

Proposed Lands with Wilderness Characteristics:

Scratch & Jerky Canyons



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



ARIZONA WILDERNESS COALITION

August, 2015

*Prepared by:*

Joseph M. Trudeau &  
Amber R. Fields



hassayampa  
forestry  
PRESCOTT, ARIZONA

## ***Table of Contents***

---

***PREFACE: This Proposal was developed according to BLM Manual 6310*** \_\_\_\_\_ ***page 3***

***MAP: Scratch & Jerky Canyons Proposed LWC*** \_\_\_\_\_ ***page 5***

### ***SECTION 1: Proposed LWC Overview***

---

***Unit Location*** \_\_\_\_\_ ***page 6***

***Brief Boundary Description*** \_\_\_\_\_ ***page 6***

***Landforms & Biological Communities*** \_\_\_\_\_ ***page 6***

### ***SECTION 2: Wilderness Characteristics***

---

***The proposed LWC meets the minimum size criteria for roadless lands*** \_\_\_\_\_ ***page 7***

***The proposed LWC is affected primarily by the forces of nature*** \_\_\_\_\_ ***page 7***

***Field Journal: Scratch & Jerky Canyons Backpacking Trip*** \_\_\_\_\_ ***page 8***

***The proposed LWC provides outstanding opportunities for solitude or primitive & unconfined recreation*** \_\_\_\_\_ ***page 9***

***The proposed LWC has supplemental values that enhance the wilderness experience & deserve protection*** \_\_\_\_\_ ***page 11***

***Works Cited*** \_\_\_\_\_ ***page 15***

### ***SECTION 3: Detailed Boundary & Routes Description***

---

***Narrative Description of the Proposed LWC Boundary*** \_\_\_\_\_ ***page 16***

### ***SECTION 4: Photopoint data***

---

***Data Tables & Photographs to accompany the Detailed Boundary & Routes Description*** \_\_\_\_\_ ***page 19***

Cover Photo: Backpackers taking the plunge down Burro Creek in March, 2015, one mile downstream of Scratch Canyon. All Photos by Joe Trudeau & Amber Fields unless otherwise noted.

***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 Kingman Resource Area of northwestern Arizona, based on new, accurate, and up-to-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.

---

<sup>1</sup>Memorandum 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](http://www.blm.gov/wo/st/en/info/regulations/Instruction_Memos_and_Bulletins/national_instruction/2011/IM_2011-154.html)

<sup>2</sup> 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](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?*

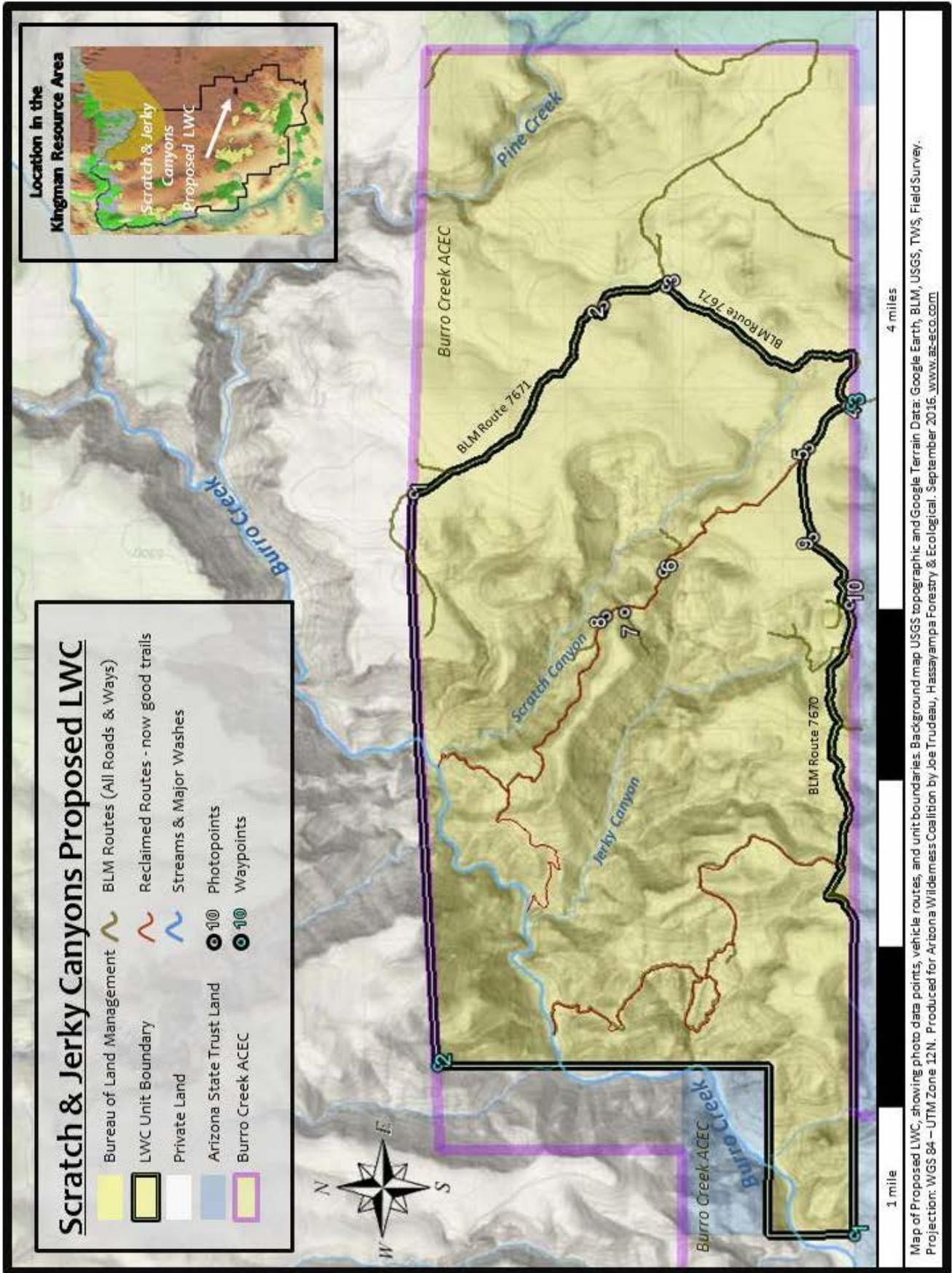
Boundaries should be based on wilderness inventory roads and naturalness rather than opportunities for solitude or primitive and unconfined recreation. For inventorying wilderness characteristics, BLM will use the “road” definition from FLPMA’s legislative history; the term “road” and “wilderness inventory 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: Scratch & Jerky Canyons Proposed LWC**



