



United State Department of the Interior



BUREAU OF LAND MANAGEMENT
Lake Havasu Field Office
2610 Sweetwater Avenue
Lake Havasu City, AZ 86406
www.blm.gov/az

August 18, 2008

In Reply Refer To:
6360 (AZ-330)

Dear Reader:

The Lake Havasu Field Office of the Bureau of Land Management (BLM) has prepared the Proposed Harcuvar Mountains Wilderness Management Plan and associated Environmental Assessment (EA). The plan proposes a variety of actions intended to preserve wilderness values while allowing existing uses, such as livestock grazing and wildlife management, to continue. This plan, once approved, will guide BLM in managing this area for the next 10 years.

We are asking for your review and comments at this time on the proposed management plan and on the EA finding BLM's intent that no significant impacts would occur from the plan's proposed actions. If you wish to review the proposed plan and EA, the documents are available on the BLM website, located at:

http://www.blm.gov/az/st/en/fo/lake_havasu_field.html

You may also request the proposed plan and EA by calling Mike Henderson at 928-505-1200 or by writing to this address:

Bureau of Land Management
Lake Havasu Field Office
2610 Sweetwater Avenue
Lake Havasu City, AZ 86406

Comments should be received by us no later than October 3, 2008. Those who comment or otherwise express an interest in the documents will be sent the approved management plan, EA, and signed Finding of No Significant Impact and Decision Record.

Thank you for your interest in public land management.

Karen Reichhardt
Lake Havasu Field Manager



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

Lake Havasu Field Office

August 2008



Proposed

**Harcuvar Mountains Wilderness
Management Plan and
Environmental Assessment**



The Bureau of Land Management is responsible for the balanced management of the BLM-administered 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 the future generations for renewable and non-renewable resources. These resources include recreation, range, timber, minerals, watershed, fish and wildlife, wilderness and natural, scenic and cultural values.

**Proposed
Harcuvar Mountains
Wilderness Management Plan
And
Environmental Assessment
EA Number: EA-AZ-330-2008-0008**

U.S Department of the Interior
Bureau of Land Management
Lake Havasu Field Office

August 2008

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PLAN SUMMARY

This plan covers the management of the Harcuvar Mountains Wilderness. Designated by the Arizona Desert Wilderness Act of 1990, the area comprises 25,120 acres and is located approximately 80 miles northwest of Phoenix, Arizona in eastern La Paz County.

Bureau of Land Management (BLM) policy requires the development of a management plan that will:

- Protect wilderness values,
- Allow for visitor use and enjoyment,
- Address the minimum requirements for administration of the area as wilderness when actions are proposed to accomplish resource objectives inside the wilderness,
- Allow legislatively accepted uses, such as livestock grazing.

MAIN FEATURES OF THIS WILDERNESS MANAGEMENT PLAN

Three Objectives are established:

1. Maintain or enhance the wilderness values of naturalness, outstanding opportunities for solitude and primitive recreation
2. Manage vegetation to maintain or improve the health and function of native plant communities,
3. In cooperation with the Arizona Department of Game and Fish (AGFD) and partners, enhance and protect desert wildlife habitat and populations.

Specific actions to meet the objectives include:

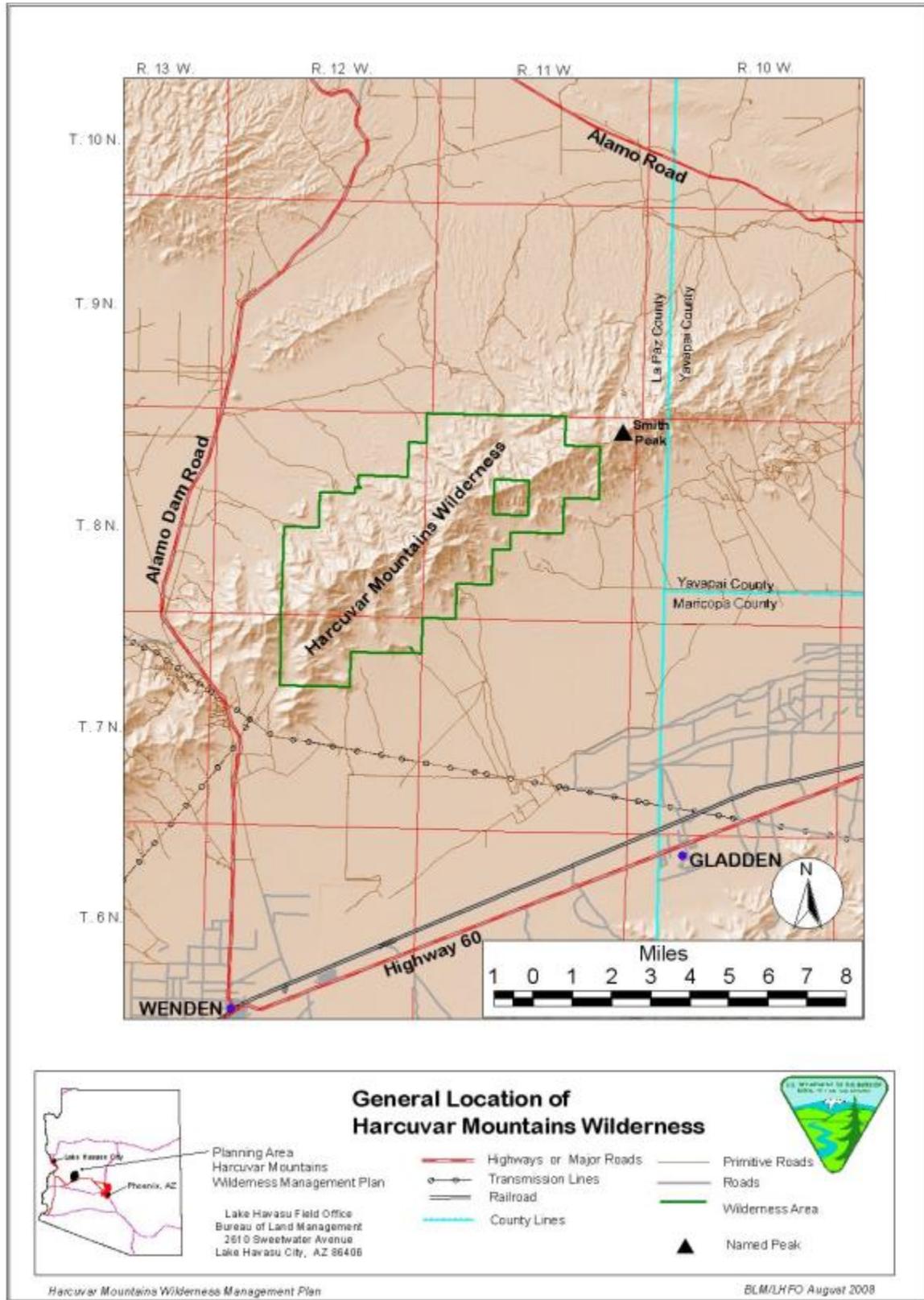
1. Establish clear “end of road access” locations at the wilderness boundary, and where appropriate, at: 1) Big Falls, 2) Dripping Springs, 3) ECP Peak, 4) Low Mountain, 5) Smith Peak, and 6) Webber Canyon. Projects may include signage, physical barriers, gates or fences with parking/turn around areas.
2. Develop maps/brochures of the area and establish bulletin boards where appropriate, to provide information to the public. Information on these bulletin boards would emphasize site-specific information; allowed and prohibited uses in the Wilderness; opportunities for solitude and dispersed wilderness recreation; protection of natural values and archeological and

biological resources; and suggestions on the use of minimum impact techniques. The design of these facilities is to have a minimal visual impact and be located outside the wilderness boundary while accommodating the need for a multiple resource message.

3. Conduct routine wilderness boundary patrols to identify locations where illegal motorized activity is entering the wilderness area. Placing carsonite signs or making informational brochures available will be initial steps to reduce these activities. Increased law enforcement patrols, drift fences, and/or post-and-cable vehicle barriers will occur if these activities cannot be reduced.
4. Use minimum impact hand tools and methods to rehabilitate short segments of closed vehicle route inside the Wilderness. This rehabilitation will minimize the contrast of vehicle routes visible along the wilderness boundary.
5. No new recreational facilities or infrastructure, including trails, will be constructed within the wilderness.
6. Accommodate Native American traditional/sacred use and management interests. Share existing and newly discovered site information with tribal museums or cultural program staff.
7. Protect the physical attributes and integrity of cultural and archeological sites. Manage those resources to prevent loss of important information, socio-cultural, or educational values. Identify and record where necessary.
8. Big Falls will be allocated to “Conservation for Future Use.” This category identifies the cultural value of this site and reserves it for potential scientific and historical study. Analysis and management of the falls would be based on consultation with affected tribes and the State Historic Preservation Officer.
9. Determine which properties, or classes of properties, are eligible for nomination to the National Register of Historic Places (NRHP).

10. Remove miscellaneous trash, debris, and abandoned equipment not determined to be historical resources from the wilderness area by non-mechanized means where possible.
11. Manage Category I desert tortoise habitat for "no net loss" as defined in the Desert Tortoise Habitat Management on the Public Lands: Range-wide Plan (BLM, 1988).
12. Limit livestock and wildlife utilization of key species to an average of no more than 50% of annual growth.
13. Fire suppression will be conducted under the Yuma/Havasu Fire Management Zone Fire Management Plan (FMP 2004) until the Colorado River District FMP is completed. Minimum Impact Suppression Tactics (MIST) will be the preferred fire suppression strategy. Full suppression tactics may be used under special and/or emergency circumstances if life and/or property are threatened. A Resource Advisor will be assigned for wildfires in the wilderness to advise on suppression activities that protect or maintain biological, cultural and wilderness resource values.
14. Fire camps, staging areas, heli-bases, and fueling dumps will be located outside the wilderness boundary.
15. Coordinate with Arizona State Land Department concerning fire management strategies on state land parcels within the Wilderness boundaries. Develop a wildfire management plan which heavily considers natural ignitions and naturally occurring conditions.
16. Establish a cooperative agreement with AGFD and the grazing permittee, where applicable, to improve, maintain, or develop range improvements to ensure their availability for wildlife as well.
17. Maintain the Dripping Springs water facilities for livestock and wildlife through a cooperative effort between the permittee, AGFD, and the BLM. The pipeline will be replaced as needed. The spring and upper trough will be stabilized. A new walk-in drinker may be installed to provide easier access by bighorn sheep. The Dripping Springs pipeline replacement will extend from the upper trough to provide water to the lower livestock facilities, and may be extended to provide livestock water outside the wilderness boundary. All of the improvements will be camouflaged with natural colors and unnecessary materials will be removed. Pack animals will be used to transport materials as much as possible. A helicopter may be the minimum tool for some materials, such as the walk-in drinker. If the helicopter is needed, it will not land within the wilderness area, but will only sling load equipment.
18. Big Falls Dam will be abandoned as a livestock project and will be retained for wildlife without any new development.
19. Section 31 Water Haul will be moved outside of the wilderness area using a 4WD truck and trailer, if the tanks cannot be rolled out. The Sec 31 Water Haul location will be rehabilitated to return the location to a natural state.
20. The storage tank at Webber Mine may be moved outside of the Wilderness area.
21. Routine inspection and maintenance of the Loma Linda/Lamberson boundary fence and the Dripping Springs pipeline will be conducted on foot or horseback. Materials will be transported by pack animal.
22. Emergency situations may require entry into the Wilderness with appropriate equipment.
23. Surveys of historic mines will be conducted to identify priority bat habitat in the wilderness. Mines identified as providing winter, summer, or maternity roosting will be classified as priority wildlife habitat and shall be protected from further disturbances. Bat gates at mine entrances maybe constructed after consideration through a minimum requirements decision analysis. Public safety of mines will be a priority.

Map 1 – Harcuvar Mountains Wilderness



Part 1 - INTRODUCTION

BACKGROUND

The Wilderness Act of 1964 laid the foundation for the National Wilderness Preservation System. On November 28, 1990, the Arizona Desert Wilderness Act, Public Law 101-628, designated 39 areas in Arizona, including the Harcuvar Mountains, as wilderness. BLM Manual 8561 establishes that BLM will manage wilderness with the guidance of a wilderness plan. The Harcuvar Mountains Wilderness Management Plan and environmental assessment (EA) analyzes the environmental and social impacts of the proposed action and one alternative, a “no-action” alternative.

PLAN PURPOSE AND NEED

Management responsibility for the Harcuvar Mountains Wilderness (HMW) is administered by the Lake Havasu Field Office (LHFO) within the Colorado River District (CRD) of the United States Bureau of Land Management (BLM). This HMW Management Plan, consistent with the LHFO Resource Management Plan (RMP) 2007, will provide management direction over the next 10 years with annual reviews and revisions as needed.

