Proposed Lands with Wilderness Characteristics:

Aquarius Mountains

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

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Table of Contents

Cover Photo: Looking northeast into the proposed LWC from the southern boundary road (BLM Route 7658). Bull Canyon is the obvious drainage, and in the distance are the two highest peaks of the unit. The high, rugged peaks of the proposed LWC provide outstanding opportunities for hiking, mountain climbing, hunting, backpacking, and more primitive types of recreation.

All photos by the authors 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.[1]

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

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

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

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

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

[1] 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

[2] Manual 6310 is available online at :
http://www.blm.gov/pgdata/etc/medialib/blm/wo/Information_Resources_Management/policy/blm_manual.Par.38337.File.dat/6310.pdf

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

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

- **Size**

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

- **Naturalness**

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

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

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

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

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

- **Supplemental values**

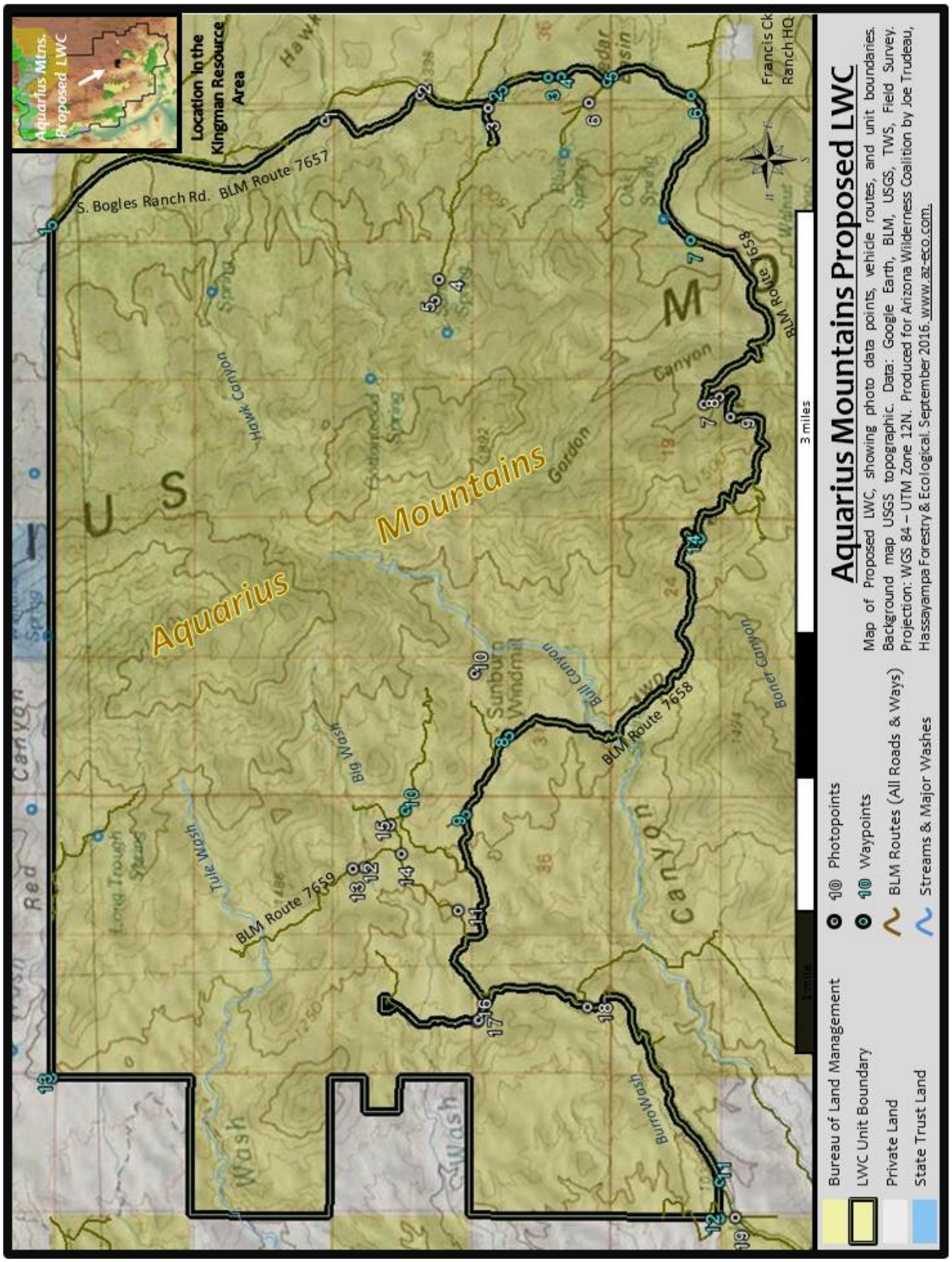
Ecological, geological, scientific, scenic, educational or historical features should be documented where they exist, although they are not required traits.

