

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

Yuma Field Office

September 2012

**Trigo Mountain
Wilderness Management Plan
Environmental Assessment,
and Decision Record**



The Bureau of Land Management is responsible for the balanced management of the public lands and resources and their various values so that they are considered in a combination that will best serve the needs of the American people. Management is based upon the principles of multiple use and sustained yield; a combination of uses that take into account the long term needs of future generations for renewable and nonrenewable resources. These resources include recreation, range, timber, minerals, watershed, fish and wildlife, wilderness and natural, scenic, scientific and cultural values.



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
Yuma Field Office
2555 East Gila Ridge Road
Yuma, AZ 85365
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September 21, 2012

In Reply Refer To:
1610 (C020)
AZA 25505

Dear Reader:

The Bureau of Land Management (BLM) Yuma Field Office is pleased to release the Trigo Mountain Wilderness Management Plan, Environmental Assessment, and Decision Record. The enclosed plan will provide long-term management guidance for the Trigo Mountain Wilderness in southwest La Paz County.

A draft version of this plan was released for a 45-day public review and comment period on July 19, 2012. The draft plan addressed wilderness management provisions for both the BLM Trigo Mountain Wilderness and the U.S. Fish and Wildlife Service (FWS) Imperial Refuge Wilderness. Comments received resulted in minor changes to the final plan. The BLM updated references and proposed actions in conformance with Manual 6340-Management of Designated Wilderness Areas (July 2012).

During this period, FWS made a determination that, although concurring with the management philosophy found in this document, finalizing the plan to include the Imperial Refuge Wilderness was not necessary as management activities that may occur on FWS lands are already covered under their Lower Colorado River National Wildlife Refuges Comprehensive Management Plan. Additionally, FWS will be developing a more comprehensive plan within the next few years that will encompass all FWS wilderness areas on the lower Colorado River in Arizona and California. The BLM will finalize our current planning process as anticipated for the Trigo Mountain Wilderness in order to begin implementation and management activities.

The Decision to approve the Trigo Mountain Wilderness Management Plan and Environmental Assessment is subject to appeal in accordance with procedures contained in 43 CFR, Part 4, Subparts E and G. Implementation of this Plan will begin 30 days after the date of this letter.

The BLM Yuma Field Office thanks all who contributed to the development of this document, especially our local cooperating partners.

Sincerely,

John MacDonald
Field Manager

Enclosure

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Trigo Mountain
Wilderness Management Plan
Environmental Assessment
and Decision Record

U.S. Department of the Interior
Bureau of Land Management

Colorado River District

Yuma Field Office

La Paz County, Arizona

EA Number: DOI-BLM-AZ-C020-0012-0025

Casefile: AZA 25505

Approved by:  9.21.12
Field Manager, Yuma Field Office Date

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PART I – BACKGROUND INFORMATION

The Plan Area

The planning area consists of approximately 30,480 acres and covers the Trigo Mountain Wilderness (Map 1). It is in the National System of Public Lands administered by the Bureau of Land Management (BLM), Yuma Field Office (YFO) in southwestern Arizona.

Plan Purpose and Conformance

This document provides management guidance for the Trigo Mountain Wilderness in conformance with requirements of the Wilderness Act of 1964 (Wilderness Act). In general, the Wilderness Act established the National Wilderness Preservation System where areas designated by Congress are ". . . administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the preservation of their wilderness character . . ."

This document provides a management framework for the foreseeable future of the planning area. Activity-level direction is provided for lands and resources in conformance with the Yuma Field Office Resource Management Plan, 2010 (YFO RMP). This document also amends and replaces the Ehrenberg-Cibola Habitat Management Plan (1983) and all other previous management direction affecting natural resources where applied to the plan area. The Colorado River District Fire Management Plan (CRDFMP), completed in 2011, contains fire management strategies for the Trigo Mountain Wilderness.

Administered by the U.S. Fish and Wildlife Service (Service) the Imperial Refuge Wilderness is adjacent to the planning area. There are also three other BLM-administered wilderness areas (Map 1) adjacent to the Imperial Refuge Wilderness in California. In conformance with BLM policies that recommend joint planning for adjacent wildernesses, the Yuma Field Office will seek to coordinate management activities when the planning process for adjacent wilderness commences.

Historical Context

The planning area's unique natural resources provide diverse opportunities and uses for wildlife and people. The area provides important wildlife habitat and accommodates a variety of uses that include recreational opportunities.

BLM origins stem from the General Land Office which was created by Congress in 1812 to "superintend, execute, and perform all such acts and things touching or respecting the public lands of the United States." On July 16, 1946, the General Land Office and the U.S. Grazing Service were merged to form the BLM.

Federal lands along the lower Colorado River were formerly administered by the Bureau of Reclamation. In 1961, the Lower Colorado River Land Use Office (LCRLUO) was established by Secretarial Order and supervised by the Office of the Secretary of the Interior

in accordance with 200 DM 2.1. LCRLUO mandates were to “perform all work necessary to establish and execute policies and procedures with respect to land use and occupancy and related matters on Federal Lands bordering the lower Colorado River.” In 1972, the LCRLUO came under full BLM jurisdiction.

By Secretarial Order, BLM-administered lands were designated as the National System of Public Lands in 2008. YFO administers multiple uses and resources on the planning area and other public lands that include: a wide spectrum of recreational activities, wildlife habitat, wilderness, cultural resources, wild horses and burros, grazing, realty, and mining.

With passage of the Arizona Desert Wilderness Act of 1990, BLM-administered lands in the Trigo Mountains were designated as part of the National Wilderness Preservation System.

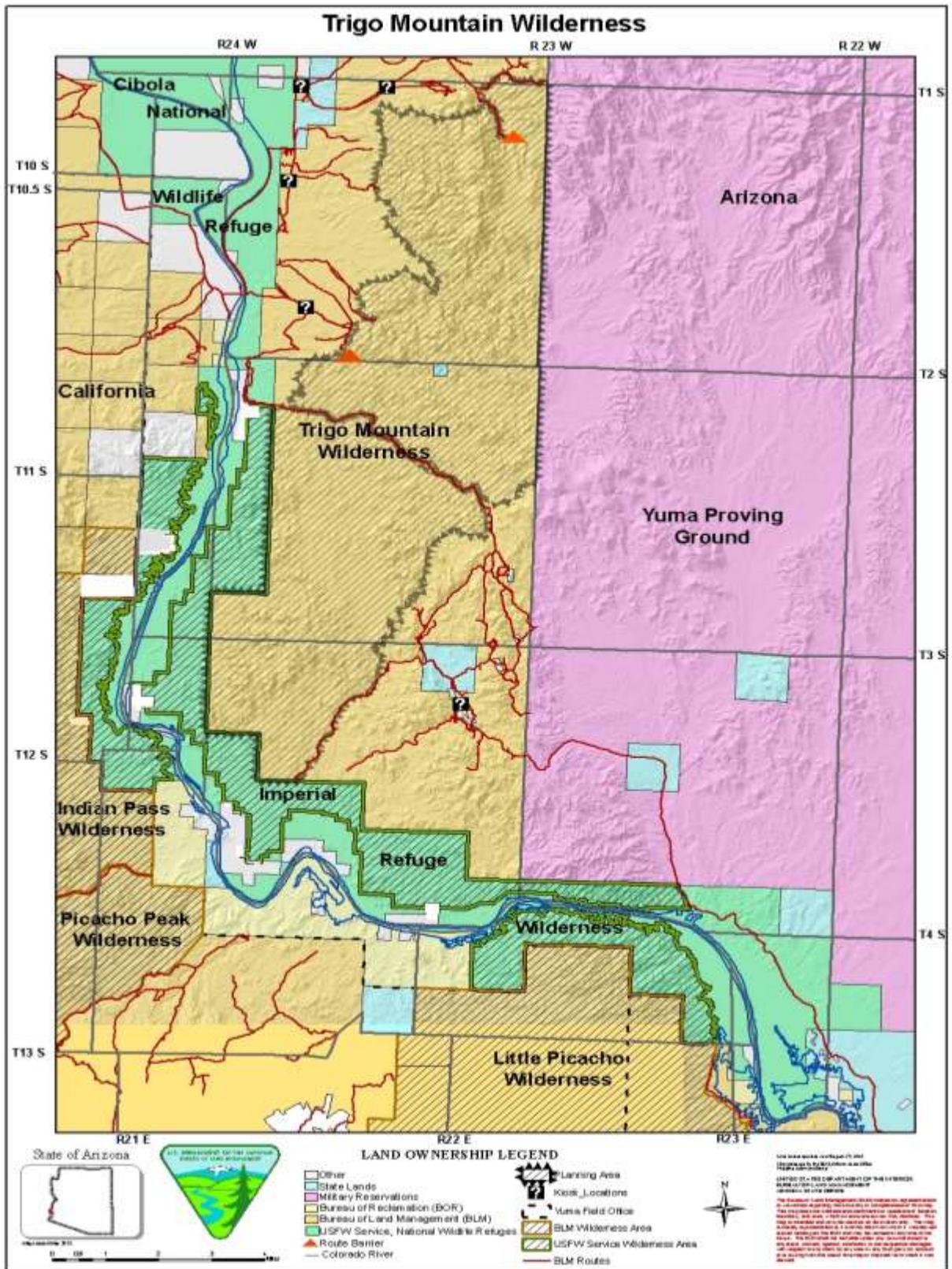
Legal Guidance

The Wilderness Act of 1964 gives general legal guidance for the planning area. Additionally the Arizona Desert Wilderness Act of 1990 provides supplemental legal guidance.

Management direction for the planning area will be guided by the following:

1. Federal Land Policy and Management Act of October 21, 1976, (FLPMA) as amended (90 Stat. 2743, *et seq.*; 43 U.S.C. 1701, *et seq.*)
2. National Environmental Policy Act of 1969 (42 U.S.C. 4321, 4331 4335, and 4341-4347)
3. Title 43, Code of Federal Regulations, Part 6300
4. Wilderness Act of 1964 (16 U.S.C. 1131)
5. Arizona Desert Wilderness Act of 1990 (16 U.S.C. 460 ddd)
6. Wild Free-Roaming Horse and Burro Act of 1971 (as amended 1976 and 1978; 16 U.S.C. 1331-1340)
7. Endangered Species Act of 1973
8. Sikes Act (16 U.S.C. 670a-670o; 74 Stat. 1052) as amended, Public Law 86-797
9. Master Memorandum of Understanding Between Department of the Interior, Bureau of Land Management Arizona State Office and State of Arizona, Arizona Game and Fish Commission, 2007
10. Public Rangeland Improvement Act of 1978 (43 U.S.C. 1901, *et seq.*)
11. Archaeological Resources Protection Act of 1979 (16 U.S.C. 470 aa, *et seq.*)
12. National Historic Preservation Act of 1966 (16 U.S.C. 470)

Map 1 - Planning Area Location and Access



13. BLM Manual 6120, Congressionally Required maps and Legal Boundary Descriptions for National Landscape Conservation System Designations
14. BLM Manual 6620, Habitat Management Plans
15. Master Memorandum of Understanding between the Arizona Game and Fish Commission and Department of the Interior BLM, 1987 (AGFC-BLM MOU)
16. BLM Manual 6340, Management of Designated Wilderness Areas, 2012
17. H-1730-1 Interdisciplinary Resource Management Handbook, 1995
18. Arizona Game and Fish Department Game Management Program Strategic Plans and Management Guidelines, 1993.

AGFD has responsibilities for the protection and management of all wildlife species in the State of Arizona, under the authority of the AGFC and Arizona Revised Statutes Title 17.

National Wilderness Management Policies

The BLM has national wilderness management policies that are expressed as objectives or goals. These national policies are listed below:

BLM Wilderness Goals (BLM Manual 8561, 1984):

1. 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 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. 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. 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. 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.

PART II – ENVIRONMENTAL SETTING AND MANAGEMENT SITUATION

Geology

The planning area is in the Basin and Range physiographic province and consists of Precambrian to Quaternary age rocks. There is an underlayment composed primarily of Quaternary basalt and Cretaceous rhyolite and andesite. Smaller amounts of Paleozoic and Mesozoic limestones, shale, sandstone, and quartzite also exist.

Steep mountainous slopes, rocky outcrops, undulating hills and flat alluvial fans are the area's primary topographic features. Shallow, stony soils and rock outcrops are predominant in the mountainous and steep slope areas. Deep, gravelly, moderately fine textured soils characterize alluvial fans, valley floors, and desert washes. Elevations in the planning area range from approximately 300 feet in the southern portion of Red Cloud Wash to 1,920 feet on a peak west of the Black Diamond Mine in the northern portion of the Wilderness.

The principle mountain range within the planning area is the Trigo Mountains. The mountains are composed primarily of Tertiary and Quaternary volcanic rocks that include basaltic and andesitic lava flows, as well as some intrusive dikes and plugs.

Climate

Winter and spring seasons are characterized by sparse rainfall from prevailing Pacific frontal storms that have depleted most of their moisture. During the summer, there is a prevailing influence from convectional storms that originate in the tropics. Periods of prolonged drought may occur throughout the year (Brown, 1982).

Precipitation generally ranges from 2 to 8 inches per year. Summer rains are characterized by isolated, intense thunderstorms resulting, at times, in high runoff and localized flooding. High summer temperatures contribute to high evaporation and transpiration rates, reducing the effectiveness of summer rains as moisture available for plants. About 60 percent of the total precipitation occurs during the late fall and winter season. This precipitation, occurring under lower temperatures, provides most of the moisture available for plant growth.

Winters are mild, characterized by sunny, clear days with temperatures that range from slightly below freezing to highs of 85 degrees F. The only measurable snowfall recorded since 1901 in the Yuma area occurred in December 1932 when 1.5 inches fell. Traces of snow sometimes occur on higher mountain peaks adjacent to the planning area. The average frost-free season is from 315 to 350 days. Summer days are hot and dry with temperatures that may exceed 115 degrees F. from May through September. Summertime maximum and minimum temperatures can range about 30 degrees each day.

Winds are mainly from the west during the summer and from the north in the late fall and winter months. Surface winds are generally light with average velocities of 4 to 6 mph. Peak gusts average 16 mph in the winter months and 22 mph in the summer. Winds are light at night, rapidly increasing just after sunrise. Short duration sand and dust storms can occur during any month and may cause reduced visibility ranging from 3 to 5 miles.

Air Quality

Most of the planning area is within a Class II Air-shed as classified by the Clean Air Act. Although no long-term or consistent air quality monitoring data exists, portions of the planning area within a Class II Air-shed generally meet the National Ambient Air Quality standards. Ambient air quality is good, except when temporary high velocity winds, farming practices, or military activities create smoke or dust.

