

Proposed Lands with Wilderness Characteristics:

Black Mountains North



A proposal report to the Bureau of Land Management,
Kingman Field Office, Arizona



ARIZONA WILDERNESS COALITION

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Cover Photo: From the eastern boundary of the proposed LWC, looking across the unit to the southwest, towards Lake Mohave and distant mountains in Nevada.

PREFACE: This Proposal was developed according to BLM Manual 6310

General Overview

Instruction Memorandum 2011-154 and Manuals 6310 and 6320 set out the BLM's approach to protecting wilderness characteristics on the public lands. This guidance acknowledges that wilderness is a resource that is part of BLM's multiple use mission, requires the BLM to keep a current inventory of wilderness characteristics, and directs the agency to consider protection of these values in land use planning decisions.¹

In March 2012, the Bureau of Land Management issued updated manuals for inventorying and managing Lands with Wilderness Characteristics on public lands (hereafter often referred to as LWC's). These manuals provide the agency with direction for implementing its legal obligations to inventory and consider management of Lands with Wilderness Characteristics, including the Federal Land Policy and Management Act's provision that BLM "preserve and protect certain public lands in their natural condition" (43 U.S.C. § 1701(a)(8)). **Manual 6310** (Conducting Wilderness Characteristics Inventory on BLM Lands) guides the BLM on how to meet its obligations to inventory for and identify lands with wilderness characteristics. **Manual 6320** (Considering Lands with Wilderness Characteristics in the BLM Land Use Planning Process) guides the BLM on the options available to address lands with wilderness characteristics in land use planning once they have been identified in the required inventory, such as putting management prescriptions in place to protect wilderness characteristics. The purpose of this report is to provide the BLM with recommendations for designation of Lands with Wilderness Characteristics in the Kingman Resource Area of northwestern Arizona, based on new, accurate, and up-to-date information according to **Manual 6310**.²

What does Manual 6310 require for the identification of LWC's?

Minimum standards for LWC proposals are described in Manual 6310 in section .06.B.1. There are three things required in a citizens' wilderness proposal in order to meet the minimum standard for BLM to consider it in an inventory and to consider it as new information:

- Detailed map with specific boundaries;
- Detailed narrative of the wilderness characteristics; and
- Photographic documentation.

Once there is new information that meets these standards, then "as soon as practicable, the BLM shall evaluate the information," including field checking as needed and comparing with existing data to see if previous conclusions remain valid. Further, BLM will document its rationale and make it available to the public. (.06.B.2). This proposal report provides the three necessary criteria listed above.

¹Memorandum 2011-154 is available online at:

http://www.blm.gov/wo/st/en/info/regulations/Instruction_Memos_and_Bulletins/national_instruction/2011/IM_2011-154.html

² Manual 6310 is available online at :

http://www.blm.gov/pgdata/etc/medialib/blm/wo/Information_Resources_Management/policy/blm_manual.Par.38337.File.dat/6310.pdf

What does Manual 6310 require for an area to be identified as an LWC?

Requirements for determining lands have wilderness characteristics are found in section .06.C.2 of Manual 6310. Lands with Wilderness Characteristics must possess the following traits:

• **Size**

Sufficient roadless area to satisfy size requirements (5,000 acres, of sufficient size to make management practicable or “any roadless island of the public lands”; or contiguous with Wilderness, Wilderness Study Areas, USFWS areas Proposed for Wilderness, Forest Service WSAs or areas of Recommended Wilderness, National Park Service areas Recommended or Proposed for Designation).

• **Naturalness**

Affected primarily by the forces of nature – The criteria is “apparent naturalness” which depends on whether an area looks natural to “the average visitor who is not familiar with the biological composition of natural ecosystems versus human affected ecosystems.” This is an important distinction between ecological integrity and apparent naturalness.

Human impacts – Human impacts must be documented and some are acceptable so long as they are “substantially unnoticeable”; Examples include trails, bridges, fire rings, minor radio repeater sites, air quality monitoring devices, fencing, spring developments, and stock ponds.

Outside human impacts – impacts outside the area are generally not considered, but major outside impacts should be noted and evaluated for direct effects on the entire area (the manual explicitly cautions BLM to “avoid an overly strict approach”).

• **Outstanding opportunities for either solitude or primitive and unconfined recreation**

The area does not have to possess both opportunities for solitude and primitive and unconfined recreation, nor does the area need to have outstanding opportunities on every acre; BLM cannot compare lands in question with other parcels; BLM cannot use any type of rating system or scale.

• **Supplemental values**

Ecological, geological, scientific, scenic, educational or historical features should be documented where they exist, although they are not required traits.

What does Manual 6310 require for the identification of the boundaries of an LWC?