Other primary laws that dictate the management of the HMW include the Federal Land Policy and Management Act (FLPMA) 1976 and the Arizona Desert Wilderness Act (ADWA) 1990. The FLPMA directs the BLM to manage public lands and the various resource values for multiple-use and sustained yield, so that they are utilized in a strategy that will best meet the present and future needs of the American people.

The ADWA (PL 101-628) designated 25,120 acres of the Harcuvar Mountains as the HMW. Consistent with these Acts of Congress and current BLM policy, the LHFO is preparing the HMW Management Plan to provide for the management of wilderness values and characteristics such as naturalness, solitude, and primitive/unconfined recreation.

The purpose of the HMW Management Plan (the Plan) is to identify management: issues, objectives, actions, and monitoring methods to facilitate the sound stewardship of wilderness values and characteristics.

CONFORMANCE WITH LAND USE PLAN

The proposed action and no-action alternative addressed in the EA are in conformance with the LHFO RMP 2007. Specific decisions that apply to this plan are:

VM-1. Native plant communities will be maintained appropriate to climate and landform.

VM-4. The BLM will require the use of certified weed-free forage for all stock in Wilderness Areas (WAs), Wilderness Study Areas (WSAs), lands managed for wilderness characteristics, and wildlife habitat areas (WHAs). Domestic-sheep-free forage will be required for any permitted activity within or adjacent to bighorn sheep habitat.

WF-1. Wildlife movement corridors will be maintained for biotic diversity, to minimize fragmentation of habitat and to minimize barriers to movement.

WF-2. The BLM will manage all wildlife habitats with the objective to conserve native species for sustainable public benefits.

TE-2. No net loss of quantity or quality of priority species and/or priority habitats will occur on the Lake Havasu Field Office.

FM-14. In WAs, WSAs, and areas with wilderness characteristics according to wilderness plans or the Approved RMP, when suppression actions are required, minimum impact suppression tactics (Interagency Standards for Fire and Aviation Operations 2003) will be applied and coordinated with WA management objectives and guidelines. In all cases, determining appropriate attack strategies and tactics, including the use of MIST, must be based on appropriate management response while providing for fire fighter and public safety, land and resource management objectives, values at risk, weather, fuel conditions, threats and values to be protected, and available resources.

FM-20. In WAs, WSAs, and lands with wilderness characteristics according to land use plans, when suppression actions are required, minimum impact suppression tactics (Interagency Standards for Fire and Aviation Operations 2003) will be utilized and coordinated with WA management objectives and guidelines.

LR-37. Locating communication facilities outside of designated corridors and communication sites will be prohibited in ACECs, WAs, WSAs and cultural sites eligible for inclusion on the NRHP.

Subject to valid existing rights at the time of designation, all wilderness areas are withdrawn from all forms of appropriation under the mining laws and closed mineral leasing and mineral material disposal. The designated wilderness areas cover a total of 120,599 acres (page 42 of the LHFO RMP).

WM-1. To provide for the long-term protection and preservation of the designated area's wilderness character under the 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.

WM-2. To manage the WA 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 resources will be dominant in all management decisions where a choice must be made between preservation of wilderness and visitor use.

WM-3. To manage nonconforming but accepted uses permitted by the Wilderness Act and subsequent laws in a manner that will prevent unnecessary or undue degradation of the area's wilderness character. Nonconforming uses are the exception rather than rule; therefore, emphasis is placed on maintaining wilderness character.

WM-4. Accommodate the traditional or sacred use that may be identified in the future by the tribes that historically used the WAs.

WM-5. No recreational facilities, including trails, will be constructed within the WAs unless needed for public safety or the protection of natural conditions and/or any ecological, cultural, geological, or other features of scientific, educational, scenic, or historical value.

VR-1. VRM Class I – The objective of this class is to preserve the existing character of the landscape. This class provides for the natural ecological changes; however, it does not preclude very limited management activity. The level of change of the characteristic landscape should be very low and must not attract attention.

RELATIONSHIP TO STATUTES, REGULATIONS OR OTHER PLANS

- The *Phoenix District Interim Guidance for Fire Suppression in Wilderness* (1991) is superseded by the decisions contained within the Arizona State *Land Use Plan Amendment for Fire, Fuels and Air Quality Management* and the implementation actions within this document.
- The Wilderness Act of 1964 (Public Law 88-577) 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 so as to preserve its natural conditions.” The Act also prohibits commercial enterprise, permanent roads, and, except as necessary to meet minimum requirements for the administration of the area for the purpose of the Act, motor vehicles, motorized equipment, mechanical transport, and certain other uses are prohibited. 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 (FLPMA) (Public Law 94-579). The Arizona Desert Wilderness Act of 1990 established the HMW.
- Regulations governing wilderness management by BLM are found at 43 CFR 6300. BLM Manual 8560, “Management of Designated Wilderness Areas,” provides additional guidance.
- This environmental assessment complies with the National Environmental Policy Act of 1969 (Public Law 91-190) by providing the decision-maker with appropriate alternatives for managing this wilderness and describing the environmental impacts of implementing each of the alternatives. A 45-day comment period is provided for public review and input to the environmental assessment.

WILDERNESS OVERVIEW

LOCATION AND ACCESS

The HMW is a 25,120 acre portion of the greater Harcuvar Mountains located approximately 80 miles northwest of Phoenix and 10 miles northeast of Wenden, Arizona in La Paz County. The HMW comprises an area of rugged mountains rising abruptly from the desert floor characteristic of Sonoran Desert basin/range topography. Elevations range from 2,400 to 5,135 feet. The rocky canyons, sculpted ridgelines, and challenging desert peaks offer an outstanding setting for primitive forms of recreation. The northern ridgeline of the Harcuvar Mountains is isolated and rarely visited, greatly enhancing opportunities for solitude. The high-ridgeline features a unique 3,500 acre island of chaparral habitat. Human-made developments include evidence of vehicle routes, mining and grazing activity. However, because these developments are widely dispersed and largely unnoticeable due to the topography, they do not detract from the area's overall naturalness (Map 1).

LAND OWNERSHIP/STATUS

The BLM is the primary land manager of the HMW and the surrounding Harcuvar Mountains (Map 2, Table 1). Included within the HMW is a single section (approximately 640 acres) of Arizona State Land. Additionally, 3,200 acres of State land is dispersed between 5 separate 640 acre sections along the HMW perimeter boundary. No private ownership occurs in or adjacent to the HMW.

Table 1 - Land Status/Ownership

Ownership	Acres	Percent
BLM	24,480	97.5%
State	640	2.5%
Private	0	0%
Total	25,120	100.0%

CLIMATE/AIR/WATER/VISUAL

The HMW is within the Tropical-Subtropical Desertland climatic zone (Brown 1994).

Temperatures range from near 30° F in the months of December/January to often exceeding 115° F from July through August. Annual precipitation generally ranges from 4 inches in the lowlands to 12 inches in the uplands.

The HMW is classified under the Clean Air Act as Class II. No site-specific air quality data exists for the HMW. Class II standards allow for moderate deterioration of air quality associated with agricultural, industrial and population growth that may possibly occur outside the wilderness boundary.

The availability of free water within the HMW is limited. Dripping Springs, a series of 3 troughs, is the only perennial water source available. It was developed primarily for livestock use. A historical pipeline to the lower 2 troughs is currently not functioning whereas the upper trough remains accessible largely to wildlife. Another seasonal water source, created by Big Falls Dam, is supplied by a spring on adjacent State land. Ephemeral washes on the south-side of the wilderness drain into McMullen Valley and Centennial Wash where washes on the north-side drain into Butler Valley or Alamo Lake (Appendix A, Map 4).

The HMW is managed as a Visual Resource Management (VRM) Class 1. The objective of the Class 1 designation is to preserve the existing character of the landscape and provide for natural ecological processes. However, it does not preclude very limited management activity to the landscape if actions have minimal disturbance and do not attract attention.

VEGETATION AND SOILS

Plant communities within the HMW are representative of the Interior Chaparral Biome, and the Arizona Upland/Lower Colorado River Valley subdivisions of the Sonoran Desert scrub Biome (Brown 1994). A Soil and Vegetation Inventory Method survey was conducted in 1979 and identified a diversity of ecological plant communities. For mapping purposes, this information was further developed to delineate three broad vegetation types: chaparral, paloverde/saguaro, and creosote (Appendix A, Map 3, Table 2). A species list is provided in Appendix B.

Chaparral - The Chaparral vegetation type occupies 8,100 acres (32%) of the HMW. Chaparral vegetation is characterized by desert scrub oak, mountain mahogany, and desert needlegrass. Other common species include: turpentine bush, flattop buckwheat, and buckhorn cholla. This is a unique vegetation type for this area and is found on the upper north slopes. Annual precipitation varies from 8 to 12 inches. This vegetation type is used by several species of wildlife, including mule deer, and bighorn sheep.

The primary soil type associated with the chaparral vegetation community is Barkerville cobbly to very stony sandy loam. These are shallow soils formed over weathered granite and schist.

Paloverde/Saguaro - The paloverde/saguaro vegetation type occupies 16,830 acres (67%) of the HMW. The predominant vegetation is foothill paloverde and saguaro cactus. Other associated species may include: ocotillo, big galleta, flattop buckwheat, white bursage, ratany, and other shrubs. This is a very diverse and productive vegetation type used by livestock and mule deer. Precipitation averages from 6 to 12 inches annually.

A variety of soil types are associated with the paloverde/saguaro vegetation community. Some of the most common are the Cellar-Chiricahua-Rock Outcrop complex, Continental, and Schenco soil types. Cellar-Chiricahua soils consist of cobbly clay loam, very gravelly sandy loam, cobbly loam, and loam. Continental is a gravelly sandy loam. Schenco is a very gravelly loam. All these types occur on steep, rough, or rolling hills and low mountains. Plant-soil moisture relationship varies from fair to good.

Unique to the Paloverde/Saguaro mapping unit, located in the upper third of the mountain range near the Chaparral vegetation type, is a Semi-Desert Grassland community (AGFD observations). This is a mid-seral vegetation type maintained by occasional wildfires. An increased variety and abundance of grasses such as threeawn shrubby buckwheat, bush muhly, big galleta, and desert needlegrass characterize this unique ecological site.

Creosote - The creosote vegetation type occupies 1% (250 acres) of the HMW. This vegetation type is dominated by creosote with big galleta and annuals. Other common species include white bursage and ratany. Small amounts of foothill

paloverde and saguaro may also be present but are not dominant components. Elevation of the relatively flat topography ranges from 1620 to 2600 feet. Annual precipitation averages from 4 to 8 inches annually. Livestock and smaller mammals such as cottontail rabbits, kangaroo rats and coyotes use this vegetation type.

The most common soil type associated with the creosote vegetation type is the Whitlock-Tres Hermanos complex. These are deep soils that occur on gently rolling hills to undulating fans and terraces. They may be gravelly and range in texture from sandy loam to loam. They are limy throughout and plant-soil moisture relationships are poor.

Washes located throughout the HMW provide ephemeral drainages and create unique desert riparian corridors heavily used by wildlife. Vegetation unique to these riparian corridors includes ironwood, catclaw acacia, wolfberry, mesquite and desert saltbush.

MINERAL RESOURCES

Subject to valid existing rights at the time of designation, all wilderness areas are withdrawn from all forms of appropriation under the mining laws and closed to mineral leasing and mineral material disposal.

GENERAL MANAGEMENT SITUATION

Wilderness

The HMW offers outstanding opportunities for naturalness, solitude, and primitive/unconfined recreation. Particularly along the top of the 5100-foot ridgeline or within the numerous side canyons and dense foothill vegetation that effectively screens the sights and sounds of human activity. Wilderness visitation is estimated at 900 visits annually and is dispersed from the numerous access roads along the perimeter. Legal public access is possible from the north by five two-track dirt roads, from the east by the maintained communications site access roads, and from the south by four two-track dirt roads (Map 1). The wilderness boundary follows section lines. At three locations it deviates slightly to exclude a range water facility, a game guzzler, and an area of mining impacts.

Disturbances to the naturalness of the wilderness primarily are the result of historic, recent past and contemporary activities within or near the HMW. Mining evidence and the remains of the Webber Mine mining camp have been removed along with the Big Falls Pipeline. As the result of disrepair, the last documented use of the Dripping Springs Pipeline to the two lower tanks was in 1975 and the above ground pipeline is clearly observable to the source. The upper tank is still functioning and wildlife uses this water source routinely. The current lessee has requested use and reconstruction of Dripping Springs Pipeline for the past ten years, however, the use of motorized equipment is restricted within wilderness and approval has not been authorized.

