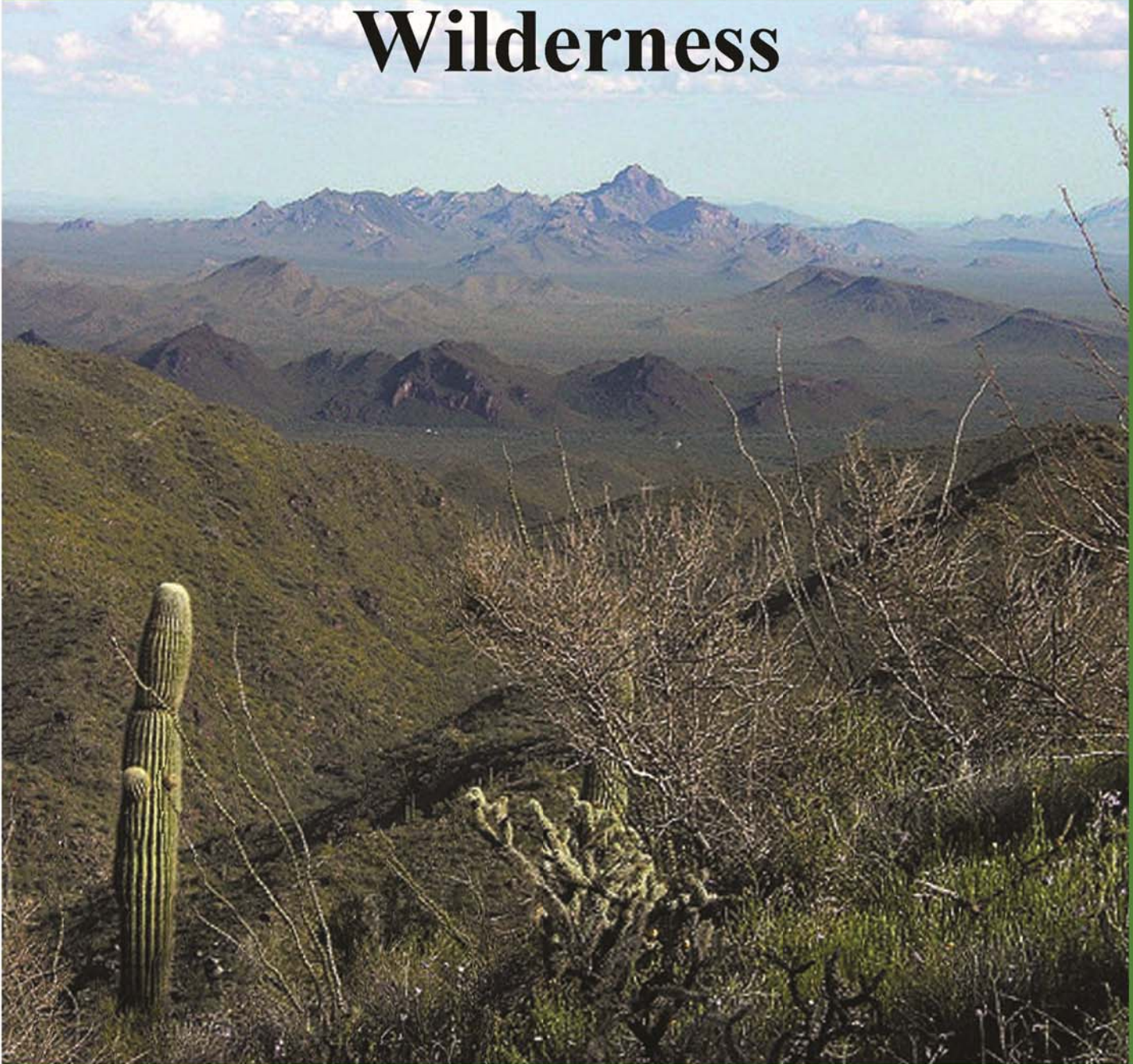


# Harquahala Mountains Wilderness



Arizona Phoenix District Office Hassayampa Field Office

## Draft Management Plan and Environmental Assessment

August 2015



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 non-renewable resources. These resources include recreation, range, timber, minerals, watershed, fish and wildlife, wilderness and natural, scenic, scientific and cultural values.

**Harquahala Mountains  
Wilderness Management Plan  
And  
Environmental Assessment  
EA Number: DOI-BLM-AZ-P010-2013-0044-EA**

U.S. Department of the Interior  
Bureau of Land Management  
Hassayampa Field Office  
21605 North 7<sup>th</sup> Avenue  
Phoenix, AZ 85027

## Table of Contents

<b>PART I – INTRODUCTION .....</b>	<b>4</b>
WILDERNESS BACKGROUND .....	4
PLAN PURPOSE AND NEED .....	5
CONFORMANCE WITH LAND USE PLAN.....	5
RELATIONSHIP WITH STATUTES, REGULATIONS, OR OTHER PLANS .....	6
WILDERNESS OVERVIEW (GENERAL SETTING) .....	8
<i>Wilderness Boundary, Location, and Access.....</i>	8
<i>Ownership/Land Use .....</i>	8
<i>Environmental Setting: .....</i>	8
<b>PART II – NATIONAL WILDERNESS MANAGEMENT GOALS .....</b>	<b>10</b>
<b>PART III – ISSUES .....</b>	<b>11</b>
ISSUES ADDRESSED IN THIS PLAN: .....	11
<i>General Wilderness Management.....</i>	11
<i>Recreation .....</i>	11
<i>Wild Burro Management.....</i>	12
<i>Wildlife Management .....</i>	12
<i>Noxious Weeds .....</i>	12
<i>Fire Management.....</i>	12
<i>Cultural .....</i>	12
ISSUES SOLVED THROUGH POLICY OR ADMINISTRATIVE ACTION .....	12
<i>Wilderness Designation .....</i>	12
<i>Wild Horse and Burro Management.....</i>	12
<i>Water Rights.....</i>	13
<i>Livestock Grazing and Allotment Management Plans.....</i>	13
<i>Law Enforcement and Emergency Services.....</i>	13
<i>Threatened, Endangered, or Special Status Species.....</i>	13
<i>Non-native Invasive and Noxious Species .....</i>	13
<i>Minerals Management .....</i>	14
<i>Hunting and Fishing .....</i>	14
<i>Military Overflights .....</i>	14
<i>Access for the Physically Challenged.....</i>	14
<i>Management of Traditional Cultural Properties.....</i>	14
ISSUES BEYOND THE SCOPE OF THIS PLAN .....	14
<i>Sights and Sounds from Outside Land Uses on Private, State and Federal Lands .....</i>	14
<i>Recommendations – Outside the Wilderness Area .....</i>	15
<i>Complementary Facilities.....</i>	15
<i>Permanent Public Access.....</i>	15
<b>PART V – ALTERNATIVES FOR WILDERNESS MANAGEMENT .....</b>	<b>16</b>
INTRODUCTION .....	16

PROPOSED ACTION.....	16
<i>General</i> .....	16
<i>Recreation</i> .....	17
<i>Wild Burro Management</i> .....	19
<i>Wildlife Management</i> .....	19
<i>Non-native Invasive and Noxious Species</i> .....	20
<i>Livestock Grazing</i> .....	20
<i>Fire Management</i> .....	22
NO ACTION ALTERNATIVE.....	23

**PART VI – GENERAL MANAGEMENT SITUATION AND AFFECTED ENVIRONMENT..... 24**

WILDERNESS VALUES & CHARACTER .....	25
SOILS .....	26
VEGETATION.....	26
<b>NON-NATIVE INVASIVE AND NOXIOUS SPECIES</b> .....	26
THE HMW CONTAINS NO MAPPED INFESTATIONS OF NON-NATIVE NOXIOUS INVASIVE SPECIES.	
NON-NATIVE SPECIES THAT OCCUR INCLUDE RED BROME, SCHISMUS SPECIES, FILAREE, AND	
SALT CEDAR IN RIPARIAN AREAS. THE BLM HAS NOT ACTIVELY MANAGED THESE SPECIES IN	
THIS AREA. ....	26
WILDLIFE .....	26
<i>Special Status Species</i> .....	27
WILD BURROS .....	28
RECREATION .....	28
VISUAL RESOURCES.....	28

**PART VII – ENVIRONMENTAL CONSEQUENCES AND CUMULATIVE IMPACTS 30**

PAST, PRESENT, AND REASONABLY FORESEEABLE FUTURE ACTIONS .....	30
WILDERNESS VALUES & CHARACTER .....	30
<i>Proposed Action</i> .....	30
<i>No Action</i> .....	31
<i>Cumulative Impacts</i> .....	31
SOILS .....	31
<i>Proposed Action</i> .....	31
<i>No Action</i> .....	31
<i>Cumulative Impacts</i> .....	31
VEGETATION INCLUDING NON-NATIVE INVASIVE AND NOXIOUS SPECIES .....	31
<i>Proposed Action</i> .....	31
<i>No Action</i> .....	31
<i>Cumulative Impacts</i> .....	32
WILDLIFE .....	32
<i>Proposed Action</i> .....	32
<i>No Action</i> .....	32
<i>Cumulative Impacts</i> .....	32
WILD BURROS .....	32

<i>No Action</i> .....	32
<i>Cumulative Impacts</i> .....	32
RECREATION .....	32
<i>Proposed Action</i> .....	32
<i>No Action</i> .....	33
VISUAL RESOURCES .....	34
<i>Proposed Action</i> .....	34
<i>No Action</i> .....	34
<i>Cumulative Impacts</i> .....	34
<b>PART VIII – CONSULTATION AND COORDINATION.....</b>	<b>35</b>
AGENCIES, TRIBES, AND ORGANIZATIONS CONSULTED .....	35
LIST OF PREPARERS .....	36
<b>PART IX – REFERENCES .....</b>	<b>37</b>

# **Part I – Introduction**

## **Wilderness Background**

Wilderness areas are places where the earth and its community of life remain undisturbed by the imprint of humans. They retain a primeval character without permanent improvements and generally appear to have been affected primarily by the forces of nature.