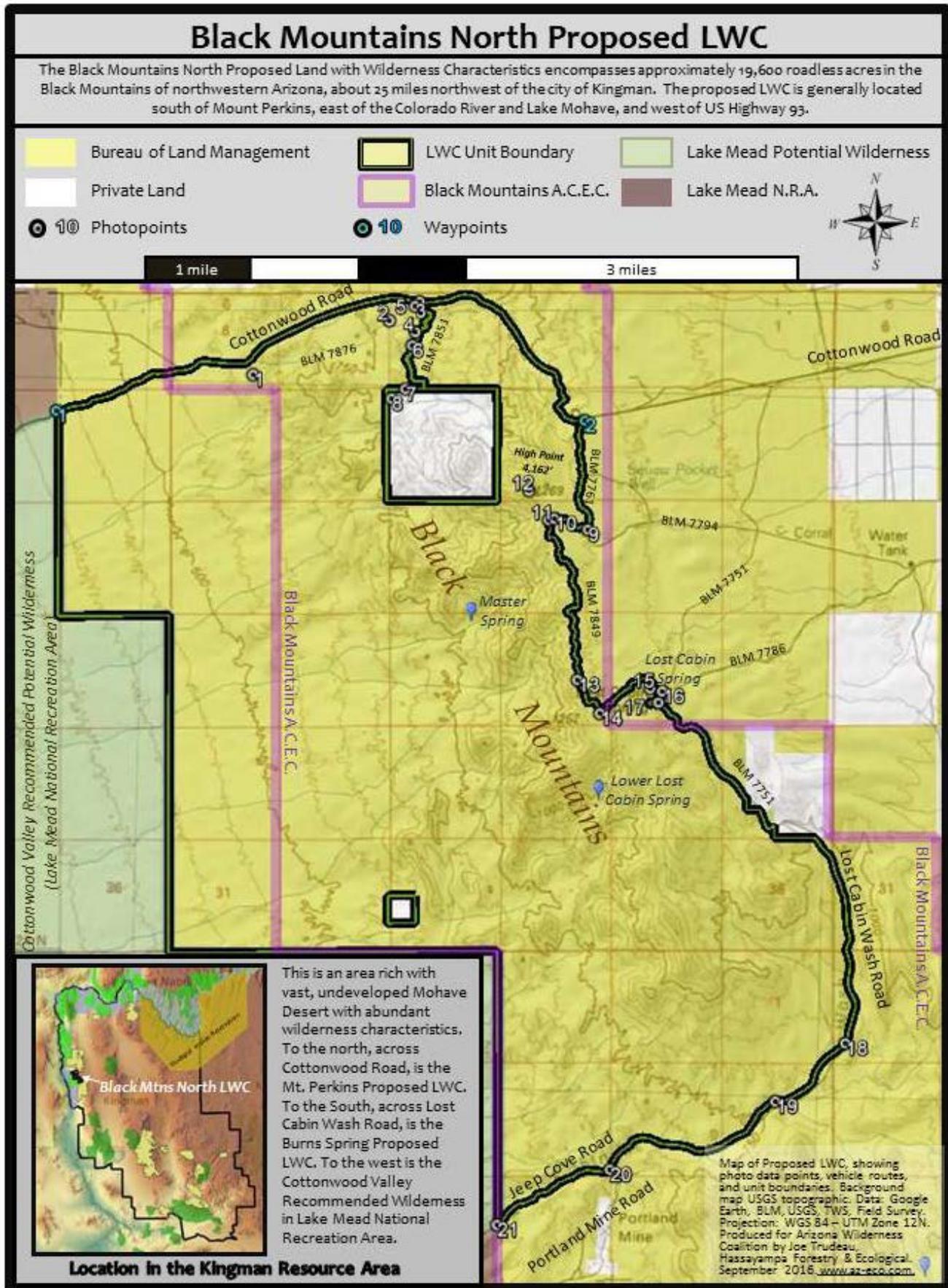
Boundaries should be based on wilderness inventory roads and naturalness rather than opportunities for solitude or primitive and unconfined recreation. For inventorying wilderness characteristics, BLM will use the “road” definition from FLPMA’s legislative history; the term “road” and “wilderness inventory road” are interchangeable in this guidance. The AWC survey team took a very literal, maintenance-driven approach to road/way determination.

• “Wilderness inventory roads” are routes which have been: (1) *improved and maintained* (when needed), (2) *by mechanical means* (but not solely by the passage of vehicles), (3) *to insure relatively regular and continuous use*.

• “Primitive routes” or “ways” are transportation linear features located within areas that have been identified as having wilderness characteristics and not meeting the wilderness inventory road definition.

Lands between individual human impacts should not be automatically excluded from the area; no setbacks or buffers allowed; boundaries should be drawn to exclude developed rights-of-way; “undeveloped rights-of-way and similar possessory interests (e.g., as mineral leases) are not treated as impacts to wilderness characteristics because these rights may never be developed”; areas can have wilderness characteristics even though every acre within the area may not meet all the criteria.