The solitude of the HMW may be disrupted by AGFD to conduct wildlife management activities, including wildlife surveys by aircraft, and by the military conducting aircraft maneuvers. The estimated current and anticipated uses of motorized vehicles and equipment are found in Table 2.

Table 2 - Activities that may require the use of motorized equipment within the boundaries of the HMW.

Program	Description of Activity	Frequency	Season/Duration
Wildlife	Use of aircraft to capture and release of bighorn sheep. May require landing the craft. A minimum requirement decision analysis will be conducted prior to any actions.	Variable	As need arises.
Wildlife	Major maintenance of water catchments and/or emergencies. May require vehicles and power tools. A minimum requirement decision analysis will be conducted prior to any actions.	Variable	On a case-by-case basis as needs arise.
Livestock Management	Emergency situations threatening public land resources, livestock, or property. May require vehicles and power tools. A minimum requirement decision analysis will be conducted prior to any actions.	Variable	On an as needed basis generally not expected to occur more than once every five years.
Livestock Management	Maintenance of range improvements, pipelines and fencing. May require vehicles and power tools. A minimum requirement decision analysis will be conducted prior to any actions.	Variable	On an as needed basis generally not expected to occur more than once every two to three years.
Law Enforcement, Fire, Search and Rescue	Wilderness entry to protect resources, public health and safety, or pursuit of criminal law violators. May require landing aircraft, using motorized vehicles and power tools. A minimum requirement decision analysis will be conducted prior to any actions.	Variable	Not expected to occur more than twice a year. In case of fire, may involve several aircraft simultaneously.
Wilderness	Resource protection, abandonment of facilities and/or rehabilitation of resources. May require landing aircraft, using motorized vehicles and power tools. A minimum requirement decision analysis will be conducted prior to any actions.	Project	Project-by-project basis as identified. Less than one week duration.

LIVESTOCK GRAZING

The entire 25,120 acres of the HMW is under a portion of four BLM permitted grazing allotments (Map 3). Grazing management within each allotment is described below:

Babcock - The greater Babcock Allotment is 36,630 acres. 1,550 acres of the allotment are within the wilderness boundary and occupies 6% of the HMW. An Allotment Management Plan was implemented in 1983 and is the only allotment with such a plan. A rotational grazing system provided in the Plan uses six pastures of unequal size and grazing capacity. The rotation schedule includes one to three pastures of use for three to six months at a time. Farm fields are also incorporated into the schedule. The rotation schedule allows for a growing season rest either yearly or bi-yearly of each pasture.

The Babcock Allotment is currently authorized for the yearlong stocking of 115 head equaling 1,007 AUMs. Near maximum stocking has been used over the past 10 years with some periodic ephemeral use.

Evaluation of the Babcock Allotment for conformance with Arizona Standards for Rangeland Health is planned for completion by the end of 2009.

Lamberson - The greater Lamberson Allotment is 25,840 acres. 7,320 acres are within the wilderness boundary and occupies 29% of the HMW. The grazing permit authorizes yearlong grazing of 43 head equaling 513 AUMs. Full stocking has been used in recent years. Prior years varied from nonuse to full use. There is no Allotment Management Plan for this permit.

Evaluation of the Lamberson Allotment for conformance with Arizona Standards for Rangeland Health is planned for completion by the end of 2009.

Loma Linda - The greater Loma Linda Allotment is 39,990 acres. 4,400 acres (18%) of the allotment are within the HMW. The grazing permit authorizes yearlong grazing of 150 head equaling 1602 AUMs. Eighty-nine per cent (89%) of the allotment occurs on public lands. Less than full stocking has been used for the past ten years. There is no Allotment Management Plan for this permit.

Evaluation of the Loma Linda Allotment for conformance with Arizona Standards for Rangeland Health was completed in 2003. The evaluation concluded that both the long term and short objectives for maintaining rangeland health are being met. Additional waters have been activated or proposed for activation to provide better livestock distribution on the allotment.

Harcuvar - The greater Harcuvar Allotment is 103,090 acres. 11,850 acres are within the wilderness boundary and occupies 47% of the HMW. The grazing permit authorizes yearlong grazing of 450 head equaling 4,266 AUMs. Less than full stocking has been used for the past ten years. Stocking has been increasing within authorized limits as additional water developments are made functional outside the wilderness.

Evaluation of the Harcuvar Allotment for conformance with Arizona Standards for Rangeland Health is planned for completion by the end of 2009.

Table 3 - Grazing Allotment Acreage (approximate)

Allotment Name	Total Allotment Acreage	Allotment Acreage Within HMW	Portion of HMW
Babcock	36,630	1,550	6%
Lamberson	25,840	7,320	29%
Loma Linda	39,990	4,400	18%
Harcuvar	103,090	11,850	47%
Totals		25,120	100%

WILDLIFE

Wildlife in the HMW is commonly associated with the Sonoran Desert Life Zone (see Appendix A for a list of common and scientific names). Big game species include mule deer, javelina, bighorn sheep,

and mountain lion. The greater Harcuvar Mountains are identified as a key Habitat Management Area for mule deer and javelina (Fish and Wildlife 2000 - Big Game Management Plan, 1993) and are essential to maintaining big game populations in the area. In 1995, the AGFD estimated a mule deer population of 147 animals.

It is estimated 27 bighorn sheep reside in the greater Harcuvar Mountains. Bighorn sheep habitat within the Granite Wash/Harcuvar Mountains complex has been fragmented by historic settlement, road construction, and utility corridor construction in Cunningham Pass. Bighorn sheep populations have decreased over much of their range due to settlement era subsistence hunting, disease, and competition with livestock. In 1994 and 2001, the AGFD and the BLM conducted 4 bighorn sheep releases west of Cunningham Pass in the Granite Wash/ Harcuvar Mountains in an attempt to augment numbers and improve herd health.

Free water is a limited resource in the HMW. Currently the upper Dripping Springs trough provides the only known year-round water source within the HMW. The location, accessibility and security of the trough for bighorn sheep is of concern and has been identified for possible improvement by the AGFD (Water Development Plan 1994). Two water collection facilities for wildlife (Webber Mine access road and Big Falls Dam) have been constructed by AGFD near (and outside) the wilderness boundary. Several other water sources supplied by hauled water have also been developed primarily for livestock on rangelands outside the wilderness boundary.

SPECIAL STATUS SPECIES (SENSITIVE, THREATENED, ENDANGERED WILDLIFE AND PLANTS)

There are not any Federally listed threatened or endangered species known to occur within the HMW.

The HMW contains suitable habitat for several BLM sensitive species, as well as, a wide variety of migratory birds. A query of the AGFD Heritage Data Management System, and information provided from the U.S. Fish and Wildlife Service-Ecological Services, provided information that identified the following special status species that may occur within or near the HMW: California leaf-nosed bat (*Macrotus californicus*), Southwestern

cave myotis (*Myotis velifer brevis*), spotted bat (*Euderma maculatum*), Yavapai Arizona pocket mouse (*Perognathus amplus amplus*), chuckwalla (*Sauromalus obesus*), desert rosy boa (*Lichanura trivirgata gracia*) and the Sonoran Desert tortoise (*Gopherus agassizii*).

Mines located within the HMW provide important habitat for several bat species. Bats use abandoned mines for maternity roost, hibernation, and winter and summer roost sites. Mines also provide important habitat for other wildlife species, including desert tortoise, great horned owls (*Bubo virginianus*), and ringtailed cats (*Bassariscus astutus*).

The HMW is Category I Sonoran Desert tortoise habitat (Appendix A, Map 5). Category I habitat is managed for no net loss in quantity or quality. Desert tortoise utilizes a wide range of habitats from rocky slopes and bajadas, to scrub covered desert foothills and mountains, between 500 and 4500 feet elevation. The BLM is guided in the management of desert tortoise habitat according to the Desert Tortoise Habitat Management on Public Lands: A Rangeland Plan (U.S. Department of Interior, 1988) and the Strategy for Desert Tortoise Habitat Management on Public Lands in Arizona (BLM 1990).

RECREATION

The HMW lies within a greater area designated as Extensive Recreation Management (ERMA). Under an ERMA designation, lands are managed in a custodial manner to provide for enhanced recreation experiences and enjoyment and are usually subject to less intensive management. Popular recreation in these areas includes primitive camping, exploring and OHV use.

Within the HMW area, recreation activities are limited to those that are compatible with maintaining wilderness values and characteristics. Popular activities are primarily hunting, sightseeing, and rockhounding with some hiking and backpacking.

Sightseeing use has increased in recent years and is attributed to the increased number of winter visitors in the Wenden/Salome area. Hunting seasons exist for bighorn sheep, deer, javelina, dove, and quail with year-round seasons for other small game and varmints. While some hunters come from the local

communities, the majority are from the Phoenix Metropolitan Area. In recent years more out-of-state hunters have come to the Harcuvars for mule deer and big horn hunts. A special recreation use permit for a hunting outfitter has been in effect since December 1996. Guided hunts utilizing outfitter services are expected to increase.

Hiking and wildlife viewing is often associated with pre-hunt scouting excursions prior to the opening of the big game hunting seasons. Primitive camping occurs at road ends near the wilderness boundary. There are no formal camping or lodging facilities. Limited guided hikes have occurred in the HMW.

CULTURAL RESOURCES

Although earlier occupation during the Paleo Indian Period is possible, archaeological evidence indicates that humans first occupied the greater HMW area during what archaeologists call the Archaic Period. No sites have been tested or excavated to establish absolute dates, but it is likely that first occupation may have been 7000 years before the present. During this period people would have been hunting and gathering wild plants for food and other material needs. It is possible that some of the rock art sites in the area were made during the Archaic. These sites are considered as sacred places to the Native American groups in the region today. As people began to settle into larger camps and villages, and cultivate crops their lifeways changed. Archaeologists call this the Formative period. The date of this transition varies widely with locality, but was probably somewhere between A.D. 500 and 800 in the planning area. Preliminary evaluation of archaeological remains in the planning area indicates that the area was used by both the Patayan and Hohokam cultural groups, with most prehistoric Patayan material and features representing the ancestors of the Mohave and Yavapai. Sites continue to represent resource exploitation, hunting and gathering, with semi-permanent habitations and indication of continued ceremonial use. Mohave tales translated by Kroeber (1951:90) refer to settlements with gardens along Centennial Wash, food resources of deer and agave from the Harcuvar range, and references to camps at all the springs. Native Americans probably used this area up until the first contact with Euro-Americans.

LANDS

There are not any right-of-ways or energy corridors identified within the HMW.

LAW ENFORCEMENT AND EMERGENCY SERVICES

Law enforcement jurisdictions within the greater HMW area include BLM Rangers, AGFD Wildlife Managers, County Sheriffs (La Paz, Yavapai and Maricopa), and Arizona Department of Public Safety. Law enforcement activities in the greater HMW area include: enforcing State wildlife laws and regulations, investigation and prosecution of reported cactus thefts, enforcement of the motorized vehicle restrictions within wilderness, patrols during periods of increased recreation use, and monitoring and investigation of unauthorized use of archaeological sites.

Emergency services include, but not limited to, search and rescue, medical transportation, and fire suppression.

FIRE

Information on fire occurrence and suppression in the greater HMW area is limited. Fire data from 1986 through 1997 estimates the fire frequency to be approximately 0.25 fires per year and averaging 3.6 acres in size. Since 1997, the largest fire documented is the Harcuvar Fire of 1999 that was ignited by lightning and burned 4,575 acres within the HMW.

Typically fire occurrence and intensity are low, but during years of high fuel loads of non-native annual grasses, fire occurrence, intensity, and severity could be high. At lower elevations light natural fuels are unable to carry much flame without the aid of strong winds, unless non-native grasses are present in sufficient quantities. Heavier fuels higher up in the chaparral and semi-desert grassland vegetation types on the ridge tops and north slopes are more likely carry fire.

All fires recorded in the greater HMW area have been at the higher elevations, with the majority in the chaparral vegetation type. Suppression crews responded to all reported fires. With the exception of the 1999 fire, fires within the Harcuvar Wilderness generally have not threatened adjacent private structures or livestock. Structures potentially at risk within the greater Harcuvar

Mountain area include the communications site on Smith Peak outside of the Wilderness to the east, range developments, the Hargus Cabin, and private homes, farms, and ranches near Wenden.

Much of the area is remote, steep, and inaccessible for both motorized and non-motorized ground operations. The steep terrain of the Harcuvar Mountains is best suited to aerial suppression methods such as air tankers and helicopter bucket work. No heli-spots have been officially identified.

