

**Hartman Rocks Recreation Area Management Plan**  
**Environmental Assessment**



Table of Contents

**1.0 INTRODUCTION.....5**

**1.1 Background/Introduction .....5**

**1.2 Purpose and Need for the Proposed Action.....6**

**1.3 Decision to be Made .....6**

**1.4 Scoping and Public Involvement .....6**

**1.5 Issues and Concerns..... 6-15**

**2.0 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES .....16**

**2.1 Actions Common in All Alternatives Except the No Action Alternative ..... 16-47**

**2.2 Alternative 2 - Proposed Action Alternative ..... 48-55**

**2.3 Alternative 3 – Limited Recreation Alternative..... 58-59**

**2.4 Alternative 1 - No Action Alternative ..... 60-62**

**2.5 Alternatives Considered But Not Analyzed in Details.....62**

**2.6 Comparison of Alternatives Table ..... 63-69**

**2.7 Conformance Review..... 70-71**

**3.0 AFFECTED ENVIRONMENT/ENVIRONMENTAL EFFECTS ..... 72-111**

**4.0 CONSULTATION AND COORDINATION .....111**

**5.0 LIST OF PREPARERS..... 111-112**

**6.0 REFERENCES CITED.....112**

**APPENDICES**

**Appendix A: Interdisciplinary Team Analysis Record Checklist..... 113-117**

**U.S. Department of the Interior  
Bureau of Land Management  
Gunnison Field Office  
DOI-BLM-CO-S060-2011-0004-EA**

**ENVIRONMENTAL ASSESSMENT**

**NUMBER:** DOI-BLM-CO-S060-2011-0004-EA

**PROJECT NAME:** Hartman Rocks Recreation Area Management Plan, Gunnison County, CO

**PLANNING UNIT:** Gunnison Resource Area Resource Management Plan (RMP),  
Management Units 8, 13 and 16

**LEGAL DESCRIPTION:**

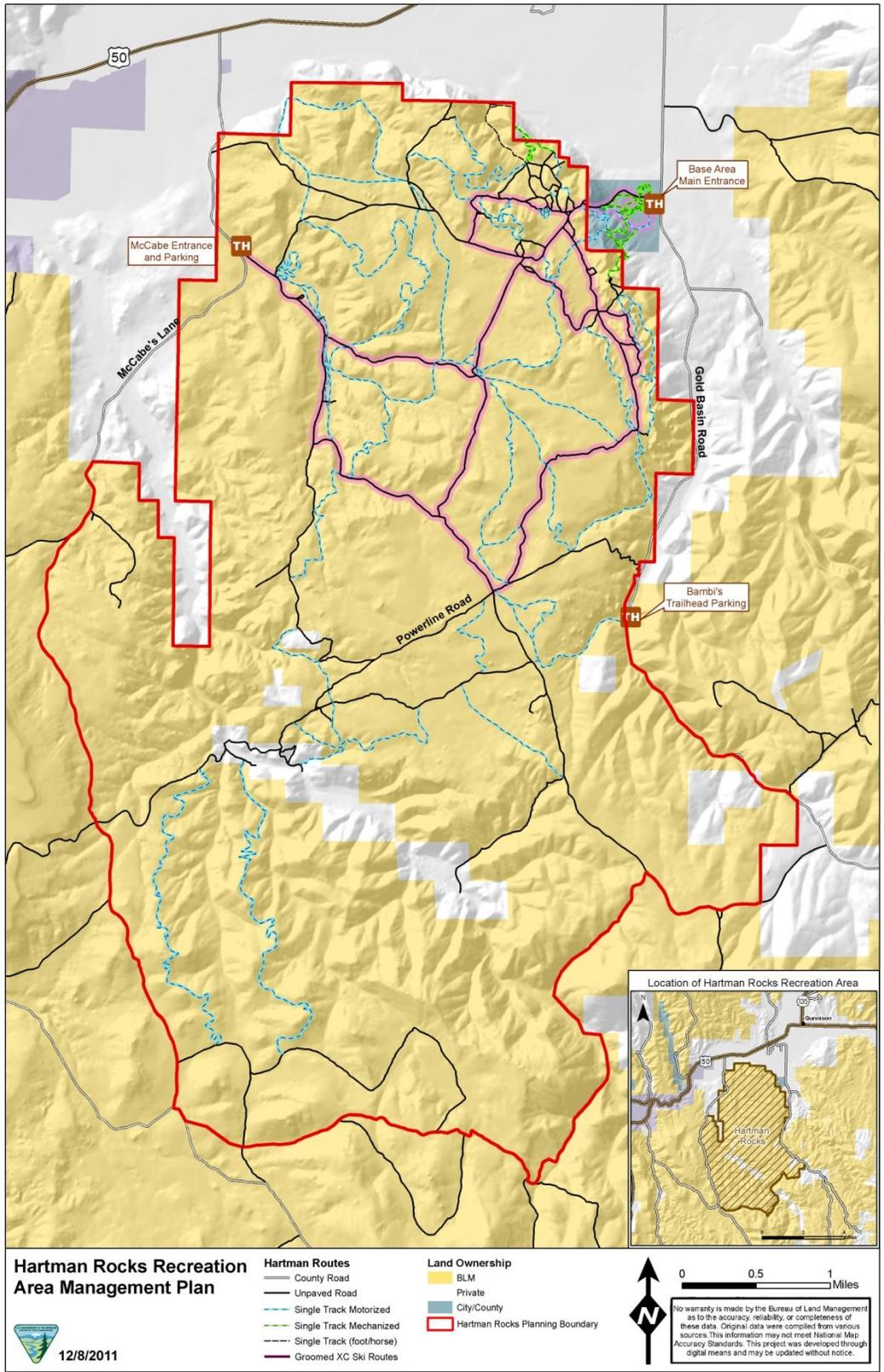
NMPM, T.49N., R.1 W., Parts of Sections 15, 16, 17, 20, 21, 22, 23, 26, 27, 28, 29, 30, 31, 32, 33, 34, and 35; and T48N. R.1W Parts of Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 15, 16, and 17.

The total planning area boundary is 14,423 acres.

See Figure 1.0 Planning Area Boundary and General Location Map

**APPLICANT:** USDI, Bureau of Land Management

Figure 1.0 - Planning Area Boundary and General Location Map



## **1.0 INTRODUCTION**

### **1.1 Background/Introduction**

Hartman Rocks Recreation Area is a popular urban interface recreation area about 2 to 6 miles southwest of Gunnison. Its proximity to Gunnison makes it easy to access for local residents for a quick recreation experience. It is becoming a destination location for mountain biking, rock climbing and single track motorized enthusiasts. It is estimated that it receives approximately 40,000 visits each year. Visitors practice a variety of recreation activities including mountain biking, motorcycling, ATV riding, 4 wheeling, rock climbing, bouldering, camping, trail running, horseback riding, cross country skiing, snowmobiling, dog sledding, hill parties, target shooting, hunting and more. The area also has other resource values that must be considered when contemplating recreation management actions. These include livestock grazing, cultural sites, wildlife habitat and rare plants. The total planning area boundary is 14,423 acres.

According to the Colorado Statewide Comprehensive Outdoor Recreation Plan (SCORP), the population in Gunnison County is expected to grow by 38% from 2007 to 2030. In 2011 the BLM set up traffic counters and use figures have grown from approximately 20,000 in 2006 to 40,000 in 2011. Increased use is resulting in increased impacts to the resource such as wide spread human waste, trash, vegetation trammeling, etc.

The focused recreation use in this area has led to some benefits and problems. The benefits are that many visitors use the roads, trails and rocks in this area regularly for a variety of recreational pursuits. Hartman Rocks benefits the public as a destination location for people not from the Gunnison area. Hartman Rocks has economic benefits to the local community. Some of the concerns that arise from this recreation use include human use impacts to soil and vegetation, potential impacts to cultural sites, impacts to wildlife, conflicts between recreationists and livestock operations, trespass on adjacent private lands and conflicts between different recreation groups.

The 2006 Recreation Area Management Plan (RAMP) for Hartman Rocks, provides good general guidance and some specific management decisions, much of which have been accomplished. Due to issues with sensitive species, site specific decisions which are no longer valid, increased visitor use and other changed conditions this plan is no longer sufficient and needs more direction to reduce human use impacts and conflicts in this area. The 2006 RAMP focuses on local use and does not take into consideration use from outside the geographic area. It does not allow for geographic expansion and does not include a large southern area including the Aberdeen Loop Trail. The 2006 RAMP included site specific direction for trail and road management but lacked direction and vision to address human use impacts on public lands.

The 1993 Gunnison Resource Area Approved Resource Management Plan (RMP) mentions Hartman Rocks as part of the Gunnison Extensive Recreation Management Area which will be managed for a diversity of recreation opportunities. Potential recreation projects will be

considered and if proposed for development these projects will be addressed in Recreation Project Plans.

## **1.2 Purpose and Need for the Proposed Action**

The purpose of this proposed action is to take an adaptive management approach to recreation planning at Hartman Rocks Recreation Area and to update some guidance decisions made in the 2006 RAMP accordingly. An updated RAMP will provide guidance and direction toward managing recreation in a manner that maintains or improves the condition and health of the unique landscape and natural resources while creating a sustainable recreation environment to promote a diversity of high quality recreation opportunities and provide for the health and safety of visitors.

An updated Recreation Area Management Plan is needed due to issues with sensitive species, site specific decisions which are no longer valid, increased visitor use and other changed conditions. The 2006 RAMP is no longer sufficient and needs more direction to reduce human use impacts and conflicts in this area.

## **1.3 Decision to be Made**

The BLM will decide whether or not to update the Hartman Rocks Recreation Area Management Plan, and if so, what management directions to include. The BLM Gunnison Field Office Manager is the Responsible Official who will make the decision.

## **1.4 Scoping and Public Involvement**

Hartman Rocks User Group meetings were held on July 20, 2010; March 2, 2011; November 30, 2011; February 6, 2012; and February 15, 2012 to discuss issues at Hartman Rocks and to discuss potential solutions responsive to these issues.

An Interdisciplinary Team Meeting was held on February 8, 2011; October 26, 2011; and January 26, 2012 to discuss internal issues.

A public open house to discuss issues at Hartman Rocks was held on January 20, 2011. Notice of this public open house was advertised in the local paper on January 13, 2011. Approximately 25 individuals, government/agency representatives attended that meeting.

## **1.5 Issues and Concerns**

As a result of public and internal scoping, several issues were identified that are analyzed in detail below.

### **1.5.1 Roads and Trails**

A variety of single track trails and roads exists within the planning area. The 2006 plan designated the current trail and road system at Hartman Rocks. Single track trails are used mainly by motorcycles, mountain bikes and foot travel. Trail difficulty level ranges from easy to very technical but trails are not signed with difficulty levels. Some of the trails were originally put in by users following old cow trails and erosion issues exist. Difficult trails are often used by riders that are not capable of riding them, making user created trails around difficult sections. Some trails have resource issues due to location and lack of maintenance. Some users feel that technical sections on trails are being lost. Other trail users feel that not enough loop options are provided at Hartman Rocks. What roads and trails are necessary to provide for a variety of recreational uses and opportunities while minimizing resource damage?

In 2010 the BLM completed a comprehensive travel plan for the Gunnison Field Office and all open routes in the approved 2006 Hartman Rocks Plan were adopted in the 2010 Travel Plan. All motorized and mechanized travel on BLM lands in the Gunnison Basin is limited to routes as defined in the 2010 Gunnison Basin Federal Lands Travel Management BLM Record of Decision.

Trails and roads closed in the 2006 plan are still being used by visitors on occasion. These routes were closed for various resource reasons. Most closed routes are signed but obliteration has not been completed. What closed routes will be obliterated or restored?

Hartman Rocks has miles of roads that are used by adaptive bicycles but trails designed for adaptive bikes have not been provided. Some people feel that BLM should consider constructing trails for adaptive bikes in Hartman Rocks. Will trails be retrofitted or constructed to accommodate hand cycles?

Trails are not provided on hard rock areas. Some mountain bikers and trials riders would like to be allowed to ride off trails on hard rock because they feel that hard rock sections would not be impacted from that type of use. Trials riding and rock hopping has been happening on hard rock surfaces with little impact. Recreationists have expressed interest in designating an area for this type of use. Will trials riding and rock hopping be allowed off designated routes at Hartman Rocks? If so, where would it be allowed?