MAP: Black Mountains North Proposed Lands with Wilderness Characteristics



SECTION 1: Proposed LWC Overview

Unit Location

The Black Mountains North Proposed LWC comprises approximately 19,587 roadless acres in the Black Mountains of northwestern Arizona, about 25 miles northwest of the city of Kingman. The proposed LWC is generally located south of Mt. Perkins, east of the Colorado River and Lake Mohave, and ten miles west of U.S. Highway 93. To the north, across Cottonwood Road, is the Mt. Perkins Proposed LWC. To the South, across Lost Cabin Wash Road, is the Burns Spring Proposed LWC. To the west is the Cottonwood Valley Recommended Wilderness in Lake Mead National Recreation Area.

Brief Boundary Description

The unit is bounded on the north and northeast by Cottonwood Road (BLM Route 8701) (excluding a cherry-stemmed road leading to private land detailed below); on the east by BLM routes 7761, 7794, 7849, Lost Cabin Wash Road, and by BLM and private property boundaries; on the south by Jeep Cove Road; and on the west by the property boundary between Lake Mead NRA and BLM-managed lands.

Landforms & Biological Communities

The Black Mountains North Proposed LWC unit is in the northwestern area of the Kingman Resource Area, encompassing a portion of the Black Mountains, a range defined by rugged peaks, sharp ridges, and steep canyons. The crest of the range runs generally in a north-northwest to south-southeasterly direction, featuring a west-facing escarpment that drops ~2,500 ft. from the units' highest point (4,162 ft.) down toward Lake Mohave on the west in Cottonwood Valley.

The unit features three dramatically varied periods of geologic activity. The eastern edge of the unit is composed of Early Proterozoic Granitic Rocks, including granite, granodiorite, tonalite, quartz diorite, diorite, and gabbro which are 1.6 – 1.8 billion years old. These rocks are visible from along the eastern boundary roads. The majority of the steep escarpment, ridges, and canyons that form the Black Mountains is composed of Middle Miocene to Oligocene Volcanic Rocks, such as feldspar- and quartz-rich lavas, tuffs, fine-grained intrusives, and pyroclastic rocks which erupted in a series of volcanic events from 15-25 million years ago. The lowest slopes within the unit are composed of Quaternary Surficial Deposits, which consist primarily of sands, silts, clays, and gravels in alluvial terraces, representing the past few million years of erosion (Arizona Geological Society, 2000).

The entire unit is characterized by the Mohave Desert Scrub biotic community. These plant communities are shrub dominated arid lands, as opposed to cacti-dominated. Several large plants such as the Joshua tree and Mohave yucca are endemic, and catclaw and mesquite typically grow along washes. Creosotebush and white bursage are widespread and common in a variety of soils and positions. At higher elevations, juniper, banana yucca, and prickly pear cacti are more prominent. A wide variety of forbs, grasses, and low shrubs and cacti occur throughout the unit.

Previous Wilderness Inventories

The proposed LWC was recognized as “AZ-020-09” by the Bureau of Land Management in the agency's own Wilderness Review, published in May of 1980, and for this inventory we have continued the use of the agency's assigned name of Black Mountains North. That intensive inventory concluded that this unit, containing 20,398 acres, would be proposed as a Wilderness Study Area (BLM, 1980a). When the final EIS for the Proposed Mohave Desert Wilderness Areas was released, the preferred alternative was the designation of an 18,400 acre Wilderness Area. This reduced acreage excluded an area that was planned to be used for the expansion of Portland Mine, and some areas were excluded because there were plans to create two new open pit mines, and one subsurface mine (BLM, 1989).

In the BLM's own words, the Black Mountains North:

“retains its essential naturalness because the few imprints of man within the unit are not substantially noticeable. The numerous deep canyons, deeply-cut washes and low, rolling hills provide outstanding opportunities for solitude and primitive and unconfined recreation” (BLM, 1980a).

In the last 35 years, nothing substantive has occurred that would degrade that condition. Since that time, the Portland Mine has become inactive, and the new mining never occurred, therefore, we maintain that the full acreage of our proposal be considered eligible for LWC designation.

SECTION 2: Wilderness Characteristics

The proposed LWC meets the minimum size criteria for roadless lands

The Black Mountains North Proposed LWC contains approximately 19,587 contiguous roadless acres under BLM ownership. This acreage calculation excludes two private parcels of land:

- 1) Section 9 in Township 24 N, Range 21 W, including the cherrystemmed route that provides access;
- 2) the NWSW quadrant of Section 33 in Township 24 N, Range 21 W (isolated parcel without access)

The proposed LWC is affected primarily by the forces of nature

The Black Mountains North Proposed LWC is a truly wild, remote, and rugged landscape dominated by the natural forces of wind, water, fire, and time. Essentially, there are five categories of human impacts within the unit: primitive routes, ranch infrastructure, wildlife water catchments, inactive mining, and a Mohave County Weather Radio, all of which are substantially unnoticeable and do not affect the naturalness of the unit in its entirety.

Primitive Routes

Very few primitive routes (ways) enter into the unit. These routes, described in detail in Section 3, are lightly used, single lane two-tracks that do not penetrate deep into the core of the unit. It is our determination that the existence of these routes does not substantially affect the wilderness user experience.