In 1964 the United States Congress established the National Wilderness Preservation System and designated the first Wilderness areas in passing the Wilderness Act. This American idea has become an increasingly significant tool to ensure long-term protection of natural landscapes that are affected primarily by the forces of nature with the imprint of human imprint substantially unnoticed. Additionally, it has outstanding opportunities for solitude or primitive and unconfined type of recreation, is of at least five thousand acres or sufficient in size to make practicable its preservation and use in an unimpaired condition; and may contain supplemental attributes such as ecological, geological, scientific and educational, scenic, and historic values.

Unconfined recreation opportunities exist when the activity doesn't require facilities, motor vehicles, motorized equipment, or mechanized transport. Examples of these primitive and unconfined recreation opportunities could be but are not limited to: hiking, backpacking, hunting, horseback riding, photography, bird watching, and sightseeing.

Wilderness protects the habitat of numerous wildlife species and serves as a biodiversity bank for many species of

plants and animals. Wilderness is also a source of clean water. It has long been used for science and education as well as for higher education purposes, providing sites for field trips, study areas for student research, and serving as a source of instructional examples. Recreation is another appeal of wilderness, and wilderness areas are seeing steadily increasing use from people who wish to experience freedom from the Nation's fast-paced industrialized society.

On November 28, 1990, the Harquahala Mountains Wilderness (HMW) was designated by Congress with the passage of the Arizona Desert Wilderness Act of 1990 (Public Law 101-628). This wilderness is managed by the Department of the Interior, Bureau of Land Management (BLM), under the authority of the Wilderness Act of 1964 and within the National Landscape Conservation System. HMW consists of 22,865 acres and is located approximately 35 miles west of Wickenburg, Arizona and 80 miles from downtown Phoenix. BLM land and surrounds this wilderness area. HMW supports mountain seeps and springs with varying rugged topography which supports exceptional natural diversity in flora and fauna. Harquahala means in a native language, "running water up high."

The BLM's Manual 8561 established that the agency will manage wilderness with the guidance of a wilderness plan. This environmental assessment analyzes the environmental and social impacts of the proposed Wilderness Management Plan and one alternative, a "no-action" alternative.

## Plan Purpose and Need

BLM Manual 8561 *Wilderness Management Plans* requires that wilderness areas be managed pursuant to a specific management plan. In fulfillment of this requirement, the Hassayampa Field Office staff prepared this Wilderness Management Plan (WMP) to address future management of this area.

The need for the Proposed Action stems from Section 4(b) of the Wilderness Act, which requires administering agencies to preserve wilderness character. Further, Section 1.4.C. of BLM Manual 6340 *Management of Designated Wilderness Areas* requires BLM District and Field Managers, to develop and implement land use and activity-level plans addressing wilderness areas that conform to the Wilderness Act, the establishing legislation, and BLM wilderness policies and guidance.

Based on the analysis herein, the BLM will decide whether to manage the wilderness area strictly according to legislative and regulatory requirements, or whether to implement a management plan that provides additional management actions to manage approved uses while ensuring adequate protection and preservation of resources and values, as well as mitigation for potential impacts to those resources and values.

This wilderness management plan (WMP) describes the existing environment in the wilderness, defined in various sections. The plan proposes management actions to address specific management issues or concerns. The Environmental Assessment (EA)

describes and analyzes potential effects to wilderness character.

## Conformance with Land Use Plan

The Proposed Action and No Action alternatives addressed in this EA are in conformance with the Bradshaw-Harquahala Resource Management Plan (BLM, 2010). Specific decisions that apply to this plan are:

WM-1. Wilderness Areas are to retain the qualities for which they were designated by Congress. They remain undisturbed and offer a respite with opportunities for enjoyment of solitude and natural landscapes through non-motorized, non-mechanized access.

WM-2. Wilderness remains closed to motorized and mechanized uses.

WM-3. Exceptions to the prohibition on motorized and mechanized uses may be allowed for such wildlife management activities as approved by the Field Manager, and when such motorized and mechanized equipment is determined to be the minimum tool needed to do the job. Such activities will be evaluated on a case-by-case basis as need arises.

WM-4. In the absence of group size limitations in existing wilderness or activity plans, group size for casual use activities will be limited to 25 people. BLM will evaluate requests for groups of more than 25 people on a case-by-case basis to ensure that resources and wilderness values are protected. Groups exceeding 25 people will require prior written authorization from the authorized officer. A special recreation permit will be required for groups over 50 people.

WM-5. Commercial recreation and vending operations are not allowed in the Harquahala Mountains (including, but not limited to such activities as guided horse rides or guided hikes) except for guided hunt and outfitter services. Organized non-commercial activities will be allowed on a case-by-case basis when consistent with wilderness management objectives.

WM-7. Develop and adopt measurement standards for limits of acceptable change for trail conditions, visitor-to-visitor encounters, vegetation changes, Arizona Land Health Standards, and approved motorized/mechanized activities. Exceeding the limits of acceptable change could result in implementing actions such as the following: Developing and distributing Leave No Trace or other educational information, initiating a permit system, closing damaged areas or trails to camping to allow natural restoration, realigning trails, reclaiming damaged areas, installing alternative access points, monitoring or removing non-native or invasive plants or animals; and mitigating the evidence (sights and sounds) of any authorized mechanized/mechanical uses.

This WMP also complies with the additional decisions in other program areas as established in the land use plan.

### **Relationship with Statutes, Regulations, or Other Plans**

The Wilderness Act of 1964 defined wilderness as: “An area of undeveloped federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and

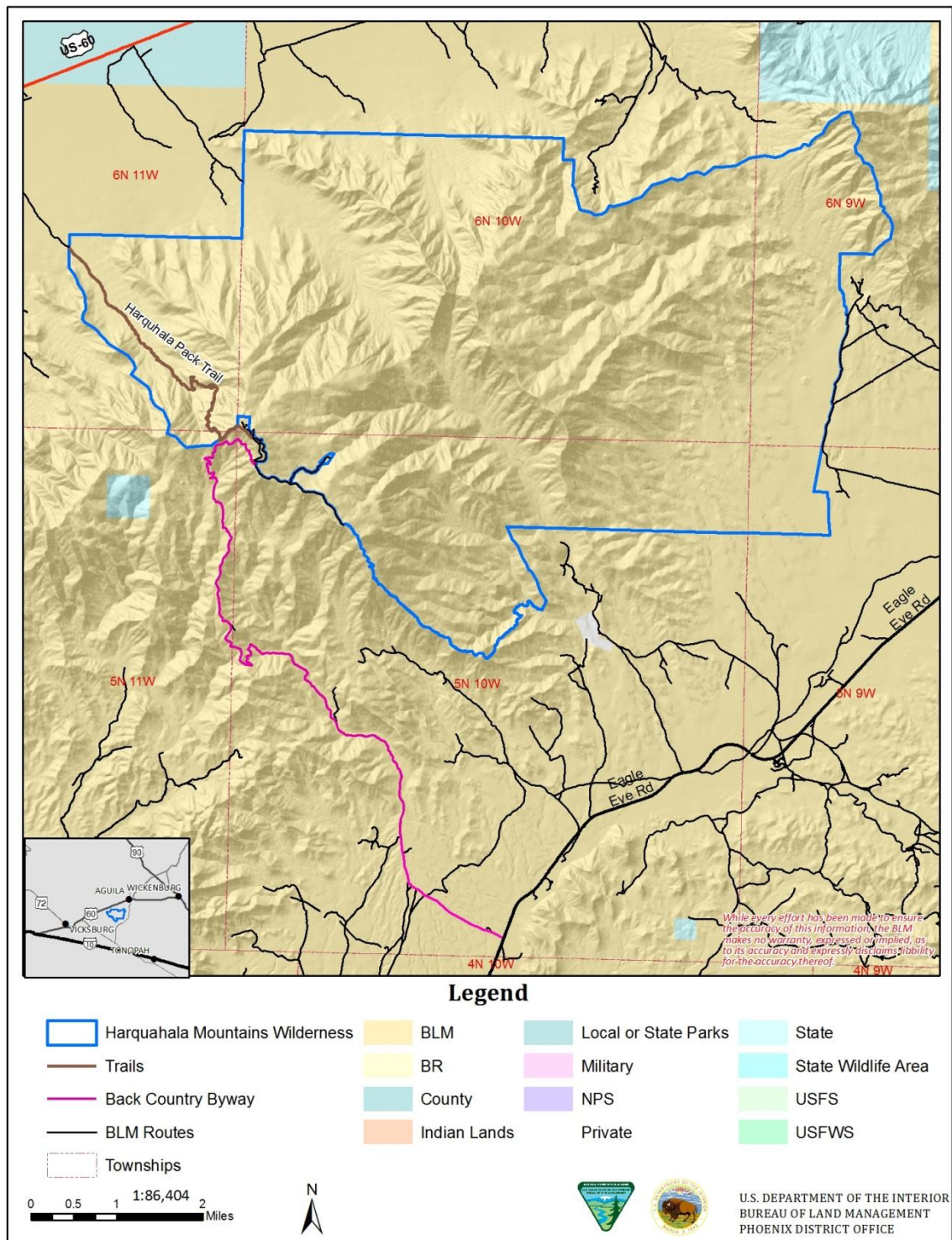
managed as to preserve its natural conditions.” Under the Act, the BLM must manage wilderness within its jurisdiction to protect wilderness values.