Some users are concerned that there is a lack of rock crawling routes at Hartman Rocks while other people feel that rock crawling is not an appropriate use at Hartman Rocks. The 2006 plan approved two locations for rock crawling routes but neither route was constructed. Is rock crawling a legitimate use at Hartman Rocks?

Vegetation loss from hang-out spots at intersections is a concern to some users. Other users are concerned about trails widening from overuse. Erosion on BLM Roads 3520c, 3054a and 3585a needs to be addressed. How will vegetation loss and erosion issues be addressed?

Trail and road access across private property is an issue at some locations in Hartman Rocks Recreation Area. Public easements need to be put in place. Access and trespass from the subdivision near the Golf Course is also an issue. How will public access issues across private land be resolved?

Road and trail density is a factor that needs to be considered when planning new trails. According to the 2006 Hartman Rocks Recreation Area Management Plan approximately 1% of the planning area is denuded ground from roads and trails. However, a significant percent of planning area habitat is affected because of the presence of people. With human population growth people still want a high quality experience and dispersing people through trail development is important to maintain the feeling of remoteness and solitude. Where should new trails be constructed at Hartman Rocks yet still allow for the feeling of remoteness and solitude?

### **1.5.2 Shooting**

How can the BLM manage recreational shooting consistent with BLM policy, to minimize potential safety hazards?

Shooting is a valid recreation activity on BLM lands. However, recreational shooting at random locations within Hartman Rocks Recreation Area is causing safety concerns and user conflicts. Use levels at Hartman Rocks have increased to approximately 40,000 visits a year. Use levels estimated in the 2006 plan were estimated at 20,000 visits a year. One of the biggest concerns is increased recreational shooting in a fairly small geographic area with increased general recreation visitor use. The BLM has received verbal and written complaints from people feeling unsafe due to shooting. The majority of complaints came from people riding mountain bikes or motorcycles on trails. They hear gun shots being directed toward them or the trail they are riding on. One party even complained that bullets hit some rocks behind them. All reporting parties assume that the shooters had no idea that a single track trail exists just beyond the area they were shooting towards. The BLM has also had complaints of people shooting in the Ring Dike area where high use recreation activities happen like camping, rock climbing, hiking, running, motorcycling and mountain biking. This recreational shooting is usually pistol shooting at close range.

The 2006 Hartman Rocks Recreation Area Management Plan attempted to attract shooters to a target shooting area near the McCabe Lane entrance. The target shooting area has been successful in attracting people to shoot but the Target Shooting Area only offers space for one individual at a time. The demand for good shooting locations is very high at Hartman Rocks and

although the Target Shooting Area has been successful it is not adequate. When the Target Shooting Area is occupied, people will find other places to shoot in Hartman Rocks and many of these locations are not safe. The existing Target Shooting Area does not offer shooting for more than one party at a time, the terrain only allows for a maximum of 100 yard targets, the location of the shooting area is too close to other recreation activities, and parking is inadequate at the target shooting area. Even though there is a large backstop at the Target Shooting Area the direction of shooting is toward the town of Gunnison. Because the Target Shooting Area only offers a maximum of 100 yard target shooting, people will set up targets west of the target shooting area so they can shoot farther distances. The direction they are shooting is toward the Terrain Park.

Currently the Gunnison Field Office is not following agency policy, Instruction Memorandum No. 2008-074, by keeping the existing designated Target Shooting Area open for public use. The Bureau of Land Management (BLM) may authorize shooting sports areas such as target ranges on public lands where they are consistent with the goals and objectives in the applicable resource management plan and would enhance public land management by improving public safety, providing recreational opportunities, providing firearms or archery safety and hunter education training for the community, or consolidating opportunities for dispersed target shooting.

### **1.5.3 Terrain Park**

Hartman Rocks Recreation Area attracts dirt bike or motorcycle users through single track trails and the Terrain Park. The Terrain Park was constructed to attempt to satisfy motor-cross needs that were no longer available at Hartman Rocks. The Terrain Park does not contain jumps and no dirt was moved to construct features. The BLM has been approached repeatedly by this user group and asked if the BLM would consider a motor-cross style track instead of a terrain park. Local shops feel like this could increase business at local shops and economic opportunities in Gunnison. The BLM has concerns about liability with a motor-cross style track. Currently the terrain park receives very little use. Some people say the track is too hard with too many turns. Others say that the track is not fun to use and does not contain enough jumps. Some people feel that opportunities for single track motorized use are very limited. Visitors are interested in expanding single motorized track trails off of the terrain park. How can BLM manage for motor-cross users without increasing agency liability and how can this motorized area be expanded for future use?

An old gravel pit located between Behind the Rocks and Kill Hill serves as a play area for motorized and non-motorized recreationists. The trails in this area were designated as open to single track motorized users during the 2006 planning effort at Hartman Rocks but these trails are being used by double track vehicles as well as single track vehicles. The old gravel pit is approximately 3 acres in size and is denuded of vegetation due to the amount of use it receives.

It is always busy and the area is starting to grow. People are encroaching on vegetation to park around this area. The old gravel pit is often used by families to help build motorized and non-motorized bike skills in a more controlled environment. How should the BLM manage the old gravel pit area at the top of Kill Hill?

#### **1.5.4 Climbing**

Since the inception of the Hartman Rocks Plan, the popularity of climbing has grown at a level commensurate with other uses in the planning area. The “rock” of Hartman Rocks has been used by local climbers since the 1960’s. Most of the early climbs at Hartman Rocks were high-ball bouldering problems or top roped climbs until a flurry of route development took place in the 1980’s and early 1990’s, resulting in most of the bolted routes of today. While the majority of (sport and traditional) use is focused in the Ring Dike area, the popularity of bouldering has increased in other areas of Hartman Rocks. Inherently, some impacts to the resource are an inevitable by-product of increased use. These impacts are typically impacts to the ground and vegetation at parking sites, user created access routes, and belay spots. Human waste is also becoming an issue in and around the rocks at Hartman Rocks. How should the BLM manage rock climbing in Hartman Rocks (bearing in mind the area’s growing popularity as well as its potential to adversely affect other resources)?

#### **1.5.5 Camping**

Camping and impacts associated with camping are becoming more evident over time. Dispersed campsites are increasing in size especially at large group campsites where vehicle use, sleeping areas and living areas are intermingling together. Vegetation loss and soil compaction are issues at campsites. Rock fire rings are littered with nails from pallet burning in dispersed campsites. Nails at dispersed campsites are causing flat tires on vehicles. Human waste at campsites is one of the biggest health hazards at Hartman Rocks. Human waste can be found around dispersed campsites. The number of campsites in the Front Country area is increasing.

Another issue with camping and other night life activities is unattended campfires. In the past, unattended campfires in Hartman Rocks have caused small wildfires to start. Currently, campfires can be started in any location. People normally build a fire ring out of rocks but some people do not, increasing the spread potential.

Hartman Rocks has very little fuel for burning in campfires. Trees are not abundant and the few trees that are in the area have been vandalized by people trying to find firewood. Some people have started burning sage brush and people often bring in wood pallets to burn. Wood pallets leave behind nails.

How should the BLM manage camping in Hartman Rocks (bearing in mind the area’s growing popularity as well as its potential to adversely affect other resources)?

### **1.5.6 Parking**

With growing visitation parking lots are too small. Internal parking areas for various recreation activities are not provided. Use is thereby limited and people expand areas as they fill up with vehicles. This user created expansion of parking areas is impacting vegetation and soils. Sometimes these parking impacts are in undesirable locations. Parking is also impacting camping sites where vehicles are often parked next to or in places where tents are set up. This has created a safety issue with not having barriers between vehicles parking and living spaces at dispersed campsites, especially in high use areas. How will the BLM provide for future growth and facility development?

### **1.5.7 Use Levels and Education**

Use levels at Hartman Rocks have increased over time. It is becoming more and more popular to local residents and is now a destination location for mountain bikers, motorcyclists and rock climbers. Hartman Rocks is a recreation area that has economic benefit for the local community. Increased use and human use impacts such as human waste, soil compaction, vegetation loss, and trash are related issues at Hartman Rocks. The greatest challenge at Hartman Rocks is balance between keeping the unique dispersed recreation characteristic of the area with the increasing amount of visitor use. Many users have challenged the BLM with finding a solution to dealing with human use impact yet planning for future generations so that they would be able to recreate at Hartman Rocks like we do today.

Education is lacking at Hartman Rocks. Night life, rider, climbing, camping, plant, and animal education are all needed at Hartman Rocks Recreation Area.

How will BLM provide information and education to reduce resource impacts?

### **1.5.8 Special Recreation Permits and Events**

An increase in Special Recreation Permits and events has been noticed by the BLM permit administrator. Concerns that events and outfitters could displace visitors could be an issue. Some people have commented that they feel like motorized events are not welcome at Hartman Rocks. Others are concerned that some motorized events could have a negative impact on trails and roads.

How will special recreation permits and events be managed?

### **1.5.9 Law Enforcement**

High visitor use levels require extra efforts in law enforcement. The Gunnison Field Office does not have a dedicated Law Enforcement Officer and shares a portion of an officer from the Uncompahgre Field Office in Montrose. Shooting issues, hill parties, extended camping and

residency issues, and trail poaching all need constant attention at Hartman Rocks Recreation Area. How will BLM enforce regulations at Hartman Rocks?

#### **1.5.10 Migratory Birds**

The Migratory Bird Treaty Act (MBTA) of 1918 was passed to regulate the taking of native birds. In 2001, President Clinton signed Executive Order 13186 (66 FR 3853), which directs federal agencies to further implement the MBTA by considering the effects of projects and actions on migratory birds. Pursuant to this Executive Order, the US Fish and Wildlife Service and the BLM have developed a Memorandum of Understanding (MOU). This memorandum requires, among other things, that the BLM review the U.S. Fish and Wildlife Service *Birds of Conservation Concern* for species that may inhabit a project area, which includes raptors, evaluate the effects of the proposed action and alternatives on migratory birds, and implement conservation measures to minimize, reduce, or avoid unintentional take.

How can BLM manage for Hartman Rocks for recreation outcomes while complying with the MBTA?

#### **1.5.11 Wildlife**

All of the Hartman Rocks Recreation Area has been identified by the Colorado Dept. of Parks and Wildlife as critical winter range for big game. In the winter, food plants for these species are scarce and the nutritional value of the plants is reduced. As snow covers the vegetation at higher elevations big game herds migrate down to lower elevations to try to find food plants that haven't been covered by snow. The deeper the snow the less land is available as winter range and big game herds are concentrated on smaller patches of critical winter range. These areas are particularly critical during heavy snow years (perhaps 1 in 10 years) because more animals are trying to feed on very limited habitat in the lower elevations. This means that the vegetation needs to be managed to maintain the forage that animals rely on. If there is human use on these areas of winter range the animals may feel threatened and may have to expend extra energy to escape. Winter recreation activities by people and their pets should be managed in a way to allow some safe areas for wildlife to occupy without being disturbed. In rare years when snowfall is heavy enough it could be necessary to restrict all human use to allow animals to make use of the critical winter range without disturbance.

To what extent would the BLM manage Hartman Rocks for deer and elk winter range yet continue to manage the area for recreation outcomes?

#### **1.5.12 Threatened, Endangered, and Sensitive Species**

In 2000 the Gunnison sage-grouse was recognized as a distinct species from the greater sage-grouse that occurs in scattered populations in the western U.S. Both species are declining but the Gunnison sage-grouse has a much smaller range limited to southwest Colorado and a small

portion of southeast Utah. This range has been shrinking over the years and the population of the bird in the remaining habitat has also been declining. The Gunnison Basin has the largest remaining population of this sensitive species. The Gunnison sage-grouse is classified as a candidate species under the Federal Endangered Species Act and it is proposed for listing.

Hartman Rocks Recreation Area includes habitat for this scarce species. Current levels of recreation use here have probably pushed the bird out of some suitable habitat. It is essential that the needs of this species are considered as a plan is developed to ensure recreation is not contributing to further decline of the species.

Some people feel that the plan should incorporate more winter recreation restrictions as winter recreation can be impactful to wildlife, including Gunnison sage-grouse.