Ranch Infrastructure

The only ranch infrastructure documented during inventory was along Lost Cabin Wash Road. The windmill, corral, and associated impacts at Lost Cabin Spring were excluded from the unit to maintain the naturalness of the unit (see Photopoint 18). We observed that most grazing impact was localized to this and other ranch and water installments along Lost Cabin Wash Road.

Wildlife Water Catchments

Arizona Game and Fish Department has installed two water catchments within the unit. Master Spring (#804) and Lower Lost Cabin Spring (#849) are shown on the map. In cooperation with the Arizona Desert Bighorn Sheep Society, AZGFD has constructed 25 water catchments in the Black Mountains to primarily benefit the desert bighorn sheep herds. These installments are built to blend in with the surroundings (BLM, 1989) and are painted to match the local rocks. Currently, AZGFD maintains catchments in several of the existing wilderness areas in the Kingman Resource Area. It is our determination that, because such installments can be accommodated within LWCs, these two in particular do not substantially affect the naturalness of the unit.

Inactive Mining

Very old evidence of mining and/or prospecting occurs in and around the excluded private parcel in the north of the unit. No current activity was observed. The very minimal diggings are revegetating with native plants and do not create a substantial visual impact to the casual visitor (see Photopoints 7 and 8). Claim stakes occur throughout the unit at claim corners, but no active mineral exploration is currently underway. The presence of mineral claims does not affect naturalness, as *“undeveloped possessory interests (e.g., mineral leases) are not treated as impacts to wilderness characteristics because these rights may never be developed”* (BLM Manual 6310, page 10).



Looking west from the eastern boundary of the Black Mountains North Proposed LWC, the rugged volcanic mountains fall away towards the lower bajadas that are protected by the Cottonwood Valley Potential Wilderness in Lake Mead National Recreation Area. Lake Mohave and the Spirit Mountain Wilderness in Nevada’s Newberry Mountains are beyond. There are no human impacts in the scene with the exception of a small marina on the lakes distant shore.

Lost Cabin Spring Weather Radio

Mohave County maintains a system of 172 fully automated weather monitoring stations. Called the “Mohave County ALERT (Automated Local Evaluation in Real Time) Flood Warning System”, these sites are distributed throughout the county across land ownership. Currently, one such site has been installed on the edge of the unit (see map and Photopoint 15). The installment is equal in height to surrounding junipers, and is located within 50 feet of the boundary-forming wilderness inventory road, so it is our determination that this installation has no effect on naturalness to the average visitor.

Cumulative effects of human impacts

Collectively, the impacts documented above do not substantially detract from the naturalness of the proposed LWC, and overall “*the human imprints within the [Black Mountains North]...are insignificant* (BLM, 1989: p. 73). The impacts are small, and contained around the edge of the unit or on adjacent private lands. Additionally, there are no significant impacts off of the unit that effect the naturalness or user-experience within the unit. The mining that was planned in the late 1980’s never occurred, and the Portland Mine has since become inactive as well. In sum, the Black Mountains North Proposed LWC is affected primarily by the forces of nature, which is obvious when visiting this vast, unspoiled range.

The proposed LWC provides outstanding opportunities for solitude or primitive & unconfined recreation

Outstanding opportunities for both solitude and primitive recreation exist throughout the Black Mountains North Proposed LWC unit (BLM, 1989). In the three days that the Arizona Wilderness Coalition crew spent inventorying the area, we encountered only one individual, which happened to be a cattle rancher tending to his watering infrastructure along Lost Cabin Wash Road. No signs of human visitation were observed within the unit, with the exception of sparse vehicle use along primitive routes. We observed that once we dropped below the escarpment that forms the eastern portion of the unit that this was one of the quietest places we had ever been. The Black Mountains provide an effective wall over which none of the light or noise pollution from US Highway 93 was detected. Furthermore, we observed very few commercial airline over-flights, adding to its exemplary wilderness character.

The rugged, complex terrain in the Black Mountains is ideal for experiencing solitude. The numerous east-west running canyons offer abundant locations for a visitor to be completely alone. Additionally, there are no roads cutting up into these canyons because of the adjacent Potential Wilderness in Lake Mead National Recreation Area that has excluded OHV use in the area. The opportunities for primitive and unconfined recreation are numerous. Recreationists could backpack in the area for an extended time, most likely without seeing a single other person, in a place where there are no visible human impacts for many miles in any direction. The high peaks offer opportunities for technical hiking, vast views for great photography, or numerous routes for the more adventurous rock climber. The mix of volcanic rocks, with their unique and convoluted erosion, provide an immense number of rock outcrops, incised canyons, and strangely shaped caves and grottos for exploration, discovering the varied geology, and viewing of wildlife. Because of the neighboring Cottonwood Valley Potential Wilderness in Lake Mead NRA, the lower bajadas of the unit are extremely remote, which provides the backcountry traveler an outstanding opportunity for solitude, in a quiet, natural setting.

