

# Decision Record

## Black Canyon National Recreation Trail Big Bug Trailhead Construction Plan

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### Decision

It is my decision to approve the *Black Canyon National Recreational Trail – Big Bug Trailhead Construction Plan* as described in the Proposed Action of the Environmental Assessment DOI-BLM-AZ-PDO-2012-017-EA.

### Rationale for Decision

Construction of the Big Bug Trailhead for the Black Canyon National Recreation Trail (BCNRT) represents the best attempt to increase outdoor recreation needs of an expanding urban population and promote the preservation of public access to the 80 mile trail system, to offer parking and staging for non-motorized recreation trail use, and to enjoy and appreciate the historic resources along the BCNRT. It also provides the opportunity to enhance our natural and cultural heritage through awareness of the historic sheep drive still occurring on this trail.

The building of this 5-acre trailhead will provide access and amenities on the northern end of the BCNRT and increase the enjoyment of this world-class hiking, biking, and equestrian trail.

Construction of the Big Bug Trailhead results in implementing a management decision made in the Bradshaw Harquahala Resource Management Plan (BHRMP) to provide additional trailheads on the BCNRT.

### Public Involvement

Members of the public were encouraged to participate in the planning for the Big Bug Trailhead as part of a larger planning effort in the area. Through the scoping process, suggestions presented by members of the public were incorporated into the plan. See DOI-BLM-AZ-PDO-2012-017-EA for specific information on public involvement throughout the project planning process.

### Alternatives Considered

The BLM considered four alternatives: the no action, the Proposed Action (a five acre disturbed site on the south side of SR 69), Alternative 1 (a two acre site off SR 69 and Old Sycamore Road), and Alternative 2 (a five acre site off SR 69 and Old Sycamore Road).

Because the Proposed Action incorporates the following design features and because of its minimal impact on resources of the human environment, the Proposed Action has been selected as the preferred alternative.

- The site is already denuded and disturbed.
- The site provides easy access off of SR 69, but is hidden from site of the highway topography.
- The site has an on-site well available.

- The site has a larger area for parking including vehicles with trailers.
- The site has an area for dispersed camping with host sites.
- The site is adjacent to the trail and would be less costly to develop.

## Appeal Opportunity

This decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR, Part 4. Your notice of appeal must be filed in this office, located at 21605 North 7<sup>th</sup> Avenue, Phoenix, Arizona, 85027, within 30 days from receipt of this decision. The appellant has the burden of showing that the decision appealed from is in error.

If you wish to file a petition (request) pursuant to regulation 43 CFR Part 4.21(b) for a stay (suspension) of the effectiveness of this decision during that time that your appeal is being reviewed by the Board, the petition for a stay must accompany your notice to appeal. A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the notice of appeal and the petition for a stay must also be submitted to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (see 43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

## Standards for Obtaining a Stay

Except as otherwise provided by law or other pertinent regulation, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards:

1. The relative harm to the parties if the stay is granted or denied,
2. The likelihood of the appellant's success on the merits,
3. The likelihood of immediate and irreparable harm if the stay is not granted,
4. Whether the public interest favors a granting the stay.

\_\_\_\_\_/S/\_\_\_\_\_  
D. Remington Hawes  
Manager, Hassayampa Field Office

\_\_\_\_\_/08/23/2012\_\_\_\_\_  
August 23, 2012

## Finding of No Significant Impact

DOI-BLM-AZ-P010-2012-017-EA

### **Black Canyon National Recreation Trail, Big Bug Trailhead**

#### **Construction Plan Environmental Assessment**

Based on the analysis of potential environmental impacts contained in the attached environmental assessment (EA), and considering the significance criteria in 40 CFR 1508.27, described below, I have determined that the proposed action will not have a significant effect on the human environment. An environmental impact statement is, therefore, not required.

### **Context**

The Big Bug Trailhead project area is located on approximately five acres on the south side of SR 69 in T. 11 N., R. 2 E., Section 5, NW¼SW¼ in Yavapai County, Arizona. The Black Canyon National Recreation Trail (BCNRT) is managed in the Black Canyon Management Unit (MU) where the entire MU is allocated to the Black Canyon Special Recreation Management Area (SRMA) within the Black Canyon Hiking and Equestrian Trails Recreation Management Zone (RMZ). The proposed project will implement a Bradshaw-Harquahala Resource Management Plan (BHRMP) management decision to provide a trailhead on the BCNRT and to partner with the Black Canyon Trail Coalition in coordination with their receipt of the United States Forest Service Resource Advisory Committee grant. The Big Bug Trailhead will also meet the needs of an expanding urban population and promote the preservation of public access to the 80 mile trail system, to offer parking and staging for non-motorized recreation trail use, and to enjoy and appreciate the historic resources along the BCNRT.

### **Intensity**

The following discussion is organized around the 10 Significance Criteria described at 40 CFR 1508.27. The following have been considered in evaluating intensity for this proposal:

#### **Impacts that may be both beneficial and adverse**

Beneficial impacts primarily surround recreation resources. The construction of the Big Bug Trailhead within the BCNRT network will help to relieve recreation pressures along the urban interface and add to the trail experiences for hikers, bikers, and equestrians along the BCNRT. The presence of the only active historic sheep drive in the spring each year will enrich both local residents and visitors on the historic aspects of the BCNRT. It also presents the opportunity to bring in additional visitor dollars into the northern metropolitan region. The Big Bug Trailhead also assists the public to pursue an active, healthy outdoor lifestyle.

Potential adverse impacts presented in the Environmental Assessment primarily surround wildlife/riparian resources, through the removal of vegetation and key habitat. The analysis concluded

that the adverse impact to these resources is less than .0002 percent of the Big Bug Creek –Agua Fria River sub-watershed.

## **2. Degree of effect on public health and safety**

The Big Bug Trailhead will have a positive health effect by providing opportunities for people to pursue an active, healthy outdoor lifestyle. Amenities will be provided to aid visitor comfort and to provide a safe stopping/starting point for hikers, bikers and equestrians.

## **3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas**

There are no historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas in the Big Bug Trailhead area. The unique characteristics in this geographic area are the natural resources and the beauty of the setting.

## **4. Degree to which the possible effects on the quality of the human environment are likely to be highly controversial.**

The proposed project has a low degree of controversy from the possible effects on the quality of the human environment.

## **5. Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risk.**

The proposed project does not involve any effects on the quality of the human environment that are highly uncertain or involve unique or unknown risk.

## **6. Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.**

There is a low degree to which the construction of the Big Bug Trailhead may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

## **7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.**

Cumulative actions that could incrementally impact resources in this project area include other recreating members of the public; expansion of the BCNRT into the Prescott and Coconino National Forests, construction of the turnout land on S.R. 69, construction of the Copper Mountain Loop and a connector trail into Mayer. The totality of these actions would not have adverse significant impacts.

## **8. Degree to which the action may adversely affect district, sites, highways, structures, or objects listed on the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.**

Two Class III pedestrian surveys were conducted in August 2011 and April 2012 on all three alternatives for the Big Bug Trailhead and no district sites, highways, structures, or objects listed on

the National Register of Historic Places were identified. There is a low probability that the construction of this trailhead would cause loss or destruction of significant scientific, cultural or historic resources.

**9. Degree to which the action may adversely affect an endangered or threatened species or its critical habitat.**

There are no endangered or threatened species or its critical habitat in the proposed action site for the Big Bug Trailhead area.

**10. Whether the action threatens a violation of federal, state, or local environmental protection law.**

The construction of the Big Bug Trailhead does not threaten a violation of federal, state, or local environmental protection law.

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D. Remington Hawes, Hassayampa Field Manager

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August 23, 2012

BIG BUG TRAILHEAD  
BLACK CANYON NATIONAL  
RECREATION TRAIL

CONSTRUCTION PLAN

&

ENVIRONMENTAL ASSESSMENT

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NEPA Number DOI-BLM-AZ-P010-2012-017-EA

BLM Hassayampa Field Office

21605 North 7<sup>th</sup> Avenue

Phoenix, AZ 85027

August, 2012

# Big Bug Trailhead Construction Plan and Environmental Assessment

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## **I. Introduction**

The Big Bug trailhead project area is located in the northern third of the Black Canyon National Recreation Trail (BCNRT), off Highway State Route 69 (SR-69) in Yavapai County, Arizona.

The BCNRT is approximately 80 miles long, stretching from the Carefree Highway (AZ Highway 74) northward along the base of the Bradshaw Mountains, beyond Highway 69 near the town of Spring Valley to the Prescott National Forest (See Map A). It began as a prehistoric Native American pathway linking local settlements together and providing a way to travel long distances. The trail follows a route that has been used since the 1600s for the movement of livestock and people.

During the development of the Bradshaw-Harquahala Resource Management Plan (BHRMP), completed in April 2010, specific management decisions related to the BCNRT and surrounding land were made. These management actions include:

1. Developing at least eight trailheads and staging or camping areas near communities, with vehicle access points to serve the trail and adjoining public lands (BHRMP, RR-62, Pg. 62);
2. Trailhead facilities development could include information signs, kiosks, picnic tables, loading ramps, and soil stabilization for dust abatement (BHRMP, RR-63, Pg. 63; and
3. Establishing the BCNRT as a model of successful community partnerships and determining the exact locations of the trail or any ancillary trails and facilities in conjunction with ...Yavapai County trails committees, local communities, equestrian and other user groups, and interested citizens (BHRMP, RR-57, Pg. 62).