Water

In the extremely dry Sonoran Desert ecosystem, water is the primary limiting factor. The Trigos currently have natural wildlife waters and provide access to the lower Colorado River. The wildlife water sources typically consist of rain water collection areas associated with naturally occurring potholes. There are no existing developed wildlife waters within the planning area.

Wilderness Values

The planning area is one of the components of the National Wilderness Preservation System (NWPS) with legal requirements that these areas be ". . . administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the preservation of their wilderness character . . . where the earth and its community of life are untrammelled . . ." Land within an area of the NWPS is further characterized as ". . . undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions . . ." The area ". . . may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value . . . "

Covering approximately 30,480 acres, the Trigo Mountain Wilderness is administered by BLM. Opportunities for environmental studies, primitive recreation, solitude, and other wilderness-dependent activities are abundant. Primitive recreation opportunities are enhanced by the area's scenery, rugged topography and associated vegetation, wildlife, and cultural resource components.

The Wilderness includes 14 miles of the Trigo Mountains ridgeline with Red Cloud Wash to the south, Clip Wash in the center, and Hart Mine Wash to the north. Sawtooth ridges, steep-sided canyons, and terrain heavily bisected by washes provide topographic features that enhance opportunities for solitude. There is sparse vegetation and no permanent water sources. The Wilderness is divided at Clip Wash by a non-wilderness corridor that contains a vehicle route.

The Wilderness is predominantly undisturbed. However, the area contains surface disturbances from mining and exploration activities, former vehicle routes, and burro wallows and trails. Some mining sites serve as a testament of the rigors faced by past generations and are of sufficient age to have become historic features of the Wilderness.

Most of the former vehicle routes have begun to blend into the landscape with the camouflaging effects provided by weathering and recently established vegetation. Several surface disturbances (Map 2) are of a magnitude that will require mitigation, consisting primarily of surface restoration and trash removal to restore wilderness values.

Soils

Hills and mountains in higher elevations of the planning area contain soils that are moderately deep, steep, well-drained, and extremely gravelly with rock outcrops. Typically, 70 to 80 percent of the surface is covered by gravel. Permeability is moderate with rapid runoff. The soils are generally very gravelly loam underlain by bedrock at a depth of 20 to 40 inches, and are located on steep side slopes. These soils formed in material weathered from granite, gneiss, schist, andesite, and rhyolite. Rock outcrops are exposed on the peaks and crests of hills and mountains and occur on slopes of 15 to 75 percent.

Below the hills and mountains on broad old alluvial fans and terraces, soils are deep, well-drained, and strongly saline. These soils developed in very gravelly alluvium exhibiting moderately slow permeability and rapid surface runoff. These soils occur at mid-elevations of the landscape on slopes of 2 to 6 percent.

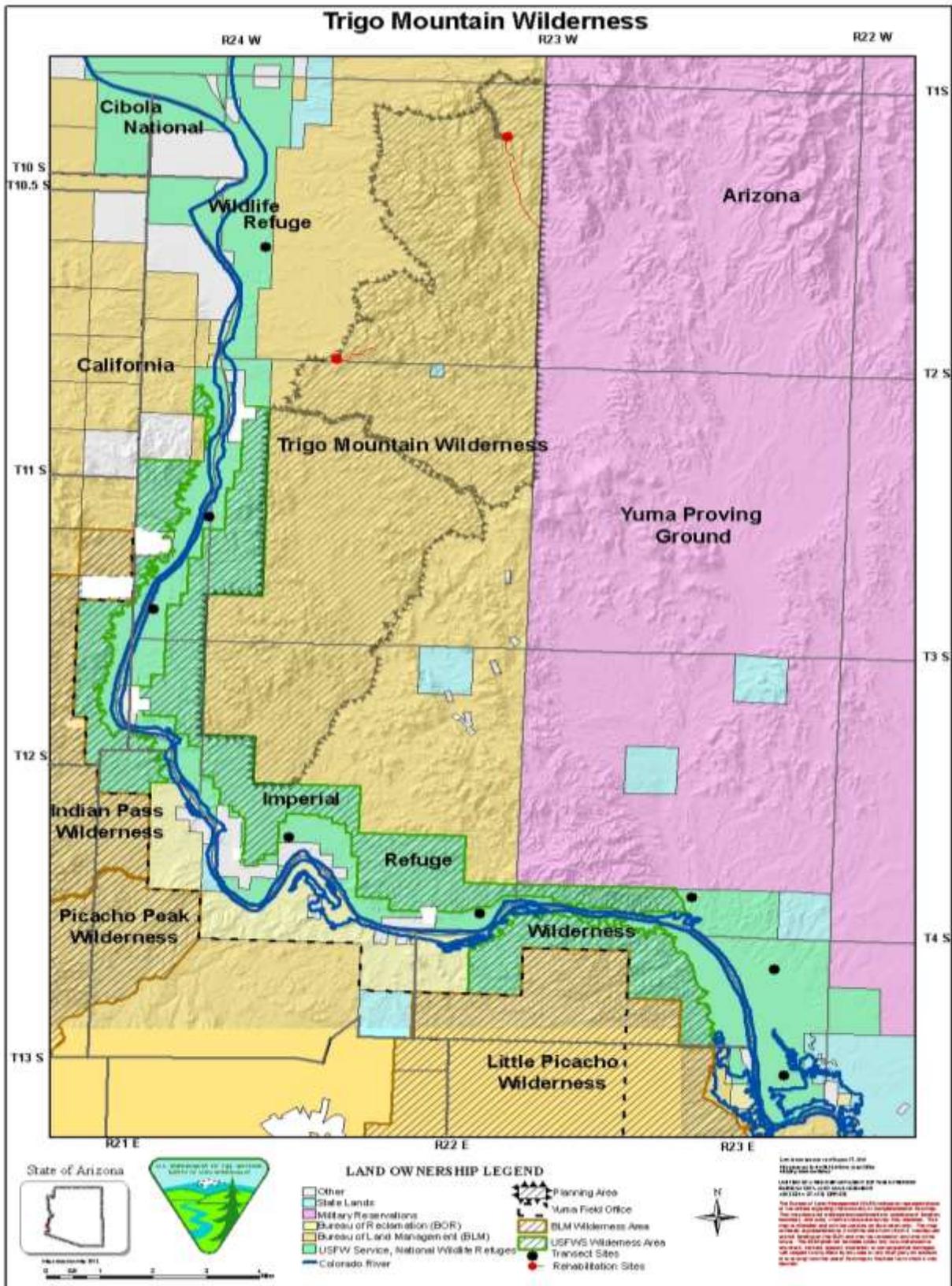
In the lowest portions of the landscape on lower terraces and dissected alluvial fans, slopes vary from 1 to 50 percent. Near the surface, soils consist of many layers of varied textures that contain silt loam or very fine sandy loam with a clay layer. Sand or loamy sand is at a depth of 20 to 36 inches.

Vegetation

The planning area is located within the Lower Colorado River Valley Subdivision of the Sonoran Desert (Shreve, 1951). This subdivision is the largest, hottest and driest subdivision of the Sonoran Desert with very high temperatures and very low and erratic precipitation. Perennial plant cover is extremely low on most sites. The dominant species are creosotebush and white bursage. Mountainous areas are covered with palo verde, ocotillo, and mixed cacti including beavertail cactus, saguaro, barrel, and cholla. Desert wash woodlands, which provide a higher density of vegetation for wildlife habitat, are dominated by blue and foothills palo verde, ironwood, mesquite, smoke tree, and a variety of thorny Sonoran Desert shrubs such as tomatillo, wolfberry, and sweet resinbush. Lower elevations of the planning area are covered by desert pavement, which provides surface water runoff for small rivulets and channels covered with plant species representative of the mountains and desert wash woodlands.

Ephemeral (annual) species of grasses and forbs are numerous in this region and can be locally abundant in both density and species diversity in unusually wet winter or summer seasons. Most of these species are either cool or warm season. Very few of them have the ability to germinate, grow, and set seed in both seasons. Seeds may remain in the soil, viable for many years, waiting for the next wet season to trigger germination. The single most

Map 2 - Rehabilitation, Vehicle Barriers and Vegetation Transects



important feature shaping the characteristic vegetation of the Sonoran Desert is the frequent occurrence of drought (Shreve and Wiggins, 1964).

As a result of this planning effort, AGFD and the Service work with YFO to monitor vegetation utilization by wild burros. There are 10 different vegetation monitoring sites (transects). Each is 1 mile long and placed within desert washes that support key forage plants for the burros. Transect locations are shown on Map 2.

Wildlife

The AGFD has jurisdiction over wildlife in the planning area and has developed cooperative management relationships with the BLM in their efforts to manage all wildlife populations. Cooperative wildlife management activities by the AGFD and BLM on BLM administered wildernesses are guided by an existing memorandum of understanding (2007).

Habitats within the planning area include mountain ranges, desert wash woodlands, abandoned mines, and natural caves. Mountain ranges provide important habitat for desert bighorn sheep and other wildlife species that could not survive on the arid plains of lower elevations. Mountain ranges in the planning area provide some of the best remaining bighorn sheep habitat in the southwest, with stable populations in several areas.

Desert wash woodlands occur in extensive networks throughout the planning area, maintaining hydrologic connections with the Colorado River. This natural community is an area of great richness and abundance in the Lower Colorado River Valley Subdivision of the Sonoran Desert, providing important cover, forage, and dispersal habitat for nearly every wildlife species during some portion of their life cycle (YFO RMP, 2010). The relatively high vegetation production in these communities provides forage and thermal cover critical for the survival of many species of wildlife (Weinstein, *et al.*, 2003).

The importance of desert washes to wintering, migrant, and breeding birds has been well documented (Hensley, 1954; Eichinger and Moriarty, 1985; Rosenberg, *et al.*, 1991) and is a result of the structural diversity of trees and low-growing vegetation which attracts a diversity of desert and riparian bird species (Rosenberg, *et al.*, 1991). Birds particularly favor palo verde trees for nesting, which places them in potential conflict with burros. Of 579 nests analyzed by the Arizona Breeding Bird Atlas project in Sonoran Desert habitat, 269 (46 percent) were in washes and 203 (35 percent) were in palo verde trees (Troy Corman, unpub. data). Of the 269 nests within washes, 139 (52 percent) were in palo verdes.

Abandoned mines and natural caves are particularly important to bats for roosts and maternity colonies. Many of the bat species occurring in the planning area use abandoned mines at least part of the year. Horizontal mine shafts and natural caves also provide shelter for other wildlife, such as ringtail and fox (YPG, 1995).

Non-game species that occur within the planning area include small mammals, birds including migratory birds and raptors, amphibians, and reptiles. A few of the many species that can be found in the planning area are listed below.

Birds include: Costa hummingbird (*Calypte costae*); gilded flicker (*Colaptes auratus*); rufous-winged sparrow (*Aimophila carpalis*); Le Conte’s thrasher (*Toxostoma lecontei*); and purple martin (*Progne subus*).

Raptor species include: red-tailed hawk (*Buteo jamaicensis*); great horned owl, (*Bubo virginianus*); barn owl (*Tito alba*); and American kestrel (*Falco spariverius*).

Reptiles include: whip-tailed lizard (*Aspidoscelis spp.*); side-blotched lizard (*Sceloporus magister spp.*); tree lizard (*Sceloporus magister spp.*); desert spiny lizard (*Sceloporus magister spp.*); gopher snake (*Pituophis melanoleucus*); kingsnake (*Lampropeltis spp.*); desert iguana (*Dipsosaurus dorsalis*); and western diamondback rattlesnake (*Crotalus atrox*).

Special Status Species

Special status species that occur or may occur within the planning area include:

Common Name	Name	Agency	Status
Sonoran Desert tortoise	<i>Gopherus morafkai</i>	Federal	Species of concern
California leaf-nosed bat	<i>Macrotus californicus</i>	Federal State	Sensitive Species of Concern
Arizona cave myotis	<i>Myotis velifer brevis</i>	Federal State	Sensitive Species of Concern
Yuma myotis	<i>Myotis yumanensis</i>	Federal State	Sensitive Species of Concern

Heritage Data Management System (2012); Natureserve.org (2012)

Desert Tortoise

Sonoran and Mohave populations of desert tortoises have been recognized as separate species (Murphy, *et al.*, 2011). The Sonoran Desert tortoise is a species of special concern in Arizona. BLM classified portions of the plan area as Category II desert tortoise habitat, in conformance with BLM policy and the document, Management Plan for the Sonoran Desert Population of the Desert Tortoise in Arizona (1996). Under this plan, the management goal for Category II tortoise habitat is to maintain stable, viable populations and halt further declines in tortoise habitat values.

Big and small game species that occur within the planning area include: mule deer (*Odocoileus hemionus*); desert bighorn sheep (*Ovis Canadensis nelsoni*); mountain lions (*Puma concolor*); cottontail rabbits (*Sylvilagus audubonii*); coyote (*Canis latrans*); grey fox (*Urocyon cinereoargenteus*); and kit fox (*Vulpes macrotis*).

Desert Bighorn Sheep

Desert bighorn population estimates from 1983 through 2011 are shown in Table 1 for Game Management Unit 43B (GMU-43B), which includes the planning area and covers more than 500,000 acres. Historically, population spikes in the sheep population have been noted. An

average of five sheep hunting permits was issued from 2006 to 2010 for GMU-43B.

Table 1 - Bighorn Sheep Survey Results AZ Game Management Unit 43B

Year	Population Estimate						
1986	158	1993	208	2000	No Survey	2007	334
1987	141	1994	No Survey	2001	190	2008	No Survey
1988	110	1995	209	2002	No Survey	2009	No Survey
1989	127	1996	No Survey	2003	No Survey	2010	430
1990	No Survey	1997	No Survey	2004	250	2011	No Survey
1991	154	1998	207	2005	No Survey		
1992	No Survey	1999	207	2006	No Survey		

Mule Deer

Desert mule deer occur at low density throughout most of the planning area, though they avoid the rough mountainous areas that bighorn sheep inhabit. AGFD manages this herd by conducting annual aerial surveys (Table 2) and issuing hunting permits. Population estimates vary considerably due to herd movements and the survey process. The area is included in GMU 43B. The hunt in this unit is managed as a part of a much larger multi-unit hunt area (Units 43A, 43B, 44A, and 44B).

Table 2 - Mule Deer Survey Results AZ Game Management Unit 43B

Year	Population Estimate ¹						
1986	221	1993	718	2000	156	2007	228
1987	302	1994	526	2001	277	2008	393
1988	Data unavailable	1995	304	2002	34	2009	322
1989	300	1996	330	2003	140	2010	125
1990	300	1997	311	2004	248	2011	12
1991	259	1998	158	2005	340		
1992	535	1999	525	2006	212		

¹ Population estimates are based on approximately 600 square miles of habitat.