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

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

- "Wilderness inventory roads" are routes which have been: (1) *improved and maintained* (when needed), (2) *by mechanical means* (but not solely by the passage of vehicles), (3) *to insure relatively regular and continuous use*.
- "Primitive routes" or "ways" are transportation linear features located within areas that have been identified as having wilderness characteristics and not meeting the wilderness inventory road definition.

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


Aquarius Mtns. Proposed LWC
Location in the Kingman Resource Area
S. Bogles Ranch Rd. BLM Route 7657
Aquarius
Mountains
BLM Route 7658
BLM Route 7659
Hawk Canyon
Big Wash
Tule Wash
Bull Canyon
Boner Canyon
Burro Wash
Francis Ck Ranch HQ
3 miles
1 mile
Aquarius Mountains Proposed LWC
Map of Proposed LWC, showing photo data points, vehicle routes, and unit boundaries.
Background map USGS topographic. Data: Google Earth, BLM, USGS, TWS, Field Survey.
Projection: WGS 84 – UTM Zone 12N. Produced for Arizona Wilderness Coalition by Joe Trudeau,
Hassayampa Forestry & Ecological. September 2016. www.az-eco.com.
Bureau of Land Management
LWC Unit Boundary
Private Land
State Trust Land
10 Photopoints
10 Waypoints
BLM Routes (All Roads & Ways)
Streams & Major Washes

SECTION 1: Proposed LWC Overview

Unit Location

The Aquarius Mountains Proposed LWC (20,281 acres) is located in the southeastern region of the Kingman Resource Area in the central Aquarius Mountains, approximately seven miles to the northeast of Wikieup, and five miles east of Highway 93. Trout Creek is approximately nine miles to the north and the Mohon Mountains are 8 miles to the northeast. Francis Creek is two and a half miles to the east, Burro Creek is about 14 miles to the east, and the northern edge of the Upper Burro Creek Wilderness is roughly five miles to the southeast of the proposed LWC unit.

Brief Boundary Description

The proposed LWC unit is bounded by wilderness inventory roads and property boundaries. South Bogles Ranch Road (BLM Route 7657) is a maintained wilderness inventory road that forms the eastern proposed LWC unit boundary. The southern boundary is BLM Route 7658, another wilderness inventory road. The BLM property line bordering private land serves as the entire western unit boundary. The BLM property boundary with private land and State Trust land serves as the northern Aquarius Mountains Proposed LWC boundary.

Landforms & Biological Communities

The proposed LWC contains some of the central Aquarius Mountains, a northwest - southeast running mountain range that defines the eastern confines of the Big Sandy River watershed. In this rugged, mountainous area, a dozen peaks rise to over 5000 feet, and there is as much as 3000 feet of elevation gain from low points in Burro Wash, Tule Wash or Big Wash to the summit of the highest peak at 6,236'. Four major drainages descend towards the Big Sandy River to the west: Tule Wash, Big Wash, Burro Wash, and Bull Canyon. The unit is almost entirely composed of Precambrian granitic rocks, which form the basement for this part of North America (Arizona Geological Society, 2000). Most of the unit is within the Apache Highlands ecoregion, but the furthest western lobes are classified as Sonoran Desert, even though the Sonoran influence is evident for much of the western slopes of the range. The proposed LWC clearly showcases the diverse vegetative ecotone between these two regional ecosystems. The Sonoran Desert sections slopes are mostly clad in the Sonoran Paloverde-Mixed Cacti Desert Scrub, the Apacherian Mesquite Upland Scrub, and the Sonoran Mid-Elevation Desert Scrub ecological systems. Climbing in elevation, the vegetation changes to a matrix of Mogollon Chaparral, with patches of Colorado Plateau Pinyon-Juniper and Madrean Pine-Oak Woodlands (USGS, 2015). These ecological types are typical of the Apache Highlands and dominate the eastern flanks of the LWC as well.