## ***Section 1: General Overview***

---

### ***Unit Location***

The Scratch & Jerky Canyons Proposed LWC is positioned in one of the most remote locations in the region, and includes both Scratch and Jerky Canyons, as well as portions of Burro Creek. The proposed LWC lies in the east/southeastern portion of the BLM Kingman Resource Area, six miles to the northeast of the Upper Burro Creek Wilderness, to the west of the Santa Maria Mountains, to the north of Bozarth Mesa, and to the southeast of the Mohon Mountains.

### ***Brief Boundary Description***

The proposed LWC is surrounded by State, BLM, and private lands. The northern boundary is the BLM property line which is shared with private land (the Luis Maria Baca Float Number 5). BLM Route 7671 forms the eastern boundary. BLM Route 7670 and the BLM property line forms the southern boundary. The western boundary is the BLM property line with State and private parcels.

### ***Landforms & Biological Communities***

The proposed LWC is situated at the head of the Burro Creek Watershed in a region of extensive tablelands of late to middle Miocene basaltic rocks deposited in a series of volcanic flows from 8-16 million years ago (Arizona Geological Society, 2000). This geology creates the basis for the incision of numerous deep canyons that descend into Burro Creek from the Juniper, Santa Maria, and Mohon Mountains. Eons of erosion have sliced through layers of black basalt, white to tan tuffs, reddish rhyolites, and interbedded series of pyroclasts and conglomerates. This section of Burro Creek runs generally east to west, so there is substantial aspect-oriented variability in plant communities and associated wildlife between the north and south sides of the canyon. Scratch and Jerky Canyons drop into Burro Creek from the east-southeast, and feature similar differences between aspects.

Vegetation here is transitional between the upper Sonoran Desert and the lower Colorado Plateau/Apache Highlands regions. Ecological types consist of Madrean pinyon-juniper woodlands and savannas on the canyon rims, where pronghorn, mule deer, javelina, elk, and cattle coexist. Dropping over the canyon rim to steep slopes, vegetation transitions to a matrix of dense Mogollon Chaparral, which is dominated by manzanita, mountain mahogany, and scrub oak, where prolific flowering shrubs support an explosion of pollinating insects, which then attract birds and small mammals. Patches of Colorado Plateau Pinyon-Juniper Woodland occur on south facing slopes, and Madrean Pine-Oak Forest and Woodland on north-facing slopes. The deep canyon bottoms support a ribbon of North American Warm Desert Lower Montane Riparian Woodland and Shrubland along the streamside area, and Apacherian-Chihuahuan Mesquite Upland Scrub on the warm, south-facing terraces above the creek (USGS, 2015).

## **SECTION 2: Wilderness Characteristics**

---

### ***The proposed LWC meets the minimum size criteria for roadless lands***

The Scratch & Jerky Canyons Proposed LWC contains approximately 6,720 roadless acres under BLM ownership. There are no private or other inholdings located within the proposed LWC unit.

### ***The proposed LWC is affected primarily by the forces of nature***

The Scratch & Jerky Canyons Proposed LWC is set in a truly remote location dominated primarily by natural forces. There are only two categories of human impacts within the unit: primitive routes and ranch infrastructure.

#### *Primitive Routes*

Very few primitive routes (ways) enter into the unit. These routes, described in detail in Section 3, are barely used, single lane two-tracks, many of which more closely resemble hiking trails rather than vehicle ways. It is our determination that the existence of these ways does not substantially affect the wilderness user experience. In fact, most of these primitive routes enhance the user experience by providing a path for primitive recreational activities such as hiking or horseback riding (see Photopoints 6 & 8; routes are also shown on map as trails). No mining or prospecting was detected during our three days of field inventory in March, 2015, but the routes that drop into the canyons may have been built for the purpose of mineral explorations. As stated above, these routes are much degraded and resemble trails that now provide valuable hiking corridors. 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).

#### *Ranch Infrastructure*

There is little evidence of ranch activity within the Scratch & Jerky Canyons Proposed LWC. Much of the ranch infrastructure and influence are concentrated to the east of the proposed LWC unit, and were excluded from the unit due to their impacts on naturalness. The area within the proposed LWC is minimally affected by ranch activity and appears to be affected primarily by the forces of nature. There are five stock ponds located within the proposed LWC unit: Leppi Tank, Suicide Tank, Rose Tank, Brushy Basin Tank and Miller Tank. These are natural looking stock ponds that contain water with a berm, rather than a manufactured installation, and serve a benefit to the areas abundant wildlife as well. BLM Manual 6310 states that stock ponds, despite being human-made features, can be considered substantially unnoticeable to the average visitor. The tanks are surrounded by dense pinyon and juniper woodlands and thus are generally unseen except when directly beside them.

#### *Summary of Human Impacts*

Collectively, the impacts documented above do not substantially detract from the naturalness of the proposed LWC. The LWC is without a doubt dominated by the forces of nature, not man; it is an incredibly wild, remote, and pristine tract of public land. The Scratch & Jerky Canyons Proposed LWC is located in a very remote area and can be difficult to access. Consequently, human impacts are not conspicuous, especially when compared to the perceptibly wild character of this place.