Livestock Grazing

The planning area contains approximately 65 acres of the 21,100-acre Bishop Grazing Allotment that overlaps into the northernmost portion of the Trigo Mountain Wilderness. There are no range developments in wilderness. Livestock grazing within the Trigo Mountain Wilderness is minimal.

Burro Management

Spanish explorers and early miners brought horses and burros for their use into the lower Colorado River area. In ensuing years, enough animals were abandoned to allow the establishment of viable “wild” herds. Subsequently, the treatment of wild horse and burro herds on the public lands became a public issue that led to enactment of the Wild Free-Roaming Horses and Burros Act (WHBA) of 1971 (Public Law 92-195).

The WHBA directs the BLM to manage wild horse and burro herds “as an integral part of the natural system . . . in a manner that is designed to achieve and maintain a thriving natural ecological balance on the public lands.” Furthermore, the WHBA directs that “management activities . . . shall be carried out in consultation with the wildlife agency of the State wherein such lands are located in order to protect the natural ecological balance of all wildlife species which inhabit such lands, particularly endangered wildlife species.” There are also provisions for the removal of wild horses and burros that cause excessive resource damage.

According to the Cibola-Trigo Herd Management Area Plan (1980), there was a stable population trend of the wild horse herd within the planning area. This population stability was the result of high colt mortality, primarily caused by environmental stress during the summer. Wild horses have not been reported in the planning area since a 2004 population inventory.

Through the YFO RMP, a population of approximately 165 wild burros was determined to be the appropriate management level for Cibola-Trigo Herd Management Area (CTHMA), which includes the Trigo Mountain Wilderness. The wild burro herd is more adapted than wild horses to the local climate and burro populations have increased beyond 1,200 animals when the BLM has been unable to conduct burro removal because of funding constraints or litigation that has affected wild horse and burro management at the national level.

Wild burros along the Lower Colorado River Valley tend to concentrate in desert washes, particularly during times of drought or extreme heat. They are attracted to these areas by the greater abundance and variety of forage and shade. Of the dominant species in these habitats, wild burros browse heavily on palo verde, mesquite, catclaw acacia, and ironwood and only lightly on tamarisk. Wild burros also browse heavily on woody species in upland areas.

Wild burro vegetation utilization collection began in 1999. Data was not collected from 2004 to 2009. The vegetation utilization standards and protocol for vegetative analyses are included in Appendix A.

Public Access

U.S. Highway 95, Martinez Lake Road, Red Cloud Mine Road, and the Colorado River provide access to the planning area. In addition to the river and its levee roads, California State Highway 78 to Cibola Road in Arizona allows access to the west and northwest. Cibola

Lake Road allows access to the northern portion of the planning area on the Arizona side of the river. The public is confined to using Cibola Lake and Red Cloud Mine Roads where they pass through the Yuma Proving Ground (YPG). The plan will provide for the continuation of appropriate public access.

A Compatibility Determination was also completed by the Service in August 1999 to address vehicle access through the Imperial Refuge to Clip Wash beyond a gate that was locked at the time. The route provides access to the non-wilderness corridor that bisects the Trigo Mountain Wilderness in Clip Wash.

Recreation

The BLM works in partnership with other agencies to administer various recreational uses that are compatible with their respective purposes and mandates. This plan presents an opportunity to resolve recreational concerns associated with public access and illegal off-road vehicle use in the planning area.

Recreation is one of the multiple uses to be derived from public lands. Recreational activities within BLM-administered lands include: hiking, camping, hunting, horseback riding, photography, and rock hounding. The Trigo Mountain Wilderness provides ample opportunities for primitive recreation and solitude. A large portion of the western wilderness boundary south of Clip Wash is within .5 to 1.5 miles from the Colorado River and is, therefore, accessible by boat for day-use trips. It is estimated that there are fewer than 500 visitors per year to the Trigo Mountain Wilderness. Camping is limited to 14 consecutive days in the planning area.

The BLM has two Long-Term Visitor Areas (LTVAs) from where campers travel into the surrounding desert to explore. The Imperial LTVA is less than a 30-minute drive to the plan area and the La Posa LTVA is approximately a 1-hour drive. Long-term camping is allowed in these two areas from September 15 through April 15, with a Special Recreation Use Permit. During fiscal year 2011, BLM issued 7,289 permits in the LTVAs. Campers from the LTVAs make use of the planning area's recreational opportunities.

Socioeconomics

The regional economy is primarily influenced by agriculture, tourism, and local military installations together with other government agencies. After agriculture, tourism provides the second-largest contribution to the local economy. There are recreation opportunities for visitors from large cities such as San Diego and Phoenix that are within a 3-hour drive from the planning area. Los Angeles and the surrounding metropolitan areas are within a 4 to 5-hour drive from the planning area.

A favorable winter climate in Southwestern Arizona and Southeastern California provides a major attraction for thousands of winter visitors who return yearly to local communities. Winter visitors have an abundant opportunity to enjoy resources within the planning area due to favorable weather conditions that prevail during this period.

High temperatures during the summer period limit outdoor activities in the desert region surrounding the planning area. Many businesses in local communities limit their hours of operation or are closed during the summer months when there is limited activity from tourism.

Minerals and Mining

A minerals investigation conducted jointly by the U.S. Geological Survey (USGS) and the U.S. Bureau of Mines in 1989 provided an assessment of mineral resources for the area within the Trigo Mountain Wilderness. USGS Bulletin 1702-B (1989) contains a published account of the mineral survey conducted in 1989. There are no active mining claims in the Trigo Mountain Wilderness and the Arizona Desert Wilderness Act of 1990 withdrew this area from location, entry, and patent under the U.S. mining laws.

Lands

On November 28, 1990, Public Law 101-628, designated “certain lands in LaPaz County, Arizona, which comprise approximately 29,095 acres, as generally depicted on a map entitled “Trigo Mountain Wilderness” and dated February 1990, and which shall be known as the Trigo Mountain Wilderness” The map of the Trigo Mountain Wilderness referred to in the Public Law is hereby incorporated and made part of this document. The BLM serialized case record of the Trigo Mountain Wilderness, AZA 025505, provides a legal description of the wilderness area that is being used until such time as a cadastral survey of the wilderness area is completed and approved.

Public land records indicate that nearly all the lands within the Trigo Mountain Wilderness are Federal and primarily managed by the BLM. The Bureau of Reclamation maintains a withdrawal in T. 2 S., R. 23 W., Gila and Salt River Meridian (G&SRM), Arizona, for the Temporary Withdrawal Colorado River Survey, Secretarial Order January 31, 1903. The State of Arizona owns a 41.05-acre parcel in section 2, T. 2 S., R. 23 W., G&SRM.

In 1942, through a special-use permit by the Department of the Interior for military training by the Department of the Army, portions of the planning area known as the Laguna Maneuver Area (LMA) were authorized. The LMA was part of the California Arizona Maneuver Area (C-AMA) which covered approximately 12 million acres and was used by General George S. Patton, Jr., for desert military training during World War II. As a result of the military use, there is a potential for discovery of unexploded ordnance in the planning area.

Airspace

The Federal Aviation Administration (FAA) has issued a flight advisory for a recommended minimum flight elevation of 2,000 feet above ground level for designated Wilderness Areas where other airspace restrictions are not in place. Restricted airspace over the planning area is activated only when it is required for military purposes. When the restricted airspace is not in use, it is released to the managing agency (Marine Corps Air Station, Yuma) for general

aviation use. Consult the FAA for current special use airspace restrictions.

Cultural Resources

Prehistoric site types likely to occur within the planning area include habitation sites, temporary camps, petroglyphs and pictographs, intaglios and geoglyphs, trails, hearths, and artifact scatters with chipped stone and ceramics. These prehistoric sites are typically distributed over all ecological zones within the region. Miles of trails and numerous cleared areas, rock rings, and hearths scattered across the desert lowlands attest to a constant presence and movement across the desert landscape. Upland zones typically provided more variety in biotic resources and were a great resource for raw lithic materials. These upland and lowland sites are components of a larger, interconnected system established prehistorically for the exploitation of the area's resources.

Historic sites likely to occur include roads, trails, irrigation facilities, mining sites, telegraph lines, and possible homesteads. Economic enterprises such as mining and agriculture populated the region, and southern Arizona became the focus of a transportation route to California and the coast. Mail routes and the railroad continued the populating of the region. Thus, the historic sites tend to occupy transportation corridors along river valleys, between mountain ranges, and over mountain passes. Historic sites are often located at or near the same locations as prehistoric sites, indicating similar needs for access to water and other resources.

A single prehistoric site has been formally recorded in the planning area. This site is a rockshelter site that included an artifact scatter. No historic sites have been formally recorded within the planning area, but the Black Diamond Mine appears on the topographical maps within the Wilderness boundary and an unnamed cabin foundation and several mine shafts were noted during an aerial reconnaissance of the area. The planning area does not contain any sites that are listed on the National Register of Historic Places.

During World War II, portions of the planning area were used for military training by the Department of the Army and were part of a larger complex known as the LMA. The LMA was part of the C-AMA used by General George S. Patton, Jr., and which covered approximately 12 million acres.

The lack of recorded sites within the planning area is largely due to very limited cultural resource inventories that have covered only a small portion of it. In 1977, archaeologists from Wallaby Enterprises conducted a cultural resource inventory of several sections of land in the Trigo Mountains in advance of the New Jersey Zinc Project (Fritz, 1979). This inventory was quite large, but was primarily outside of the wilderness boundary. No cultural resources were identified within the planning area during this inventory. However, numerous cultural resources were identified just outside the planning area. The previously-recorded site was not recorded as part of a formal cultural resources inventory.

Despite the lack of recorded cultural resource sites within its boundaries, the planning area is considered by several Native American Tribes to be part of their traditional lands. As such,

the planning area likely contains areas of traditional cultural use as well as cultural resources important to these Tribes.

Fire

Fire has not played a significant role in the planning area. It is unlikely that any fires will continue beyond the first 24 hours (initial burning period) in upland areas due to sparse fuels. Drainages contain more contiguous fuels. While there is a slight possibility of fires occurring in major drainages, there is also a very low risk of fire damage to wilderness resources. From 2000 to 2011, there were no fires in the Trigo Mountain Wilderness.

The CRD Fire Management Plan included the Trigo Mountain Wilderness in a Fire Management Unit composed of wilderness areas that are not fire-adapted and it contains fire management strategies for fire operations in wilderness.

Law Enforcement and Emergency Services

The BLM and AGFD have law enforcement officers who routinely patrol the planning area to monitor visitor safety and compliance with regulations. The AGFD has jurisdiction over wildlife-related activities and the enforcement of Arizona Off-Highway Vehicle Regulations. There is further assistance and cooperation with county sheriffs' departments, and the U.S. Border Patrol. The Service also has a law enforcement presence due to its jurisdiction of the adjacent Imperial Refuge Wilderness. Violations encountered by the aforementioned agencies are primarily misdemeanors and include driving vehicles off-road and hunting violations. Border-related smuggling activities have also occurred in the area.

PART III – ISSUES

Management issues for the planning area were identified by cooperating agency staff, other agencies, and the public. The issues are separated into three categories: planning issues, issues solved by policy or administrative action, and issues beyond the scope of the plan.

Planning Issues

1. There are concerns that the burro herd population within the planning area is affecting ecological balances, threatened and endangered species habitat, wilderness values, and cultural resources. Burro management provisions, including monitoring/census and future removal, need to be addressed on a regular basis. Monitoring utilization protocol for upland vegetation may need to be developed and transects established to monitor upland ecological balance.
2. The long-term preservation of wilderness values is mandated by the Wilderness Act. Concerns to address are: effects of visitor uses; illegal vehicle trespass; monitoring of effects of uses; management of invasive, non-native species; and opportunities for environmental education, interpretation, and public outreach.
3. Appropriate analysis must be considered for air operations that require helicopter landings to support wildlife and burro management, possible military activities, and emergency operations within designated wilderness.
4. Existing structures within the area should be evaluated for historic values and the potential need for removal, preservation/protection restoration, and interpretation should be determined. A cultural resource inventory for the area has not been completed; and there may be sites (historic or archaeological) which need mapping, preservation, or protection.
5. Off-road vehicle use is affecting wilderness values, agency mission, and cultural resources. Of concern is illegal off-road use at Red Cloud Wash, Clip Wash, Lopez Wash, and Hart Mine Wash.
6. The lack of capabilities for law enforcement agencies to effectively enforce laws within the planning area need to be addressed.
7. There is a need to identify those mining sites where there is a conflict between public use and wildlife (bat habitat).
8. There is no consistent, unified source of information about the area (interagency and public need).
9. Address the livestock grazing allotment that overlaps the northernmost portion of the Trigo Mountain Wilderness.
10. The plan should provide for the continuation of appropriate public uses.

Issues Solved by Policy or Administrative Action

1. Are there legitimate needs to use former vehicle routes now within wilderness for access to Hidden Valley in the Yuma Proving Ground that should be authorized in the plan?

Rationale: The building of temporary or permanent roads or unauthorized use where an authorization is required by the administering agency is explicitly prohibited by the Wilderness Act of 1964.

2. What is the legal authority to close existing vehicle routes? How does R.S. 2477 apply in wilderness and Refuges?

Rationale: Some previously existing routes were closed when Congress designated the areas as part of the National Wilderness Preservation System and the routes were not left open as non-wilderness corridors. There are no recorded R.S. 2477 roads in the planning area.

3. What is the width of cherrystem (non-wilderness corridor with vehicle route) roads?

Rationale: In conformance with BLM Manual 6120.06A, the corridor width of cherrystem roads in the Trigo Mountain Wilderness varies as depicted on the legislative map referenced in the Arizona Desert Wilderness Act of 1990.

4. The public opposes restrictions on the use of game carriers in wilderness.

Rationale: This issue has been addressed by Section 4(c) of the Wilderness Act where mechanized transport in wilderness is prohibited. The use of mechanical transport, including game carriers, is prohibited in wilderness. This issue is also addressed by Title 43 Code of Federal Regulations at § 6301.5 and 6302.20(d).

5. There is a concern about the effect of current military activities on the area's natural resources and about a potential for discovery of unexploded ordnance due to past military use of the area.

Rationale: Military training routes for aircraft occur over the planning area as provided by law. The provision for military training routes does not include routine aircraft landing or the delivery of materials by means of air drops. The Los Angeles District of the U.S. Army Corps of Engineers also determined that portions of the planning area were Formerly Used Defense Sites (FUDS) within the CAMA where General Patton and his troop trained, and recognized that there is still a potential for land managers and the public to encounter unexploded ordnance during routine use of the lands. Public safety information regarding the FUDS locations has been developed for use by the BLM. The military would be contacted for the removal of discovered unexploded ordnance using emergency provisions in BLM Manual 6340, section 1.6.B.1 as authorized by section 4 (c) of the Wilderness Act.