The development of the BCNRT and ancillary facilities has been a result of extensive partnerships with the Black Canyon Trail Coalition, Prescott National Forest, and Maricopa and Yavapai County Officials. The Black Canyon Trail Coalition has received an approximately \$70,000 grant from the U.S. Forest Service Resource Advisory Council (RAC) for the purpose of constructing the Big Bug Trailhead. This grant comes with a one-third match for the BLM and the grant award period begins October 1, 2012.

### **Purpose and Need for Action and Decision to Be Made**

The purpose of the Big Bug trailhead project is to implement the BHRMP management actions to provide trailheads on the BCNRT and to partner with the Black Canyon Trail Coalition in coordination with their receipt of the USFS RAC grant.

The project need is to conform to a decision made in the BHRMP to develop trailheads and facilities along the Black Canyon National Recreation Trail (BHRMP, RR-62, Pg. 62).

The BLM decision to be made is whether or not to implement the Big Bug trailhead project and, if so, to determine the best location and design features.

## Land Use Plan Conformance

In addition to conforming to the management decisions noted above, the proposed action conforms to the following RMP decisions.

- RR-58: Provide for the ever-increasing outdoor recreation needs of an expanding urban population;
- RT-1/RT-2: Provide for the ever-increasing outdoor recreation needs of an expanding urban population to promote the preservation of, public access to, travel within, and enjoyment and appreciate of the open-air, outdoor areas and historic resources of the Black Canyon corridor. Segments of the trail are established primarily near urban areas, secondarily within scenic area, and along the historic travel routes of the area.
- RT-3: Establish the trail as a model of successful community partnerships.
- RR-64: Limit to 5 acres the area of exposed barren soil for each developed site.

## Relationship to Statutes, Regulations, or Other Plans

The BLM's planning process is governed by the Federal Land Policy and Management Act (FLPMA) (43USC1711) and 43 Code of Federal Regulations (CFR) 1600, which governs the administrative review process for most of the decisions concerning BLM. Land use plans ensure that BLM-administered public lands are managed in accordance with the intent of Congress as stated in FLPMA and under the principles of multiple use and sustained yield. BLM currently manages the Black Canyon Hiking and Equestrian Trails and the North Black Canyon Hiking and Equestrian Trails RMZs under the *Bradshaw-Harquahala Approved Resource Management Plan and Record of Decision (2010)*.

## Scoping & Public Participation

On April 5, 2012, from 7:00 p.m. to 9:00 p.m., representatives of the Hassayampa Field Office attended the Black Canyon Trail Coalition Meeting at the Albins Center in Black Canyon City to discuss the plans for the Big Bug Trailhead construction. Three concept designs were provided to the Coalition members.

In addition, on May 24, 2012, from 6:30 p.m. to 8:30 p.m., a public scoping meeting was held at the Mayer Fire Station #22, Mayer, Arizona. The meeting was held in an open house format with a variety of posters displayed to solicit public comments on the three alternative trailhead sites and recreation amenities. A total of 17 people attended the open house. Guests were greeted and encouraged to sign in, were given comment cards, and were encouraged to submit comments in writing by June 8, 2012.

## Issues

Through the internal and external scoping process, several issues were identified. The table below contains a summary of external issues. Appendix A contains a summary of the internal scoping process, along with issues considered and dismissed from further analysis.

**Table 1 Internal Resource Issues Summary**

<b>Table 1 - Internal Resource Issues Summary</b>	
<b>Resource</b>	<b>Rationale for Determination</b>
Air Resources	Mitigation in proposed action with gravel, etc., will resolve dust mitigation issues.
ACECs	Not present
BLM Natural Areas	Not present
Climate Change	Not present
Cultural Resources	Class III cultural surveys were conducted in 8/2011 and 4/2012 for all three sites. No cultural resources were found. No further analysis is needed in the EA.
Environmental Justice	Not present
Prime/Unique Farmlands	Not present
Fish/Wildlife, Migratory Birds	Only the proposed action has a riparian area near the site. Mitigation in proposed action and Table 3, Design Features Common to all Action Alternatives will mitigate any issues with wildlife or migratory birds.
Geological Resources	Not present
Hydrologic Function and Floodplains	Not present
Invasive Species/Noxious Weeds	See Table 3, Design Features Common to all Action Alternatives for mitigation for Invasive species/noxious weeds.
Lands/Access	Access across state land would be needed for Alternative 1 if selected
Livestock Grazing	Trailhead has negligible effect on current livestock grazing and sheep trail permittee, but the effects of increased use on the BCNRT in general on livestock grazing will be analyzed in a subsequent analysis document.
Mining and Minerals	Negligible effect on mining claim since no active mining is occurring.
Native American Religious Concerns	Not present
Paleontology	Not present
Public Safety	Not present
Rangeland Health	Present, but not affected to a degree that detailed analysis is required.
Recreation	Historic sheep drive in spring is a positive attraction for the trailhead and BCNRT in general; amenities requested by public would increase recreation visitation.
Socioeconomics	Not present.
Soils	Present, but not affected to a degree that detailed analysis is required.
Transportation/Travel	Not present
T&E/Candidate Species	Not present.
Hazardous Wastes	Not present.
Water Resources	Well on proposed action site is currently used for livestock and could be made available for horses.
Wetlands/Riparian	Mitigation in proposed action (fencing around perimeter of trailhead) will exclude vehicles from the riparian area near proposed action site.
Wild and Scenic Rivers	Not present
Wilderness/WSA	Not present

Table 1 - Internal Resource Issues Summary	
Resource	Rationale for Determination
Wildland Fire/Fuels	Not present
Visual Resources	VRM Class III
Wild Horses and Burros	Not present
Wilderness Characteristics	Not present

**Table 2 External Issues Summary**

Table 2 External Issues Summary	
Issue	How issues are addressed
Concern that the well located at the proposed trailhead site has never been tested for animal consumption	See <b>affected environment</b> .
Concern that there may be excessive dust from construction and subsequent use of trailhead	See <b>proposed action</b> and <b>alternatives section Table 2</b> regarding road and parking area treatments.
Concern that excessive speed on Old Sycamore Road can pose a threat to public safety	See <b>Section 2 alternative 1</b> . See also <b>affected environment and environmental consequences</b> recreation.
Suggestion that signage be placed at the Russian Well location to inform campers of the quarter-mile no camping restriction around wildlife waters. (This suggestion was made in response to increased camping near the well area.)	<b>Out of scope</b> of purpose and need of this project. The Russian Well is located approximately ten miles north of the proposed project area and alternatives. Signage can be placed as part of administrative maintenance, does not require NEPA analysis. Signage near wildlife waters is the responsibility of the Arizona Game and Fish Department (AGFD). The AGFD would be notified of the need for signs at this location.
Suggestion that the BLM provide U Cross Ranch with a new water trough due to increase use of Black Canyon Trail.	<b>Out of scope</b> of purpose and need for this project. Must be addressed in subsequent rangeland management decision.
Suggestion that the BLM install a solar pump for the well located at the site of proposed action for ease of maintenance.	<b>Out of scope</b> . The BLM is considering providing water from the well as part of the proposed action. The type of pump used would be determined by the BLM based on a variety of factors.
Concern that Alternative 1 trailhead would be too small for intended use and would require a ½-mile connector trail to reach the main BCNRT. This alternative connector trail would be noisy and would not be in keeping with the rest of the character with the BCNRT.	See <b>section 2 alternative, affected environment and environmental consequences</b> (recreation).
Suggestion that the private land for sale on Old Sycamore be used for the trailhead.	<b>Out of scope</b> . Though a private parcel is for sale and does have adjacent access to the BCNRT, development of this land is speculative at this point. No private entity has offered to develop this site for trail use.
Suggestion that an eastbound deceleration lane on Highway 69 be built for safety of visitors hauling horse trailers and others turning on the 65 mph highway.	<b>Out of scope</b> . Any highway adjustments would be conducted by ADOT under their highway best management practices. The BLM has no decision authority over this type of highway action.
Suggestion that a cattle guard be installed at entrance of proposed action trailhead to prevent cattle from accessing SR 69.	See <b>proposed action</b> .
Concern that Alternative 2 would result in building a long access road that may need	See <b>affected environment and environmental consequences (alternative 2)</b> .

<b>Table 2 External Issues Summary</b>	
<b>Issue</b>	<b>How issues are addressed</b>
engineering to provide for a sustainable road and enable safe access to the trailhead site.	
Suggestion that the BLM provide water via pump only, with no troughs (as there is a concern about sharing water among potentially sick horses).	See <b>proposed action</b> .
Suggestion that the trailhead includes sufficient parking and turn around areas for vehicles with trailers.	See <b>proposed action</b>
Suggestion that restrooms be available at the trailhead.	See <b>proposed action</b> .
Suggestion that hitching posts and corrals be available for horses.	See <b>proposed action</b> .
Suggestion that a fence be installed around the trailhead to contain horses.	See <b>proposed action</b> .
Suggestion that a host site be developed.	See <b>proposed action</b> .
Suggestion that stipulations are need for managing invasive species and noxious weeds.	See <b>proposed action, alternative section Table 2</b> .
Suggestion to analyze the public safety issues with wildlife and pedestrians crossing through the culvert and that ADOT needs to be included in the discussion.	<b>Out of scope.</b> The culvert is ADOT’s jurisdiction.
Suggestion that there would be impacts to the soils from developing parking lots, clearing the vegetation, and the different soil types and may require different mitigation measures for each site.	See <b>proposed action and alternatives</b> .
Suggestion to discuss the beneficial recreational impacts from the sheep drive in the spring.	See <b>affected environment and environmental effects</b> .
Suggestion to determine the quality and ownership of the water prior to allowing its use by the public.	<b>Out of scope.</b> To be addressed in a separate decision document.
Suggestion to explore potential run-off issues at the proposed action site.	See <b>affected environment and environmental effects</b> .

