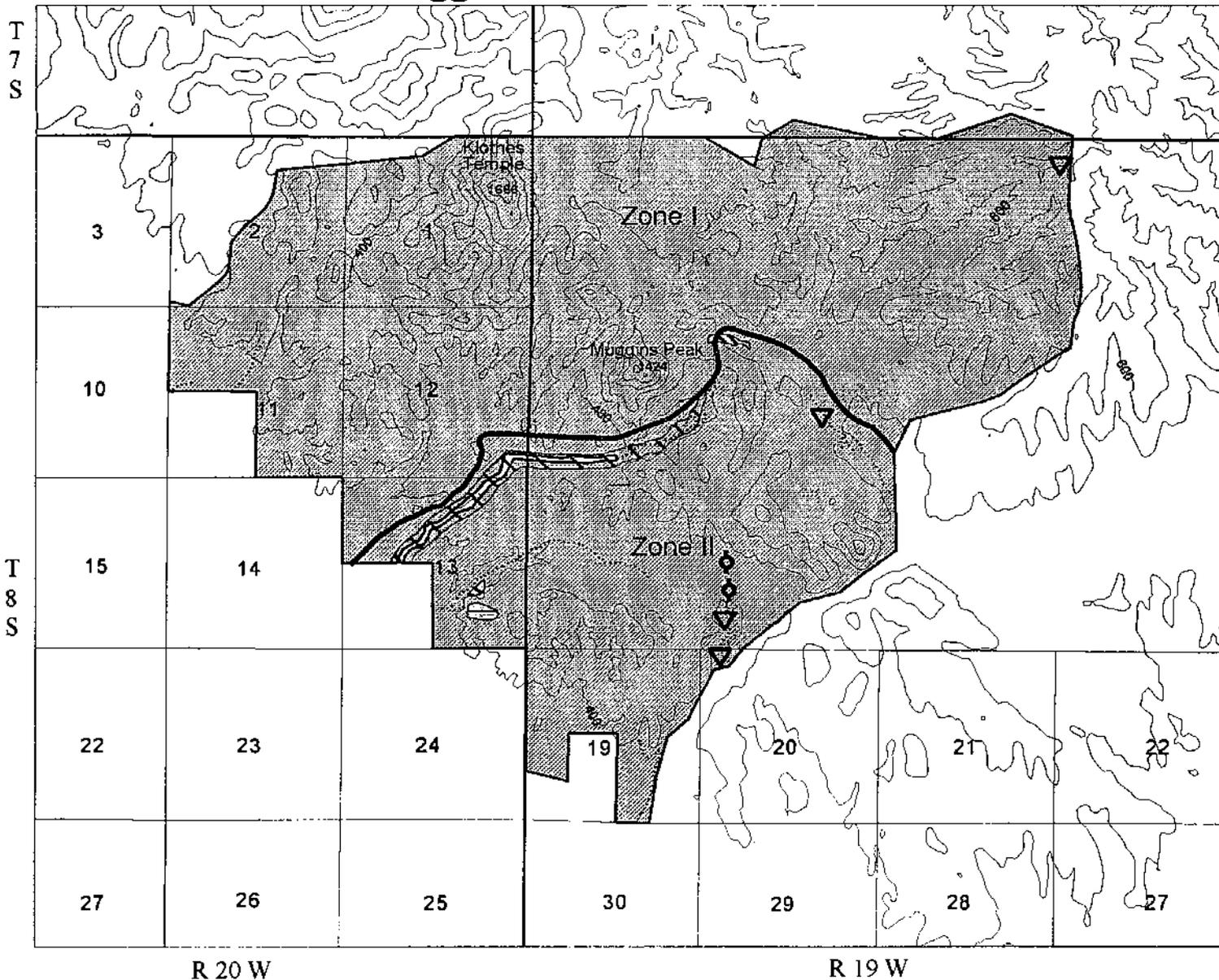
For this alternative, the wilderness would be divided (Map 3) into two management zones. Zone I would include the more pristine areas of the wilderness where there is little evidence of previous human activity.

Recreational activities such as overnight camping and the use of campfires would be restricted in Zone I to reduce the potential for human impacts. The same indicators and standards used for the proposed action would be used in this alternative.