6. Address wildlife water catchments and consideration of new developments if the river is no longer accessible to wildlife.

Rationale: If wildlife access to river water becomes an issue, this would be addressed in accordance to existing policies and agency manual guidance.

Issues Beyond the Scope of the Plan

1. To address high public use in the BLM portion of Ferguson Lake and at adjacent developed recreation sites, additional recreation facilities and opportunities to disperse visitor impacts should be considered.

Rationale: Ferguson Lake is not within the planning area.

2. Increase water flow through the north end of Ferguson Lake to provide more fresh water and benefit the ecological system of the lake.

Rationale: Ferguson Lake is not within the planning area.

3. Recreational Use Permits issued by the Arizona State Land Department do not allow for access of State Trust land leased for military, commercial, agricultural or mineral purposes. Recreational use of the abandoned manganese mine on State Trust land in section 5, T. 2 S., R. 23 W., G&SRM, La Paz County, Arizona, is a concern. A mineral exploration permit has been issued for section 2, T. 4 S., R. 23 W., G&SRM, La Paz County, Arizona. Should that be developed into a full mining lease, access may be restricted or eliminated.

Rationale: This plan calls for providing legal access to allow public use of the various wilderness opportunities described in the Wilderness Act. However, decisions to designate routes on YFO-administered lands to planning area will be made through the BLM Travel Management Planning process. Similarly, the acquisition of easements or non-Federal lands from willing sellers to provide legal public access will be addressed in site specific projects.

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PART IV – MANAGEMENT PROGRAM

Management Strategy

The management program is designed to protect natural resources and values of the planning area for the foreseeable future. In addition, the management program addresses national goals established by national wilderness management policies.

This plan is issue driven. Within the framework of legal mandates and policy guidelines, plan objectives are established to address planning area issues. Management actions are designed to meet the objectives. A project-specific Minimum Requirements Analysis following guidance in BLM Manual 6340 Appendix B will be completed for: any action that considers one of the prohibited uses as specified in the Wilderness Act, with an exception when needed to meet minimum requirements for the administration of the area; or an action that could impair wilderness character but does not involve a prohibited use.

Preserving “wilderness character,” referenced throughout the Wilderness Act is the primary management mandate for administering a wilderness. Preserving wilderness character requires maintenance of the tangible and intangible aspects of wilderness that include:

1. Maintaining an untrammeled area where ecological processes are unimpaired by human activities;
2. Preserving natural conditions;
3. Maintaining an undeveloped, primeval character;
4. Maintaining a setting that provides opportunities for solitude, primitive and unconfined outdoor recreation, sense of risk and discovery, and spiritual and mental restoration;
5. Protecting ecological, geological, cultural or other features of scientific, educational, scenic or historical value.

Where possible, target dates to accomplish proposed actions are assigned. Monitoring will be conducted to gauge the effectiveness of management actions and determine if plan objectives are being met. Mitigation requirements are specified for each action as needed. During annual plan evaluations, information gathered from monitoring that has been conducted and a review of administrative activities carried out to preserve wilderness resources in the preceding year will be used to determine if new actions need to be considered and ensure mitigation requirements are being met.

OBJECTIVE 1 – PRESERVATION OF WILDERNESS CHARACTER

Maintain or enhance the untrammeled and undeveloped character of wilderness, to provide for the public purposes of recreational, scenic, scientific, educational, conservation, and historical use of the planning area by:

1. Protecting values of naturalness, and outstanding opportunities for solitude and primitive recreation.

2. Minimizing impacts of recreational use and visual impacts of former vehicle routes.
3. Decreasing visual impacts from non-historic features of abandoned mining sites.
4. Promoting and enforcing compliance with vehicle/mechanized use restrictions.
5. Reducing the frequency and need for administratively authorized motorized travel in wilderness.
6. Minimizing potential impacts to visitors from administrative use of motorized or mechanized equipment and vehicles in wilderness by scheduling activities for weekday periods instead of weekends when feasible.

Management Actions

1. To deter unauthorized vehicle use, construct vehicle barriers where former vehicle routes entered the Trigo Mountain Wilderness at the following locations: within the NW $\frac{1}{4}$ NW $\frac{1}{4}$ of section 12, T. 2 S., R. 23 W., G&SRM, La Paz County, Arizona, and within the SE $\frac{1}{4}$ SW $\frac{1}{4}$ of section 33, T. 2 S., R. 23 W., G&SRM, La Paz County, Arizona. Barriers will be constructed outside of the Wilderness boundary so as not to affect water flows; barrier materials may consist of boulders, well casing, and/or post-and-cable used in a manner that will create a minimal visual contrast.
2. At other locations along the Wilderness boundaries where illegal vehicle use persists, vehicle barriers may be constructed as a resource protection measure. Barriers will be constructed outside of the Wilderness boundary so as not to affect water flows; barrier materials may consist of boulders, well casing, and/or post-and-cable used in a manner that will create a minimal visual contrast.
3. Provide public information about Wilderness boundaries, the Leave No Trace! and Tread Lightly Programs at informational displays shown on Map 1.
4. At a minimum, conduct monthly wilderness patrols. Boundary signs, informational displays, and traffic counters will be maintained as needed.
5. Remove/prevent establishment of tamarisk or other new, exotic/invasive species within the Trigo Mountain Wilderness. The exotic/invasive species control would be in accordance with guidance in BLM Manual 6340.15.
6. The use of a helicopter may be considered following the Minimum Requirements Decision Guide (MRDG) process to remove non-historical mining or agricultural debris.
7. Use appropriate methods to minimize visual impacts of former vehicle routes in Wilderness at the following locations: former vehicle route to State Land in the Trigo Mountain Wilderness, Black Diamond Mine route, and Lopez Wash route. The routes will be converted from two-track to single-track hiking trails.
8. Follow strategies contained in the CRDFMP for wilderness areas that are not fire-adapted and implement the following 2010 YFO RMP decisions pertaining to wildland

fire management: FM-006: The entire planning area is managed as non-fire use; FM-012: Identify and implement post-fire stabilization and rehabilitation actions in burned areas to restore a functional landscape to meet the natural resource management objectives; FM-014: In Wilderness, when wildland fire suppression occurs, minimum impact suppression tactics identified in the Interagency Standards for Fire and Aviation Operations will be applied; FM-018: Protect all known cultural resources from fire management activities-related disturbance through consultation with cultural resource specialists; FM-019: For fire suppression activities, follow the biological consultation protocol that has been developed as a part of the FWS Biological Opinion for the YFO RMP.

There is no history of fires in the Trigo Mountain Wilderness; plant communities in this area are not fire-adapted. Implementing provisions from the YFO RMP and CRDFMP will protect habitat, other resources, and wilderness values if a wildfire occurs.

9. Coordinate with the military to remove any military debris/ordnance found within the Wilderness in a manner that provides for staff safety while using methods that create the least disturbance. The removal of discovered ordnance will be implemented as an emergency action. Provide public safety information at kiosks regarding procedures to follow if unexploded ordnance is discovered.

OBJECTIVE 2 -WILDLIFE, WILD HORSE AND BURRO, AND HABITAT MANAGEMENT

Maintain wildlife habitat values and enhance the natural diversity of flora and fauna within the planning area by:

1. Reducing the opportunity for new exotic and/or invasive species to become established.
2. Reducing disturbance to bats from recreational visits.
3. Maintaining populations of animals appropriate to ecosystem capacity.
4. Providing for air operations needed to support wildlife and wild burro management.
5. Maintaining access to water for wildlife populations.
6. Managing wild burro herd to maintain a thriving ecological balance in the Trigo Mountain Wilderness with minimal impacts to surrounding lands using adaptive management.

Management Actions

1. Adopt provisions of the CRDFMP. For fires in the planning area, consult Action 8 under Objective 1 in this document.
2. Inventory abandoned mine sites. Where needed, install gates in a way that allows for continued use by bats and other wildlife. If appropriate, the mine opening may be closed for

public safety by appropriate means. Provide public safety information regarding abandoned mine lands on kiosks.

3. Wildlife capture and transplant work in or out of the planning area will be considered annually through consultations between the AGFD and BLM staff.
4. Evaluate helicopter use as the minimum tool in wilderness area for wild horse and burro census and wildlife census and capture/release operations through the MRDG process. Aircraft operations may be approved by the Field Manager upon compliance with BLM Manual 6340, Appendix B.
5. An advanced notification to YFO of 2 weeks prior to planned flights over the Trigo Mountain Wilderness by AGFD is desirable. Flight operations outside of wilderness are not subject to the limitations listed in this action. Provide for the following flight operations in accordance with the Memorandum of Understanding between the AGFC and the BLM:
 - a. One low-level mule deer survey during the period from January 1 through March 31.
 - b. One low-level bighorn sheep survey in the period from October 1 through November 30.
 - c. Other flights deemed as necessary may occur in coordination with the appropriate agency.
 - d. Helicopter landings may occur for bighorn sheep transplants (capture or release) or mule deer and other species for tagging and removal of telemetry equipment upon compliance with MRDG requirements specified in BLM Manual 6340, Appendix B.
6. Provide for low-level flights to conduct wild horse and burro census.
7. The FAA should be consulted for special use airspace restrictions that may be in place when planning air operations needed for wild horse and burro or wildlife management actions.
8. Maintain the wild burro population at the Appropriate Management Level of approximately 165 burros as established in Management Action HB-003 and in conformance with Administrative Action AA-167 of the YFO RMP. To maintain thriving natural ecological balance in the planning area, limit utilization on key forage species listed in Appendix D and as specified by the utilization standards also listed in Appendix D.

As acknowledged in Management Action HB-005 of the YFO RMP, Service-administered lands, including the Imperial Refuge Wilderness, are not within the CTHMA boundary. The Service currently allows wild burro use if impacts to native vegetation are kept to a minimum by maintaining the AML.

9. Habitat monitoring will continue using vegetation monitoring protocols in Appendix D as agreed by the cooperating agencies. The Burro Working Group (YFO Rangeland Management Specialist, and BLM, INWR, and Region IV AGFD Biologists) will evaluate

conditions annually and modify or establish new monitoring protocols and sites as needed.

10. Maintain an accurate population estimate of the wild burro herd using established census methods.

11. Continue vegetation utilization monitoring. The Burro Working Group will conduct annual evaluations of the vegetation utilizations data and present a summary and recommendations to the Interagency Oversight Team (YFO and INWR Managers and Region IV AGFD Supervisor) regarding herd size adjustments needed to remain within Vegetation Utilization Standards listed in Appendix D.

12. Future development of wildlife water sources in the planning area will only be considered if access to the Colorado River is lost. If this occurs, proposals for wildlife water sources will follow current BLM Manual 6340 guidelines.

OBJECTIVE 3 – RECREATION, LEGAL ACCESS, AND PUBLIC INFORMATION

Provide appropriate recreational opportunities while protecting natural resources by implementing the following provisions for the foreseeable future by:

1. Providing public information that allows for public enjoyment of recreational opportunities while protecting the area's natural and cultural resources and providing for public safety.
2. Enhancing recreational opportunities through agency initiatives or partnerships.
3. Establishing methods that will allow for the public to continually assess the quality of their recreational opportunities and thereby assist in determining appropriate future management decisions.

Management Actions

1. Establish and maintain kiosks at access points (Map 1) to the planning area as funding and staff levels permit.
2. Conduct routine patrols of the planning area at least once per month as staffing and funding allow.
3. Promote “Leave No Trace!” land use ethics by making appropriate information available at kiosks and administrative sites.
4. Establish visitor registers and traffic counters at the BLM kiosks in the following locations: on the vehicle route that leads to the northern Trigo Mountain cherrystem road; along the vehicle route south of Red Cloud Mine; and at the junction of the Clip Wash vehicle route east of Lopez Wash (Map 1). Provide for public assessment and comment about the quality of their recreational and wildlife appreciation opportunities. Develop an

appropriate register form to assist in providing information regarding assessments of recreational opportunities by the public.

5. Keep existing public access routes (Map 1) open to promote dispersed visitor use and maintain recreational opportunities.

6. The BLM will pursue options to acquire non-Federal lands within or adjacent to special management areas, including wilderness, established by law or administrative action and provide legal access to public lands by acquiring an easement through or by purchasing the entire land parcel where access routes cross non-Federal lands. The following parcel has been identified for BLM acquisition:

sec. 2, T. 4 S., R. 23 W., G&SRM, La Paz County, Arizona

The route through section 2 provides the only vehicle access to the southern portion of the Trigo Mountain Wilderness. Providing legal public access would assist in meeting Objective 1 by facilitating dispersed visitor use and maintaining recreational opportunities throughout a larger portion of the planning area.

7. Encourage the use of feeding containers and pelletized feed or of certified weed-free hay for packstock.

The use of feeding containers and pellets or certified weed-free hay will assist in preventing the introduction of exotic plants and pathogens from domestic livestock. Cumulative habitat/resource degradation will be prevented from continued recreational livestock use. It is recognized that the use of recreational livestock is one method of transporting game across long distances or as an alternative recreational opportunity. This action also contributes to the achievement of Objective 2.

8. Only dead, down, and detached wood may be used for campfires. Provide information at kiosks located on access routes to promote less use of campfires as a measure to promote Leave No Trace principles. Seasonal fire restrictions may occur each year as a fire prevention measure when weather conditions create a heightend risk for wildfires.

OBJECTIVE 4 – USE AND PRESERVATION OF CULTURAL RESOURCES

Cultural resource management guidance for BLM-administered lands is provided by BLM Manual 8110. In this manual, the BLM is directed to categorize cultural resources according to their potential uses in order to allow Field Office managers to know in advance how to respond to conflicts that arise between specific cultural resources and other land uses (BLM Manual 8110.4). In practice, this categorization takes place by allocating cultural properties to a specific use category. Within the BLM, use categories include the following: Scientific Use, Public Use, Traditional Use, Conservation for Future Use, Experimental Use, and Discharged from Management. The allocation process takes into account a property's characteristics, condition, setting, location and accessibility, and especially its perceived value and potential use. According to the manual, cultural resources may be allocated to

more than one use category, and category allocations are reevaluated and revised, as appropriate, when circumstances change or new data become available (BLM Manual 8110.41A). The BLM is directed to make specific allocations during its land use planning or, if it is more than a year from the start of a land use planning cycle, the BLM can assign cultural resources to use categories through an implementation plan (BLM Manual 8110.41C). The Yuma Field Office did not make such an allocation in the 2010 YFO RMP; however, the document includes the following Desired Future Condition, identified as CL-005:

“Within Wilderness, YFO accommodates traditional or sacred uses identified by Native American tribes who traditionally used the area.”