## **II. Alternatives**

### **Proposed Action**

The proposed action is to design, construct and maintain the Big Bug Trailhead on an approximately five acre parcel on the south side of SR 69 in (See Map B). The Big Bug Trailhead would be the northernmost trailhead on the Black Canyon National Recreation Trail.

The trailhead design would include a double vault toilet, kiosk(s) and signs, interpretative information/displays, picnic ramadas with tables, hitches for horses, a corral, accommodations for between 50 and 65 parking sites with approximately 20 pull-through trailer sites, water troughs, and other minor recreation developments (See Figure 1).

Two host campsites may be developed. The host sites would consist of utilities, potable water storage, maintenance shed(s), and other amenities. Dispersed camping may also be developed at a future date.

Road surfacing materials would be applied to the existing access road off highway 69 up to the parking area per Arizona Department of Transportation (ADOT) requirements. All construction activities would be required to keep dust emissions under control. The perimeter of the approximately 5-acre site would be fenced off with pipe rail fence or similar barrier to contain motorized vehicles while gates/passage areas would offer non-motorized access to the trail and administrative access for authorized livestock operators. Buffer areas with existing native foliage would be kept between the trailhead site and the riparian area (Big Bug Creek). All denuded areas that would be used for vehicles would be surface treated (i.e., pavement, gravel, etc.).

A vehicle-access cattleguard would be installed off highway 69, as per ADOT standards. This trailhead would be open 24 hours, except in cases with reason to limit use, such as a special recreation permitted event.

The on-site well would be used for watering animals, but it would not be available for potable water. Water troughs may be available, as well as accessing water directly from a pump. Water may also be used for the restrooms and cleaning the facilities. Water from the well may also be used to control fugitive dust emissions during construction if needed. Because the parking lot and road would be graveled or treated, fugitive dust emissions during use of the trailhead are not expected. The proposed trailhead area is denuded of vegetation due to existing uses in the area, which include a mining claim, a grazing allotment, and seasonal sheep trailing operation. An abandoned, dry reservoir exists on site which would be filled in with soil. Minor engineering would be needed to level it for the parking facility and recreation amenities. Mining/test pits would also be filled.

All construction activities (i.e., gravelling of parking area or roads; kiosks; toilets, etc.) could be accomplished in a number of ways through: (1) a construction contract; (2) BLM; or (3) volunteers. The trailhead design would adhere to BLM engineering standards. Other trailhead amenities would be constructed and/or installed as funds and resources become available. The first phase of construction would be accomplished in the fall of 2012 with the receipt of grant money from the US Forest Service to the Black Canyon Trail Coalition.

A mining claim exists on a portion of this alternative. The current mining claimant is not actively mining and has no plans to mine the area designated as the trailhead.

## **Alternative – 1**

Alternative #1 is located on the south side of Old Sycamore Road approximately 500 feet north of SR 69 in (See Map B). This proposed trailhead site would be approximately 2 acres in size with the addition of a perpetual easement from ASLD for the approximately .54 acres of land that would be needed to construct an entrance road to the trailhead. The perpetual easement process with the Arizona State Lands Department would take approximately 12-18 months. Even with the addition of the ASLD land, no additional expansion potential would be available at this site.

It is a well-drained site with easy access and would require approximately 150 feet of two-way roads approximately 20 feet wide and approximately 600 feet of a one-way road 14 feet wide with ditching to be constructed. Electrical power could be available since there is a power line crossing the site. The

design would include the same amenities as the proposed action except the design and placement of the components would be tailored to the topography of that particular site (See Figure 2). This site would accommodate approximately 15 vehicle parking sites of approximately 12 feet wide by 20 feet long each with no pull-through parking sites for vehicles with trailers. Because the site is currently undisturbed, 2 acres would need to be denuded for road and parking areas. There is no well on site; therefore, no water would be available for animals. This site is approximately 1½ miles from the actual Black Canyon National Recreation Trail (BCNRT) which would require the construction of a connector trail to the BCNRT (See Figure 2). Because recreationists may use Old Sycamore Road for accessing the BCNRT instead of walking along the connector trail, signage would be needed for safety reasons along Old Sycamore Road and at the trailhead to inform recreationists about fast moving vehicles and residents about possible people on the road.

Construction parameters would be the same as in the Proposed Action. No cattle guard would be installed at this site.

## **Alternative - 2**

Alternative #2 is located on the south side of Old Sycamore Road approximately ¼ mile east of Alternative #1 (See Figure 3). This proposed trailhead site is approximately 5 acres in size. This alternative would sit directly on top of a portion of the constructed trail requiring this portion of the trail to be relocated away from the parking area. The design would include all the same amenities as the proposed action except the design and placement of the components would be tailored to the topography of that particular site. There is no need to install a cattle guard.

Alternative #2 is on undisturbed land and would need to be cleared of vegetation for the parking and road areas. It borders private land. There is no well on site, so no water would be available for animals. Construction parameters would be the same as in the Proposed Action.

The parking area and recreation development site is located on a flat area where minimal grading would be required, but the trailhead access road would require engineering design because of the steep slope (between 9-31%) and would require the installation of numerous culverts for proper drainage. The site could be expanded and is screened from the private residence by the slope of the site. This site is poorly drained and muddy when wet requiring a four-wheel drive vehicle to access the trailhead. The entrance/exit road would be a two-way road of approximately 20 feet in width and approximately 2,625 feet long. There is no access from the east as the curve for the access road would be too sharp of a turn without extensive engineering efforts.

The site would also have approximately 1,580 feet of one-way roads approximately 14 feet in length. The vehicle parking area would be approximately 12 feet wide and 20 feet long with room for approximately 30 or more vehicles.

## **No Action Alternative**

Under the no action alternative, the Big Bug Trailhead would not be developed. Associated easement(s) acquisition, grading, and construction would not occur. No developed amenities would be available at the Big Bug project area for trail users.

## Alternatives Considered but Removed from Detailed Analysis

One additional alternative location was considered but removed from detailed analysis because it is privately owned property of approximately 6.25 acres and is located on Old Sycamore Road between Alternatives 1 and 2 (See Map C). This property is large enough and on disturbed land that is for sale; but upon investigation by a member of the Black Canyon Trail Coalition the price of the property was too expensive for the Coalition or any member of the Coalition to purchase in a timely manner. The Coalition also researched the use of the USFS RAC grant money to purchase or use as a down payment on the private property. The grant money cannot be used to purchase property. (Personal conversation with Bob Cothorn, 2012)

## Design Features Common to All Action Alternative

The following design features would be incorporated for any action alternative in order to mitigate any impacts.

**Table 3 – Design Features Common to All Action Alternatives**

Table 3 – Design Features Common to All Action Alternatives	
Resource Protected	Design Feature/Stipulation
Cultural Resources	While no signs of prehistoric or historic artifacts were found, any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on their behalf, on public or Federal land shall be immediately reported to the Bureau of Land Management authorized officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values.
Invasive Species/Noxious Weeds	To minimize the establishment and spread of new invasive species in the project area: <ul style="list-style-type: none"> <li>• Before ground disturbing activities begin, inventory weed infestations and prioritize areas for treatment in project operating areas and along access roads</li> <li>• Minimize soil disturbance to the extent practical, consistent with project objectives to prevent weed germination and establishment</li> <li>• Retain native vegetation in and around project area consistent with project objectives</li> <li>• Locate and use weed-free project staging areas</li> <li>• Prevent weed establishment by avoiding or minimizing travel through weed-infested areas</li> <li>• Inspect material sources on site, and ensure they are weed free before use and transport</li> </ul>

Table 3 – Design Features Common to All Action Alternatives	
Resource Protected	Design Feature/Stipulation
	<ul style="list-style-type: none"> <li>• Clean all equipment before entering and leaving the project site</li> <li>• Re-establish vegetation on bare ground caused by project disturbance as soon as possible using either natural recovery or artificial techniques</li> <li>• Require the use of certified weed-free seed mixes for site rehabilitation.</li> <li>• The use and perpetuation of native plant species would be emphasized when restoring or rehabilitating disturbed or degraded areas. (VM-6, BHRMP)</li> <li>• The use of certified weed-free or weed-seed-free hay or straw 3 days prior and during use of project areas by horses or pack animals to prevent introducing noxious, invasive weeds, would be encouraged.</li> </ul>
Migratory Birds	Construction would be minimized during migratory bird nesting season which occurs between February 15 <sup>th</sup> and August 1 <sup>st</sup> . If construction needs to be conducted during the migratory bird nesting season, the BLM wildlife biologist would conduct a clearance survey for active nests prior to vegetation removal.
Soils	To prevent road degradation and soil compaction, no construction will occur on saturated wet roads and soils.
Grazing Management	<ul style="list-style-type: none"> <li>• Construction will not occur during sheep trailing in April and May.</li> <li>• Livestock waters for cattle operations will be signed with no camping allowed within ¼ mile of watering facilities during sheep trailing to reduce disturbance to animals.</li> </ul>

### III. Affected Environment

This chapter describes the existing environment, including the physical environment, natural environment, and recreational uses which would be affected by the proposed action and the no action alternative.