The proposed LWC has supplemental values that enhance the wilderness experience & deserve protection

The Black Mountains North Proposed LWC features a number of important supplemental values that deserve recognition and protection. In fact, these important features have long been recognized by the BLM and partner agencies. The points discussed below highlight the degree to which there is consensus regarding the importance of resource protection in this area.

Areas of Critical Environmental Concern

Approximately 15,200 acres of the proposed LWC are encompassed by the Black Mountains Ecosystem Management ACEC. This special management area is protected for premiere bighorn sheep and wild burro habitat, federal candidate plant species habitat, outstanding scenic values, open space near major population centers, and rare and outstanding cultural resources (BLM, 1993: p. 89).

The proposed LWC is contiguous with National Park Service Recommended Wilderness

The entire western boundary of the Black Mountains North Proposed LWC is contiguous with the Cottonwood Valley Recommended Potential Suitable Wilderness in Lake Mead National Recreation Area. This 15,295 acre unit consists of west-facing, gently sloping bajadas and washes that descend into Lake Mohave, protecting “solitude and isolation in a primitive setting just to the north of a major development at Katherine Landing” (USDI, 1979: p. I-11). The proposed LWC shares eleven miles of contiguity with the entire eastern boundary of the Cottonwood Valley Unit, suggesting that the wilderness characteristics within the Park Service unit are also present in the proposed LWC.

The proposed LWC would protect exceptional wildlife habitat and a wildlife movement corridor

The Black Mountains North Proposed LWC unit includes abundant, high-quality wildlife habitat in a pristine, largely untrammled mountain range. The predominately public ownership of the Black Mountains over a long period has protected them from significant habitat disturbance. The Black Mountains contain crucial bighorn sheep habitat for the wildlife watcher or hunter, and indeed the Arizona Wilderness Coalition team observed at least five bighorn sheep during our inventory. The proposed LWC, in particular, would protect critical lambing grounds (BLM, 1989).



A bighorn ewe viewed from Cottonwood Road, January, 2015

“The Black Mountains are widely recognized as critical to the welfare and continued existence of desert bighorn sheep. They represent the largest contiguous block of desert bighorn sheep habitat in Arizona. This area provides all of the habitat requirements of desert bighorn sheep in an optimal arrangement. Topographic relief provides the essential escape habitat for bighorns through much of the mountain range. Perennial springs provide abundant water over much of the range.”

(Kingman Resource Management Plan, 1993, page 83)

The Black Mountains also provide habitat for wild burros, in fact, “the Black Mountains have been identified as one of the BLM’s outstanding wild burro herd areas in the West” (BLM, 1993: p. 87) and the range is managed as a special herd management area by the BLM. Our AWC survey team

encountered several herds of wild burros along Lost Cabin Wash Road. The Black Mountains North Proposed LWC offers prime opportunities for burro enthusiasts to watch or photograph these beautiful animals, regardless of the management challenges that the animal presents with regards to balancing forage needs for multiple species and livestock demands.

Cottonwood Road has been identified as an important wildlife movement corridor between both the Black Mountains North Proposed LWC and the Mt. Perkins Proposed LWC (BLM, 1993: p. 82 -map 20 "Wildlife Movement Corridors"). Protection of these proposed LWC's would ensure that resource development threats to this corridor are minimized.

The proposed LWC would protect habitat for sensitive plants and animals

The proposed LWC provides habitat for a range of species, many of which have not been officially recognized as occurring at this part of the Black Mountains. The Arizona Heritage Data Management System's records for known special status species occurrences in the Black Mountains suggest that there is appropriate habitat within the proposed LWC such that many of these species may in fact occur within the unit, including twelve vascular plants (*Castilleja minor spiralis*, *Penstemon bicolor roseus*, *Senna armata*, *Selinocarpus nevadensis*, *Arctomecon californica*, *Stillingia linearifolia*, *Tetradymia stenolepis*, *Chrysothamnus teretifolia*, *Petalonyx nitidus*, *Enceliopsis argophylla*, *Opuntia echinocarpa*, *Purshia glandulosa*), ten bats (Allen's Big-eared Bat, Big Brown Bat, Brazilian Free-tailed Bat, California Leaf-nosed Bat, California Myotis, Fringed Myotis, Greater Western Bonneted Bat, Townsend's Big-eared Bat, Pallid Bat, and the Western Pipistrelle), two raptors (peregrine falcon and zone-tailed hawk), and a reptile, the ever-charming Gila monster (AZGFD, 2007; http://www.azgfd.gov/w_c/edits/species_concern.shtml). The proposed LWC provides up to 8,640 acres of suitable peregrine falcon, desert tortoise, and Gila monster habitat (BLM, 1989).