Given the aforementioned guidance, and, in order to prevent further loss of information, educational, and traditional values and ensure the proper and best use of cultural resources, this plan will:

1. Allocate known cultural resources or classes of cultural resources on BLM-administered lands to primary and secondary use categories to guide future management.
2. Promote a more active participation in the preservation of cultural resources by Native Americans and provide for their traditional uses in the planning area.
3. Increase cultural resource issues awareness (education and information) of permitted and casual recreation users.
4. Establish an effective cultural resource survey and monitoring program to document and develop mitigation for both natural and potential man-made impacts.

Management Actions

1. Allocations of cultural resources on BLM-administered lands to the Conservation for Future Use category are changed to Traditional Use as a primary use and Scientific Use as a secondary use.

Rationale: The BLM Conservation for Future Use category is reserved for those cultural properties which are scarce, have research potentials that cannot be realized through current analytical techniques, or possess comparable characteristics making them inappropriate for studies which would alter them. The concept of conservation of sites in the planning area is an appropriate management goal, but it is not clear that any known or recorded properties in the planning area meet the criteria of having research potential that cannot be realized through current techniques. Cultural properties that would benefit from allocation to the Conservation for Future Use category that are subsequently identified would be allocated to this use through maintenance of the plan. Traditional Use as a primary use would provide guidance to protect the integrity of sites that are of concern to Native Americans.

2. All prehistoric cultural resources on BLM-administered lands are allocated to Traditional Use and Scientific Use categories.

3. All prehistoric cultural resources would be interpreted through off-site information. No prehistoric sites are allocated to Public Use with this plan.
4. All BLM-administered historic cultural resources are allocated to Scientific Use and Public Use categories; Scientific Use is a primary use. If public use would compromise the integrity of any historic site, information would be provided at off-site locations or access may be limited to the least invasive means.
5. Conduct condition assessment and develop maintenance plans for any standing historic structures or ruins in the planning area.
6. In coordination with local Native Americans, conduct field visits to archaeological sites in the planning area. Frequency of field visits will be dependent on both their interest in previously recorded sites and in newly discovered locations. Share existing and newly discovered site information with their museums or cultural program staff at a minimum of once a year. Consult with tribal members and cultural staff to develop appropriate monitoring, mitigation measures, or develop research designs on a case-by-case basis.

Rationale: Archaeological or traditional sites that represent the activities of Native Americans are the most sensitive properties to manage. The locations of these sites have often been lost to the people whose ancestors made them or used them. Many archaeological sites are sacred to the Native Americans. Archaeologists should share their knowledge of these sites with the local Native Americans and include their recommendations regarding the importance of these sites in their traditional culture as well as provide a wide spectrum of appropriate scientific research.

7. Develop non-specific or generic interpretive materials appropriate to the intended audiences on the importance of all cultural resources (archaeological, traditional, and historic).
8. Include historic road and trail information as part of any access or trail guide developed. Include information on any historic cultural properties that are in the vicinity of the route to be used.
9. Provide signs at historic properties outside of wilderness to indicate active management. Include information about historic properties in wilderness brochures or at wilderness entry locations.
10. Include cultural resource information on any new information bulletin boards.
11. Complete a patrol plan to help protect natural and cultural resources and implement.
12. Complete documentation of the known cultural properties and visit sites to provide a baseline for the patrol plan to schedule monitoring and evaluating potential impacts.

13. Conduct orientation patrols with certified members of the Arizona Site Stewards Program to promote and maintain monitoring effectiveness.

Rationale: Monitoring selected properties or areas for changes in uses that could threaten the allocated use or eligibility of the cultural resources in the planning area is an effective way to actively manage cultural resources. Arizona Site Stewards are trained volunteers who provide a local workforce to accomplish the time intensive task of field monitoring.

14. Coordinate the use and preservation of archaeological or traditional sites that represent the activities of Native Americans with Federally and State recognized Native American Indian Tribes.

15. Coordinate the designated use and preservation of archaeological or traditional sites with the Arizona State Historic Preservation Office.

Monitoring

Compile and evaluate information from cultural field visits and patrol reports during the annual plan evaluation to determine whether sites are being identified and evaluated, whether traditional uses are being considered, and whether human impacts are being avoided.

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PART V – PLAN EVALUATION

In coordination with the AGFD Region IV Supervisor and staff, the Yuma Field Manager and interdisciplinary team will conduct annual evaluations of the plan to:

1. Document completed management actions and adjust schedules for the following year if necessary.
2. Assess monitoring that has been conducted to determine if the plan objectives are being met.
3. Recommend new management actions or mitigation that may be needed.
4. Determine if the plan needs to be revised.

Needed revisions will amend the plan and be available for public review before being implemented.

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PART VI – IMPLEMENTATION SCHEDULE AND COST ESTIMATE

Table 3 - Annual/ Recurring Tasks

TASK/ACTIVITY	WORKMONTHS (\$2500/MO)	TASK ASSIGNMENT
Monthly (minimum) Wilderness Patrols, Facilities Maintenance - kiosks, signs and vehicle barriers	6	Park/Law Enforcement Rangers/Wilderness Specialist
Conduct annual vegetation monitoring	0.5	Field Office/Refuge Staff
Annual evaluations by Burro Working Group and recommendations for needed action by Interagency Oversight Group	3	Field Manager /AGFD Region IV Supervisor Interdisciplinary Team, AGFD
Plan Evaluation	0.5	Field Manager/ AGFD Region IV Supervisor Interdisciplinary Team/AGFD
Wilderness Character Assessment every 5 years starting in 2013	0.5	Wilderness Specialist

Table 4 - One Time Tasks

TASK/ACTIVITY	TARGET DATE	COSTS	TASK ASSIGNMENT
1. Establish visitor registers.	2013	\$5,000	Wilderness Specialist/ Park Ranger
2. Construct vehicle barriers.	2013	\$1,000	Wilderness Specialist/ Park Ranger/ Maintenance staff
3. Conduct restoration of former vehicle routes.	2014- 2015	\$400	Park Ranger/ Wilderness Specialists/ Maintenance staff
4. Clean up debris at abandoned mining sites	2015	\$1,000	Wilderness Specialist / Park Ranger/ Maintenance staff
6. Inventory and gate or close abandoned mines as appropriate	2015	\$35,000	Wildlife Biologist/ Maintenance staff
7. Acquire easements for public access	2018	\$100,000	State Office Realty Specialist/Field Manager

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PART VII – APPENDICES

APPENDIX A – WILD HORSE AND BURRO VEGETATION MONITORING PROTOCOLS AND VEGETATION UTILIZATION STANDARDS

Vegetation Monitoring Protocols Field Monitoring Guide and Sampling Methodology

1. Project Information

This guide is a field reference for performing vegetation monitoring of key areas utilized by wild horses and burros in the Cibola-Trigo Herd Management Area (CTHMA). The guide is to be used with two field forms: the “Modified Extensive Browse” field form, and “Transect Location and Documentation Data” form (inserts 3 and 4 of this document). Refer to this guide to obtain specific information regarding transect location and data collection.

An interagency team was assembled for the purpose of developing these protocols as part of the Trigo Mountain Wilderness and Imperial Refuge Wilderness Cooperative Wilderness Management Plan (T-I CMP) at the beginning of the planning process. The team was composed of staff from U.S. Bureau of Land Management (BLM) Yuma Field Office (YFO); Imperial National Wildlife Refuge (INWR) and Cibola National Wildlife Refuge (CNWR); both managed by the U.S. Fish and Wildlife Service (Service), U.S. Army Yuma Proving Ground (YPG); and Arizona Game and Fish Department (AGFD).

The team initially established 10 permanent transects for monitoring key species utilized by wild horses and burros near the Colorado River where animals tend to concentrate during hot or dry conditions. Transects are placed in representative areas where grazing/browsing pressure is heaviest. Annual monitoring is needed to detect change and condition in key species utilized by the herd.

2. Management Objective

The overall objective of data collection is to ensure that T-I CMP objectives are being met and to validate the Appropriate Management Levels (AMLs) for wild horses and burros.

3. Sampling Objective

The sampling methodology is a modification of the extensive browse method described in Utilization Studies and Residual Measurements (Interagency Technical Team, 1996). For further reference on current vegetation monitoring methodologies, consult Measuring and Monitoring Plant Populations (Elzinga, Salzer, and Willoughby, 1998) and Inventory and Monitoring of Wildlife Habitat (Cooperrider, Boyd and Stuart, 1986).

The modified extensive browse method is an adaptation of the extensive browse method to more closely fit the unique characteristics of the Sonoran Desert. The subcommittee developed the modified extensive browse method based on the extensive browse method, which is rapid and can be used on all browse species. The modified extensive browse method records the percent of current year utilization, age class, hedging/form class, and

bark stripping. The trees of the Sonoran Desert do not typically exhibit readily identifiable current year's growth. This makes estimating utilization of current year's growth very difficult to impossible. Therefore, utilization is judged by current use of branches less than 1 centimeter in diameter. Additional modifications include making permanent transects and modifying data collection procedures.

A. Limits of the Study Area

The study area is in the CTHMA. Reference the YFO RMP map of the CTHMA. Transects are placed in key areas, adjacent to the Colorado River as shown on Map 2 of the Trigo Mountain Wilderness and Imperial Refuge Wilderness Cooperative Wilderness Management Plan.

B. Sampling Unit

The Sampling Unit is comprised of the Riverbend or Carrizo soil type found in washes near the Colorado River. These sites will fall within the Sandy Bottom Ecological Site. This is where key vegetative species predominate and wild horses and burros tend to concentrate during droughts and/or summer months.

C. Sampling Time

Data collection is to occur after wild horses and burros have dispersed into the uplands as winter precipitation begins. Collect data in late fall/winter, November, December, January, or February. Should no winter precipitation occur, transects should be visited and data collected by March 1 of each year.

4. Location and Layout of the Study Area

A. Location of Transects Within Study Area

Transect locations are listed in table 1 and shown on 7.5 minute topographical maps, aerial photos, and transect photos (refer to supplemental guide in YFO files).

Table 1. General location of transects, 7.5 minute quadrangle name and UTM position of marker stake.

No.	Transect Name	7.5 Minute Map Name	UTM Coordinates
1	Los Angeles Wash	Imperial Reservoir/Red Hill H432114/A433114	3651960.5029, 737973.0579
2	McAllister Wash	Red Hill A433114	3655849.7824, 734425.3625
3	South Yuma Wash	Picacho A533114	3658141.576, 731317.0464
4	Arrastra Wash	Picacho A533114	3657958.1579, 725689.0298
5	Red Cloud Wash	Picacho SW A633114	3659869.6037, 719692.2119
6	Paradise Valley	Picacho SW A633114	3666172.6532, 714866.3471
7	No Name (North of Lighthouse Rock and Draper Lake)	Picacho NW B633114	3670356, 716477.1551
8	Imperial-Cibola boundary (No Name Wash)	Picacho NW B633114	3670347.36 716465.35
9	Lopez Wash	Picacho NW B633114	3679785.7137, 717587.7454
10	Gould Wash	Palo Verde/Mule Wash D633114/D533114	3700012.5289, 720248.2384

5. Equipment

Transect Location and Documentation form (insert 3)
 Extensive Browse form (insert 4)
 Digital Camera
 Compass
 GPS Unit

6. Detailed Description of Sampling Process

A. Photograph Transect

Take at least three photos of each transect. Take the first photo from a photo point (nearby ridge). Take a second photo from the transect marker stake pointing down the length of the transect. Use the transect bearing (compass bearing) recorded on the previous “Transect Location and Documentation” form. Take a third photo of anything you find unusual or distinctive about the vegetation condition. Record photo locations with a GPS position on the “Transect Location and Documentation Data” form.

B. Pace Interval and Sample Plants

Note length of transect and total number of samples to determine pace interval between each sample point. Each transect length is noted on the respective “Transect Location and Documentation Data” form. The length is either 1 mile or the length of the wash if less than 1 mile. Divide transect length by 100 to determine transect interval. Begin at transect marker and walk along the transect bearing point to nearest perennial plant (creosote, etc.). From the perennial plant, walk in a 180-degree zone to the nearest key species.

Record the data on the form for the key species and then face the transect bearing point. Walk the pace interval and up the transect to the next sample point. Locate and sample the nearest key species within a 180-degree zone. At each sample point, all information will be collected on the nearest species, even if it is not a key species. Limit the search for key species at each point to 25 meters on either side of the point on the ground to avoid the area. Continue until you have finished 100 sample points and reach the end of the transect.

C. Key species

ACGR	catclaw acacia	<i>Acacia greggii</i>
OLTE	ironwood	<i>Olneya tesota</i>
PAFL	blue palo verde	<i>Parkinsonia floridum</i>
PAMI	little leaf palo verde	<i>Parkinsonia microphyllum</i>
PRSP	mesquite	<i>Prosopis spp.</i>

D. Percent Utilization

Estimate percentage of leaders (stem ends less than 1 centimeter diameter) browsed during the last year. Look at the entire plant below 2 meters. Count 10 leaders and subtract the number stems grazed during that year. If the plant is large, more leaders may be counted. Estimate the average after the whole plant is observed. Do not count utilization over 1 year old. If grazing is more than 1 year old, the stem end should be grey and scarred. Current year utilization will not exhibit as much scarring.

E. Age Class

Mark one of the following categories for each plant.

S - “seedling”

Y - “young”

M - “mature”

D - “dead” or “decadent”

F. Hedging/Form Class

Hedging/form Class is the volume of branches over 1 centimeter removed in the current year. Refer to the photo guide in the files at the YFO to attain consistency measuring hedging/form class. Hedging/form Class is an overall visual estimate of the percentage of browse no longer available below 2 meters (about 6 feet).

G. Bark Stripping

If you see fresh bark stripping from the *current year*, mark “yes” for each plant sampled.

H. Other Plants on Transect

Use block at bottom of form to list other plants observed but not encountered on the transect.

7. Abbreviation Codes of Common Shrubs and Trees

The following table is a suggested list of perennial plants found on YPG which could potentially occur on the transects. For reference of floristics in the area, see Bern (1995).

