DOS CABEZAS MOUNTAINS

LANDS WITH WILDERNESS CHARACTERISTICS

PUBLIC LANDS CONTIGUOUS TO THE BLM'S DOS CABEZAS MOUNTAINS WILDERNESS IN THE NORTHERN CHIRICAHUA MOUNTAINS, ARIZONA



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



ARIZONA WILDERNESS COALITION

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TABLE OF CONTENTS PREFACE: This Proposal was developed according to BLM Manual 6310———page 3 Section 1: Overview of the Proposed Lands with Wilderness Characteristics Unit Introduction: Overview map showing unit location and boundaries provides a brief description and labels for the units' boundary Previous Wilderness Inventories: Map of former WSA's or inventory unit's provides comparison between this and past wilderness inventories, and highlights new information Section 2: Documentation of Wilderness Characteristics The proposed LWC meets the minimum size criteria for roadless lands———page 11 The proposed LWC is affected primarily by the forces of nature— -page 12 The proposed LWC provides outstanding opportunities for solitude and/or primitive and unconfined recreation— -paae 16 A Sky Island Adventure: an essay and photographs by Steve Till— –page 20 MAP: Hiking Routes in the Dos Cabezas Mountains discussed in this report— -page 22 The proposed LWC has supplemental values that enhance the wilderness experience & deserve protection— -page 23 Conclusion: The proposed area should be managed for protection of wilderness characteristics— -page 28 Appendices--paae 29 <u>Section 3: Detailed Maps and Description of the Unit Boundary,</u> Roads, Ways and Human Impacts —раае 32 Detail Maps with Photopoint Locations— -page 33 Narrative Description of the Proposed LWC Boundary and Vehicle Routes————— -page 38 Section 4: Photopoint Data Data Tables and Geotagged Photographs to accompany the

Cover Photo: Taken at point S4, this view looks over riparian forests in Buckeye Canyon towards Dos Cabezas Peaks. The historic rail line to the Buckeye Mine is visible cutting across the steep canyon walls on the left. This long-abandoned route was hand built with extensive dry-stacked stone support walls. It now provides an outstanding hiking route that blends incredible scenery, history, and adventure.

Detailed Boundary & Vehicle Routes Description—

-page 43

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 Safford Resource Area of southeastern Arizona, based on new, accurate, and upto-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.

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

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

¹Memorandum 2011-154 is available online at:

² 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

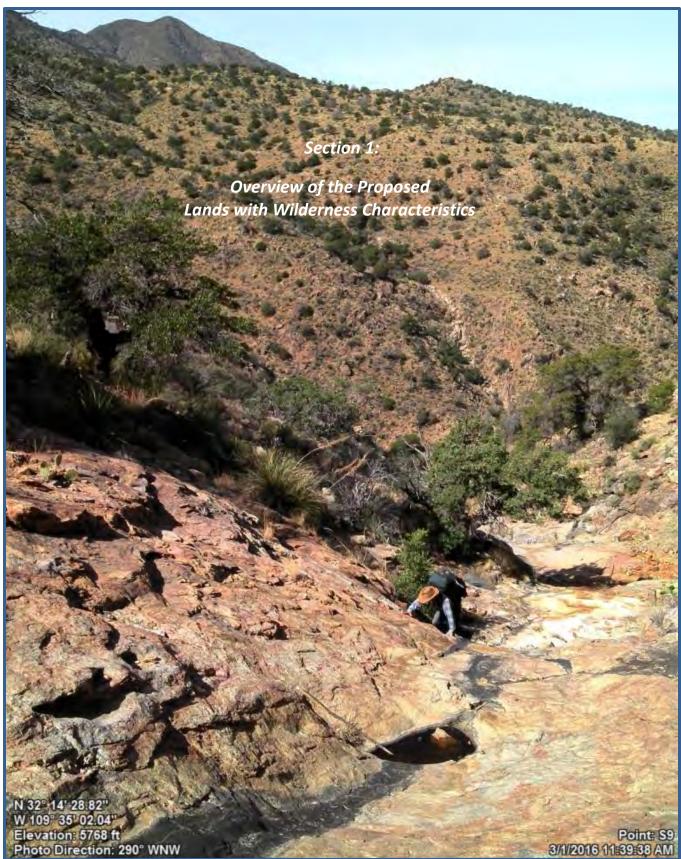
Trips to the field were strategic, focused efforts. For each unit, we developed a list of field inventory points that we endeavored to visit either by foot or vehicle. By using the BLM Route Inventory Dataset, the BLM Range Improvements dataset, the USGS Springs dataset, the Arizona Land Resources Information 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.

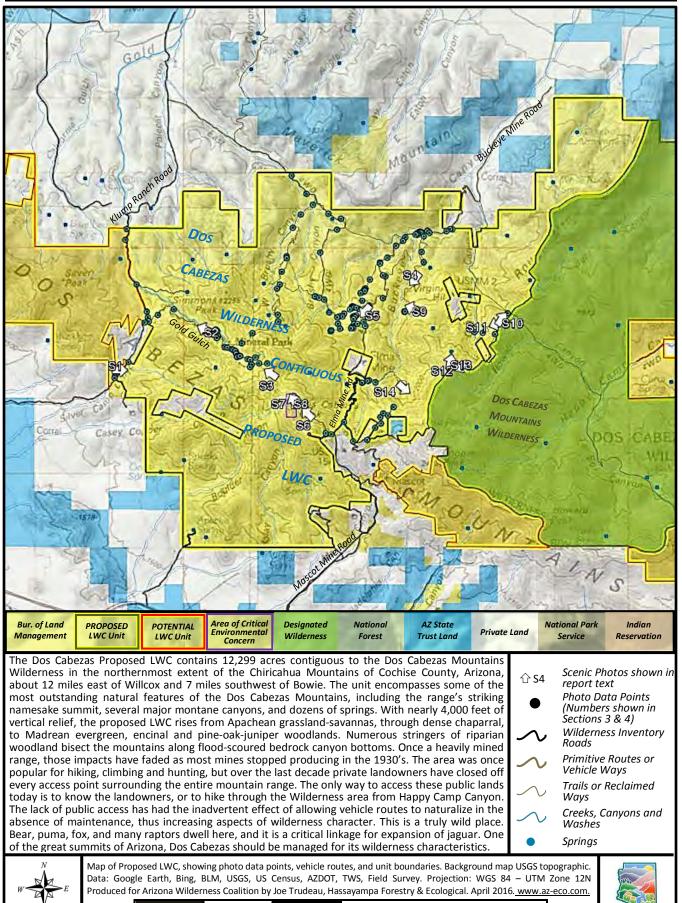
STEP 5: FINAL ASSESSMENT, MAPPING, AND DATA COMPILATION

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".



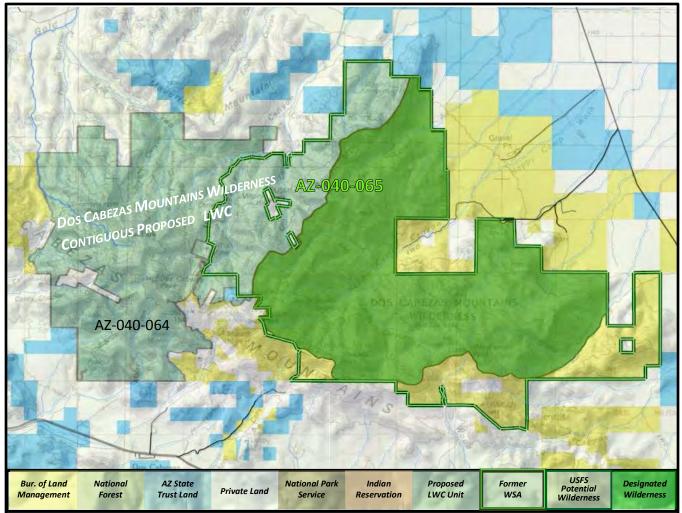
A number of canyons and drainages offer exceptional scrambling opportunities on granite slickrock smoothed by millennia of weathering. After a wet spring or heavy monsoon rain event, it would be truly outstanding to admire the waterfalls that would result, flowing down features such as this steep drainage above the relics of the Buckeye Mine.

Unit Introduction: Overview map showing unit location & labeled boundaries



3 miles

Previous Wilderness Inventories: Map & discussion of former WSA's or inventory units



The Dos Cabezas Mountains Wilderness Contiguous Proposed LWC encompasses the western portion of the Happy Camp Wilderness Study Area (AZ-040-065) and an area to the west that was previously identified by BLM as inventory unit AZ-040-064. The BLM drew the western wilderness boundary to follow the ridgelines of Rough Mountain because the 6,511 acres of the WSA to the west had known mineralized areas, and the agency sought to avoid enclosing private lands on Virginia Hill and upper Cement Canyon, despite that area having been recognized for its naturalness and outstanding wilderness characteristics, and those private parcels lacking in any vehicle access routes or other substantial impacts to naturalness. Unit AZ-040-064 was disqualified in the first phase of wilderness inventory, having been determined to be "obviously lacking" wilderness character. We fundamentally disagree with that determination, as that unit contained Dos Cabezas Peak, Simmons Mountain, and several wild canyons. The dividing line between the two units was the Buckeve Canvon Road, which we have now documented as a revegetating, unmaintained way. The largest deficiency in protecting wilderness qualities was BLM's determination not to include the spectacular summit towers of Dos Cabezas Peak in wilderness recommendations. In 1987, Arizona Wilderness Coalition proposed that the Wilderness should extend 2,100 acres to the west of the WSA and contain these wild, craggy spires, and five springs. Another reason that the BLM excluded the western portion of the WSA was the planned development of the Buckeye and Apache Mines, which would have disturbed 115 surface acres, and seen a tramway, roads and other developments constructed, including filling 20 acres of Buckeye Canyon with tailings. The BLM stated in the 1987 Final Wilderness EIS that "due to the extremely steep and rocky nature of this part of the WSA, disturbance to natural values would be permanent. In this rugged environment, reclamation would not preserve the areas natural qualities...[and] No Wilderness would result in significant impairment of wilderness values in the western part of the WSA around Buckeye Canyon" (pp. 133-134). Fortunately, these developments never occurred, and that portion of the proposed LWC (see cover photo) is a wild, exceptionally scenic area that deserves protection from exactly those types of activities. This proposal will show that the proposed LWC is contiguous with the designated Wilderness, and the human impacts that disqualified areas from wilderness consideration during the 1979/1980 inventory process have not been maintained or improved, and do not substantially degrade the naturalness of the unit as a whole.



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. <u>www.az-eco.com.</u>

5 miles

1 mile

Section 2:

Documentation of Wilderness Characteristics



Dos Cabezas Peaks from the southeast, along the approach trail, a typical example of one of the many reclaimed vehicle ways in the unit that now make excellent hiking trails. These peaks epitomize outstanding opportunities for solitude and primitive and unconfined recreation. This is truly one of the great desert summits of the southwest. We summited the right peak after negotiating a difficult circumnavigation of the summit towers, through dense chaparral and Madrean oak woodland.

Size Criteria

At ~12,299 acres of contiguous BLM land, the Dos Cabezas Proposed LWC meets the minimum size criteria for roadless lands set forth in BLM Manual 6310. As the unit shares six miles of contiguous boundary with the Dos Cabezas Mountains Wilderness, there are more than 24,000 contiguous acres of lands with wilderness characteristics. There are three private inholdings contained within the proposed LWC, none of which have any vehicle access leading to them, nor any substantial modern development. The Virginia Hill parcel is approximately 78 acres, and was mined to a slight degree around 1900; there are no remaining structures or impacts to visual purity. The upper Cement Canyon parcel is approximately 20 acres and may have been mined during that era, but no evidence was observed to remain on the property. The Casey Copper Canyon parcel is approximately 170 acres, and has several small, old mines on it that produced into the early 1900's. The Elma Mine parcel is reached by a one-mile cherrystem road which forks off Mascot Mine Road. The Silver Camp Mine parcel is excluded from the unit along the western boundary road. A very short cherrystem enters the southwestern corner of the unit and accesses a spring, and a single iron radio tower is excluded near the top of Mascot Mine Road.



Looking down the long western ridge (Peak 8,095' at "A") from the top of Dos Cabezas toward Simmons Peak ("B") and the Pinaleno Mountains ("C"). There is only one primitive route on Simmons Peak that leads to a spring on its lower west slopes. With no other ways or trails, Simmons Peak offers yet another outstanding destination for those seeking solitude. Our inventory team camped at the meadow at "D". North of that meadow, an impressive grove of old-growth Gambel's oak drapes the north facing alcove. Some trees are probably more than 200 years old. The northern boundary of the proposed LWC abuts private land on the slopes of Maverick Mountain, at "E".

Naturalness

The Dos Cabezas Mountains Proposed LWC is affected primarily by the forces of nature and appears natural to the average visitor. Many of the human impacts that do exist in the area are located outside of the proposed LWC, and therefore do not affect the naturalness of the LWC itself. There are human impacts within the unit, but these are largely abandoned and slowly being reclaimed by nature's persistent forces of decomposition. Human impacts that we have documented include old mines that have not produced for at least 50 years, cattle ranching infrastructure that has not been maintained or used for at least a decade, vehicle ways, many of which are fully reclaimed, and primitive trails that have been maintained with hand tools.

There are several historic mine operations within the proposed LWC. Examples of these impacts can be found up Gold Gulch in a location known as Mineral Park. Having collapsed, burnt down, rotted, and grown in with brush, these old mine relics are largely dominated by the forces of nature and do not detract from wilderness character. The few mines in Mineral Park produced primarily copper, silver, gold, lead and iron in the late 1880's, with periodic production between 1915 and 1935 (Keith, 1973³). Additionally, Mineral Park is tucked into the bottom of Gold Gulch canyon and hidden from most vantages within the unit. Historic mines and relics are frequently found within Wilderness, and are usually in such a condition that it is obvious that wind, rain, and other natural influences are the dominant force at work. Such is the case with historic mine sites found within the proposed LWC. However, there is one exception: the old miners' cabin seen in points 26 and 27. This old cabin has been outfitted for occasional use by hunters that live in Bowie. From our perspective, this situation appears to be outside of allowable uses for publicly owned historic structures on public land that fall under protection of the Antiquities Act. Considering that this use is most likely not permitted, the impact to naturalness is unwarranted.

Ranching infrastructure within the area is almost entirely in a state of disrepair; appearing to be more dominated by the forces of nature than by man. Most fencing is down and deemed useless (see points 108 & 135), corrals are falling in on themselves and filling with brush and cacti (see points 46, 68 & 107) and virtually all water developments are non-functional. The cattle we observed appeared feral, and indeed we observed a number of unbranded cows. Our understanding is that some of the grazing permitees have operated outside of their agreements with the BLM in the past. Based on the overall very poor condition of the range management operations that we observed, it was unclear whether the cattle we observed were accounted for, or if there were sufficient infrastructure to carry through with a successful roundup. While the influence of ranching can be found in various places throughout the unit, these impacts are minimal and substantially unnoticeable to the average visitor. It seems that the heyday of livestock raising in the Dos Cabezas has long since passed. The only functional developments we observed were developed springs that are piped off of BLM land and onto private property north of the proposed LWC.

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³ Keith, Stanton B. 1973. Index of Mining Properties in Cochise County, Arizona. Arizona Bureau of Geology and Mineral Technology, Geological Survey Branch, Bulletin 187. University of Arizona, Tucson.



Peering down from a saddle along the northern ridge of the Dos Cabezas Peaks, this photograph documents the natural setting found down in Gold Gulch and the historic settlement of Mineral Park. Although this was historically a mining hotspot, the land has had time to heal and conceal evidence of this past use. From this vantage, the old mining impacts and routes can hardly be detected. Gold Gulch is truly a gem within the Dos Cabezas Proposed LWC, with historic mine buildings and equipment among old-growth juniper and massive oaks all within a rough canyon with an ephemeral stream. What fun to sit and ponder the lives of those people who once tried — and failed — to tame this wild country.



Heading west down the way that goes up Gold Gulch, this photo highlights the remoteness of this canyon that leads up to Mineral Park. This primitive route receives only very occasional ATV use, and makes for an outstanding trail. Amazingly, looking out to the northwest, one can barely make out the few signs of civilization in the distant background. Gold Gulch is truly a secluded canyon in an already remote landscape. As all of the vehicle access points on private land are gated, solitude is abundant.

Primitive routes and trails do not detract from the naturalness of the Dos Cabezas Mountains Proposed LWC. In fact, these ways enhance opportunities for primitive recreation. The actuality is that it is unique to be able to travel through such wild, untamed country on old miners' and cowboys' trails, some of which were created over a century ago. Furthermore, many primitive vehicle routes are revegetating due to a lack of use and maintenance, or have been reclaimed by natural processes. Examples of the typical condition of the lightly used primitive routes within the unit can be seen in points 18, 43, 48, 49, 63, 83, 102, 104, 119. Points 8, 29, 30, 34, 36, 54, 92, 138-142, and 146 depict some of the reclaimed ways found in the LWC, while points 50, 57, 58, 110, 125-127, 131-134, 139, and 153-155 illustrate what some of the old miners' and cowboy trails look like. None of these trails or ways are dominated by anything but nature, and all are considered to be substantially unnoticeable to the average visitor. The route that impacts naturalness the most is the one that enters the unit from the Klump Ranch on the north (see point 63), passes the old Buckeye Mill (see points 70-72), and eventually connects to the Elma Mine (see point 100). This route was bulldozed perhaps 10 years ago, and is a well-established bench, but it sees almost no vehicle traffic as the access is restricted on private property from all directions. Points 64, 65, 78-82, and 91 clearly show that the route is growing in with brush to the point that it would be impassable were access available.



Looking to the southwest toward Dos Cabezas Peaks (left), and Simmons Peak (right), from the way that connects the defunct Buckeye and Elma Mines, the viewer looks over a landscape that has healed from a long-passed period of industrious human use. The foothills and lower slopes in the foreground appear entirely natural, in spite of there being several old vehicle ways and the remnants on the Apache Mines, which stopped production in the late 1940's. These imprints are barely even discernable. This is an example of another big view with no major human impacts; completely natural to the average visitor. The alligator juniper savanna pictured here is a common vegetation type in this unit. Many junipers we observed are likely to be over 500 years old. In other areas, hillsides that were denuded a century ago for fuelwood have now returned in coppiced clumps of juniper and oak.



This photograph was taken from within the Dos Cabezas Mountains Wilderness to document that the radio towers to the south of Dos Cabezas Peaks are visible from within the Wilderness area. These developments are all located outside of both the Wilderness area, as well as the proposed LWC unit. The precedent has been set: these human impacts to not substantially detract from the naturalness of the Wilderness, nor do they significantly detract from the naturalness of the proposed LWC.

Outside human impacts include some mining, gravel quarrying, radio antennas, and the distant train and Interstate Highway to the north. The Elma Mine is situated on a private inholding, with access provided by a cherrystem from Mascot Mine Road. This mine has not operated since the late 1960's, and is tucked deeply into upper Buckeye Canyon. Some diggings, adits, and shafts, and several small buildings are all that remain of this once bustling operation, which peaked in the 1920's. The relics of this operation had no effect on our primitive recreation experience during our week long backpack trip. The Silver Camp Mine, on the western boundary road, has not produced since the 1930's, and signs of that operation are barely visible. The extensive mine workings associated with the vast Mascot Mine on the southern slopes of the range are not visible from anywhere within the unit. This mine has also been inactive, having stopped production in the 1950's. A gravel pit on private land in Lower Buckeye Canyon, outside of the unit, could have periodic sound impacts from the lower slopes of Rough Mountain, but we never noticed the operations during our entire trip. Very historical mining once occurred on private land on Virginia Hill, an inholding in the eastern portion of the unit, but nothing remains of that, as those workings probably were in the late 1800's. The radio towers along the southern boundary of the unit were visible from a few points, but as the photo above shows, they can be seen from within the designated Wilderness as well. From the summit of Dos Cabezas, while they were visible, they hardly affected the incredible experience of being so far above the surrounding valleys. The interstate and the train that parallels it are several miles to the north of the unit, and the train was actually only audible from our camp in Happy Camp Canyon, within the designated Wilderness. In sum, outside impacts do not substantially degrade any aspect of the naturalness of the proposed LWC.