**FIELD JOURNAL: SCRATCH & JERKY CANYONS BACKPACKING TRIP, MARCH 24-25, 2015**



**Emily Hague photographing the unique topography within Scratch Canyon, looking toward the 'Hole in the Ground'.**

*"Scratch & Jerky Canyons in the Kingman Resource Area contain real wilderness character, given the constant views of unfragmented landscapes, the lack of significant human disturbance, the diversity of wildlife habitat for core species, and the opportunities for solitude and passive recreation.*

*These canyons exemplify natural integrity because human impacts are "substantially unnoticeable" within and immediately surrounding. Roads and ways are seldom traveled or maintained, and there are no structures visible from high points surrounding the canyons. The primary evidence of human impacts is the presence of cattle, and the occasional watering trough, fence or salt lick along an access road or way, which I would consider "substantially unnoticeable".*

*"I really enjoyed getting to explore those canyons, as they have a remoteness to them that is unmatched in the east, at least in my home of New Hampshire. It was incredible to see so much wildlife as well (pronghorn antelope, mule deer, coyote, peregrine falcon, red-tailed hawk, tree frog, fish, and more), especially in an area where mammals and birds are not habituated to human activities and are therefore more likely to be seen. The vistas and waterfalls were also incredible sights to see. Opportunities to experience wild areas such as this are extraordinary, and speak to the enormous value of our federal lands."*

*Emily Hague is Stewardship Director at the Monadnock Conservancy, a regional Land Trust serving southwest New Hampshire*

**An outstanding scenic feature, Jerky Falls, dropping 25 feet in a tight slot canyon near the confluence with Burro Creek.**



Photo by Emily Hague



Peregrine Falcon  
photo by Emily Hague

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

The Scratch & Jerky Canyons Proposed LWC features terrain that provides plentiful outstanding opportunities for solitude. Brushy Basin, Scratch Canyon, the 'Hole in the Ground', Jerky Canyon and Burro Creek all offer outstanding prospects for finding solitude. To reach any of these locations, a person must first travel several hours out rough dirt roads, and only then, they must drop below the canyon rim and down into extremely rough terrain. The immense natural beauty and uniquely wild character of the proposed LWC assure excellent potentials for primitive recreational experiences of absolutely outstanding value. Dramatic landforms and deep canyons exhibit many hidden natural wonders for visitors to discover. The BLM reported the following about this section of Burro Creek:

*"This portion of Burro Creek contains outstanding scenic qualities, including riparian vegetation, cliffs and undeveloped shorelines uncluttered by human development. The narrow canyon and clear, deep pools of Burro Creek offer exceptional scenery. Rugged landforms, riparian vegetation and water combine to provide a variety of scenery unmatched within the resource area. Outstanding opportunities for recreation also exist along this portion"* (BLM, 1993: p. 174).

The rare and abundant wildlife also make the opportunities for solitude & primitive and unconfined recreation outstanding. During the AWC volunteer backpacking trip, we encountered amazing amounts of uncommon plants and animals. While sleeping near Burro Creek, we woke up to a falcon taking down a duck right in front of us. To see such predator-prey interactions is absolutely rare and outstanding. The incredibly rich riparian ecosystems found within the proposed LWC provide abundant opportunities for solitude & primitive and unconfined recreation, unlike those found anywhere else because these canyons and their creeks are so completely unique in the Kingman Resource Area.

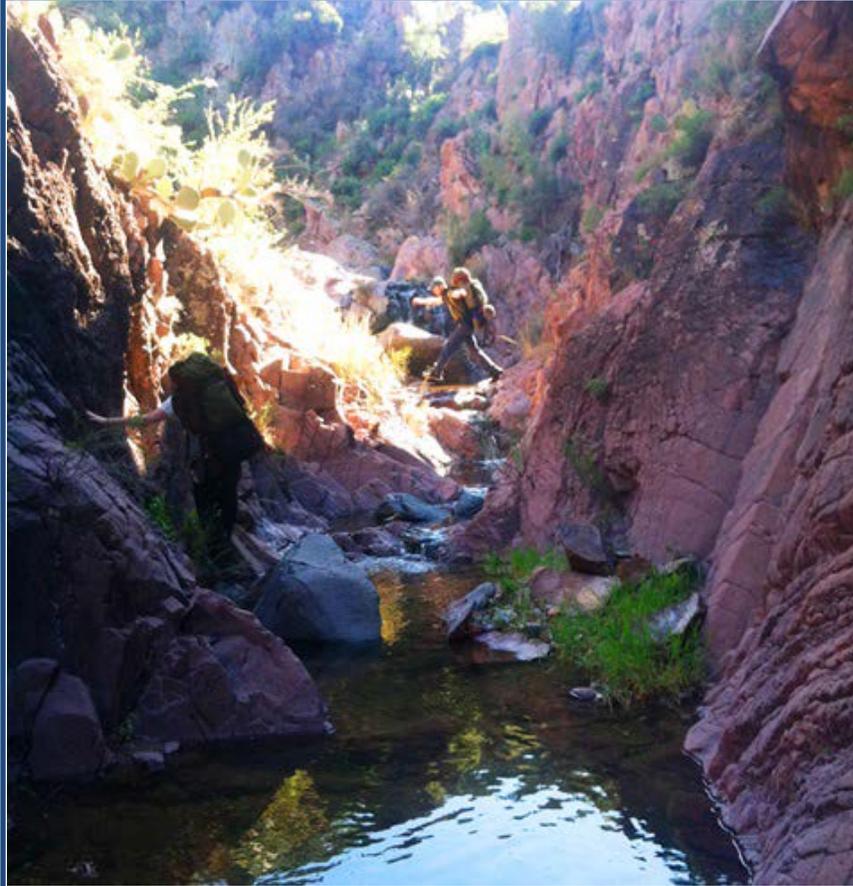
The riparian ecosystems provide opportunities for discovery unmatched elsewhere. Burro Creek offers perennial flows for visitors to enjoy all year round; an especially valuable component in an arid landscape. Indeed, free-flowing water in Arizona provides for outstanding recreational experiences simply because you can be in or near naturally flowing water in such a dry environment. Moreover, the immensity of Burro Creek Canyon is breathtaking. The power of the floods that rip through this corridor is evident through the scoured bedrock in the creek bed and thrashed riparian vegetation. This hydraulic power has carved incredible slot canyons and waterfalls. While hiking up Jerky Canyon, we came upon a waterfall in a slot canyon that rivals side canyons of the Grand Canyon. This 25-foot tall waterfall was gracefully shaped by flowing water over a deep period of time stretching well into the distant past. It is purely outstanding to be able to explore and discover places as spectacular as Jerky Creek Falls (see photo on preceding page).