The primary strategy in wilderness areas, when suppression actions are required, is to utilize Minimum Impact Suppression Tactics (Interagency Standards for Fire and Aviation Operations) in order to achieve wilderness area management objectives. In all cases, appropriate management strategies and tactics, including the use of MIST, will be based on appropriate management response, considering fire fighter and public safety, land and resource management objectives, values at risk, weather, fuel conditions, threats and values to be protected, and available resources. Incident management will include the advice and guidance of a Wilderness Resource Advisor, when one is available.

Part II – NATIONAL WILDERNESS MANAGEMENT GOALS

Wilderness management goals have been established to obtain consistency in the BLM wilderness management program. The goals established apply to all BLM-administered wilderness areas. The underlying concepts that form the basis of these goals are wilderness preservation, minimum tool management, and management of land uses specifically provided for in the Wilderness Act:

1. To provide for the long-term protection and preservation of the area's wilderness character under a principle of nondegradation. 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 character and visitor use.

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

Part III - ISSUES

Issues identified were obtained from input from the BLM resource specialists, other interested agencies, and the public (Appendix C) resulting from the original scoping process of the greater East Harcuvar Mountain Interdisciplinary Management Plan and Environmental Assessment (2003 draft). Since the completion of the LHFO RMP, management has directed the development of the HMW Management Plan to focus specifically on the management of wilderness values and characteristics within the wilderness boundary. A majority of the issues identified in 2003 are still applicable and provide substantive input into the development of the HMW Management Plan and EA. Those issues considered and evaluated are as follows:

ACTIVITY PLAN ISSUES

1. MAINTENANCE AND ENHANCEMENT OF WILDERNESS VALUES

- How will range/wildlife developments located in wilderness be maintained and modified to be less visually obtrusive? Will any additional projects be approved?
- What existing human impacts will be

removed or mitigated to enhance naturalness?

- What activities requiring the use of motorized/mechanized equipment will be approved as the minimum tool or necessary emergency actions?
- What methods will be used to eliminate unauthorized vehicle use in wilderness?

2. VEGETATION MANAGEMENT

- How will the existing vegetation community be maintained or enhanced to meet the Wilderness Act criteria of naturalness while supporting livestock and wildlife populations?
- Will there be impacts to livestock operations if wildlife numbers increase due to increased available water?
- How will the Arizona Standards for Rangeland Health and Guidelines for Grazing Administration be implemented in the planning area?

3. WILDLIFE MANAGEMENT

- What actions are necessary to enhance and protect desert wildlife habitat?
- What action will be taken to protect special status species and their habitat?

4. MANAGEMENT OF RECREATIONAL USES

- What recreational opportunities will be allowed?
- How will recreational uses be managed to prevent impacts to wilderness, cultural resources, vegetation, livestock, wildlife, and associated projects?

5. MANAGEMENT OF CULTURAL PROPERTIES

- How will cultural properties be allocated for scientific, interpretive and other uses and be protected for those uses?
- What kinds of actions should be taken to maintain, preserve or interpret cultural properties?
- How will significant cultural properties be identified and protected?
- How will Native American concerns about cultural resources be addressed?

6. LANDS ACCESS AND TENURE ADJUSTMENTS

- What parcels of State land would be a priority for acquisition for the protection of resource values?

7. FIRE MANAGEMENT

- How will fire be managed within the planning area?
- What types of suppression activities will be used, what rehabilitation will be required and who is responsible for making suppression decisions that are not provided for in the plan?
- Where can heli-spots be located to avoid resource damage?

ISSUES RESOLVED THROUGH EXISTING POLICY

- 1. 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.
- 2. Wild Horse and Burro Management.** The HMW lies outside of a designated Burro Herd Area and any animals in the wilderness would be removed in a timely manner according to regulations. Current regulations implementing the Wild Free-Roaming Horse and Burro Act of 1971 states "Management of wild horses and burros shall be undertaken with the objective of limiting the animals' distribution to herd areas."
- 3. Water Rights.** The Arizona Desert Wilderness Act of 1990 does not affect existing State-based water rights in the wilderness. The Act establishes a Federal Reserve Water Right as of the date of the Act for a quantity of water sufficient to fulfill the purposes of the Act. That right is junior to water rights established prior to the date of the Act.
- 4. Livestock Grazing and Allotment Management Plans.** Designation of wilderness does not affect grazing preference nor does it affect 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 care for range improvements and these things are discussed in this plan. In accordance with existing Bureau 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.

5. **Law Enforcement and Emergency Services.** Wilderness management policy and regulations (BLM Manual 8560 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, 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.
6. **Threatened, Endangered, or Special Status Species.** All habitats of special status species will be managed under existing policy in BLM Manual 8560 and 6840. Wildlife and/or plant species that are currently or become federally listed in the future will be managed under the Endangered Species Act of 1973, as amended.
7. **Noxious and Invasive Vegetation.** Noxious weeds are those species specifically identified by federal, state, or county governments as to be injurious to public health, agriculture, wildlife, recreation and/or any public or private property. Within the HMW, native vegetation is well established and in good vigor. Any infestations will be addressed through an integrated strategy to eliminate or control any further spread.
8. **Minerals Management.** The Arizona Desert Wilderness Act of 1990 withdrew the area from mineral entry. Recreational collection (rockhounding) of minerals is allowed in the wilderness. Collection (for non-commercial purposes) must be done in a manner that preserves the wilderness environment, uses only non-motorized hand tools and causes only minimal surface disturbance. Metal

detectors/Geiger counters would be acceptable tools.

9. **Hunting.** Hunting and fishing regulations are written and enforced by the State. Activities must be conducted without the use of motorized equipment or mechanized transport in the wilderness.
10. **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.
11. **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 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.
12. **Management of Traditional Cultural Properties.** There are no known Traditional Cultural Properties in the wilderness, and 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

Additional Wilderness Designation

Can the BLM change the existing designation and boundary of the Harcuvar Mountains Wilderness? No. The Congress of the United States designates wilderness areas and boundaries, and charges the BLM with the task of management. It is beyond the scope of this plan, and the authority of the BLM, to designate any additional wilderness. If the BLM feels that additional designation is warranted,

the BLM can establish or amend an RMP to include new Wilderness Study Areas for Congress to consider for final wilderness designation.

Part IV – MANAGEMENT STRATEGY

This plan has been designated to serve as the management guidance for the HMW. Implementation will commence following final approval. An interdisciplinary team developed three general management objectives for meeting the National Wilderness Management Goals (see Part II). The objectives and associated management actions were designed to help meet the goals of preserving the wilderness and vegetative characteristics of the area while providing protection of cultural resources, primitive recreational opportunities, solitude and the continuation of accepted uses permitted by the Wilderness Act.

The planned actions and monitoring of their effectiveness are designed to ensure that the characteristics that define the wilderness remain stable or improving.

Future issues, actions or opportunities will be considered on a case-by-case basis. If, through evaluation, actions are determined to be consistent and compatible with the goals and objectives, they will be incorporated into the plan without amendment to the plan. Inconsistent or incompatible actions will be further evaluated and be subject to public review and comment.

Management objectives will be re-evaluated periodically and maintained and/or updated as needed.

Part V – WILDERNESS MANAGEMENT (Proposed Action)

INTRODUCTION

In this section, specific HMW management goals and objectives are outlined consistent with the overall National Wilderness Management Act direction. Target dates for management accomplishments of actions; monitoring necessary to evaluate the effectiveness of the identified management actions and rationales for identified action/monitoring are presented.

OBJECTIVE 1

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

- Eliminating unauthorized vehicle use.
- Maintaining appropriate recreation opportunities while preserving naturalness.
- Avoiding human impacts to cultural and archeological resources to protect their traditional/spiritual, scientific, and educational values.
- Sustaining the ecological quality and quantity of Sonoran Desert habitat and species including Category 1 desert tortoise habitat.

Rationale: Implementing this objective will ensure long-term preservation of wilderness values.

MANAGEMENT ACTIONS

1. Establish clear public notice of “end of road access” locations at the wilderness boundary and/or where appropriate at: 1) Big Falls, 2) Dripping Springs, 3) ECP Peak, 4) Low Mountain, 5) Smith Peak, and 6) Webber Canyon. Projects may include signage, physical barriers, gates or fences with parking/turn around areas.
2. Develop maps/brochures of the area and establish bulletin boards where appropriate, to provide information and track public use. Information on these bulletin boards would emphasize site-specific information; opportunities for solitude and dispersed wilderness recreation; protection of natural values and archeological and biological

resources; and suggestions on the use of minimum impact techniques. The design of these facilities is to have a minimal visual impact and be located outside the wilderness boundary while accommodating the need for a multiple resource message.

Rationale for Actions 1 and 2: The HMW lies within a greater area designated as an ERMA. A custodial management strategy is applied to an ERMA. These information sites are not developed to attract visitation to the HMW, but rather to inform the public that they have reached the “end of the road” and that only foot or horse traffic is permitted beyond that point. No additional markings (other than the designated route number) of the access route to these six sites will be developed. Maps/brochures are intended to inform visitors of authorized activities in the HMW and foster an appreciation for the importance of the area.

3. Conduct routine wilderness boundary patrols to identify locations where illegal motorized activity is entering the area. Placing carsonite signs or making informational brochures available will be initial steps to reduce these activities. Increased law enforcement patrols, drift fences, and/or post-and-cable vehicle barriers will occur if these activities cannot be reduced.
4. Use minimum impact hand tools and methods to rehabilitate short segments of trails to minimize the contrast of vehicle routes visible along the wilderness boundary.

Rationale for Actions 3 and 4: Illegal trespass and OHV access within the wilderness does occasionally occur. Signage and information brochures may be enough to curb the problem. If illegal vehicle entry to the area continues and/or becomes significant, more intensive management actions (i.e. physical barriers) may be required.

Rationale for Actions 3 and 4: Reducing visibility of short segments of these non-system vehicle routes will help to discourage future intrusions and allow for the remainder of the routes to rehabilitate naturally. Natural rehabilitation of these routes has already begun, and physical rehabilitation to the total route may be detrimental to that process.

5. No new recreational facilities or infrastructure, including trails, will be constructed within the Wilderness.

Rationale for Action 5: Recreational facilities, including trails, are not needed. Naturalness and primitive recreation opportunities would be diminished with construction of such facilities. Any signing or information needed to manage the area will be located outside the wilderness.

6. Accommodate Native American traditional/sacred use and management interests. Share existing and newly discovered site information with tribal museums or cultural program staff.
7. Protect the physical attributes and integrity of cultural and archeological sites and manage those resources to prevent loss of important information, socio-cultural, or educational values. Identify and record where necessary.

Rationale for Actions 6 and 7: Sites within the HMW represent some of the most sensitive properties to Native Americans. We should share our knowledge of these sites with the local tribes and include their recommendations regarding the importance of these sites in their culture as well as provide for a wide spectrum of scientific research.

8. Big Falls will be allocated to “Conservation for Future Use”. This category identifies the cultural value of the site and reserves it for potential scientific and historical study. Analysis and management of the falls would be based on consultation with affected tribes and the State Historic Preservation Officer.

Rationale for Action 8: This site is fragile and has attributes that are important to both Native Americans and the scientific community. Because of its setting and attributes it is worthy of segregation from other land or resource uses which would threaten the maintenance of its present condition.

9. Determine which properties, or classes of properties are eligible for nomination to the National Register of Historic Places.

Rationale for Action 9: An existing Class I Data Inventory (Stone, 1987) which defines site types and research values has been conducted. A report is required to be developed to identify and determine the properties that are eligible for National Register nomination. Consultation with the State Historic Preservation Office (SHPO) will also be required to occur.

10. Remove miscellaneous trash, debris, and abandoned equipment not determined to be historical resources from the wilderness.

Rationale for Action 10: Near recent range improvements and mining activities have developed and abandoned facilities within the HMW. Those materials not determined to be of cultural or historic value will be removed if possible and the sites rehabilitated if necessary.

11. Manage Category I desert tortoise habitat for “stable and viable populations” as defined in the Desert Tortoise Habitat Management on the Public Lands: Range-wide Plan (BLM, 1988).

Rationale for Action 11: The Sonoran desert tortoise is a BLM Sensitive Species and therefore requires special management emphasis. The HMW is also identified as a Category 1 desert tortoise habitat. Management goals for Category I habitat include to “maintain stable, viable populations and protect existing tortoise habitat and increase populations where possible.”

MONITORING

1. Conduct routine boundary patrols and record unauthorized vehicle use as well as make public contacts when possible to obtain information on visitor use and experiences. Evaluate the effectiveness of current efforts to eliminate unauthorized vehicle use and adjust enforcement with reason to protect wilderness values.
2. Establish photo points and annually photograph vehicle routes to determine progress of rehabilitation toward a natural appearance. Using the visual contrast rating system, evaluate contrast annually until weak or no contrast is achieved.
3. Track cultural field visits, patrol reports and review 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.