Eight known springs occur in the unit, most of which are not reached by vehicle routes. Vegetation at the springs and reaches downstream consists of chaparral and woodland species accented with Gambel oak (*Quercus gambelii*), Palmer oak (*Q. palmeri*), Gooding willow (*Salix goodingii*), Fremont cottonwood (*Populus fremontii*), Arizona walnut (*Juglans arizonica*) and coffeeberry (*Rhamnus californicus*). See photopoint 5 for an excellent example of a deciduous hardwood riparian community.

SECTION 2: Wilderness Characteristics

The proposed LWC meets the minimum size criteria for roadless lands

The Aquarius Mountains Proposed LWC encompasses approximately 20,281 roadless acres. There are no inholdings. Two cherrystems provide access to ranch infrastructure:
1) on the eastern edge, a short un-numbered route accesses a corral which was being improved at the time of our inventory in late winter, 2015 (see photopoint 3);
2) an un-numbered route leaves the southern boundary and accesses a ranch compound after less than a mile. The route is well-maintained and closed with a locked gate (see photopoints 16 & 17).

The proposed LWC is affected primarily by the forces of nature

The proposed LWC is without a doubt dominated by the forces of nature. There are over 20,000 acres of wild, nearly untouched land within the proposed unit. The area is quite remote and the backcountry provides challenging access in dense vegetation on steep slopes. The AWC inventory team encountered no other humans within this unit, and little evidence of human activity exists within the proposed boundaries. Challenging travel through the chaparral vegetation, which is present throughout much of the LWC, and steep, rocky mountainsides prohibit most human disturbance. When looking at the landscape within the proposed LWC, it appears to be primarily affected by the forces of nature particularly because the hillsides are comprised of continuous, naturally occurring vegetation with very few linear manmade features or other human impacts, which consist of primitive routes, ranching infrastructure, and abandoned mining, most of which are confined to the unit's edges.

This photo, taken from waypoint 14, shows the immense mountainsides and craggy summits in the southern part of the unit. An abandoned mine prospect is in the picture, which is barely noticeable to the average visitor. The route to access the prospects no longer exists.

Primitive Routes

Very few primitive routes (ways) enter into the unit, and most do not penetrate deeply into the units core. The ways that do exist enter from the eastern and southern boundaries, with most of the proposed LWC containing no primitive routes at all, and none entering from the western or northern boundaries with private and State Trust land. These routes, described in detail in Section 3, are lightly used, single lane two-tracks. Photopoints 6, 10 & 15 (see section 4) are examples of how light the use is for most of these primitive routes. Chaparral is abundant throughout the proposed LWC and conceals many of the ways so that they are hardly detectable unless you are actually on the route (see photopoints 4 &7). The most substantial primitive route is BLM Route 7659, which departs the southern boundary near photopoint 11. This route accesses a well and corral after 2 ¾ miles, and goes no farther. The route was likely built for mineral prospecting, and after the abandonment of the mining efforts a well was drilled and ranch use became the primary purpose. The route was worked on at some point nearly a decade ago, and has since fallen into disrepair (see photopoints 11, 12 & 13 for examples of the erosion and encroaching vegetation). The route is no longer being maintained, and thus we have determined it is a way. It is our determination that the existence of these routes does not substantially affect the wilderness user experience because there are so few of them, they are generally concealed from view by vegetative screening (reference same photos for examples of dense vegetation lining the routes), use is limited almost exclusively to ranchers, and the routes are generally low on the hillsides, and most recreational use would occur higher in the mountains.