#### General Setting

The proposed action and both alternatives are within Yavapai County which is in attainment for all national ambient air quality standards (ADEQ 2008). There are no hazardous wastes present at any of the action alternative sites. None of the action alternative sites contain habitat suitable for any threatened or endangered species or BLM sensitive species.

A Class III cultural survey for the proposed action alternatives was conducted on August 3, 2011. A Class III cultural survey for alternatives 1 and 2 including the connector trail for alternative 1 was conducted

on April 4, 2012. No cultural resources were identified during the Class III surveys.

Red Brome has become naturalized over much of Arizona. Salt cedar, Spiny Cocklebur, and Malta starthistle are present within the Big Bug Creek allotment. The establishment of non-native grasses and forbs is increasing in the area, but a site visit did not reveal issues with non-native invasive species and/or noxious weeds at any of the action alternative locations.

A GIS analysis of the area has determined that there are no mineral potential, locatable materials, geothermal or oil and gas potential for any of the action alternatives.

The Proposed Action and Alternative 1 are located in Venezia Soil Series and consists of very shallow or shallow, well drained soils. Permeability is moderate and runoff is rapid. Soil erosion can be moderate to high however the Proposed Action and Alternative 1 are relatively flat areas with a stony surface. Alternative 2 is primarily located in Balon Soil Series and consists of deep, well-drained soils. Permeability is moderately slow and higher capacity to retain water and pool on the soil surface, whereas the entrance for Alternative 2 has a slope of between 9-31% and would require engineering design with switch backs, numerous culverts, and access road paving.

All three action alternative sites are within VRM Class III. Class III Visual Resource Management is defined as all authorized actions may alter the existing landscape, but not to the extent that they attract or focus attention of the casual viewer.

Currently one shepherd has a permit for trailing sheep from Badger Springs to the high country for summer grazing. It has been used for livestock including the traditional annual spring sheep drive that takes place when approximately 3,000 sheep are moved through the area to their summer range. The shepherd, the crew, and livestock camp near the trailhead location for 1-2 days and spend at least one night before moving north. This permittee is the last of the shepherds over the historic sheep trail that has been happening since the 1800s.

A well traditionally used for mining and livestock operations is located within the 5 acre project area of the proposed action. The proposed action would develop the well for use by animals (non-potable) other than sheep and cattle. BLM has not tested the well because it has been used for livestock watering with no reports of sick animals over many years use of the well water.

No water is available at the two Action Alternatives.

### **Proposed Action**

The current 5+ acre site has been used for a placer gold mining operation for many years. The current mining claimant purchased the claim in June, 2010 and has not been actively mining. The site has two mining pits and an old mining pond. The site has been locked by BLM law enforcement for public safety and to constrain cattle from getting on SR 69. A trash pile left from mining was removed. A BLM well is on-site and has been used for both mining and livestock operations. No electricity is available on site. The site is in Venezia-soil series that has a high stone and cobbly surface and well drained soils.

The surface of the site is disturbed and has been mostly denuded of vegetation with sporadic areas of vegetation scattered around the site. The area is level and has enough room for the variety of amenities proposed and is easily accessible.

### **Alternative 1**

This 1.6 acre site is bordered by Old Sycamore Road, state land, private land and SR 69. To the west of the site is an arroyo which limits space for expansion. The entrance into the proposed site would need to be through a 0.54 acre parcel of state land. Legal access to this site would be needed from Arizona State Land Department. This perpetual easement process takes approximately 12-18 months. No expansion is available at this alternative site beyond the ASLD land easement.

The site is covered with Arizona Interior Chaparral vegetation that is undisturbed. There are a series of washes that run through the site. The site is 1.5 miles from the BCNRT and would require a connector trail to be developed along with site development. The Venezia soils series has a high stone and cobbly surface and well drained soils occupy the site.

A 15 kV transmission line runs through the site. There is no access to water.

This site is approximately 1 ½ miles from the BCNRT, and is separated by BLM and private land from the existing trail. (See Map C).

### **Alternative 2**

This is an approximately 5 acre site set back from Old Sycamore Road by a steep grade. The site would go directly through the current trail alignment requiring the trail to be moved and reconstructed. The site is covered with upland Sonoran vegetation that is generally undisturbed. The entrance slope is between 15-20% and is at least ½ mile long which would require extensive engineering. No trailer access to the site is available from the east on Old Sycamore Road because of the topography.

Site visits have been made by different resource specialists following rain events. This site is primarily within the Balon Soil Series. The soil has a higher loam and clay content which tend to collect and pool water on the soil surface. During wet times of the year the area is muddy and contains sink holes. No well or water is available at the site. No electricity is available at the site.

## **Wildlife/Migratory Birds/Riparian**

### **Proposed Action**

This site is heavily disturbed by vehicle use, heavy equipment excavations, and associated debris. This site is adjacent to an intermittent reach of Big Bug Creek. Dominant vegetation at the site includes desert broom, red brome, mesquite, globe mallow, cat claw acacia, juniper and hackberry. Dominant vegetation along Big Bug Creek adjacent to the site includes juniper, barberry, hackberry, desert broom, snake weed, red brome, Arizona walnut, desert willow, cat claw acacia and seep willow. The stream channel was dry with upland species growing in the channel and on the banks during site visits in August of 2010 and May of 2012. Species such as mule deer, javelina, coyote, small mammals and migratory

birds may also use this area periodically, though wildlife use is likely to be limited due to the disturbed condition of the habitat and the close proximity to the 4-lane highway.

### **Alternative 1**

A two-track road leads into the site and a power line is located adjacent to the site. Dominant vegetation includes prickly pear cactus, range ratany, cat claw, flattop buckwheat, 3-awn grass, hedgehog cactus, shrubby buckwheat, spurge, barberry, globe mallow, mesquite, Indian wheat, juniper, bear grass, snake weed, and red brome. Wildlife species likely to use this site include mule deer, javelina, coyote, gray fox, bobcat, striped skunk, kangaroo rats, wood rats, pocket mice, western diamondback rattlesnakes and various other snakes, lizards, small mammals and birds.

### **Alternative 2**

This site is sparsely vegetated with prickly pear, cat claw, red brome, tobosa and mesquite. Evidence of recent fire was observed during the site visit in May of 2012. The soil surface leading from the road to the site is heavily eroded with deep gullies. Wildlife that may use this site include mule deer, javelina, coyote, gray fox, bobcat, striped skunk, kangaroo rats, wood rats, pocket mice, western diamondback rattlesnakes and various other snakes, lizards, small mammals and birds. Occurrence of these species is likely to be minimal due the sparse amount of vegetative cover and forage.

## **Recreation**

### **Proposed Action**

A locked gate prevents vehicle access to this area. People may climb over the fence and/or gate to gain access to the BCNRT. A bike pass/guard is located about 500 feet east from the locked gate which also provides access. People recreating on the trail access this area from other areas which contain sufficient access for parking vehicles and trailers while they hike, bike or ride the trail. There have been complaints that trail users have been parking on private lands. Additionally, vehicles are also parking in areas not designed for trail use which results in safety hazards.

The current site is an open area that trail users may be currently using in a variety of ways including camping. The closest trailhead for users is the Black Canyon City Trailhead which is 35 miles south.

Proposed action has an onsite well. The BCNRT is located adjacent to this site.

### **Alternative 1**

Alternative 1 is an approximately 2 acre site located off of Old Sycamore Road and SR 69. The turnoff for Old Sycamore is between mileposts 267 and 266 on SR 69. (See Figure 2).

The site is currently approximately 1 ½ miles from the Black Canyon National Recreational Trail. There is no access to water. There is an electrical distribution line on the site which could allow for power to the site. The site is dissected by washes. There is currently no recreational use at this site.

## **Alternative 2**

Alternative 2 is also located off of Old Sycamore Road and SR 69. The entrance would be on the south side of the road approximately ½ mile east from SR 69.

This site is dissected by the existing trail BCNRT. This site has a steep grade and when the soil is wet, the area is extremely muddy.

There is no water for horses or electrical access.

## **IV. Environmental Consequences**

This chapter presents the anticipated environmental consequences of the development of the proposed and no action alternatives.

### **Fish/Wildlife/Migratory Birds/Riparian**

#### **Proposed Action**

The proposed action would remove approximately 5 acres of upland Sonoran vegetation at a heavily disturbed site consisting of desert broom, red brome, mesquite, globe mallow, catclaw acacia, juniper and hackberry. This equates to 0.0002% of the Big Bug Creek-Agua Fria River sub-watershed (H1507010202). Since the proposed action avoids construction and vegetation clearing in the adjacent riparian area, direct impacts to riparian habitat would not occur.

#### **Alternative 1**

This alternative would remove approximately 2 acres of upland Sonoran vegetation consisting of prickly pear cactus, range ratany, cat claw, flattop buckwheat, 3-awn grass, hedgehog cactus, shrubby buckwheat, spurge, barberry, globe mallow, mesquite, Indian wheat, juniper, bear grass, snake weed, and red brome. It would reduce forage and cover for wildlife by 2 acres which equates to 0.00008% of BLM public lands in the Big Bug Creek-Agua Fria River sub-watershed (H1507010202).

#### **Alternative 2**

This alternative would remove approximately 5 acres of sparsely vegetated upland Sonoran vegetation consisting of prickly pear, cat claw, red brome, tobosa and mesquite. It would reduce forage and cover available for wildlife by 5 acres, which equates to 0.0002% of BLM public lands in the Big Bug Creek-Agua Fria River sub-watershed (H1507010202).