Table 2. Abbreviation Codes of Common Shrubs and Trees

Family	Binomial	Common Name	Code
ACANTHACEAE	<i>Justicia californica</i>	hummingbird bush	JUCA
ASCLEPIADACEAE	<i>Asclepias subulata</i>	rush milkweed	ASAL
ASTERACEAE	<i>Ambrosia ambrosioides</i>	Ambrosia leaf burr Ragweed	AMAM
	<i>Ambrosia dumosa</i>	white bursage	AMDU
	<i>Ambrosia ilicifolia</i>	hollyleaf bur ragweed	AMIL
	<i>Baccharis salicifolia</i>	mule's fat	BASA
	<i>Baccharis sarothroides</i>	Desertbroom	BASA
	<i>Bebbia juncea</i>	Sweetbush	BEJU
	<i>Brickellia atractyloides</i>	spearleaf brickellbush	BRATA
	<i>Brickellia coulteri</i>	Coulter's brickellbush	BRCO
	<i>Encelia farinosa</i>	Brittlebush	ENFA
	<i>Hymenoclea salsola</i>	white cheesebush	HYSA
	<i>Palafoxia linearis</i>	Palafoxia	PALI
	<i>Peucephyllum schottii</i>	Schott's pygmy cedar	PESC
	<i>Pluchea sericea</i>	arrow-weed	PLSE
	<i>Stephanomeria exigua</i>	white-plume wire- lettuce	STEXE
BIGNONIACEAE	<i>Chilopsis linearis</i>	desert willow	CHLIA
CHENOPODIACEAE	<i>Atriplex canescens</i>	fourwing saltbush	ATCA
	<i>Atriplex hymenelytra</i>	Desertholly	ATHY
	<i>Atriplex lentiformis</i>	big saltbush	ATLEL

Table 2. Abbreviation Codes of Common Shrubs and Trees (continued)

Family	Binomial	Common Name	Code
CHENOPODIACEAE	<i>Atriplex linearis</i>	thinleaf fourwing saltbush	ATLI
FABACEAE	<i>Acacia greggii</i>	catclaw acacia	ACGR
	<i>Olneya tesota</i>	Ironwood	OLTE
	<i>Parkinsonia aculeata</i>	mexican palo-verde	PAAC
	<i>Parkinsonia florida</i>	blue palo-verde	PAFL
	<i>Parkinsonia microphyllum</i>	little-leaf palo-verde	
	<i>Prosopis glandulosa</i> var. <i>torreyana</i>	honey mesquite	PRGLT
	<i>Prosopis velutina</i>	velvet mesquite	PRVE
	<i>Psoralea arguta</i>	Smoketree	PSSP
	<i>Senna covesii</i>	hairysensitive plant	SECO
FOUQUIERIACEAE	<i>Fouquieria splendens</i>	Ocotillo	FOSP
KRAMERIACEAE	<i>Krameria erecta</i> SYN <i>K. parvifolia</i>	small-flower ratany	KRER
	<i>Krameria grayi</i>	white ratany	KRGR
LAMIACEAE	<i>Hyptis emoryi</i>	desert lavender	HYEM
	<i>Salazaria mexicana</i>	Mexican bladder-sage	SAME
MALPHIGIACEAE	<i>Janusia gracilis</i>	slender janusia	JAGR
RHAMNACEAE	<i>Colubrina californica</i>	las animas nakedwood	COCA
	<i>Condalia globosa</i>	bitter snakewood	COGL
	<i>Ziziphus obtusifolia</i>	Lotebush	ZIOB
RUTACEAE	<i>Thamnosma montana</i>	turpentine-broom	THMO
SALICACEAE	<i>Populus fremontii</i>	fremont's cottonwood	POFR
	<i>Salix exigua</i>	sandbar willow	SAEX
	<i>Salix gooddingii</i>	goodding willow	SAGO
SIMAROUBACEAE	<i>Castela emoryi</i>	thorn of christ	CAEM
SOLONACEAE	<i>Lycium andersonii</i>	red-berry desert-thorn	LYAN
	<i>Lycium cooperi</i>	Peachthorn	LYCO
	<i>Lycium freemontii</i>	fremont's desert-thorn	LYFR

Family	Binomial	Common Name	Code
SOLONACEAE	<i>Lycium parishii</i>	parish's desert-thorn	LYPA
TAMARICACEAE	<i>Tamarix aphylla</i>	athel tamarisk	TAAP
	<i>Tamarix chinensis</i>	five-stamen tamarix	TACH
ZYGOPHYLLACEAE	<i>Larrea tridentata</i>	creosote bush	LATR

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Vegetation Utilization Standards

Cibola-Trigo Herd Management Area

Vegetation utilization greater than a 20 percent average utilization of any key species for a specific transect would result in a management action in that area. Greater than 20 percent average utilization of any key species over all transects would result in a management action over a large area and/or reevaluation of the AML for the CTHMA.

Hedging – The goal is for an average of 90 percent or more of all key species to fall within the 1 to 20 percent hedging/form class category as described in the vegetation monitoring protocols in this appendix. If this goal has not been reached and an increase in hedging/form class is observed for any key species on any transect, this would result in a management action in that area. If this goal has not been reached and an increase in hedging/form class is observed for any key species for all transects, this would result in a management action over a large area and/or reevaluation of the AML.

Bark Stripping – If there is greater than 5 percent new bark stripping of any key species for any specific transect, this would result in a management action in that area. Greater than 5 percent new bark stripping on any key species over all transects would result in a

management action over a large area and/or reevaluation of the AML. All acceptable use levels will be reevaluated periodically and are subject to change to meet all plan objectives

APPENDIX B – CULTURAL RESOURCE ALLOCATIONS

The following is taken from BLM Arizona Handbook H-8110, Section VI, and entitled “Evaluating Cultural Resources.”

B. Allocation to Use Categories. Once a cultural property has been evaluated in relation to the National Register criteria, it should be categorized to establish what values and qualities need to be protected, and when or how use should be authorized. Cultural resources can be used in many ways, e.g., for research, traditional or ceremonial purposes, interpretive exhibits, educational field schools, experimental studies, and as resource “banks” to be conserved for future use. The six use categories to which cultural resources are allocated are (1) scientific use, (2) conservation for future use, (3) traditional use, (4) public use, (5) experimental use, and (6) discharged from management. A cultural property may be allocated to more than one use category, and allocations may change as circumstances change. These use categories and their relationship to the National Register criteria are described in BLM Manual 8110.42 and 8110.43. The BLM is responsible for managing cultural resources regardless of their National Register status, so even properties found not eligible for the National Register should be allocated to one or more use categories. Use categories help to define the appropriate kind and degree of management needed, including no management.

C. Justifying Use Allocations. Allocation of cultural resources to use categories should be based on supporting rationale. When developing written statements to justify allocations, the following guidelines should be considered:

1. Scientific Use. Reasons for allocating cultural properties to scientific use are based on research in progress or on short- and long-term research objectives. Information supporting the need to use cultural properties for scientific study should be provided directly by individual researchers. Research needs and objectives may also be identified from contract proposals, data recovery plans, cultural resource use permit documents, Bureau planning documents, Class I Regional Overviews, historic context studies, and other background sources. In some cases, potential uses will be perceived which have not been previously documented. Statements supporting allocation to this use category should, at a minimum:

- a. Identify the information likely to be extracted from the cultural property.
- b. Refer to the research objectives (regional questions and specific study topics) that would require collection of the information identified.
- c. Identify the techniques likely to be used to collect the information.
- d. Identify any current research project and researchers presently investigating the cultural property.
- e. Identify the research objectives of any project currently investigating the

cultural property.

f. Identify any techniques currently being used to extract information from the cultural property.

2. Conservation for Future Use. Rationale supporting allocation to this category should be based on future long-term goals and information needs as discussed in Bureau planning documents, Class I Regional Overviews, historic context studies, and other background documents. Justifications should, at a minimum:

- a. Identify the specific information or values in the cultural property, including traditional cultural values, which are pertinent to future goals and information needs.
- b. Explain why the cultural property is not presently eligible for consideration as the subject of scientific study involving physical alteration or eligible for other uses.
- c. Identify the conditions under which the cultural property might be used in the future.

3. Traditional Use. Reasons for allocation to this category should be based on the identified value placed on the resource by specific social and/or cultural groups. Statements supporting allocation should address:

- a. The nature of the traditional value that occasions the use.
- b. The identity of the group that holds the traditional value.
- c. The nature of the use made of the property related to the value.
- d. The percent of the group participating directly or indirectly in the use.
- e. The length of time the group has ascribed this value to the property.
- f. The importance of the property in maintaining the heritage or existence of the group.

4. Public Use. Rationale for assignment to this category should be based on the potential use of cultural properties by the general public for education or recreation. Consider accessibility, public demand, impacts on cultural resource values, cost-effectiveness, and feasibility. Statements supporting allocation should be developed in coordination with recreation specialists and should:

- a. Identify the specific aspect of the cultural resource that lends itself to public use.

b. Identify the techniques to be applied to provide or enhance public use opportunities.

c. Identify the specific information to be recovered or values to be protected prior to public use.

d. Identify the specific values to be protected and techniques to be used during public use.

5. Experimental Use. Assignment to this category should be based on the need to obtain information to develop effective cultural resource protection measures. For example, cultural properties may be studied to identify rates and processes of deterioration acting on them or to determine the effectiveness of specific efforts to deter vandalism. Justifications for allocation should:

a. Identify the information to be extracted from the cultural property.

b. Identify the techniques to be used to collect the information.

c. Identify the management objectives supported by the information.

6. Discharged from Management. Statements supporting assignment to this category should document the lack of any further use for the cultural property and explain why the property should no longer constrain other land uses. At a minimum, justifications for allocation should:

a. Identify the use category to which the cultural property was previously assigned, if any.

b. Explain why the cultural property no longer possesses the characteristics that qualified it for that category or for allocation to an alternate use category.

c. Briefly describe the records representing the cultural property and explain why the records document the property's only remaining importance.

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APPENDIX C – INTERDISCIPLINARY PLANNING TEAM

BUREAU OF LAND MANAGEMENT

Yuma Field Office

Tom Jones*	Archaeologist
John Hall*	Rangeland Management Specialist
Candice Holzer	Land Law Examiner
Art Lopez*	Assistant Field Manager
John MacDonald	Field Manager
Ron Morfin*	Team Lead, Recreation & Wilderness
Michael Pittman	Natural Resource Management Intern
Karen Reichhardt*	Assistant Field Manager
Theresa Schutt	Staff Assistant
Erica Stewart*	Wildlife Biologist

Colorado River District

Dave Daniels	Planning and Environmental Coordinator
Wade Reaves	Fuels Specialist

Arizona State Office

Ken Mahoney	National Landscape Conservation System Coordinator
Roger Oyler*	Senior Technical Specialist – Wild Horses and Burros

FISH AND WILDLIFE SERVICE

Imperial National Wildlife Refuge

Joseph Barnett *	Wildlife Biologist
Denise Bausch*	Visitor Services Manager
Nate Caswell	Refuge Manager
Elaine Johnson	SWAZ Complex Manager
Bill Seese	Deputy Complex Manager
Brenda Zaun*	Zone Wildlife Biologist

ARIZONA GAME AND FISH DEPARTMENT

Region IV – Yuma

Pat Barber	Region IV Supervisor
Thomas Bommarito*	Habitat Specialist
Russ Engel	Habitat Program Manager
Bob Henry	Game Specialist
Bill Knowles*	Habitat Program Manager

*Member of Core Interdisciplinary Planning Team

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APPENDIX D – CONSULTATION AND PUBLIC INVOLVEMENT

In December 1995, the Bureau of Land Management (BLM) and U.S. Fish and Wildlife Service (Service) decided to coordinate efforts and form an interdisciplinary (ID) team to develop one management plan that would cover both the Trigo Mountain Wilderness and Imperial Refuge Wilderness. Due to the wild burro herd size and deteriorating resource conditions that were occurring, the BLM and Service realized they would need to expand the initial planning boundary beyond these two adjacent wildernesses and invite other agencies to participate in the planning effort. Unless some of the issues could be resolved over a broader area, it would be difficult to meet national wilderness preservation goals established by both the BLM and Service. Therefore, it became evident that some ongoing activities and resource conditions outside of wilderness also had to be addressed.

There were two interagency meetings to continue with the identification of planning issues. Being that the planning process is issue-driven, the BLM and Service determined that the issues would help to define the final planning boundary. The meetings were initially attended by representatives from: the BLM Yuma Resource Area (YRA); FWS Imperial (INWR) and Cibola (CNWR) National Wildlife Refuges; Arizona Game and Fish Department (AGFD); California Department of Parks and Recreation (CDPR); California Fish and Game Department (CFGD); and U.S. Army Yuma Proving Ground (YPG).

To provide opportunities for other governmental agencies, private organizations, and the general public to identify their concerns about the proposed planning area, public meetings were held in Yuma and Blythe. The meetings allowed for the public to become involved at the beginning of the planning effort and provided for a better assessment of the issues. Concerns addressed at the public meetings are included in the issues section of this interagency plan.

Due to policy changes at the national level related to implementation of the Federal Advisory Committee Act, there were concerns about continuing with a public involvement process that included forming a working group composed of representative members of the interested public. As had become a common practice, the working group would join the interdisciplinary team. However, new policies at the national level prompted a request for a solicitor's opinion on the continued use of this practice. Subsequently, it was determined that public working groups would no longer be involved in wilderness planning. Instead, state Resource Advisory Councils approved at the Secretary of the Interior level were formed. A long period elapsed after the request for guidance.

As the planning effort continued, it became evident that it would be necessary to amend the Yuma District Resource Management Plan to update provisions for managing the Cibola-Trigo Wild Horse and Burro Herd. A notice of intent to prepare a resource management plan amendment was published in the Federal Register on September 3, 1998, and there was a public meeting to provide an additional opportunity for public involvement on the proposed amendment.

Another opportunity for public involvement occurred when the INWR notified the public that a Compatibility Determination to evaluate allowing vehicle access through Clip Wash would be included within this plan. The Clip Wash route had been closed by the INWR and there was a public interest for opening the route. The Compatibility Determination was completed by Imperial NWR in August 1999 and, by this means, the Service allowed vehicle access through Clip Wash.

There were additional delays in the planning process as the interdisciplinary team and agency managers considered options to reduce the Cibola-Trigo wild burro herd that had significantly exceeded the appropriate management level (AML). As a part of the process to resolve a variety of issues for management of the wild burro herd, the interdisciplinary team developed vegetation monitoring protocols to assess vegetation utilization in the planning area. This part of the planning effort required approximately 2 years to complete. The vegetation monitoring protocols and utilization standards are included in this planning document.

In 2003, resource inventories for a revision of the Yuma District RMP for the Yuma Field Office were initiated. The YFO RMP revision was completed in January 2010. Land use plan level decisions for the management of wild horses and burros were made in the YFO RMP. Since there was no longer a need for a land use plan amendment, the Trigo/Imperial Plan reverted to being an interagency wilderness management plan for the BLM and Service.

A public notice was sent on January 31, 2012, to a consolidated list of various organizations and individuals to inform the public that the Service and BLM were coordinating efforts to develop a cooperative management plan to cover both wilderness areas. The mailing included a list of planning issues and requested input into the planning process. The mail out provided another opportunity for the public to identify issues or concerns for the planning area.

A draft version of this document was released for a 45-day public review and comment period on July 19, 2012. Comments on the draft plan were received from the U.S. Army Garrison Yuma Proving Ground, Arizona Game and Fish Department, Grand Canyon Chapter of the Sierra Club, and the U.S. Army Corps of Engineers.