Solitude & Recreation

The Dos Cabezas Mountains 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). All of these activities are present in the Dos Cabezas Proposed LWC. However, because access is restricted at every point of potential entry on private land, it is difficult to get into the public land. The only point of access that we determined was problem-free is to enter through Happy Camp canyon, and hike the Sky Islands Traverse route up Howell Canyon, crossing the pass at Rough Mountain, and entering the unit at the Wilderness boundary. The outstanding opportunities for solitude and primitive recreation that are well established in the existing Wilderness area are inherently present within the proposed LWC since the units are contiguous.



Looking toward Rough Mountain with the Dos Cabezas Mountain Wilderness on the right side of the hiker and the Dos Cabezas Mountains Proposed LWC to the left. The boundary between the two is an arbitrary line up the ridge, because as this photo documents, there are no human impacts anywhere in sight. The fence that follows the ridge is down in many places, and in fact it was cut at the pass at the southern side of Rough Mountain. Our route followed a primitive trail that brought us up Howell Canyon, from the right, to start our trip, and then back down it on the last day. That path is part of the 500 mile Sky Islands Traverse hiking route. The distant peak in the Wilderness is Government Peak, and the canyon to the left of Rough Mountain is Cement Canyon, which drains into lower Buckeye Canyon.

Because of restricted access, our inventory team spent seven days backpacking in the Dos Cabezas Proposed LWC unit, covering 45 miles and collecting data at over 200 pre-determined data points. We hiked in from the Dos Cabezas Mountains Wilderness because there are no other public access points to reach the area. Our route took us along the ridge between the Wilderness and the proposed LWC; down a drainage into upper Buckeye Canyon where we camped among giant sycamore and ash trees; to the summit of the hard-to-reach Dos Cabezas (northern peak) where we barely made it down in time to make camp in a saddle where we resorted to melting snow for water; into Gold Gulch and Mineral Park, which provided for a wonderful day of traveling through the past via antique buildings and long ago abandoned homesteads; over a pass into West Brushy Canyon; up East Canyon; then to an old miners pothole of a swimming hole in Brushy Canyon; to Buckeye Mill followed by hiking up the

old route to Buckeye Mine; to the summit of Virginia Hill; down to Cement Canyon; and then back to the Wilderness via an old miners trail. For this backpack adventure, we used many old primitive miners and cowboy trails; connecting them to make an amazing loop providing a most memorable wilderness experience.



Looking down Cement Canyon ("A") at Virginia Hill ("B") and the northeastern area of the Dos Cabezas Proposed LWC unit; yet another view of a wild, rugged, and relatively unfragmented landscape within the unit. The grassy mountain on the right is Rough Mountain ("C"), and the slightly lower grassy hills left of lower Buckeye Canyon is Maverick Mountain ("D"). Lower Buckeye Canyon ("E") drains much of the unit. The Pinaleno Mountains are seen in the distance ("F").

Outstanding opportunities for solitude can be found throughout the proposed LWC unit, especially because of the difficult access. Our inventory team did not encounter a single other person in the seven days we spent within the unit. The rugged topography within the LWC rises and falls from canyon bottoms to mountaintops with plenty of features to shelter visitors from the sights and sounds of developments on the surrounding valley floor; giving one the impression that they truly are in the middle of nowhere. Riparian forests and a variety of woodland types supply abundant vegetative screening throughout almost the entire unit. Without a doubt, the proposed LWC contains incredible potential for experiencing solitude in one of Arizona's great mountain ranges. When analyzing the Dos Cabezas WSA, the BLM reported:

"The WSA offers many opportunities for primitive recreation. The topography, animals and plants combine to provide outstanding opportunities for hiking, backpacking, camping, rock scrambling and sightseeing. Sightseeing from the higher mountains and ridges offers outstanding long distance views of the Sulpher Springs and San Simon Valleys and mountain ranges. The WSA also offers good opportunities for hunting, horseback riding and photography" (BLM Final Wilderness EIS, Safford District, 1987: p.65).

The Dos Cabezas Proposed LWC also offers outstanding opportunities for many primitive forms of recreation. Determined day hikers can reach many different intriguing destinations. For history buffs, Mineral Park and Buckeye Mine contain exemplary historic mining relics. For climbers and rock scramblers, the Dos Cabezas Peaks offer a variety of rugged climbing opportunities ranging from easy to ex temely difficult and risky; all on top of incredibly scenic, ex posed craggy peaks towering thousands of feet above the desert valley below. Horseback riders can enjoy dozens of miles of ways and trails that receive minimal vehicular use. Old miners' and cowboy trails travel to historic sites and many beautiful natural features, providing horseback riders with a number of loop options.



The view looking to the north from the northern summit of Dos Cabezas Peaks, towards the Pinalenos and the broad San Simon Valley. It took two full days to get to this exposed, rugged summit, having traversed the range from Happy Camp Canyon. On top of this mountain, it's easy to feel like you are on top of the world with civilization a barely visible distant distraction. The BLM has written that "the unit provides outstanding opportunities for solitude. The rugged mountains, canyons and forests provide numerous opportunities for isolation. The unit also offers outstanding opportunities for primitive and unconfined types of recreation. The topography, fauna, and flora make possible many recreational activities" (BLM Intensive Wilderness Inventory Proposal Report, May, 1980).

The Dos Cabezas Proposed LWC provides outstanding opportunities for sightseers seeking to photograph, observe, or study natural features in a wide variety of habitats. The cliffs of Dos Cabezas Peaks are excellent habitat for raptors. Unique high-elevation woodlands are truly islands of diversity, with numerous old-growth junipers scattered throughout the unit. The riparian forests are important for providing food, water and shelter for numerous species, especially birds. A large number of springs shelter plants uncommon in the greater Sonoran and Chihuahuan Desert landscapes. The ecosystems throughout the LWC unit supply almost limitless prospects for nature study of botanical, zoological and geological features, as well as there being many interesting historical sights too.

For hunters, the proposed LWC unit provides habitat for a variety of species of economic and recreational importance, such as the band-tailed pigeon, black bear, Gambel's quail, javelina, scaled quail, Mearn's quail, mountain lion, mule deer, white-tailed deer, and white winged dove (www.habimap.org). The BLM has reported that this range provides the best habitat for white-tailed deer in the area (BLM Upper Gila - San Simon Grazing Environmental Statement Final, September, 1978). At present, however, it appears that only those who know the surrounding landowners can hunt here because of the restricted access. Outstanding bird watching opportunities exist in Cement Canyon, Buckeye Canyon, Brushy Canyon, West Brushy Canyon, Gold Gulch, Mescal Canyon, Boulder Canyon, and more, where ephemeral streams provide important habitat for a variety of bird species. Furthermore, the numerous springs found throughout the proposed LWC provide reliable water for wildlife during drier seasons.



Looking towards Mescal Canyon in the western foothills of Dos Cabezas Peaks, this hiker enjoys the solitude and wildness in this island of public land, surrounded by private ranchland and farms. Mescal Canyon is a steep, narrow drainage containing sections of deeply incised slots, making for an exciting hiking route. There are absolutely no vehicle roads, ways, or even trails within this view; other than the boundary road in the foreground, which is heavily vegetated with grasses because of the extremely limited use of the route. This route was once used to access the Silver Camp Mine, which has not produced ore for almost 100 years.

Opportunities to experience solitude and primitive and unconfined recreation within this part of the LWC are spectacular, and the mosaic of grassland, savanna, chaparral, and woodland provide excellent habitat for deer, bear, wild cats, kit fox, and a variety of birds. A survey of birds at the Fort Bowie National Historic Site, just south of the Dos Cabezas Mountains, identified nearly 200 species on just 1,000 acres. The greater diversity of habitats within the proposed LWC would support even more than that. The hills to the right of Mescal Canyon are within a private inholding that has no vehicle access or developed aspects to it. Some mining occurred there, but probably nearly 100 years ago. Gold Gulch and Mineral Park are on the other side of the skyline ridge in this scene, and the summit of Dos Cabezas are beyond this view, right of center.

A Sky Island Adventure: an essay and photographs by Steve Till

Having grown up at the base of one of Arizona's sky island mountain ranges, I have a deep attachment to not only the Dos Cabezas but all these important ranges that rise out of the desert floor and provide unique habitat for wildlife and respite for people like myself, looking to escape the heat of the valley. The range, located just south and east of Wilcox, AZ, has significant relief, rising over 4,000' from Willcox, AZ to an impressive pair of summits. Appearing as "two heads" or domes of granite, the peaks are actually made of welded tuff and are volcanic in origin.

This spring, while a light blanket of snow covered the upper slopes of the Dos Cabezas, I set out with a friend and my dog to hike the length of that mountain range. We climbed out of the mesquite grasslands below and gained ridges of oak and mahogany. Views south to Cochise Head and the Chiricahuas extended into Mexico. To the east, the snowy tops of the Mogollon Mountains of New Mexico glistened, poised to melt down into the San Francisco and Gila Rivers as the February sun shone. We continued upward, happy to reach snow. While springs dot the canyons and lower slopes of the range, the ridges held little water for drinking, so the snow quenched our thirst and provided for cooking water over our four day adventure.



Rugged and rarely visited, this range does not have established hiking trails, so much of the walking is done following water courses, ridgelines, dilapidated mining roads and game trails. Loose rocks abound, spiny cacti grab, wind-stunted shrubs claw, but the spectacular views provide the memories. Having ventured into the Dos Cabezas years before, I found the access, not the landscape itself, to be one of the more problematic challenges of exploring and enjoying the Dos Cabezas. Locked gates prevail, and private lands restrict most of the access into the public lands above.

We camped where a tall radio antenna towered over a cleared meadow at 8,000, right on the edge of AWC's proposed lands with wilderness characteristics. Views opened to the west, exposing the Huachucas, Dragoons, Rincons and Santa Catalinas beyond the proposed unit. We marched past and towards the two summits, which continued to hold secret any obvious route up that may exist. Only once reaching the base of the cliffs did a rock ledge appear and provide means to gain the upper portion of the summit. A bit more entertaining scrambling and the south summit was underfoot. Not

the first to make it here, we were greeted with modern and not-so-modern signatures etched into the natural red patina of a summit boulder. Unlike many commonly sought summits of today, the traffic on this peak may have actually been heavier in the mining days of the Dos Cabezas than the present.

Wrapping west around the densely blanketed slopes to reach the north summit was slow and arduous. Once at its base, we were standing knee-deep in snow and ice, under a canopy of dormant Gambel's oak trees. Again, a straightforward but fun scramble led to this peak. Views



north to the Pinalenos, Pinal Peak, and the White Mountains showed that all the ranges held snow above the 6,000 level.

As we left the peak and made our way towards Camel Back and the ridge leading down to Willcox, the afternoon winds picked up from the southwest. The Willcox playa, sitting thousands of feet below to the west, came alive with dozens of dust-devils. The tornados of dirt merged within minutes to form a giant dust storm that grew several thousand feet, filled all of Sulphur Springs Valley and swept over the Dos Cabezas Mountains, and over our own two heads. Evening brought another beautiful Arizona sunset our way, dust particulates glowing and highlighting the silhouettes of sotol and agave on the horizon.

On our final day, we chased dozens of white-tail deer over the hilltops, followed javelina tracks, and spooked a golden eagle. Lower down, old mining roads zigzagged and faded away into the valley. With the wineries of Willcox closer with each step and the dusty winds soon to be upon us, we too faded into the valley, fondness of the Dos Cabezas Range locked in our minds forever.

Our hope is that the BLM can see fit to protect this range from the exploitation it saw in the past, as it is as wild and beautiful as any of Arizona's great mountain ranges.

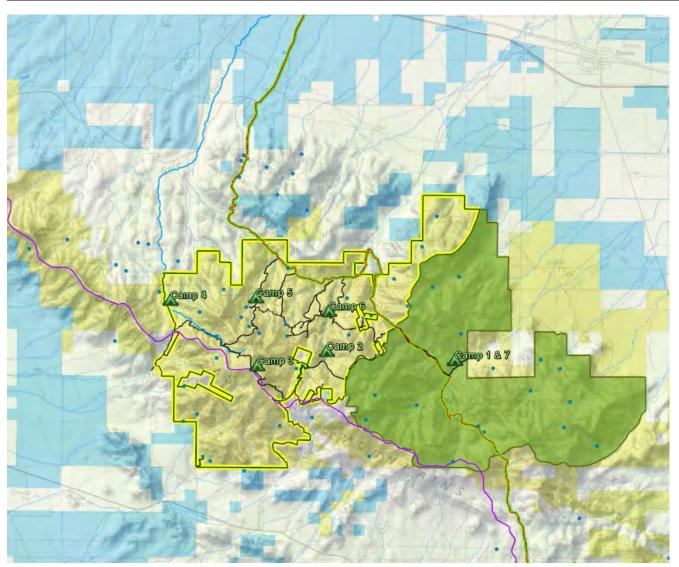


Steve Till is a botanist, explorer, and desert rat based in Flagstaff, Arizona. He has spent much of his life hiking the many incredible mountain ranges and canyons that the southwest has to offer, and working for public, private, and non-profit conservation organizations and agencies. Coincidentally, Steve and Glenn traversed the Dos Cabezas in mid-February, 2016, just two weeks prior to the AWC inventory trip. The week prior, Mr. Rink had hiked from Apache Pass, over Bowie Mountain, and through the rugged Ku-Chish Potential Wilderness on the Coronado National Forest to the legendary Apache Head peak.



Dos Cabezas as seen from Cooper Peak; all photos in this essay courtesy of Steve Till

Hiking Routes in the Dos Cabezas Mountains discussed in this report





Route followed by the authors A 7-day, 45 mile trip



The authors seven camps



Route followed by Till and Rink A 4-day, 25 mile trip



Sky Island Traverse route A 550-mile route linking 8 major Sky Islands mountain ranges

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 contains an **Area of Critical Environmental Concern**

Source: Safford District Resource Management Plan: Final EIS. Published in 1991 by the BLM, Safford Field Office, Arizona Find it at: http://www.blm.gov/az/st/en/info/nepa/environmental_library/arizona_resource_management.html

The summit of Dos Cabezas Peaks is encompassed by the 25 acre Dos Cabezas ACEC, which recognizes the scenic and cultural value of the mountain summit. It also recognizes the scientific and educational values of the isolated high-elevation plant community structure and composition that occurs around the summit. We think the ACEC's size dramatically underrepresents the importance of this peak and the expanse of mountains that it towers above, and feel that protection of wilderness characteristics would better suite this important landmark. The detailed Evaluation report for this ACEC, as described in the 1991 Resource Management Plan, is provided in Appendix 1 (BLM, 1991: p. 444).

The proposed LWC provides habitat for multiple 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 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 Luzena, Railroad Pass, Dos Cabezas, and Simmons Peak quadrangles. Some of the species documented here include the federally threatened yellow-billed cuckoo, the federally endangered lesser long-nosed bat, the globally rare seashore cactus, as well as peregrine falcon, golden eagle, and the western borrowing owl. The proposed LWC contains abundant habitat for all of these species, so it is almost certain that these species occur within the unit. A table listing the species found within the four quadrangle area is provided in Appendix 2. Enhanced protection of the proposed LWC would benefit these species directly or indirectly, regardless of whether they occur within or around the proposed LWC, although our determination is that most of the species on the list do occur within the unit.

The proposed LWC contains **grasslands of ecoregional importance**

Source: "An assessment of the spatial extent and condition of grasslands in central and southern Arizona, southwestern New Mexico, and northern Mexico" by David F. Gori and Carolyn A.F. Enquist. Published in 2003 by The Nature Conservancy, Arizona Chapter.

Find it at: http://azconservation.org/downloads/category/grassland_assessment

This study assessed and characterized native grasslands, historical vegetation changes, and prospects for grassland restoration – primarily using fire – for the Apache Highlands Ecoregion in Arizona, New Mexico, and northern Mexico. They found that native grasslands with a low (<10%) shrub cover

represent only 15.4% of all current and former grasslands in the study area. The BLM manages 17.5% of all current and former grasslands in the Unites States portion of the ecoregion, where only 1.2% of the highest quality grasslands are protected from land cover conversion. The proposed LWC contains extensive grasslands at the lower elevations, as evident in our photo documentation, and this study identified important native grasslands with 10-35% shrub cover occurring in a band around the lower slopes of Rough Mountain in the northern portion of the unit. Protection of wilderness characteristics in the proposed LWC would contribute to the conservation of this important and diminishing ecological and cultural resource.

The proposed LWC supports a **priority Conservation Area** as determined by The Nature Conservancy

Source: "An ecological analysis of conservation priorities in the Apache Highlands Ecoregion" by R.M. Marshall, D. Turner, A. Gondor, D. Gori, C. Enquist, G. Luna, R. Paredes Aguilar, S. Andersen, S. Schwartz, C. Watts, E. Lopez, and P. Comer. Published in 2004 by the The Nature Conservancy of Arizona, Instituo del Medio Ambiente y el Desarrollo Sustentable del estado de Sonora, agency and institutional partners.

Find it at: http://azconservation.org/projects/ecoregions

This study identified conservation focus areas for 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. This was a collaborative, multi-disciplinary process which analyzed at-risk species and habitats, threats to ecosystem health, and effective solutions to maintain biodiversity and ecosystem resiliency. TNC completed the ecoregional assessment using advanced GIS and statistical computing tools to identify a network of conservation areas, across land ownership, where the most imperiled, keystone, or endemic ecosystems, species, and habitats could be protected with the least effort. The proposed LWC is immediate outside of the Dos Cabezas/Pinaleno Foothills Conservation Area, which encompasses 67,953 acres spanning the distance between those two ranges. All of the conservation targets that are specified in that area are present within the proposed LWC, including Apachean class B native grasslands, oak-pine woodlands, interior chaparral, black bear, scaled quail, cotton-rat, and others. The protection of wilderness characteristics in the proposed LWC would contribute to the broader objectives of protecting the full range of native wildlife and ecosystems in the Apache Highlands Ecoregion, especially this priority conservation area. The table showing the target criteria from this analysis is provided below.

Conservation	Area 49 Dos Cal	bezas/Pin	aleño Foothills Total Conservati	Total Conservation Targets			
Site size (hects	ures): 27,500	(acres):	67,953				
Taxonomio Group	Solentiflo Name		Common Name	Global	ESA Statuc		
Ecological System			Apachean Grassland and Savanna Condition Class B Apachean Shrubland	GU			
			Chihuahuan Desert Scrub	GU			
			Interior Chaparral	GU			
			Madrean Encinal	GU			
			Madrean Oak-Pine Woodland	GU			
Bird	Callipepia squamata		Scaled quall	G5			
Mammal	Sigmodon ochrognati	hus	Yellow-nosed cotton rat	G4			
	Ursus americanus		Black bear	G5			
Vascular plant	Physalls latiphysa		Broad-leaf ground-cherry	G1			
	The second secon						

The proposed LWC is essential habitat linkage for multiple rare, keystone and iconic wildlife

Source: "Models of Regional Habitat Quality and Connectivity for Pumas (*Puma concolor*) in the Southwestern United States", by Brett G. Dickson, Gary W. Roemer, Brad H. McRae, Jill M. Rundall. Published in 2013 in *PLOS one*. Find it at: http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0081898

Source: "Modeling connectivity of black bears in a desert sky island archipelago", by Todd C. Atwood, Julie K. Young, Jon P. Beckmann, Stewart W. Breck, Jennifer Fike, Olin E. Rhodes Jr., and Kirby D. Bristow. Published 2011 in *Biological Conservation 144*.

Find it at:https://www.azgfd.com/PortalImages/files/wildlife/research/Reports/Atwood,T_C%20etal_%202011_Modeling%20connectivity%20of%20black%20bears%20in%20a%20desert%20sky%20island%20archipelago.pdf

Source: "A Spatial Model of Potential Jaguar Habitat in Arizona", by James R. Hatten, Annalaura Averill-Murray, William E. Van Pelt. Published in 2005 in *The Journal of Wildlife Management, Vol. 69, No. 3.*Find it at: http://www.jstor.org/stable/3803341

Source: "Arizona Missing Linkages: Galiuro – Dos Cabezas – Pinalenos Linkage Design", by Paul Beier, Emily Garding, Daniel Majka. Published in 2008 by Northern Arizona University and Arizona Game and Fish Department. Find it at: http://corridordesign.org/linkages/arizona

Source: "Identifying Corridors among Large Protected Areas in the United States, by RT Belote, MS Dietz, BH McRae, DM Theobald, ML McClure, GH Irwin, et al. Published in 2016 in *PLOS one* 11(4).