4. Track trends of desert tortoise populations/habitat by conducting annual population transects and livestock range utilization surveys.

OBJECTIVE 2

Manage vegetation to maintain or improve the naturalness of the HMW by:

- Maintaining or improving current levels of native plant diversity and ground cover.
- Improving distribution and management of livestock through maintenance of fences and existing water developments.
- Managing fire to maintain natural values.

Rationale: The diverse plant community in the HMW is utilized for livestock grazing and a variety of wildlife such as mule deer, big horn sheep and javelina. Monitoring data will be used to determine compliance with the Arizona Standards for Rangeland Health and Guidelines for Grazing Administration. While aggressive suppression may be necessary in some situations, wildfire should be managed as a natural disturbance using MIST.

MANAGEMENT ACTIONS

1. Approved grazing permits within the HMW will be limited to 50% of annual growth of key species.

<u>Vegetation Community</u>	<u>Key Species</u>
<u>Creosote</u>	big galleta, white bursage flattop buckwheat
<u>Paloverde/Saguaro</u>	big galleta ratany, flattop buckwheat, ephedra menodora
<u>Chaparral</u>	desert scrub oak, desert ceanothus mountain mahogany

2. Routine inspection and maintenance of the Loma Linda/Lamberson boundary fence and the Dripping Springs pipeline will be conducted on foot or horseback. Materials will be transported by pack animal.

Rationale for Actions 1 and 2: Under current use levels, the health of the land is to be sustained and no downward trend in the condition of the existing plant community is expected. Utilization limits by livestock should allow adequate and suitable native forage, space, and cover for desert tortoise and other species throughout the year. This will ensure maintenance of Category I desert tortoise habitat. If grazing use exceeds 50% annual growth, 1 year pasture rest or a reduction in stocking and/or duration will be considered to improve range conditions.

3. Fire suppression will be conducted under the Yuma/Havasu Fire Management Zone Fire Management Plan (FMP 2004) until the Colorado River District FMP is completed. Minimum Impact Suppression Tactics (MIST) will be the preferred fire suppression strategy. Full suppression tactics may be used under special and/or emergency circumstances if life and/or property are threatened. A Wilderness Resource Advisor will be assigned for wildfires in the Wilderness to advise on suppression activities that protect or maintain biological, cultural and wilderness resource values.
4. Camps, staging areas, heli-bases, and fueling dumps will be located outside the wilderness boundary.
5. In coordination with Arizona State Land Department concerning fire management strategies on state land parcels surrounded by BLM lands, develop a wildfire management plan which heavily considers natural ignitions and naturally occurring conditions.
6. Identify potential heli-spots to facilitate suppression activities in avoiding/minimizing impacts to sensitive resources.

Rationale for Actions 3, 4, 5 and 6: Fire is a natural component of ecosystems and plant succession. These plant communities burned as fuels became sufficient and seasonal lightning storms provided an ignition source. Typically

fire occurrence is infrequent, small in size and low in intensity. However, in 1999, a fire was ignited by lightning, burned 4,575 acres within the wilderness, and suppression tactics were implemented. If risks to natural resources and wilderness values are significant, fires in or near the wilderness boundary, in desert tortoise habitat, and in sensitive cultural property zones, may require suppression strategies to eliminate safety concerns and prevent property loss.

MONITORING

1. Grazing use of key species will be monitored by range and/or wildlife specialists (Map 3) using key species, landscape appearance, and/or grazed class methods (BLM, 1996a). Data collection will include observation of wildlife and livestock sign. If utilization limits are exceeded, appropriate corrective action(s) that may be considered include 1 year pasture rest or a reduction in stocking and/or duration of range use.
2. Pace Frequency and Dry Weight Rank Method studies will be continued within allotments (currently a three-year cycle for Babcock, a five-year cycle for Harcuvar, Lamberson, and Loma Linda) to monitor for changes in plant composition and trend. The Step-Point Method will be combined with the pace frequency studies for cover determinations. (BLM, 1996b)
3. Fires will be tracked and burned areas monitored to evaluate the effects to the environment. Studies will be conducted yearly for the first three years, and then they may be coordinated with other existing studies. At a minimum, photo points will be established depending on the accessibility of the burned site. Photos should be repeated at 90-day intervals for the first year, then yearly for two more years.
4. Evaluate fire results and suppression efforts to determine if management objectives have been met.

OBJECTIVE 3

In cooperation with the AGFD and partners, enhance and protect desert wildlife habitat and populations by:

- Maintaining safe and reliable livestock and wildlife water developments while minimizing impacts to wilderness values.
- Identifying, protecting, and improving habitat conditions for BLM sensitive species.
- Using minimum tool strategies for inspection and routine maintenance of all range/ wildlife projects.

MANAGEMENT ACTIONS

1. Establish a cooperative agreement with AGFD and the grazing permittee, where applicable, to improve, maintain, or develop range improvements to ensure their availability for wildlife as well.

Rationale for Action 1: The greater Harcuvar Mountains are identified in Fish and Wildlife 2000 Big Game Habitat Management Plan as a Key Habitat Area for desert mule deer and javelina (Fish and Wildlife 2000 - Big Game Management Plan, 1993). The availability of free water is limited and wildlife actively use developed sources when available.

2. Modify and maintain the Dripping Springs water facilities for livestock and wildlife through a cooperative effort between the permittee, AGFD, and the BLM. The pipeline will be replaced as needed. The spring and upper trough will be stabilized. A new walk-in drinker may be installed to provide easier access by bighorn sheep.

The pipeline replacement will extend from the upper trough to provide water to the lower livestock facilities and may be extended to provide livestock water outside of the wilderness boundary. A minimum requirements decision analysis along with the appropriate NEPA documentation will be conducted prior to the approval of activities.

Rationale for Action 2: Dripping Spring is a Class I base water for the Harcuvar Allotment and provides a perennial water source for wildlife. The pipeline below the upper trough

has been replaced several times in the past and is currently in need of repair. This pipeline supplies water to the lower storage and trough, which is more accessible to livestock. The upper trough can be stabilized with rock and mortar, improving its serviceability and visual appearance. However, dense vegetation presently surrounds the upper trough, relocating this trough may be more conducive for use by bighorn sheep.

All of the current Dripping Springs facilities are within the wilderness. A pipeline extension to a lower trough outside the wilderness boundary would maintain availability for livestock and improve wilderness characteristics. This would also eliminate the need for motorized access to the current lower facilities and allow for rehabilitation of the route.

3. Big Falls Dam will be abandoned as a livestock project and will be retained for wildlife without new development.

Rationale for Action 3: Big Falls is identified as an archaeological site. Heavy livestock use threatens the archaeological values of this site. The pipeline used to supply livestock water was abandoned in 1972 and currently has no livestock value. However, Big Falls Dam provides an important seasonal water location for wildlife in the area. Therefore, no new developments or improvements are proposed at the site.

4. Section 31 Water Haul (Map 4) will be moved outside of the wilderness area using a 4WD truck and trailer (or helicopter) if the tanks cannot be rolled out. The Sec 31 Water Haul location will be rehabilitated to return the location to a natural state.
5. The storage tanks at Webber Mine may be moved outside of the wilderness area.

Rationale for Actions 4 and 5: Section 31 Water Haul and the Webber Mine storage have existed for many years, but have never been authorized as range projects. The permittee may apply for a permit to use the materials in another location outside the wilderness boundary.

6. Conduct bat surveys of mines and identify priority bat habitat in the wilderness. Mines identified as providing winter, summer, or maternity roosting will be classified as priority wildlife habitat and shall be protected from further disturbances.

Rationale for Action 6: The California leaf-nose bat, southwestern cave myotis, spotted bat, and other bat species are all BLM special status species in Arizona that utilize mines for winter, summer, and maternity roost sites. The identification and protection of occupied mines will ensure that steps are taken to reduce or eliminate impacts to these special status species.

MONITORING

1. Monitor and maintain water facilities to assure safe and reliable wildlife access.
2. Establish trend surveys for desert tortoises, bats, migratory birds and other special status species to monitor presence/absence, numbers, distribution and habitat condition.
3. Install small ramps in watering facilities to provide for access and escape of smaller wildlife species. Establish ground-level watering facilities for wildlife at livestock waters where feasible.
4. Evaluate the need and effectiveness of relocating the upper Dripping Springs trough for bighorn sheep. Any installation would be in coordination with AGFD and the rancher.

Part VI – The “NO ACTION” ALTERNATIVE

Under this alternative, management of the HMW would be considered on a case-by-case basis as directed by the LHFO RMP 2007 as well as guidance from 43 CFR 6300 and the national BLM wilderness policy as set forth in BLM Manual 8560 (BLM, 1983). Management would occur reactively as issues arise. There would be no other plans to provide direction for management activities and all new actions would be considered in a separate environmental analysis per the requirements of the National Environmental Policy Act.

Part VII – ENVIRONMENTAL CONSEQUENCES

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

1. Areas of Critical Environmental Concerns
2. Environmental Justice
3. Farm Lands Prime or Unique
4. Floodplain
5. Native American Religious Concerns
6. Threatened or Endangered Species
7. Solid or Hazardous Wastes
8. Water Quality
9. Wetlands/Riparian Zones
10. Wild and Scenic River

IMPACTS OF THE PROPOSED ACTION

IMPACTS TO AIR QUALITY

Proposed projects that cause surface disturbance would have minor impacts to air quality. Any authorized vehicle access or motorized tools will have temporary effects on air quality. There would be no long-term adverse impacts to air quality by the proposed actions.

IMPACTS TO CULTURAL RESOURCES

Existing cultural resources would be monitored and protected, additional resources would be evaluated and allocated to a cultural use category. Proper use of cultural properties would be ensured. Consultation and coordination would be improved, public education and appreciation of cultural resources would be positive. Cultural resources would not be adversely impacted by the proposed action.

IMPACTS TO RANGE

The proposed action would monitor grazing use and fence maintenance. Minimum tool would be defined to operate and maintain specific range developments located within the wilderness (i.e. water developments, fences). Only in unique circumstances would motorized access be authorized (i.e. relocation of water hauls). Fences and livestock use would be monitored and maintenance applied when and where appropriate to minimize impacts to wilderness values and characteristics. In general, livestock operations within the wilderness would minimally be impacted

by implementing the proposed action and would benefit from routine monitoring. Range resources would not be adversely impacted by the proposed action.

IMPACTS TO RECREATION

Recreationists visiting the HMW would be pursuing an experience exemplified by the Arizona Desert Wilderness Act and BLM wilderness policy. Through the implementation of the proposed action, wilderness values and characteristics for solitude, primitive recreation and naturalness will be better managed, maintained and enhanced.

Establishment of clear public notices of “end of road access” signage at the wilderness boundary and informational displays/brochures will better inform visitors of the surrounding ERMA and help reduce the number of illegal entries into the HMW. Implementing the proposed action will enhance the wilderness experience for individuals within the HMW. Outside the HMW in the greater ERMA, general recreational opportunities will not be impacted.

IMPACTS TO SOILS

Improved management and monitoring of recreation and livestock use of the wilderness will help to maintain productive soil conditions. Implementation of the proposed action will maintain healthy soil conditions over the life of the plan.

IMPACTS TO VEGETATION

Implementation of the proposed action will help to monitor vegetation trends; livestock use; fire suppression and noxious weeds. Increased monitoring will aid in guiding appropriate management adjustments over the life of the wilderness plan.

IMPACTS TO WILDLIFE

No net loss of desert tortoise habitat will occur by implementing the proposed action. Monitoring and adjusting grazing use; conducting backcountry patrols; and eliminating OHV will sustain healthy habitat conditions for all species of concern. Mine inspections will provide important species presence and use data as well as information concerning public safety. Habitat management will be coordinated with AGFD and other appropriate partners as necessary.

Any temporary impacts will be offset by long-term improvements, annual monitoring and adaptive management. All BLM sensitive plant and wildlife species will benefit under the proposed actions.

IMPACTS TO WILDERNESS RESOURCES

Wilderness values would be maintained and enhanced for the foreseeable future under provisions of the proposed actions. Educational displays would be located outside or along the wilderness boundary, promoting “Leave No Trace” and “Tread Lightly” land use ethics. Support for these programs would minimize new visitor use impacts to wilderness values and characteristics as well as other resources (i.e. cultural, visual, wildlife etc.).

There would be short-term impacts to solitude from wilderness patrols and other monitoring activities. Long-term benefits would offset these activities by enhancing and maintaining wilderness values and characteristics while providing primitive recreation opportunities.