Ranch Infrastructure

There are relatively few ranching impacts within the proposed LWC, especially when compared to the large size of the proposed unit. Most of these ranching influences are concentrated along the eastern and southern unit boundaries, and one well in the unit interior. There are two corrals along the eastern LWC bound, one of which is close to the proposed LWC boundary line (midway between photopoints 2 & 3) and is not reached by a spur route, and the other was excluded because of active improvement work which was ongoing (see photopoint 3). These corrals are substantially unnoticeable to the average visitor because BLM Manual 6310 states that fencing is included in the list of human-made features that can be considered substantially unnoticeable, and they are so close the boundary road. A windmill and water tank was excluded associated with the route shown in photopoints 1 &2. The route was used as the unit boundary because of the combination of the ranch infrastructure, the management challenges with limiting use of a through-route, and the route is often used for RV-camping. A feed trough is located at the end of the route shown at photopoint 6. The road is not currently maintained and any stocking of the trough could be accomplished by horseback.

Two more corrals are located a short distance from the southern boundary; one of these appears to be unused and has fallen into disrepair (1/4 mile west of photopoint 10), and the Sunburn Windmill and water tanks, which are adjacent to the southern boundary, have been excluded from the proposed LWC unit, and therefore, do not affect the naturalness within the LWC at all. "*Human impacts outside the area will not normally be considered when assessing naturalness of an area*" (BLM Manual 6310, p. 7). The last stock tanks within the proposed LWC are found in the west-central part of the unit, and

again, are substantially unnoticeable to the average visitor, especially because of vegetative screening and the small area of impact when compared to the unit as a whole. A corral and some ranch infrastructure at the end of an excluded cherrystem road (Photopoint 17) have been omitted from the proposed LWC, and therefore do not affect the naturalness within the unit.

Inactive Mining

No current mining activity was observed during the AWC inventory. Along the southern boundary, there are some old mining impacts that are revegetating and naturalizing, including unused access routes, crumbling wooden structures, a concrete building pad, and diggings (see photopoints 7, 8, 9, & 14). Claim stakes may occur within the unit at claim corners, but no active mineral exploration is currently underway. The presence of mineral claims does not affect naturalness, as "*undeveloped possessory interests (e.g., mineral leases) are not treated as impacts to wilderness characteristics because these rights may never be developed*" (BLM Manual 6310, page 10).

Summary of Human Impacts

Collectively, the impacts documented above do not substantially detract from the naturalness of the proposed LWC. Currently maintained infrastructure was excluded from the unit. The natural forces of wind, water and fire have sculpted this landscape and its ecosystems. Human impacts in the form of primitive routes, ranching infrastructure, and old mines, are few and far between, and considered to be substantially unnoticeable to the average visitor, especially considering that most are along the unit boundary. The Aquarius Mountains Proposed LWC is and has always been affected primarily by the forces of nature, with periodic attempts by man to reshape the face of what is an expansive, wild mountain range.

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

There are outstanding opportunities to find seclusion within the proposed LWC, where almost anywhere, recreationists can easily avoid the sights, sounds, and evidence of other people. The chaparral and pinyon-juniper woodland vegetation provides exceptional vegetative screening. These dense vegetation types can hide just about anything from view of visitors, especially once the hiker, hunter, or equestrian has ventured deep into the area. Campers, birdwatchers, deer hunters and other visitors can certainly find seclusion nearly anywhere within the proposed LWC by either using the vegetation to screen themselves from others, or by finding a hidden spot in one of the many canyons, saddles, or wooded mountainsides. Opportunities for finding solitude are abundant and absolutely outstanding within the Aquarius Mountains' steep terrain, winding drainages, and abundant topographic relief.