Wilderness preservation became one of the BLM’s multiple-use mandates with the signing of the Federal Land Policy and Management Act of 1976. The Arizona Desert Wilderness Act of 1990 designated the Harquahala Mountains Wilderness.

Regulations governing wilderness management by the BLM are present in 43 CFR 6300 and BLM Manual 6340, “Management of Designed Wilderness Areas.”

This EA complies with the National Environmental Policy Act of 1969 by providing the decision maker with an appropriate alternative for managing this wilderness area and describing the environmental impacts of implementing each of the alternatives. A 45-day comment period is provided for by public review and input to WMP and EA.

Figure 1 Location Map Harquahala Mountains Wilderness Area



## **Wilderness Overview (General Setting)**

### **Wilderness Boundary, Location, and Access**

The wilderness is bounded on all sides by BLM lands. For access to the north boundary, one must first traverse across land managed by the Arizona State Land Department. These roads are numbered: 9329, 9328, 9327, and 9326 and terminate before the wilderness boundary. The road numbered 9331 leads to the wilderness boundary and provides access to the wildlife waters managed by the Arizona Game and Fish Department. The road numbered 9332 leads to the Harquahala Peak Pack Trail Trailhead. BLM roads leading from Eagle Eye Road access the eastern and southern sections of the boundary. Roads numbered 9309 and 9310 lead to the eastern side of the wilderness boundary where there are no natural geographical features that clearly define the wilderness boundary from other public lands. On the southern boundary, roads leading to the wilderness are truncated by 1/3 of a mile or more before reaching the wilderness boundary. The Harquahala Back Country Byway consists of 10.5 miles of extremely rough road, climbing to the summit of the Harquahala Mountains which leads to the upper Harquahala Peak Pack Trail Trailhead, wilderness boundary, and features outside of the wilderness area. Boundaries are marked with flexible fiberglass posts. Minimum spacing is one-half mile apart. Additional signs are placed at locations that have the potential or are prone to vehicular travel, such as flat, non-vegetative areas or areas. Signage will

keep the majority of motorized use outside of the wilderness area.

### **Ownership/Land Use**

The BLM administers all surface and sub-surface land within the wilderness and surrounding the wilderness.

### **Environmental Setting:**

The area is characterized by the Sonoran Desert subdivision of the basin and range physiographic province. This is characterized by the flat desert valleys separating isolated mountain ranges<sup>1</sup>. The geology includes major constituents of granite, gneiss, schist, and shale. Erosion has produced steep exposures on the northern slopes. Deeply incised canyons on the southern flanks have produced irregular, narrow ridges. A considerable number of springs and seeps are present.

The area is characterized by a relatively wet microclimate set above the dry valley. The upper reaches of the mountain may accumulate up to 12-18 inches of rain per year compared to an average rainfall in the valley of only 6 inches per year. Rainfall comes in a bi-seasonal pattern; about 40 percent of the total falls in the form of high intensity, localized thunderstorms during the summer months. The remainder falls during the winter months in the form of widespread storm fronts. Late spring and early fall are characterized by drought or near-drought conditions. The average daily temperatures range from 30 – 67 degrees Fahrenheit in January and 70-108 degrees Fahrenheit in July in valleys<sup>2</sup>. Temperatures in the

---

<sup>1</sup> Thornbury 1965

<sup>2</sup> Sellers and Hill 1974

mountain can fluctuate by 20 degrees or more for the same time of the year.

The elevation rises to a maximum of 5,681 feet and represents the highest peak in the immediate vicinity.

### **Military Aircraft Overflight**

The Arizona Desert Wilderness Act of 1990 specifically provides for continuing military overflight above wilderness. Overhead aircraft can be heard and or seen during practice maneuvers. Noise disturbance from flights has not been reported by visitors. Flying over dark sky areas, such as wilderness areas, enhances military preparedness.<sup>3</sup>

---

<sup>3</sup> Strategies to Protect Arizona's \$9 Billion Military Economy

## **Part II – National Wilderness Management Goals**

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

- 1.** To provide for the long-term protection and preservation of the area's wilderness character under a principle of non-degradation. The area's natural condition, opportunities for solitude, opportunities for primitive and unconfined types of recreation, and any ecological, geological, or other features of scientific, educational, scenic, or historical value present will be managed so that they will remain unimpaired.
- 2.** To manage the wilderness area for the use and enjoyment of visitors in a manner that will leave the area unimpaired for future use and enjoyment as wilderness. The wilderness resource will be dominant in all management decisions where a choice must be made between preservation of wilderness and visitor use.
- 3.** To manage the area using the minimum tool, equipment, or structure necessary to successfully, safely, and economically accomplish the objective. The chosen tool, equipment, or structure should be the one that least degrades wilderness values temporarily or permanently. Management will seek to preserve spontaneity of use and as much freedom from regulation as possible.
- 4.** To manage nonconforming but accepted uses (i.e. grazing) permitted by the Wilderness Act and subsequent laws in a manner that will prevent unnecessary or undue degradation of the area's wilderness character. Nonconforming but accepted uses are the exception rather than the rule; therefore, emphasis is placed on maintaining wilderness character.

## Part III – Issues

Input was solicited from BLM staff, interagency meetings, and public scoping meetings where issues were identified and discussed. The issues have been categorized into three types: (1) issues addressed by this plan; (2) issues resolved by policy; and (3) issues beyond the scope of the plan. The bulk of issues identified hinged on keeping the area natural and recreation/visitor experiences in the wilderness.

### Issues Addressed In This Plan:

#### General Wilderness Management

- How will natural conditions be maintained with respect to preventing overuse, managing fire, accommodating wildlife needs, and developing monitoring programs?
- Do stakeholders and others know of the minimum requirements provision of the Wilderness Act when resource management and recreation use functions are conducted in the wilderness?

#### Recreation

- How will visitor use be managed to maintain naturalness despite the following?
  - Development of social trails
  - Proliferation of campsites
  - Removal of trees and woody brush for camp fires
  - Human waste
  - Vandalism
  - Concentrated use in specific areas

- How can the BLM assist in keeping the recreation experience wild?
- How will the trail be maintained?
- Should pack animals besides horses and llamas be permitted in the wilderness?
- Should horse limits per group be imposed on the trail? How about on the rest of the wilderness area?
- Should more signs be installed for notifying the public about the wilderness boundary and the prohibition on motorized use?
- How should organized recreation be managed with regard to group sizes and appropriate areas?
- What would trigger adaptive management to maintain solitude or other wilderness values?
- What type of monitoring would be effective to measure that wilderness character is being preserved?
- What types of visitor use information should be made available (access, hiking route, boundary, signs, brochures, other media, etc.)?
- What type of informational systems would be used to inform visitors of management actions that may infringe upon solitude?
- What effect would signs on Highway 60 and Eagle Eye Road have on the volume of people using the trail?

- Are more trails needed to enhance the visitor experience or is one designated trail sufficient?
- Is there an area where a loop trail can be constructed?
- How can wilderness values and airspace for recreational purposes be managed?

### **Wild Burro Management**

- How would burros be managed in the area?
- What impact do burros have on existing wildlife waters and vegetation?
- How may volunteers help with burro management?

### **Wildlife Management**

- How does wilderness enhance habitat connectivity?
- Does this wilderness play a role in desert tortoise recovery?
- What arrangements does the BLM have with the Arizona Game and Fish Department to perform wildlife enhancement, recovery, or data collection needs for species recovery, health, and longevity and are motorized uses needed?
- Are there any maintenance needs or construction needs for wildlife waters?
- Are there existing bat roosts in the wilderness and, if so, how will they be managed?
- How may volunteers help with wildlife management actions?

### **Noxious Weeds**

- What measures should be taken to prevent noxious weeds?
- What types of treatment methods would be used?
- How would BLM determine if the treatment was a success?

### **Fire Management**

- How many acres of the wilderness is fire dependent and how many acres are not fire adaptive, and where are they located?
- Is the existing fire policy adequate to address fire behavior in the HMW?

### **Cultural**

- How would you protect prehistoric and historic elements?
- Can volunteers help protect areas within this wilderness?

