# **POTHOLE**

## LANDS WITH WILDERNESS CHARACTERISTICS

PUBLIC LANDS AROUND THE BLM'S GILA BOX RIPARIAN NATIONAL CONSERVATION AREA IN THE EASTERN GILA MOUNTAINS, ARIZONA



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



ARIZONA WILDERNESS COALITION

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Cover Photo: From atop a cliff, author Joe Trudeau surveys the scene in upper Dry Creek Canyon, the route for the Safford-Morenci Trail. All photos by the authors.

#### 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.<sup>1</sup>

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 Safford Resource Area of southeastern Arizona, based on new, accurate, and upto-date information according to Manual 6310.<sup>2</sup>

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.

 $http://www.blm.gov/wo/st/en/info/regulations/Instruction\_Memos\_and\_Bulletins/national\_instruction/2011/IM\_2011-154.html$ 

http://www.blm.gov/pgdata/etc/medialib/blm/wo/Information\_Resources\_Management/policy/blm\_manual.Par.38337.File.dat/6310.pdf

<sup>&</sup>lt;sup>1</sup>Memorandum 2011-154 is available online at:

<sup>&</sup>lt;sup>2</sup> Manual 6310 is available online at :

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

<u>Sufficient roadless area to satisfy size requirements</u> (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

<u>Affected primarily by the forces of nature</u> – 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.

<u>Human impacts</u> – 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.

<u>Outside human impacts</u> – 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.

#### METHODS: The research approach to developing this citizens' proposal

The information presented in this report was developed systematically to ensure a comprehensive and accurate description of the proposed LWC that fulfills the citizens' proposal requirements of Manual 6310. Our intent has been to effectively combine the analytical power of technology with the equally important elements of qualitative observation, to produce a suite of products that can be used to facilitate the protection of a variety of lands with wilderness characteristics across the Safford Resource Area, meeting the conservation objectives of Arizona Wilderness Coalition *and* the legal obligation for the BLM to "preserve and protect certain public lands in their natural condition".

#### STEP 1: GIS ROADLESS ANALYSIS

The initial exercise in our inventory was to complete a geospatial analysis of the study area to identify potential roadless areas using a combination of Qgis, ESRI ArcGis, and Google Earth Pro. The BLM's Route Inventory dataset was gueried for keywords that indicated that a route may be maintained, such as "gravel-surfaced", "2WD use", "Recent grading", and numerous other terms. Several rounds of this process were verified over color aerial imagery to assess the quality of the output. During this step, some errors in the dataset were corrected, such as incomplete line features or very inaccurate digitization. Additionally, we performed a visual assessment of aerial imagery for roads that appeared obviously maintained, and added an attribute column to mark these features as such. We also acquired railroad data, US Census Lidar data for Primary & Secondary Roads, Interstate highway data, and county-maintained roads data from Cochise County. In addition, we digitized natural gas pipeline corridors, telephone and power lines, and the proposed route for the SunZia transmission line. Each feature type was buffered by distances ranging from 10 feet for dirt roads, to 50 feet for interstates and powerlines, and the results were dissolved and unioned to develop one master feature dataset that represented probable wilderness inventory roads and rights-of-way corridors. These data were then used to clip BLM's Surface Management dataset into contiguous blocks of BLM land. Areas less than 5,000 acres were then deleted (unless contiguous to wilderness, WSA, or Proposed Wilderness), and the resultant output was a dataset of 52 units of BLM lands that were probable roadless areas.

#### STEP 2: FIELD INVENTORY PRIORITIZATION

Prior to visiting any sites on the ground, we assessed each initial roadless area polygon to determine where our resources would be most effectively deployed. Our objectives were to maximize field inventory efforts on the areas that we estimated would possess the most outstanding wilderness values, while also covering a broad geographic sample of the study area. Our determinations were informed by EIS documents, past wilderness inventory reports by BLM and AWC, research by The Nature Conservancy and the Sky Island Alliance, and geospatial data we acquired from BLM, US Forest Service, academic institutions, and the Arizona Game and Fish Department, including the Heritage Database. It is important to make clear that the units we decided not to inventory probably possess wilderness characteristics, but given available resources, we could not visit every unit. In addition to the units we are proposing as LWC's, we are also providing recommendations for areas we have identified as "Potential LWC's". Those units should still be inventoried for wilderness characteristics.

#### **STEP 3: FIELD PLANNING**

Trips to the field were strategic, focused efforts. For each unit, we developed a list of field inventory points that we endeavored to visit either by foot or vehicle. By using the BLM Route Inventory Dataset, the BLM Range Improvements dataset, the USGS Springs dataset, the Arizona Land Resources Information System Mines dataset, and USGS Topographic Maps, we identified potential impacts to naturalness and areas of potential supplemental value. These datasets were exhaustively examined on Google Earth to validate feature locations. Additionally, other inventory features were identified on the aerial imagery. Once the field inventory points were identified, they were loaded into MotionX GPS HD for iPad. Also, we loaded high-resolution color aerial imagery for our target units and the surrounding area, to assist in navigation, identification of landscape features, and location of hard to detect features. Finally, standard logistical planning steps were completed to ensure that our team would enjoy safe and efficient days in the field.