#### **No Action Alternative**

Under the no action alternative, no trailhead would be built at any of the three sites. Under the no action alternative, 0% of the Big Bug Creek-Agua Fria River sub-watershed (H1507010202) would be reduced.

## Recreation

### Proposed Action

The proposed action site has sufficient acreage for amenities such as trailheads that enhance the recreation experience by providing restrooms, information outlets (i.e., kiosks, notification boards, maps, etc.), resting and eating areas (i.e., ramadas and picnic tables), easy equestrian access with pull-through sites, hitches and corrals (See Figure 1).

Site visits have shown that the western section of the trailhead could be used for dispersed camping. Two host sites would also be developed. Hosts would serve the purpose of assisting travelers and recreationists with information and updates on the trail and travel conditions; maintain the facilities; and educate recreationists on the trail and outdoor ethics (i.e., “Leave No Trace”). Additionally, a host site would make maintenance and management of the trailhead less costly and more efficient for both BLM and their partner the Black Canyon Trail Coalition.

It is estimated that the addition of the Big Bug trailhead to the BCNRT facilities would increase visitors to the northern section of the trail by a range of 20,815 to 27,600 visitors per year. See Table 4 below.

**Table 4 – Estimated Number of Visitor Days per Year for Big Bug Trailhead**

Table 4 – Estimated Number of Visitors per Year for Big Bug Trailhead				
Estimation of increase in visitors for the Proposed Action				
Formula Used	Calculations	Total Visitors		
		Summer Visitors	Winter Visitors	Total Visitors
Summer Season of Use: Number of vehicles (See Figure 1) x Average # of passengers/vehicle; Divide # of Weekends/year x 2	46* vehicles x 2.5 visitors/vehicle = 115 52/2 = 26 115 visitors x 13 days = 1,495 visitors/year	1,495	19,320	20,815
Winter Season of Use: Number of vehicles (See Figure 1) x Average # of passengers/vehicle; Divide by # of days/week x 4 weeks/months	46 vehicles x 2.5 visitors/vehicle = 115 visitors 7 days/week x 4 weeks/month x 6 month/year = 168 days/year 115 x 168 = 19,320 visitors/year			
Winter Season of Use:	46 vehicles x 2.5	8, 280	19,320	27,600

Table 4 – Estimated Number of Visitors per Year for Big Bug Trailhead				
Estimation of increase in visitors for the Proposed Action				
Formula Used	Calculations	Total Visitors		
		Summer Visitors	Winter Visitors	Total Visitors
Number of vehicles (See Figure 1) x Average # of passengers/vehicle; Divide by # of days/week x 4 weeks/months	visitors/vehicle = 115 visitors 7 days/week x 4 weeks/month x 6 month/year = 168v visitors/year			
Summer Season of Use: Add the other six months with 3 Days/week x weeks x 6 month	115 x 168 = 19,320 visitors/year  3 days/week x 4 weeks/month x 6 months/year = 72 days/year 115 x 72 = 8280 visitors/year			

The minimum calculation for total visitors used the assumptions of the maximum capacity of vehicles being 2.5; only used one weekend day for the six month summer season; and no assumptions were made for hours of use. Also note that the 2.5 passengers per car are based on professional experience. Considering the increased visitor usage that could occur during the winter season when the winter visitors are in town, BLM has recalculated the equation for a more likely scenario of visitors per year. This calculation is based on the fact that the weekends during the peak season when the winter visitors are in town and weather is favorable for recreation from November through April or six months.

The maximum calculation for total visitors used the assumptions that the number of visits would be the same during the winter season when the trail is frequented by the winter visitors. But, a more likely scenario was determined for the summer season since the trail is frequently visited by local residents. It was assumed that the trail can be used any day of the week, but BLM used an average of three days per week for the six summer months.

In reality, the addition of this trailhead will bring out additional local visitors year long. In addition, the advertisement of the BCNRT on websites such as International Motor Bike Association (IMBA) has increased the marketing of the BCNRT. The bicycle community is excited about the BCNRT because it is a single track trail which is a desirable attribute in the biking world. The addition of a new trailhead is likely to increase usage at the northern end of the trail.

### **Alternative 1**

Because of the smaller size, recreation amenities compared to the Proposed Action site would be limited to fewer parking spaces, pull-through parking, no on-site water availability, and no host sites. This site is also dissected by washes which would require additional engineering design and leave less available land for amenities.

This proposed trailhead site is approximately 1 ½ miles from the actual trail and recreationists would need to traverse that distance to reach the main trail or they could walk or bike along Old Sycamore Road instead of using the connector trail. Since Old Sycamore Road is the main road for residents and ranchers living along that road, a public safety hazard may arise because there are currently no speed limit signs on the road and many drivers travel at a high rate of speed on the curved and washboard roadway. Additionally, Old Sycamore is unpaved and increased traffic from recreationists could cause an increase of dust and potential accidents. This site would require additional caution or warning signage placed at the kiosks at the trailhead warning recreationists to use the connector trail and the possible hazards of walking on the road.

Additionally, this site has less room for expansion because it can only be accessed through a portion of state land that would require a perpetual easement. The ASLD easement process would take approximately 12-18 months to complete. The total available land for the trailhead is approximately two acres with the addition of ASLD land. Using the same calculation for estimated increased visitor usage as for the proposed action, the parking sites are limited to a maximum of 15 sites with no room for vehicles with trailers, limiting visitor use days. The limited amount of amenities is also bound to affect the visitor experience and satisfaction level.

The connector trail to access the BCNRT is less aesthetically pleasing to recreationists because of traffic and noise from the proximity of SR 69, and a private residence and homestead that is fenced.

Because the Alternative 1 size is smaller and the maximum number of vehicles with and without trailers would be reduced to only 15 parking sites, and fewer amenities would be available, the estimated visitor usage at Alternative 1 is expected to be less than ½ because of size based on best professional judgment (See Figure 2).

## **Alternative 2**

Alternative 2 is off of Old Sycamore Road approximately ½ mile east of Alternative 1. The access road that would need to be constructed to enter the approximately 5 acre site would be approximately 1/2 mile long and has a slope of between 15-30%. BLM engineers have assessed the site and stated that the entrance road would require excessive engineering with switchbacks and a minimum of 6 culverts. The road would need to be at least 20 feet wide to accommodate turning access for larger vehicles. The entire entrance road would need to be graveled or paved with ditches on both sides. There would be no access from the east because the turning radius from the Old Sycamore Road to the trailhead road could not be made safe enough for the slope and topography limits for larger vehicles. (See Figure 3).

Once onto the actual trailhead site, the soils are very muddy. The site was visited by two BLM recreation specialists following different rain events. They both stated that the site could only be accessed with a 4-wheel vehicle because of the slippery and muddy surface that made walking difficult. (Personal conversation with David Scarbrough, May 2012) One specialist also noted the presence of multiple sink holes. (Personal conversation with Troy Dymock, July 2012)

The total available land for the trailhead is approximately five acres. Using the same calculation for estimated increased visitor usage as for the proposed action, parking sites would be limited to a maximum of 30 vehicles and possibly 10 vehicles with trailer sites based on site configuration. But, the difficult and steep entrance road is likely to dissuade vehicles with trailers from entering the site. Also,

the site is likely to have limited usage during rain events which is expected to affect the visitor experience and satisfaction level.

Because of the steep entrance road, it is the least sustainable of all the alternatives. It is also likely to be more expensive and time consuming to maintain for BLM recreation specialists and/or volunteers who will monitor. Monitoring site visits will be required following each rain event.

**No Action Alternative**

No trailhead would be constructed. Trailhead users would still park at the proposed action site in the current ADOT ROW and continue to climb over existing barbed wire fencing and potentially get hurt.

**Cumulative Impacts**

**Table 5: Cumulative Impacts Table**

<b>Table 5: Cumulative Impacts Table</b>			
<b>Cumulative Action <i>Is it past, present, reasonably foreseeable?</i></b>	<b>Description <i>What is the action?</i></b>	<b>Resources Affected <i>Which resources does the action impact</i></b>	<b>Impact Area <i>What is the geographic/temporal scope of impact</i></b>
Construction of BCNRT on both sides of SR 69 <b>Past</b>	Construction by both hand crews and mechanical of a 24" wide trail that was completed in the 2010-2011 season.	Vegetation removal from approximately 12 miles north of SR 69 and 1.5 miles south of SR 69 and 24" wide path. A cultural clearance was conducted prior to construction.	Provides additional access to recreationists from both north and south of the metropolitan area for the trail leading to the Big Bug Trailhead.
New access (turn-out lane) on SR 69 <b>Reasonably foreseeable</b>	Future construction of a turn-out lane from the West to assist vehicles with trailers to slow down and turn into the trailhead safely.	Construction would be to ADOT standards. For purposes of analysis, it is estimated that the turn-out land would be approximately 20 ft. wide by 1,000 feet long on ADOT ROW. Vegetation removal and potential cultural clearance would need to be conducted prior to construction	Public safety and ease of access for larger vehicles turning into the trailhead.
Expansion of the BCNRT into the Prescott and Coconino National Forests and beyond. <b>Reasonably foreseeable</b>	Work with the Federal Interagency Council on Outdoor Recreation (FICOR) to support outdoor recreation access and opportunities on Federal public lands waters and shores. The BCTC and other organizations would be submitting a letter to both National Forests requesting this expansion of the BCNRT into the National Forests be a top priority for 2013.	Unknown amount of vegetation removal. No information is available on how long or where these trails would be located making estimation of the impact out of the scope of this document.	Would provide future recreational opportunities and enhancements for northern BCNRT trail users.