Skiff milkvetch (*Astragalus microcymbus*) is a BLM sensitive and Candidate plant species that occurs in the Hartman Rocks Plan area within the South Beaver Creek watershed southwest of Gunnison. This is the only location in the world it lives. The plant, which is a member of the pea family, is found on sparsely vegetated slopes in dry open sagebrush plant communities. Soil compaction from motorized and mechanized use can negatively affect this plant species. Noxious and invasive weeds may impact populations of skiff milkvetch and can be spread from the tires of vehicles or bicycles along trails and roads. Other vectors for transportation of noxious weed seed also include people's clothing, dogs, wildlife, livestock, wind, and water.

The South Beaver Creek ACEC (Area of Critical Environmental Concern) was created to protect the skiff milkvetch population in 1993 when the Resource Management Plan was developed for the Gunnison Field Office. The Recreation Area overlaps the ACEC. Most closed routes within the ACEC have been signed closed and some work has been made to obliterate these routes and restore natural habitat. Additional route obliteration work would assist with the conservation of the skiff milkvetch.

How would BLM manage Hartman Rocks for threatened, endangered, and sensitive species yet continue to manage the area for recreation outcomes?

### **1.5.13 Livestock Grazing**

This has been a long established use in the Hartman Rocks area and would continue to be one of the multiple uses of the area. There are 2 main pastures in the area that are grazed for a short time (10 to 14 days) in the spring of most years which is also a busy time for recreation. Each pasture is rested (not grazed) periodically to allow the vegetation to recover. A number of fences and water developments have been constructed in the area to help manage the grazing activities. These serve to keep animals in specific areas and encourage more even grazing. Problems can occur when gates are left open or fences are damaged by recreational use. This can allow cattle

to move into public land pastures that are being rested or trespass onto private land. Livestock tend to walk on the same roads and trails used by recreationists. As a result, cows are often pushed along these routes by recreation use. This can have the effects of separating cows from their calves, decreasing weight gain and making it hard to keep livestock evenly distributed to achieve proper forage utilization. Grazing use is managed under the terms of an allotment management plan that is tailored specifically to the area and its resources. As a result, this recreation area management plan would not deal specifically with grazing management. How will BLM reduce the potential for conflicts between recreationists and ranchers?

#### **1.5.14 Cultural Resources and Native American Concerns**

The BLM has been mandated by legislation and by executive orders over the years to preserve America's archaeological resources, including the National Historic Preservation Act, the Archaeological Resources Protection Act, the Native American Graves Protection and Repatriation Act and the Federal Land Policy and Management Act. These directives establish the role that the BLM must follow when developing policies and permitting certain actions on public lands. Ground disturbing activities are required to have an archaeological inventory conducted to determine if any significant cultural resources will be impacted by the proposed activity. The determination of significant cultural resources within the project area requires some form of mitigation. This is usually accomplished by site avoidance; other options include testing the site, limited data recovery or full excavation of the site. The latter options are necessary when avoidance is not possible in order to allow for scientific interpretation of the site before it is permanently damaged by a proposed action.

In addition to the federal regulations, the Gunnison Field Office Resource Management Plan includes stipulations that address protection of cultural and archaeological resources, including sites eligible for the National Register of Historic Places, traditional cultural properties, and Native American sacred sites.

How will BLM manage Hartman Rocks for cultural resources even with increased visitation and facility development?

#### **1.5.15 Soils**

As discussed above in several of the issues, soil erosion is an issue that needs to be addressed. Will the BLM include in this plan numerous management actions designed to prevent, minimize, or rehabilitate areas of soil erosion?

#### **1.5.16 Riparian Areas and Wetlands**

As discussed above in several of the issues, the condition of riparian areas and wetlands is an issue that needs to be addressed. Will BLM include in this plan, actions designed to prevent, minimize, or rehabilitate impacts to riparian areas and wetlands?

### **1.5.17 Fire and Fuels Management**

The primary vegetation type within the planning area is sagebrush with a mixed understory of grasses and forbs and some isolated clumps of juniper. Small isolated patches of Douglas-fir stands exist on north facing slopes within many of the steep drainages. Drainage bottoms are often the mixing zone with sage brush, juniper, Douglas-fir and riparian species such as willow and dogwood.

Wildfires have been actively suppressed in the planning area for more than 100 years. The current fire management response is to suppress fires in the planning area. Of the fires that are often encountered in the planning area the majority are man caused. A human caused wildfire in 2007 started along County Road 38 and expanded into the planning area burning approximately 20 acres.

Developed communities lie at the foot of the Hartman Rocks planning area on the north and east sides. Extensive private property is also located along the west side of the planning area. Small isolated parcels of nonfederal ownership exist within the planning area as well. There is a possibility that a human caused fire, from a source such as a campfire, could likely spread from the planning area taking advantage of the above mentioned fuel types and frequent strong west winds and quickly impact the surrounding private property. How will BLM manage fire and fuels issues related to recreation management?

### **1.5.18 Invasive, Non-native Species**

As discussed above in several of the issues, management of invasive, non-native species is an issue that needs to be addressed. Will BLM includes management actions designed to prevent or minimize the introduction and spread of non-native, invasive species?

## 2.0 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

### 2.1 Actions Common in All Alternatives Except the No Action Alternative

**Management Plan Goals** – In all alternatives the BLM would manage for a diversity of recreation uses in a way that seeks to improve the recreation experiences for visitors within the area that is currently used intensively by recreationists. Recreation use could expand within the planning area to help BLM meet the goal of improving visitor experiences. The general goals and objectives for alternative development are:

- 1) New development, expansion, and special recreation permits would not be authorized if the proposal would have long term impacts that could not be resolved or mitigated.
- 2) Hartman Rocks Recreation Area is a multiple use recreation area.

#### 2.1.1 Recreation Management

The BLM would expand the recreation management planning area. See Figure 2.1.1 for map of recreation zones which includes the planning area. The BLM would manage Hartman Rocks as an urban interface recreation area that receives moderate to heavy use. It is an after work and weekend play area for local residents but it is also a destination location for mountain biking, rock climbing and single track motorized enthusiasts. The BLM would manage for positive recreation experiences and outcomes. Reducing the resource impacts caused by recreation is important to maintain a healthy, natural setting for recreation. Intensive recreation management would largely stay within the boundaries of the planning area and not expand beyond those boundaries. Recreation management would attempt to be more proactive by identifying problems while they are small and hopefully easier to resolve. The BLM would open active dialogues with the visitors at Hartman Rocks Recreation Area to keep track of how well expectations of visitors are being met.

During this planning effort the BLM divided Hartman Rocks into three different zones; Front Country, Middle Country and Back Country. See Figure 2.1.1 for map of recreation zones. Proposed development at Hartman Rocks Recreation Area would be in accordance with the description in these zones setting.

- **Description of Hartman Rocks Front Country Zone:**

This is a heavy use zone and includes 1,758 acres with locations such as Kill Hill, Ring Dike, Main Street, Behind the Rocks, Cottonwood Grove, the Shooting Area, the Terrain Park and McCabe's Parking Area. This zone contains the two main access points into Hartman Rocks Recreation Area. These access roads are drivable by two-wheel drive vehicles. More people would be encountered in this zone and visitors may experience a variety of recreational activities. Activities include mountain biking, dirt biking, hiking, running, dog walking, climbing, bouldering, partying, paint balling, driving for pleasure, ATVing, rock crawling,

cross country skiing, snowmobiling, or snowshoeing. This zone contains most of the rock climbing, bouldering routes, terrain parks, and rock crawling routes. It also contains the majority of all dispersed campsites. Single track trails in this area are shorter in distance but still provide challenge due to terrain features. Parking areas exist in this zone. Human impacts are evident with surface vegetation gone and soil compacted in concentration areas throughout the zone. Sounds of people can be regularly heard.

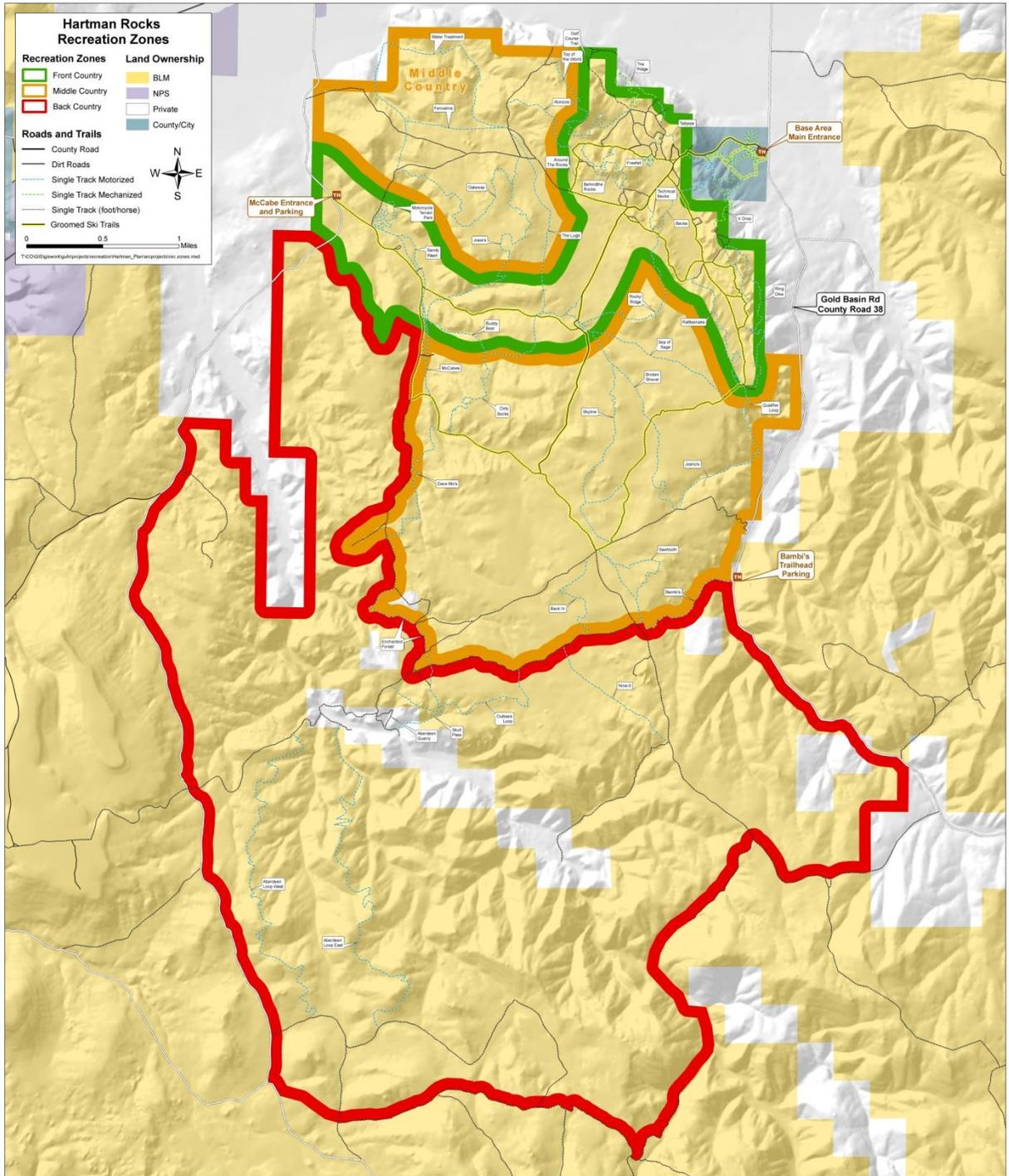
- **Description of Hartman Rocks Middle Country Zone:**

This 4,205 acre zone receives less visitation than the Front Country Zone and is geographically described as areas north of the power line but outside the Front Country Zone. This zone is accessed by interior roads and trails. Visitor facilities include two track roads and single track trails. Informal parking areas exist in this zone and the zone could include additional small parking areas. Main activities include mountain biking, dirt biking, hiking, running, ATVing, cross country skiing, snowmobiling, or snowshoeing. Camping is not popular in this zone but dispersed campsites do exist. Single track trails in this area are middle distance trails with less drastic terrain features. Small areas of alteration can be seen. Surface vegetation is showing wear with some bare soil around development. Sounds of people can occasionally be heard.