Outstanding opportunities for primitive and unconfined recreation are plentiful within the proposed LWC. Recreationists could backpack or horsepack in the area for an extended time, most likely without seeing a single other person, in a place where there are no significant visible human impacts for many miles in any direction. The rugged canyons offer opportunities for technical hiking, vast views for photography, or pools for summertime swimming. Technical rock climbers will find distinctive routes in

## *Scratch & Jerky Canyons Proposed LWC*

an extreme back-country setting. Naturalists could spend countless days discovering the immense diversity of life within the proposed LWC. Backpackers have the opportunity to wander, unconfined and in complete solitude. The geology is endlessly intriguing with a multiplicity of rock types and features to be found. Whether recreationists are looking to simply enjoy the majestic beauty of this place or to have a more daring outdoor adventure, they will not be disappointed if they travel to the Scratch & Jerky Canyons Proposed LWC.

*AWC Volunteer Matt Decker, Stewardship Coordinator for the Hudson Highlands Land Trust in Garrison, New York, leaps across Jerky Creek, on his way out from our three-day exploration of the proposed LWC*



*“Both Scratch and Jerky Canyons contain ample opportunities for solitude or a primitive and unconfined form of recreation. There are no visible structures or improvements, and no confining boundaries. The landscape lends itself well to solitude and primitive recreation, given its vastness, its natural beauty, and the diversity of plants and animals it contains as part of the greater Sonoran Desert. The area is perfect for backpacking, photography, and wildlife observation. And there is outstanding geologic diversity between the rhyolite and basalt cliffs flanking the plateaus above the canyons, the diversity of granites and even limestone fragments visible in the creek beds, and the tuff beds found at varying elevations.”*

*AWC volunteer Emily Hague*

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

*The proposed LWC is contained within an Area of Critical Environmental Concern*

These special designation lands help protect special status plants, wildlife, cultural sites, spectacular scenery, and riparian areas. **The Burro Creek Riparian and Cultural ACEC** contains 22,682 acres in the Burro Creek Watershed. It was established following the 1993 Resource Management Plan (RMP) that found that Burro Creek offers “*outstanding riparian resources; rare and outstanding cultural resources; and important threatened and endangered habitat*” (BLM, 1993: p. 92). The entire 6,720 acres of the proposed LWC are contained within this ACEC. Alternative 3 in the 1993 RMP would have created the Black Butte ACEC to protect significant Prescott Culture archaeological sites and an important obsidian source, but the Preferred Alternative included the area as part of the larger ACEC (BLM, 1993).

*The proposed LWC would protect 2.2 miles of proposed Wild & Scenic River*

Burro Creek was determined by BLM to be eligible for Wild & Scenic River designation in the 1993 Resource Management Plan. At the time of that analysis, of the 51.6 mile river corridor, 31.4 miles were under BLM ownership. The agency then conducted a thorough review of Arizona’s Rivers, including Burro Creek, in its “Final Arizona Statewide Wild and Scenic Rivers Legislative EIS”, and remarked therein that Burro Creek “*is free-flowing and has outstandingly remarkable scenic, recreational, fish and wildlife habitat, and cultural resource values*” (BLM, 1994: p. 174).

In this review, Burro Creek was divided into 5 segments based on the segments classification as recreational, wild, or scenic. Segment 1 encompassed a portion of Burro Creek that extended from Scratch Canyon down to the border of Upper Burro Creek Wilderness Area. Nearly three miles of this segment is within the proposed LWC, and the BLM determined that the upper 2.2 miles were eligible for designation. Ultimately, the Department of the Interior signed a Record of Decision that determined this section, and three others, as suitable and recommended for designation as part of the Wild and Scenic Rivers System (BLM, 1994). However, Congress has not advanced this legislation. Protection as an LWC would ensure that this segment of truly wild and scenic river is secure from threats to the area's valuable natural assets.

*The proposed LWC would protect sensitive archeological sites*

The proposed LWC and the surrounding area contains an extremely high concentration of archaeological sites dating to the Prescott culture of the Anasazi Native Americans, circa 1200 AD, including a major source of obsidian for constructing stone tools. In fact, “*this area may contain the greatest density of rare and unique cultural resources in the entire resource area*” (BLM, 1993: p 124). Field crews from Pima Community college have visited the site since 2002, and have documented dozens of artifact sites. The area is an important field school for students learning field survey techniques, orientation, and basic outdoor survival skills. Enhanced protection of the proposed LWC would ensure that these unique elements of our cultural heritage are preserved for proper scientific and cultural studies, and to provide continued opportunities for education and appreciation Of these rare sites.

*The proposed LWC would protect sensitive riparian ecosystems & numerous sensitive species*

As discussed above, the Scratch & Jerky Canyons Proposed LWC is protected by ACEC designation for riparian & cultural values, *and* has been recommended to Congress for designation as a Wild and Scenic River. Here, we provide some more specific information regarding riparian and upland ecosystems to support our proposal for further protection by LWC designation.