Find it at: http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0154223

The northern Chiricahua Mountains, including the Dos Cabezas Mountains, are considered the most important link for wildlife moving north and south between the southern Rocky Mountains and the Sierra Madre of Mexico. These vast, intact tracts of public lands feature the ideal combination of terrain, vegetation, and water sources to provide the best viable corridor for long-distance dispersal for multiple species, most notably the large predators that serve as keystone components of ecosystem function. A study of Puma habitat connectivity (Dickson et al., 2013) clearly identified the northern Chiricahua's and Dos Cabezas Mountains as a very high-value area of connectivity for the large cat, and the results of that study apply to multiple other large wildlife, especially jaguar, ocelot, bobcat, and black bear. Atwood et al. (2011) determined that the same area is considered an "optimal" linkage corridor between the Chiricahua and Pinaleno wildland blocks for the movement of black bear, stressing that "if connectivity can be maintained, there is greater likelihood of the long term persistence of species such as black bears, mountain lions, and jaguars along the US-Mexico border" (Atwood et al., 2011: p 2861). Hatten et al. (2005) determined that the northern Chiricahua's provide the best possible habitat link for the federally endangered jaguar to continue its movement north into its former range which once extended to the Grand Canyon. Modeling was borne out in thrilling photographic documentation of a jaguar on BLM lands in the Dos Cabezas in November of 2016. Beier et al. (2008) modeled habitat linkage for 18 focal species in the Sky Islands region, and their extensive study shows that Bowie Mountain provides an essential public lands link for badger, pronghorn, black bear, bobcat, jaguar, javelina, Mexican gray wolf, mountain lion, and mule deer to travel between the main block of the Chiricahua Mountains to the Galiuro Mountains to the north. These studies support what has been known by regional wildlands advocates for years, that the northern Chiricahua's may in fact be the best possible habitat linkage area in the entire sky islands region for iconic large wildlife. Belote et al. (2016) substantiated these studies in a meta-analysis that determined that this area provides "low cost" priority linkage between core protected areas for all species, based on an analysis of wildness and human modification. A broad public interest in this area has been supported by the Sky Island Alliance, The Wildlands Project, Wilderness Society, and AWC for years (Mike Quigley, communication, March 2, 2016). Management for protection of wilderness characteristics in the Dos Cabezas Mountain Proposed LWC has internationally important and far-reaching consequences for the protection of biodiversity far beyond the limits of the proposed area.

www.azwild.org

The proposed LWC contains riparian ecosystems with numerous values

The Dos Cabezas Mountains have the highest density of springs of any of the Sky Island ranges, and several canyons that support riparian ecosystems. More than 30 springs occur within the unit, and a number of seasonal seeps exist along canyons where there are bedrock exposures. To complete the inventory for this report, we backpacked through the proposed LWC for 7 days, and found flowing water every day. Riparian streamside plant communities exist in Buckeye Canyon, Brushy Canyon, and Gold Gulch, where sycamore, cottonwood, ash, willow, box elder, juniper, white oak, and cherry trees line the canyon bottoms. The cover photo to this report shows some of the riparian habitat along upper Buckeye Canyon, near Buckeye Mine. Old cowboy and miners pack trails link water sources in these canyons and Cement Canyon to water sources in Howell Canyon, which is in the designated Wilderness area. This mountain range is literally full of water. Howell Well is a hand dug shaft in upper Howell Canyon that has been dammed and is now full of crystal clear, cold water. The mine shaft at point 85 is full of water. Old shafts in Mineral Park have pipes sunk into them, taking the water away to private land. The abundance of springs in this range must be attributed to the geology and the sheer height of the peaks which attract storms and absorb far more rain and snow than the surrounding plains. These irreplaceable resources have not been inventoried and assessed for health, condition, or species richness, but our observations clearly established that cattle grazing has severely negatively impacted them. It appears that a number of feral cattle graze the area and congregate around water sources. Protection of these canyons and the abundant water that flows here should include reducing the impact of cattle on wild, natural water sources and the sensitive vegetation that makes riparian areas so unique.

The proposed LWC contains historical sites of cultural & educational importance

Source: "Upper Gila-San Simon Grazing Environmental Statement Final". Published in 1978 by the Bureau of Land Management, Safford District, Arizona.

Find it at: http://catalog.hathitrust.org/Record/002559477

The history of mining in the proposed LWC characterizes many of Arizona's remote desert ranges, and soon after the BLM was established it reported that the Dos Cabezas Mountains have the highest concentration of historical sites in the Upper Gila – San Simon planning area (BLM, 1978). The Buckeye Mill site preserves some concrete foundations, rusting steel gears and components, and a dilapidated trailer that was used to carry men to work in the mine. The Buckeye Mine itself is a 1.5 mile hike out the once-railroad bench (see points 125-127 and cover photo). The mine consists of several interconnected shafts with intact wooden support posts. Interesting relict equipment can be found scattered around, including the anchors for what would have been an impressive tramway (see points 128-130). Other very interesting relics are found in the canyon bottom below. Mineral Park preserves several fallen cabins (see points 12 and 24), as well as several that stand (see points 25-27). The remains of very old stone cabins occur in upper Cement Canyon, where the miners who worked Virginia Hill lived along small flowing streams. Very unique relics exist at the long-abandoned mine at point 61. Those who mined there lived at cabins at point 56, which are now gone, although many other antiquities remain, including the very unique find at point 52. All of these artifacts of a bygone era are antiques, and most if not all exceed 50 years old and as such are protected by the antiquities act. The

proposed LWC provides hikers and horsepackers an outstanding outdoor classroom for learning about the bygone era of mining in the Dos Cabezas Mountains. Here, you can literally walk in the footsteps of these hard-working folks, along their well-built trails and roads that connect the proposed LWC to the stone structures and hand dug mines in Howell Canyon in the contiguous Wilderness area.



This is an excellent example of Madrean oak woodlands with Mexican blue oak, alligator juniper, pinyon pine, Arizona white oak, Emory oak, silverleaf oak, and black cherry. A primitive trail cuts down this untamed canyon with abundant wildlife sign including deer, bear, and mountain lion. The combination of vegetative cover, rugged terrain, and limited human influence makes this area important for wildlife movement between the Chiricahuas and ranges to the north. Behind the photographer, an old mining road, which has since become a revegetated trail, connects this foot path to Buckeye Canyon and points west.

Conclusion

The Arizona Wilderness Coalition recommends to the Bureau of Land Management that the proposed area 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.

There is no denying the remarkable scenery, the outstanding primitive recreational opportunities, the excellent wildlife habitat, the diversity of vegetation types, the abundant solitude and the historical value of the proposed LWC. The views from the summit of Dos Cabezas are among the finest in southern Arizona, on par with Babquivari, Mount Wrightson, or Chiricahua Peak. What all of those peaks have in common that Dos Cabezas does not is that they are all protected as Wilderness. Every day, thousands of people look up at these peaks from the Interstate; and almost none of them have ever been into these mountains. The range has been effectively blocked from most public access by private landowners, separating the public from rightful access to spectacular public lands. This de-facto closure has minimized the impact that humans have had on the mountains to the point that routes are disappearing, vegetation is encroaching, and the wildlife is becoming ever more wild.

Our proposal offers a single Wilderness contiguous unit for the BLM's consideration. If the BLM decides that the Buckeye Mine Road should not be considered a way, despite the fact that we strongly believe that it is, that should not disqualify any of the acreage we are proposing. The units to either side of that route meet all of the requirements of Manual 6310 even if that road was a paved highway. The eastern third would still be more than ~3,700 acres of wilderness contiguous area, and the western two-thirds would be a stand-alone ~8,700 acre unit; each fully defensible as lands with wilderness characteristics.

Our inventory should serve as the ultimate testament to the evaluation of wilderness characteristics. Our team spent a week hiking 45 miles all over the mountains, and we never saw a single person, heard a single vehicle, or saw one bit of modern trash. Essay contributor Steve Till had a similar experience. The proposed LWC is not without human impacts. We have documented mining sites, prospects, corrals, water tanks, developed springs, and vehicle ways. What all of these have in common is that they have essentially all been abandoned and nature has reclaimed or begun to reclaim them. This range was once a bustling mining center employing thousands of people. Those days are in the past. Dos Cabezas is a case study in re-wilding. Now is the time for BLM to appropriately manage this iconic mountain and its canyons for wilderness characteristics.

Appendix 1: Area of Critical Environmental Concern Evaluation, Safford Resource Management Plan

Dos Cabezas Peaks

1. Description of the Value, Resource, System or Hazard: The Dos Cabezas Peaks are a noteworthy landmark, both currently and historically. The area contains a small relict grove of aspens and a number of plants normally found in coniferous forest associations, now missing from this range. Because of these plants, the area has some potential for research on processes and interrelationships of isolated and relict species. The type and size of the rock outcroppings are noteworthy. The peaks can be seen from long distances and are quite scenic. This area was identified as a potential Area of Critical Environmental Concern as a result of BLM inventories.

This area meets the relevance criterion on two points. It has significant scenic value in that the peaks are well-known and a highly visible landmark. It also shows evidence of relict plants from the wetter and cooler climates of 15,000 to 20,000 years ago and, as such, fits into the natural process or system characteristic.

This area meets the importance criterion in that it is sensitive and vulnerable to adverse change, especially from surface-disturbing activities.

- 2. Relationship to Other Areas of Special Management: None.
- 3. Rationale for Designation: The Dos Cabezas Peaks should be designated as an Area of Critical Environmental Concern of 25 acres because the special values identified above meet the relevance and importance criteria and need special management to protect these values.
- 4. Special Management Prescription -Preferred Alternative
- -Close the area to mineral material sales.
- -Require a mining plan of operations for all future mining activity.
- -Designate the area limited to off-highway vehicle use.
- -Limit vehicle use to existing roads and trails.
- -Prepare a prescribed burn plan that will allow fire to continue its role in the ecology of the Area of Critical Environmental Concern.
- Prohibit woodcutting and gathering for home use. Gathering dead-and-down wood for campfires is permitted.
- Manage the area as a Visual Resource Management Class II area to preserve its scenic quality.
- -Prohibit authorization of rights-of-way.
- 5. Alternatives Considered: *Alternative B* is the same as the *Preferred Alternative*. In *Alternative* C the area is not considered for designation as an Area of Critical Environmental Concern but allocated to mineral development.

Appendix 2: Arizona Heritage Data Management System report for Dos Cabezas Mountains Wilderness Contiguous Proposed LWC

Quad Name	Scientific Name	Common Name Bear Canyon Talussnail	USESA	USFS	BLM	GRANK G3	SRANK SH	SGCN 1C	NPL
LUZENA	Sonorella danielsi								
LUZENA	Sonorella huachucana	Huachuca Talussnail				G4G5	S2	1C	
RAILROAD PASS	Crotalus lepidus klauberi	Banded Rock Rattlesnake				G5T5	S3	1A	
RAILROAD PASS	Phrynosoma modestum	Round-tailed Horned Lizard				G5	S3		
RAILROAD PASS	Sigmodon ochrognathus	Yellow-nosed Cotton Rat	SC			G4G5	S4	1C	
DOS CABEZAS	Aquila chrysaetos	Golden Eagle			S	G5	S4	1B	
DOS CABEZAS	Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)	LT	S		G5	S 3	1A	
DOS CABEZAS	Crotalus lepidus klauberi	Banded Rock Rattlesnake				G5T5	S 3	1A	
DOS CABEZAS	Echinocereus ledingii	Pinaleno Hedgehog Cactus				G4G5T4	S2		SR
DOS CABEZAS	Falco peregrinus anatum	American Peregrine Falcon	SC	S	S	G4T4	S4	1A	
DOS CABEZAS	Hedeoma dentatum	Mock-pennyroyal				G3	S 3		
DOS CABEZAS	Hymenoxys ambigens var. floribunda	Apache Pass Rubberweed				G3?T2	S2		
DOS CABEZAS	Hypsiglena sp. nov.	Hooded Nightsnake				G4	S4	1B	
DOS CABEZAS	Leptonycteris curasoae yerbabuenae	Lesser Long-nosed Bat	LE			G4	S2S3	1A	
DOS CABEZAS	Phrynosoma hernandesi	Greater Short-horned Lizard				G5	S4		
DOS CABEZAS	Sceloporus virgatus	Striped Plateau Lizard				G4	S 3		
DOS CABEZAS	Sonorella danielsi	Bear Canyon Talussnail				G3	SH	1C	
DOS CABEZAS	Tantilla nigriceps	Plains Black-headed Snake				G5	S2		
SIMMONS PEAK	Aquila chrysaetos	Golden Eagle			S	G5	S4	1B	
SIMMONS PEAK	Aspidoscelis arizonae	Arizona Striped Whiptail			S	G2	S1S2	1B	
SIMMONS PEAK	Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	S	G4T4	S 3	1B	
SIMMONS PEAK	Crotalus lepidus klauberi	Banded Rock Rattlesnake				G5T5	S3	1A	
SIMMONS PEAK	Echinocereus arizonicus ssp. nigrihorridispinus	Black-spined Hedgehog Cactus				GNR	S2		
SIMMONS PEAK	Hedeoma dentatum	Mock-pennyroyal				G3	S3		
SIMMONS PEAK	Heterodon kennerlyi	Mexican Hog-nosed Snake				G4	S 3		
SIMMONS PEAK	Hypsiglena sp. nov.	Hooded Nightsnake				G4	S4	1B	
SIMMONS PEAK	Leptonycteris curasoae yerbabuenae	Lesser Long-nosed Bat	LE			G4	S2S3	1A	
SIMMONS PEAK	Machaeranthera riparia	Chiricahua Mountain Tansy-aster				G4	S1		
SIMMONS PEAK	Opuntia martiniana	Seashore Cactus				G1Q	S1S2		SR
SIMMONS PEAK	Phrynosoma cornutum	Texas Horned Lizard	SC			G4G5	S3S4		
SIMMONS PEAK	Phrynosoma modestum	Round-tailed Horned Lizard				G5	S 3		
SIMMONS PEAK	Polygala lindheimeri var. parvifolia	Tweedy's Milkwort				G4T3T4	S1S2		
SIMMONS PEAK	Psorothamnus scoparius	Broom Dalea				G4	S1		
SIMMONS PEAK	Reithrodontomys montanus	Plains Harvest Mouse				G5	S 3	1C	
SIMMONS PEAK	Terrapene ornata luteola	Desert Box Turtle			S	G5T4	S2S3	1A	

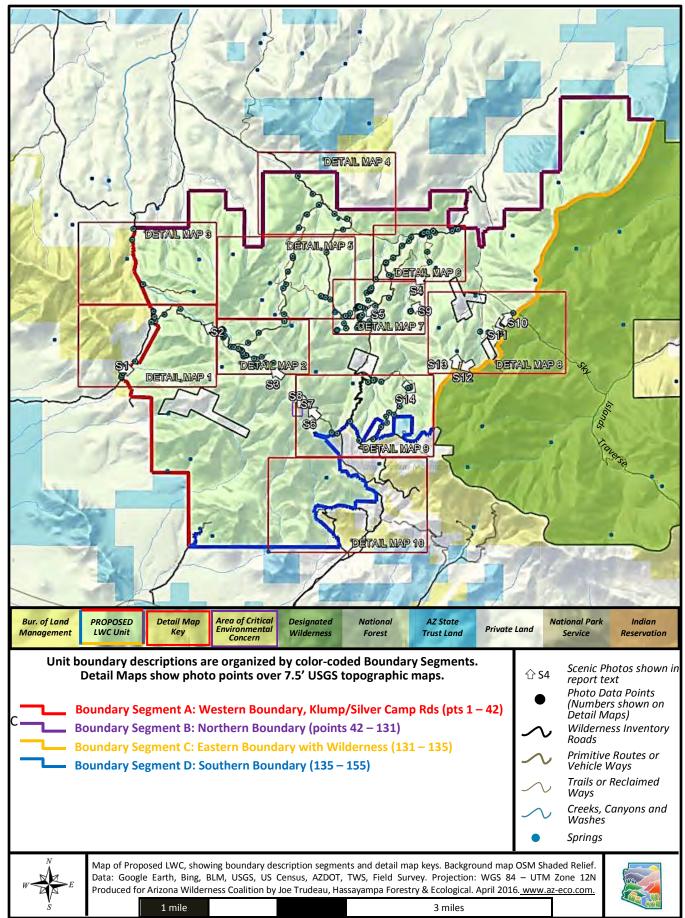
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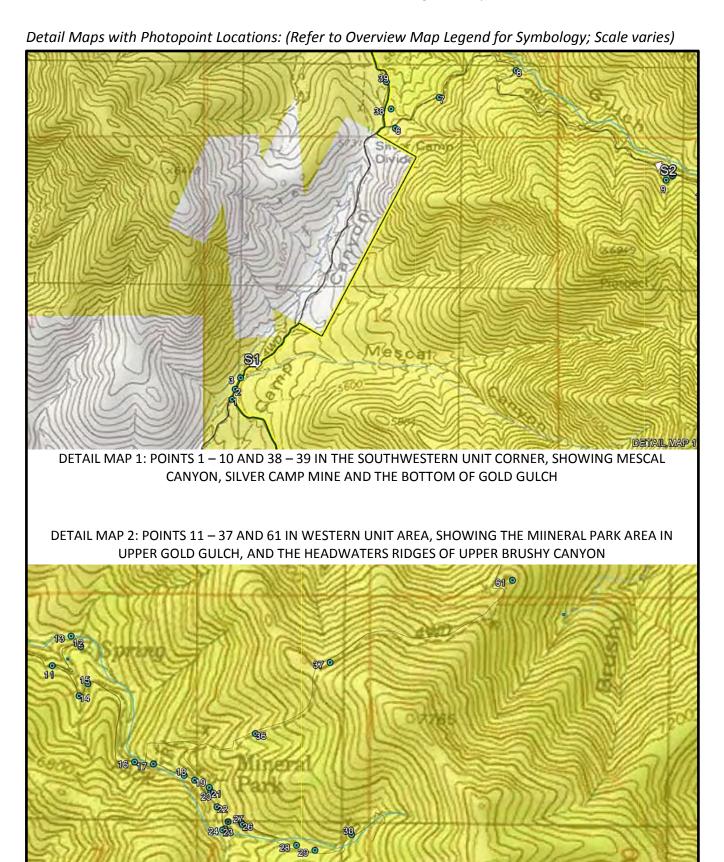
Detailed Maps & Description of the Unit Boundary, Roads, Ways and Human Impacts



Taken from the Dos Cabezas Wilderness boundary, looking to the west over upper Cement Canyon at the Dos Cabezas Peaks; nothing for miles, but solitude and abundant potential for primitive and unconfined recreation. Our route brought us to this point on day 1 and day 6. An excellent hiking trail climbs out of Cement Canyon to this point

Overview Map with Boundary Segments & Detail Map Keys



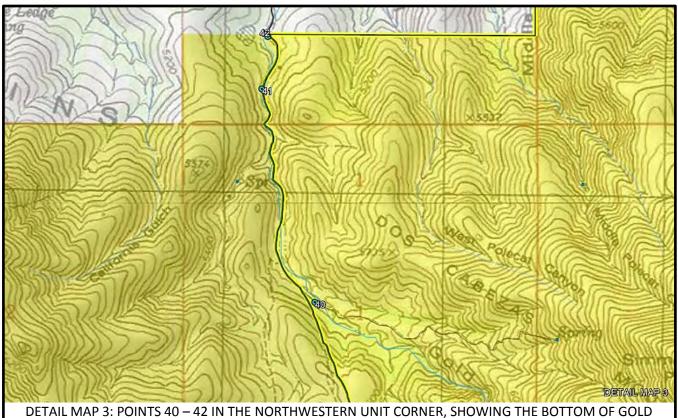


DETAIL MAP 2

340

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Detail Maps with Photopoint Locations: (Refer to Overview Map Legend for Symbology; Scale varies)