- **Description of Hartman Rocks Back Country Zone:**

This 8,460 acre zone receives less visitation than the Middle Country Zone and is geographically described as areas south of the power line and west of BLM Road 3555. This zone is accessed by interior roads and trails as well as some remote exterior access points. Access with vehicles is challenging due to roughness of roads and lack of roads and trails. Large areas are undeveloped. Visitor facilities include two track roads and single track trails. Main activities include mountain biking, dirt biking and ATVing. Cross country skiing may take place in northern portions of this zone. Camping is not popular in this zone but does exist in the far reaches of the zone. Single track trails in this area are longer distance trails due to the distance from the main trailheads. Some trails have more technical difficulty than others. Informal parking areas exist in this zone. Small areas of alteration can be seen. Surface vegetation is showing wear with some bare soil around development. Sounds of people can occasionally be heard but are less frequent than the Middle Country Zone.

**Figure 2.1.1 Recreation Zone Map**



### 2.1.2 Roads and Trails

The road and trail system in Hartman Rocks was designated in the 2006 Recreation Management Plan for Hartman Rocks. In 2010 the BLM completed a comprehensive travel plan for the Gunnison Field Office and all open routes in the approved 2006 Hartman Rocks Plan were adopted in the 2010 Travel Plan. All motorized and mechanized travel on BLM lands in the Gunnison Basin is limited to routes as defined in the 2010 Gunnison Basin Federal Lands Travel Management BLM Record of Decision.

All routes open to motorized and mechanized travel would be signed accordingly on the ground so it is clear which routes are open to recreationists. Motorized and mechanized travel would not occur off those designated routes.

A priority would be made to obliterate and restore closed routes. New trails/roads and reroutes would not be considered until obliteration/restoration work has made significant progress unless another significant issue arises such as access, safety or special initiatives.

#### Additional Road Closures:

- **Close 3520C**, which is a redundant route to 3520 and has caused soil quality to not meet land health standard 2. The road has caused on the road and off the road gully erosion.
- **Close 3054a**, which has caused accelerated soil erosion and doesn't meet land health standard 2. This road has become a gully for 0.20 miles of its length between closed routes Z4-1921 and Z4-X168. This road is not needed for any permits or recreational sites. Maintaining this road will be too costly and unsustainable.
- **Close 3585a**, which is a cut-across route between 3585 and 3557. The route is rarely used; it has caused soil erosion and does not meet land health standards.

#### Site-Specific Actions for Route Obliteration/Restoration on Specific Closed Routes:

- HRR A28 - Rip and revegetate 0.30 miles of this closed route that is not rehabbing with a barrier alone. Motorcyclists still use this route and this route is highly visible from BLM road 3054.
- HRR22 - Rip and revegetate 125 feet of this route, which has caused 2 active headcuts with a total soil loss of 14 cubic yards. Revegetate 368 feet of this route with native plants to restore infiltration and provide protective ground cover.
- Close 3520C - Rip and revegetate 781 feet of this road, which has caused has caused 3 active headcuts with a total soil loss of 1,160 cubic yards.

- 3520 - Rip a user created segment of 85 feet to reduce the amount of compacted surface contributing to excessive runoff and erosion in this part of the watershed. Revegetate 0.02 acres of bare ground where users have caused widening of the road.
- Head cuts - Stabilize 9 active headcuts that threaten to migrate head ward, which would result in damage of BLM Roads 3510 and 3515 (see map). Headcuts range in size between 1 and 72 cubic yards. Hand crews would stabilize 8 of the headcuts, while a backhoe is required for the largest headcut with a volume of 72 cubic yards. Headcuts would be re-contoured to a 2:1 slope where feasible. Erosion control fabric would be installed between the riprap and the soils. All bare ground would be revegetated with native plants.

Actions for Route Obliteration/Restoration on Other Closed Routes:

The list of routes (see table 2.1.2a) which were closed under the 2006 RAMP and the 2010 Travel Management Plan, will be targeted for restoration. Site specific cultural and biological clearances will be completed by a qualified person prior to obliteration and restoration. Newly created or undocumented non-system routes not listed in table 2.1.2a or Figure 2.1.2b would also be obliterated using these methods.

Levels of treatment actions for transportation routes fall into varying levels. Closed routes and unauthorized routes within Hartman Rocks Recreation Area will be evaluated on a case by case basis for levels of decommissioning. The following methods of road decommissioning will be the tools for decommissioning closed roads and routes within the Gunnison Field Office. The minimal tools that cause the least amount of disturbance required to best protect the resources will be used and determined on a site basis. Revegetation may occur at all levels as deemed necessary by the BLM. Disturbed areas may be stabilized with erosion control products as deemed necessary by the BLM. Levels of decommissioning may be completed in conjunction with other levels of decommissioning.

*Level of Decommissioning done by hand, ATV, or UTV.*

Level 1 – Allow the closed road to naturally revegetate

Level 1 would be implemented if the closed road has naturally revegetated, shows no signs of erosion, and displays no use by motorized or mechanized recreation. To prevent attention being drawn to these sites, signs would not be appropriate.

Level 2 – Install sign with a hand crew

Level 2 would be implemented if an area has naturally revegetated or there is an existing barrier. Signing would be appropriate if minimal use by motorized or mechanized vehicles has occurred. Area of disturbance is limited to the location of the sign. These types of areas may be on level ground and outside of water influence zones. These roads and routes have no accelerated erosion

on or off the old road prism. The field office would use this level of road decommissioning as an interim step until resources are available to fully implement the closure.

Level 3 –These activities will be done by a hand crew or equipment smaller than a UTV with implements.

- a) Install/Remove worm fence/barricade, buck and pole fence/barricade, rock barriers, or gate.
- b) Place slash on the road surface, drop trees, dead plant vegetation, plant live vegetation, transplant live vegetation from nearby areas, and install erosion products such as coir logs (i.e. wattles) , mulch, and erosion control blankets.
- c) Install and remove cross ditches/drains; check dams; and water bars.
- d) Rototill or scarify the ground.

Level 3 would be used if a route needs to be closed for the protection of resources. Implementation of 3b could be used to reduce visual fragmentation by blending the disturbed area with the natural setting. Implementation of 3a is limited to the line of the fence or barricade and approximately 15 feet of that structure. Additional ground disturbance would occur within the road or trail prism with 3b. For live planting and dead planting, vegetation about 100 feet of the edge of the road or trail could be gathered. Boulders and rocks used under this level would be gathered about 100 feet of both edges of the route. Additional ground disturbance would result from foot traffic and digging holes for planting or installation erosion control products. Implementation of 3c is limited to the drainage feature and up to 15 feet of the structure.

*Levels of decommissioning done with tracked or wheeled equipment (such as an excavator, dozer, track hoe, or back hoe).*

Level 4 – Physical Barricades. Install gates, rock blockades or trees with mechanized equipment, such as a tracked excavator or dozer.

Boulder or rock placement would be emplaced with the bottom one-third in the ground where feasible. Spacing between the boulders would range between 2 and 3 feet. Disturbance would occur at the site of the boulder placements and where feasible at sources of boulders. Boulders used for this level would be gathered where an excavator can extend its arm from open and closed roads.

Level 5 – With mechanized equipment, rip the road; sub-soil the road; or construct water bars or ditches within and outside of the road prism.

Level 5 would be used on closed roads that are highly visible from open roads and still shown signs of mechanized and motorized use. This level of road decommissioning may be used to reduce accelerated erosion (gullyng and head cutting) on and off the closed road; on roads within water influence zones that have altered the hydrologic function, and closed roads with gradients above 15%. Additional ground disturbance could occur approximately 15 feet from the road prism.

Level 6 – With mechanized equipment, re-contour the road prism by pulling back all cut and fill slopes in addition to inboard ditches.

Level 6 would be appropriate on closed roads with cut and fill slopes. The affected areas of disturbance are the cut and fill slopes and about 15 feet beyond those slopes.

Level 7 –With mechanized equipment, remove drainage structures including cross drains (culverts, rolling dips, and water bars); stream crossings structures (culverts); and unstable fills. All culverts within closed roads will be removed to prevent future failures. Water bars and rolling dips would be removed on a site specific basis, depending on whether their existence would continue to cause soil erosion or sedimentation of surface water bodies, including wetlands. Areas of disturbance of crossings are the road fill and the culverts. There would be stream bed disturbance where the culvert lies. For the removal of water bars and rolling dips, the area of disturbance is almost 15 feet of these drainage features.

Table 2.1.2a Closed Routes to be Obliterated

Route Name	Miles	Route Number
	0.0829	Z4-X102
River Trail	0.1227	HR A2
Hartman Rocks Trail A3	0.1607	HRT A3
	0.1577	HR1
Gateway Reroute Closed	0.1461	Z4-X103
	0.1906	HR2
Hartman Rocks Trail A23	0.1729	Z4-X104
Hartman Rocks Trail A7	0.1742	Z4-X105
Hartman Rocks Trail A7	0.0574	Z4-X106
Closed segment of the Luge	0.2358	Z4-X107
Hartman Rocks Road A27	0.2877	Z4-X108
Hartman Rocks Rd A68	0.1909	HRR A68
	0.3775	HRR1
	0.2004	Z4-X109
	0.0321	Z4-X110
	0.0343	Z4-X111
Gateway Reroute Closed	0.0485	Z4-X112
	0.0560	HRR2
Hartman Rocks Trail A3	0.3067	HRT A3
	0.0758	HR3
	0.0350	Z4-X113
Hartman Rocks Trail A6	0.3811	Z4-X114
	0.0430	Z4-X115
Ridgeline - closed portion	0.2778	HRT A4
	0.1846	HRR3
	0.0459	HRR4
	0.0905	HRT1
	0.0891	HRR5

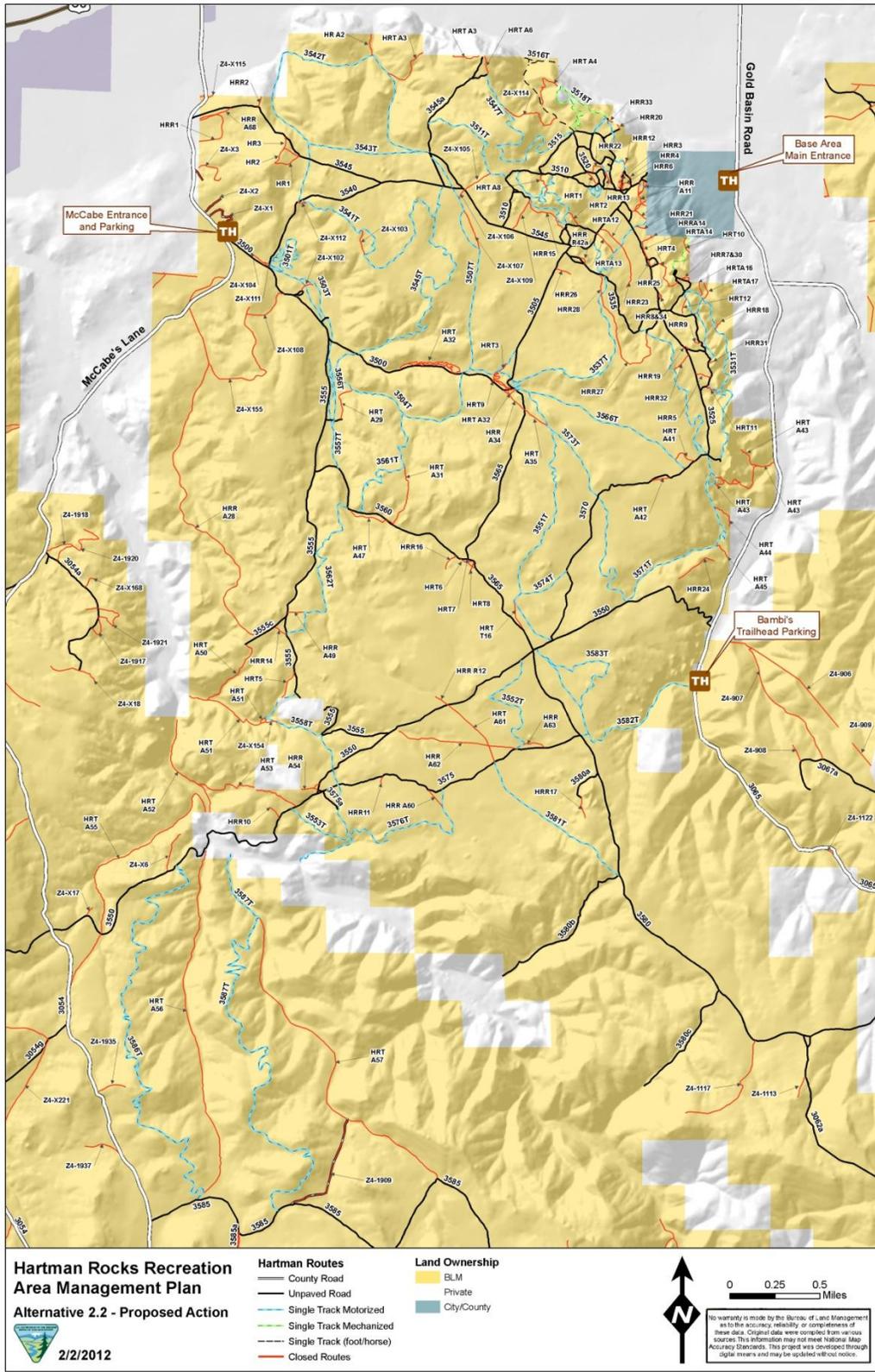
	0.0190	HRR6
Freefall	0.1235	HRT A8
Dirty Sock Closed Section	0.3952	HRT A31
Hartman Rocks Rd	0.0988	HRR A11
	0.0935	HRT2
Hartman Rocks Rd A14	0.0717	HRR A14
Hartman Rocks Trail A12	0.1595	HRT A12
Hartman Rocks Trail A51	0.5016	HRT A51
	0.0658	HRT3
Hartman Rocks Trail A13	0.1497	HRT A13
	0.0686	HRR7
	0.2306	HRT4
	0.0210	HRR8
Road to Top of Becks	0.0564	HRR R42a
	0.0370	HRR9
Hartman Rocks Trail A35	0.1548	HRT A35
Hartman Rocks Trail A29	0.2191	HRT A29
Hartman Rocks Rd 12	0.0850	HRR R12
Hartman Rocks Trail A61	0.4225	HRT A61
Powerline maintenance spur	0.0864	HRR10
Powerline maintenance Spur	0.0410	HRR A54
	0.0416	HRR11
Hartman Rocks Rd	0.1146	HRR A11
East Trail	0.1108	HRT A17
Hartman Rocks Road 63	0.1311	HRR A63
Hartman Rocks Road A62	0.6808	HRR A62
Powerline maintenance Spur	0.0990	HRR A54
Back Door	2.3093	HRR A28 <sup>1</sup>
	0.1688	HRT5
Hartman Rocks Rd	0.0391	HRR A11
	0.0765	HRT6
	0.0711	HRT7
	0.0245	HRR12
Hartman Rocks Trail A51	0.0459	HRT A51
Hartman Rocks Trail A50	0.4538	HRT A50
Hartman Rocks Rd A60	0.1215	HRR A60
Old Quarry Drop	0.5332	HRT A53
Arden's	1.5877	HRT A55
Hartman Rocks Trail A47	0.2299	HRT A47
Hartman Rocks Rd	0.1230	HRR A11