Burro Creek is a free-flowing intermittent perennial stream that runs for about three miles through the proposed LWC. Much of the Burro Creek, Scratch Canyon, and Jerky Canyon corridors are ribbons of deciduous riparian forest, woodland, and streamside habitats consisting of Arizona sycamore, Fremont cottonwood, velvet ash, Arizona walnut, Arizona alder, ponderosa pine, oaks, and willows. These habitats are among the rarest and most threatened ecosystems in the entire State of Arizona, amounting to less than 1% of the land area. The importance of these areas is disproportionate to their occurrence because of their multiple benefits, such as providing recreational amenities, habitat and travel corridors for wildlife, livestock grazing and their influence on water quality and quantity (Zaimes et. al, 2007). Burro Creek provides habitat for a wide variety of unique wildlife, including 14 federal-, state-, and BLM-sensitive species. The riparian habitat associated with this area supports a great diversity of birds of prey, such as bald eagle (*Haliaeetus leucocephalus*), zone-tailed hawk (*Buteo albonotatus*), and peregrine falcon\* (*Falco peregrinus*). There are more breeding pairs of Common black-hawks\* (*Buteogallus anthracinus*) in Burro Creek than anywhere else in North America (BLM, 1993). Five native fish species occur in this section of Burro Creek, including longfin dace (*Agosia chrysogaster*), desert sucker (*Catostomus clarkii*), Sonora sucker\* (*Catostomus insignis*), roundtail chub\* (*Gila robusta*; a candidate for threatened listing), and speckled dace\* (*Rhinichthys osculus*)(Turner & List, 2007). All five of these fish are listed as Species of Greatest Conservation Need, identified in the Arizona State Wildlife Action Plan (AZGFD, 2012), and our survey in March, 2015 observed three of these fish.

The rich riparian environments of the Scratch & Jerky Canyons Proposed LWC, threading through chaparral, grassland, upper Sonoran desert, and pinyon-juniper woodland provide important habitat for a number of Species of Economic and Recreational Importance, such as Bighorn sheep, elk\*, Gambel's quail\*, javelina\*, mountain lion, mule deer\*, pronghorn\*, and turkey (AZGFD, 2012). A query of Arizona's Heritage Data Management System for the two USGS quadrangles that cover the proposed LWC reported that there has been confirmed occurrences of Golden Eagle (*Aquila chrysaetos*), Zone-tailed hawk (*Buteo albonotatus*), Common Black Hawk\* (*Buteogallus anthracinus*), Roundtail Chub\* (*Gila robusta*) in the Burro Mesa Quadrangle, and Creeping Milk Vetch (*Astragalus troglodytus*), Common Black Hawk\* (*Buteogallus anthracinus*), Tusayan Flameflower (*Phemeranthus validulus*), Flux Weed (*Trichostema brachiatum*) in the Scratch Canyon Quadrangle. (<http://www.habimap.org/habimap/>)

*\* indicates that we observed these species within the proposed LWC during field inventory*

## Scratch & Jerky Canyons Proposed LWC

*The proposed LWC would protect some of Arizona's Species of Greatest Conservation Need*

The Scratch & Jerky Canyons Proposed LWC would protect important habitat for some of Arizona's Species of Greatest Conservation Need (SGCN). We conducted a query of Arizona Game & Fish Departments State Wildlife Action Plan data for potential habitat for SGCN animals in the portions of the unit which were ranked highest in the Departments' Richness Index Model, which is generally the riparian corridor. The query returned an impressive list of potential occurrences<sup>3</sup> :

### Bats that have a high potential for occurring in the Scratch & Jerky Canyons Proposed LWC

Pale Townsend's Big-eared Bat	<i>Corynorhinus townsendii pallescens</i>
Spotted Bat	<i>Euderma maculatum</i>
Greater Western Mastiff Bat	<i>Eumops perotis californicus</i>
Allen's Big-eared Bat	<i>Idionycteris phyllotis</i>
Western Red Bat	<i>Lasiurus blossevillii</i>
Arizona Myotis	<i>Myotis occultus</i>
Cave Myotis	<i>Myotis velifer</i>
Yuma Myotis	<i>Myotis yumanensis</i>
Pocketed Free-tailed Bat	<i>Nyctinomops femorosaccus</i>
Mexican Free-tailed Bat	<i>Tadarida brasiliensis</i>

### Amphibians & Reptiles that have a high potential for occurring in the Scratch & Jerky Canyons Proposed LWC

Lowland Leopard Frog	<i>Rana yavapaiensis</i>
Sonoran Desert Toad	<i>Bufo alvarius</i>
Arizona Toad	<i>Bufo microscaphus</i>
Arizona Black Rattlesnake	<i>Crotalus cerberus</i>
Gila Monster	<i>Heloderma suspectum</i>
Sonoran Mud Turtle	<i>Kinosternon sonoriense sonoriense</i>
Regal Horned Lizard	<i>Phrynosoma solare</i>
Gila Spotted whiptail	<i>Aspidoscelis flagellicauda</i>

### Some Birds that have a high potential for occurring in the Scratch & Jerky Canyons Proposed LWC

American Peregrine Falcon	<i>Falco peregrinus anatum</i>
Bald Eagle	<i>Haliaeetus leucocephalus</i>
<b>Golden Eagle</b>	<b><i>Aquila chrysaetos</i></b> <sup>4</sup>
Ferruginous Hawk	<i>Buteo regalis</i>
Arizona Bell's Vireo	<i>Vireo bellii arizonae</i>
Wood Duck	<i>Aix sponsa</i>
American Bittern	<i>Botaurus lentiginosus</i>
Common Nighthawk	<i>Chordeiles minor</i>
Yellow Warbler	<i>Dendroica petechia</i>
Desert Purple Martin	<i>Progne subis hesperia</i>
Pinyon Jay	<i>Gymnorhinus cyanocephalus</i>
Lincoln's Sparrow	<i>Melospiza lincolnii</i>