In general, the comments were supportive of the proposed action. As a result of the comments several editorial changes and clarifications were made. It was clarified that any proposed administrative use of motorized or mechanical tools or equipment would require further NEPA analysis using the Minimum Requirements Decision Guide as specified in BLM Manual 6340 - Management of Designated Wilderness Areas. This document did not authorize the administrative use of motorized or mechanized tools or equipment for any of the proposed management actions. The BLM made editorial changes and updated references in conformance to Manual 6340 - Management of Designated Wilderness Areas, 2012.

On September 5, 2012, the Service made a determination that, although concurring with the management philosophy found in this document, finalizing the plan to include the Imperial Refuge Wilderness was not necessary as management activities that may occur on Service lands are already covered under their Lower Colorado River National Wildlife Refuges

Comprehensive Management Plan. Additionally, the Service will be developing a more comprehensive plan within the next few years that would encompass all Service wilderness areas on the lower Colorado River in Arizona and California. The BLM decided to finalize this planning process as anticipated for the Trigo Mountain Wilderness in order to begin implementation and management activities.

ACRONYMS

AGFC	Arizona Game and Fish Commission
AGFD	Arizona Game and Fish Department
AML	Appropriate Management Level
BLM	Bureau of Land Management
CFR	Code of Federal Regulations
CMP	Comprehensive Management Plan
C-AMA	California-Arizona Maneuver Area
CRDFMP	Bureau of Land Management Colorado River District Fire Management Plan
CTHMA	Cibola-Trigo Herd Management Area
EO	Executive Order
FAA	Federal Aviation Administration
FLPMA	Federal Land Policy and Management Act
FWS	U.S. Fish and Wildlife Service
ID	Interdisciplinary
INWR	Imperial National Wildlife Refuge
LCRFMP	Lower Colorado River NWR Complex Fire Management Plan
LMA	Laguna Maneuver Area
LTVA	Long-Term Visitor Area
NWPS	National Wilderness Preservation System
WHBA	Wild Free-Roaming Horses and Burros Act of 1971
YFO	Yuma Field Office
YPG	U.S. Army Yuma Proving Ground
YFO RMP	Yuma Field Office Resource Management Plan

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ENVIRONMENTAL ASSESSMENT

I. Background

This Environmental Assessment analyzes the potential impacts of proposed actions and management alternatives that were considered for the Trigo Mountain Wilderness Management Plan. Background information, including plan purpose and location, is provided on pages 1 through 16 of the plan.

Issues that are addressed in the plan can be found on pages 17 through 19 of the proposed plan.

II. Description of Proposed Action and Alternatives

Alternative A – Proposed Action

The Proposed Action is to adopt and implement the Trigo Mountain Wilderness Management Plan. In general, implementation of the Proposed Action would provide for the long-term protection and enhancement of the untrammeled and undeveloped character of wilderness, to provide for the public purposes of recreational, scenic, scientific, educational, conservation, and historical use of the planning area. Actions to reclaim disturbances resulting from former vehicle routes and mining activities are addressed. The proposed plan also includes measures to protect cultural resource values and addresses monitoring, public outreach, and environmental education to assist resource protection efforts.

Opportunities for solitude and primitive unconfined recreation would be maintained under the Proposed Action. Measures to maintain naturalness by preventing the introduction and establishment of non-native species are addressed. Actions to minimize environmental impacts from past mining activities are evaluated. Scenic qualities and values of naturalness would be enhanced. Proposed management actions that could have environmental effects are listed below.

Actions to Preserve Wilderness Character

1. To deter unauthorized vehicle use, construct vehicle barriers where former vehicle routes entered the Trigo Mountain Wilderness at the following locations: within the NW¹/₄NW¹/₄ of section 12, T. 2 S., R. 23 W., G&SRM, La Paz County, Arizona, and within the SE¹/₄SW¹/₄ of section 33, T. 2 S., R. 23 W., G&SRM, La Paz County, Arizona. Barriers will be constructed outside of the wilderness boundary so as not to affect water flows. Barrier materials may consist of boulders, well casing, and/or post-and-cable used in a manner that will create a minimal visual contrast.
2. At other locations along the wilderness boundaries where illegal vehicle use persists, vehicle barriers may be constructed as a resource protection measure. Barriers will be constructed outside of the wilderness boundary so as not to affect water flows. Barrier materials may consist of boulders, well casing, and/or post-and-cable used in a manner that

will create a minimal visual contrast.

3. Provide public information about wilderness boundaries, the Leave No Trace! and Tread Lightly Programs at informational displays shown on Map 1.
4. At a minimum, conduct monthly wilderness patrols. Boundary signs, informational displays, and traffic counters will be maintained as needed.
5. Remove/prevent establishment of tamarisk or other new, exotic/invasive species within the Trigo Mountain Wilderness. The exotic/invasive species control would be in accordance with guidance in BLM Manual 6340.15.
6. The use of a helicopter may be considered following the MRDG process to remove non-historical mining or agricultural debris.
7. Use appropriate methods to minimize visual impacts of former vehicle routes in wilderness at the following locations: former vehicle route to State Land in the Trigo Mountain Wilderness, Black Diamond Mine route, and Lopez Wash route. The routes will be converted from two-track to single-track hiking trails.
8. Follow strategies contained in the CRDFMP for wilderness areas that that are not fire-adapted and implement the following 2010 YFO RMP decisions pertaining to wildland fire management: FM-006: The entire planning area is managed as non-fire use; FM-012: Identify and implement post-fire stabilization and rehabilitation actions in burned areas to restore a functional landscape to meet the natural resource management objectives; FM-014: In Wilderness, when wildland fire suppression occurs, minimum impact suppression tactics identified in the Interagency Standards for Fire and Aviation Operations will be applied; FM-018: Protect all known cultural resources from fire management activities-related disturbance through consultation with cultural resource specialists; FM-019: For fire suppression activities, follow the biological consultation protocol that has been developed as a part of the FWS Biological Opinion for the YFO RMP.

Rationale: There is no history of fires in the Trigo Mountain Wilderness; plant communities in this area are not fire adapted. Implementing provisions from the YFO RMP and CRDFMP will protect habitat, other resources, and wilderness values if a wildfire occurs.

9. Coordinate with the military to remove any military debris/ordnance found within the Wilderness in a manner that provides for staff safety while using methods that create the least disturbance. The removal of discovered ordnance will be implemented as an emergency action following guidance in BLM Manual 6340 section 1.6.B.2. Provide public safety information at kiosks regarding procedures to follow if unexploded ordnance is discovered.

Actions to Maintain Wildlife Habitat and Natural Diversity

1. Adopt provisions of the CRDFMP. For fires in the planning area, consult Action 8 under Objective 1 in this document.

2. Inventory abandoned mine sites. Where needed, install gates in a way that allows for continued use by bats and other wildlife. If appropriate, the mine opening may be closed for public safety by appropriate means. Provide public safety information regarding abandoned mine lands on kiosks.
3. Wildlife capture and transplant work in or out of the planning area will be considered annually through consultations between the AGFD and BLM staff.
4. Evaluate helicopter use as the minimum tool in wilderness area for wild horse and burro census and wildlife census and capture/release operations through the MRDG process. Aircraft operations may be approved by the Field Manager upon compliance with BLM Manual 6340, Appendix B.
5. An advanced notification to YFO of 2 weeks prior to planned flights over the Trigo Mountain Wilderness by AGFD is desirable. Flight operations outside of wilderness are not subject to the limitations listed in this action. Provide for the following flight operations in accordance with the Memorandum of Understanding between the AGFC and the BLM:
 - a. One low-level mule deer survey during the period from January 1 through March 31.
 - b. One low-level bighorn sheep survey in the period from October 1 through November 30.
 - c. Other flights deemed as necessary may occur in coordination with the appropriate agency.
 - d. Helicopter landings may occur for bighorn sheep transplants (capture or release) or mule deer and other species for tagging and removal of telemetry equipment upon compliance with MRDG requirements specified in BLM Manual 6340, Appendix B.
6. Provide for low-level flights to conduct wild horse and burro census.
7. The FAA should be consulted for special use airspace restrictions that are subject to change and that may be in place when planning air operations needed for wild horse and burro or wildlife management actions.
8. Maintain the wild burro population at the Appropriate Management Level of approximately 165 burros as established in Management Action HB-003 and in conformance with Administrative Action AA-167 of the YFO RMP. To maintain thriving natural ecological balance in the planning area, limit utilization on key forage species listed in Appendix D and as specified by the utilization standards also listed in Appendix D.

As acknowledged in Management Action HB-005 of the YFO RMP, Service-administered lands, including the Imperial Refuge Wilderness, are not within the CTHMA boundary. The Service currently allows wild burro use if impacts to native vegetation are kept to a minimum by maintaining the AML.

9. Habitat monitoring will continue using vegetation monitoring protocols in Appendix D as agreed by the cooperating agencies. The Burro Working Group (YFO Rangeland Management Specialist, and BLM, INWR, and Region IV AGFD Biologists) will evaluate conditions annually and modify or establish new monitoring protocols and sites as needed.
10. Maintain an accurate population estimate of the wild burro herd using established census methods.
11. Continue vegetation utilization monitoring. The Burro Working Group will conduct annual evaluations of the vegetation utilizations data and present a summary and recommendations to the Interagency Oversight Team (YFO and INWR Managers and Region IV AGFD Supervisor) regarding herd size adjustments needed to remain within Vegetation Utilization Standards listed in Appendix D.
12. Future development of wildlife water sources in the planning area will only be considered if access to the Colorado River is lost. If this occurs, proposals for wildlife water sources will follow current BLM Manual 6340 guidelines.

Actions to Maintain Recreation Opportunities

1. Establish and maintain kiosks at access points (Map 1) to the planning area as funding and staff levels permit.
2. Conduct routine patrols of the planning area at least once per month as staffing and funding allow.
3. Promote “Leave No Trace!” land use ethics by making appropriate information available at kiosks and administrative sites.
4. Establish visitor registers and traffic counters at the BLM kiosks in the following locations: on the vehicle route that leads to the northern Trigo Mountain cherrystem road; along the vehicle route south of Red Cloud Mine; and at the junction of the Clip Wash vehicle route east of Lopez Wash (Map 1). Provide for public assessment and comment about the quality of their recreational and wildlife appreciation opportunities. Develop an appropriate register form to assist in providing information regarding assessments of recreation opportunities by the public.
5. Keep existing public access routes (Map 1) open to promote dispersed visitor use and maintain recreational opportunities.
6. The BLM will pursue options to acquire non-Federal lands within or adjacent to special management areas, including wilderness, established by law or administrative action and provide legal access to public lands by acquiring an easement through or by purchasing the entire land parcel where access routes cross non-Federal lands. The following parcel has been identified for BLM acquisition:

The route through section 2 provides the only vehicle access to the southern portion of the Trigo Mountain Wilderness. Providing legal public access would assist in meeting Objective 1 by facilitating dispersed visitor use and maintaining recreational opportunities throughout a larger portion of the planning area.

7. Encourage the use of feeding containers and pelletized feed or of certified weed-free hay for packstock.

The use of feeding containers and pellets or certified weed-free hay will assist in preventing the introduction of exotic plants and pathogens from domestic livestock. Cumulative habitat/resource degradation will be prevented from continued recreational livestock use. It is recognized that the use of recreational livestock is one method of transporting game across long distances or as an alternative recreational opportunity. This action also contributes to the achievement of Objective 2

8. Only dead, down, and detached wood may be used for campfires. Provide information at kiosks located on access routes to promote less use of campfires as a measure to promote "Leave No Trace!" principles. Seasonal fire restrictions may occur each year as a fire prevention measure when weather conditions create a heightened risk for wildfires.

Actions to Preserve Cultural Resources

1. Allocations of cultural resources on BLM-administered lands to the Conservation for Future Use category are changed to Traditional Use as a primary use and Scientific Use as a secondary use.

The BLM Conservation for Future Use category is reserved for those cultural properties which are scarce, have research potentials that cannot be realized through current analytical techniques, or possess comparable characteristics making them inappropriate for studies which would alter them. The concept of conservation of sites in the planning area is an appropriate management goal, but it is not clear that any known or recorded properties in the planning area meet the criteria of having research potential that cannot be realized through current techniques. Cultural properties that would benefit from allocation to the Conservation for Future Use category that are subsequently identified would be allocated to this use through maintenance of the plan. Traditional Use as a primary use would provide guidance to protect the integrity of sites that are of concern to Native Americans.

2. All prehistoric cultural resources on BLM-administered lands are allocated to Traditional Use and Scientific Use categories.

3. All prehistoric cultural resources would be interpreted through off-site information. No prehistoric sites are allocated to Public Use with this plan.

4. All BLM-administered historic cultural resources are allocated to Scientific Use and

Public Use categories; Scientific Use is a primary use. If public use would compromise the integrity of any historic site, information would be provided at off-site locations or access may be limited to the least invasive means.

5. Conduct condition assessment and develop maintenance plans for any standing historic structures or ruins in the planning area.
6. In coordination with local Native Americans, conduct field visits to archaeological sites in the planning area. Frequency of field visits will be dependent on both their interest in previously recorded sites and in newly discovered locations. Share existing and newly discovered site information with their museums or cultural program staff at a minimum of once a year. Consult with tribal members and cultural staff to develop appropriate monitoring, mitigation measures, or develop research designs on a case-by-case basis.

Archaeological or traditional sites that represent the activities of Native Americans are the most sensitive properties to manage. The locations of these sites have often been lost to the people whose ancestors made them or used them. Many archaeological sites are sacred to the Native Americans. Archaeologists should share their knowledge of these sites with the local Native Americans and include their recommendations regarding the importance of these sites in their traditional culture as well as provide a wide spectrum of appropriate scientific research.

7. Develop non-specific or generic interpretive materials appropriate to the intended audiences on the importance of all cultural resources (archaeological, traditional, and historic).
8. Include historic road and trail information as part of any access or trail guide developed. Include information on any historic cultural properties that are in the vicinity of the route to be used.
9. Provide signs at historic properties outside of wilderness to indicate active management. Include information about historic properties in wilderness brochures or at wilderness entry locations.
10. Include cultural resource information on any new information bulletin boards.
11. Complete a patrol plan to help protect natural and cultural resources and implement.
12. Complete documentation of the known cultural properties and visit sites to provide a baseline for the patrol plan to schedule monitoring and evaluating potential impacts.
13. Conduct orientation patrols with certified members of the Arizona Site Stewards Program to promote and maintain monitoring effectiveness.
14. Coordinate the use and preservation of archaeological or traditional sites that represent the activities of Native Americans with Federally and State recognized Native American

Indian Tribes.

15. Coordinate the designated use and preservation of archaeological or traditional sites with the Arizona State Historic Preservation Office.