IMPACTS TO VISUAL RESOURCES

Wilderness is managed as a Visual Resources Management (VRM) Class I area. The level of change to the characteristic landscape should be very low and will not attract attention. Projects within the HMW will meet VRM standards for Class I over the life of the Plan.

IMPACTS OF THE “NO ACTION” ALTERNATIVE

The primary impact of the no action alternative would be the absence of a coordinated wilderness strategy over the next 10 years. Under the no action alternative, management guidance would be provided by the Wilderness Act of 1964, the Arizona Desert Wilderness Act of 1990, the National BLM Wilderness Management Policy and The LHFO RMP 2007. No specific actions would be proposed for the rehabilitation of existing disturbances or the enhancement of wilderness values. Under the No Action alternative, existing laws, regulations, policies and approved plans would be followed in a case-by-case scenario as opposed to a long term overall integrated management strategy.

CUMULATIVE IMPACTS

PROPOSED ACTION

Under the proposed action, a 10-year, integrated Harcuar Mountains Wilderness Management Plan will benefit all user groups, managers and resources by improving the dissemination of information and

creating a more coordinated management direction. The proposed action addresses the issues and concerns; provides for management actions and mitigates for anticipated impacts. Cumulatively, the proposed action provides for improved management effectiveness overtime for sustaining wilderness values and characteristics for naturalness, solitude and primitive recreation.

NO ACTION ALTERNATIVE

Under the no action alternative, not having a 10-year, integrated interdisciplinary wilderness plan would not benefit all the user groups, managers and resources over the long-term. The effectiveness and efficiency of managing wilderness resources, as well as the other resources, would be compromised and cumbersome as proposed projects come forward and are evaluated on a case-by-case basis. Cumulatively, this alternative has a greater potential for decreasing wilderness values and characteristics for naturalness, solitude and primitive recreation.

MITIGATION

Mitigation for the proposed action and the no action alternatives are guided by the National BLM Wilderness Management Policy and are, therefore the same. Mitigation measures specific to the Harcuvar Mountains Wilderness Plan are as follow:

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

2. Only after a minimum requirement decision analysis will any action or the use of any motorized equipment necessary to reasonably accomplish management objectives be authorized for use.
3. Land use ethics, such as “Leave No Trace” and “Tread Lightly” would be encouraged so that visitor use in the long-term would occur with the minimum possible impact on wilderness values.

Part VIII - PLAN EVALUATION

The Lake Havasu Field Office will periodically evaluate the effectiveness of plan implementation. The purpose for the evaluation will be to assess the effectiveness of management actions; determine priorities; and identify any adaptive management that may be required. Evaluation will include the following:

1. Document completed management actions and identify future management priorities and actions.
2. Analyze monitoring data to determine if plan objectives and national goals are being met.
3. If needed, recommend and select new management actions.
4. Actions selected for implementation will become plan revisions or amendments. Plan amendments will be available for public review for 45 days before being implemented.

Part IX - IMPLEMENTATION SCHEDULE AND COST ESTIMATES

Table 4 - Annual Tasks

Management Actions/ Monitoring/ Plan Evaluation	Workmonths (\$3400/MO.)	Task Assignment
1. Ongoing Activities		
Wilderness Patrols	1	Law Enforcement Park Ranger
Installing and Maintaining Signs, Structures and barricades	2	Wilderness Specialist Park Ranger
Resource Protection	3	All Specialists
Public Response	.25	Wilderness Specialist Park Ranger
2. Monitoring		
Inventory and Data Collection	2.5	Wilderness Specialist Park Ranger Range Conservationist Wildlife Biologist Archeologist
3. Plan Evaluation		
Data Synthesis, Evaluation, Plan Amendments	1	Interdisciplinary Team

Table 5- Management Actions

Management Actions	Target Date	Estimated Costs	Task Assignment
Objective 1 – Maintain and enhance the wilderness values of naturalness, outstanding opportunities for solitude, primitive recreation, and special features in the HMW.			
Install six “end of road” carsonite signs and develop barriers as needed.	2010	\$4,000	Wilderness Specialist Park Rangers
Monitor and maintain six “end of road” carsonite signs and barriers.	Annually	\$2,000	Wilderness Specialist Park Rangers
Construct six new informational bulletin boards.	2012	\$10,000	Wilderness Specialist Park Rangers
Monitor and maintain 6 new informational bulletin boards.	Annually	\$3,000	Wilderness Specialist Park Rangers
Develop maps/brochures.	2009	\$3,000	Wilderness Specialist Park Rangers
Conduct routine boundary patrols to identify and record illegal motorized access points.	Annually	\$2,000	Wilderness Specialist Park Rangers

Place carsonite signs, create barriers and rehabilitate route segments at illegal access points.	2009	\$2,000	Wilderness Specialist Park Rangers
Monitor and maintain carsonite signs, barriers and rehabilitated route segments at illegal access points.	Annually	\$2,000	Wilderness Specialist Park Rangers
Assess current condition of cultural and archeological resources.	2009	\$2,000	Archeologist
Share information to local tribes.	2009	\$1,500	Archeologist
Determine property eligibility for nomination to National Register of Historic places and consult with tribes and SHPO.	2009	\$1,500	Archeologist
Monitor and maintain condition of cultural and archeological resources	Annually	\$2,000	Wilderness Specialist Archeologist
Assess miscellaneous trash, debris and abandoned equipment and remove.	Annually	\$2,000	Wilderness Specialist Park Rangers Archeologist
Monitor, assess and determine status of desert tortoise.	Annually	\$2,000	Wildlife Biologist
Evaluate and adapt tortoise management as necessary.	Annually	\$1,500	Wilderness Specialist Wildlife Biologist Range Con
Objective 2 – Manage vegetation to maintain or improve the naturalness of the HMW.			
Monitor and assess livestock use and trend of key vegetation.	Annually	\$2,000	Range Con
Evaluate and adapt livestock management as necessary.	Annually	\$1500	Wilderness Specialist Range Con
Develop fire management plan.	2009	\$4,000	Wilderness Specialist CRD Fire Ecologist
Monitor and evaluate fire management strategy on fire-by-fire basis or as needed.	As needed	\$2,000	Wilderness Specialist CRD Fire Ecologist
Objective 3 – In cooperation with the AGFD and partners, enhance and protect desert wildlife habitat and populations in the HMW.			
Monitor, assess, construct and/or improve safe watering facilities for wildlife.	Annually	\$2,000	Wildlife Biologist Park Rangers
Modify and maintain Dripping Springs.	2010	\$10,000	Wilderness Specialist Wildlife Biologist Park Ranger
Relocate Section 31 water haul location outside wilderness boundary.	2010	\$5,000	Wilderness Specialist Park Ranger Range Con
Remove Webber Mine water storage tank outside wilderness boundary.	2011	\$5,000	Wilderness Specialist Park Ranger Range Conservationist
Inspect and maintain Loma Linda/Lamberson boundary fence.	Annually	\$2,000	Permittee Wilderness Specialist Park Ranger

<i>Monitor, assess and determine status of desert tortoise.</i>	<i>Captured in Objective 1</i>	<i>Captured in Objective 1</i>	<i>Wildlife Biologist</i>
<i>Evaluate and adapt tortoise management as necessary.</i>	<i>Captured in Objective 2</i>	<i>Captured in Objective 2</i>	<i>Wildlife Biologist</i>
Monitor and assess mines and determine status of bats.	Annually	\$2,000	Wildlife Biologist
Construct and maintain bat gates as necessary.	As needed	\$6,000	Wilderness Specialist Wildlife Biologist Park Ranger

Part X - CONSULTATION AND COORDINATION

A public scoping meeting was held in Salome, Arizona on the greater East Harcuvar Mountain Management Plan. Members of the local community were able to obtain information about the proposed planning area from BLM Resource Specialists and have an opportunity to identify issues and concerns for the East Harcuvar Mountains. Primary concerns generally regarded wilderness, OHV use, and the number of proposed wildlife waters.

Public input received at the scoping meeting and through letters was used to develop the Harcuvar Mountain Wilderness Management Plan and Environmental Assessment. The continuation of the public participation process requires a 45-day comment for input provides an opportunity for interested individuals to comment on the Plan. Those comments are considered and published as part of the final plan (Part III, Issues). The final plan will have a thirty-day protest period.

Public Scoping Comments from the greater East Harcuvar Mountain Plan Meeting, Salome, AZ

1. Are the proposed wildlife developments natural? Will there be more water development than natural?
2. What is the reason for development of wildlife waters? Manage the current population, don't add.
3. Concerned that wildlife developments or management will restrict personal use.
4. Is there a mandate to change range management?
5. Why were people not informed about the Wilderness Act of 1990?
6. Is this plan going to create a buffer zone around the wilderness area?
7. People don't want wilderness.
8. No more wildernesses!!
9. Don't add watering areas for wildlife.
10. What are the devastators to the habitat? Burros.
11. Range developments are located in wilderness. How will they be maintained?
12. Range development can't be maintained in wilderness.
13. Are water developments going to be fenced? Cattle walk to developments and die because they can't get to it.
14. Are there roads in the wilderness? Are they closed? Wilderness should not have roads. Don't close roads.
15. Allow cross-country travel.
16. How much will the plan cost?
17. Who funds water development for big horned sheep?
18. Will water developments help other needs?
19. Many areas are now closed to 4x4 travel.
20. Do not want OHV areas.
21. Water developments need to be used for cattle and wildlife.
22. OHVs should try to stay on roads to reduce damage on range land.
23. Lease fees are excessive and continue to rise at the communication site.
24. No limit should be placed on number of users of communication site.
25. Leave road open to communication site.
26. Coordinate water development lower so cattle are not attracted up the hill.
27. Add the rest of the Harcuvar Mountains into wilderness.
28. We want a written guarantee that wilderness will not expand.
29. There is no need for this plan.
30. Limit vehicles to roads and trails.
31. What change will be made to an allotment?
32. Does non-use affect how allotments are modified?
33. What kind of water developments will be built?
34. Why is BLM to write plans?
35. Why was the boundary drawn the way they are? Private land is included. Remove private land from planning area.
36. Don't do anything on public land that affects private land, values, tax base.
37. Okay to increase wildlife, but not affect ranching and mining interests in the process.
38. Is the area still open to rock hounding, mining claims?
39. Are there any T&E species in the area?

Part XI – LIST OF PREPARERS

Bureau of Land Management-Lake Havasu Field Office

Cindy Barnes	Range Conservationist/ Horse & Burro Specialist
Cory Bodman	Realty Specialist
Amanda Dodson	Geologist
Tim Duck	Fire Management Officer
Angela Gatto	Wildlife Biologist
Kirk Koch	Soil/Air/Water Specialist
Myron McCoy	Outdoor Recreation Planner
Sally Murray	Archeologist
James Priest	Project Lead
Maria Rosalez	Realty Specialist
Gina Trafton	Planning & Environmental Coordinator

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Kroeber, Alfred L., 1951. A Mohave Historical Epic. Anthropological Records No. 11(2). University of California, Berkeley.

Stone, Connie L., 1987. People of the Desert, Canyons and Pines: Prehistory of the Patayan Country in West Central Arizona. Cultural Resource Series No. 5, BLM, Phoenix, AZ.

U.S. Congress.

1955. Clean Air Act of 1955, as amended.
1964. Wilderness Act. Public Law 88-577, 88th Congress.
1966. National Historic Preservation Act of 1966. Public Law 89-665, as amended through 1992.
1968. Wild and Scenic Rivers Act of 1968, as amended.
1970. The National Environmental Policy Act (NEPA) of 1970.
1971. Wild and Free-Roaming Horse and Burro Act of 1971, as amended.
1974. Sikes Act of 1974.
1973. Endangered Species Act of 1973, as amended.
1974. Safe Drinking Water Act of 1974 as amended.
1976. Resource Conservation and Recovery Act of 1976.
1976. Federal Land Policy and Management Act of 1976. Public Law 94-579.
1977. Clean Water Act of 1977.
1977. Surface Mining Control And Reclamation Act of 1977.
1978. American Indian Religious Freedom Act of 1978.
1978. Public Rangeland Improvement Act of 1978.
1979. Archaeological Resources Protection Act (ARPA) of 1979.
1980. Comprehensive Environmental Response, Compensation, and Liability Act of 1980.
1990. Arizona Desert Wilderness Act. Public Law 101-628.
1990. Native American Graves Protection and Repatriation Act (NAGPRA) of 1990.