## **Issues Solved Through Policy or Administrative Action**

### **Wilderness Designation**

Wilderness areas were designated through the Arizona Desert Wilderness Act of 1990. The boundaries of the wilderness were set through the passing of the Act and are not open to review through this planning process.

### **Wild Horse and Burro Management**

The Wild Free-Roaming Horses and Burros Act of 1971 directs the BLM to maintain these animals in a wild, free-roaming state and in a thriving ecological balance with their environment. This wilderness area is only a small portion of the Harquahala Herd Area. Therefore this plan will not

address overall burro management. The plan will address burros in the context of their effect on wilderness character (primarily vegetation), and the impacts of their management (i.e. census and capture operations).

### **Water Rights**

In the Arizona Desert Wilderness Act of 1990, Congress reserved a quantity of water sufficient to fulfill the purposes of the wilderness. The priority date of such reserved rights is the date of the Act, November 28, 1990. State-based water rights in the wilderness with a priority date before November 28, 1990 are not affected.

### **Livestock Grazing and Allotment Management Plans**

Grazing of livestock, where established prior to November 28, 1990, shall be administered in accordance with section 4(d)(4) of the Wilderness Act and the grazing guidelines in Appendix A of House Report 101-405. Designation of wilderness does not affect grazing preference nor does it preclude the development of Allotment Management Plans. These items are administered according to the regulations in 43 CFR 4100. The designation of wilderness may affect some of the methods used to maintain range improvements and these things are discussed in this plan. In accordance with existing BLM policy, periodic interdisciplinary allotment evaluations assess the appropriateness of grazing use by cattle and other animals on vegetation and a determination of ecological health is made. Based on this analysis, an action plan is recommended (if needed) to assure that ecosystem structure and function is protected.

### **Law Enforcement and Emergency Services**

Wilderness management policy and regulations (BLM Manual 6340 and 43 CFR 6300) provide for emergency law enforcement access to pursue suspects or to address health and safety concerns during emergencies. Search and Rescue (SAR) operations are the responsibility of the county Sheriff. In the event of a SAR operation, the BLM would coordinate with the involved agencies to assist as needed and to minimize impacts to wilderness character.

Historically, there have been no law enforcement problems in the HMW that required mechanized or motorized access. In the event of a problem, existing policy guidance is adequate.

### **Threatened, Endangered, or Special Status Species**

All habitats of special status species will be managed under existing policy in BLM Manuals 6340 and 6840. Wildlife and/or plant species that become federally listed in the future will be managed under the Endangered Species Act of 1973, as amended.

### **Non-native Invasive and Noxious Species**

With current technology, removal of established invasive species (such as red brome) is not ecologically or economically feasible. Noxious weeds are those species specifically identified by federal, state, or county governments as to be injurious to public health, agriculture, wildlife, recreation or any public or private property. New infestations of invasive or noxious plants will be addressed in this plan.

## **Minerals Management**

The Arizona Desert Wilderness Act of 1990 withdrew the area from mineral entry. Recreational collection of minerals (rockhounding) is allowed in the wilderness. Collection must be for non-commercial purposes and done in a manner that preserves the wilderness environment, uses only non-motorized hand tools and causes only minimal surface disturbance which is not noticeable by the casual visitor. Use of metal detectors and Geiger counters would be acceptable. There are six mining claims within the wilderness boundary. Exploration and extraction would require additional environmental review at the time an application is submitted. Appropriate mitigation would be considered to prevent undue and unnecessary degradation. The Arizona Desert Wilderness Act of 1990 withdraws the HMW from the filling of any new claims

## **Hunting and Fishing**

Hunting and fishing regulations are written and enforced by the State. Predator control measures should be directed at the individual animals causing the problem. Only the minimum amount of control necessary to solve the problem should be used.

## **Military Overflights**

Military flight restrictions are addressed in the Arizona Desert Wilderness Act of 1990. The Act states: "Nothing in this title shall preclude low level overflights of military aircraft, the designation of new units of special airspace, or the use or establishment of military flight training routes over wilderness areas designated by this title." The BLM will continue to cooperate with the military in seeking

mutually beneficial opportunities to protect the integrity of wilderness airspace, and the natural quiet of this area.

## **Access for the Physically Challenged**

Special facilities to accommodate wilderness use by those with disabilities are not required by the Americans with Disabilities Act of 1990. Wheelchairs are allowed in wilderness for use by individuals whose disability requires the use of a wheelchair. Wheelchairs suitable for use in wilderness are those that would be suitable for use in an indoor pedestrian area.

## **Management of Traditional Cultural Properties**

There are no known Traditional Cultural Properties in the wilderness, and the BLM knows of no current use of the area for Native American religious or traditional purposes. If such use is identified in the future, the BLM will act in accordance with Public Law 95-341 and applicable Federal policy.

## **Issues beyond the Scope of This Plan**

### **Sights and Sounds from Outside Land Uses on Private, State and Federal Lands**

Some public comments have expressed concern about the potential for short-term, temporary impacts to solitude and naturalness caused by off-site land uses like mining, grazing, or rights-of-way use. Senate Report 101-359 in the Section-by-Section Analysis addressed the issue of outside sights and sounds as follows:

*"Subsection (d) clarifies that the designation of wilderness areas does*

*not imply the creation of ‘protective perimeters’ or buffer zones around any of the areas.”*

### **Airspace including Drones**

Visual flight rules (VFR) near noise sensitive areas is provided by the Federal Aviation Administration. The purpose of the Advisory Circular encourages pilots making VFR flights near noise sensitive areas to fly at altitudes higher than the minimum permitted by regulation and on flight paths that will reduce aircraft noise in such areas<sup>4</sup>.

Drones are aircraft under the Federal Aviation Administration (FAA) regulations. In addition to being aircraft, drones are “motorized equipment” and “mechanical transport”, all of which are prohibited by the Wilderness Act. Drones cannot take from, land in, or be operated from congressionally designated wilderness.<sup>5</sup>

Drones may be considered for approval as an administrative tool, on a case by case basis, after applying the MRDG.

## **Recommendations – Outside the Wilderness Area**

### **Complementary Facilities**

During scoping, it was suggested by the public that existing facilities around Harquahala Peak Pack Trail may not be sufficient to support all desired recreational uses. A recommendation was made to expand the existing horse corral area by providing a larger area for

trailering and a larger group camping area with hitches. These facilities would be located along road number 9332 away from the wilderness boundary. This would be in support of the wilderness use outside the wilderness boundary.

Constructing a trail for horse use was considered inside the wilderness on the northeastern portion, but any trail construction would be better suited for outside the wilderness boundary.

### **Trailhead Amenities**

Trailhead amenities may be added if the need presents itself. Wilderness users are encouraged to practice *Leave No Trace* principles when in the outdoors to maximize enjoyment of all visitors using the area.

Develop partnerships to assist in interpretive displays such as the big horn sheep recovery project and those dedicated to its advancement; and other topics integrating social, cultural, historic, scientific, and other supplemental values to further enhance the value of the wilderness and its role in society.

### **Permanent Public Access**

Future consideration should be given to securing rights-of-way on existing routes located on BLM land to permanently provide public access to the wilderness boundary. At a minimum, this should include road number 9300, the Harquahala Back Country Byway and the road number 9310 leading to Brown’s Canyon.

---

<sup>4</sup> US Department of Transportation, Federal Aviation Administration, AC No: 91-36D

<sup>5</sup> *ibid*

# Part V – Alternatives for Wilderness Management

## Introduction

In this section, objectives are established to address activity plan issues identified in “Issues Addressed in This Plan” section. Management actions to meet national wilderness management goals and plan objectives are outlined below. Monitoring will be conducted to gauge the effectiveness of outlined management actions and to determine if plan objectives are being met.

## Proposed Action

The following management actions would be implemented as part of the proposed action to ensure achievement of the national wilderness program goals listed in Part II.

### **OBJECTIVE 1: Preserve wilderness character and inform visitors and authorized persons of the HMW.**

#### **General**

1. Apply the Minimum Requirements Decision Guide<sup>6</sup> is used to analyze all proposed actions and projects in the wilderness areas.
  - a. A Minimum requirements Decision Guide training session will be offered annually to all staff, partners, and volunteers assigned to manage or conduct activities inside wilderness.
2. The BLM will partner with volunteers, youth, and other organizations/individuals whenever possible to accomplish wilderness goals.
3. The BLM will provide information to the public in many forms and locations.
  - a. Printed information and internet web pages will be kept updated.
  - b. Portal signs will be erected to provide visitor information at the Harquahala Pack Trail lower trailhead and the Harquahala Pack Trail upper trailhead.
  - c. Signs at trailheads will consist of synthetic materials such as aluminum or plywood, but designed to be consistent with visual resource management objectives and social settings. Brown, or dark colors, will be used on sign backgrounds to minimize visibility from the surrounding area. No sign lighting will be provided.
  - d. Signs will be installed along the trail as needed inside the wilderness to provide guidance at areas of low tread visibility. Trail signs inside the wilderness will be constructed to have a natural material appearance and be sufficiently built to withstand the desert environment. This could include routed wood signs or recycled plastic composite wood routed signs.
  - e. Truncated BLM signs for wilderness access will be placed at main roads and will

---

6

<http://www.wilderness.net/MRDG/documents?RDGoverview.pdf>

follow the BLM standards for National Conservation Lands. Signs will be placed at U.S. 60 at or near mile marker 69 and the intersection of the Harquahala Backcountry Byway (Road 9300) and Eagle Eye Road according to state and county road jurisdictions and standards.