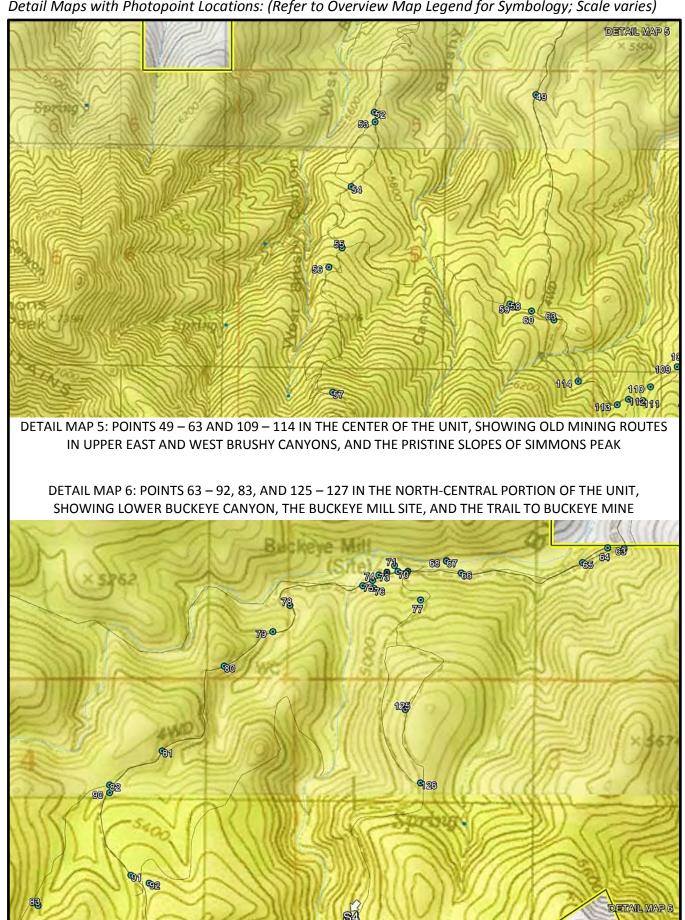


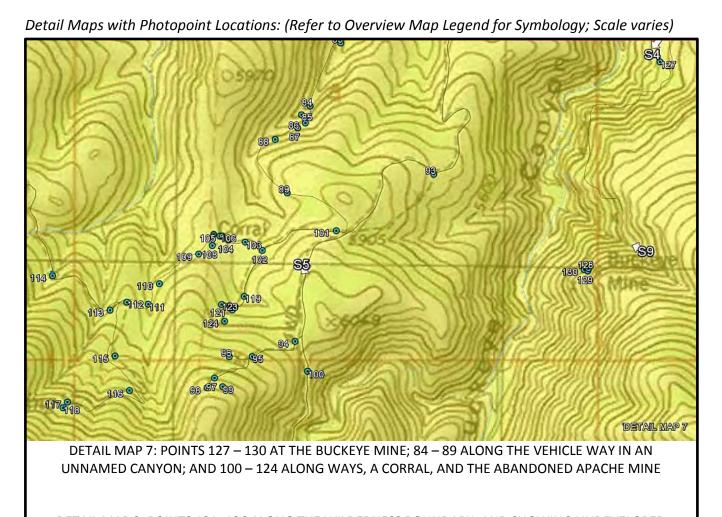
DETAIL MAP 3: POINTS 40 – 42 IN THE NORTHWESTERN UNIT CORNER, SHOWING THE BOTTOM OF GOLD GULCH AT THE KLUMP RANCH BOUNDARY, AND THE VEHICLE WAY ON SIMMONS PEAK

DETAIL MAP 4: POINTS 43 – 51 IN THE NORTH-CENTRAL PORTION OF THE UNIT, SHOWING VEHICLE WAYS IN LOWER BRUSHY CANYON AND EAST CANYON AT THE BOUNDARY OF THE KLUMP RANCH

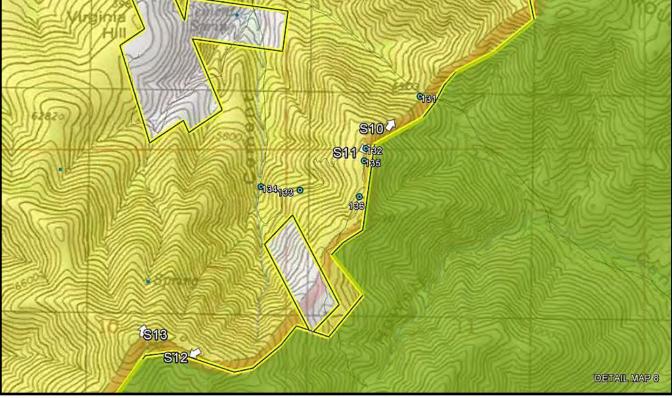


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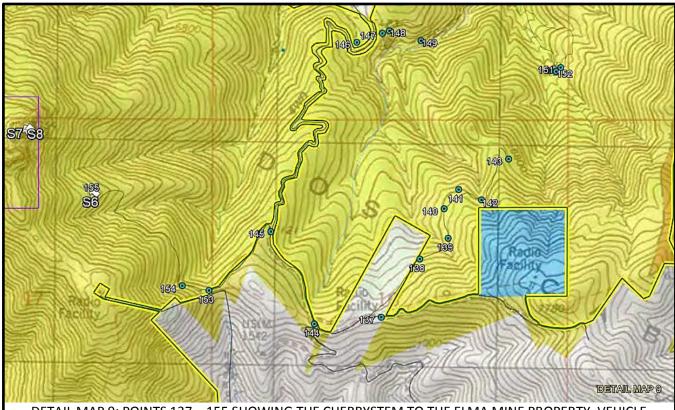




DETAIL MAP 8: POINTS 131 -136 ALONG THE WILDERNESS BOUNDARY, AND SHOWING UNDEVELOPED PRIVATE LANDS ON VIRGINIA HILL AND IN UPPER CEMENT CANYON

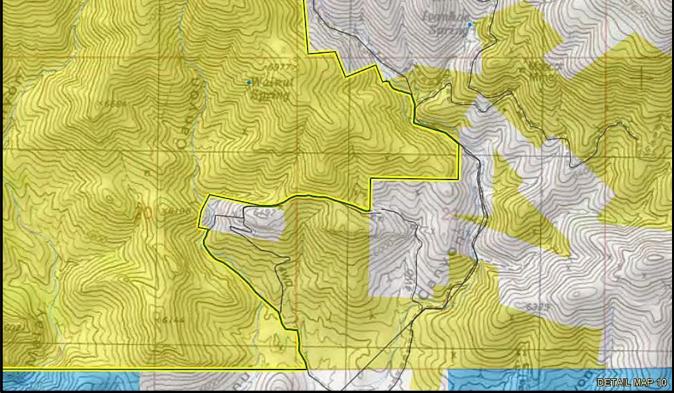


Detail Maps with Photopoint Locations: (Refer to Overview Map Legend for Symbology; Scale varies)



DETAIL MAP 9: POINTS 137 – 155 SHOWING THE CHERRYSTEM TO THE ELMA MINE PROPERTY, VEHICLE WAYS IN UPPER BUCKEYE CANYON, AND THE SOUTHERN UNIT BOUNDARY AROUND STATE & PRIVATE LANDS

DETAIL MAP 10: SHOWING THE SOUTHEASTERN UNIT BOUNDARY ALONG MASCOT MINE ROAD, A POWERLINE, AND PRIVATE LANDS



Narrative Description of the Proposed LWC Boundary & Vehicle Routes

Segment A: Western Boundary

SEE DETAIL MAPS 1 - 3

General Description: From the southwestern unit corner, the southern half of the Dos Cabezas Mountains Proposed LWC western unit boundary is the BLM property line with adjacent private and State Trust lands. At point 1, the northern half of the western boundary follows a very grassy, and nearly invisible wilderness inventory road that crosses BLM land, linking private lands on the south and north side of the mountain range. This point displays an image of a spur road that serves as the proposed unit boundary for a short distance. This road is also used to access private land and contains older evidence (5-6 years ago) that it is being mechanically maintained. Points 2 & 3 show images the primary wilderness inventory road that serves as most of the unit boundary. As the photographs illustrate, this road hasn't received any *very recent* maintenance, but does show signs that it was maintained about five to six years ago, which is as old as "maintenance" should be considered. From point 4 to point 5, midway on the western through-road, the proposed LWC unit boundary is the BLM property line with private land (the abandoned Silver Camp Mine). Points 39, 41, and 42 depict the remainder of the wilderness inventory road that is used to access private land (Klump Ranch). This road shows evidence that it was mechanically maintained about five to six years ago, and is occasionally traveled by an ATV. Absolutely no evidence of pickup truck or SUV use was observed.

Boundary Adjustments: A small corral and empty, unused water tank at point 6 is excluded. This appears to not have been used for a very long time.

Ways & Trails:

-Points 7, 9, 10, 11, 16, 18, and 22 show the main primitive route that leads up Gold Gulch into Mineral Park (an historic mine). As the photographs portray, this way is not being mechanically maintained, nor has it been for a long time. This route is only passable by an ATV or UTV. There is a culvert that was installed using hand-labor (point 9), but no other upkeep was observed. Vehicular use appears to end around point 29 and the way has been reclaimed by natural processes (revegetated) uphill from that point. Point 34 depicts the revegetated status of the primitive route near its terminus. Point 35 shows an abandoned mine digging at the end of the way.

-There is one way (point 11) that leaves the main primitive route leading up Gold Gulch to Mineral Park. This way shows no signs of maintenance and ends after a short distance at an old miner's homestead which burnt down some time ago (point 12). Many interesting relics of a bygone era are to be seen here.

-Points 8, 15, 23, 31, 33, and 30 display some old primitive routes stemming from the main way leading up into Mineral Park. These old routes, which were built during the heyday of mining in Mineral Park, are largely revegetated, and have been reclaimed by nature. Point 14 documents a natural drainage that was never a route at all, though the BLM route inventory recorded it as needing to be evaluated.

-Points 17, 36, and 37 document an old primitive route that has largely become revegetated, and is now just a trail. This route crosses a high saddle and continues for miles down the northern slopes of the mountains, and is described later in this section. There is no evidence that this trail gets any vehicular use at all; it has nearly 100% slope in places. The route is so steep that it probably never

was passable by any truck. It may have been bulldozed from the top down when the rest of the route was built, decades ago.

-Point 38 was taken looking north down a way near the corral pictured in point 6. This way appears to be user-created, and is kept open solely by the passage of an occasional ATV.

-Point 40 shows an unmaintained way that is used to access a spring on the west side of Simmons Peak; again, this is only traveled by the occasional ATV. We did not hike all the way up to the spring to assess its condition, but the route appears revegetated when looking across Gold Gulch at it from the route into Mineral Park.

Associated Human Impacts:

-Point 6 displays an image of an apparently unused corral which is excluded.

-Points 12, 13, 19, 20, 21, 24, 25, 26, 27 28, 32, 33, and 35 were taken to document the various forms of human impacts that are found up Gold Gulch; in and near Mineral Park. Many of these impacts are antiques protected by the Antiquities Act, which add considerable supplemental & historic value to the average visitor's experience of this place. Several of these impacts are non-functional water troughs, or other unused ranching infrastructure like the falling-down and brush-filled corral at point 32. These human impacts are largely hidden from view because they are in the bottom of Gold Gulch. Few of these impacts are visible from other areas within the proposed LWC unit outside of this canyon. A single 1.5" plastic water pipe leads from the mine shaft at point 20 and runs along the entire Mineral park route, and turns north, bypassing the corral at point 6, and then runs off BLM onto private property. A shorter pipe runs from the springbox at point 28 until the cabin at point 26, then it empties out onto the ground, completely wasting the water.

Segment B: Northern Boundary

SEE DETAIL MAPS 4 – 7

General Description: The entire northern boundary for the proposed LWC unit is the BLM property line with private land and State Trust Lands, most of which is the privately owned Klump Ranch. The landscape of this boundary segment is rough, steep mountains, and broad canyons. The private and State Trust lands north of BLM here seem every bit as wild as the public-lands heart of this mountain range, and they extend the feeling of solitude and wildness of the BLM lands.

Boundary Adjustments: There are no boundary line adjustments to this boundary segment; it is a clean boundary that is penetrated by only two lightly-used ways, and no other human impacts approach the BLM land.

Ways and Trails: Two ways enter the unit from private lands along the northern boundary.

-Points 43, 44, 45, 47, 48, 49, 62, and 113 all show images of an unmaintained way that enters the unit through the northern boundary in East canyon, and ultimately climbs up ridges along Brushy Canyon. This way gets very low vehicular use as it is quite rough in places, and it is only passable by ATV's. It appears to have been used for ranching purposes, although the corral (point 46) found along this way is non-functional. At point 112, the route turns due south and climbs up switchbacks to a developed spring box at Magnesia Spring (see points 117 and 118). The route appears to be not used by any vehicles (see points 115 and 116), and is not maintained, and is now just a reclaimed way/trail.

-Points 50, 51, 53, and 57 depict an old primitive route that climbs up the rim of West Brushy Canyon that receives no vehicular use, and thus has turned into a trail mostly used by cattle. This road was built decades ago for an historic mining operation (point 61). This is the continuation of the extremely steep way that climbed over a saddle from Mineral Park. There are natural barriers along the trail to prevent vehicular use. For example, at point 45 any ATV would have to drive up an entirely wild wash full of boulders. In places the trail is growing in with trees and shrubs. This old route was probably rebuilt at some point in the distant past as there are several even older sections of the route that are also revegetating or are reclaimed, such as the spur seen in point 54.

-Points 55, 58, 59, and 60 are all images of a hand-built trail that receives foot use only. This was probably built by miners to get to small creeks, and has since been used by ranchers on horseback.

--Points 63-65, 69, 78-81, 91, and 100 display images of an unnamed way that enters the proposed LWC unit from the north, and climbs up Buckeye Canyon and its west rim. As these photographs clearly display, this primitive route is growing in with perennial vegetation, and is obviously not being maintained. It is a substantial road-cut in places, but as all the ranching equipment is out of order, and no mining is underway, the route serves no purpose, especially since access is gated on private land so there is no <u>public</u> recreational use. It appears to be completely abandoned and should be allowed to fully revegetate and become a trail for horseback, hiking, and wildlife.

-Point 90 shows an image of a natural wash that the BLM identified as 'Needs to be Evaluated' in their route inventory.

-Points 92 and 93 depict images of two different old primitive routes that receive no vehicle use, have revegetated, and been reclaimed by nature. These were likely built during the mining days.

-Points 82-84 and 87-89 all display photographs of an unnamed way that is not being maintained, and is in the process of revegetating and being reclaimed by nature. This way was once used to access an old mine (points 85 & 86) but has not been used by any vehicles for quite a while.

-Points 101-104 depict a primitive route that leads to an abandoned corral (points 105-108). As the photographs show, this way is not receiving mechanical maintenance. It is in good condition due to the relatively flat terrain at this saddle, and because all access points are gated, there is virtually no use of these routes.

-Points 109-111 document a foot trail that leads southwest from the defunct corral (point 105) to the route that leads to Magnesia Spring.

-Points 119, 120, 123, and 124 depict a way that leads to a small historical mine (points 121 & 122) and is not being maintained.

-Points 94, 95, 97, and 99 were taken on a primitive route that was once used to access an old mine (point 96) and a prospect (point 98).

-Points 125-127 show an old hand-built route that leads to the historic Buckeye Mine (points 128-120). This trail is wonderfully scenic and has incredible historical value. Incredible, there were once rail tracks set on this amazing piece of work which would connect the mine to Buckeye Mill. Point 126 shows an elevated turnpike where the rail line crossed a saddle.

Associated Human Impacts:

-Point 46 displays an image of an old corral that is non-functional and appears to get no use. This corral is growing in with abundant catclaw shrubs, and the water tank is empty.

-Points 52 and 56 show photographs of some old machinery that was abandoned along this route. These old vehicles are now antiques and are now a part of the wild character of this place. Our best assessment concluded that there is no chance in hell that these are driving out of here.

-Point 61 was taken looking at one of two old mines in this area. Point 61 shows vertical shaft, while the other small and substantially unnoticeable mine is an adit. This mining has been abandoned for decades.

-Points 66-68 were taken looking at an old corral that is not used anymore and is in disrepair. As point 66 illustrates, this old corral is substantially unnoticeable when viewed from just a short distance away. Interestingly, some of the tracks from the Buckeye Mine rail line were used to build the frame for this corral.

-Points 70-77 display images of the historical Buckeye Mill. This mill was largely deconstructed and has not been active in decades. As the photographs document, the remaining impacts are not large; they are localized and substantially unnoticeable unless you are right next to them. Points 76 and 77 show that when viewed from a short distance away, the Buckeye Mill impacts are relatively small.

-Points 85 and 86 show an old mine shaft that is full of water. This shaft is located in the bottom of a drainage and not visible from within the rest of the LWC unit.

-Points 105-108 were taken of and around a defunct corral. As the pictures document, the fences of the corral are falling over, and the loading ramp has mature cholla growing in it indicating that it has not been used in a very long time. None of the grazing fences are functional.

-Points 114 and 118 show images of functional spring boxes. Point 114 (JDK Spring) emptys out into the drainage, and point 118 (Magnesia Spring) is partially piped through a ½" plastic propane gas line down past point 113 and into a canyon. Much of the water at Magnesia Spring surfaces and forms in impressive seep that covers an area 40 feet wide by 100 feet long.

-Points 96, 98, 121, and 122 were taken looking at a couple of small historical mines, and one prospect. These impacts are small and well-hidden by abundant vegetative screening (juniper and oak woodland) surrounding them.

-Points 128-130 document the human impacts at the historic Buckeye Mine.

Segment C: Eastern Boundary

SEE DETAIL MAP 8

General Description: The entire eastern proposed LWC unit boundary is follows the Dos Cabezas Mountains Wilderness boundary. To be clear, the entire unit boundary is an arbitrary line roughly following ridgelines. As point 135 shows, the Wilderness boundary is on a ridge with an old fence line. The fence is no longer functional, and is not a suitable boundary feature. The photograph documents that the land in the proposed LWC unit (left of fence) is no different from the Wilderness land (right of fence).

Boundary Adjustments: There are no boundary line adjustments along this boundary segment. This boundary is completely free from any human impacts that affect wilderness characteristics.

Ways and Trails:

-Point 131 was taken looking down the Sky Island Traverse, which is a primitive trail that circumnavigates the Sky Island mountain ranges of southeastern Arizona.

-Points 132-136 picture another historic mining trail that was hand-built many years ago. It probably connected the historic mining in Howell Canyon to that on Virginia Hill. Trails such as this add incredible supplemental values to the Dos Cabezas Mountains Proposed LWC. This trail is used by wildlife, cattle, horseback ranches, and hunters, though not often.

Segment D: Southern Boundary

SEE DETAIL MAPS 9 & 10

General Description: The complicated southern boundary of the Dos Cabezas Mountains Proposed LWC unit is formed by the BLM property line with State Trust and private lands, a wilderness inventory road that climbs Mescal Canyon to access radio towers, and sections of a powerline. Points 137, 144 and 145 display images of the wilderness inventory road.

Boundary Adjustments: A Radio tower on BLM land (visible in point 53) is excluded along a "cherrystem" that follows a fence line.

Cherrystems: There are two cherrystemmed vehicle routes along the southern boundary. At point 145, maintenance continues along the road to the private land excluded from the unit (the historic Elma Mine). Point 146 documents an old section of this road that is no longer used or maintained, and was therefore not excluded from the proposed LWC unit. Maintenance does not continue south of the Elma Mine property. The second cherrystem is at the units' southwestern corner. We did not visit this site, but it is a route that accesses Apache Spring from private land.

Ways and Trails:

-Points 138-143 document an old way that has revegetated and been reclaimed by nature. There is point to this route as it dead ends at a turnaround.

-At point 147 an abandoned mining route drops into upper Buckeye Canyon. Points 148 through 151 show that this route is now fully reclaimed, impassable to any vehicle, and makes a great hiking trail in otherwise extremely rugged country. Point 152 shows a trail that descends to this route from the ridge above.

-Points 153-155 show an old primitive route that has largely revegetated and is now a trail. There was no evidence that this trail receives any vehicular use. Most hikers take this path to reach the Dos Cabezas summit.

Associated Human Impacts:

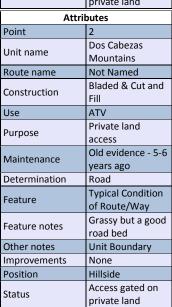
All major human impacts along the southern boundary are outside of the proposed LWC unit.

That completes the narrative description of the unit boundary and other points.