Hartman Rocks Rd	0.0734	HRR A11
Hartman Rocks Rd	0.0375	HRR A11
Hartman Rocks Rd	0.0305	HRR A11
	0.0827	HRR13
Hartman Rocks Rd A34	0.1602	HRR A34
	0.0787	HRT8
Connector R14 to A64	0.0867	HRR14
Skyline Closed	0.1713	HRT T16
Hartman Rocks Trail A44	0.1574	HRT A44
Hartman Rocks Trail A42	0.1005	HRT A42
Alt entrance to Trail 14	0.1503	HRT A41
Bong Hits	0.1862	HRT A43
	0.0661	HRT A32
Hartman Rocks Trail A32	0.5710	HRT A32
	0.4337	HRT A32
	0.0683	Z4-X116
	0.2834	HRR15
Hartman Rocks Trail	0.0427	HRT9
	0.1066	HRR16
Extension of HRR 9	0.1197	HRR17
Hartman Rocks Rd	0.0174	HRR A11
V Drop Closed Section	0.0333	HRT10
	0.0544	HRR18
Bong Hits	0.0798	HRT A43
Hartman Rocks Trail A45	0.1117	HRT A45
Quarry Drop Old	0.0908	HRT A53
	0.0372	HRR19
	0.0295	HRR20
Arden's	0.0248	HRT A55
	0.0569	HRR21
Hartman Rocks Rd	0.0316	HRR A11
Sacrifice	0.0865	HRT A16
	0.0986	HRR22 <sup>1</sup>
	0.2507	HRR23
	0.2438	HRR24
	0.0427	HRR25
	0.0933	HRR26
Bong Hits	0.1551	HRT A43
Hartman Rocks Trail A14	0.1114	HRT A14
	0.0736	HRT11

Hartman Rocks Rd	0.7074	HRR27
Hartman Rocks Rd	0.1146	HRR28
	0.1870	HRT A32
	0.0127	HRR29
	0.0875	HRT12
	0.0543	HRT13
	0.0179	HRR30
	0.0383	HRR31
	0.1213	HRR32
	0.0299	HRR33
Sacrifice	0.0443	HRT A16
Old Railroad Grade	0.6079	HRT A52
Hartman Rocks Trail A52	0.0241	HRT A52
Bong Hits	0.3832	HRT A43
	0.0428	HRR34
	0.3529	Z4-1922
	0.0517	Z4-X120
Enchanted Forest	0.0920	Z4-X154
Hartman Rocks Road A27	0.8188	Z4-X155
	0.3209	Z4-191
	0.4971	Z4-X162
	0.1653	Z4-1918
	0.0861	Z4-X168
	0.0073	Z4-X224
	0.2529	Z4-1915
	0.2499	Z4-X232
	0.1072	Z4-X247
	0.2968	Z4-X253
	0.0756	Z4-X265

<sup>1</sup> Subject to site-specific actions for route obliteration/restoration described on pg. 19

Map 2.1.2b Proposed Route Obliteration



### Access Issues:

Trails such as Water Treatment, Enchanted Forest, V-drop and Aberdeen Loop are high priority trails that either need reroutes to get off private land or legal public easements to preserve the single track trail experience at Hartman Rocks. Public access is also a high priority on BLM Road 3555 near Enchanted Forest and BLM Road 3550 in the Aberdeen Quarry.

### Consideration of New Routes:

New proposed routes or reroutes must be evaluated and authorized by the BLM prior to construction. It is more desirable to locate new trails in the Front Country and Middle Country zones at Hartman Rocks. Adaptive sports trails/hand cycle trails would be considered when adding routes. Retrofitting routes for hand cycle use to meet the needs of people with disabilities would be considered with adequate analysis. Any routes created without authorization would be closed as soon as practical. Routes added to the trail and road system at Hartman Rocks through future analysis would be added to the BLM Map of Record Database for travel management.

If new routes are considered for analysis they should meet the criteria below prior to consideration.

- Hartman Rocks Recreation Area is a multiple use recreation area.
- New development, expansion, and special uses of facilities would not be considered if it would negatively impact other resources such as sensitive species or cultural sites.
- New trails or segments of trails would be designed to incorporate best management practices and should be sustainable in both directions.

During route exploration the BLM would consult with trail users to look for opportunities to include a variety of difficulty levels and a variety of loop options. This may include bypass trails around difficult sections of trail. Designing a trail system with a variety of loop options for riders would help disperse use as visitor use increases at Hartman Rocks Recreation Area. Hartman Rocks Recreation Area is known for its single track type experience and keeping this type of experience is important to trail users.

More skilled riders and advancing technology in bikes that have more suspension and can handle steeper terrain are resulting in some demand for steep downhill routes. Steep routes have a much higher chance of erosion problems and tend to create more obvious visual scars. The BLM must be careful when designing more expert routes to try to offer a challenging ride and still avoid unacceptable resource impacts. This can be done by searching for routes with rock or durable soils as a substrate, including extensive features to control water and prevent soil erosion, and designing routes to minimize visual impacts.

### Seasonal Closures:

Spring closures would continue to be employed each year to minimize damage to roads and trails when they are wet. Vehicle closure gates would continue to be used to avoid damage on the routes in the spring. Mechanized and motorized users would be required to follow regulations governing spring closures. The spring closures would apply to all motorized vehicles and mechanized vehicles, such as mountain bikes and other wheeled vehicles, as well as to horses. Roads and trails north of the power line would open annually, after winter, when the roads are free of snow, ice and water. The BLM may harden sections of roads and trails that are muddy to allow Hartman Rocks to open earlier in the spring. The BLM Field Office Manager may also decide to open Hartman Rocks Recreation Area north of the power line earlier even if roads are still wet and accept the damage to trails and roads. This may reduce recreation use in outlying areas of Gunnison and concentrate use at Hartman Rocks to assist with limiting impacts to Gunnison sage-grouse. The Field Office Manager may weigh the option of opening trails earlier to all uses with the understanding that all volunteer days and partnership work will be geared towards repairing damaged trails from early spring use. The BLM Field Office Manager may institute a graduated opening on Hartman Rocks trails allowing mountain biking earlier than motorcycles based on wet trail conditions.

Roads and trails south of the power line road would be closed to motorized and mechanized vehicles from March 15 to May 15 each year for Gunnison sage-grouse conservation.

Supplemental rules not allowing motorized or mechanized use in the spring would be put in place. Anyone found riding cross country, riding on closed or illegal routes or riding during the spring closure could be issued a violation notice by law enforcement.

### Foot and Horse Trails:

All trails and roads are open to horse and foot access. For all Alternatives hikers and runners would continue to have full use of the area year round, except that horse use would not be allowed during spring closures. Access trails would be designated in and around climbing crags.

Opportunities for hikers and dog walkers could be improved by installing a few rustic benches at scenic overlooks or other enjoyable spots around the area. A hiking trail down to the Aberdeen Quarry Historical Site may be considered if permission can be obtained from the Pioneer Historical Society.

The Golf Course Trail is the only “hiking only” trail in Hartman Rocks. The development or designation of new hiking trails may be considered in the future if the trail mitigates resource issues or assists with the recreation demand.

A small neighborhood group formed after the Dos Rios Golf Course management blocked access to the Hartman Rocks Recreation Area via the green with a locked gate. After exploring several potential private land-to-private land solutions, the group concluded that installing a bridge across Tomichi Creek from private land to BLM land is the only viable alternative. Information is still being gathered and the BLM is not making a decision either way on the construction of a bridge or trail to resolve this access issue. The BLM would allow for the potential of a bridge from the subdivision with a legal easement, proper public input and planning. The installation of the Tomichi Creek Bridge is outside the scope of this proposed action.

Signs and educational materials would strongly encourage all trail users to use good trail etiquette throughout Hartman Rocks.