- f. All pack animals used for recreation or business related tasks must be fed weed-free feed for at least 72 hours before entering the wilderness.
4. The BLM will reclaim roads and/or install barriers when and where needed while complying with the visual resource management setting.
- a. Reclamation will occur using hand tools with methods such as vertical mulching techniques, native seed propagation, etc.
  - b. Barriers will be installed where necessary to prevent degradation of naturalness through continued and illegal motor vehicle access.
  - c. Barriers will be placed outside of the wilderness boundary except when limited by topography or geographic events, such as flash food areas, etc.
5. Wilderness boundary identification will be improved.
- a. Wilderness boundary signs will be posted around the wilderness perimeter and in other areas where awareness of the boundary is critical to protect wilderness values.

- b. Sign locations will be documented using GPS and entered into the data base.
- c. Boundary sign monitoring will be conducted, at a minimum, once every three years.
- d. Sign maintenance will comply with the BLM sign guidebook and standards, Manual 9130.

**OBJECTIVE 2: Provide for outstanding primitive recreation opportunities and dispersed use.**

**Recreation**

- 6. The Harquahala Pack Trail will be designated as a trail asset type in the travel management plan with a maintenance intensity of 1 (the most primitive maintenance category).
- 7. An adaptive management approach will be used to address the need for new trails and maintenance of the existing trail.
  - a. No new trails will be constructed at this time.
  - b. As visitor use increases, new trails will be considered through future analysis to accommodate visitor needs. Additional site-specific analysis with public outreach would occur at that time.
  - c. The trail will be monitored and areas where the trail corridor is obstructed or damaged will be maintained as necessary.
- 8. Reclamation will occur on unauthorized areas of disturbance, including social trails, areas of

erosion, campsites and other gathering areas, and other areas on the historic trail where needed to retain primitive recreation opportunities.

- a. Methods may include ground disturbance to allow native seed placement and growth using manual tools and labor.
9. The BLM will monitor recreation and use.
- a. The BLM will conduct a baseline inventory of existing recreation impacts present in wilderness. The inventory will include gathering data through visitor register log sheets at trailheads, staff or volunteer observation reports, verbal or written complaints, area

condition assessment, and visitor counts through placement of traffic counters outside wilderness.

- b. A GIS record of areas and findings will be recorded.
- c. The BLM will conduct periodic monitoring (every 3 – 5 years) to determine changes to baseline conditions.
- d. The BLM will summarize findings and take appropriate actions to manage the area for wilderness values.
- e. When impacts exceed the standards listed in Table 1 below, action will be taken to alleviate the impact.

Table 1 Standards for managing recreation use.

Factor	Indicator	Standard
Inter-party contacts	Number of complaints per year received by office	Not to exceed 5 complaints per year
Evidence of human use	Presence of fire rings or campsites	No closer than ½-mile apart
		Not more than 2 visible from the Harquahala Peak Pack Trail and at least 100 feet from the trail.
	Presence of non-historic litter or human waste	None observable

10. The BLM will manage dispersed recreation and use.

- a. Educational messages will be employed to address the causes of settings not being

achieved, focusing on normative messaging.<sup>7</sup>

- b. Directional signs along highways will be reduced in size

<sup>7</sup> Caldini

or removed if standards are not being achieved.

- c. Additional maintenance will be conducted to reduce the visibility of human impacts through rehabilitation of disturbed areas and removal of litter and waste removal.
- d. A permit system may be implemented for access.

11. The BLM will provide for organized recreation use.

- a. Horse or llama use will be limited to 12 pack animals in a group except on the trail, which would be limited to 6 pack animals. No other pack animals, such as goats but not limited to goats, will be permitted in the wilderness.
- b. Pack animals would be fed with certified weed free dry 72 hours before visiting the HMW.
- c. Hunting guide SRPs would be permitted for groups up to 10 clients per trip.
- d. No other commercial SRPs would be permitted.

### **OBJECTIVE 3: Maintain and enhance the natural conditions of the HMW.**

#### **Wild Burro Management**

12. Specific actions related to burro management will be limited in the wilderness.

- a. Flights would be permitted to occur for population counts and other purposes within the wilderness, however, aircraft are not permitted to land in the

wilderness except during emergency situations.

- b. If gather operations must occur within the wilderness boundary, bait or water trapping may occur as long as the Minimum Requirements Decision Guide (MRDG) system is applied.

#### **Wildlife Management**

13. The BLM will work with the Arizona Game and Fish Department in coordinating wildlife management activities including, but not limited to, the following:

- a. Population surveys
- b. Monitoring and data collection
- c. Maintenance of wildlife water developments including water hauling
- d. Developing new wildlife waters or re-developing existing waters
- e. Recovery and translocation actions
- f. Predator control operations
- g. Placement of traps for wildlife population management
- h. Habitat restoration and enhancement projects
- i. Placement of GPS collars on wildlife species and other future technologies that would advance tracking efforts.

The Minimum Requirements Decision Guide (MRDG) system will be applied for projects that take place within the wilderness. Future development and re-development of wildlife water catchments will be analyzed under separate site-specific Environmental

Assessments. To accomplish wildlife management objectives, landing helicopters and use of drones may be considered for approval on a case by case basis.

- b. The BLM will monitor treated infestations to ensure success and conduct additional treatments as necessary.

### **Non-native Invasive and Noxious Species**

- 14. The BLM will monitor for and remove non-native invasive or noxious plants or animal species.
  - a. Methods will be determined by the type and size of infestation and selected through an integrated weed management approach as outlined in the Vegetation Treatments Using Herbicides on Bureau of Land Management Lands in 17 Western States Programmatic Environmental Impact Statement (PEIS) (BLM 2007a).

The PEIS outlines the following priorities for weed management:

Priority 1: Take actions to prevent or minimize the need for vegetation control when and where feasible, considering the management objectives of the site.

Priority 2: Use effective non-chemical methods of vegetation control when and where feasible.

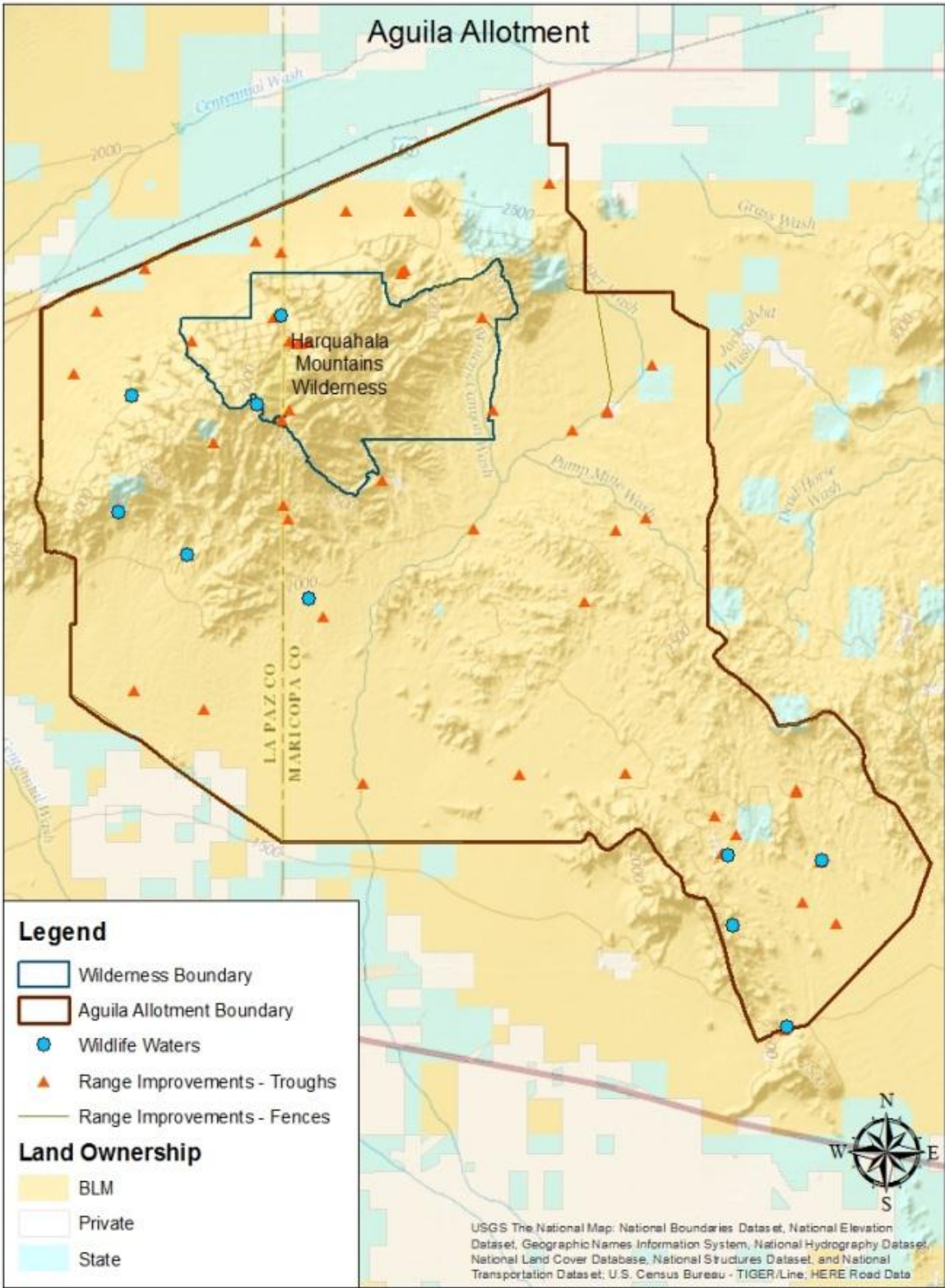
Priority 3: Use herbicides after considering the effectiveness of all potential methods or in combination with other methods or controls.