Section 4: Photopoint Data

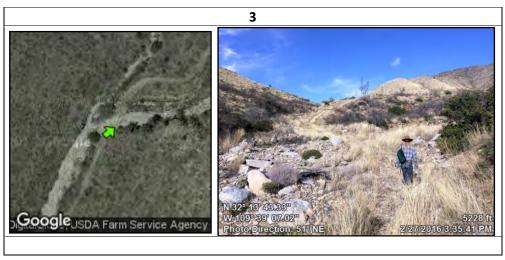
Attributes	
Point	1
Unit name	Dos Cabezas Mountains
Route name	Not Named
Construction	Bladed & Cut and Fill
Use	ATV
Purpose	Private land access
Maintenance	Old evidence - 5-6 years ago
Determination	Road
Feature	Typical Condition of Route/Way
Feature notes	Evidence of maintenance.
Other notes	Unit Boundary
Improvements	None
Position	Hillside
Status	Access gated on private land

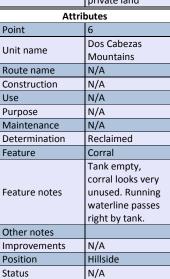


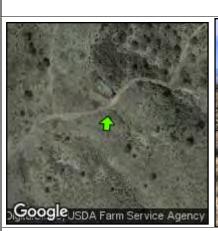












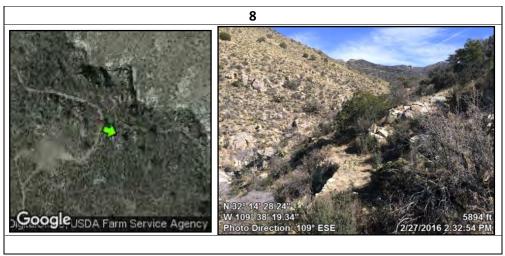


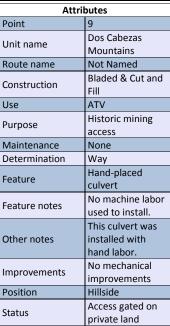
Attributes	
Point	7
Unit name	Dos Cabezas Mountains
Route name	Reclaimed mining road
Construction	Bladed & Cut and Fill
Use	ATV
	Historic mining
Purpose	access
Maintenance	None
Determination	Way
Feature	Typical Condition of Route/Way
Feature notes	Occasional ATV use
Other notes	Would make a great trail.
Improvements	None
Position	Hillside
Status	Access gated on private land



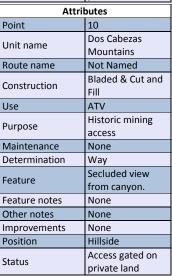


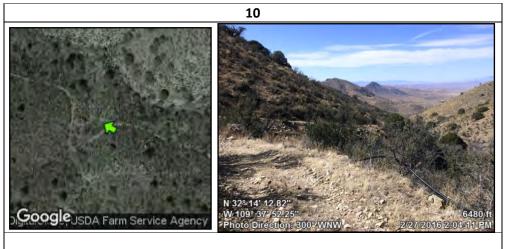


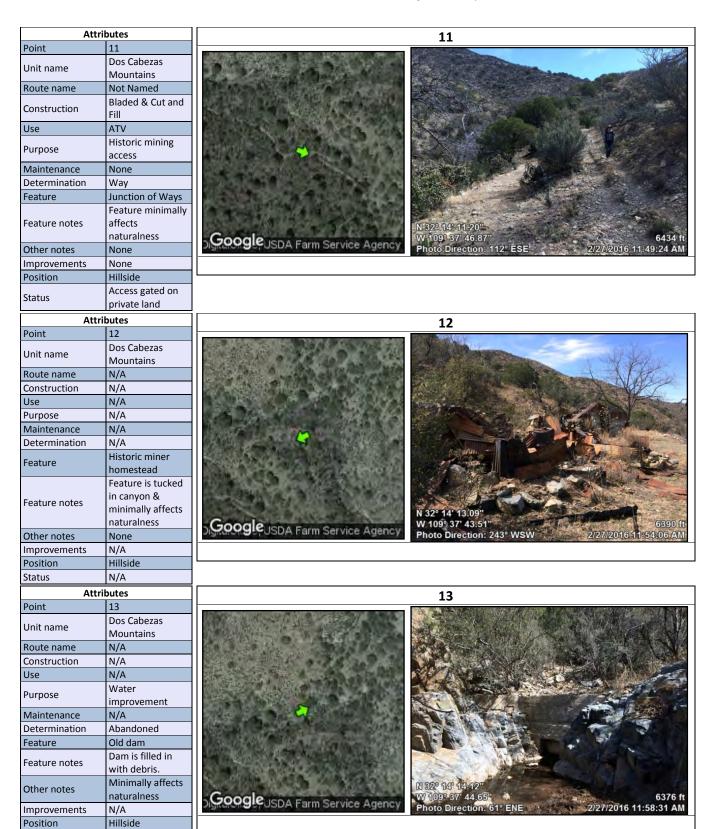






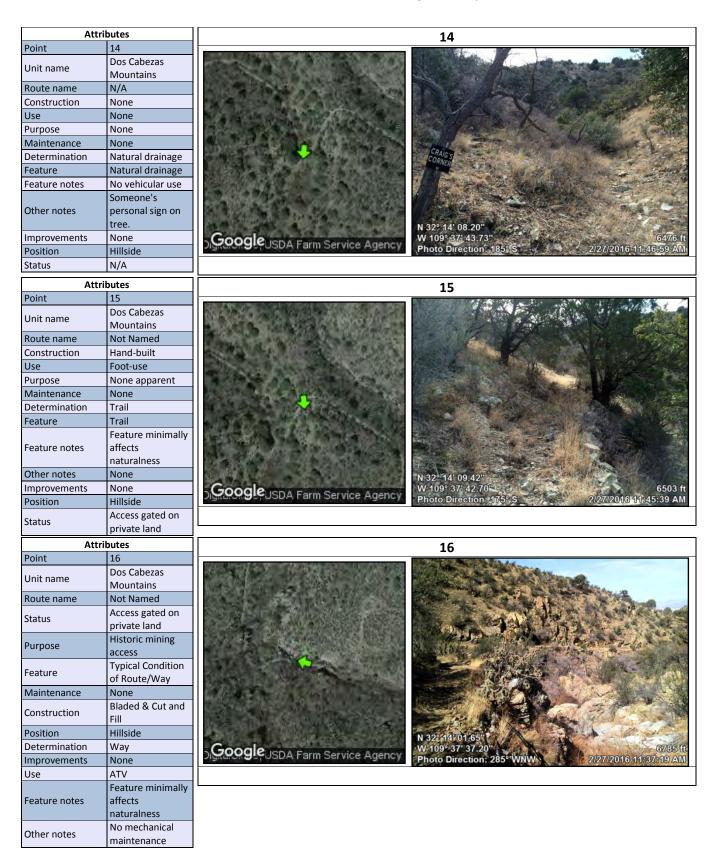




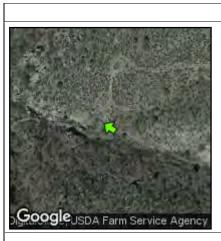


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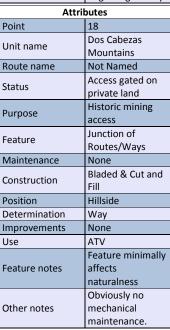
Status

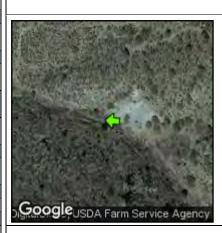


Attri	butes
Point	17
Unit name	Dos Cabezas Mountains
Route name	Not Named
Status	Access gated on private land
Purpose	Historic mining access
Feature	Junction of Routes/Ways
Maintenance	None
Construction	Bladed
Position	Hillside
Determination	Trail
Improvements	None
Use	ATV
Feature notes	Feature minimally affects naturalness
Other notes	Another personalized sign was placed at beginning of Way.



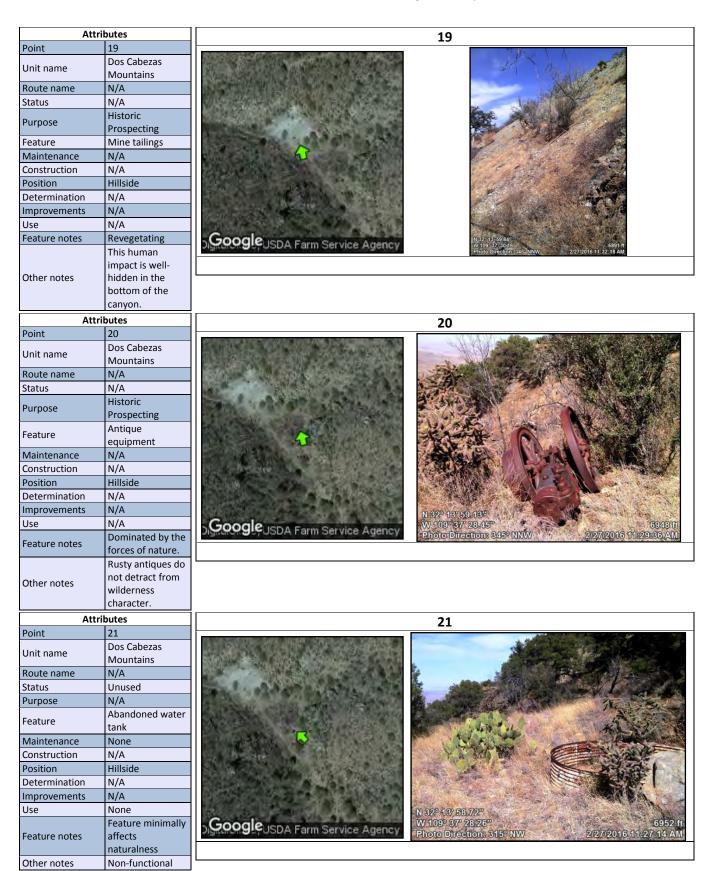


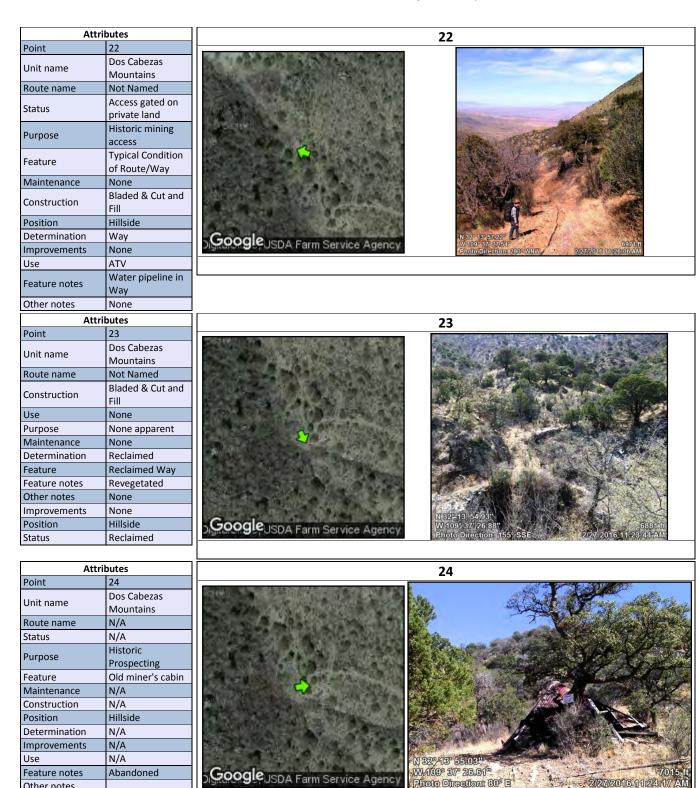






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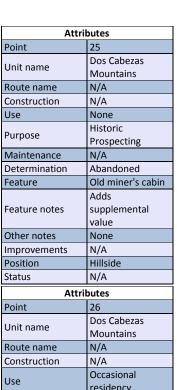


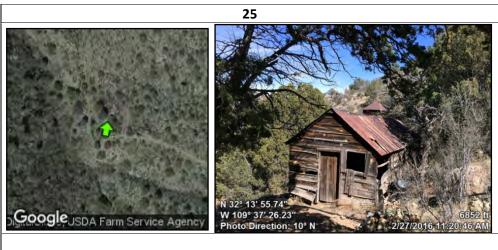


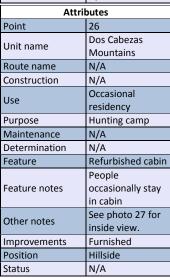
Other notes

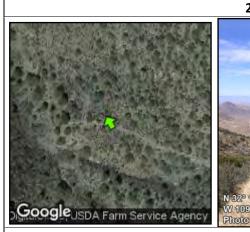
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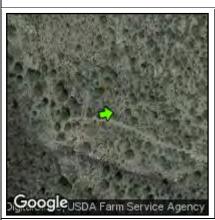




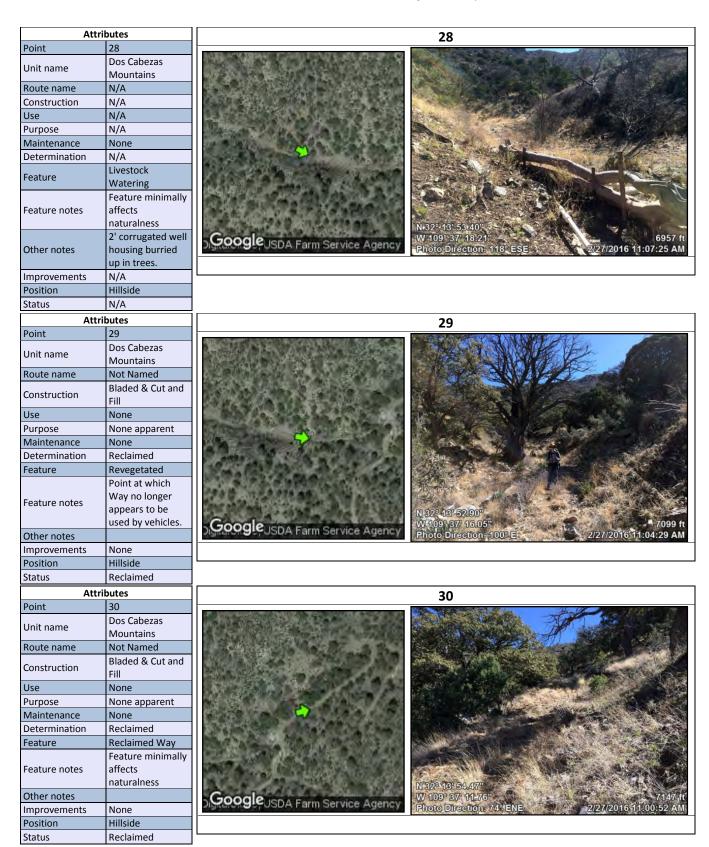


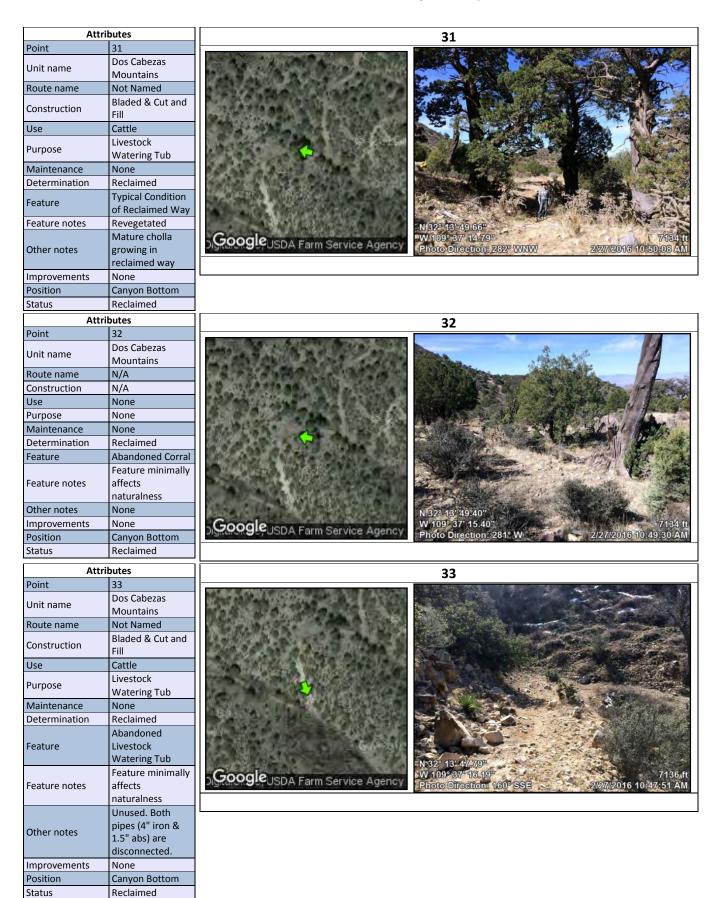


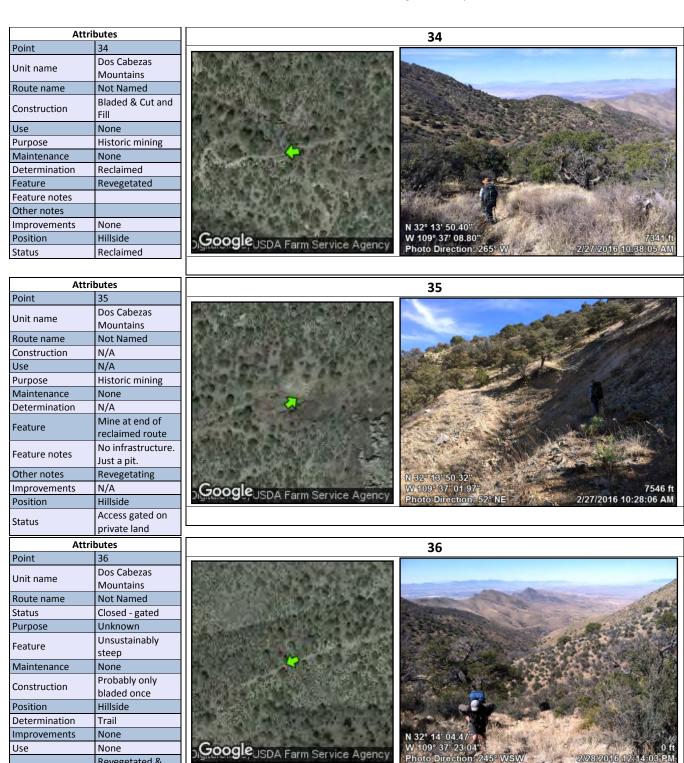
Attri	butes
Point	27
Unit name	Dos Cabezas
Offic flattie	Mountains
Route name	N/A
Construction	N/A
Use	Occasional
use	residency
Purpose	Hunting camp
Maintenance	None
Determination	N/A
Feature	Refurbished cabin
	Someone uses
Feature notes	cabin for personal
	use
Other notes	2' corrugated well
	housing burried
	up in trees.
Improvements	Furnished
Position	Hillside
Status	N/A