### Mammals that have a high potential for occurring in Scratch & Jerky Canyons Proposed LWC

Harris' Antelope Squirrel	<i>Ammospermophilus harrisi</i>
Kit Fox	<i>Vulpes macrotis</i>
Stephen's Woodrat	<i>Neotoma stephensi</i>

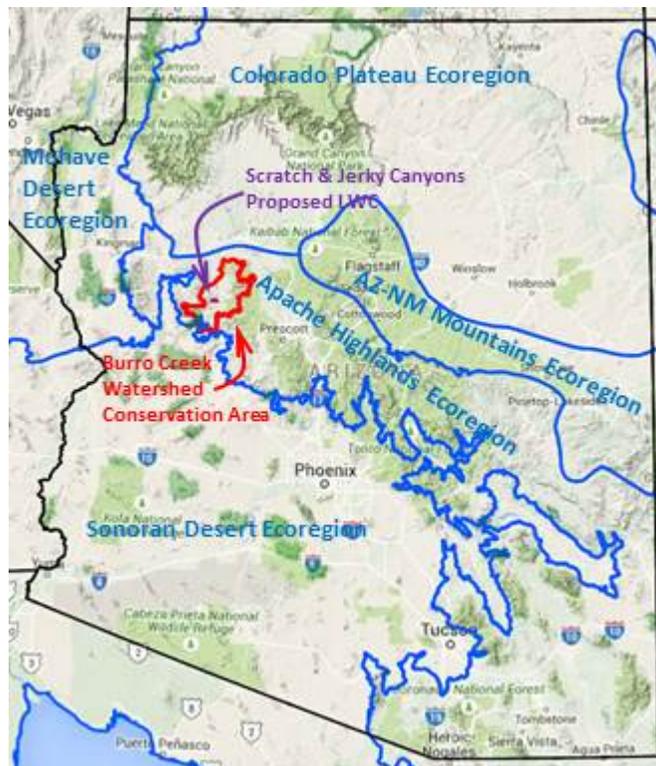
<sup>3</sup> sources: AZGFD, 2012 & Arizona Game & Fish Department HabiMap Tool: <http://www.habimap.org/habimap/>). This is by no means intended to be a comprehensive list of species that might occur at the proposed LWC.

<sup>4</sup> species in **bold** type indicate confirmed AZ Heritage Data occurrence in the Burro Mesa or Scratch Canyon Quadrangles

*The proposed LWC is within a conservation priority area for the Apache Highlands Ecoregion*

The Nature Conservancy (TNC) is an international conservation organization dedicated to preserving life in all of the earth's ecosystems. The organization takes a scientific approach to prioritizing conservation work to achieve the most effective species and habitat protection outcomes. Their approach involves identifying conservation focus areas in each ecoregion, based on collaborative, multi-disciplinary based determinations of at-risk species and habitats, threats to ecosystem health, and effective solutions to maintain biodiversity and ecosystem resiliency. The proposed LWC is situated within the northwestern portion of the Apache Highlands Ecoregion, which includes 30 million acres of central and southeastern Arizona, southwestern New Mexico, and north-central Mexico; bounded to the north by the Mogollon Rim, the west by the Mohave and Sonoran Deserts, the east by the Chihuahuan Desert, and to the south by the Sierra Madre Occidental. TNC completed an ecoregional assessment using advanced GIS and statistical computing tools to identify a network of conservation areas where the most imperiled, keystone, or endemic ecosystems, species, and habitats could be protected with the least effort.

This expansive effort at comprehensively prioritizing conservation across jurisdictional and biogeographical boundaries ranked the Burro Creek Watershed 23<sup>rd</sup> out of 69 conservation focus areas with aquatic systems in the entire Apache Highlands Ecoregion, and further concluded that enhanced conservation work in this area would protect 10.8% of the ecoregions conservation targets, including: 10 ecological system targets, 2 amphibian targets, 5 fish targets, 4 bird targets, 1 invertebrate target, 2 mammal targets, and 3 plant targets (Marshall et. al, 2004). The full list of these target species and ecosystems, available in the primary source, includes many of those mentioned above in the previous supplemental value headings.



**Works Cited**

---

- Arizona Geological Society. 2000. Geological Map of Arizona. Available online at:  
<http://data.azgs.az.gov/geologic-map-of-arizona/#>.
- AZGFD. 2012. Arizona's State Wildlife Action Plan: 2012-2022. Arizona Game and Fish Department, Phoenix, Arizona.
- 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.
- Jarnecke, Pamela (ed). May 2014. "Central Arizona Grasslands Conservation Strategy." An Interagency Report published cooperatively by Arizona Game and Fish Department, Bureau of Land Management, Prescott National Forest, Tonto National Forest, and the USDA Natural Resource Conservation Service. 56pp.
- Marshall, R.M., D. Turner, A. Gondor, D. Gori, C. Enquist, G. Luna, R. Paredes Aguilar, S. Andersen, S. Schwartz, C. Watts, E. Lopez, and P. Comer. 2004. An ecological analysis of conservation priorities in the Apache Highlands Ecoregion. Prepared by the Nature Conservancy of Arizona, Instituto del Medio Ambiente y el Desarrollo Sustentable del estado de Sonora, agency and institutional partners. 152pp.  
available online at <http://azconservation.org/projects/ecoregions>.
- Turner, Dale S., and List, Michael D. 2007. Habitat mapping and conservation analysis to identify critical streams for Arizona's native fish. *Ecosystems*, Vol. 17: 737-748.
- USGS. 2015. National Gap Analysis Program (GAP) Land Cover Data Viewer. U.S. Department of the Interior, United States Geological Survey, online tool at  
[http://gis1.usgs.gov/csas/gap/viewer/land\\_cover/Map.aspx](http://gis1.usgs.gov/csas/gap/viewer/land_cover/Map.aspx)
- Zaimes, G., Nichols, M., Green, D., & Crimmins, M. 2007. Understanding Arizona's Riparian Areas. University of Arizona Press. 114p.