There are numerous opportunities to recreate in primitive and unconfined ways within the Aquarius Mountains Proposed LWC. With more than 20,000 acres, the proposed LWC offers abundant prospects for dispersed, undeveloped recreation in challenging, engaging terrain and vegetation. Day-hikers can chart off-trail routes to the rocky summits and ridgelines of the Aquarius Mountains, enjoying vast views in all directions. Those looking for an extended experience can backpack for days exploring the meandering drainages and isolated peaks, relying on the eight known springs located within the proposed unit, which provide water resources for backpackers and horseback riders. Rock climbers and

desert mountaineers will find challenging routes to explore amid the numerous granitic boulders, ledges, cliffs, and outcrops. For those interested in wildlife and plants, there is a diversity of both to identify, observe, and photograph. Scenic values are immense, with vast views of distant peaks, canyons, and plains. The westernmost portions of the unit are more open, desert slopes. Despite there being less vegetation, and therefore limited vegetative screening, there are several small mountains with sharp, defined summits that would provide outstanding opportunities for day hikes to excellent 360° views. Those looking for solitude and/or primitive and unconfined recreation opportunities will agree that the Aquarius Mountains Proposed LWC offers all of these outstanding experiences and more.

The eastern and northern portions of the Aquarius Mountains Proposed LWC, whether in Hawk Canyon, at Cottonwood Spring, or in the rugged high country, is incredibly isolated. Once on the east side of the crest of the range, the solitude that one can experience is deeper and quieter than most other places within the Kingman Resource Area. Shielded from Highway 93 and almost all other signs of humanity, the opportunities for solitude in this area are outstanding, with stunning silence and absolutely no light pollution. The view looking southeast toward Burro Creek and beyond is breathtaking; this is what the West looked like before civilization fragmented the countryside with roads and the many human disturbances that come along with development. Places to experience such profound solitude are disappearing, leaving future generations deprived of opportunities that were once abundant. Establishing the Aquarius Mountains LWC would protect such wilderness character for many to enjoy far into the future. Without protection, resource extraction could completely ruin this outstanding opportunity to experience solitude. The private lands that surround the northern and western side of the proposed LWC are experiencing rapid parcel subdivision and residential development. What is today a mostly intact landscape of private and state lands will someday be much different. It is important that the BLM considers the long-term value of preserving large wild and natural areas adjacent burgeoning developments.

Works Cited

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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

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 Aquarius Mountains 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 Aquarius Mountains Proposed LWC unit contains about 20,281 contiguous roadless acres, with few primitive routes permeating the unit boundary, and none cutting into its core. The Photopoints described here of the Aquarius Mountains 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.

Eastern Boundary

Waypoint 1 marks the northeastern corner of the Aquarius Mountains Proposed LWC unit. Heading south from Waypoint 1, South Bogles Ranch Road (BLM Route 7657) is a well-maintained wilderness inventory road that forms the eastern proposed LWC unit bound. The images in Photopoints 1 and 2 show a primitive loop route leaving BLM Route 7657. The way in Photopoint 1 heads southwest into the unit. This primitive route was constructed, and contains no apparent evidence of maintenance or improvements, and is therefore not a road as defined by BLM Manual 6310. The way makes a loop to the south and back to BLM Route 7657, passing a windmill and water tank, and might be the old roadbed before the road was improved and its course altered. Photopoint 2 was taken at the southern end of this primitive route where it once again intersects BLM Route 7657. As this image displays, there is vegetation growing in the middle of the way, indicating a lack of maintenance. Despite the condition of the route, we are proposing it as the unit boundary because of its impact on naturalness: it is commonly used for camping, there is the windmill and water tank along it, and the route is a through-way so it would be difficult for BLM to manage the particular area as an LWC.

Continuing south on BLM Route 7657, Photopoint 3 shows a short cherrystem heading west into the proposed LWC unit. There is a campsite on this route, right near the main road. This cherrystem (wilderness inventory road) is actively used by ranchers and leads to a corral where there are piles of materials, apparently being prepped for corral maintenance. The cherrystem into the Aquarius Mountains unit ends at the corral and becomes a primitive route after the corral (west of the corral). Photopoint 4 shows the typical condition of the primitive route beyond the corral, which displays no

evidence of construction or maintenance. Additionally, the primitive route corridor is extremely narrow in many places, growing in with vegetation and quite eroded. This way leads to Sam Spring, an undeveloped spring with an interesting stand of native trees surrounding it (see Photopoint 5).