### **Livestock Grazing**

- 15. Livestock grazing management involving maintenance of existing infrastructure and herd management will continue to be conducted using non-motorized methods. See map 2.

Map 2: Range and Wildlife Features

Figure 2: Range and Wildlife Water Developments



## Fire Management

16. Pursuant to Section 4(c) of the Wilderness Act, otherwise prohibited uses may be authorized in wilderness areas only when they are determined to be "...necessary to meet minimum requirements for the administration of the area for the purpose of this Act..."

An evaluation and approval template for emergency actions that functions as a Minimum Requirements Analysis is in Appendix B-1 of BLM Manual 6340. The following process would be used to evaluate actions that may be considered during development of a proposed emergency fire response.

- a. Assign a resource advisor with knowledge and experience in wilderness stewardship to the firefighting team to assist in identifying and protecting wilderness character.
- b. Prevent the establishment of noxious weeds and invasive species to preserve the natural wilderness character through implementation of the following:
  - i. Inspect and wash all suppression equipment prior to wilderness entry, but locate wash-down sites outside of wilderness areas.
  - ii. Locate camps and other assembly points outside of wilderness areas and away from areas infested by noxious weeds and invasive species.
  - iii. Avoid using water sources containing invasive species

for suppressing fires in wilderness.

- c. Use MIST when feasible, as long as the safety of firefighters, human life and property is protected.
- d. Locate support operations, such as helispots, fire camps, and staging areas outside of wilderness.
- e. Remove or rehabilitate evidence of human intervention to the maximum extent possible.
  - i. Repair fire suppression-related resource damage immediately
  - ii. Plan and implement actions prior to the suppression incident organization demobilization.
- f. Repairs to damaged sites or resources may occur with the same type of equipment that was used for suppression. For example, if motorized, earth-moving equipment was used to construct fire lines, then the same type of equipment may be used to contour and rehabilitate.

17. The District Manager, as the delegated authority, must document her/his approval of otherwise prohibited uses, and the documentation must be included in the wilderness fire activity reports. Types of prohibited uses include:

- a. Motorized Water Pumps
- b. Aerial Retardant Application
- c. Air Transport/Personnel Shuttle (landings) and Supply Drops

- d. Fence (Facility) Repair or Temporary Fence Installation
- e. Chainsaws
- f. Motor Vehicles
  - i. Engines
  - ii. Helicopter Transports
  - iii. Crew Trucks
  - iv. UTV/ATV
- g. Helispot Construction (major ground disturbance)
- h. Heavy Equipment (equipment associated with major ground disturbance, i.e. bulldozers, excavators)

### **No Action Alternative**

Under this alternative, the BLM would not initiate any new actions.

Management would occur reactively as issues arise, with the exception of actions approved by existing documents that may be adapted to the HMW. Each new action would be considered in a separate environmental analysis, per the requirements of the National Environmental Policy Act.

## Part VI – General Management Situation and Affected Environment

This section describes the current activities or resources found within the wilderness area that may be affected by the proposed action or alternative.

Table 2. Resources that were considered for potential impacts

Resource	Not Present	Present, but Not Impacted	Present and Potentially Impacted	Rationale for Dismissal
Air Quality		X		No proposed management actions will contribute to changes in current air quality conditions.
ACECs		X		Present, but not affected due to the national wilderness designation which is a higher protection level than administrative ACEC designation.
Cultural Resources		X		No proposed management actions will contribute to changes in current conditions.
Economic & Social Values	X			Not Present
Environmental Justice	X			Not Present
Prime or Unique Farmlands	X			Not Present
Fire Management		X		No proposed management actions will contribute to changes in current conditions.
Floodplains	X			Not Present
Human Health and Safety	X			Not Present
Invasive Non-native or Noxious Species			X	See Part VII for a discussion of potential impacts.
Livestock Grazing		X		No proposed management actions will contribute to changes in current conditions.
Mineral Resources		X		No proposed management actions will contribute to changes in current conditions.
Native American Religious Concerns		X		Tribes were notified of the proposed action, but no concerns were expressed.
Paleontological Resources	X			

Resource	Not Present	Present, but Not Impacted	Present and Potentially Impacted	Rationale for Dismissal
Recreation			X	See Part VII for a discussion of potential impacts.
Rights-of-way		X		No proposed management actions will contribute to changes in current conditions.
Soils			X	See Part VII for a discussion of potential impacts.
Travel Management/ Land Access		X		No proposed management actions will contribute to changes in current conditions.
Threatened/ Endangered Species	X			Not Present
Vegetation			X	See Part VII for a discussion of potential impacts.
Visual Resources			X	See Part VII for a discussion of potential impacts.
Wastes, Hazardous or Solid	X			Not Present
Water Quality, Surface and Ground		X		No proposed management actions will contribute to changes in current conditions.
Wetlands/ Riparian Zones		X		No proposed management actions will contribute to changes in current conditions.
Wild & Scenic Rivers	X			Not Present
Wild Burros			X	See Part VII for a discussion of potential impacts.
Wilderness			X	See Part VII for a discussion of potential impacts.
Wildlife (including Special Status Species and Migratory Birds)			X	See Part VII for a discussion of potential impacts.

### Wilderness Values & Character

The HMW contains outstanding values of naturalness and opportunities for solitude. Numerous side canyons exist sporting varied topography with diverse vegetative communities. The

Harquahala Peak Pack Trail traverses 5.4 miles with an elevation gain of 3,300 feet on the western slope of the Harquahala Mountain Range within the wilderness. Outstanding views and sounds of song birds and raptors in

flight may be enjoyed by visitors hiking on the trail or traversing through untamed and rugged canyons.

Ecosystem structure and function within this wilderness is relatively intact. Some human-caused changes are present and are discussed under the specific resource category to which the change applies.

## **Soils**

Soils within the HMW are typical of the low desert mountains. The primary soil unit within the project area is the Cellar-Rock outcrop complex, 10-70% slopes. These soils are shallow or very shallow on hill slopes and mountain slopes, with a moderate hazard of erosion. Water holding capacity is limited and runoff is medium to rapid. Other soils in the Cellar-Rock outcrop soil unit include Nickel and Eba soils on lower side slopes and Arizo soils in drainageways.

Minor soils that may occur in the lower elevation areas include the Eba-Continental complex, the Greyeagle-Continental-Nickel association, the Quilotosa-Vaiva Rock outcrop complex on mountain and hill slopes, and the Sal-Cipriano complex on fan terraces.

## **Vegetation**

Vegetation within the HMW is typical of the Sonoran desert. The desert scrub vegetation type is most common, consisting mainly of low shrubs with dense clusters of trees along drainages, typically referred to as xeroriparian areas. Higher elevations have similar vegetation types with higher percentages grasses and forbs within the vegetation community. Mid to high elevations contain Interior Chaparral plant communities dominated by scrub

oak and manzanita species. In Brown Canyon, riparian obligate species are present above the dam.

## **Non-native Invasive and Noxious Species**

The HMW contains no mapped infestations of non-native noxious invasive species. Non-native species that occur include Red Brome, Schismus species, filaree, and salt cedar in riparian areas. The BLM has not actively managed these species in this area.

## **Wildlife**

The Arizona Game and Fish Department (AGFD) has jurisdiction over wildlife populations Arizona and has developed cooperative management relationships with the BLM in their efforts to manage all wildlife species. 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 HMW include rugged mountain ranges with cliffs and steep-sided canyons, chaparral vegetation interspersed with semi-arid grassland, Sonoran scrub, desert wash woodlands, and abandoned mines. There are six mapped springs within the wilderness area. Perennial surface water occurs in portions of Brown's Canyon. Other drainages within the wilderness area contain surface water intermittently, depending on rainfall events. One wildlife water catchment is located in the HMW. See map 2. The water catchment was constructed in partnership with AGFD and BLM. AGFD maintains the wildlife water catchment to ensure that it continues to

provide water for a variety of wildlife species.

Wildlife species that occur include mule deer, desert bighorn sheep, javelina, coyote, mountain lion, bobcat, grey fox, black-tailed jackrabbit, desert cottontail, Harris' antelope squirrel, Mexican free-tailed bat, pallid bat, canyon bat, Gambel's quail, Gila woodpecker, Sonoran desert toad, Gila monster, rosy boa, western diamondback and black-tailed rattlesnakes, as well as various other snakes, lizards, small mammals and migratory birds.