#### **STEP 4: FIELD INVENTORY**

From January to March, 2016, our team dedicated more than 800 hours to inventorying lands with wilderness characteristics. Our objectives were: 1) to refine unit boundaries to confirmed wilderness inventory roads and impacts to naturalness; 2) to identify and document primitive routes, ways, and trails; 3) locate and document minor impacts to naturalness that are permitted within LWC's; 4) identify and document opportunities for solitude and primitive recreation; and 5) discover and document supplemental values where they exist. The primary tool for documentation was GeoJot+ for iPhone, a data collection app that allows the user to develop drop-down data tables that are attached to geotagged .jpeg digital photographs. In making determinations whether a route was a road versus a way, we returned to the legislative definition of a road (discussed earlier), closely assessed the history of maintenance, and considered the purpose (or lack thereof) of the route, the level of use, its connectivity, and other aspects. We are confident that upon verification, our determinations meet the intent of Manual 6310.

#### STEP 5: FINAL ASSESSMENT, MAPPING, AND DATA COMPILATION

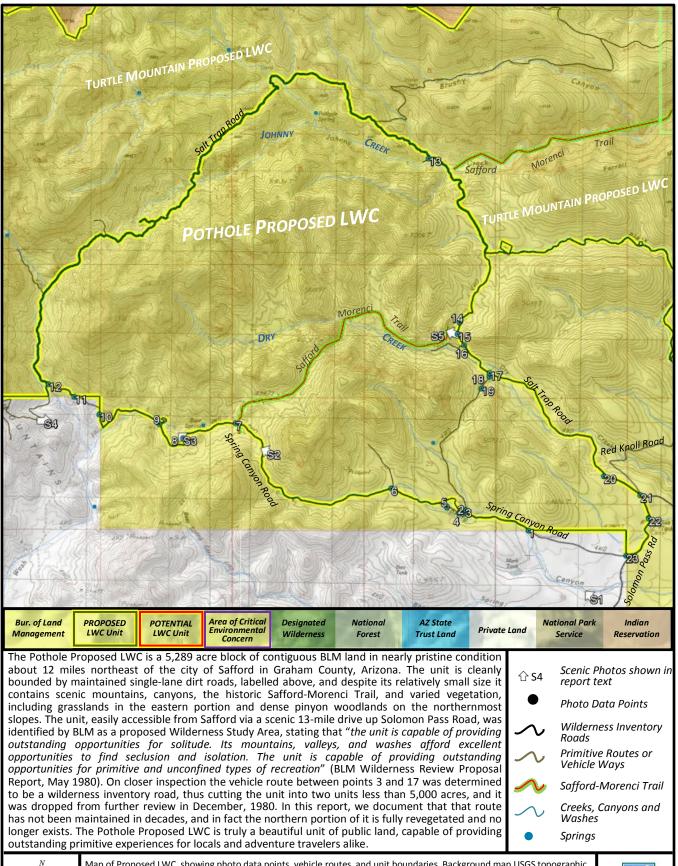
After a field trip, data were loaded into GeoJot + Core for PC, where edits were made where necessary, and final determinations for unit boundaries were made. A range of products were developed from this application: 1) the photopoint data in Section 5 of this report, complete with tables and geotaggs; 2) .kml files for Google Earth to visualize the photopoints across the landscape; and 3) a .kml file of scenic panoramas of the units, showcasing the immense beauty and wildness of our final unit proposals. It is the intent of AWC to share these interactive products with BLM to facilitate in the review of our proposals and to support our best efforts to put forth fair proposals in full transparency. Finally, edits were made to unit polygons in GIS, supplemental information was further explored, maps were developed, and the components of this report were produced. Arizona Wilderness Coalition is proud to share with the BLM this citizens' proposal report and accompanying GIS data, the product of an intensive and science-based conservation process that furthers our collective goal to "preserve and protect certain public lands in their natural condition".

## Section 1:



At photo point 14, the Safford-Morenci Trail enters the Proposed LWC, following a wash into Dry Creek.