Listed below are designated roads and trails in Hartman Rocks (Tables 2.1.2b and 2.1.2c) and a map of roads and trails in Hartman Rocks (Figure 2.1.2d)

Table 2.1.2b Designated Roads in Hartman Rocks Recreation Area

Road Name	Distance in Miles	BLM Road Number
Cottonwood/McCabes Road	2.56	3500
	0.11	3500a
	0.05	3500b
Interstate Lane	1.53	3505
	0.06	3505a
	0.21	3505b
	0.18	3505c
	0.12	3505d
	0.11	3505e
	1.09	3510
	0.11	3510a
	0.03	3510a
	0.01	3510b
	0.84	3515
	0.22	3515a
	0.12	3515b
	0.12	3515c
	0.10	3515d
	0.02	3515e
	0.36	3520
	0.07	3520a

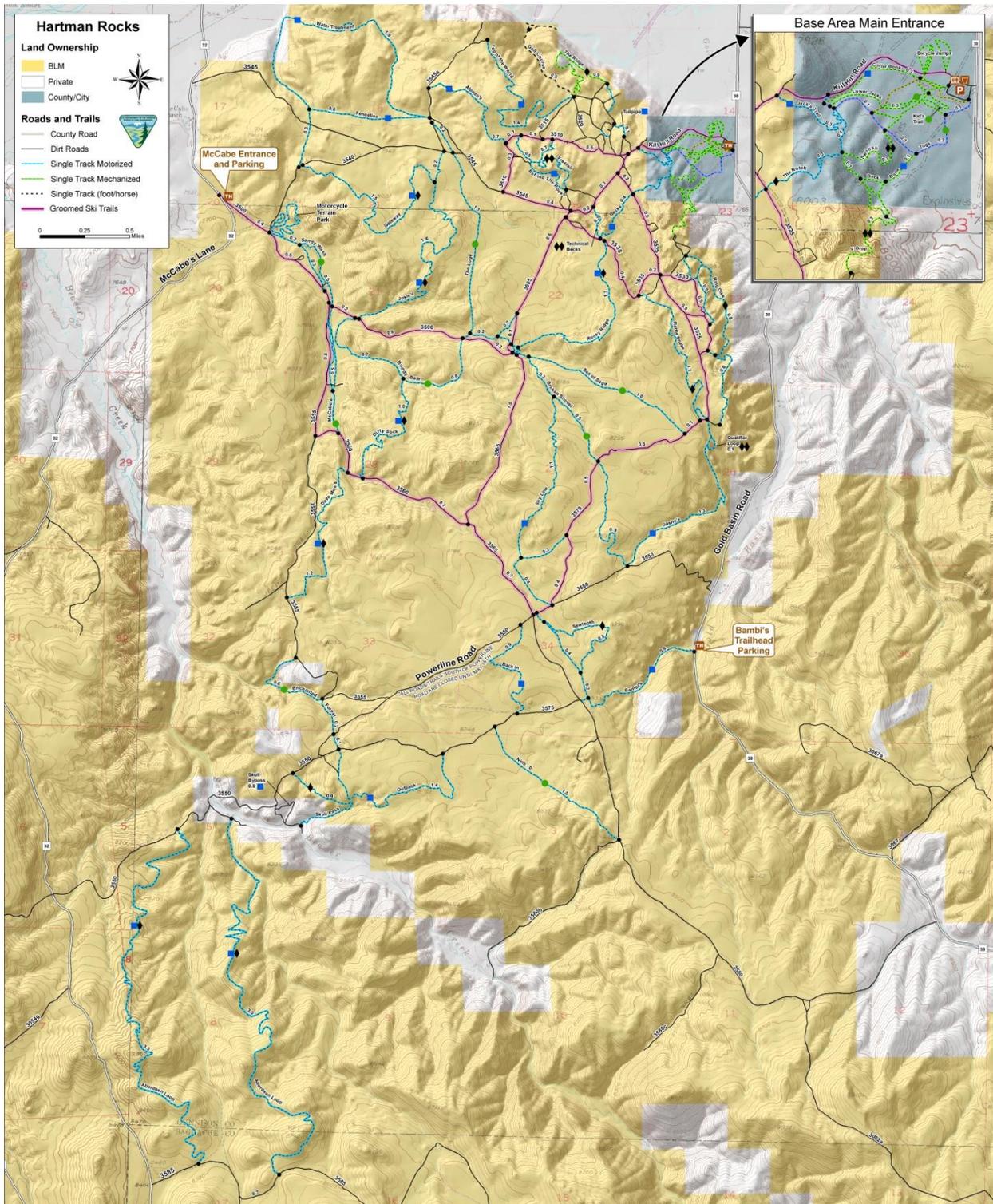
	0.09	3520b
	0.15	3520c
Main Street	1.53	3525
Chinnery Rock Spring Rd	0.17	3525a
Budda's Belly Loop	0.14	3525b
Tiger Wall parking	0.01	3525c
Tiger Wall parking	0.01	3525d
	0.16	3525e
	0.11	3525f
	0.09	3525g
Pinnacle Rock Road	0.70	3530
Hawk's Nest Road	0.47	3530a
	0.88	3535
	0.10	3535a
Estop Drop Road	0.90	3540
West Side Drive	2.42	3545
Overlook Road	0.83	3545a
	0.14	3545a1
Trench Road	0.28	3545b
Power Line Road	7.69	3550
	0.10	3550a
	0.34	3550b
Stage Coach Road	2.82	3555
	0.10	3555a
	0.09	3555b
Stage Coach Point	0.28	3555c
Cattle Pond Drive	1.14	3560
	1.73	3565
Top Side Road	1.62	3570
Richardson Road	1.64	3575
	0.14	3575a
Back Door Road	3.85	3580
Boobies Drive	0.21	3580a
Moncreif Drive	0.94	3580b
	0.72	3580c
	3.09	3585
	0.83	3585a

Table 2.1.2c Designated Trails in Hartman Rocks Recreation Area

<b>Name of Trail</b>	<b>Type of Trail</b>	<b>Distance in Miles</b>	<b>BLM Route Number</b>
Motorcycle Terrain Park	ST Motorized	0.9951	3501T
Sandy Wash	ST Motorized	1.2523	3502T
Buddy Bear	ST Motorized	1.2523	3504T
Luge Connector	ST Motorized	0.0937	3506T
The Luge Trail	ST Motorized	1.4168	3507T
Luge South Connector	ST Motorized	0.0534	3508T
Jacks Trail	ST Motorized	0.0589	3509T
Alonzos	ST Motorized	0.7098	3511T
Gravel Pit Trail Complex	ST Motorized	0.3330	3512T
Behind the Rocks	ST Motorized	0.5192	3513T
Freefall	ST Motorized	0.7042	3514T
Golf Course Trail	Foot/ Horse	0.8010	3516T
Tailpipe	ST Motorized	0.1269	3517T
The Ridge	ST Mechanized	1.0761	3518T
The Notch	ST Motorized	0.0896	3526T
Becks	ST Motorized	0.3714	3527T
V Drop	ST Mechanized	0.2877	3528T
Ring Dike	ST Motorized	0.8216	3531T
Ring Dike South	ST Motorized	0.5834	3532T
Ring Dike West	ST Motorized	0.4157	3533T
Ring Dike North	ST Motorized	0.1492	3534T
Rattlesnake	ST Motorized	1.2269	3536T
Rocky Ridge	ST Motorized	1.3659	3536T
Technical Becks	ST Motorized	0.2160	3538T
Gateway Trail	ST Motorized	1.5069	3541T
Water Treatment Trail	ST Motorized	2.4563	3542T
Fenceline Trail	ST Motorized	0.6501	3543T
Josie's Trail	ST Motorized	1.8323	3545T
Top of the World	ST Motorized	1.5396	3547T
Skyline	ST Motorized	1.4774	3551T
Back In	ST Motorized	0.8523	3552T
Skull Pass	ST Motorized	0.8032	3553T
McCabes Trail	ST Motorized	0.5065	3556T
McCabes Trail	ST Motorized	0.6488	3557T

Enchanted Forest	ST Motorized	0.7616	3558T
Dirty Socks	ST Motorized	0.9916	3561T
Dave Mo's Trail	ST Motorized	1.1700	3562T
Sea of Sage	ST Motorized	1.0796	3566T
Josho's	ST Motorized	2.1363	3571T
Qualifier Loop	ST Motorized	0.1310	3572T
Broken Shovel	ST Motorized	0.7384	3573T
Skyline Connector	ST Motorized	0.3028	3574T
Outback Loop	ST Motorized	1.4312	3576T
9-0	ST Motorized	0.9861	3581T
Bambi's Trail	ST Motorized	1.4442	3582T
Sawtooth Trail	ST Motorized	0.7953	3583T
Aberdeen Loop West	ST Motorized	3.3174	3586T
Aberdeen Loop East	ST Motorized	3.5566	3587T

Figure 2.1.2d Map of Existing Roads and Trails (Some roads and trails in this map are not common to both alternatives.)



### 2.1.3 Dog Walking

Dog owners would be encouraged through public education efforts to walk dogs on leashes. Dogs owners are encouraged to keep dogs under control at all times. Dogs are not allowed to molest wildlife. Owners would also be encouraged to remove dog waste from trails. Dog related issues can be reevaluated at any time if needed and new regulations could be implemented.

### 2.1.4 Rock Climbing

Rock climbing would continue to be managed as a valid use at Hartman Rocks. BLM and community partners would work to delineate parking, incorporate signage at popular crags, adopt and improve some user created access routes where appropriate, restore and naturalize extraneous access routes, and delineate and improve belay areas where appropriate. Appropriate access routes would be added to GFO's approved travel plan. The BLM would not be responsible for the soundness or integrity of bolts placed by climbers. This proposed action would continue to authorize commercial guiding for this activity in the area. Climbing in sensitive portions of the planning area would be discouraged. If climbing begins to cause unacceptable resource impacts (such as long term impacts that cannot be resolved or mitigated), measures would be put in place to reduce and/or remove those impacts. Management actions could include bolting moratoriums, closure of climbing routes, hardening belay areas, etc. A list (Table 2.1.4a) and map (Figure 2.1.4b) of designated climbing crags are listed below.

Climbing areas would be evaluated and monitored for existing and potential bird nesting sites (eagles, falcons, owls, ravens etc). Known nesting areas would be closed to climbers during the nesting season (May 15 through July 15). The extent of the closure will be determined on a case by case basis taking into consideration a variety of factors including visibility, sensitivity of the species to disturbance, height of the nest and climbing patterns of use in the area. Generally a closure could include up to 100 yards on either side of the nest site. The boundaries of the closure will be marked on the ground with signs at the base of the cliff. If a nest site is not occupied by May 15 in a given year the closure on that nest site will be lifted for the rest of that season. If a nest site is not used for 3 consecutive seasons the automatic closure will be lifted. The closure would be reinstated if nesting activity begins again.

#### Definitions

*Sport Climbing* – a method of climbing relying on “fixed protection;” i.e. expansion bolts placed into the rock with a battery powered drill. These bolts and other hardware (chain anchors, etc.) are permanently fixed to the rock face.

*Traditional Climbing* (trad climbing) –a style of climbing in which a climber “places” all gear in order to protect against falls. Traditional climbing gear historically includes pitons, nuts, and

cams. Anchors are created by slinging webbing around trees or rock horns. All gear is removed when the climb is completed.

*Bouldering* – a relatively new style of climbing in which no ropes or fall protection (bolts or trad gear) are used. Bouldering routes are rarely more than ten to twelve feet high, with some lateral routes in existence. Most bouldering is done over a ground or “crash” pad to protect against serious injury.

Table 2.1.4a Hartman Rocks Crag (from North to South, divided by Management Zones)

<b>Front Country Zone</b>		
<b>Crag Name</b>	<b>Parking</b>	<b>Access</b>
Kill Pass Rock	Top of Kill Pass in the Notch Area.	Trail exists from the Notch barrier (at pull-off near Chinnery Rock). Not much use.
Lowe Wall	Barriers at the Notch trail head.	User created network of trails (non-climbing) branching out from Chinnery Rock area. Must bush-whack to reach Lowe Wall Crag. Not much use; 3-5 short bolted routes. Un-published.
Shark’s Fin	Buddha’s Belly	A trail exists from Buddha’s Belly Area. Trail follows drainage north from parking area and passes Tom Sawyer en route to Shark’s Fin. Not much use.
Tom Sawyer	Buddha’s Belly	Unpublished crag. Not much use.
Buddha’s Belly	Large parking with camp site.	Crag is close to parking, but the approach can be improved (crosses small drainage at multiple points), and defined. This is the most popular climbing area at Hartman Rocks, and a network of trails lead to crags in close proximity. Some of these trails receive motorized use.