AGFD currently conducts periodic aerial fixed-wing and helicopter census, monitoring, or inspection flights over the wilderness at less than 2,000 feet above ground level (AGL), for mule deer, bighorn sheep and golden eagle.

### **Special Status Species**

Special status species include federally listed or proposed species, and BLM sensitive species. The HMW does not contain habitat for any federally listed or proposed species; however, several BLM sensitive species do. BLM manages sensitive species and their habitats to minimize or eliminate threats affecting the status of the species and to improve the condition of the species habitat (BLM Manual 6840). The BLM sensitive species known to occupy habitat in the planning area are Sonoran desert tortoise (*Gopherus morafkai*), Townsend's big-eared bat (*Corynorhinus townsendii*), cave myotis (*Myotis velifer*), California leaf-nosed bat (*Macrotus californicus*), Greater western mastiff bat, (*Eumops perotis californicus*), lowland leopard frog (*Lithobates yavapaiensis*), golden eagle

(*Aquila chrysaetos*) and gilded flicker (*Colaptes chrysoides*).

The HMW is located in category I Sonoran desert tortoise habitat, which is the most valuable and protected category of habitat. Category I habitat is defined as habitat that is essential to the maintenance of large viable populations; where conflicts are resolvable; that contain medium to high density tortoise populations or low density populations contiguous with medium or high density populations; and have increasing, stable or decreasing populations. The desert tortoise distribution within the wilderness is not uniform. Tortoises tend to occupy hillsides and ridges with outcrops of large boulders as well as areas with incised washes and caliche caves, but may be found in lower densities throughout the area. Tortoises generally use natural and excavated cover sites between or under boulders and in caliche caves along washes wherever they occur. Their diet consists of annual forbs (30.1%), perennial forbs (18.3%), grasses (27.4%), woody plants (23.2%), and prickly pear fruit (1.1%).

Townsend's big-eared bat, California leaf-nosed bat, and cave myotis are insectivorous bats that roost in caves or abandoned mines. Several abandoned mines are present in and near HMW. Greater western mastiff bat is also an insectivorous bat, but this species roosts in crevices in canyons and cliffs.

Lowland leopard frogs may occur in any perennial water source within the planning area. They have been known to breed in a variety of natural and developed waters including perennial and intermittent streams, springs, cienegas, and livestock ponds and drinkers.

Golden eagles have been known to nest in cliff habitat within the HMW. Golden eagles have large home ranges and hunt while soaring or from a perch. They typically feed on small mammals, but may also eat snakes, birds, juvenile deer and carrion.

Gilded flicker is a cavity nesting species, predominantly nesting in saguaro cacti. The species feeds on insects, fruits and seeds. These flickers forage primarily on the ground, often feeding on ants.

## **Wild Burros**

The Harquahala Herd Area (HA) encompasses a portion of this wilderness. The BLM evaluated each HA through the development of the Bradshaw-Harquahala Resource Management Plan to determine whether or not there was enough food, water, cover and space to support healthy and diverse populations of wild burros over the long-term. Areas which met these criteria were then designated as Herd Management Areas (HMAs). Therefore HAs did not meet the criteria and are managed to achieve a population of zero burros over the long term. Burros currently occupy the HA and may be commonly seen in the eastern portion of this wilderness.

## **Recreation**

Current recreation use includes: backpacking, hiking, equestrian, and hunting for quail, mule deer, and big horn sheep. This area is contained within AGFD hunting unit 44a. Camping is dispersed throughout the wilderness with permitted hunting parties and ardent backpackers venturing into the heart of the wilderness. Visitor use days are estimated to exceed 700 per year.

This wilderness offers visitors a fairly high degree of solitude, due to the remoteness of the area and the topography featuring side canyons which screen out views, noise, and other visitors. Wide expanse areas exist making the activities of others relatively unnoticeable when viewed from a distance. Natural quiet is typically in abundance throughout the wilderness, except for frequent military flights.

No visitor use conflicts have been documented for this wilderness. There is potential for visitor use conflict if the popularity of the Harquahala Peak Pack Trail increases with hikers and or horseback riders. The trail is challenging for horseback rides due to cliffs and narrow passages with no relief from topography which may result in only expert riders venturing on the trail.

As the Greater Phoenix Area continues to grow, this area may become more popular as people seek out natural places for a variety of benefits in their valuable respite from societal pressures, assuring their leisure time is well spent.

## **Visual Resources**

The HMW is classified as Visual Resource Management (VRM) Class 1 in accordance with BLM policy. The objective for VRM Class 1 is to preserve the existing character of the landscape. This class provides for natural ecological changes; however, it does not preclude management activity that will retain and or improve the ecological state. The level of change to the characteristic landscape should be low and should not attract attention. The characteristic landscape within HMW is predominantly natural in appearance; with the exception of the following: scattered remnants of abandoned water pipelines; mining features such as adits,

prospecting pits, mine tailings, and one shaft; a concrete dam; filament lines, and water wells. Some of which have a moderate degree of contrast under the BLM's Visual Contrast Rating System.

Water developments for wildlife and cattle exit within the area. Any needed or new construction for wildlife or grazing would be accomplished by applying the visual contrast rating system and providing for minimum visual disturbance.

Debris within the area or that may occur would be removed.

All proposed work in the HMW would undergo a Minimum Requirements Analysis and incorporate the visual contrast rating protocol. This includes the need to add wildlife/ livestock waters.

## **Part VII – Environmental Consequences and Cumulative Impacts**

### **Past, Present, and Reasonably Foreseeable Future Actions**

Past and present actions include:

- livestock grazing management involving maintenance of existing infrastructure and herd management with non-motorized methods,
- wildlife population management involving water development maintenance, population monitoring, and species recover actions,
- non-motorized recreational usage, both organized and dispersed, throughout the wilderness, and
- unauthorized motorized travel within the wilderness.

All of these actions are expected to continue into the foreseeable future and no additional actions have been identified at this time.

### **Wilderness Values & Character**

#### **Proposed Action**

Preservation of the wilderness character includes maintaining or enhancing natural conditions throughout the wilderness area, including promoting a healthy ecosystem, through the use of the Minimum Requirements Decision Guide (MRDG). Specific actions have been identified, but not limited to the following:

- ensuring the Minimum Requirements Decision Guide is

used by offering training sessions annually to staff assigned to manage or conduct activities within wilderness,

- improving the recognition of wilderness boundaries,
- increase awareness of FAA no-fly advisory zones by incorporating information on the aeronautical charts and other outreach methods that would inform recreational pilots and recreational users of other devices such as drones of existing regulations over wilderness areas,
- eliminating vehicle intrusion in wilderness,
- removing, maintaining, or repairing existing developments,
- coordinating with other agencies to achieve mutual healthy land goals,
- managing wildlife fire,
- adequately monitoring health of the land and wilderness character,
- inventorying, evaluating, and mitigating abandoned mine features for human and ecological hazards as well as for historic/cultural and visual values, and
- monitoring for and removing exotic or noxious plant or animal species.

## **No Action**

Providing for overall ecosystem health in this area without the guidance of the MRDG would compromise wilderness values of naturalness and solitude. Retaining debris would dampen the wilderness experience. Naturalness and solitude would be compromised as privacy for the wilderness visitor would be diminished by recreational pilots and the use of recreational devices. Other actions would be carried out, but not possibly in accordance with the MRDG.

## **Cumulative Impacts**

Managing without applying the principles and protocol in the MRDG would result in additional acres of reduced wilderness values including naturalness and solitude.

## **Soils**

### **Proposed Action**

Soil stability on the Harquahala Peak Pack Trail is subjected to monsoon weather in the summer, which escalates the severity of water on the trail, entering the trail from topographic features that funnel the water across and down the trail resulting in portions of the trail compromised to washouts. In addition, portions of the trail may be compromised through hikers and horse use.

To provide for a quality trail experience, trail maintenance and re-routing of the trail may be needed. Reclaiming social trails and other disturbed areas would also reduce erosion and soil compaction in areas to maintain naturalness.

### **No Action**

Trail maintenance would continue, but reclamation of social trails and other disturbed areas would not be allowed.

Over time, this may reduce the sense of naturalness as these areas may continue to flourish and erosion through soil compaction would be evident.

## **Cumulative Impacts**

No cumulative impacts were identified.

## **Vegetation including Non-native Invasive and Noxious Species**

### **Proposed Action**

Vegetation communities in the project area would likely improve as non-native invasive and noxious species would be identified and treated using various approved methods for eradication. Treatment areas would also be monitored by BLM specialists to evaluate the success of various types of treatments. Knowledge of successful treatment methods may help with management of other infested areas in the project area.

Equestrian users would also be required to use certified weed free hay to feed their horses 72 hours before visiting the area. Weed free hay would decrease the likelihood of new invasive species becoming established in new areas.

Overall the impacts from the Proposed Action would be beneficial to vegetation communities within the project area. No negative consequences would be expected.

### **No Action**

Current BLM management would continue in the project area. Vegetation communities would continue to persist and flourish within the project area. Non-native and invasive management would be limited. Populations of non-native invasive and noxious weeds may expand beyond their current locations if no human intervention is made to

currently established populations. No certified weed free restrictions on equestrian users would be implemented by the BLM.