Unit Introduction: Overview map showing unit location & labeled boundaries





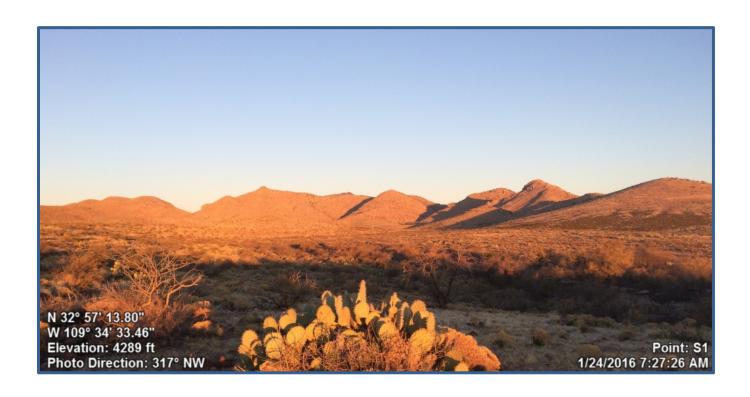
Map of Proposed LWC, showing photo data points, vehicle routes, and unit boundaries. Background map USGS topographic. Data: Google Earth, Bing, BLM, USGS, US Census, AZDOT, TWS, Field Survey. Projection: WGS 84 – UTM Zone 12N Produced for Arizona Wilderness Coalition by Joe Trudeau, Hassayampa Forestry & Ecological. April 2016. <a href="https://www.az-eco.com">www.az-eco.com</a>.



#### Section 2:

# Documentation of Wilderness Characteristics

This photo shows a sunrise view, looking over Spring Canyon, towards the mountains in the southeastern part of the Pothole Proposed LWC. The vantage is from just off the main road used to access the area, Solomon Pass Road. This is the view that most visitors to the area would see, as most traffic does not appear to leave this road which ultimately leads to Bonita Creek. This unit contains a variety of hills and mountains whose summits reward with wide views of the surrounding area, including the Turtle Mountain Proposed LWC and some very wild country in the San Carlos Reservation.



#### Size Criteria

At 5,289 acres, the Pothole Proposed LWC meets the minimum size criteria for roadless lands set forth in BLM Manual 6310. There are no State, private or other inholdings contained within the unit. Despite the relatively small size of the unit, its shape and lack of human impacts make it such that management for wilderness characteristics would be easily accomplished.

#### **Naturalness**

The proposed LWC is affected primarily by the forces of nature and appears natural to the average visitor. This unit, in spite of its small size, is largely unaffected by human impacts and is in a very natural condition. The few human impacts inside the unit and those surrounding the unit are not major and we found them to have no impact to the naturalness of the units' interior. Human impacts that we have assessed include three lightly used vehicle ways, two old ways that have been closed by BLM, a few range improvements, an old homestead, and some evidence of mining claims.

There are very few primitive vehicle routes within the proposed LWC. Two ways have been closed to vehicular use (see points 6 & 16), and another has naturally revegetated and been reclaimed by nature (points 17-19). The three ways that do enter the unit (points 2, 3, 13 & 20) do not receive much use and two of these are only a couple hundred feet long (points 13 & 20). There is one cherrystemmed road that is only 250 feet in length along the southern boundary of the unit, which leads to the historic cabin and corral at Bear Spring (point 9, and photo below). The proposed LWC is extraordinarily natural and dominated by the forces of nature partially due to the very few vehicle ways within the unit.



From a vantage on Spring Canyon Road, the units' southern boundary, the homestead in upper Peterson Wash near Bear Spring is dwarfed by the mountain behind it. This impact was excluded via a short cherrystem, and as this photo illustrates, the old homestead has a negligible effect on naturalness, especially since its right along the edge of the unit. Incredible tuff fins and spires in this part of the unit provide for adventurous exploration in challenging terrain. Narrow slots between formations, along with many other remote locations provide opportunities for outstanding solitude.

The BLM Range Improvements GIS data records that there are six wells within the proposed LWC. We searched for sign of these and could not find any of them. In fact, some of the wells would be located on steep mountainsides; locations where no well driller could ever take their rig. We suspect that these wells shown on the GIS layer have not actually been drilled. If there are rights to future wells that does not affect wilderness characteristics because undeveloped rights of way may never be developed. Also, that data records a "possible pumping station" near Bear Spring, but this is just an old rusted tank. This is in the wash visible in point 8. This GIS data also suggests that there is one wildlife water catchment in upper Dry Creek. As there is no vehicle access to this feature, we did not see the need to go out to it. It is not visible in aerial photos and may not actually exist. Also in Dry Creek, near the eastern unit boundary is one old dirt tank, called Dry Creek Reservoir, which is visible in the cover photo, and obviously not a significant impact. All of these types of impacts can be found in existing Wilderness areas and do not substantially detract from the naturalness of the proposed LWC. There are several small water improvements along the unit boundary, shown in our photo points, but these do not affect the naturalness of the unit itself because they are not major impacts and they are located outside of the proposed unit, right along the boundary roads.

Mining claims do not affect the naturalness of the LWC. Past prospecting impacts that may exist are not apparent on the ground, or in aerial imagery, and consequently have no impact to naturalness. Our inventory team did not observe any active mining operations. While there is likely one mining claim in the proposed LWC, it has no affect to naturalness because as BLM Manual 6310 states "Undeveloped ROWs and similar undeveloped possessory interests (e.g., mineral leases) are not treated as impacts to wilderness characteristics because these rights may never be developed". The hum of the Safford Mine was audible at times, depending on the direction of the wind, but it's not a significant negative impact.