### **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 Scratch & Jerky Canyons 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 Scratch & Jerky Canyons Proposed LWC unit contains 6,720 contiguous roadless acres, with few primitive routes permeating the unit boundary, and none cutting into its core. The Photopoints described here of the Scratch & Jerky Canyons Proposed LWC are listed in detailed tables with photographs following this description. Beginning at Waypoint 1, the proposed LWC unit description will move clockwise around the unit.

#### ***Western Boundary***

The BLM property line forms the northern proposed LWC boundary. Waypoint 1 marks the southwest corner of the Scratch & Jerky Canyons Proposed LWC unit. From Waypoint 1, the BLM property line serves as the proposed LWC unit boundary heading north. The BLM property boundary is the western Scratch & Jerky Canyons Proposed LWC unit boundary the entire distance to Waypoint 2. Waypoint 2 marks the northwestern corner of the proposed LWC unit.

#### ***Northern Boundary***

From Waypoint 2, the BLM property line forms the entire northern Scratch & Jerky Canyons Proposed LWC unit boundary. Photopoint 1 marks the northeastern proposed LWC unit corner.

#### ***Eastern Boundary***

BLM Route 7671 forms the entire eastern proposed LWC unit boundary. It should be noted that the eastern Scratch & Jerky Canyons Proposed LWC unit boundary (BLM Route 7671) is an unmaintained way. This primitive route was used for the unit boundary because the area to the east contains substantially noticeable ranching impacts across the landscape. The area to the east that has been excluded from the proposed LWC unit has numerous molasses dispensing tanks for cattle, as well as many saltlicks. The molasses tanks are quite large and detract from the natural character of the land.

Furthermore, the impact from the cattle themselves (trampling of vegetation and compacted soils surrounding ranching infrastructure) is substantially noticeable and unnatural looking across the terrain. There is also the abandoned Winter Camp cabin that further detracts from the wilderness character of the excluded area. This excluded area seems to be fairly intensively managed by the ranchers with the grazing lease. As a result of the substantially noticeable ranching impacts, an unmaintained primitive route (BLM Route 7671) has been used for the eastern proposed LWC unit boundary.

Photopoint 1 depicts BLM Route 7671 heading north out of the proposed LWC unit. There is a game management gate that the Arizona Game and Fish Department installed at the location of Photopoint 1. Photopoint 1 documents that there is no vehicular public access to BLM Route 7671 beyond this locked gate, which is necessary to document for this report because BLM 7671 eventually passes back into the LWC unit as a primitive route, not a road; accessing Leppi Tank. Traveling south down BLM Route 7671, Photopoint 2 displays another image of this boundary way. Photopoint 3 depicts BLM Route 7671 as it starts to head more to the southwest. BLM Route 7671 continues to act as the Scratch and Jerky Proposed LWC unit boundary heading southwest to Waypoint 3.

### ***Southern Boundary***

BLM Route 7670 and the BLM property line forms the southern Scratch and Jerky Proposed LWC unit boundary. Waypoint 3 marks the location where the proposed LWC unit boundary way changes from BLM Route 7671 to BLM Route 7670, which is also an unmaintained way. As with the eastern border, the southern proposed LWC boundary is an unmaintained way. BLM Route 7670 serves as the proposed southern border because although it has no signs of maintenance, this route is a thruway and is actively used by local ranchers in the management of their grazing allotments. Photopoint 4 displays an image of BLM Route 7670 as it heads to the northwest, with the proposed LWC unit to the right of the route. Continuing northwest up BLM Route 7670, Photopoint 5 was taken looking up an unnamed primitive route stemming from the boundary road. Photopoint 5 documents that this way contains no signs of construction or maintenance. Continuing north up this unnamed way, the BLM route inventory data displays a couple of ways stemming to the north. However, these ways do not exist and there is no evidence of them on the ground. Photopoint 6 depicts another image of the main way. As Photopoint 6 shows, this primitive route was constructed, but is growing in with perennial vegetation and is not being maintained. Continuing northwest up the main way, Photopoint 7 displays an old way to the west of the 'Hole in the Ground' that the BLM has in their route inventory data as a "Need to Verify" route. As seen in Photopoint 7, this old primitive route is not getting any use, has revegetated, and is now reclaimed and naturalized; meaning it is not a road or a way. However, since this old way was constructed, the old roadbed would now make a great trail. Continuing northwest up the main way, vehicular use of this primitive route ends not long after the 'Hole in the Ground'. Photopoint 8 documents the condition of the main way, showing that it is more like a trail than a way. Indeed, this way makes a great hiking trail, which can be seen traversing the mesa parallel to Scratch

Canyon in Photopoint 8. This way continues to get rougher the farther north it goes, and all ways stemming from it are also unmaintained.

Returning to the southern boundary and continuing west, BLM Route 7670 remains the Scratch & Jerky Canyons Proposed LWC unit boundary. Photopoints 9 was taken looking west along BLM Route 7670. Due north of Photopoint 10, the BLM route inventory data displays a “Need to Verify” route and one other way. However, these ways do not exist on the ground. Photopoint 10 shows an eroded section of BLM Route 7670. All primitive routes that enter the proposed LWC unit to the west of Photopoint 10, and accessed via BLM Route 7670, are similarly eroded in places; making them ways, not roads.