Buddha's Crack	Large parking with camp site.	This crag is immediately to the northeast of Buddha's Belly in a gully. There is only one (mixed) route at this crag without much use. Main use of the trail is to access easy top-roping site for Buddha's Belly.
Buddha's Slab	Large parking with camp site.	This crag is accessed via the Buddha's Belly Trail system. This trail dead-ends at Buddha's Slab.
Television Wall/Rock N' Roll Wall	Limited parking on Main Street, or at Tiger Wall.	Accessible via a short hike from Main Street. It is also possible to connect to the area via user created trails from Buddha's Belly. The main trail from Buddha's is closed in the Hartman Plan, and receives regular motorized use.
Slot Area	Park at Tiger Wall, access user created trail (East) into the Slot.	It is also possible to connect to the area via user created trails from Buddha's Belly.
Best Wall	Park at Tiger Wall. Access to Best Wall is via a slick rock Gully northeast of Tiger Wall.	Route is on rock and therefore sustainable.
Tiger Wall	Parking on Main Street, Climber's Trail Access to numerous crags.	Tiger Wall is easily accessible from parking. Parking could be expanded to accommodate volume of users at multiple crags.
Corridor	Climbers park at multiple sites heading east from the 4 way past Tiger Wall. Best access is to turn north from the east route past TW, park and hike directly up (NW) to the base of the crag.	Access route is on slick-rock covered with large rocks.
Resistance Wall	Parking for Resistance Wall is at the northern end of the "Rock Garden"	Route to base of climb is predominately on rock, and

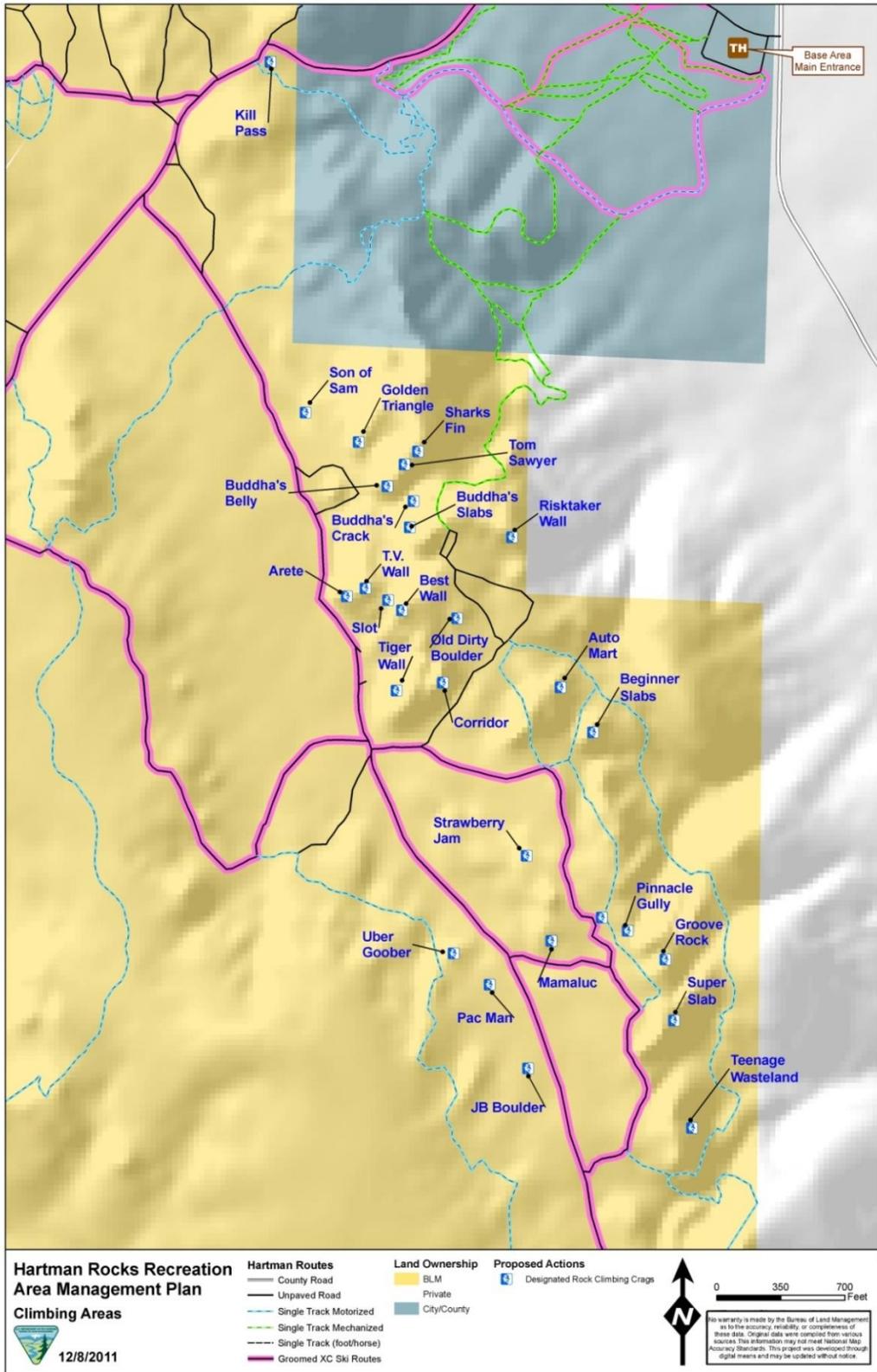
	loop; accessed by going east and then north from the 4 way stop past Tiger Wall.	sustainable. Resistance Wall has few bolted routes; trail ends at the northern most route.
Auto Mart	Parking at Beginner Slab parking.	Auto Mart is accessed by following Ring Dike (system trail) north from Beginner Slab.
Beginner Slab	Parking accessed by staying east from 4 way stop past Tiger Wall.	Currently, vehicles access the base of Beginner Slab. This is causing some impacts, and could be addressed by limiting vehicle access and improving parking from the main (system) road. This is a heavily used crag, and could benefit from a sustainable multiple use trail that accesses the crag and the Ring Dike Trail.
Alpha Quadrant	Beginner Slab Parking	Crag is immediately south of Beginner Slab. Not much use.
Quintessential Pinnacle	Parking at the base of the crag. This parking is also used to access Pinnacle Gully.	Parking is predominately on slick-rock and undefined. Access to crag is on slickrock, with no noticeable impacts. (Note: One of the protection bolts on this crag is an old piton.)
Pinnacle Gully	Quintessential Pinnacle Parking	Trail is in the bottom of the drainage that leads to Pinnacle Gully, Disco Boy, and Slab of No Return. The climbs at Pinnacle Gully have a belay spot that is eroding heavily; it may be possible to improve the belay spot.
Disco Boy/Valley Girl	Quintessential Pinnacle Parking	Not much use, but accessible by the same trail system that accesses Pinnacle Gully.

Slab of No Return	Quintessential Pinnacle Parking	Not much use, but accessible by the same trail system that accesses Pinnacle Gully.
Groove Rock	Groove Rock Parking	Crag is accessed immediately from parking.
Super Slab	Super Slab Parking	Crag is accessed immediately from parking.
Teenage Wasteland	Teenage Wasteland Parking	Crag is accessed via a short user created spur trail from the Ring Dike Trail. Main trail would require some delineation and signage to distinguish it from Ring Dike Trail.
Pre-Teen Wasteland	Teenage Wasteland Parking	Crag is accessed via a short user created spur trail from the Ring Dike Trail.
<b>Middle Country Zone</b>		
Bambi Trail Buttress	Bambi Trail Parking	Crag is north of Bambi's Trail, 40 feet off trail. To access crag, climbers must cross a deep gully; no major impacts. Not much use.
<b>Back Country Zone</b>		
Skull Wall	Small User created parking site at Skull Pass Trail. Crag is located by following Skull Pass Trail until it crests a ridge, then hiking up a notch to the right.	Not much use, mix of sport and trad routes. BLM would continue to monitor trail and belay impacts.
The Skull	Small User created parking site at Skull Pass Trail. Crag is located by following Skull Pass Trail until it crests a ridge, then hiking up a notch to the right.	Not much use, mix of sport and trad routes. BLM would continue to monitor trail and belay impacts
Aberdeen Quarry Middle	Parking is at the bottom of the canyon before the road climbs the final hill before dropping again and crossing South Beaver Creek en route to the Aberdeen Loop.	This crag is located on land owned by the State Historical Society. Base of these crags are located on blocky mine workings without much impact. Most of the climbs

		are traditional, with very few fixed anchors or bolts.
Aberdeen Quarry West	Parking is at the bottom of the canyon before the road climbs the final hill before dropping again and crossing South Beaver Creek en route to the Aberdeen Loop.	This crag is located on land owned by the State Historical Society. Base of these crags are located on blocky mine workings without much impact. Most of the climbs are traditional, with very few fixed anchors or bolts.

At this time, the highest concentration of climbing use occurs at bolted crags from the Buddha’s Belly area south to the Teenage Wasteland area (see above). This use all occurs within the Hartman Rocks Front Country Management Zone. Climbers typically travel by vehicle to the specific crag (or group of crags) that they are interested in climbing. When they finish climbing at that crag, many climbers would get back in their vehicle and travel to the next crag (or group of crags). As part of this planning effort, the Bureau of Land Management would pursue opportunities to improve and sign parking at the following locations: Buddha’s Belly, Tiger Wall, The Corridor, Resistance Wall, Beginner Slabs, Quintessential Pinnacle, Groove Rock, Super Slabs, Teenage Wasteland, Skull Wall, and Aberdeen Quarry (with permission from the landowner).

Figure 2.1.4b Designated Climbing Crags



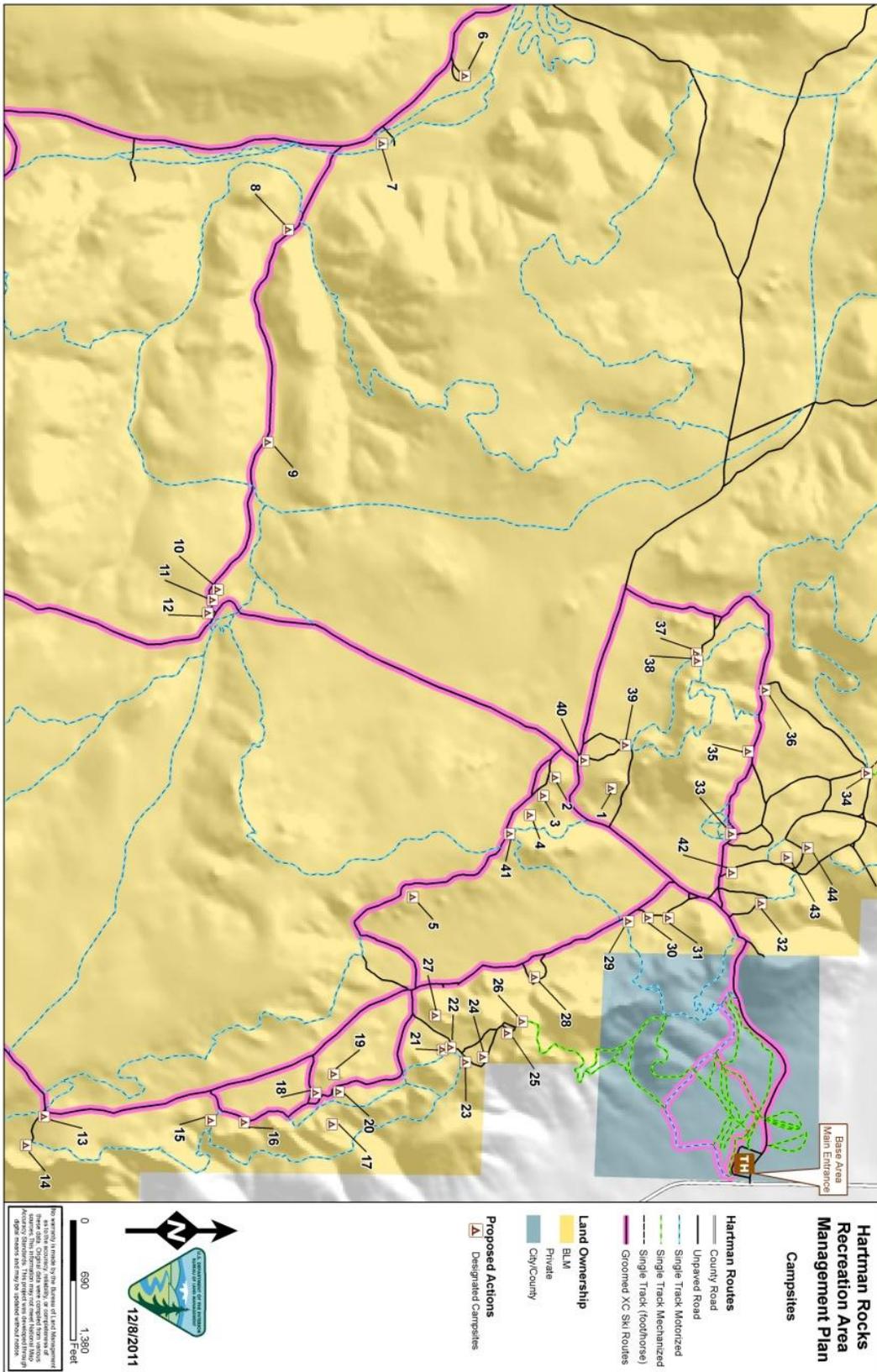
### **2.1.5 Camping and Campfires**

Camping would continue to be allowed but people would be required to camp in designated dispersed campsites in the Front Country Zone. Campsites would be located at least 150 feet away from open water (springs, lakes, streams, etc.). Campsites would be designated with amenities such as firegrates, picnic tables, and parking spurs. Gravel may be added to these sites to improve access and to delineate living/impact area. Both group campsites and individual campsites would be designated. A map of proposed designated campsites are shown in figure 2.1.5a. Campsites in the Front Country Zone can be added or removed if resource issues arise such as discovery of cultural sites, sensitive plant species, or high visitation warrants more campsites in the Front Country Zone. Future designation of campsites would be based on distance to water, distance to other campsites or activities, density of campsites, and impact to other resources such as sensitive species or cultural sites.