The Pothole Proposed LWC exists in a very natural condition. This area is dominated by natural forces and processes, not humans. With the added protection that LWC designation can provide, this wild and relatively untouched piece of land will remain so for current and future generations to enjoy.



Another vantage showing the extraordinarily scenic mountains in the southwestern part of the proposed LWC. This unit obviously offers outstanding opportunities for challenging hiking and climbing in a wilderness setting. The southern boundary road is visible traversing the lower slopes of the mountains.

#### Solitude & Recreation

The proposed LWC provides outstanding opportunities for solitude and primitive and unconfined recreation. Some activities that the BLM has identified as primitive recreation in the Safford area include hunting, horseback riding, hiking, backpacking, camping, rock scrambling and climbing, sightseeing, photography, and environmental study (BLM, 1987).

Hikers, climbers, backpackers and horseback riders will all find excellent opportunities for primitive recreation within the proposed LWC. Day hikers and climbers can get incredible views from a variety of summits to choose from. The Safford-Morenci Trail (part of the Grand Enchantment Trail) is a non-motorized trail that travels through the unit's core. This trail helps to facilitate primitive forms of recreation for visitors less likely to travel cross country, while explorers that love back country travel away from trails will also find plenty of secluded, rugged terrain. The Safford-Morenci Trail is ideal for horseback riders looking to do an out-and-back day trip. Backpackers can put together scenic loops through this wild, undeveloped landscape, such as traveling up Johnny Creek, over the highest summit, down an isolated canyon to the Safford-Morenci Trail, along the trail, up another canyon, over a mountain pass, and back to Johnny Creek. Rock climbers that are up to the challenge have numerous cliffs to scale or steep canyons to explore. No matter what form of primitive recreation visitors prefer, the Pothole Proposed LWC will not disappoint.



A view into the heart of the Pothole Proposed LWC from the east, where the Safford-Morenci Trail travels up the canyon cutting through the middle of the photo. Pinyon-juniper woodlands provide vegetative screening from other visitors. The BLM has reported that "the unit is capable of providing outstanding opportunities for solitude. Its mountains, valleys, and washes afford excellent opportunities to find seclusion and isolation. The unit is capable of providing outstanding opportunities for primitive and unconfined types of recreation" (BLM Intensive Wilderness Inventory Proposal Report, May, 1980).

For those interested in natural history, this LWC provides outstanding observational and learning opportunities. There are a variety of habitat types, such as exposed mountain tops, sheer cliffs, mature and potentially quite old pinyon pine woodlands, riparian species at Pothole Spring, and high desert grasslands, all featuring unique botanical, zoological, and geologic features. This striking landscape is great for photography as well; the cliffs and spires on the southern slopes of the mountains in the southwestern part of the unit are stunning and quite unique. The Pothole Proposed LWC contains outstanding opportunities for nature observation and study.

The Pothole Proposed LWC contains high-quality hunting and wildlife viewing opportunities in a wild, remote setting. With only three vehicle ways entering the unit, hunters and wildlife lovers looking to avoid the sights and sounds of vehicles, as well as the effects of vehicles on wildlife behavior, will find ample country to satisfy their desires in this proposed LWC. Band tailed pigeon, bighorn sheep, black bear, fox squirrel, Gambel's quail, javelina, mountain lion, and mule deer are species of economic and recreational importance that can be found in the Pothole unit. Birdwatchers will find fringe riparian woodlands along the ephemeral Johnny Creek offering outstanding habitat for a variety of bird species. The mature, thriving pinyon pine woodlands that clad the northern aspects of the mountains in the north part of the unit also offer great birding opportunities. The cliffs in the southern portion of the LWC provide habitat for rare and uncommon raptors. In general, the Pothole Proposed LWC contains an ideal landscape for wildlife observation because of the lack of human access and influence.

The proposed unit offers outstanding opportunities for experiencing solitude. With dozens of isolated canyons and summits to explore, it is quite easy to find seclusion here. Slot canyons among the tuff fins and spires in the southern part of the unit provide exceptional opportunities for solitude. With only three primitive routes entering the LWC, visitors can be alone without much effort. The core of the unit is a solid block of wild country surrounded by mountains. Topographic and vegetative screening throughout the unit further shield recreationists from the sights and sounds others.

#### Supplemental Values

The proposed LWC has supplemental values that enhance the wilderness experience & deserve protection. BLM Manual 6310 defines supplemental values as features of "ecological, geological, or other features of scientific, educational, scenic, or historical value" (section .06.C.2.d). Throughout this report, we have shown the scenic value of the area in photographs and through description. A review of the photopoints in Section 4 of this report will also provide evidence of the units' incredible scenery. Below, we provide a summary of additional supplemental values present in the proposed LWC.