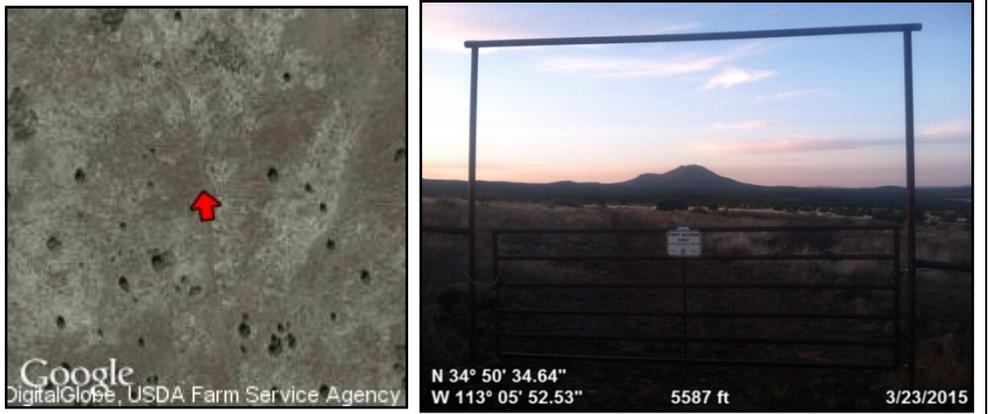
BLM Route 7670 continues to serve as the southern proposed LWC unit boundary until Waypoint 4. At Waypoint 4, the BLM property line once again becomes the LWC boundary. The property line serves as the boundary for the rest of the southern proposed LWC boundary back to Waypoint 1.

**SECTION 4: Photopoint Data**

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

Attributes	
Title	Photopoint 001
Unit name	Scratch & Jerky Canyons
Route name	BLM Route 7671
Determination	Way
Maintenance	None
Feature	Closure point

**Photopoint 001. An AZGFD gate at the northeastern proposed LWC unit corner.**



Attributes	
Title	Photopoint 002
Unit name	Scratch & Jerky Canyons
Route name	BLM Route 7671
Determination	Way
Maintenance	None
Feature	Typical condition of Route/Way

**Photopoint 002. The proposed eastern LWC boundary.**



Attributes	
Title	Photopoint 003
Unit name	Scratch & Jerky Canyons
Route name	BLM Route 7671
Determination	Way
Maintenance	None
Feature	Typical condition of Route/Way

**Photopoint 003. Another picture of BLM Route 7671.**



Attributes	
Title	Photopoint 004
Unit name	Scratch & Jerky Canyons
Route name	BLM Route 7670
Determination	Way
Maintenance	None
Feature	Typical condition of Route/Way

**Photopoint 004. Proposed LWC boundary route.**



Google  
DigitalGlobe, USDA Farm Service Agency



N 34° 48' 23.28"  
W 113° 05' 19.56"  
5650 ft  
3/24/2015

Attributes	
Title	Photopoint 005
Unit name	Scratch & Jerky Canyons
Route name	Not Named
Determination	Way
Maintenance	None
Feature	Typical condition of Route/Way

**Photopoint 005. An unmaintained way at a cattle fence.**



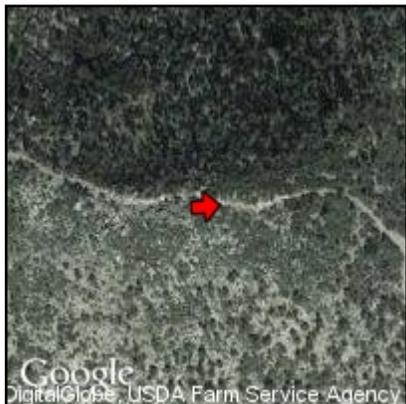
Google  
DigitalGlobe, USDA Farm Service Agency



N 34° 48' 34.73"  
W 113° 05' 35.30"  
5653 ft  
3/24/2015

Attributes	
Title	Photopoint 006
Unit name	Scratch & Jerky Canyons
Route name	Not Named
Determination	Way
Maintenance	None
Feature	Typical condition of Route/Way

**Photopoint 006. This primitive route would make a great trail.**



Google  
DigitalGlobe, USDA Farm Service Agency



N 34° 49' 19.00"  
W 113° 06' 21.71"  
5469 ft  
3/24/2015

Attributes	
Title	Photopoint 007
Unit name	Scratch & Jerky Canyons
Route name	Not Named
Determination	Reclaimed/naturalized
Maintenance	None
Feature	Revegetated

**Photopoint 007. This old way has naturalized.**




Google DigitalGlobe, USDA Farm Service Agency  
 N 34° 49' 30.67"  
 W 113° 06' 36.69" 5364 ft 3/24/2015

Attributes	
Title	Photopoint 008
Unit name	Scratch & Jerky Canyons
Route name	Not Named
Determination	Way
Maintenance	None
Feature	Typical condition of Route/Way

**Photopoint 008. There is no more vehicle use evident along this way.**




Google DigitalGlobe, USDA Farm Service Agency  
 N 34° 49' 36.23"  
 W 113° 06' 38.13" 5341 ft 3/24/2015

Attributes	
Title	Photopoint 009
Unit name	Scratch & Jerky Canyons
Route name	BLM Route 7670
Determination	Way
Maintenance	None
Feature	Typical condition of Route/Way

**Photopoint 009. The proposed southern LWC boundary.**




Google DigitalGlobe, USDA Farm Service Agency  
 N 34° 48' 33.46"  
 W 113° 06' 08.72" 5689 ft 3/24/2015

Attributes	
Title	Photopoint 010
Unit name	Scratch & Jerky Canyons
Route name	BLM Route 7670
Determination	Way
Maintenance	None
Feature	Erosion

**Photopoint 010. An eroded stretch of BLM Route 7670.**



Google  
DigitalGlobe, USDA Farm Service Agency



N 34° 48' 22.60"  
W 113° 06' 34.07"      5446 ft      3/24/2015