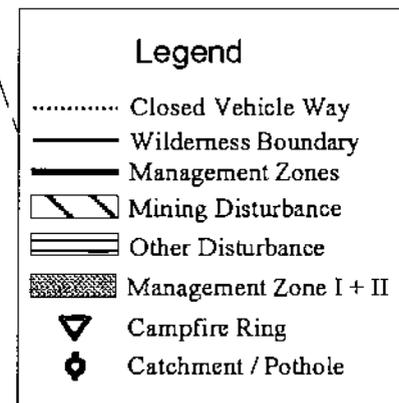
Zone II would contain the area where former vehicle trails, a wildlife development, and a quarry site are located. Rehabilitation measures specified in the proposed action would also apply for this alternative. The same restrictions that would be applied to Zone I would be imposed on areas in Zone II where the natural features at disturbed sites are restored. The desired future condition for this alternative would be to achieve and maintain Zone I wilderness characteristics for the entire wilderness.

Alternative B would enhance and maintain naturalness and wilderness values. However, a full range of opportunities for primitive and unconfined recreation would be restricted.

Muggins Mountains Wilderness



Management Zones Alternative B



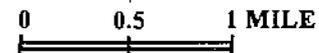
LOCATION DIAGRAM

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
FOOMA DISTRICT OFFICE

MARCH 1994

MAP 3

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Contour Interval 200 feet

Affected Environment

A description of the affected environment can be found on pages 1 through 9 of the proposed Muggins Mountains Wilderness Management Plan.

Environmental Consequences

The following critical elements have been analyzed and would not be adversely affected by the proposed action and alternatives:

1. Air Quality
2. Areas of Critical Environmental Concern
3. Cultural Resources
4. Prime or Unique Farmlands
5. Floodplains
6. Native American Religious Concerns
7. Threatened or Endangered Species
8. Solid or Hazardous Wastes
9. Water Quality
10. Wetlands or Riparian Zones
11. Wild and Scenic Rivers
12. Wilderness

Impacts of the Proposed Action

Wilderness values would be maintained and enhanced within 10 years under provisions of the proposed action. Barriers to prevent motorized vehicle violations and educational displays would be located outside the

wilderness. Visual impacts from the barriers and displays would be mitigated by using materials with a minimal background contrast. The low profile of the barriers would also minimize visual contrasts. Promoting "Leave No Trace" and "Tread Lightly" land use ethics within the planning area would assist in preventing new visitor use impacts to natural values and would protect cultural resources. The barriers and displays would provide for the enhancement of wilderness values by allowing weathering processes to reclaim minor surface disturbances. Minimal impacts to visual resources from the barriers and displays would be offset by the long-term benefits of enhancing and maintaining wilderness values and opportunities for primitive recreation.

There would be short-term impacts to solitude from wilderness patrols and other monitoring activities that would be offset by the long-term benefits of enhancing and maintaining wilderness values and opportunities for primitive recreation.

Temporary adverse impacts to wilderness values from proposed rehabilitation efforts would be limited to the vicinity of existing disturbances for the duration of each project and would ultimately result in the long-term enhancement of natural values. Opportunities for unconfined primitive recreation would continue and improve as the rehabilitation of existing surface disturbances occurs.

Temporary adverse impacts to solitude and wilderness values from low level aircraft operations would be limited to no more than one day every other year for bighorn sheep surveys. There would also be temporary adverse impacts from activities needed for the maintenance of one existing wildlife development. Over the long-term, temporary impacts from wildlife management activities would be offset by actions designed to reduce visual impacts from the wildlife development. Several wildlife species would also benefit from the maintenance of a dependable year round water source.

Preventing the establishment of an exotic species, tamarisk, and additional impacts from the development of new campsites would limit adverse impacts to native plant communities and wilderness values. The use of chemicals for tamarisk control would be in accordance with guidance in BLM Manual 8560.34.

Maintaining burro use at levels existing at the time of wilderness designation would also protect vegetation resources and prevent soil disturbances that would be associated with the establishment of a burro herd. Impacts to wilderness values from the use of helicopters for burro management activities would be temporary.

Allowing for fire to play a natural role would provide for the protection of wilderness resources and would minimize potential impacts from fire suppression activities. In the event that fire suppression activities are required, resulting disturbances would be rehabilitated.

Impacts of Alternative A - No Action

Current conditions and opportunities would be maintained under Alternative A. With this alternative, existing laws, regulations, and policies would be followed without an integrated management strategy. There would be no temporary adverse impacts from rehabilitation efforts and construction projects. In the long term, there would be a lower quality of naturalness due to the continuing presence of existing human disturbances. The lack of site displays to promote "Leave No Trace" and "Tread Lightly" would lessen the opportunity for providing visitor information that would assist in enhancing and maintaining existing natural values.