The proposed LWC would help the BLM achieve the agencies ecosystem management goals

The Black Mountains Ecosystem Management Plan, a collaboratively developed management vision for the Black Mountains, identified the following goals for the Black Mountains ecosystem: maintaining diverse and abundant native plant communities; maintaining biodiversity and overall ecological integrity; maintaining wildlife movement corridors; providing for a spectrum of recreational opportunities; preserving the areas wilderness character; increasing our knowledge of the ecosystem; and protecting cultural resources (BLM, 1996). In this, and other documents (for example, BLM, 1993 & AZGFD, 2007), the BLM has identified roads, off-road recreation, mining, and ranch developments as threats to the stability of sensitive wildlife species, habitat vitality, and overall ecosystem health. Protection of the Black Mountains North unit as Lands with Wilderness Characteristics would provide an effective tool for meeting the goals stated above, and would be congruent with the agencies own determinations in 1980 and 1989 that the area was eligible for Wilderness designation.

Works Cited

- Arizona Geological Society. 2000. Geological Map of Arizona. Available online at:
<http://data.azgs.az.gov/geologic-map-of-arizona/#>.
- AZGFD. 2007. Black Mountains Bighorn Sheep Management Plan – DRAFT, March, 19, 2007. Arizona Game and Fish Department.
- BLM. 1980a. Wilderness Review: Intensive Inventory of Public Lands Administered by Bureau of Land Management. Proposal Report. U.S. Department of the Interior, Bureau of Land Management, Arizona State Office, Phoenix, AZ.
- BLM. 1993. Kingman Resource Area Proposed Resource Management Plan and Final Environmental Impact Statement. U.S. Department of the Interior, Bureau of Land Management, Kingman Resource Area.
- BLM. 1996. Black Mountains Ecosystem Management Plan and Environmental Assessment. U.S. Department of the Interior, Bureau of Land Management, Arizona State Office, Kingman Resource Area.
- BLM. 1989. Final Environmental Impact Statement: Proposed Wilderness Program for the Arizona Mohave Wilderness Areas. U.S. Department of the Interior, Bureau of Land Management, Phoenix and Safford Districts.
- USDI. 1979. Revised Draft Environmental Statement, Preliminary Wilderness Proposal. DES 79-12. Lake Mead National Recreation Area, Arizona and Nevada. U.S. Department of the Interior, National Park Service, Denver Service Area.

SECTION 3: Detailed Boundary & Routes Description

Narrative Description of the Proposed LWC Boundary

This section of the report provides a detailed boundary description for the Black Mountains North Proposed LWC unit, including all wilderness inventory roads that comprise the unit boundary, all of the primitive routes/ways that permeate the unit boundary, and all other boundaries, such as land ownership, utility corridors, and other excluded areas. Many portions of the unit boundary have been determined according to wilderness inventory road identification protocols described in BLM Manual 6310, which states that a “way” maintained solely by the passage of vehicles does not constitute a “road” for purposes of inventorying lands with wilderness characteristics. Furthermore, the fact that a “way” is used on a regular and continuous basis does not make it a road. A vehicle route that was constructed by mechanical means but is no longer being maintained by mechanical methods is not a road. A wilderness inventory road, by comparison, is a vehicle route that has “been improved and maintained by mechanical means to ensure relatively regular and continuous use” (Manual 6310, p. 11). Based on these criteria, the Black Mountains North unit contains approximately 19,587 contiguous roadless acres, with few primitive routes permeating the unit boundary, and none cutting into its core. The Photopoints described here of the Black Mountains North Proposed LWC are listed in detailed tables with photographs following this description. Beginning at the northwest corner, the proposed LWC unit description will move clockwise around the unit.

Northern Boundary

Starting at Waypoint 001, the northern boundary of the unit is Cottonwood Road, a wide, frequently maintained gravel road that leaves US Highway 93 and passes through private and BLM-administered land as it drops into Lake Mead National Recreation Area. This portion of the unit boundary (Cottonwood Road) is approximately 5 ¾ miles, from the boundary of Lake Mead NRA to the junction with BLM 7761. Photopoint 1 shows a way that departs to the south from Cottonwood Road. The BLM route inventory identifies this primitive route as BLM Route 7876. This way quickly enters a wash (Photopoint 1), shows no evidence of construction or mechanical maintenance, and its surface is the natural sandy bed of the wash. This primitive way continues up the wash to Photopoint 2 where it exists the wash, heads up an unsustainably steep slope, travels along a narrow ridge, then meets BLM Route 7851 (Photopoint 3). As Photopoint 3 shows, this way receives limited OHV use. While most of the tracks leave the wash at Photopoint 2, some tracks continue up the wash and exit at Photopoint 4. As Photopoint 4 illustrates, this branch of this wash way receives even less use than the lower portion.

As seen on the overview map, the Black Mountains North unit contains one cherry-stemmed road (BLM Route 7851) leading to private land. The entrance to this road shows signs of a recent blade (Photopoint 5), although evidence of recent maintenance quickly fades. However, because this route leads to private land with mining activity, we recommend that it be excluded from the Black Mountains North proposed LWC. Photopoint 6 shows the general condition of this route as it winds toward the private land. BLM Route 7851 forks shortly before entering the private land. The left fork (BLM Route 7851) is in better condition and appears to get more use than the right fork (Photopoint 7) which was

not even identified during the BLM route inventory. BLM Route 7851 dead ends on the private land (Photopoint 8). No other roads leave the private parcel.