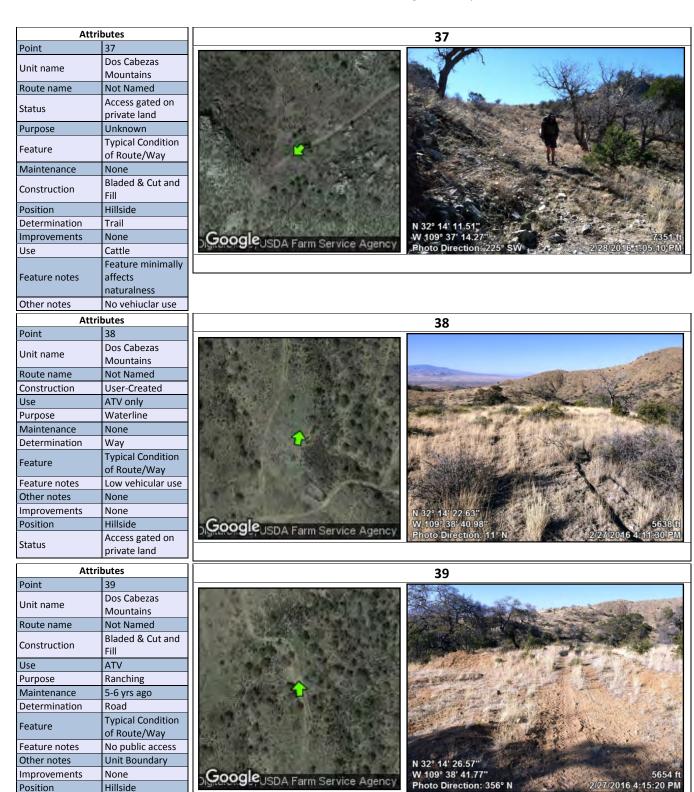


Revegetated &

naturalizing Access gated on

private land

Feature notes



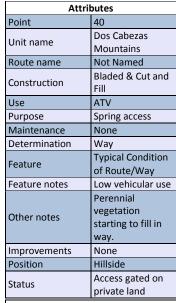
Position

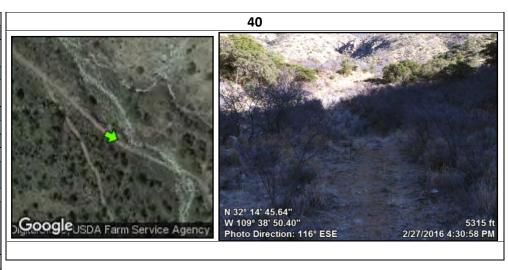
Status

Hillside Access gated on

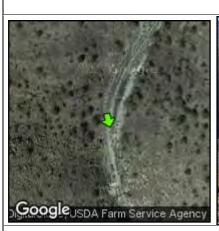
private land

Photo Direction: 356° N







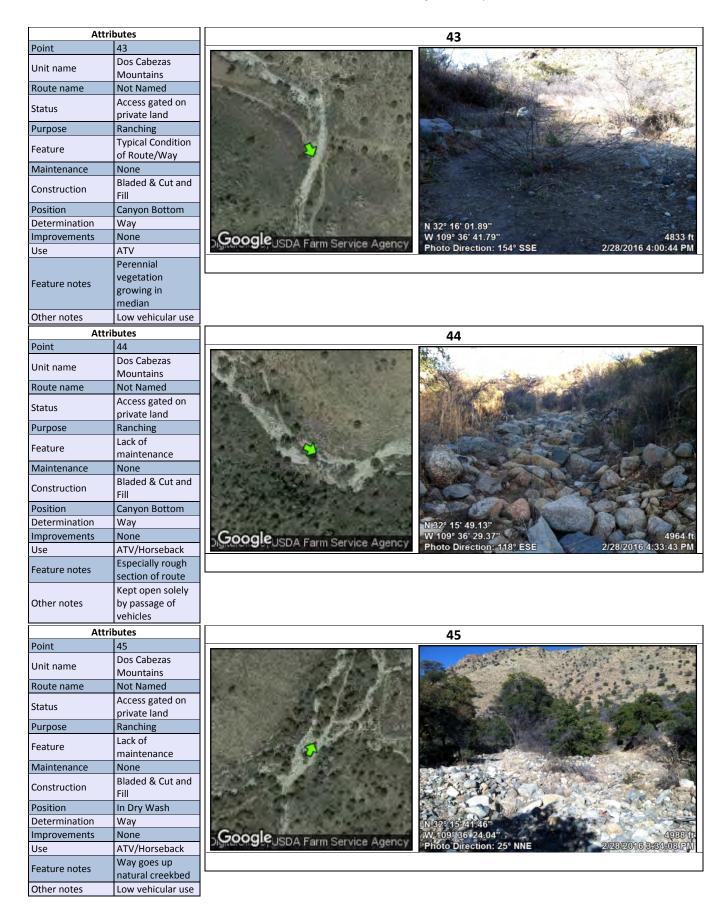


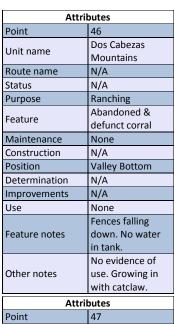


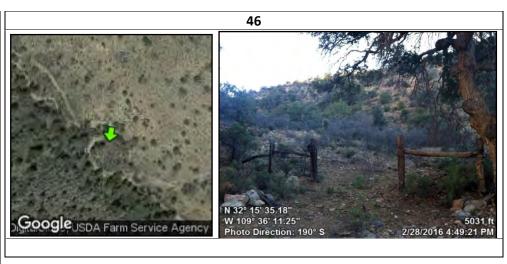
	private land
Attri	butes
Point	42
I lait acces	Dos Cabezas
Unit name	Mountains
Route name	Not Named
Construction	Bladed & Cut and
Construction	Fill
Use	ATV
Purpose	Klump Ranch
Maintenance	5-6 yrs ago
Determination	Road
Feature	Closure point
	Berm on left.
Feature notes	"Private Property:
reature notes	No Tressapssing."
	On right post.
Other notes	Unit Boundary
Improvements	None
Position	Canyon Bottom
Status	Access gated on
	private land



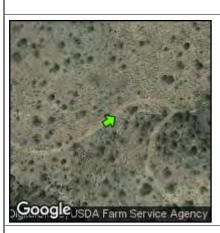










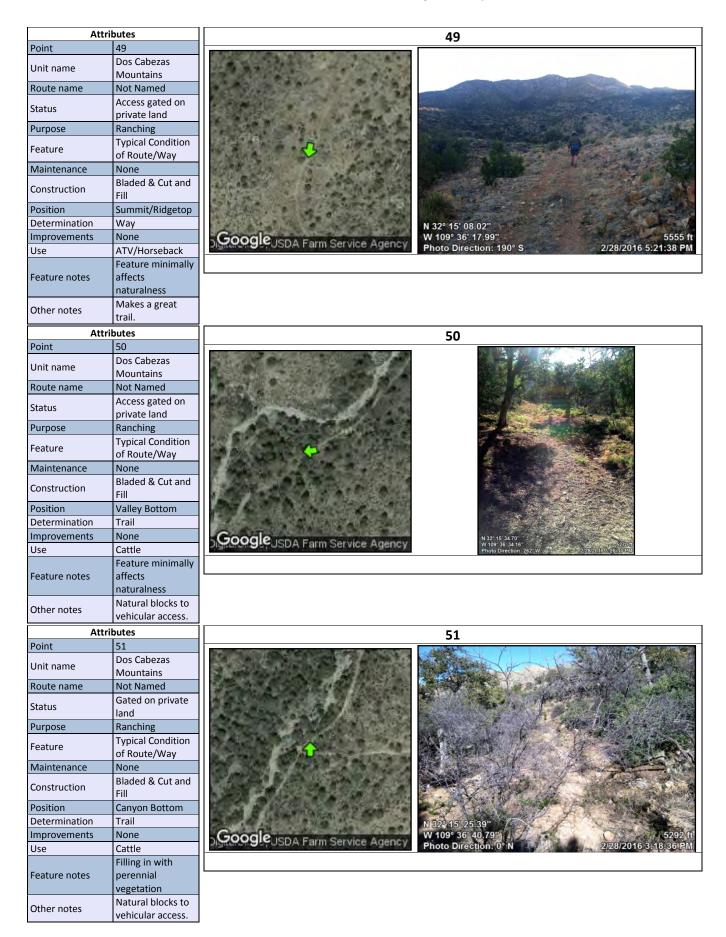




Other motes	
Attril	butes
Point	48
Unit name	Dos Cabezas Mountains
Route name	Not Named
Status	Access gated on private land
Purpose	Ranching
Feature	Typical Condition of Route/Way
Maintenance	None
Construction	Bladed & Cut and Fill
Position	Hillside
Determination	Way
Improvements	None
Use	ATV/Horseback
Feature notes	Feature minimally affects naturalness
Other notes	

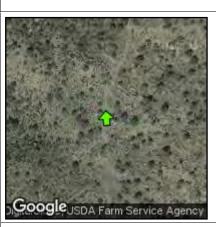






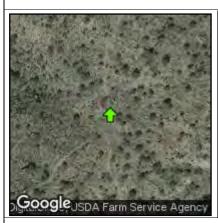
52



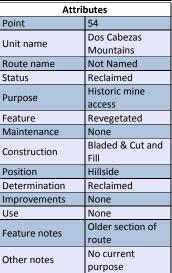


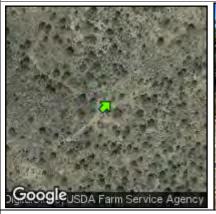


Attributes	
Point	53
Unit name	Dos Cabezas
Offic flame	Mountains
Route name	Not Named
Status	Gated on private
- Carao	land
Purpose	Historic mine
Тигрозс	access
Feature	Typical Condition
reature	of Route/Way
Maintenance	None
Construction	Bladed & Cut and
Construction	Fill
Position	Summit/Ridgetop
Determination	Trail
Improvements	None
Use	Cattle
Feature notes	Revegetating
Other notes	Equipment
	appears to be out
	of order and
	abandoned

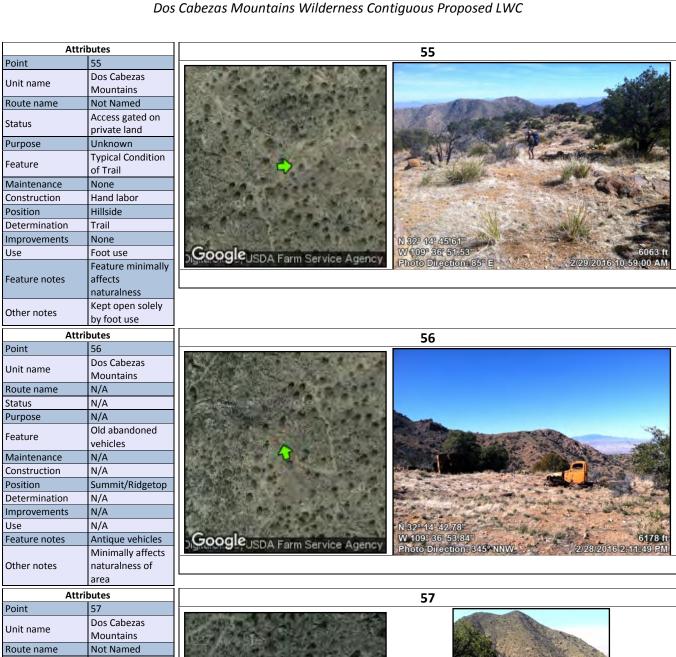




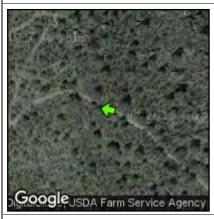




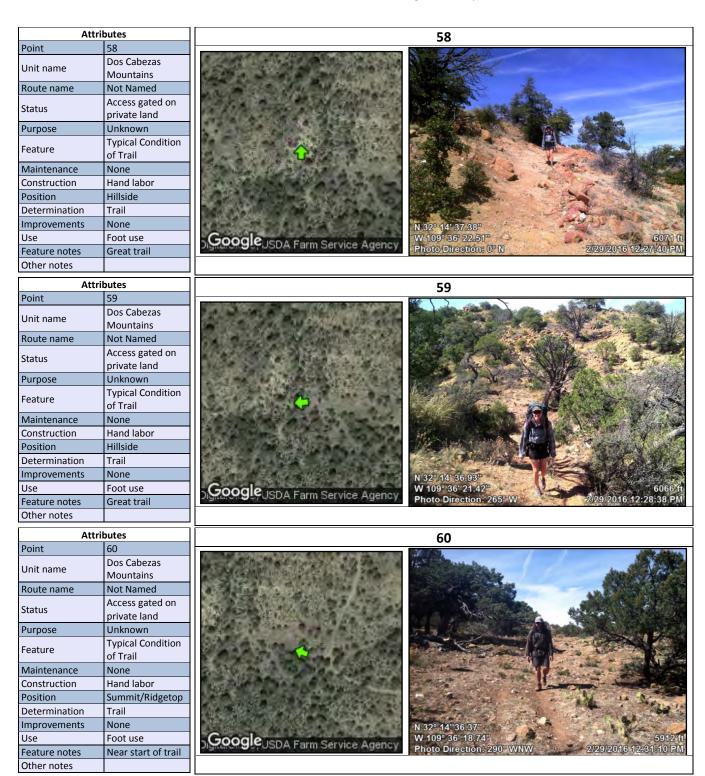




Attributes	
Point	57
Unit name	Dos Cabezas Mountains
Route name	Not Named
Status	Access gated on private land
Purpose	Historic mine access
Feature	Typical Condition of Trail
Maintenance	None
Construction	Bladed & Cut and Fill
Position	Hillside
Determination	Trail
Improvements	None
Use	Cattle
Feature notes	Revegetating
Other notes	No vehicular use

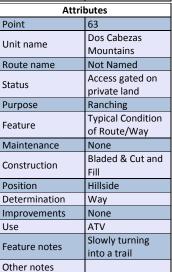










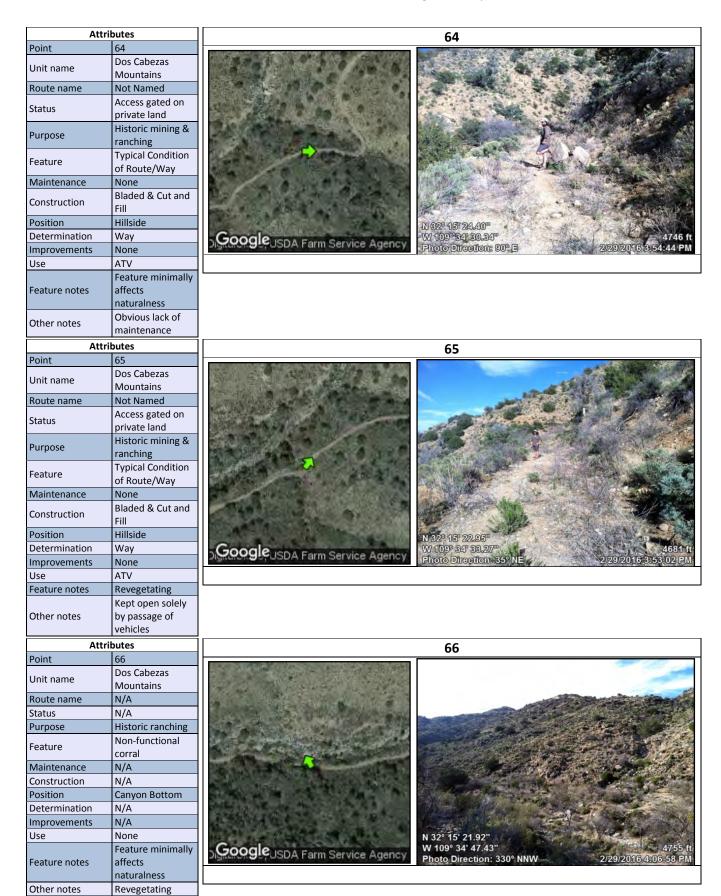












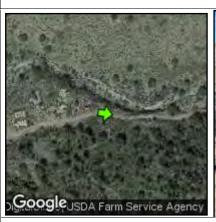






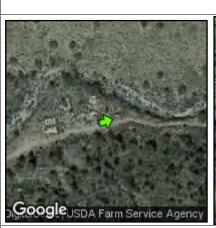














Attributes	
Point	71
I laik assess	Dos Cabezas
Unit name	Mountains
Route name	N/A
Status	N/A
Purpose	Historic mill site
Feature	Buckeye Mill
Maintenance	N/A
Construction	N/A
Position	Canyon Bottom
Determination	N/A
Improvements	N/A
Use	N/A
Feature notes	Naturalizing
Other notes	

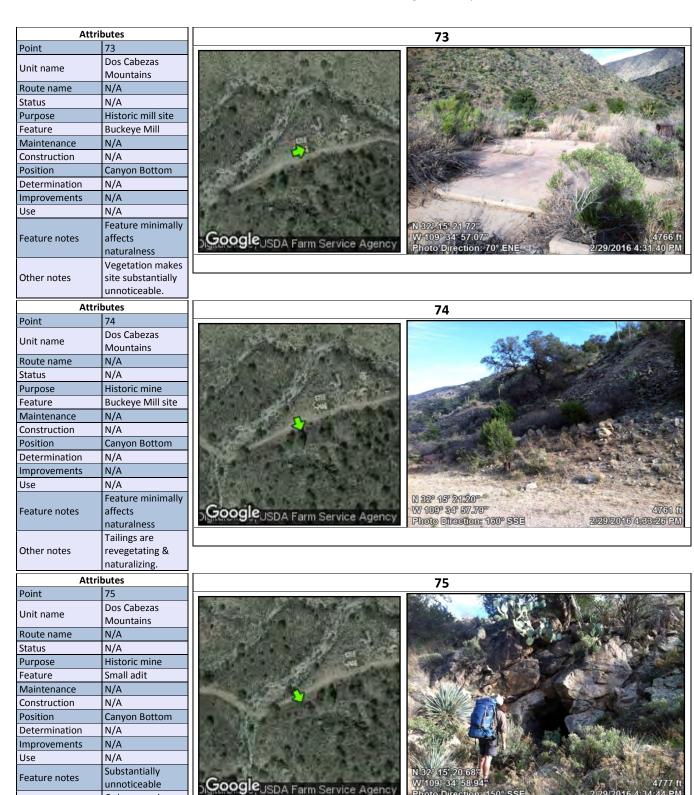




Attributes	
Point	72
Unit name	Dos Cabezas Mountains
Route name	N/A
Status	N/A
Purpose	Historic Mill Site
Feature	Buckeye Mill
Maintenance	N/A
Construction	N/A
Position	Canyon Bottom
Determination	N/A
Improvements	N/A
Use	N/A
Feature notes	Feature minimally affects naturalness
Other notes	Substantially unnoticeable to average visitor. Hidden in canyon bottom.