Impacts from wildlife management activities would be the same as the proposed action.

Impacts of Alternative B - Minimal Human Impacts

While Alternative B would provide the most protection for natural resources and wilderness values from potential adverse

impacts, there would be restrictions on the full range of opportunities for primitive and unconfined recreation. Under this alternative campfires and overnight camping would be restricted. Only day use would be permitted. This could result in decreased visitor use and therefore provide outstanding opportunities for solitude.

Cumulative Impacts

Cumulative impacts include impacts on the environment which result from incremental impacts of the proposed action when added to other past, present, and reasonably foreseeable future actions. Cumulative impacts can result from individually minor, but collectively significant actions taking place over a period of time.

Implementing the proposed action would reduce the potential for cumulative impacts to wilderness values from unmonitored visitor use where campfire rings and other disturbances from camping activities were not discouraged.

Restricting mineral extraction as a recreational activity would also prevent potential cumulative impacts from surface disturbing activities.

In general, the proposed action provides for the protection of wilderness values from potential cumulative impacts that would be likely if there were unrestricted and unmonitored visitor use. Additionally, implementing the proposed action would not have any significant cumulative effects.

Mitigation

Mitigation for the proposed action and both alternatives are guided by national BLM Wilderness Management Policy and are therefore the same. Mitigation measures specific to the Muggins Mountains Wilderness are as follows:

1. Scheduling administrative actions for periods when there is the least potential for impacts to wilderness visitors such as during weekdays when visitor use is likely to be the lowest.

2. Using the minimum tool or action to reasonably accomplish management objectives.
3. Actively promoting “Leave No Trace” land use ethics so that in the long term visitor use might occur with a minimum impact to wilderness values and resources with a minimum need for management restrictions.

Consultation and Coordination

Information about consultation, coordination, and public involvement can be found in Appendix A and Appendix B of the Muggins Mountains Wilderness Management Plan.

Finding of No Significant Impact
Muggins Mountains Wilderness Management Plan
Environmental Assessment Number AZ-055-94-39

Finding of No Significant Impact: Based on the analysis of potential environmental impacts contained in the attached Environmental Assessment, I have determined that impacts are not expected to be significant, therefore an Environmental Impact Statement is not required.



Joy Gilbert
Yuma Resource Area

8/19/94

Date

Decision Record

Muggins Mountains Wilderness Management Plan

Environmental Assessment Number: EA-AZ-055-94-39
Case File AZ-25501

Decision: It is my decision to approve the Muggins Mountains Wilderness Management Plan. The plan establishes management direction for the Muggins Mountains Wilderness for a ten-year period.

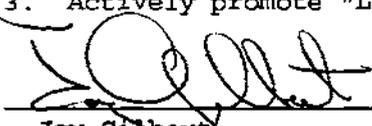
Rationale for Decision: During a 45-day public review period, seven comments were received for the draft Muggins Mountains Wilderness Management Plan. All comments were supportive of the plan. Additional information on sensitive wildlife species provided by the U.S. Fish and Wildlife Service were incorporated into the final plan.

The plan provides for the rehabilitation of existing disturbances and continued maintenance of wilderness values. Routine monitoring and yearly evaluations provide for modifications to the plan if a change in conditions requires them.

Alternatives Considered: The Proposed Action and the No Action Alternatives were considered.

Mitigation/Stipulations:

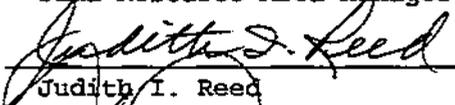
1. Administrative actions will be scheduled for periods when there is the least potential for impacts to wilderness visitors such as during weekdays when visitor use is likely to be the lowest.
2. Use the minimum tool or action to reasonably accomplish management objectives.
3. Actively promote "Leave No Trace" land use ethics.



Joy Gilbert
Yuma Resource Area Manager

8/25/94

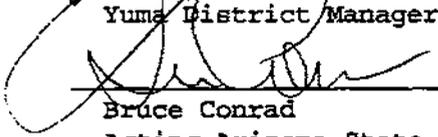
Date



Judith I. Reed
Yuma District Manager

8/25/94

Date



Bruce Conrad
Acting Arizona State Director

8-26-94

Date

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Havasu Resource Area
3189 Sweetwater Avenue
Lake Havasu City, AZ 86406**

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PENALTY FOR PRIVATE USE, \$300**