Monitoring selected properties or areas for changes in uses that could threaten the allocated use or eligibility of the cultural resources in the planning area is an effective way to actively manage cultural resources. Arizona Site Stewards are trained volunteers who provide a local workforce to accomplish the time-intensive task of field monitoring.

Monitoring

Compile and evaluate information from cultural field visits and patrol reports during the annual plan evaluation to determine whether sites are being identified and evaluated, whether traditional uses are being considered, and whether human impacts are being avoided.

Alternative B – No Action

Under the no-action alternative, management guidance would be provided by: the Wilderness Act of 1964; Arizona Desert Wilderness Act of 1990; and by national BLM resource management policies and regulations. No specific actions would be proposed for rehabilitating existing disturbances or protecting natural and cultural resources. Due to existing laws, agreements, and national wilderness management policies for the maintenance of wildlife management activities, wildlife management provisions would be the same as the proposed action for this alternative. Current conditions and values would be potentially maintained under this alternative and the degradation of wilderness values would be prevented through the continuation of wilderness monitoring, environmental education, and other resource protection measures.

Alternative C – Minimal Human Impacts

To maximize protection of natural and cultural resources, a number of recreational activities would be limited. These include: year-round fire restrictions throughout the planning area to further prevent impacts to habitat values and requiring permits for the use of recreational livestock on the entire planning area to monitor and limit potential impacts to natural values and wildlife.

Measures for the rehabilitation of surface disturbances and removal of non-historical debris as described in the proposed action would also apply for this alternative.

III. Affected Environment

A description of the affected environment can be found on pages 1 through 16 of the proposed Trigo Mountain Wilderness Management Plan. Planning issues that are addressed in the proposed plan can be found on pages 17 through 19.

IV. Environmental Effects

Impacts of Alternative A – Proposed Action

Wilderness values and wildlife habitat would be enhanced and preserved for the foreseeable future under provisions of the Proposed Action. At access points, providing public information concerning wilderness restrictions on the use of motorized or mechanized equipment and promoting practices that minimize surface disturbances should assist in allowing the natural rehabilitation of existing disturbances as would the construction of barriers when needed. Coordinating activities among the agencies involved in developing this plan should strengthen the effectiveness of public education and outreach efforts.

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 plants, berms, or low-profile materials with low visual contrasts. Promoting "Leave No Trace!" and "Tread Lightly" land use ethics would assist in reducing new visitor use impacts to natural resources and would protect cultural resources. The barriers and promotion of a low-impact land use ethic would provide for the enhancement of wilderness values and wildlife habitat by allowing weathering processes to reclaim minor surface disturbances. Impacts to visual resources from the barriers and displays would be offset by the long-term benefits of enhancing and preserving wilderness values and opportunities for primitive recreation. The construction of berms as barriers would not significantly affect erosion potentials due to the gravelly nature of soils within the planning area. There would also be no significant impacts to air quality.

Preventing new or continued surface disturbances from off-road vehicle activity would reduce the potential for increased soil erosion and impacts to air quality from dust. In regard to water quality, there are no permanent natural water sources in the planning area, and it is not expected that public activities will degrade temporary water sources that may remain in natural potholes after rainstorms or affect sheet flow during infrequent rainstorms when there are heavier amounts of precipitation that result in greater surface run-off.

Coordination between the BLM and military for the removal of military debris/ordnance in a manner that provides for staff safety while using methods that create the least disturbance would ensure public health and safety while providing for minimum environmental impacts from these activities. 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.

Implementing fire management provisions would minimize the potential for adverse impacts from fire suppression activities. In the event that fire suppression is needed, resulting disturbances would be rehabilitated.

Preventing the introduction and establishment of exotic species by removing discovered tamarisk and other exotic plant species would protect the ecological integrity and maintain the untrammled quality of the planning area.

Promoting the use of feeding containers for domestic livestock being used for recreational purposes would assist in preventing the introduction of exotic plants and pathogens from domestic livestock. Cumulative habitat/resource degradation will be prevented from continued recreational livestock use.

Maintaining the wild burro herd at the appropriate management level would also protect vegetation resources and prevent soil disturbances from a high level of use that would not sustain an ecological balance. Impacts to wilderness values from helicopter overflights for burro management activities would be temporary.

The rehabilitation of former vehicle routes in wilderness and cleanup of mining debris would restore the natural values of the affected areas. Minimizing visual impacts of existing developments and reducing maintenance needs requiring mechanized or motorized equipment and vehicles would enhance natural values and opportunities for solitude. Due to gravelly soil textures, there would be no increased potential for soil erosion or significant effects on air quality. Precluding the continued use of these former vehicle routes would minimize the potential for increased erosion or possible effects on air quality from dust in addition to enhancing the area's wilderness character.

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 and visual resource values. Opportunities for unconfined primitive recreation would continue and improve as the rehabilitation of existing surface disturbances occurs.

If authorized, the use of aircraft for burro census, wildlife surveys, and bighorn sheep captures for translocation to restore herds in historic bighorn sheep habitat would temporarily impact wilderness visitors (loss of solitude) and wildlife (stress), but would provide for maintaining species diversity for the long term. There are short-term wildlife impacts (stress) from bighorn sheep captures. However, the continued successful efforts to preserve bighorn sheep populations in the long term would benefit. The administrative use of helicopters for wildlife surveys and sheep captures would also result in short-term disturbances to wildlife and wilderness visitors. These short-term impacts would be offset by the long-term benefits of providing information to allow for informed wildlife management decisions and further efforts to preserve bighorn sheep populations. Requiring the completion of a minimum requirements analysis as specified in BLM Manual 6340 Appendix B would minimize impacts to wilderness character from aircraft use for wild horse and burro and wildlife management activities.

Cooperative efforts to identify needs and collect baseline data would improve our knowledge of natural resource management and assist in the timely identification of resource protection issues. An inventory of abandoned mine sites and the identification and implementation of appropriate actions would result in the protection of wildlife habitat and improve public safety. The use of visitor registers to provide for public assessment of existing recreational opportunities or resource conditions would assist the BLM in making resource management

decisions that would be more acceptable for the public.

Keeping designated public access routes open would assist in dispersing visitor use and maintaining opportunities for solitude. Acquiring legal public access to the southern portion of the Trigo Mountain Wilderness through State Land would allow for continued public access to enjoy use of the area. The potential for adverse impacts to natural values, recreational opportunities, and wildlife habitat would be minimized through resource protection efforts such as wilderness monitoring and public outreach and through environmental education.

Impacts of Alternative B – No Action

Current conditions and opportunities would be maintained under Alternative B. With this alternative, existing laws, regulations, and policies would be followed without an integrated management strategy. Impacts from wildlife management activities would be the same as the proposed action. There would be a higher potential for the introduction of non-native species.

There would be no temporary adverse impacts from activities to rehabilitate former vehicle routes or barrier construction at wilderness boundaries. In the long term, there would be affects to wilderness character and recreational, scenic, scientific, educational, conservation, and historical values of the planning area due to the continued presence of past human developments and disturbances. Weathering processes may eventually restore some of the natural appearance of surface disturbances. However, due to the persistent unauthorized vehicle use at several sites within the planning area, normal weathering and vegetation growth are not effective means for the restoration of natural features on former vehicle routes. Efforts to control unauthorized vehicle use in wilderness would be substantially more difficult without the installation of vehicle barriers where the former routes entered the wilderness.

There would be a continued potential threat to the archeological resources of the planning area, which could be purposefully or inadvertently taken in violation of the Archaeological Resources Protection Act. In addition, less control over unauthorized vehicle use in the area creates the possibility of undesirable affects to bighorn sheep habitat especially during critical periods such as lambing. There would be a continued higher potential for cumulative adverse impacts to the natural landscape.

Impacts of Alternative C – Minimal Human Impacts

While Alternative C would provide the most protection for natural and cultural resources and wilderness values from potential adverse impacts, there would be restrictions on the full range of compatible uses in the planning area. Under this alternative, campfires and overnight camping would be restricted. Only day-use would be permitted. This could result in decreased visitor use that would enhance outstanding opportunities for solitude. There would be decreased opportunities for unconfined recreation. Burning wood for campfires would be completely eliminated. Camp cooking would be allowed using charcoal grills or

propane burners and stoves. These restrictions would eliminate potential adverse effects for habitat values caused by the collection of dead and downed wood and would minimize potential visual impacts from campfire rings.

Provisions for the rehabilitation of surface disturbances would also apply for this alternative. Therefore, potential impacts described in these categories for the proposed action would also apply here.

Cumulative Impacts

Cumulative impacts include impacts on the environment which would 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 help to minimize the potential for cumulative impacts to the area's wilderness character and recreational, scenic, scientific, educational, conservation, and historical values from persistent unauthorized vehicle use in the planning area.

In general, the Proposed Action would provide for the protection, enhancement, and maintenance of wilderness values, wildlife habitat, and visual and cultural resources within the planning area. The potential occurrence of adverse cumulative impacts would also be minimized.

Climate change

“Climate” refers to an area's long-term average weather statistics (typically for at least 20- or 30-year periods), including the mean and variation of surface variables such as temperature, precipitation, and wind. As described through an assessment report by the Intergovernmental Panel on Climate Change (IPCC, 2007), “Climate change” refers to a change in the mean and/or variability of climate properties that persists for an extended period (typically decades or longer), whether due to natural processes or human activity. Changes in climate occur continuously over geological time.

Examples of observed changes in the physical environment include: an increase in global average sea level, and declines in mountain glaciers and average snow cover in both the northern and southern hemispheres (IPCC, 2007); substantial and accelerating reductions in Arctic sea-ice (Comiso, *et al.*, 2008), and a variety of changes in ecosystem processes, the distribution of species, and the timing of seasonal events (GCCIOUS 2009). Also, the best scientific and commercial data available indicates that average global surface air temperature is increasing and several climate-related changes are occurring and will continue for many decades even if emissions are stabilized soon (Meehl, *et al.*, 2007, Church, *et al.*, 2010, Gillett, *et al.*, 2011).

Changes in climate can have a variety of direct and indirect impacts on species, and can

exacerbate the effects of other threats. Rather than assessing “climate change” as a single threat, we examine the potential consequences to species and their habitats that arise from changes in environmental conditions associated with various aspects of climate change. For example, climate-related changes to habitats, predator-prey relationships, disease and disease vectors, or conditions that exceed the physiological tolerances of a species, occurring individually or in combination, may affect the status of a species. Vulnerability to climate change impacts is a function of sensitivity to those changes, exposure to those changes, and adaptive capacity (IPCC, 2007, Glick, *et al.*, 2011).

V. Consultation and Coordination

Information about consultation, coordination, and public involvement can be found in Appendix C and Appendix D of the proposed Trigo Mountain Wilderness Management Plan.

Environmental Justice

The YFO RMP identifies and provides a baseline analysis of minority, low-income, and Tribal populations that could also be affected by this planning effort. All populations were provided with opportunities to participate in the planning process. No environmental justice issues were identified.

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Finding of No Significant Impact

Trigo Mountain Wilderness Management Plan

EA Number: DOI-BLM-AZ-C020-0012-0025

Casefile: 25505

Finding of No Significant Impact: Based on the analysis of potential environmental impacts contained in the attached environmental assessment (EA), and considering the significance criteria in 40 CFR 1508.27, I have determined that the action will not have a significant effect on the human environment. An environmental impact statement is therefore not required.


Field Manager, Yuma Field Office

9.21.12
Date

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United States Department of the Interior



BUREAU OF LAND MANAGEMENT

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Decision Record For Trigo Mountain Wilderness Management Plan and Environmental Assessment

EA Number: DOI-BLM-AZ-C020-0012-0025
AZA 25505

Decision

It is my decision to approve the Trigo Mountain Wilderness Management Plan. The plan establishes management direction for the Trigo Mountain Wilderness for a 10-year period.

Major Laws Pertinent to the Decision

In addition to the Wilderness Act of 1964, legal guidance pertinent to the decision is listed on page 2 of the Trigo Mountain Wilderness Plan.

Rationale for Decision

Environmental assessment (EA) DOI-BLM-AZ-C020-0012-0025 evaluates the potential impacts of proposed actions and management alternatives that were considered for the Trigo Mountain Wilderness Management plan. Based on the analysis of the potential environmental impacts, I have determined that the proposed action will have no significant impacts. Therefore an EIS is not required.

In conformance with the Yuma Field Office Resource Management Plan, implementation of the Proposed Action will provide for the long-term protection and enhancement of the untrammeled and undeveloped character of wilderness, to provide for the public purposes of recreational, scenic, scientific, educational, conservation, and historical use of the planning area. Actions to reclaim disturbances resulting from former vehicle routes and mining activities are addressed. The proposed plan also includes measures to protect cultural resource values and addresses monitoring, public outreach, and environmental education to assist resource protection efforts.

Opportunities for solitude and primitive unconfined recreation will be maintained under the Proposed Action. Measures to maintain naturalness by preventing the introduction and

establishment of non-native species are addressed. Actions to minimize environmental impacts from past mining activities are evaluated. Scenic qualities and values of naturalness will be enhanced.

A draft version of this document was released for a 45-day public review and comment period on July 19, 2012. Comments on the draft plan were received from the U.S. Army Garrison Yuma Proving Ground, Arizona Game and Fish Department, Grand Canyon Chapter of the Sierra Club, and the U.S. Army Corps of Engineers.

In general, the comments were supportive of the proposed action. As a result of the comments several editorial changes and clarifications were made. It was clarified that any proposed administrative use of motorized or mechanical tools or equipment would require further NEPA analysis using the Minimum Requirements Decision Guide as specified in BLM Manual 6340 - Management of Designated Wilderness Areas, 2012. The BLM made editorial changes and updated references.

Management and Mitigation Consideration

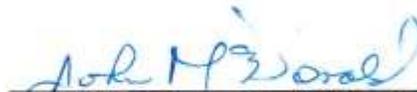
All mitigation measures are incorporated within the proposed action

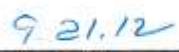
Monitoring

Annual evaluations of the plan would be conducted by an interdisciplinary team composed of Yuma Field Office staff and cooperating agencies to document completed management actions and adjust the implementation schedule if necessary. Monitoring that has been conducted would be assessed to determine if the plan objectives are being met. Based on the annual assessment, new management actions or mitigation that may be needed would be defined for implementation and a determination would be made whether the plan needs to be revised. Proposed plan revisions would be available for public review before being implemented.

This decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR, Part 4. If an appeal is taken, your notice of appeal must be filed in this office (at the above address) within 30 days from receipt of this decision. The appellant has the burden of showing that the decision appealed from is in error.

The Proposed Action will have no effect on the President's Energy Policy and a Statement of Adverse Energy Impact is not required.


John MacDonald
Field Manager


Date