#### The proposed LWC provides habitat for several sensitive species

Source: Arizona Game and Fish Department Heritage Data Management System (HDMS) Online Environmental Review Tool Find it at: https://azhgis2.esri.com/

The pristine mountain slopes of the proposed LWC provide hunting habitat for golden eagle and zone tailed hawk, both documented in the area. The State HDMS provides reports to the public for known occurrences of plant and animal species of concern per USGS topographic quadrangles. The proposed

LWC falls on the Bonita Springs, Bryce Mountain, Lonestar Mountain, and Weber Peak quadrangles. A table listing the species found within that area is provided in Appendix 1. The protection of the proposed LWC would benefit many of these species, though they may or may not occur within the proposed unit.

#### The proposed LWC would protect an **historic trail** that was important in the settlement of the area

The 18 mile Safford-Morenci Trail, which was historically used to connect the burgeoning settlements of Safford and Morenci, runs 2.5 miles through the heart of the proposed LWC, generally following the upper reaches of Dry Creek Canyon. Early ranchers and farmers in the Gila Valley built this trail around 1874 to pack their products to the bustling mines of Clifton and Morenci. As outdoor recreation pursuits continue to become more popular, the availability of this trail to residents of Safford for recreational and educational purposes cannot be understated.



This photo is taken from several miles to the east of the Pothole Proposed LWC, from East Bonita Rim Road. The Safford-Morenci Trail, which is also used as a portion of the long-distance Grand Enchantment Trail, cuts up lower Johnny Creek Canyon, under the "A", and then enters the Pothole unit in upper Dry Creek Canyon below the "B", after following Salt Trap Road for about 1.5 miles. The high point of the unit (6,219 ft.) is labeled as "C", and the peaks to the right of that are the western most portions of the Turtle Mountain Proposed LWC. For more information on the 770-mile Grand Enchantment Trail, visit <a href="http://www.simblissity.net/get-home.shtml">http://www.simblissity.net/get-home.shtml</a>.

#### **Conclusion**

The Arizona Wilderness Coalition recommends to the Bureau of Land Management that the Pothole Proposed LWC unit should be managed for protection of wilderness characteristics according to the policies established in BLM Manuals 6310 and 6320. In this report, we have provided the requirements for a citizens' proposal, and documented that the proposed unit meets the criteria for size, naturalness, solitude, and primitive recreation. Furthermore, we have provided a summary of supplemental values that support the protection of the area for the purposes of conserving biodiversity, protecting and restoring watershed health, and for preserving the vibrant fabric of life that is cherished by the residents of Arizona and is the scenic backdrop to our lives.

The BLM has previously recognized the outstanding wilderness character of the proposed unit. Since that time, some prior human impacts within the proposed LWC have been abandoned and are in the process of becoming reclaimed by nature. The Safford Mine is in operation, but is located well over a mile away from the nearest part of the LWC unit to the southwest and cannot be seen from anywhere within the proposed LWC. A substantial ridge separates the Pothole unit from the Safford Mine, blocking all views and most noise from the mine. Furthermore, the mine is located in a different watershed, reducing potential negative impacts on the LWC unit. The low hum of the mine can be heard from few locations within the LWC, but is substantially unnoticeable to the typical visitor. The natural condition of the area and the outstanding wilderness character found within far outweighs the negligible effect of the Safford Mine.

The proposed LWC is comprised of a solid block of completely wild land in the Gila Mountains that is more than large enough to contain outstanding solitude and exceptional opportunities for primitive and unconfined recreation. The ecosystems within provide valuable unfragmented wildlife habitat, as well as an outdoor classroom for the nearby community of Safford. Visitors can travel back in time on the historic Safford-Morenci Trail that provides a two and a half mile non-motorized route through the most remote part of the unit. Reprieve from the desert heat can be found along the ephemeral Johnny Creek, which also supports diverse flora and fauna. Pristine pinyon pine woodlands clad northern aspects providing opportunities to study this habitat in a setting lacking human impacts and distractions. The complex, rugged terrain of this unit contains dramatic views of spectacular scenery in a landscape dominated by natural forces.

As mines, residential development and agriculture continue to expand on private and State lands in the Safford area, places like Pothole become ever more valuable for their wild, natural values, and should be managed to maintain those wilderness characteristics.