<b>Table 5: Cumulative Impacts Table</b>			
Connector trails into Mayer  <i>Reasonably foreseeable</i>	Within the next year or so, it is hoped that connector trails into Mayer (approximately 4-5 miles)	Vegetation removal from an average of 4.5 miles of trail approximately 24" wide. Cultural clearance would need to be completed prior to construction initiation.	Provides additional recreational opportunities and enhancements for the northern most users of the BCNRT. Could provide economic benefits to the town of Mayer.
Copper Mountain Loop construction  <i>Present</i>	Construction is ongoing and expected to be complete within the next year for this 7.6 mile loop trail just north of SR 69.	Vegetation removal from the 7.6 mile loop trail which is approximately 24" wide. Cultural clearance was completed in 2011 prior to construction initiation.	Provides additional recreational opportunities and enhancements for the BCNRT. The loop is hiking, biking and riding distance from the Big Bug Trailhead.

### **Proposed Action**

The Bradshaw-Harquahala Resource Management Plan was divided within the field office into management units based on the geography and recreation potential. The Big Bug trailhead falls on the border between the Upper Agua Fria River Basin Management Unit (AFRBMU) which is sandwiched between the Prescott National Forest's Bradshaw Mountains and the Verde Ranger Districts and the Black Canyon (BCMU) which stretches from the Table Mesa area on the south to Cordes Junction on the north. It is bounded by the Agua Fria National Monument and the Tonto National Forest on the east and the Prescott National forest on the west. (See Map D).

To conduct our cumulative analysis, both MUs were included because the Big Bug trailhead lies at the border of these two MUs which contain the BCNRT.

**Table 6 - Lands in the AFRBMU and BCMU**

<b>Table 6 - Lands in the AFRBMU and BCMU</b>			
<b>Type of Lands</b>	<b>AFRBMU</b>	<b>BCMU</b>	<b>Total Acres</b>
BLM – Administered Lands	21,520	68,730	90,250
Arizona State Land	36,990	12,600	49,590
Private Land	39,290	6,780	46,070
County Parklands in MC and YC		1,100	1,100
Total Acres	89,210	97,800	187,010

We divided the acreage that would be affected by the Big Bug trailhead and other recently projects that fall within these two MUs.

**Table 7 – Acres of Cumulative Impacts for Black Canyon Management Unit (BCMU) and the Upper Agua Fria River Basin Management Unit (UAFRBMU)**

<b>Table 7 – Acres of Cumulative Impacts for Black Canyon Management Unit (BCMU) and the Upper Agua Fria River Basin Management Unit (UAFRBMU)</b>
--

Cumulative Action	Acres of Disturbance of Native Vegetation within MU	Proposed Action	Alternative 1	Alternative 2
Big Bug Trailhead	5	5	2	5
Turn Out Lane	0.46	0.46	0	0
Alt. 1 Connector Trail	0.12	0	0.12	0
Construction of BCNRT North of SR 69	2.91	2.91	2.91	2.91
Construction of BCNRT South of SR 69	0.36	0.36	0.36	0.36
Construction of Copper Mountain Loop	1.84	1.84	1.84	1.84
Mayer Connector Trail	1.1	1.1	1.1	1.1
Total Cumulative Impact	11.79	11.67	8.33	11.21
<b>% Total Cumulative Impact for MU</b>	<b>&gt; 0.00001</b>	<b>&gt; 0.00001</b>	<b>&gt; 0.00001</b>	<b>&gt; 0.00001</b>

Cumulative impacts to wildlife and livestock are extrapolated by the amount of habitat/vegetation removal. Since the vegetation removal would be less than 0.00001%, the cumulative effect would be negligible. The construction of the Big Bug Trailhead is expected to have a positive cumulative effect on BCNRT users by providing additional facilities and amenities for recreationists and promoting the preservation of, public access to, travel within, and enjoyment and appreciation of the open-air, outdoor areas and historic resources of the Black Canyon corridor.

#### **No Action Alternative**

The Big Bug Trailhead would not be constructed but there would still be insignificant disturbance from the cumulative impacts of the other related trail building activities.

If no trailhead was developed, the northern trailhead users would not have easy access to a trailhead. Decreased recreation on the northern portion of the trail may occur. Vehicles would continue to use the ADOT ROW illegally which may force BLM to take enforcement action to remedy this situation. *Ad hoc* sites may appear at various places such as on State Land, private, and BLM along the trail decreasing the natural desert footprint. Opportunities for celebrations, festivities, and SRP events would be limited.

## **V. Tribes, Individuals, Organizations or Agencies Consulted**

The following is the list of individuals and organizations consulted:

- Black Canyon Trail Coalition
  - Bob Cothorn, Member
  - Linda Slay, Member
  - Babs Sanders, Member
  - Dale Wiggins, Member
  - Shareen Goodroad, Member
  - Keith Jones, Member

- Mike Padian, Member
- Yavapai County Supervisor, Tom Thurman
- Forest Service and BLM RAC Committees Member, Norman Perry
- Upper Agua Fria Watershed, Arcosanti, Mary Hoadley

## VI. List of Preparers

The following staff and managers contributed to the preparation of this Environmental Assessment:

- Jim Andersen, Lead Realty Specialist, BLM, Hassayampa Field Office
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- Kathleen Depukat, Project Manager, BLM, Phoenix District Office
- Roy Draper, Surface Protection Specialist, BLM, Hassayampa Field Office
- Troy Dymock, Trails Specialist, USFS, Recreation Solutions
- Sharisse Fisher, GIS Specialist, BLM, Phoenix District Office
- Rem Hawes, Field Manager, BLM, Hassayampa Field Office
- Amanda James, Natural Resource Specialist, BLM, Hassayampa Field Office
- Bryan Lausten, Archaeologist, BLM, Hassayampa Field Office
- Chris McLaughlin, Archaeologist, BLM, Hassayampa Field Office
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- Michael Rice, APS Project Manager, BLM Phoenix District Office
- David Scarbrough, Outdoor Recreation Planner, BLM, Lower Sonoran Field Office
- Mary Skordinsky, Outdoor Recreation Planner, BLM, Hassayampa Field Office

Prepared by:   /JS/    
*Kathleen Depukat*  
 Project Co-Lead

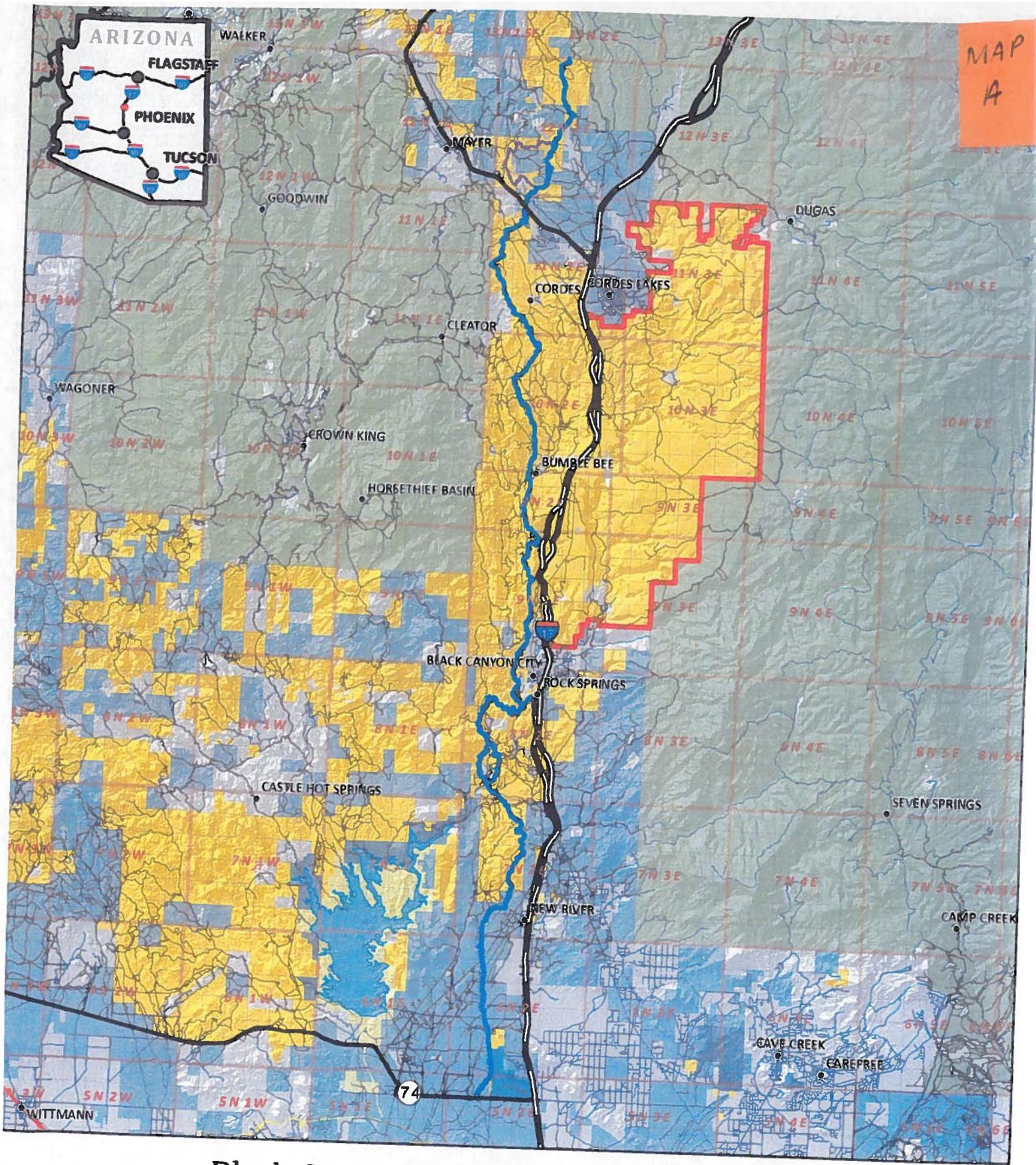
Prepared by:   /S/    
*Mary Skordinsky*  
 Project Co-Lead

Reviewed by:   /S/    
*Leah Baker*  
 Planning & Environmental Coordinator



## APPENDIX A – MAPS AND FIGURES

MAP  
A



# Black Canyon National Recreation Trail

-  Black Canyon NRT
-  Copper Mountain Loop
-  Agua Fria N.M.