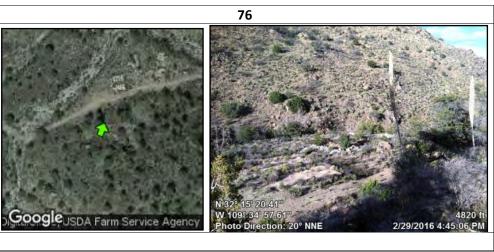


Only seen when

mine.

directly in front of







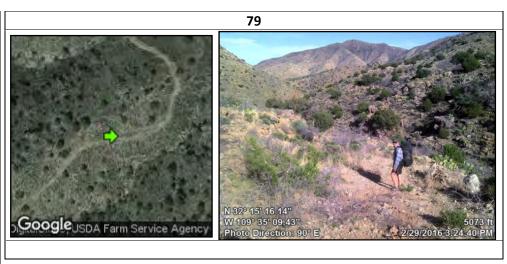


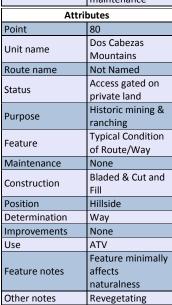
naturalness Substantially

unnoticeable



Attributes	
Point	79
Unit name	Dos Cabezas Mountains
Route name	Not Named
Status	Access gated on private land
Purpose	Historic mining & ranching
Feature	Typical Condition of Route/Way
Maintenance	None
Construction	Bladed & Cut and Fill
Position	Hillside
Determination	Way
Improvements	None
Use	ATV
Feature notes	Feature minimally affects naturalness
Other notes	Obvious lack of maintenance

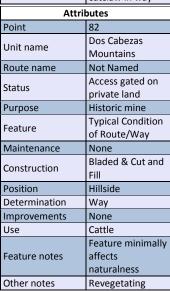








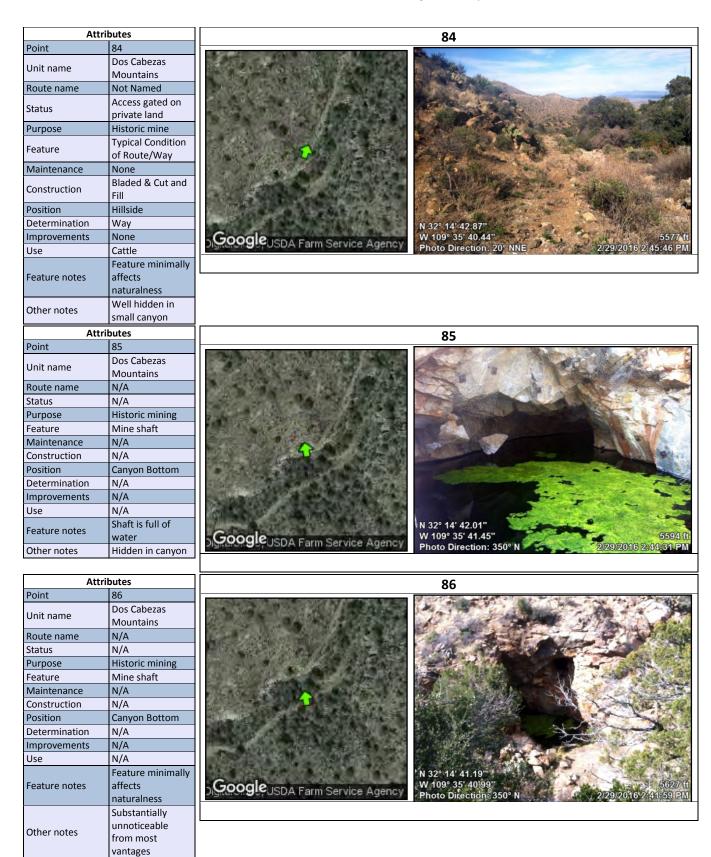


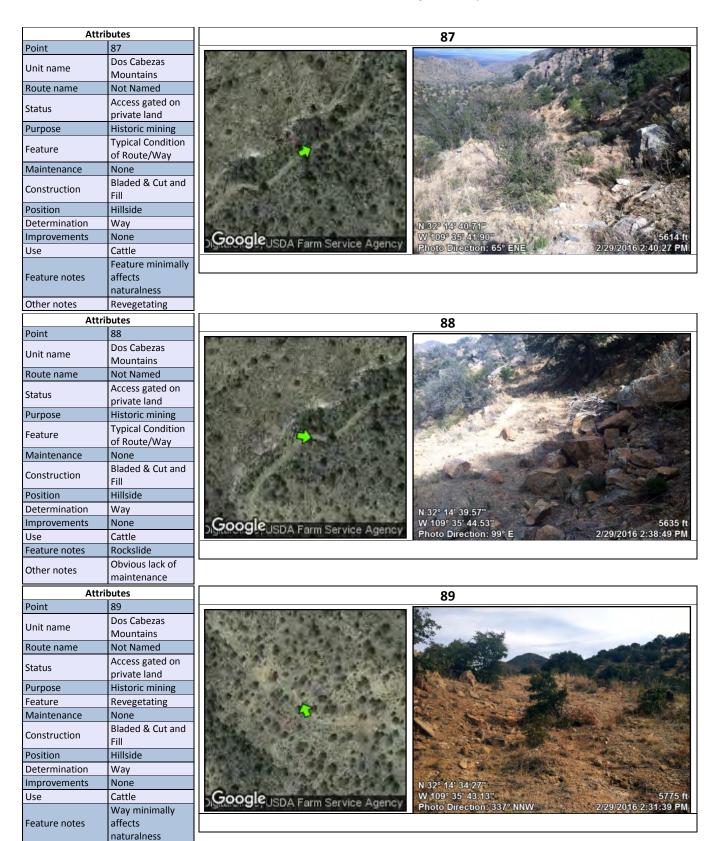


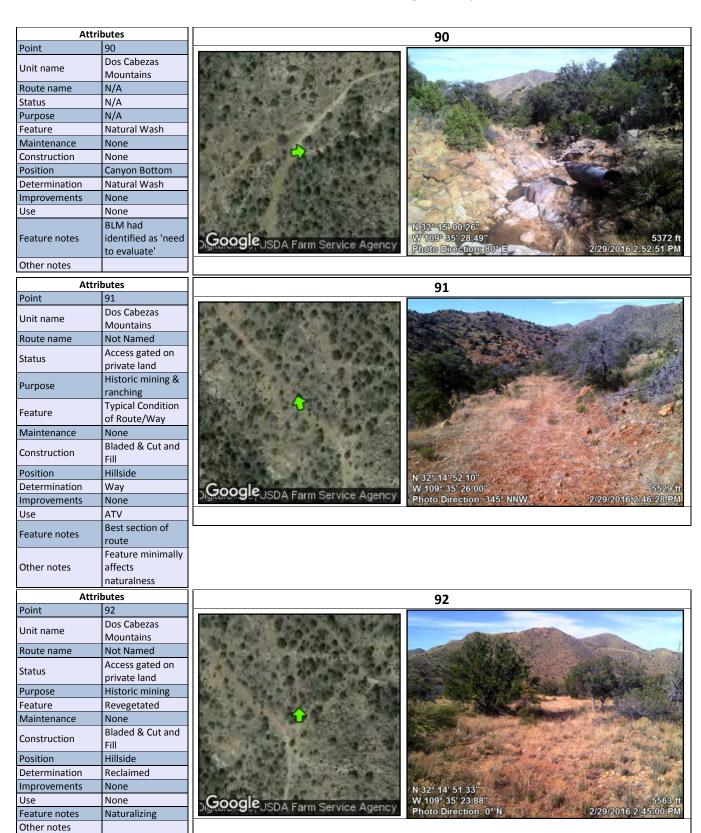


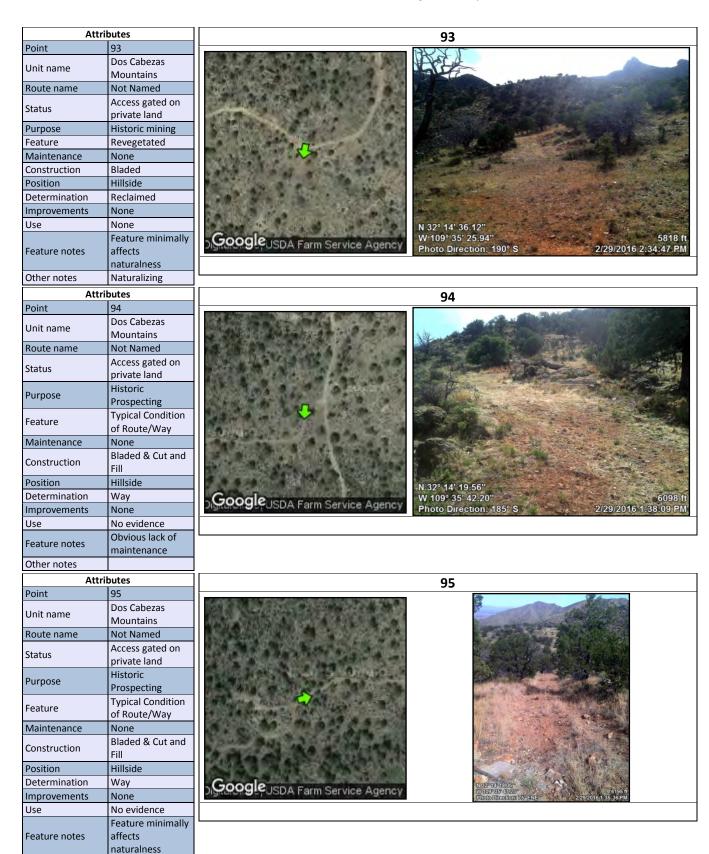










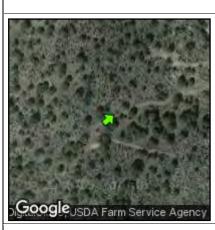


Revegetating



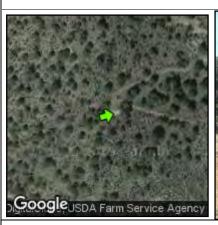


Attributes	
Point	97
Unit name	Dos Cabezas
Offic flame	Mountains
Route name	Not Named
Status	Access gated on
Status	private land
Purpose	Historic
ruipose	Prospecting
Feature	Typical Condition
reature	of Route/Way
Maintenance	None
Construction	Bladed & Cut and
	Fill
Position	Hillside
Determination	Way
Improvements	None
Use	No evidence
Feature notes	Obvious lack of
	maintenance
Other notes	Revegetating

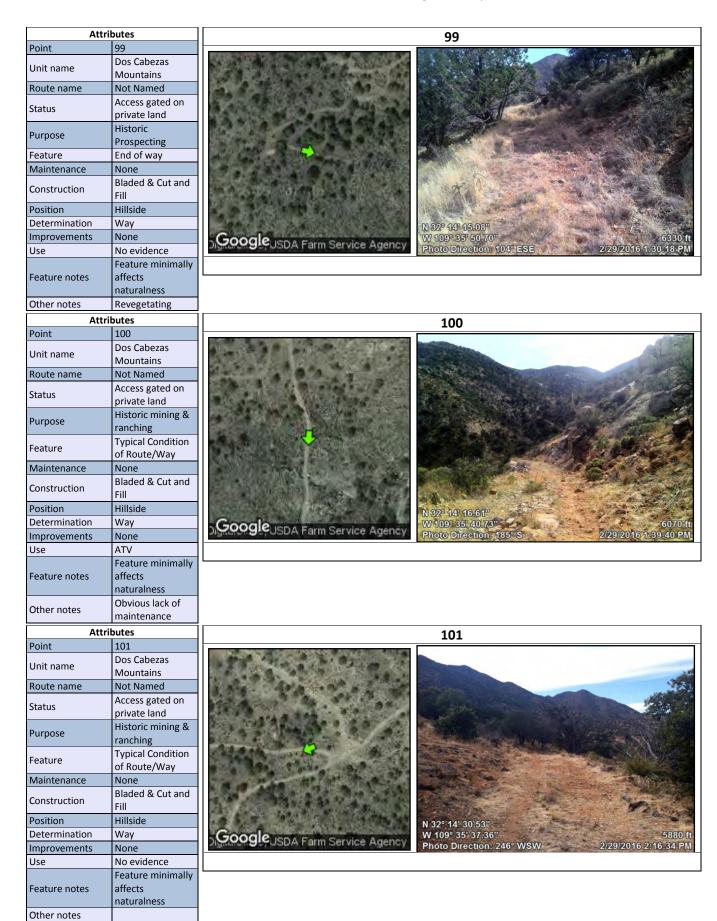


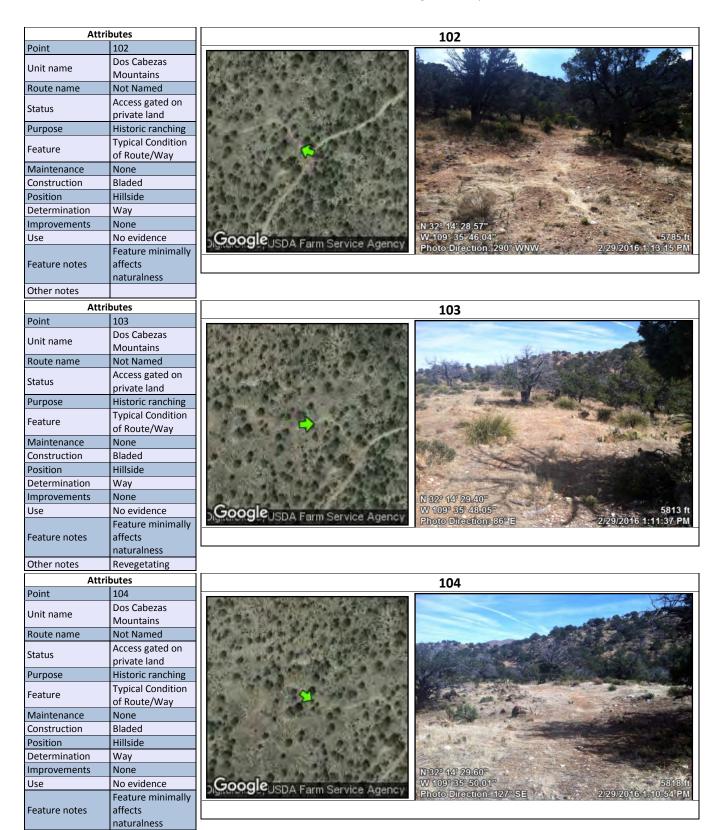


Other notes	Revegetating
Attributes	
Point	98
Unit name	Dos Cabezas
	Mountains
Route name	N/A
Status	N/A
Purpose	Historic
	Prospecting
Feature	Minor
reature	disturbance
Maintenance	N/A
Construction	N/A
Position	Hillside
Determination	N/A
Improvements	N/A
Use	N/A
Feature notes	Feature minimally
	affects
	naturalness
Other notes	

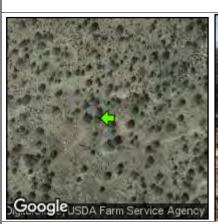








Attributes	
Point	105
Unit name	Dos Cabezas
	Mountains
Route name	N/A
Status	N/A
Purpose	Historic ranching
Feature	Corral
Maintenance	N/A
Construction	N/A
Position	Shoulder
Determination	N/A
Improvements	N/A
Use	None
Feature notes	Non-functional
Other notes	Dilapidated



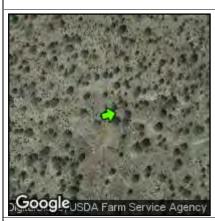


Attributes	
Point	106
Unit name	Dos Cabezas
	Mountains
Route name	N/A
Status	N/A
Purpose	Historic ranching
Feature	Unused loading
	ramp
Maintenance	N/A
Construction	N/A
Position	Shoulder
Determination	N/A
Improvements	N/A
Use	None
	Mature cholla
Feature notes	growing in loading
	ramp.
Other notes	Has not been
	used in long time.



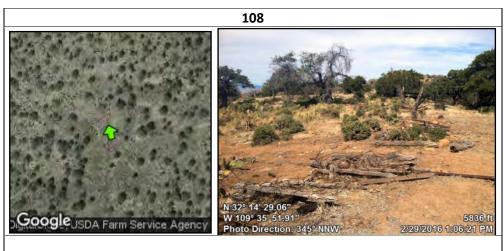








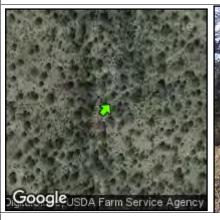




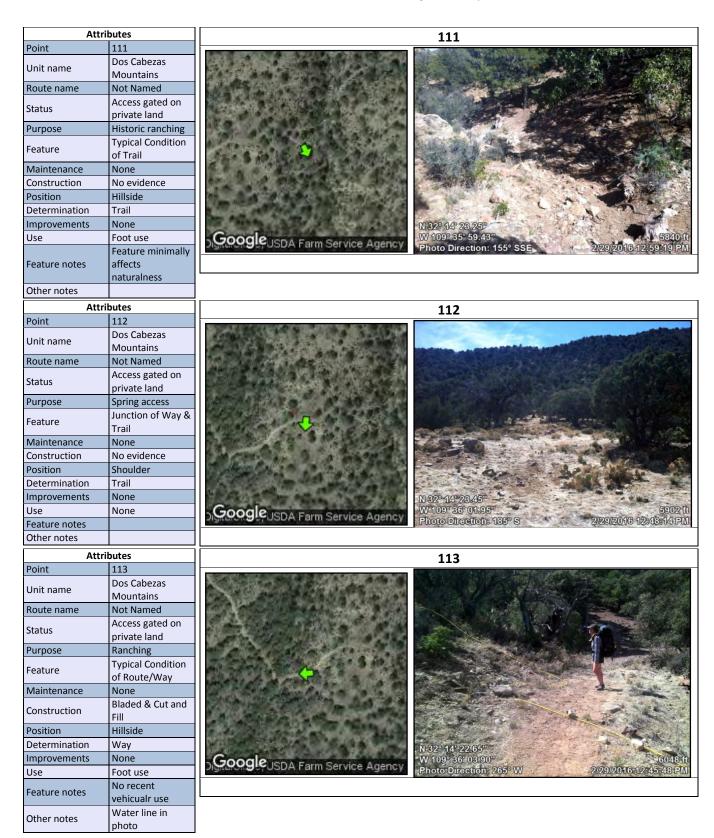
Attributes	
Point	109
Unit name	Dos Cabezas
Offic flatfie	Mountains
Route name	Not Named
Status	Access gated on
	private land
Purpose	Historic ranching
Feature	Typical Condition
reature	of Trail
Maintenance	None
Construction	No evidence
Position	Hillside
Determination	Trail
Improvements	None
Use	Foot use
Feature notes	Feature minimally
	affects
	naturalness
Other notes	