### Pothole Proposed LWC

# Appendix 1:Arizona Heritage Data Management System report for the Pothole Proposed LWC

Quad Name	Scientific Name	Common Name	USESA	USFS	BLM	GRANK	SRANK	SGCN	NP
BONITA SPRING	Agosia chrysogaster chrysogaster	Gila Longfin Dace	SC		S	G4T3T4	S3S4	1B	
BONITA SPRING	Aquila chrysaetos	Golden Eagle			S	G5	S4	1B	
BONITA SPRING	Bat Foraging Area	High Netting Concentration				GNR	SU		
BONITA SPRING	Buteo albonotatus	Zone-tailed Hawk				G4	S4		
BONITA SPRING	Buteogallus anthracinus	Common Black Hawk				G4G5	<b>S</b> 3	1C	
BONITA SPRING	Catostomus clarkii	Desert Sucker	SC	S	S	G3G4	S3S4	1B	
BONITA SPRING	Catostomus insignis	Sonora Sucker	SC	S	S	G3G4	<b>S</b> 3	1B	
BONITA SPRING	Gila intermedia	Gila Chub	LE			G2	S2	1A	
BONITA SPRING	Haliaeetus leucocephalus (wintering pop.)	Bald Eagle - Winter Population	SC	S	S	G5TNR	S4N	1A	
BONITA SPRING	Idionycteris phyllotis	Allen's Lappet-browed Bat	SC	S	S	G4	S2S3		
BONITA SPRING	Lasiurus cinereus	Hoary Bat				G5	S4		
BONITA SPRING	Rhinichthys osculus	Speckled Dace	SC		S	G5	S3S4	1B	
BRYCE MOUNTAIN	Aquila chrysaetos	Golden Eagle			S	G5	S4	1B	
BRYCE MOUNTAIN	Catostomus clarkii	Desert Sucker	SC	S	S	G3G4	S3S4	1B	
BRYCE MOUNTAIN	Catostomus insignis	Sonora Sucker	SC	S	S	G3G4	S3	1B	
BRYCE MOUNTAIN	Echinocereus arizonicus ssp. nigrihorridispinus	Black-spined Hedgehog Cactus				GNR	S2		
BRYCE MOUNTAIN	Gila intermedia	Gila Chub	LE			G2	S2	1A	
BRYCE MOUNTAIN	Rhinichthys osculus	Speckled Dace	SC		S	G5	S3S4	1B	
LONE STAR MOUNTAIN	Agosia chrysogaster chrysogaster	Gila Longfin Dace	SC		S	G4T3T4	S3S4	1B	
LONE STAR MOUNTAIN	Aquila chrysaetos	Golden Eagle			S	G5	S4	1B	
LONE STAR MOUNTAIN	Bat Colony					GNR	SU		
LONE STAR MOUNTAIN	Buteogallus anthracinus	Common Black Hawk				G4G5	<b>S</b> 3	1C	
LONE STAR MOUNTAIN	Catostomus clarkii	Desert Sucker	SC	S	S	G3G4	S3S4	1B	
LONE STAR MOUNTAIN	Catostomus insignis	Sonora Sucker	SC	S	S	G3G4	S3	1B	
LONE STAR MOUNTAIN	Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)	LT	S		G5	<b>S</b> 3	1A	
LONE STAR MOUNTAIN	Cyprinodon macularius	Desert Pupfish	LE			G1	S1	1A	
LONE STAR MOUNTAIN	Gila intermedia	Gila Chub	LE			G2	S2	1A	
LONE STAR MOUNTAIN	Haliaeetus leucocephalus (wintering pop.)	Bald Eagle - Winter Population	SC	S	S	G5TNR	S4N	1A	
LONE STAR MOUNTAIN	Macrotus californicus	California Leaf-nosed Bat	SC		S	G4	<b>S</b> 3	1B	
LONE STAR MOUNTAIN	Meda fulgida	Spikedace	LE			G2	S1	1A	
LONE STAR MOUNTAIN	Penstemon superbus	Superb Beardtongue				G3?	S2?		
LONE STAR MOUNTAIN	Rhinichthys osculus	Speckled Dace	SC		S	G5	S3S4	1B	
WEBER PEAK	Abutilon parishii	Pima Indian Mallow	SC	S	S	G2	<b>S</b> 3		SF
WEBER PEAK	Aquila chrysaetos	Golden Eagle			S	G5	S4	1B	
WEBER PEAK	Echinocereus arizonicus ssp. nigrihorridispinus	Black-spined Hedgehog Cactus				GNR	S2		

#### Section 3:

# Detailed Maps & Description of the Unit Boundary, Roads, Ways and Human Impacts

Looking at the units' high point and other surrounding mountains in the southwestern portion of the proposed LWC unit, the only human impact in sight is the wilderness inventory road that serves as the southern unit boundary, Spring Canyon Road. The west trailhead for the Safford-Morenci Trail is just a short ways down the boundary road from this photo point. One of the supposed wells discussed in the naturalness section of this report would be on the hillside behind the photographer. No evidence of any drilling was located.



Narrative Description of the Proposed LWC Boundary & Vehicle Routes

#### **Segment A:** Southern Boundary

**General Description:** The southern boundary for the Pothole Proposed LWC is formed by two small segments of the BLM property line with private land (from point 23 to point 1 and from point 10 to point 11), but is largely bounded by a Wilderness Inventory Road (see points 1 & 12), which is called Salt Trap Road in the BLM Route Inventory data, but is also shown as Spring Canyon Road on the Gila Box RNCA map.

#### **Boundary Adjustments:**

-Point 4 and 5 document a boundary line adjustment for the Pothole Proposed LWC unit. This boundary adjustment excludes an access road (point 4) to an earth-bermed water tank, as well as a solar panel and some livestock watering/feeding stations (point 5).

**Cherrystems:** Point 8 and 9 document a cherrystemmed road to an historic homestead. Point 8 shows the road and old homestead from a distance. The access road and the homestead are both excluded from the proposed LWC unit.