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1979. Soil and Vegetation Inventory Method (SVIM). Phoenix, AZ.
1982. Lower Gila North Grazing Environmental Impact Statement. Phoenix, AZ.
1983. Lower Gila North Management Framework Plan. Phoenix, AZ, as amended.
1983. Lower Gila North Habitat Management Plan. Phoenix, AZ.
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1988. Desert Tortoise Habitat Management on the Public Lands: A Rangewide Plan. Washington, D.C.
1990. Strategy For Desert Tortoise Management On Public Lands In Arizona. Phoenix, AZ
1992. Yuma District Interim Guidance for Fire Suppression In Wilderness Areas. Yuma, AZ.
- Fish and Wildlife 2000-Big Game Management Plan. Washington, D.C.
- The Havasu Resource Area Wildlife Operations and Maintenance Plan. Lake Havasu City, AZ.
- 1996a. Interagency Technical Reference 1730-4, Utilization Studies and Residual Measurements Washington, D.C.
- 1996b. Interagency Technical Reference 1730-2, Sampling Vegetation Attributes. Washington, D.C.
- 1997 Arizona Standards for Rangeland Health and Guidelines for Grazing Administration. Phoenix, AZ.
- 2004 Yuma/ Havasu Fire Management Zone Fire Management Plan. Lake Havasu City, AZ
- 2007 Lake Havasu Field Office Record of Decision and Approved Resource Management Plan, Lake Havasu City, AZ

FINDING OF NO SIGNIFICANT IMPACT

FINDING OF NO SIGNIFICANT IMPACT

LAKE HAVASU FIELD OFFICE

**Harcuvar Mountains Wilderness Management Plan
Environmental Assessment No. AZ-330-2008-0008**

FONSI:

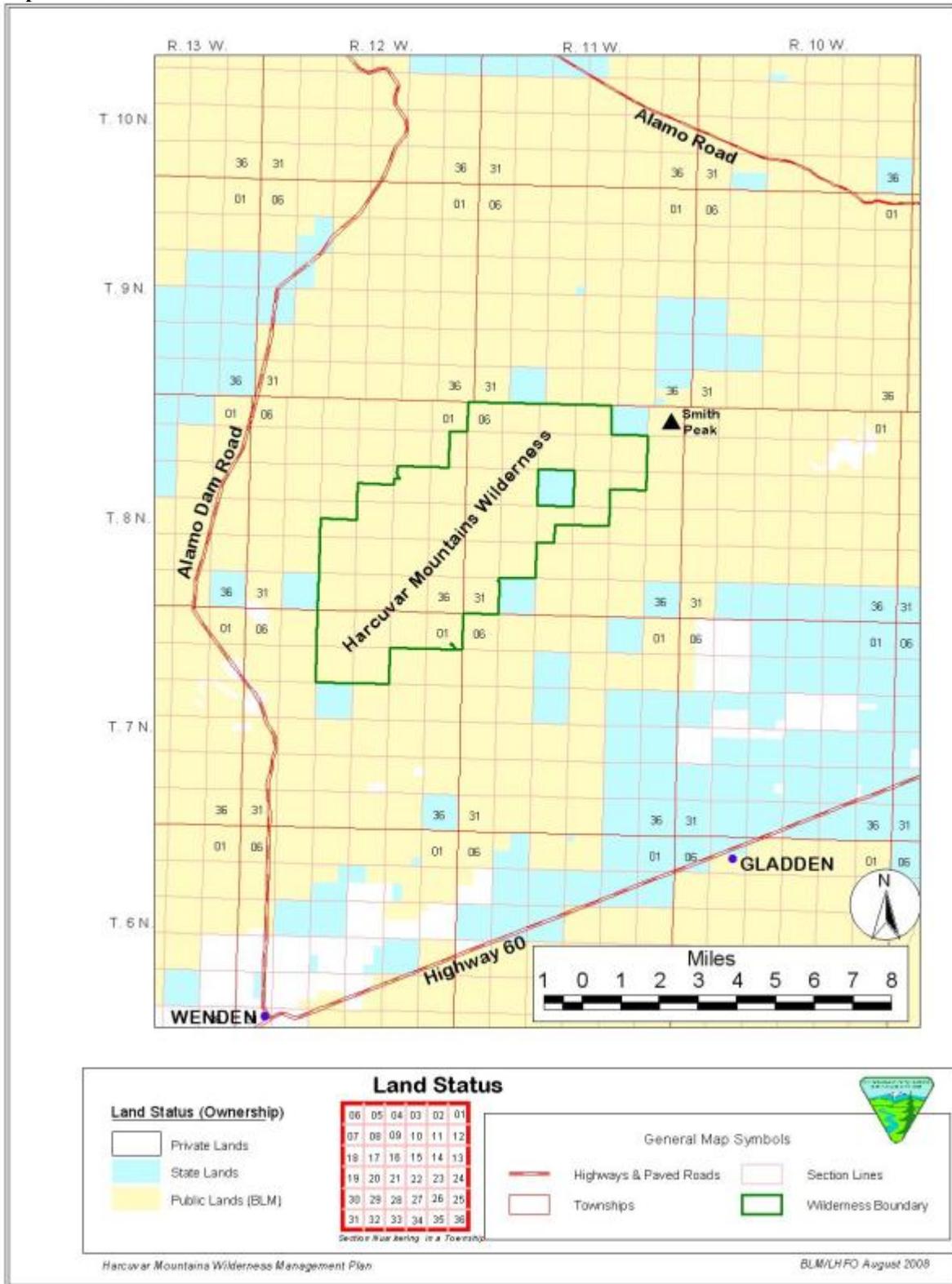
I have reviewed this environmental assessment including the discussion of environmental impacts. I have determined that the Proposed Action with the mitigation measures described will not have any significant impacts on the human environment and that an Environmental Impact Statement is not required. I have determined that the proposed management plan is in conformance with the approved land use plan.