Returning to BLM Route 7657 and heading south, Waypoint 2 is at the intersection of a primitive route and BLM Route 7657. This way shows no evidence of construction or maintenance, and leads to a campsite. Farther south along the wilderness inventory road, the BLM route inventory data displays a route heading into the LWC unit at Waypoint 3, and returning at Waypoint 4. This supposed route is most likely the old roadbed, but is no longer used or maintained. Another primitive route leaves BLM Route 7657 at Waypoint 5, heading northwest into the unit. As Photopoint 6 displays, this route leads to a small feed trough, was constructed, but is not being maintained, and is not a wilderness inventory road as defined by BLM Manual 6310.

Southern Boundary

At Waypoint 6, the unit boundary turns to the west becoming BLM Route 7658 (a constructed and maintained road). Traveling west along the Aquarius Mountains Proposed LWC unit boundary, the BLM route inventory data displays a route going into the unit at Waypoint 7. This supposed route leads to an abandoned corral, and then loops back to the wilderness inventory road. However, there was no evidence of this route on the ground, and the corral is in disrepair, therefore, this supposed route no longer serves a purpose and has naturalized. Farther west, Photopoint 7 depicts a primitive route that is all but gone, and accesses an abandoned mine. This route shows evidence of construction, but no maintenance, and is revegetating. The way in Photopoint 7 is not a wilderness inventory road as defined by BLM Manual 6310. Photopoint 8 was taken looking up another primitive route that leads to the same abandoned mine. This unnamed route was constructed, but as the photo illustrates, is not being used or maintained; is growing in with vegetation; and is not a road. Photopoint 9 depicts another old primitive route to abandoned mining infrastructure. The road on the left is BLM Route 7658 and the way on the right leads dilapidated mining infrastructure. As the photo shows, this old route is no longer used and has completely revegetated.

Continuing west/northwest along BLM Route 7658, Sunburn Windmill has been excluded from the LWC unit. Waypoint 8 marks the location of Sunburn Windmill along BLM Route 7658. Farther west along BLM Route 7658, Photopoint 10 displays an image of a primitive route within the Aquarius Mountains LWC unit. There is no evidence that this way was constructed, there are no evident improvements, it does not show any evidence that it is being maintained, and there is no apparent purpose to this way. The primitive route shown in Photopoint 10 is therefore a way, not a road. Waypoint 9 marks the spot where the BLM route inventory data shows another route entering the proposed LWC unit heading north. There wasn't evidence of this route located during AWC's inventory; indicating that if it is being used, it gets very low use. The primitive route at Waypoint 9 is not being mechanically maintained and is therefore a way, and not a road according to BLM Manual 6310.

Returning to BLM Route 7658, Photopoint 11 depicts a primitive route (BLM Route 7659) heading into the Aquarius Mountain Proposed LWC unit. Although this way was constructed and eventually leads to

a well and stock tank, it shows no apparent evidence of recent maintenance, and consequently is not a wilderness inventory road as defined by BLM Manual 6310. Photopoints 12 and 13 also show images of BLM Route 7659, and act as further evidence of erosion and a general lack of maintenance along this way. Photopoint 14 displays an image of a primitive route stemming from BLM Route 7659, heading east. This unnamed way may have been constructed, but contains no apparent evidence of maintenance, and its purpose is unknown. Photopoint 15 depicts a junction of two ways. Photopoint 15 serves as evidence that the way seen in Photopoint 14 (way on left in Photopoint 15) gets fainter as it travels east. The primitive route on the right in the photograph for Photopoint 15 shows no evidence that it is receiving maintenance, and it is a way as well. The way on the right continues down into a wash. Waypoint 10 marks the location where the BLM route inventory displays a route going southwest down a wash. There was no evidence of vehicular use of this wash, and even the BLM route inventory data calls this a "cattle trail".