#### **Ways & Official Trails:**

-Points 2 and 3 display images of an unnamed, unmaintained primitive route that appears to be kept open solely by the passage of vehicles. This route crosses the unit and meets the northern portion of Salt Trap Road, although vehicles do not continue all the way through (see points 17-19). It apparently serves no purpose as we could not determine why it is there.

-Point 6 displays an image of an old primitive route that has been closed with an earthen blockade, and revegetated and reclaimed by nature.

-Point 7 was taken looking north up the Safford-Morenci Trail, which is a non-motorized recreational trail. Some dirtbike tracks were observed for a short distance up the trail.

#### **Associated Human Impacts:**

The solar well, dirt tank, and old homestead are the only major human impacts along the proposed southern unit boundary, and they have been excluded (points 4, 5, 8, and 9). There are no other major human impacts along this boundary segment.

#### **Segment B:** Northern Boundary (northwestern to northeastern boundary)

**General Description:** The northern boundary of the proposed LWC unit is comprised entirely of Salt Trap/Spring Canyon Road, and is not affected by any human impacts.

**Boundary Adjustments:** There are no adjustments to the northern boundary segment.

**Cherrystems:** There are no cherrystemmed roads along this boundary segment.

**Ways:** There are no ways that enter the unit through the northern boundary.

**Associated Human Impacts:** There are no major human impacts along this boundary segment.

#### **Segment C:** Eastern Boundary

**General Description:** Salt Trap Road (points 15, 21 and 23) forms the eastern boundary for the Pothole Proposed LWC unit.

#### **Boundary Adjustments:**

-Point 22 documents a water tank and shade structure that are excluded from the Pothole Proposed LWC unit.

**Cherrystems:** There are no cherrystems along the eastern unit boundary.

#### **Ways and Official Trails:**

-Point 13 depicts an unmaintained primitive route that ends at a campsite and is only about a tenth of a mile in total length.

-Point 14 was taken looking southwest where the Safford-Morenci Trail leaves Salt Trap Road and enters the unit.

-Point 16 displays an image of the closure point at the start of an old way that formerly accessed a bermed tank (Dry Creek Reservoir), which is now defunct. The BLM has closed this route.

-Points 17-19 document a reclaimed way which shows no evidence of any vehicle us at all. The southern end of this old way can be seen in points 2 and 3.

-Point 20 shows a very short way that contains no evidence of maintenance, and is used for camping.

**Associated Human Impacts:** Major human impacts (only the water tank & shade structure) along the eastern boundary segment were excluded from the proposed LWC unit (point 22).

### Section 4: Photopoint Data

Attributes	
Point	1
Unit name	Pothole
Route name	Spring Canyon Rd
Construction	Bladed & Cut and Fill
Use	4-WD Trucks
Purpose	Multiple uses
Maintenance	Semi-recent evidence - 1-3 years ago
Determination	Road
Feature	Typical Condition of Route/Way
Feature notes	
Other notes	Unit Boundary





Attributes	
Point	2
Unit name	Pothole
Route name	Not Named
Construction	Probably only
Construction	bladed once
Use	4-WD Trucks
Purpose	Undetermined
Maintenance	None
Determination	Way
Feature	Typical Condition
reature	of Route/Way
	Feature
Feature notes	minimally affects
	naturalness
	Kept open solely
Other notes	by passage of
	vehicles





Attributes		
Point	3	
Unit name	Pothole	
Route name	Not Named	
Construction	Probably only	
Construction	bladed once	
Use	4-WD Trucks	
Purpose	Undetermined	
Maintenance	None	
Determination	Way	
E I	Typical Condition	
Feature	of Route/Way	
Feature notes		
	Kept open solely	
Other notes	by passage of	
	vehicles	





Attributes		
Point	4	
Unit name	Pothole	
Route name	Not Named	
Construction	No evidence	
Use	4-WD Trucks	
Purpose	Earthen-bermed tank	
Maintenance	None	
Determination	Road	
Feature	Typical Condition of Route/Way	
Feature notes		
Other notes	This impact is excluded	





Attributes		
Point	5	
Unit name	Pothole	
Route name	N/A	
Construction	N/A	
Use	4-WD Trucks	
Purpose	Well/Water tanks	
Maintenance	Likely if needed	
Determination	N/A	
Feature	Livestock Watering/Feedin g station	
Feature notes	Feature minimally affects naturalness	
Other notes	This impact is excluded	





Attributes		
Point	6	
Unit name	Pothole	
Route name	Not Named	
Construction	No evidence	
Use	None	
Purpose	None apparent	
Maintenance	None	
Determination	Closed-	
Determination	revegetated	
Feature	Closure point	
Feature notes		
Other notes		





Attributes		
Point	7	
Unit name	Pothole	
Route name	Safford-Morenci Trail	
Construction	Hand labor	
Use	Foot use	
Purpose	Recreation	
Maintenance	None	
Determination	Trail	
Feature	Trail	
Feature notes		
Other notes	Dirt bike use. Someone stole	