Field Manager, Lake Havasu Field Office, BLM

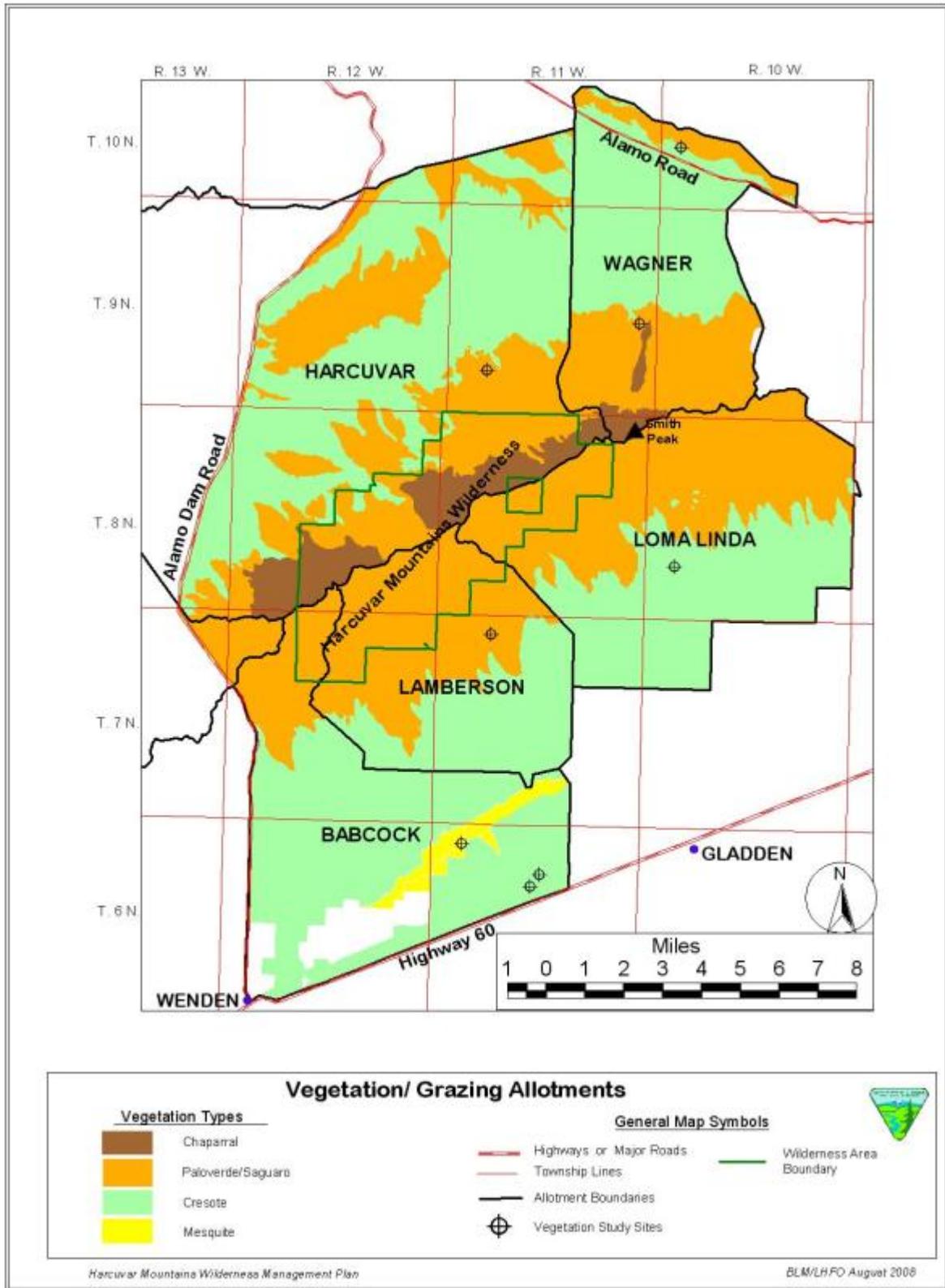
Date

APPENDIX A – Maps

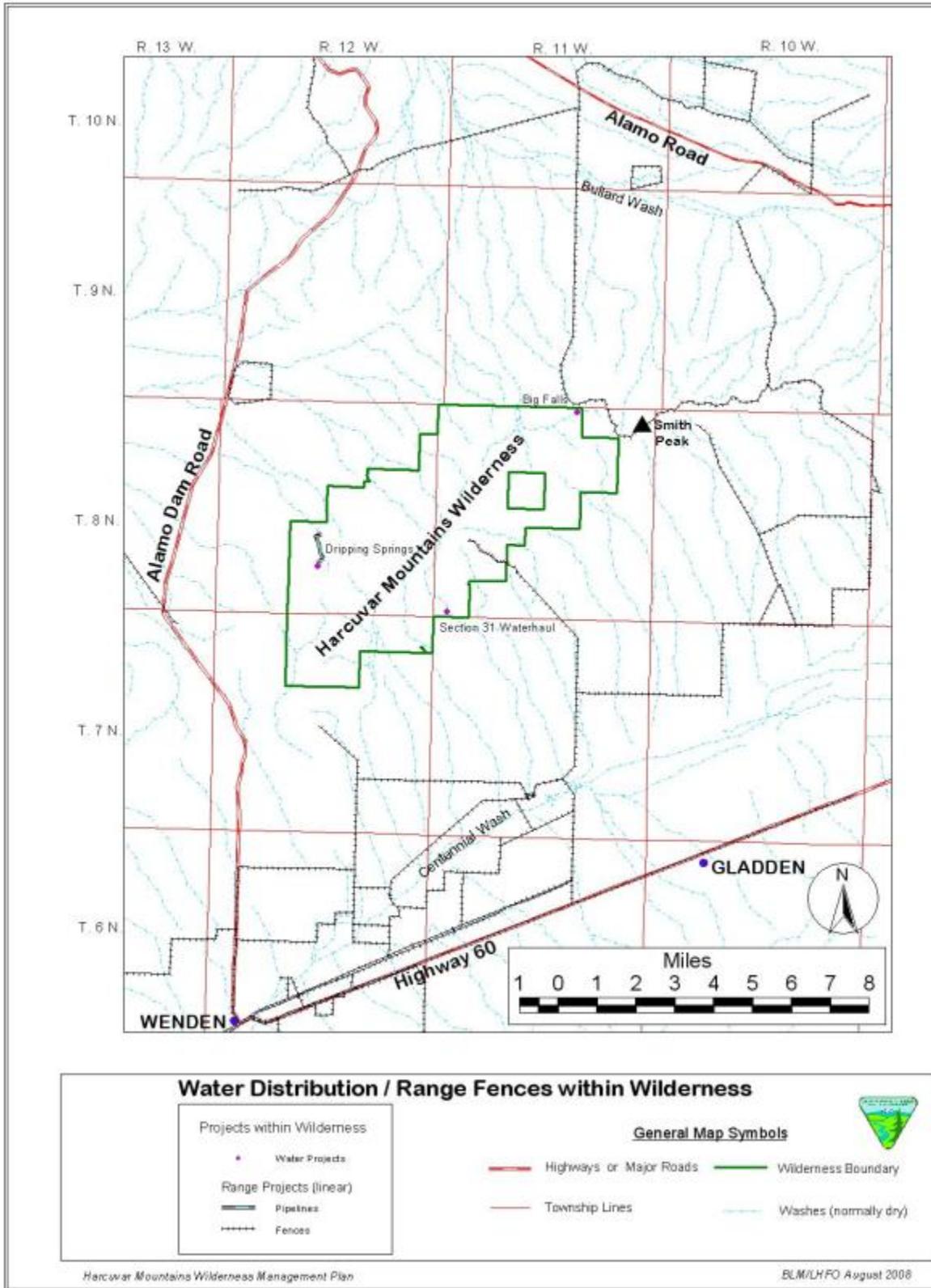
Map 2 – Land Status



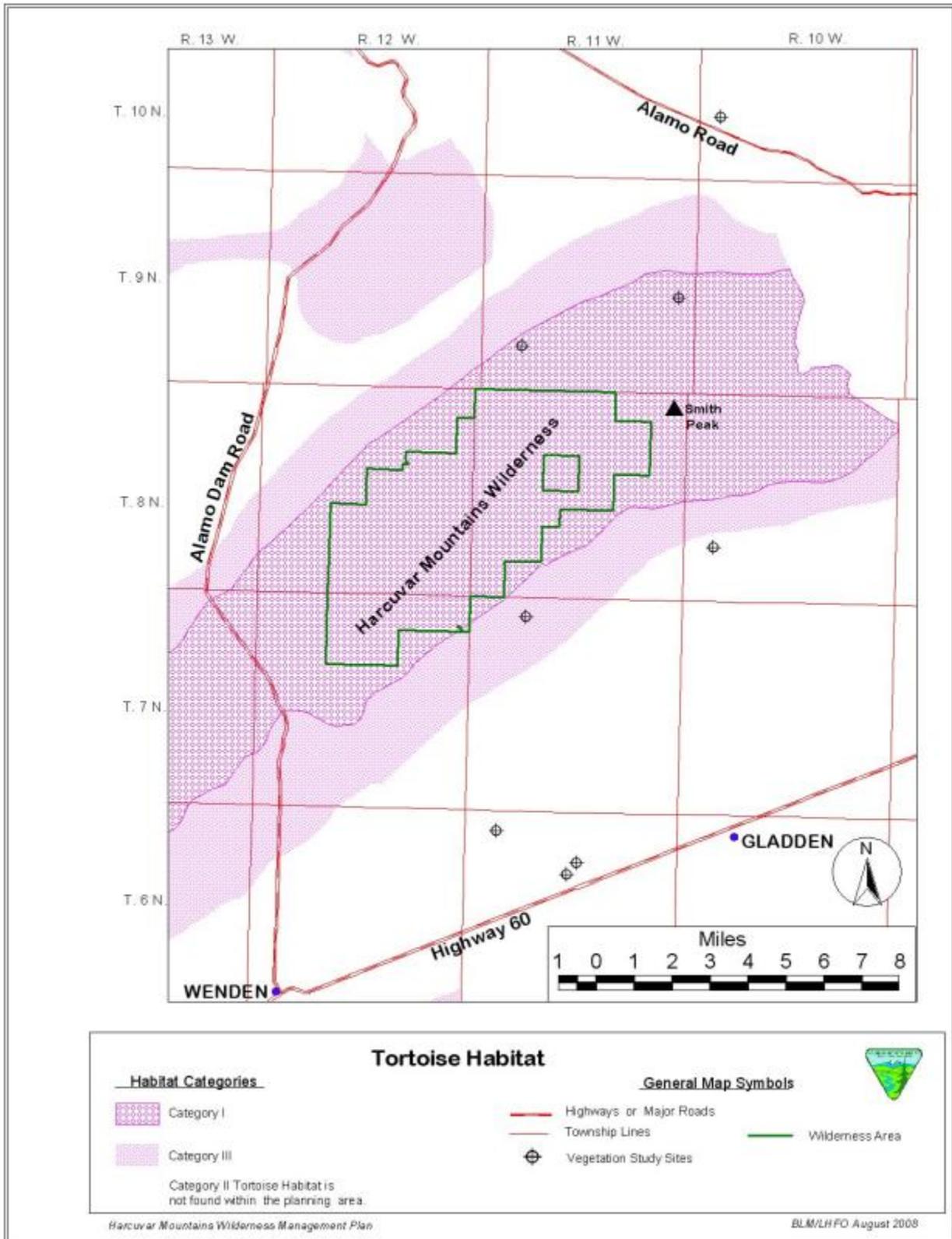
Map 3 – Vegetation/ Grazing Allotments



Map 4 – Water Distribution/Range Fences



Map 5 – Tortoise Habitat



APPENDIX B – Vegetation, Wildlife, BLM Sensitive Species/AGFD Wildlife of Special Concern

	<u>Common Name</u>	<u>Scientific Name</u>
Vegetation	beargrass or sacahuista	<i>Nolina microcarpa</i>
	beavertail prickly pear	<i>Opuntia basilaris</i>
	big galleta	<i>Hilaria rigida</i>
	bladder sage or paper-bag bush	<i>Salazaria mexicana</i>
	blue paloverde	<i>Cercidium floridium</i>
	boundary Mormon tea	<i>Ephedra nevadensis</i>
	brittlebush	<i>Encelia farinosa</i>
	broom twinberry or menodora	<i>Menodora scabra</i>
	buckhorn cholla	<i>Opuntia acanthocarpa</i>
	bush muhly	<i>Muhlenbergia porteri</i>
	catclaw acacia	<i>Acacia Greggii</i>
	cheesebush	<i>Hymenoclea salsola</i>
	creosote	<i>Larrea tridentata</i>
	crucifixion thorn	<i>Canotia holacantha</i>
	desert broom	<i>Baccharis sarothroides</i>
	desert ceanothus	<i>Ceanothus Greggii</i>
	desert globemallow	<i>Sphaeralcea ambigua</i>
	desert indianwheat	<i>Plantago insularis</i>
	desert needlegrass	<i>Stipa speciosa</i>
	desert saltbush	<i>Atriplex confertifolia</i>
	desert scrub oak	<i>Quercus turbinella</i>
	flat-top buckwheat	<i>Eriogonum fasciculatum</i>
	fluffgrass	<i>Erioneuron pulchellum</i> or <i>Tridens</i>
	foothill paloverde	<i>Cercidium microphyllum</i>
	goldeneye	<i>Viguiera deltoidea</i> var. <i>Parishii</i>
	goldenhead	<i>Acamptopappus sphaerocephalus</i>
	ironwood	<i>Olneya tesota</i>
	janusia	<i>Janusia gracilis</i>
	Mediterranean grass	<i>Schismus barbatus</i>
	mesquite	<i>Prosopis</i> species
	Mexican Mormon tea	<i>Ephedra trifurca</i>
	mountain mahogany	<i>Cercocarpus montanus</i>
	night-blooming Cereus	<i>Cereus greggii</i> var. <i>greggii</i>
	ocotillo	<i>Fouquieria splendens</i>
	ratany	<i>Krameria</i> species
	red brome or foxtail chess	<i>Bromus rubens</i>
	saguaro	<i>Carnegiea gigantea</i>
	shrubby or Wright buckwheat	<i>Eriogonum Wrightii</i>
	silver cholla	<i>Opuntia echinocarpa</i>
	threeawn	<i>Aristida</i> species
	turpentine bush	<i>Ericameria laricifolia</i> or <i>Haplopappus laricifolius</i>
	white bursage	<i>Ambrosia dumosa</i>
	wolfberry	<i>Lycium</i> species
yellow-green matchweed	<i>Gutierrezia microcephala</i>	

APPENDIX B – Vegetation, Wildlife, BLM Sensitive Species/AGFD Wildlife of Special Concern (cont.)

	<u>Common Name</u>	<u>Scientific Name</u>
REPTILES	Chuckwalla	<i>Sauromalus obesus</i> (S/WSC)
	Gila monster	<i>Heloderma suspectum</i>
	Desert tortoise (Sonoran)	<i>Gopherus agassizii</i> (S/WSC)
	Desert iguana	<i>Dipsosaurus dorsalis</i>
	Western whiptail	<i>Cnemidophorus dorsalis</i>
	Western patchnose snake	<i>Salvadora hexalepis</i>
	Common kingsnake	<i>Lempropeltis getulus</i>
	Western diamondback	<i>Crotalus atrox</i>
	Gopher snake	<i>Pituophis melanoleucus</i>
	Rosy boa	<i>Lichanura trivirgata</i> (S/WSC)
MAMMALS	Mule deer	<i>Odocoileus hemionus</i>
	Desert Bighorn Sheep	<i>Ovis candensis mexicana</i>
	Collard peccary	<i>Dicotyles tajacu</i>
	Desert cottontail rabbit	<i>Sylvilagus audubonii</i>
	Black-tailed jackrabbit	<i>Lepus californicus</i>
	Mountain lion	<i>Felis concolor</i>
	Bobcat	<i>Felis rufus</i>
	Coyote	<i>Canis latrans</i>
	Gray fox	<i>Urocyon cinereoargenteus</i>
	Kit fox	<i>Vulpes macrotis</i>
	Ringtail cat	<i>Bassariscus astutus</i>
	Badger	<i>Taxidea taxus</i>
	Striped skunk	<i>Mephitis mephitis</i>
	Rock squirrel	<i>Spermophilus variegatus</i>
	Harris antelope squirrel	<i>Ammospermophilus harrisi</i>
	White-throated woodrat	<i>Neotoma albigula</i>
	California leaf-nosed bat	<i>Macrotus californicus</i> (S/WSC)
	Spotted bat	<i>Euderma maculatum</i> (S/WSC)
	Southwestern cave myotis	<i>Myotis velifer brevis</i> (S)
	Yavapai pocket mice	<i>Perognathus amplus amplus</i> (S)
Birds	turkey vulture	<i>Cathartes aura</i>
	red-tailed hawk	<i>Buteo jamaicensis</i>
	Northern harrier	<i>Circus cyaneus</i>
	lesser nighthawk	<i>Chordeiles acutipennis</i>
	cactus wren	<i>Campylorhynchus brunneicapillus</i>
	canyon wren	<i>Catherpes mexicanus</i>
	black-tailed gnatcatcher	<i>Poliptila nigriceps</i>
	black-throated sparrow	<i>Amphispiza bilineata</i>
	white-crowned sparrow	<i>Zonotrichia leucophrys</i>
	northern mockingbird	<i>Mimus polyglottos</i>
	mourning dove	<i>Zenaida macroura</i>
	white-winged dove	<i>Zenaida asiatica</i>
	Gambel's quail	<i>Callipepla gambelii</i>
	phainopepla	<i>Phainopepla nitens</i>
	Costa's hummingbird	<i>Calypte costae</i>
	western meadowlark	<i>Sturnella neglecta</i>
	Western burrowing owl	<i>Athene cunicularia hypugea</i> (S)

BLM Sensitive (S) / AGFD Wildlife of Special Concern (WSC)

APPENDIX C – Allocation of Cultural Resource Use

Cultural Resource Use Categories. The purpose of evaluation is to classify cultural resources in terms of potential alternative use(s). Properties are allocated to a primary use, and where appropriate may have a secondary use allocated as long as it does not conflict with the goals of the primary use. The guidance for allocation is from BLM Manual 8111.21.

A. Scientific Use. This category applies to any cultural property determined to be suitable for consideration as the subject of scientific or historical study utilizing currently available research techniques.

B. Conservation for Future Use. This category is reserved for any unusual cultural resource, which is not currently appropriate for consideration as the subject of scientific or historical study that would result in its physical alteration.

C. Management Use. This category may be applied to any cultural property considered most useful for controlled experimental study that would result in its physical alteration. Experimental study may be aimed toward a better understanding of kinds and rates of natural or human-caused deterioration, effectiveness of protection measures, and similar lines of inquiry.

D. Sociocultural Use. This category is to be applied to any cultural resource that is perceived by a specified social and/or cultural group as having attributes that contribute to maintaining the heritage or existence of that group.

E. Public Use. This category may be applied to any cultural property found to be appropriate for consideration as an interpretive exhibit in place, a subject of supervised participation in scientific or historical study, or related educational and recreational uses by members of the general public.

F. Discharged Use. Assignment to the category means either that a cultural resource that was previously qualified for assignment to any of the categories defined above no longer possesses the qualifying characteristics for that use or for assignment to an alternative use; or that a cultural property's scientific use potential was so slight that it was exhausted at the time the property was recorded, and no alternative use is deemed appropriate.