- Surface Management**
-  BLM
  -  BR
  -  County/Local/State Parks
  -  Private
  -  State
  -  USFS



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HASSAYAMPA FIELD OFFICE  
Jan. 2012



# Black Canyon Trail Big Bug Trailhead

- Well
- Fence
- Black Canyon Trail
- Copper Mountain Loop
- Connector Trail
- Big Bug Trailhead Alternatives



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1:12,000

0 180 360 760 1,140 1,520 Feet

T12N, R2E  
T11N, R2E

69

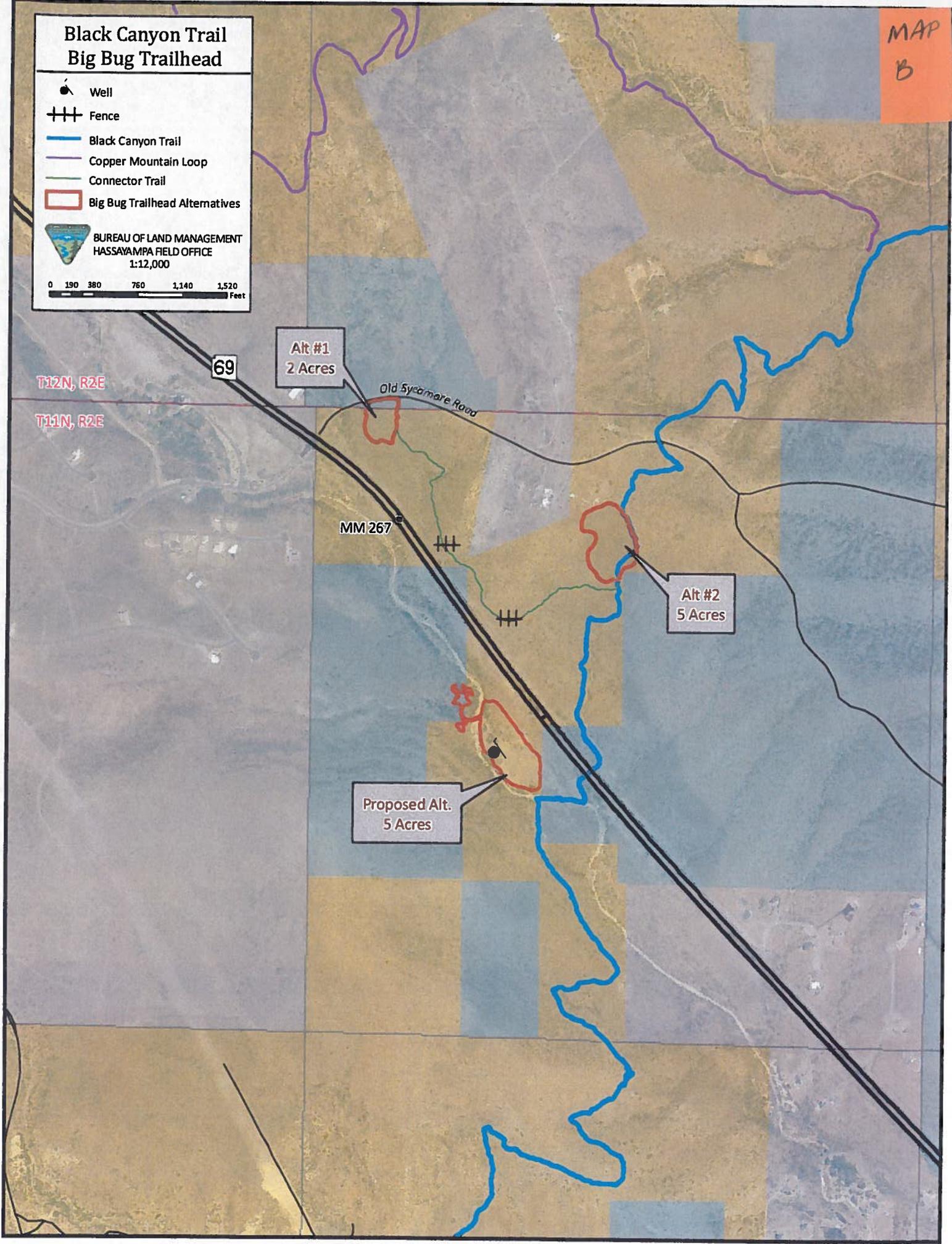
Alt #1  
2 Acres

Old Sycamore Road

MM 267

Alt #2  
5 Acres

Proposed Alt.  
5 Acres



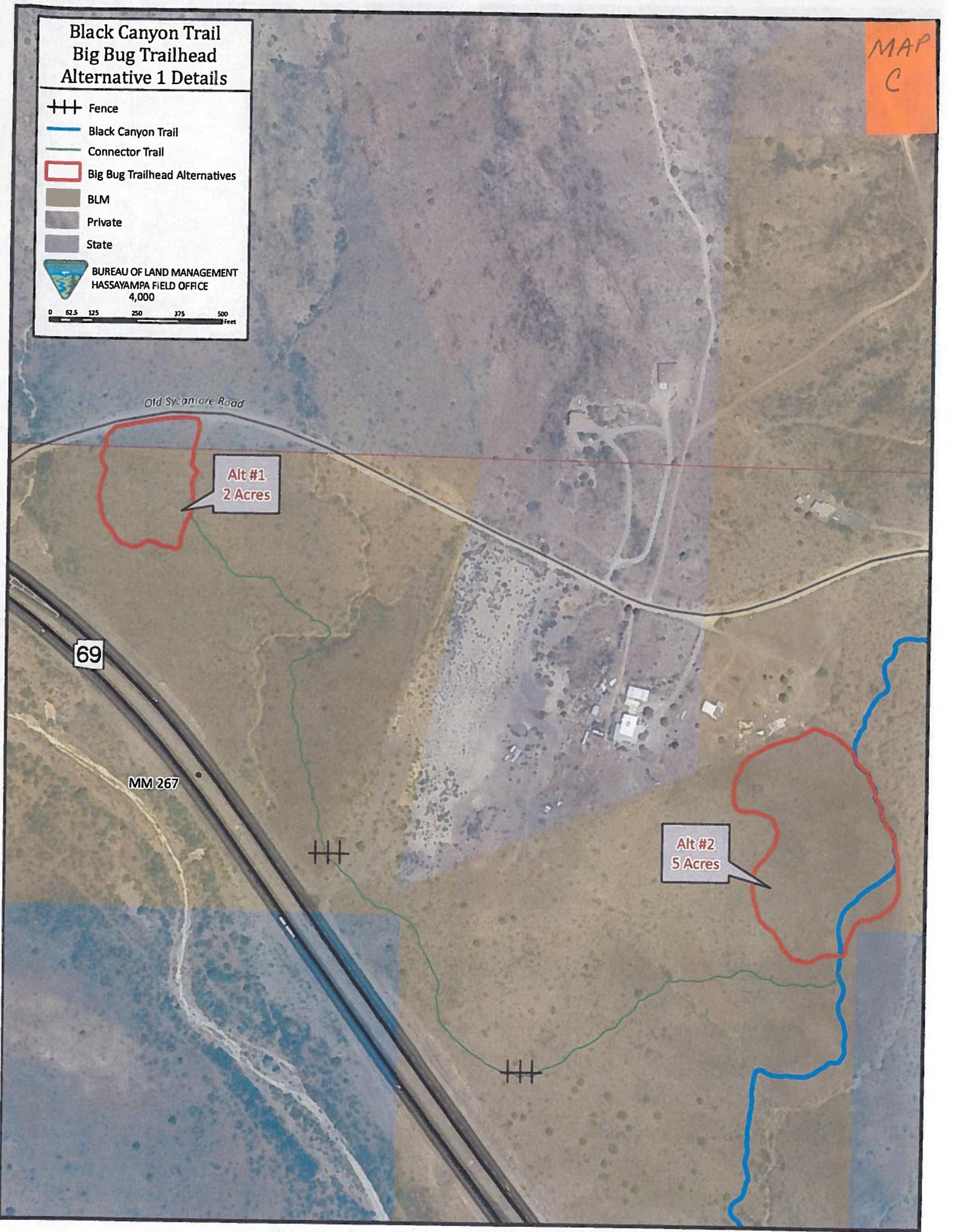
MAP  
C

# Black Canyon Trail Big Bug Trailhead Alternative 1 Details

- +++ Fence
- Black Canyon Trail
- Connector Trail
- Big Bug Trailhead Alternatives
- BLM
- Private
- State