Attributes		
Point	8	
Unit name	Pothole	
Route name	Not Named	
Construction	Bladed & Cut and	
Construction	Fill	
Use	4-WD trucks	
	Showing old	
Purpose	homestead in	
	valley	
Maintenance	Partially	
Maintenance	maintained	
Determination	Road	
Feature	Homestead and	
	tanks in valley	
	Equipment	
Feature notes	appears to be out	
reature notes	of order and	
	abandoned	
Other notes	Exclude this	
Other hotes	impact	





Attributes		
Point	9	
Unit name	Pothole	
Route name	Not Named	
Construction	Bladed & Cut and Fill	
Use	4-WD Trucks	
Purpose	Abandoned homestead	
Maintenance	Partially maintained	
Determination	Road	
Feature	Homestead	
Feature notes	Equipment appears to be out of order and abandoned	
Other notes	Exclude this impact	





Attributes		
Point	12	
Unit name	Pothole	
Route name	Salt Trap Road	
Construction	Bladed & Cut and Fill	
Use	4-WD Trucks	
Purpose	Multiple uses	
Maintenance	Old evidence - 3- 5 years ago	
Determination	Road	
Feature	Typical Condition of Road	
Feature notes		
Other notes	Unit Boundary	





Attributes	
Point	13
Unit name	Pothole
Route name	Not Named
Construction	Probably only
Construction	bladed once
Use	Off Road Vehicles
Purpose	Camping
Maintenance	None
Determination	Way
Feature	Typical Condition of Route/Way
	Feature
Feature notes	minimally affects
	naturalness
Other notes	Kept open solely
	by passage of
	vehicles





Attributes	
Point	14
Unit name	Pothole
Route name	Safford-Morenci Trail
Construction	Hand labor
Use	Foot use
Purpose	Recreation
Maintenance	Likely if needed
Determination	Trail
Feature	Trailhead
Feature notes	Non motorized route
Other notes	





Attributes	
Point	15
Unit name	Pothole
Route name	Salt Trap Road
Construction	Bladed and cut & fill
Use	4-WD Trucks
Purpose	Multiple uses
Maintenance	Semi-recent evidence - 1-3 years ago
Determination	Road
Feature	Eastern part of unit
Feature notes	
Other notes	Unit Boundary





Attributes	
Point	16
Unit name	Pothole
Route name	Not Named
Construction	Probably only bladed once
Use	None
Purpose	Formerly accessed a bermed tank, now defunct
Maintenance	None
Determination	Reclaimed
Feature	Closure point
Feature notes	Feature minimally affects naturalness
Other notes	





Attributes	
Point	17
Unit name	Pothole
Route name	Not Named
Construction	Probably only
	bladed once
Use	Cattle
Purpose	None apparent
Maintenance	None
Determination	Reclaimed
Feature	Revegetated
	Feature
Feature notes	minimally affects
	naturalness
Other notes	Boundary road in
	foreground of
	photo.





Attributes	
Point	18
Unit name	Pothole
Route name	Not Named
Construction	Probably only bladed once
Use	Cattle
Purpose	None apparent
Maintenance	None
Determination	Reclaimed
Feature	Revegetated
Feature notes	Feature minimally affects naturalness
Other notes	





Attributes	
Point	19
Unit name	Pothole
Route name	Not Named
Construction	Probably only
	bladed once
Use	None
Purpose	None apparent
Maintenance	None
Determination	Reclaimed
Feature	Revegetated
	Feature
Feature notes	minimally affects
	naturalness
Other notes	





Attributes	
Point	20
Unit name	Pothole
Route name	Not Named
Construction	No evidence
Use	4-WD Trucks
Purpose	Camping
Maintenance	None
Determination	Way
Feature	Typical Condition of Route/Way
Feature notes	Feature minimally affects naturalness
Other notes	Kept open solely by passage of vehicles





Attributes	
Point	21
Unit name	Pothole
Route name	Salt Trap and Spring Canyon Roads
Construction	Bladed & Cut and Fill
Use	4-WD Trucks
Purpose	Multiple uses
Maintenance	Semi-recent evidence - 1-3 years ago
Determination	Road
Feature	Junction of Routes/Ways
Feature notes	
Other notes	Unit Roundary





Att the Lee	
Attributes	
Point	22
Unit name	Pothole
Route name	Not Named
Construction	Bladed & Cut and Fill
Use	Off Road Vehicles
Purpose	Well/Water tanks
Maintenance	Likely if needed
Determination	Road
Feature	Tank and shade structure
Feature notes	Feature minimally affects naturalness
Other notes	This impact is excluded





Attributes	
Point	23
Unit name	Pothole
Route name	Salt Trap Road
Construction	Bladed & Cut and Fill
Use	4-WD Trucks
Purpose	Multiple uses
Maintenance	Old evidence - 3- 5 years ago
Determination	Road
Feature	Junction of Routes/Ways
Feature notes	
Other notes	Unit Boundary