Returning to BLM Route 7658 and traveling west, Photopoint 16 is the next point of interest. Photopoint 16 displays an image of an unnamed route that has closed off to public use at this locked gated. Photopoint 17 shows the condition of this road beyond the gate. The wilderness inventory road displayed in Photopoints 16 and 17 was constructed and has received a recent blade. This road appears to lead to a ranch house and corral. Because of the maintenance and regular use we have cherrystemmed the route and excluded the compound from because of impacts to naturalness.

BLM Route 7658 continues as the Aquarius Mountains Proposed LWC unit boundary, and turns to the south. Photopoint 18 displays a short spur primitive route that leads to a campsite. As the photo shows, this way contains no evidence of construction; and is being kept open solely by the passage of vehicles. Due to a lack of evidence of mechanical maintenance, this is a primitive route, not a road. At Waypoint 11, the LWC unit boundary becomes the BLM property bound, and turns to the west. Photopoint 19 depicts a primitive route that eventually enters the Aquarius Mountains LWC unit from the south. As the photo illustrates, this is a way that shows no evidenced of construction or maintenance; making it a primitive route, not a wilderness inventory road.

Western Boundary

At Waypoint 12, the BLM property line and the Aquarius Mountains Proposed LWC unit boundary turns due north. The BLM property line serves as the proposed LWC unit boundary for its entire western bound. No routes or human impacts cross this boundary

Northern Boundary

Waypoint 13 marks the northwestern proposed LWC unit corner. From Waypoint 13, the BLM property bound serves as the northern Aquarius Mountains Proposed LWC boundary. The BLM route inventory data depicts a route entering the LWC unit from the north. This is a "need to verify" route and there is no evidence of this route on the ground. This supposed route appears to simply be an unused wash; not a route at all. The northern proposed LWC unit boundary is the BLM property line the entire distance 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	Aquarius Mtns
Route name	Not named
Determination	Road
Maintenance	None
Feature	Typical condition of Route/Way

Photopoint 001. Road looping into the unit.

Attributes	
Title	Photopoint 002
Unit name	Aquarius Mtns
Route name	Not named
Determination	Road
Maintenance	None
Feature	Typical condition of Route/Way

Photopoint 002. This is the southern end of the Road depicted in Photopoint 1.

Attributes	
Title	Photopoint 003
Unit name	Aquarius Mtns
Route name	Not named
Determination	Way
Maintenance	None
Feature	Typical condition of Route/Way

Photopoint 003. A short cherrystem leading to a corral. Maintenance appeared to be imminent.

Attributes	
Title	Photopoint 004
Unit name	Aquarius Mtns
Route name	Not named
Determination	Way
Maintenance	None
Feature	Typical condition of Route/Way

Photopoint 004. Primitive route beyond cherrystem section.

Attributes	
Title	Photopoint 004
Unit name	Aquarius Mtns
Route name	NA
Determination	NA
Maintenance	NA
Feature	Grove of deciduous and riparian trees surrounding natural spring.

Photopoint 005. Interesting grove of native trees surrounding Sam Spring.

Attributes	
Title	Photopoint 006
Unit name	Aquarius Mtns
Route name	Not named
Determination	Way
Maintenance	None
Feature	Typical condition of Route/Way

Photopoint 006. Picture shows evidence of a lack of maintenance.

Attributes	
Title	Photopoint 007
Unit name	Aquarius Mtns
Route name	Not Named
Determination	Way
Maintenance	None
Feature	Typical condition of Route/Way

Photopoint 007. Rough primitive route that is revegetating.

Attributes	
Title	Photopoint 008
Unit name	Aquarius Mtns
Route name	Not Named
Determination	Way
Maintenance	None
Feature	Typical condition of Route/Way

Photopoint 008. Primitve route leading to abandoned mine.

Attributes	
Title	Photopoint 009
Unit name	Aquarius Mtns
Route name	Not named
Determination	Way
Maintenance	Old evidence
Feature	Junction of Routes/Ways

Photopoint 009. Naturalized route below abandoned mining infrastructure.