### **Cumulative Impacts**

No cumulative impacts were identified.

## **Wildlife**

### **Proposed Action**

#### **Wildlife and Special Status Species**

Managing the wilderness according to the national wilderness program goals listed in Part II will benefit wildlife through habitat protection and reduced disturbance to wildlife species.

Reclaiming closed roads and other disturbed areas may have short-term minor impacts through disturbance to wildlife in the vicinity of the project. Long-term benefits to wildlife habitat from reclaiming disturbed areas would be expected to result from increased cover of native plants.

During the building and maintenance of vehicle barriers and the installation of wilderness boundary and recreation signs, localized disturbance to wildlife may occur. These disturbances are expected to be minor and short-term. Vehicle barriers and signage are expected to have long-term benefits to wildlife through reducing impacts to habitat.

Maintenance of wildlife waters would have minor, short-term disturbance during the maintenance activities. Wildlife would likely avoid the water during maintenance activities, but would be expected to return after the work was complete. Maintenance of wildlife waters is expected to have long-term benefits to a variety of wildlife species

through increasing the reliability of the water source.

### **No Action**

Under the no action alternative the benefits to wildlife and habitat described in the proposed action would not be expected to occur.

### **Cumulative Impacts**

No cumulative impacts were identified relative to wildlife and wildlife habitat.

## **Wild Burros**

### **Proposed Action**

Wild burros will continue to exist in the project area and would not be negatively impacted by the proposed action. They may benefit from the active management of non-native invasive and noxious plants. This action would likely improve the quality of forage in some areas for burro populations. Some activities in the project area may occur due to population management of burros (e.g. trapping, herding) but would follow existing rules found in the MRDG.

### **No Action**

Under the no action alternative the benefits to burros described in the proposed action would not be expected to occur. Management of wild burros would continue as it has for the previous decade.

### **Cumulative Impacts**

No cumulative impacts were identified relative to Wild Burros.

## **Recreation**

### **Proposed Action**

An adaptive management approach provides the flexibility to address the current and future needs of visitors.

Recreation use congregates along the established trail; while hunters find less congested areas.

Monitoring the trail to provide for maintenance needs and identifying user needs will provide visitors with a quality recreation experience. Reclamation of side trails will produce a more natural area and visitor experience.

Reclamation of overused areas such as campsites or other gathering places or places of past uses will also result in a more natural type landscape and improve upon the wilderness experience and wilderness expectation.

Reclamation of wash-outs and on the trail will result in an improved visitor experience and result in a more natural type landscape. MRDG methods would be employed in any reclamation efforts.

Installing wilderness boundary markers and barriers at problem areas will lessen the intrusions of motorized vehicles and enhance the wilderness experience.

By keeping recordation of areas where signs are installed/needed, including kiosks, will aid in improving the wilderness experience, as they function to address appropriate uses and non-appropriate uses. Keeping current on this recordation and acting accordingly will maximize the wilderness visitors' experience by deterring illegal uses while promoting naturalness, unconfined recreation, and solitude.

Establishing baseline data of recreation impacts will assist in identifying areas where changes are needed and will indicate where conditions are improving. Promoting existing wilderness land use ethics awareness programs such as *Leave No Trace* and incorporating normative messaging<sup>8</sup> will assist in

maintaining the wilderness in terms of: undeveloped, untrammelled, natural, outstanding opportunities for solitude, or a primitive and unconfined type of recreation, and other supplemental qualities. In order to preserve these qualities, the practice of *Leave No Trace* is critical.

Outreach methods will aid the visitor in knowing before going, and preparing them for their trip. On-site kiosks will aid visitors who may have discovered the area or who may not have planned an extensive trip into the wilderness.

The standard for managing dispersed recreation (Table 1) will result in improving the quality experience for the visitor.

Actions identified for hiking groups, pack animals, and hunting groups would provide for a quality recreation experience while maximizing wilderness values.

The remainder of proposed actions will enhance opportunities for primitive recreation and would increase visitors' perception of solitude and naturalness of the area.

### **No Action**

If the actions presented in the wilderness plan are not implemented, the Harquahala Peak Pack Trail would not be designated as a trail asset, making it less likely to obtain maintenance funding, which would impact the unconfined recreation opportunities.

Reclamation of social trails or other evidence of social gathering areas would not occur, reducing the visitors' perception of naturalness.

---

<sup>8</sup> Cialdini, Robert B

Reclamation of roads and installing barriers would not occur which would impact unconfined recreation opportunities and detract from naturalness and solitude.

Wilderness boundary identification would not be implemented which may increase incompatible motorized and mechanized uses and reducing solitude and unconfined recreation opportunities.

Use would not be monitored which would reduce naturalness, solitude, and other wilderness values.

Standards for management would not be in place which would result in the loss of naturalness and solitude.

Pack animals would not be on weed free feed which would result in the loss of naturalness due to weed proliferation.

There would be no restrictions placed on number of stock animals. This may result in visitor dissatisfaction because of party interaction or degradation of naturalness and solitude.

Proliferation of campsites would result in visitor dissatisfaction because it would impact naturalness.

### **Cumulative Impacts**

Long term impacts should benefit the wilderness values of solitude, naturalness, unconfined recreation, and supplemental values. Wilderness is a resource where hiking, camping, backpacking and other forms of unconfined recreation reigns and caters to those who seek this experience and the pristine setting.

Areas without special designations cater to those who want less of a pristine setting to enjoy mechanized uses to motorized uses. Through monitoring and disseminating information to the public about wilderness and its purpose

in the American mind and in the American value system, this area will attract those seeking these settings.

### **Visual Resources**

#### **Proposed Action**

The proposed action would have the effect of meeting the VRM Class I objective of preserving the existing character of the landscape. Most of the actions proposed in the plan would have no effect on existing character; and actions that are intended to lessen the imprint of humans on the landscape would have the effect of improving landscape character.

By removing and or reclaiming any remnants related to grazing, mining, and other debris would enhance the visual rating.

#### **No Action**

There would be no benefits to the visual resources.

#### **Cumulative Impacts**

Removing debris and reclaiming areas would improve on the overall naturalness of the area.

## **Part VIII – Consultation and Coordination**

### **Agencies, Tribes, and Organizations Consulted**

- **Agencies:**

- Arizona Department of Game and Fish
- State Historic Preservation Office

- **Tribes:**

- Ak-Chin Indian Community
- Colorado River Indian Tribes
- Fort McDowell Yavapai Nation
- Fort Mohave Indian Tribe
- Gila River Indian Community
- The Hopi Tribes
- Navajo Nation
- Salt River Pima-Maricopa Indian Community
- Tohono O'odham Nation
- Yavapai-Apache Nation
- Yavapai-Prescott Indian Tribe
- Pueblo of Zuni

- **Organizations:**

- Arizona Conservation Partners
- Arizona Wilderness Coalition
- International Mountain Biking Association
- Sun City Hikers
- Wickenburg Horsemen's Association

## **List of Preparers**

Mary Skordinsky, Outdoor Recreation Planner, Project Lead

James Holden, Rangeland Management Specialist

Codey Carter, Wildlife Biologist

Steven Bird, Wild Horse and Burro Specialist

Chris McLaughlin, Archaeologist

Josh Tibbetts, Fire Management Specialist

Tom Bickauskas, Outdoor Recreation Planner

Casey Addy, Natural Resource Specialist

Hillary Conner, Realty Specialist

Judd Sampson, Geologist

Gloria Tibbetts, Planning and Environmental Coordinator

Ken Mahoney, State Wilderness Program Lead

Amanda James, Acting Field Manager

Rem Hawes, Field Manager

## Part IX – References

Advisory Circular (AC) 91-36D. Issued September 17, 2004 by the U.S. Department of Transportation, Federal Aviation Administration. Available online at:  
[http://www.airweb.faa.gov/Regulatory\\_and\\_Guidance\\_Library/rgAdvisoryCircular.nsf/0/208330d7efad2bf9862570650070769f/\\$FILE/AC91-36d.pdf](http://www.airweb.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/208330d7efad2bf9862570650070769f/$FILE/AC91-36d.pdf)

Cialdini, Robert B. (2003) Crafting Normative Messages to Protect the Environment. *American Psychological Society*, 12(4), 105-109.

Sellers, W.D., and R.H. Hill (editors). 1974. Arizona climate 1931-1972, second ed. The University of Arizona Press, Tucson.

Strategies to Protect Arizona's \$9 Billion Military Economy, 4/24/2013.  
[http://www.azwild.org/resources/documents/Strategies\\_Protect\\_Arizonas\\_Military\\_Economy\\_Maricopa\\_SI\\_AWC\\_Final\\_002.pdf](http://www.azwild.org/resources/documents/Strategies_Protect_Arizonas_Military_Economy_Maricopa_SI_AWC_Final_002.pdf)

Thornbury, William D. 1965. Regional Geomorphology of the United States. John Wiley and Sons, New York.

Wilderness Net [http://www.wilderness.net/MRDG/documents?RDG\\_overview.pdf](http://www.wilderness.net/MRDG/documents?RDG_overview.pdf)