The remainder of the northern unit boundary is Cottonwood Road. The northeast corner of the unit, at Waypoint 002, is the junction of BLM Route 7761 which was identified as a wilderness inventory road, as we observed evidence of the road having been semi-recently bladed, with an old roadside berm in places.

Eastern Boundary

From Waypoint 002, BLM Route 7761 receives frequent and heavy use. The unit boundary follows BLM Route 7761 for about 1 mile to a junction with BLM Route 7794. Photopoint 9 represents the general condition of this road at the junction where the road turns west, passes through a cattle gate (Photopoint 10), and becomes BLM Route 7794. At Photopoint 11, there is a fork. The wilderness inventory road turns south again and becomes BLM Route 7849 (Photopoint 11). At this junction, BLM Route 7794 turns to the north and degrades into a primitive route. This way displays no evidence of maintenance, has vegetation growing in the middle of the sparse OHV tracks, and continues for about $\frac{1}{4}$ mile before climbing up an unmaintained, extremely steep slope that ends at a viewpoint (Photopoint 12). The AWC team parked at the junction of BLM Routes 7849 and 7794, and it took us only five minutes to hike to this viewpoint which looks into the heart of the unit and clearly illustrates the rugged terrain, vertical relief, and deep canyons that provide abundant opportunities for solitude.

Continuing south on BLM Route 7849, Photopoint 13 shows this wilderness inventory road traveling along the dramatic ridge with the land dropping abruptly to the west into the heart of the unit. Photopoint 14 depicts a way that branches from BLM Route 7849 to the south. While the beginning of this way appears well established, it quickly becomes much smaller (as seen in aerial imagery) and we determined it is a way, and not a road because it was not constructed, does not show any signs of maintenance, has a natural surface, and dead ends after just over a tenth of a mile. The next point of interest along the eastern boundary of the unit is the Mohave County “Lost Cabin Spring” Weather ALERT station, shown in Photopoint 15. This weather alert station is located along the Wilderness Inventory Road (BLM Route 7849), which ends (Photopoint 16) shortly thereafter at the intersection with Lost Cabin Wash Road (BLM Route 7751).

Southeastern & Southern Boundary

From Photopoint 16, Lost Cabin Wash Road (BLM Route 7751) and Jeep Cove Road define the southeastern and southern boundary of the unit. Lost Cabin Wash Road, which follows the wash bottom, accesses several parcels of private property and Lake Mead NRA, is regularly used for maintenance of ranching infrastructure, and receives maintenance when necessary – the road appears to have been bladed recently because there is a periodic roadside berm – so it meets the criteria for a wilderness inventory road. At Photopoint 17 there is a windmill and a feed & water station for cattle at Lost Cabin Spring. We excluded this ranching infrastructure from the unit because the visual impacts might be considered substantially noticeable by the casual visitor. Southeast of Lost Cabin Spring, the

unit boundary continues to follow Lost Cabin Wash Road, but is alternately the BLM property boundary with private land where that boundary crosses the road.

Photopoint 18 shows the general condition of BLM Route 7751, as well as a livestock feed station along the south side of road, which is outside of this unit. In this photo, to the left side of the road is the Black Mountains North unit, and to the right side of the road is the Burns Spring unit (described elsewhere in this report). As Lost Cabin Wash Road curves to the west, there is a primitive route heading north up a wash (Photopoint 19). This way was not constructed, is not maintained, gets minimal use, and fades out in only about one tenth of a mile up the wash. This way is not a wilderness inventory road and does not change the unit boundary. The next point of interest shown is Photopoint 20, where Lost Cabin Wash Road ends, Portland Wash Road (BLM Route 7751) begins and goes to the Portland Mine, and Jeep Cove Road heads west staying in the wash. At this intersection, Jeep Cove Road (a wilderness inventory road) becomes the southern boundary to the Black Mountains North unit. Just after this junction, the BLM route inventory data displays a route to the northwest of this intersection. The BLM states in these data that the existence of this road or trail has not been verified and has no known use. The Arizona Wilderness Coalition team has found no evidence of this route and has determined that it does not exist. Jeep Cove Road is a wilderness inventory road for just over a mile before it intersects the Lake Mead NRA property boundary.

Western Boundary

Photopoint 21 was taken at the southwest corner of the Black Mountains North proposed LWC. At this point, the entire western boundary is the property boundary between the Bureau of Land Management land and Lake Mead National Recreation Area. There are no roads entering the unit from the National Recreation Area, which is classified as the Cottonwood Valley Potential Wilderness by the National Park Service (USDI, 1979)

SECTION 4: Photopoint Data

Data Tables & Photographs to accompany Maps and the Detailed Boundary & Routes Description

Attributes	
Title	Photopoint 001
Unit name	Black Mountains North
Route name	BLM Route 7876
Determination	Way
Maintenance	None
Feature	Wash

Photopoint 001. This is where the way enters the wash. No evidence of construction or maintenance.