Attributes	
Title	Photopoint 010
Unit name	Aquarius Mtns
Route name	Not Named
Determination	Way
Maintenance	None
Feature	Typical condition of Route/Way

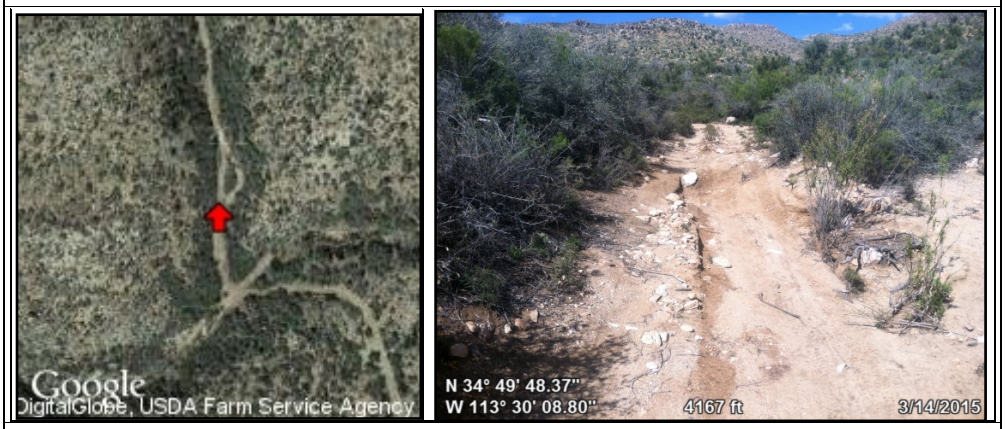
Photopoint 010. An unmaintained way within the proposed LWC unit.

Attributes	
Title	Photopoint 011
Unit name	Aquarius Mtns
Route name	BLM Route 7659
Determination	Way
Maintenance	None
Feature	Erosion

Photopoint 011. There is evidence of past maintenance on this way; however, major stretches of erosion exist in numerous places, indicating a lack of current maintenance.

Attributes	
Title	Photopoint 012
Unit name	Aquarius Mtns
Route name	BLM Route 7659
Determination	Way
Maintenance	None
Feature	Erosion

Photopoint 012. Note the vegetatioin growing in the median of this way; further evidence of a lack of maintenance.



Attributes	
Title	Photopoint 013
Unit name	Aquarius Mtns
Route name	BLM Route 7659
Determination	Way
Maintenance	None
Feature	Erosion

Photopoint 013. Yet another stretch of this primitive route exhibiting severe erosion.

Attributes	
Title	Photopoint 014
Unit name	Aquarius Mtns
Route name	Not named
Determination	Way
Maintenance	None
Feature	Typical condition of Route/Way

Photopoint 014. Another primitive route that stems from BLM Route 7659.

Attributes	
Title	Photopoint 015
Unit name	Aquarius Mtns
Route name	Not named
Determination	Way
Maintenance	None
Feature	Typical condition of Route/Way

Photopoint 015. A junction of two ways.

Attributes	
Title	Photopoint 016
Unit name	Aquarius Mtns
Route name	Not named
Determination	Road
Maintenance	Recent blade
Feature	Closure point

Photopoint 016. Point of closure on this cherrystemmed road.

Attributes	
Title	Photopoint 017
Unit name	Aquarius Mtns
Route name	Not named
Determination	Road
Maintenance	Recent blade
Feature	Typical condition of Route/Way

Photopoint 017. A wilderness inventory road with obvious maintenance.

Attributes	
Title	Photopoint 018
Unit name	Aquarius Mtns
Route name	Not Named
Determination	Way
Maintenance	None
Feature	Junction of Routes/Ways

Photopoint 018. A short way leading to a campsite.

Attributes	
Title	Photopoint 019
Unit name	Aquarius Mtns
Route name	Not named
Determination	Way
Maintenance	None
Feature	Typical condition of Route/Way

Photopoint 019. This primitive route eventually zigzags in and out of the unit for a short distance in the far southwestern unit corner.