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HASSAYAMPA FIELD OFFICE  
4,000

0 62.5 125 250 375 500 Feet



Old Syamare Road

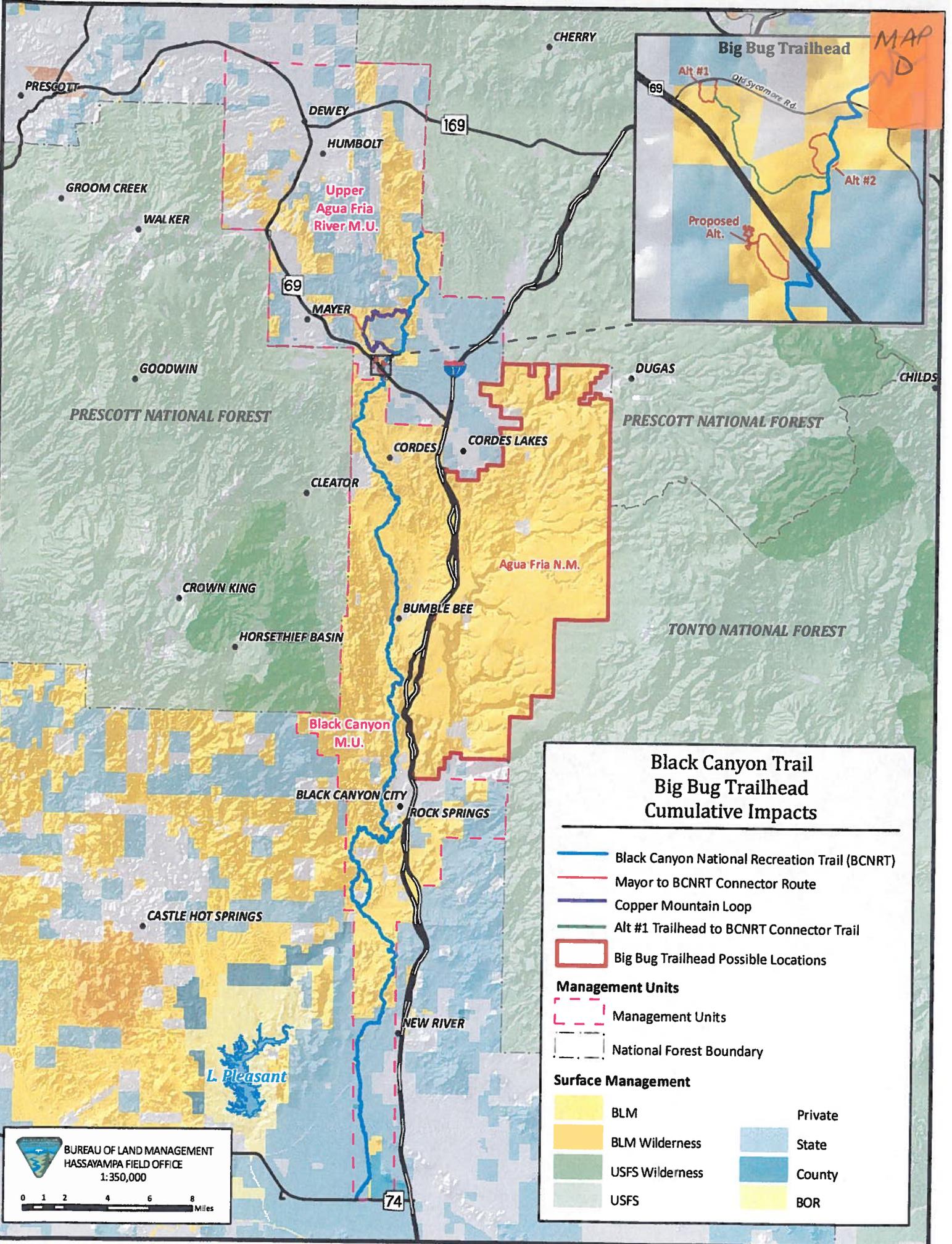
Alt #1  
2 Acres

69

MM 267

Alt #2  
5 Acres

MAP D



### Black Canyon Trail Big Bug Trailhead Cumulative Impacts

- Black Canyon National Recreation Trail (BCNRT)
- Mayor to BCNRT Connector Route
- Copper Mountain Loop
- Alt #1 Trailhead to BCNRT Connector Trail
- Big Bug Trailhead Possible Locations

- Management Units**
- Management Units
  - National Forest Boundary

- Surface Management**
- |  |                 |  |         |
|--|-----------------|--|---------|
|  | BLM             |  | Private |
|  | BLM Wilderness  |  | State   |
|  | USFS Wilderness |  | County  |
|  | USFS            |  | BOR     |

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1:350,000



Fig. 1



SYCAMORE ROAD

Directional Sign

STATE LAND

720'

Directional Sign

POWERLINE

POWERLINE

CAR PKNG

5'

EQUESTRIAN PKNG

15'

CORRAL

DISSECTED BY WASHES

VAULT TOILET

ACCESS TO BCT

DEEP DITCH



160' 11

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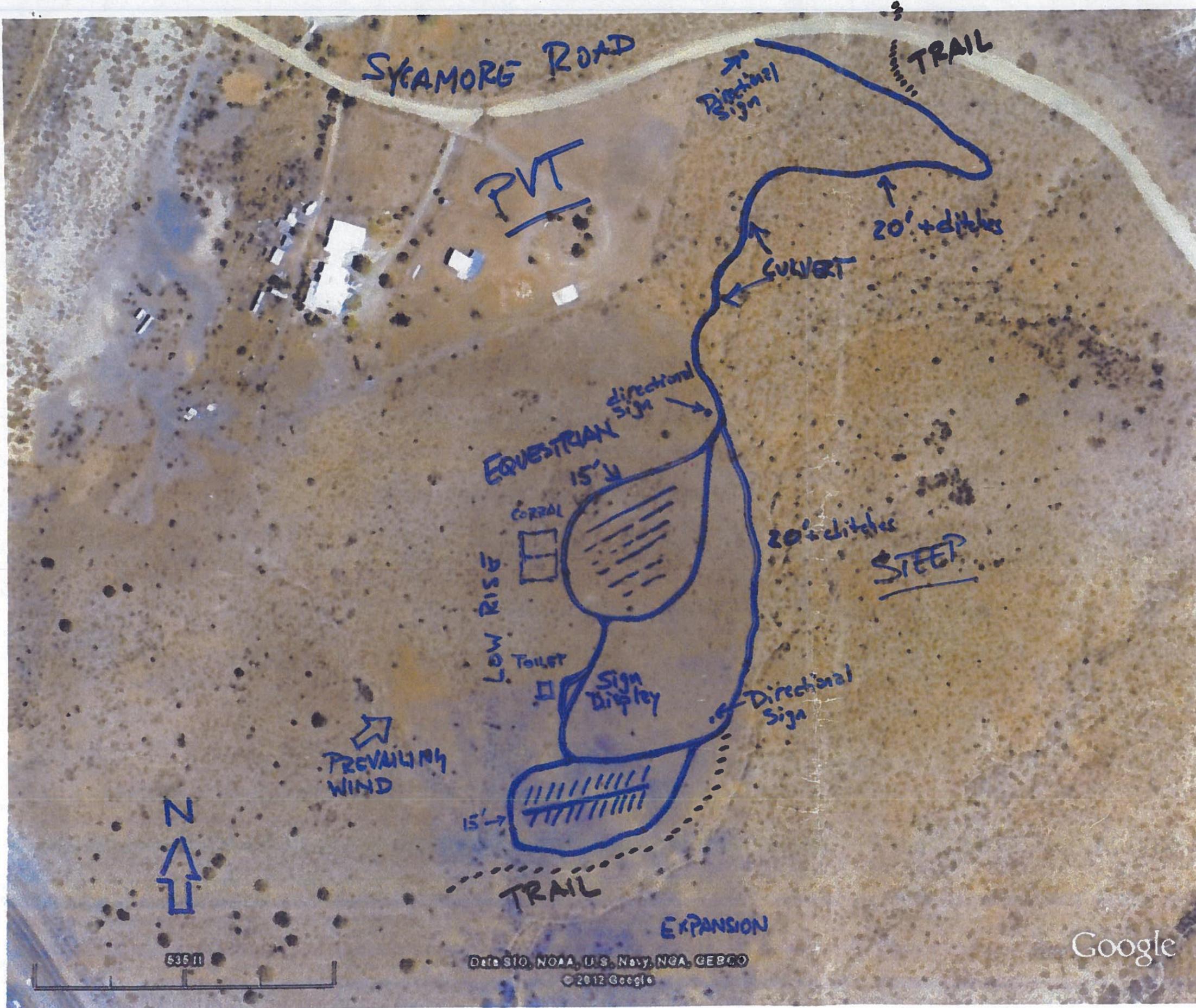
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# BLACK CANYON TRAIL

BIG BUG TRAILHEAD ALT #1

FIG 2

ALTERNATIVE 1



BLACK CANYON TRAIL  
BIG BUG TRAILHEAD ALT#2

FIG  
3

ALTERNATIVE 2

53511

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