Attributes	
Title	Photopoint 002
Unit name	Black Mountains North
Route name	BLM Route 7876
Determination	Way
Maintenance	None
Feature	

Photopoint 002. Most of tracks leave the wash going up the steep slope behind the person in the picture.

Attributes	
Title	Photopoint 003
Unit name	Black Mountains North
Route name	BLM Route 7876
Determination	Way
Maintenance	None
Feature	Route

Photopoint 003. Junction at BLM Route 7876 and BLM Route 7851.

Attributes	
Title	Photopoint 004
Unit name	Black Mountains North
Route name	None
Determination	Way
Maintenance	None
Feature	Wash

Photopoint 004. This way receives minimal use.




Attributes	
Title	Photopoint 005
Unit name	Black Mountains North
Route name	BLM Route 7876
Determination	Road
Maintenance	Recent blade
Feature	Sign

Photopoint 005. BLM Route 7876 leaves Cottonwood Road.




Attributes	
Title	Photopoint 006
Unit name	Black Mountains North
Route name	BLM Route 7851
Determination	Route
Maintenance	None
Feature	To private land

Photopoint 006. BLM Route 7851 heading toward private inholding. Photo depicts general condition of the road.




Attributes	
Title	Photopoint 007
Unit name	Black Mountains North
Route name	None
Determination	Way
Maintenance	None
Feature	To private land

Photopoint 007. As shown, this way was not constructed, is not maintained, and gets minimal use.



Attributes	
Title	Photopoint 008
Unit name	Black Mountains North
Route name	None
Determination	Way
Maintenance	None
Feature	Private land

Photopoint 008. BLM Route 7851 dead ends here within the private inholding.



Attributes	
Title	Photopoint 009
Unit name	Black Mountains North
Route name	BLM Route 7761
Determination	Road
Maintenance	None
Feature	Sign

Photopoint 009. Beginning of BLM Route 7761, a wilderness inventory road.



Attributes	
Title	Photopoint 010
Unit name	Black Mountains North
Route name	BLM Route 7794
Determination	Road
Maintenance	None
Feature	Gate

Photopoint 010. Looking west down BLM Route 7794.

Attributes	
Title	Photopoint 011
Unit name	Black Mountains North
Route name	BLM Route 7849
Determination	Road
Maintenance	None
Feature	Sign

Photopoint 011. Looking south where wilderness inventory road becomes BLM Route 7849.

Attributes	
Title	Photopoint 012
Unit name	Black Mountains North
Route name	NA
Determination	NA
Maintenance	NA
Feature	Scenic

Photopoint 012. A scenic photograph looking southwest, directly into the heart of the Black Mountains North unit with the Colorado River in the distance.

Attributes	
Title	Photopoint 013
Unit name	Black Mountains North
Route name	BLM Route 7849
Determination	Road
Maintenance	None
Feature	LWC Unit East Boundary

Photopoint 013. Looking north up wilderness inventory road as it travels near the edge of the ridge.



Attributes	
Title	Photopoint 014
Unit name	Black Mountains North
Route name	None
Determination	Way
Maintenance	None
Feature	Dead end

Photopoint 014. A very short, dead end way heading south from BLM Route 7849.



Attributes	
Title	Photopoint 015
Unit name	Black Mountains North
Route name	Along BLM Route 7849
Determination	Road
Maintenance	None
Feature	Weather System

Photopoint 015. This element of the Mohave County Alert Weather System was recently constructed about 100 feet west of BLM Route 7849.



Attributes	
Title	Photopoint 016
Unit name	Black Mountains North
Route name	BLM Route 7849
Determination	Road
Maintenance	None
Feature	Sign

Photopoint 016. Southern end of BLM Route 7849.



Attributes	
Title	Photopoint 017
Unit name	Black Mountains North
Route name	Lost Cabin Wash Rd
Determination	NA
Maintenance	NA
Feature	Cattle grazing infrastructure

Photopoint 017. Looking west toward watering and feed station.



Attributes	
Title	Photopoint 018
Unit name	Black Mountains North
Route name	BLM Route 7751
Determination	Road
Maintenance	None
Feature	Feeding station

Photopoint 018. General condition of Lost Cabin Wash Road with cattle grazing infrastructure on the opposite side of the road from the unit.



Attributes	
Title	Photopoint 019
Unit name	Black Mountains North
Route name	Wash
Determination	Way
Maintenance	None
Feature	Way in wash

Photopoint 019. Looking north at primitive way.

Attributes	
Title	Photopoint 020
Unit name	Black Mountains North
Route name	Jeep Cove Road
Determination	Road
Maintenance	None
Feature	Sign

Photopoint 020. Beginning of Jeep Cove Road.

Attributes	
Title	Photopoint 021
Unit name	Black Mountains North
Route name	BLM Route 7751
Determination	Road
Maintenance	Recent blade
Feature	Property boundary

Photopoint 021. Southwestern corner of Black Mountains North unit. Photo shows boundary of BLM and NRA on Jeep Cove Road.