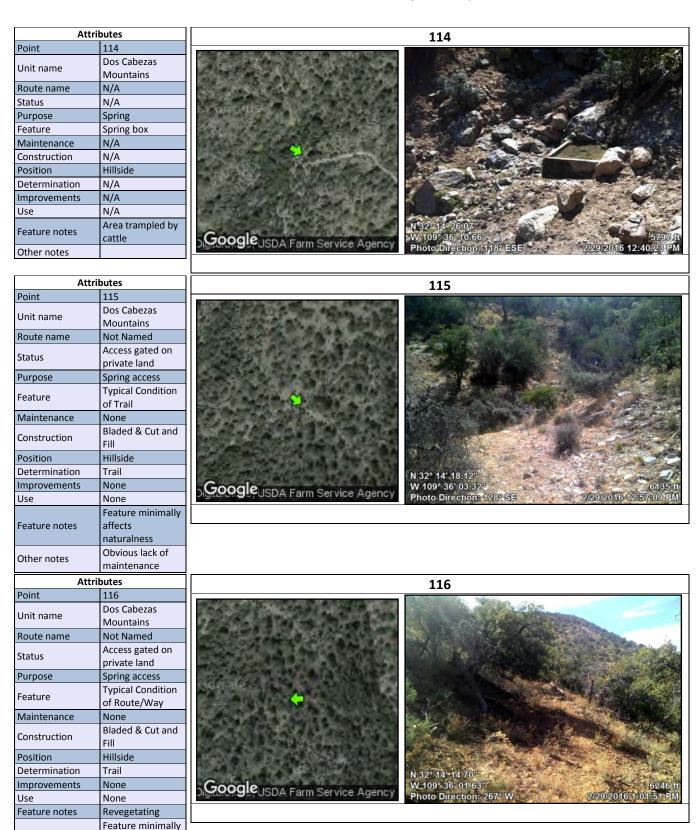




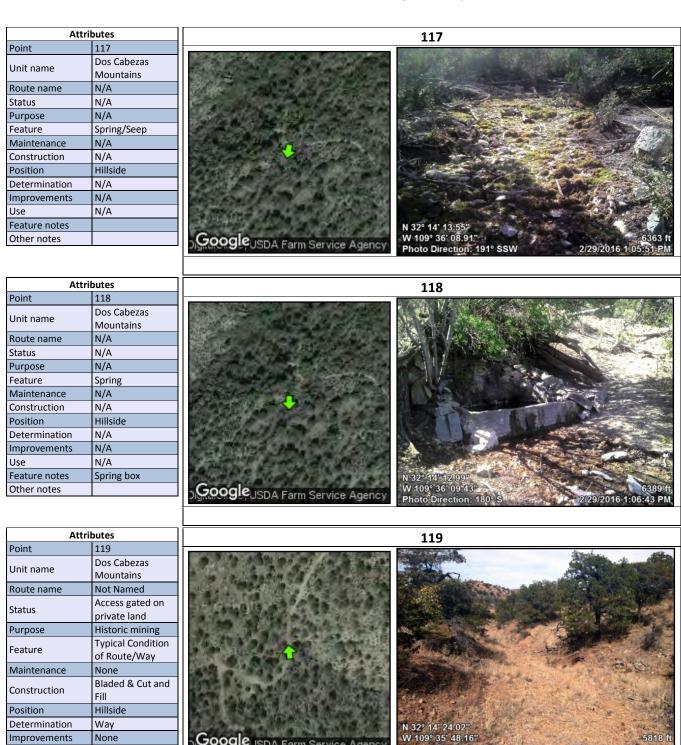








affects naturalness



2/29/2016 1:33:12 PM

Google USDA Farm Service Agend

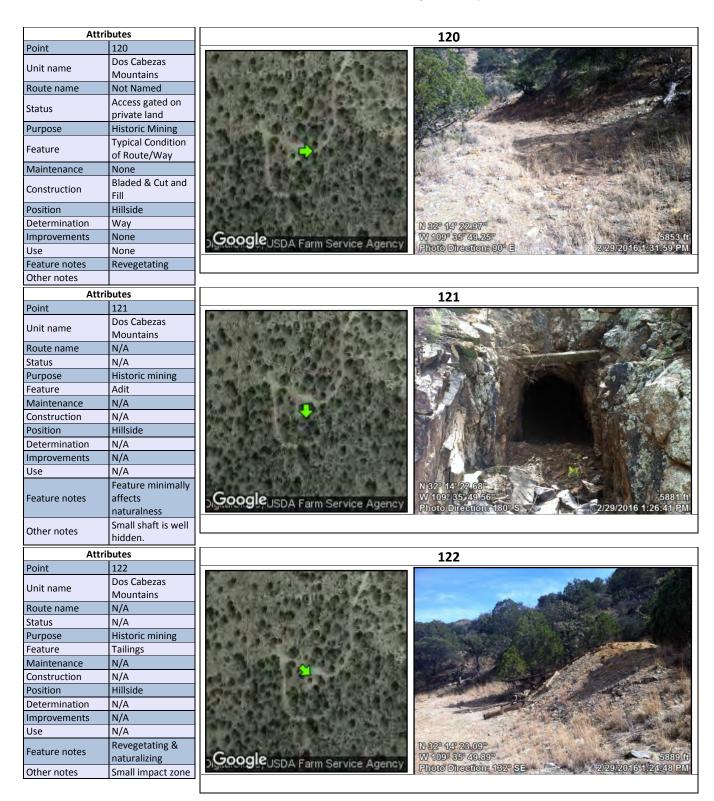
None

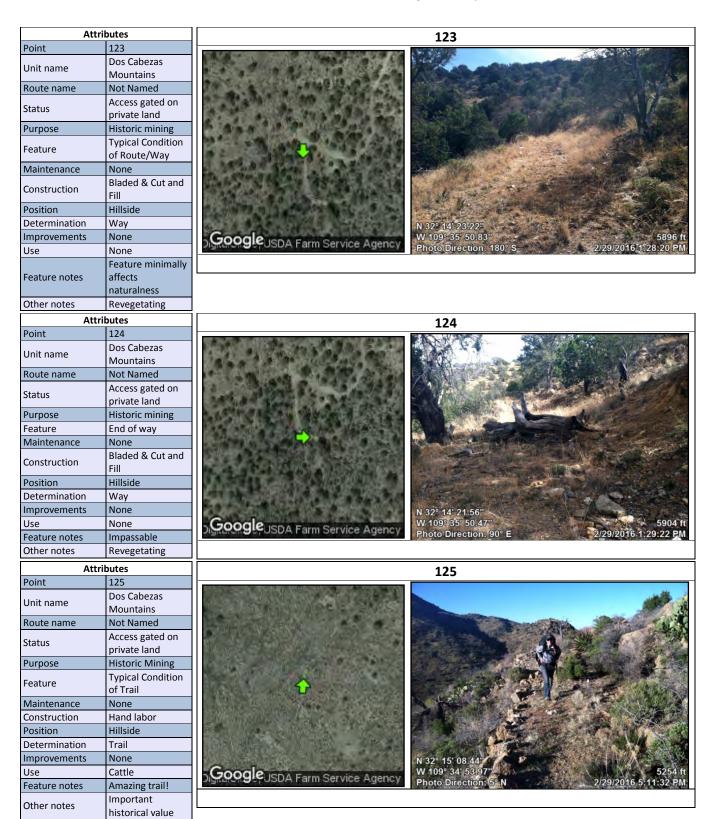
Revegetating

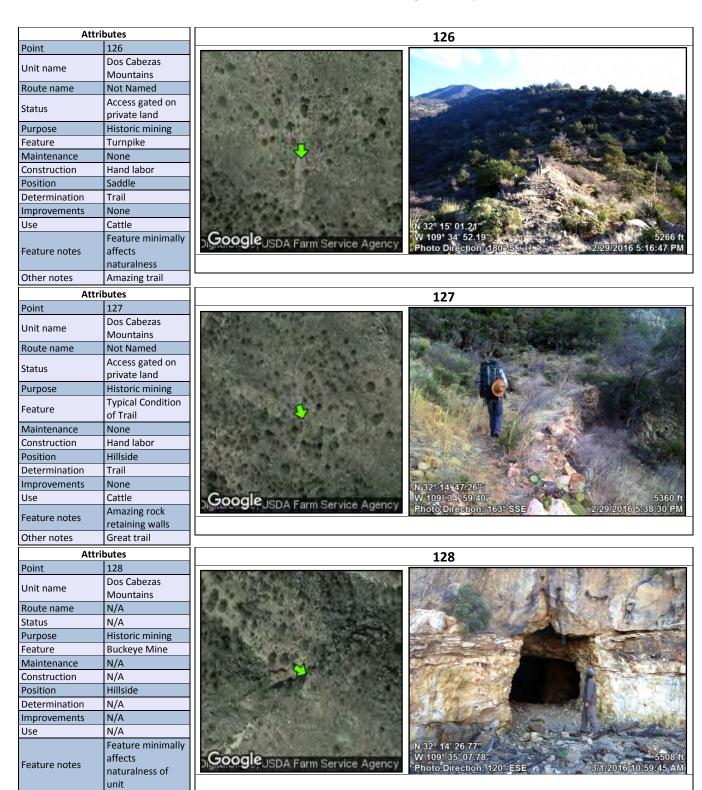
No use evident

Use Feature notes

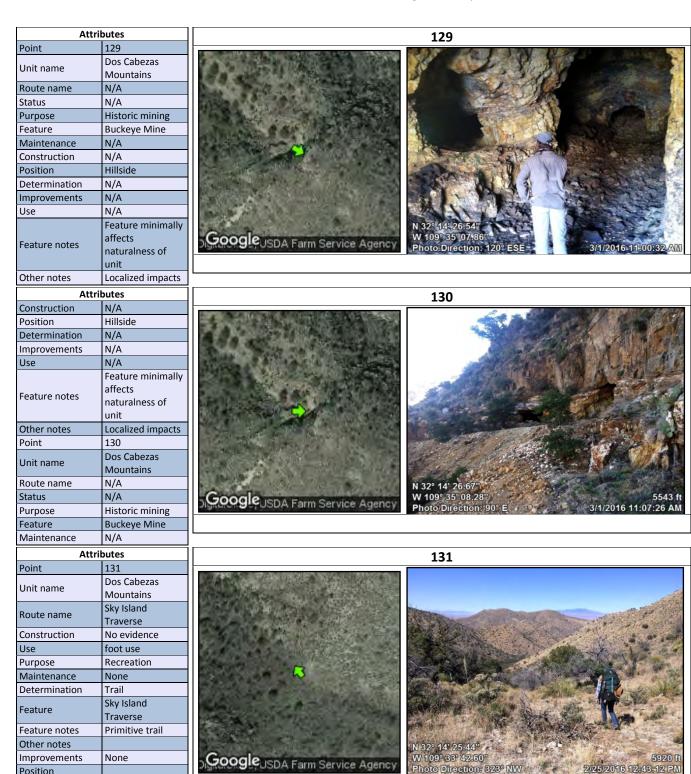
Other notes







Localized impact

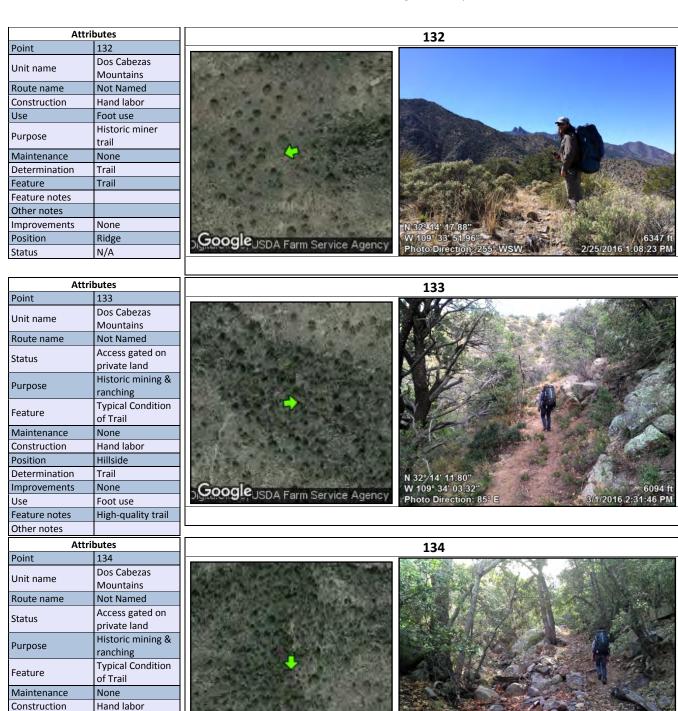


Position Status

Hiking route

Photo Direction: 323° NW

2/25/2016 12:43:12 PI



Google USDA Farm Service Agency

N 32° 14' 12-31" W 109° 34' 10.05

Position

Determination

Improvements

Feature notes

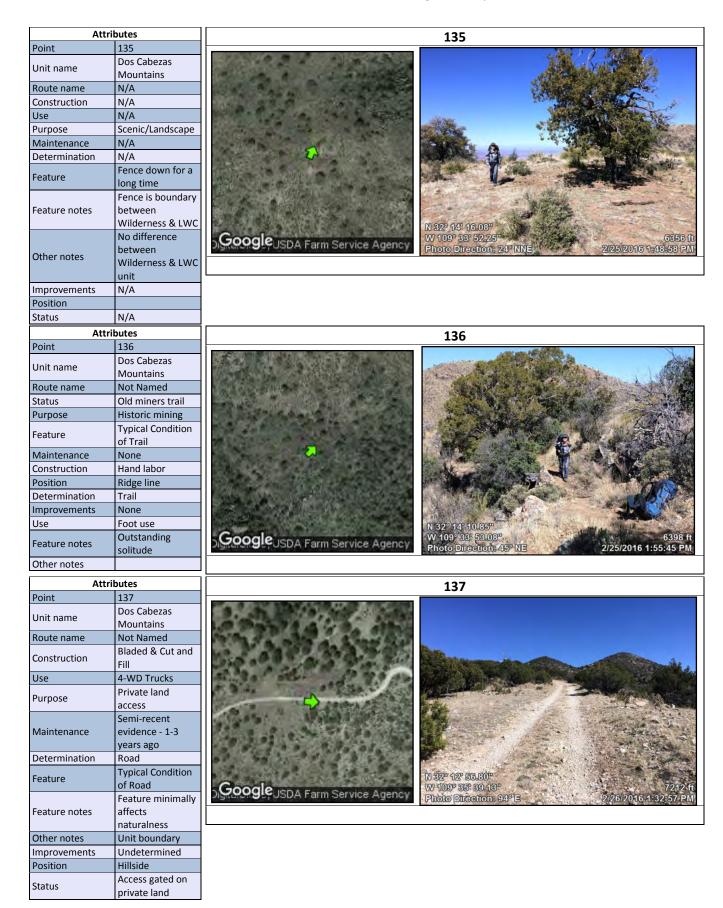
Other notes

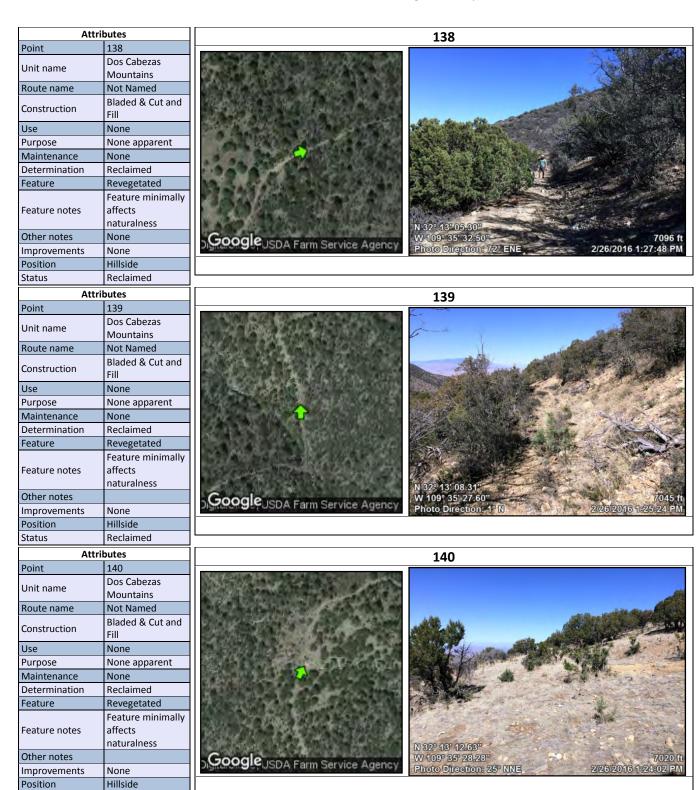
Canyon Bottom

High-quality trail

Trail

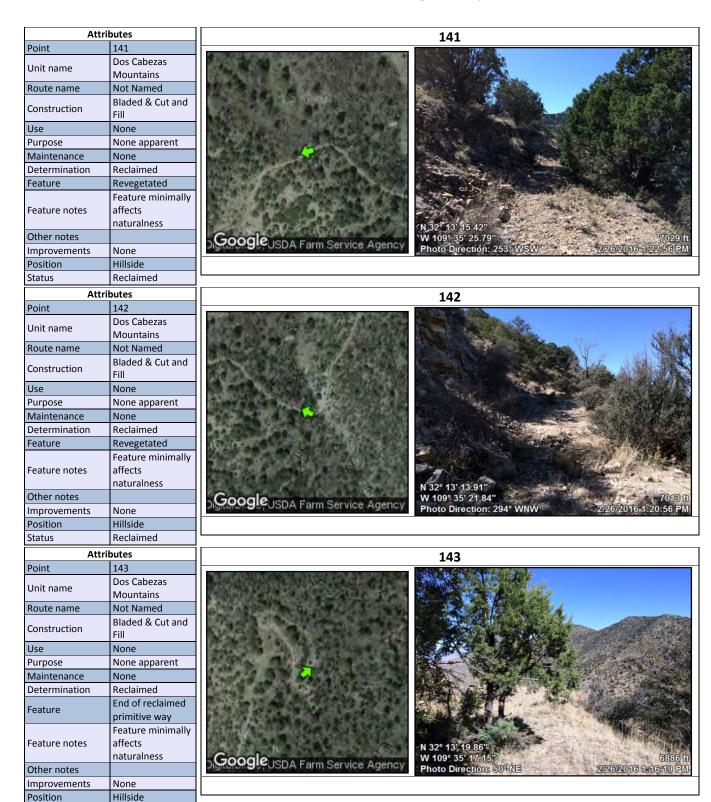
None Foot use





Reclaimed

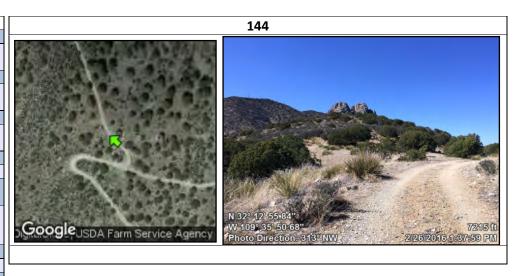
Status

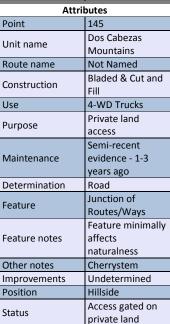


Status

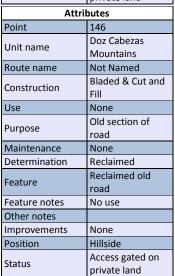
Reclaimed

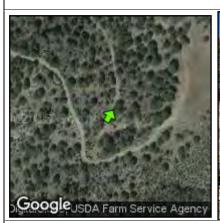
Attributes	
Point	144
Unit name	Dos Cabezas Mountains
Route name	Not Named
Construction	Bladed & Cut and Fill
Use	4-WD Trucks
Purpose	Private land
	access
Maintenance	None
Determination	Road
Feature	Typical Condition of Road
Feature notes	Feature minimally affects naturalness
Other notes	Cherrystem
Improvements	Undetermined
Position	Hillside
Status	Access gated on private land
Attributes	
Point	145





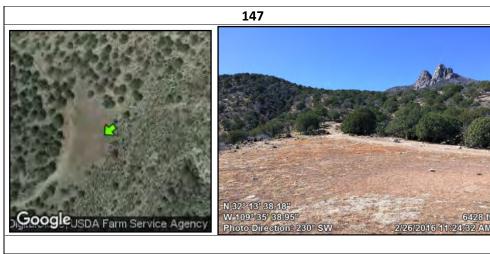




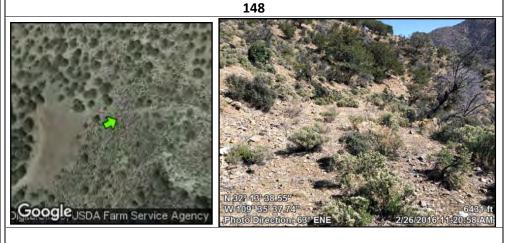


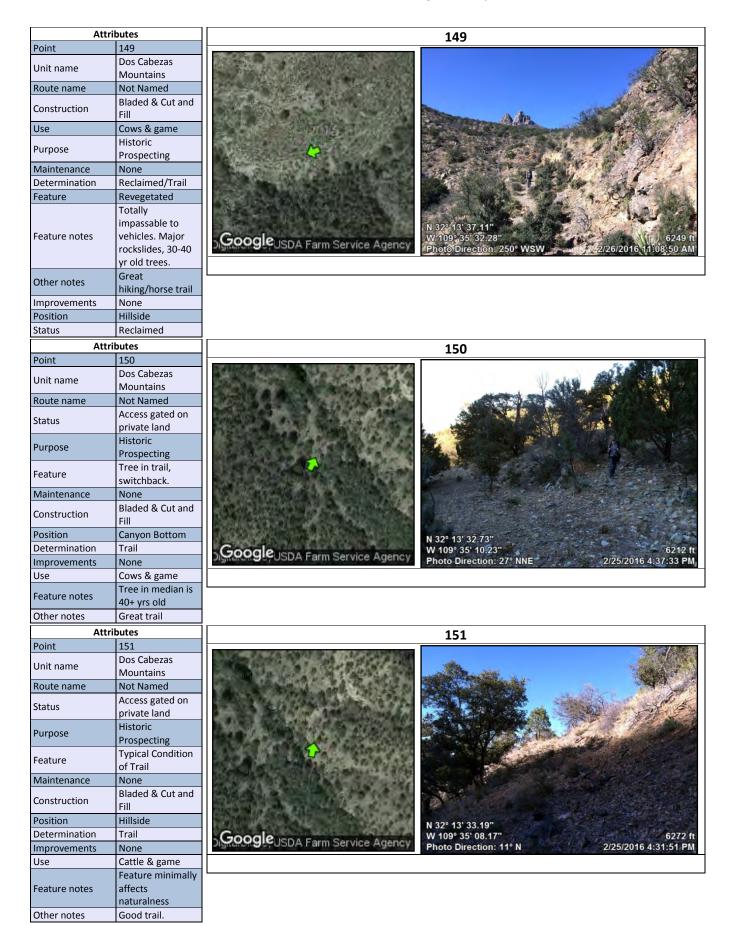


Attributes	
Point	147
Unit name	Dos Cabezas Mountains
Route name	Not Named
Construction	Bladed & Cut and Fill
Use	4-WD Trucks
Purpose	Private land access
Maintenance	Old evidence - 3-5 years ago
Determination	Road
Feature	Dozered clearing, road at end of area.
Feature notes	Dos Cabezas in background
Other notes	Cherrystem
Improvements	None
Position	Multiple Positions
Status	Access gated on private land



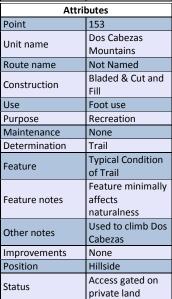






Attri	butes
Point	152
Unit name	Dos Cabezas Mountains
Route name	Not Named
Construction	No evidence
Use	Cows, game, carnivores
Purpose	Wildlife use
Maintenance	None
Determination	Trail
Feature	Trail descends steep drainage.
Feature notes	Deer, bear diggings at hive, Mtn lion skull. Two seeps.
Other notes	Good trail. Very Wild. Excellent example of madrean oak woodland. Silver oak, juniper, white oak, cherry
Improvements	None
Position	Hillside
Status	Access gated on private land







Attributes	
Point	154
Unit name	Dos Cabezas Mountains
Route name	Not Named
Construction	Bladed & Cut and Fill
Use	Foot use
Purpose	Recreation
Maintenance	None
Determination	Trail
Feature	Typical Condition of Trail
Feature notes	Feature minimally affects naturalness
Other notes	Used to climb Dos Cabezas
Improvements	None
Position	Hillside
Status	Access gated on private land