Campfires would only be allowed in sites with improved designated fire grates in the Front Country zone to reduce the risk and spread of human caused wildfires. Campfire rings may be installed at sites in Middle Country and Back Country Zones if needed. Campfire restrictions in Middle Country and Back Country Zones may also be put in place if needed. Due to lack of dead and down firewood in Hartman Rocks, visitors would be required to bring firewood from outside Hartman Rocks and firewood collection in Hartman Rocks would not be allowed. Pallet burning would not be allowed in Hartman Rocks Recreation Area.

Dispersed camping would be allowed in the Middle Country and Back Country Zones. Camping would be allowed away from stream channels and at least 150 from open water. If unacceptable impacts arise, the BLM would designate campsites in the Middle and Back Country Zones and the public would be required to camp in those designated sites.

Figure 2.1.5a Proposed Designated Campsites



### **2.1.6 Restroom Facilities**

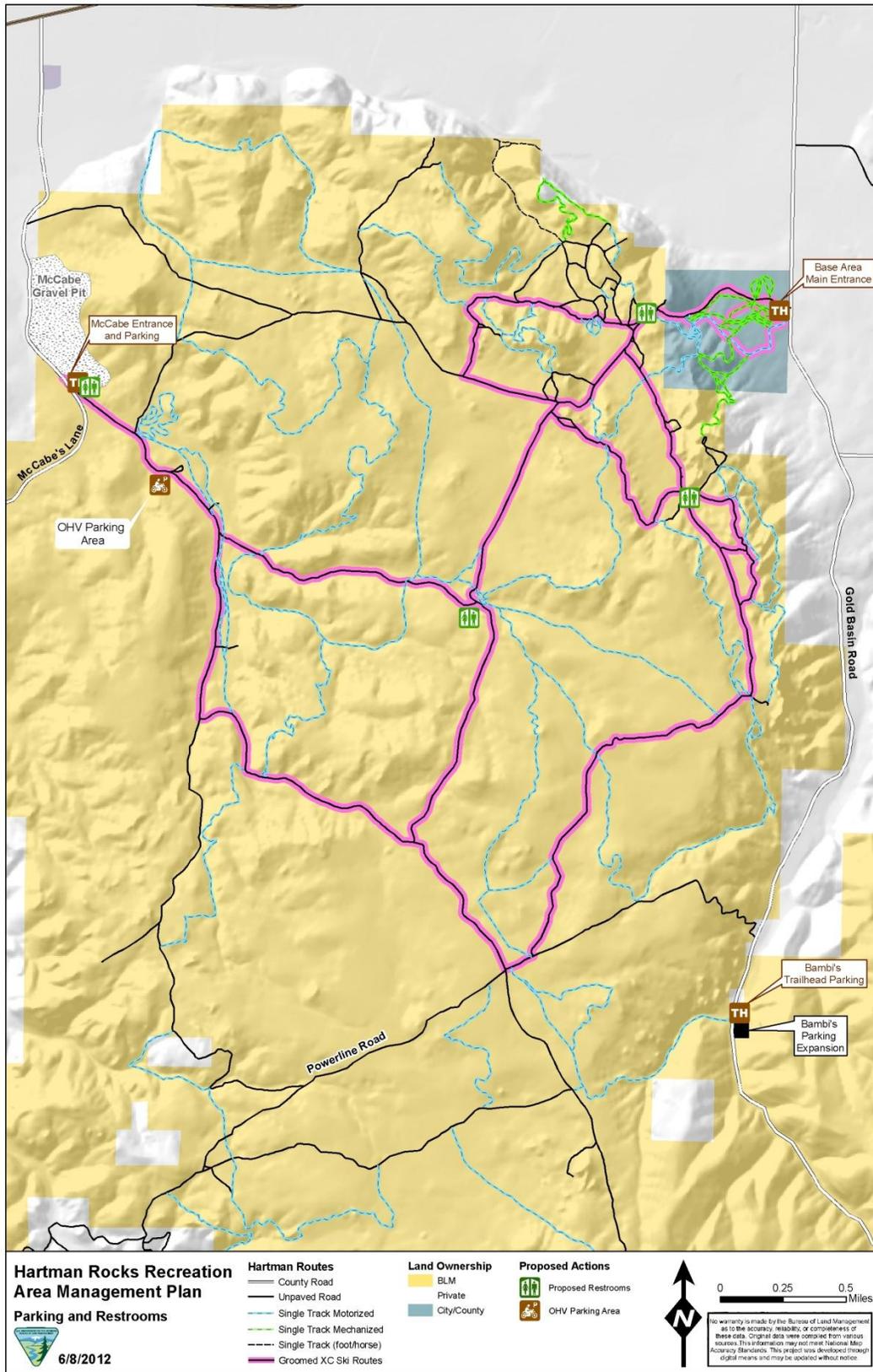
As recreation use has increased, human waste has become an issue that would require mitigation throughout Hartman Rocks Recreation Area. Restroom facilities would be installed at various locations in the Front Country Zone. Most human waste issues are associated with camping, parking and climbing areas due to concentrated visitor use in a fairly small geographic area for longer periods of time. These areas would be focus areas for restroom facility development. See Figure 2.1.6a for map of general areas that would be considered for facility development. If human waste issues arise in other areas of Hartman Rocks they would be dealt with accordingly.

### **2.1.7 Facilities and Signs**

Facility development would be considered where appropriate to enhance recreational experiences or reduce resource impacts. Development of facilities would use the minimum footprint required to maintain ground cover and to minimize the amount of compacted surfaces. Facilities would be located at least 100 feet away from springs and streams. Adequate parking would be developed on BLM land near the trailhead for Bambi's Trail to reduce trespass problems on adjacent private land. Parking area(s) would also be developed to facilitate use on the Aberdeen Loop. Small parking areas would be developed at various locations to reduce resource impacts from unconfined parking at campsites, climbing areas, and trail/road intersections. Signage would be employed as necessary to enhance visitor's understanding and appreciation of the area's resources, to encourage stewardship and responsible use and to inform them of the rules. Restrooms, dispersed campsites, parking and access trails may also be developed to reduce resource impacts from human use. All facility development should "fit-in" with the surrounding areas and be aesthetically pleasing. See Figure 2.1.6a for map of general areas that would be considered for facility development.

With the construction of facilities comes an increased cost to maintain those facilities. The general consensus from Hartman Rocks users is that the BLM should stay away from charging visitor use fees. The BLM is not considering user fees at this time but could in the future, with public involvement. User fees could help with facility maintenance costs.

Figure 2.1.6a Facility Development Map



### **2.1.8 Winter Use**

Grooming for cross country ski routes (both skate and classic) could occur on designated cross country ski routes when there is enough snow to support grooming. The BLM would work with partners such as the Gunnison Nordic Club who would do the actual grooming. Education would be used to try to reduce the impacts to wintering wildlife. Tracked vehicles would be allowed only on the designated groomed ski routes. To prevent damage to the system of groomed cross country ski trails Hartman Rocks would be closed to motorized use except tracked vehicles once grooming begins each year for ski trails. Snowshoeing is an acceptable use at Hartman Rocks and snowshoeing would primarily take place on the existing single track trail system. Winter mountain bike riding would be allowed on groomed cross country ski routes as long as the snow is hard packed and rutting does not occur on the groomed trails. Dog owners would be encouraged to remove dog waste from groomed trails.

In all alternatives cross country ski trails could be groomed on BLM Roads 3500, 3505, 3510, 3515, 3520, 3525, 3530, 3535, a section of 3545 between 3510 and 3505, a section of 3550 between 3665 and 3570, a section of 3555 between 3500 and 3560, 3560, 3565, and 3575.

See Figure 2.2.6a for map of cross country ski trail alternatives.

### **2.1.9 Other Activities**

Hill parties are an allowable use at Hartman Rocks; however, fires would be restricted to designated fire grates in the Front Country Zone. Fires would be allowed in unapproved fire rings in the Middle Country and Back Country Zones. Burning pallets would no longer be allowed at Hartman Rocks Recreation Area.

### **2.1.10 Special Events and Special Recreation Permits (SRP)**

Special Recreation Permits and events would be permitted within the regulations and management goals for the area. Events would have to follow the procedures for permits from the BLM and from the City or County as appropriate. Depending on the activity and potential impacts of the event a maximum group size and other stipulations could be employed to minimize impacts to resources. All designated routes would be considered valid and available for use in special events. These could be used for events related to mountain biking, horseback riding, running, skiing, snowshoeing, rock climbing and other non-motorized events. Motorized events such as motorcycle trials, poker runs and enduros could be considered as long as they would not cause lasting damage to the trail system or inappropriate impacts to the area's resources. The BLM would work to ensure that the routes authorized for events are appropriate for that type of use. Rock crawling events may be considered as long as they would not cause lasting damage to the resource. Events at the Terrain Park may be considered under this alternative. Special events would not have exclusive use of the area and would be managed to ensure continued public access and public safety during the event and to minimize negative

impacts on other visitors to the area. A future capacity study may be required for Harman Rocks Recreation Area if the BLM feels that visitor use and Special Recreation Permit management use is conflicting.

Vending will be considered a valid use at Hartman Rocks as long as it *directly* supports or enhances the recreation experience, and is in conformance with resource management objectives and applicable setting prescriptions. Each individual vendor must obtain a vending SRP through the Gunnison Field Office.

#### **2.1.11 Access**

The BLM has opened discussions with some adjacent landowners to assess willingness to permit public trails to cross private land. If private land owners are willing the BLM would work out details about the type of use, level of development, restrictions etc. that are appropriate for those routes and formalize them in a public access easement. No routes would be designated, developed or maintained that trespassed on private land without the owner's permission. Any trails found to be trespassing on private land would be closed as soon as practical.

Public access ways from private lands to BLM lands in and around Hartman Rocks could be considered on a case by case basis.

#### **2.1.12 Outreach and Education**

BLM and agency partners would investigate opportunities to develop and disseminate interpretive and educational messages through various media. Messages would educate the public of any new rules and regulations as well as interpret the natural resources and cultural history of the planning area. Media may include: appropriate kiosks and signage, maps, brochures, or other publications, and other interpretive or educational programming. Signs and educational materials would strongly encourage all trail users to use good trail etiquette throughout Hartman Rocks.

#### **2.1.13 Non-recreational Area**

Use of and entry into the McCabe Lane Community Pit will be limited to personnel with valid authorizations, current safety trainings (MSHA, First Aid/CPR, etc.) and proper personal protective equipment. No other uses, events or other activities will be authorized in the pit. Post reclamation use of the pit could be designed as an open off-road use area to enhance the recreation opportunities at Hartman Rocks. Post reclamation use would be after the life of the mine has been completed, anywhere between 5-20 years (depending on growth and needs for mineral materials in the valley).

#### **2.1.14 Regulations and Enforcement**

Supplemental Rules would be written to allow law enforcement personnel to enforce resource related regulations in Hartman Rocks. Proposed supplemental rules are listed below. Other supplemental rules may be added as issues arise.

- a) Close Hartman Rocks Recreation Area to motorized use in winter except for snowmobiling on designated ski trails. Cross country snowmobile travel would not be allowed.
- b) Pallet burning or possessing a pallet would not be allowed in Hartman Rocks Recreation Area.
- c) Close Hartman Rocks Recreation Area to all wheeled vehicles (mountain bike and motorcycle and cars) and horses during spring mud season.
- d) Close Hartman Rocks Recreation Area south of the Power Line to wheeled vehicles (mountain bike and motorcycle and cars) from March 15 – May 15.
- e) In the Front Country Zone, camping would be allowed only in designated sites.
- f) In the Front Country Zone, campfires would be allowed only in designated fire grates.
- g) No firewood gathering would be allowed in Hartman Rocks Recreation Area.

## 2.2 Alternative 2 - Proposed Action Alternative

Figure 2.2a Proposed Action Map

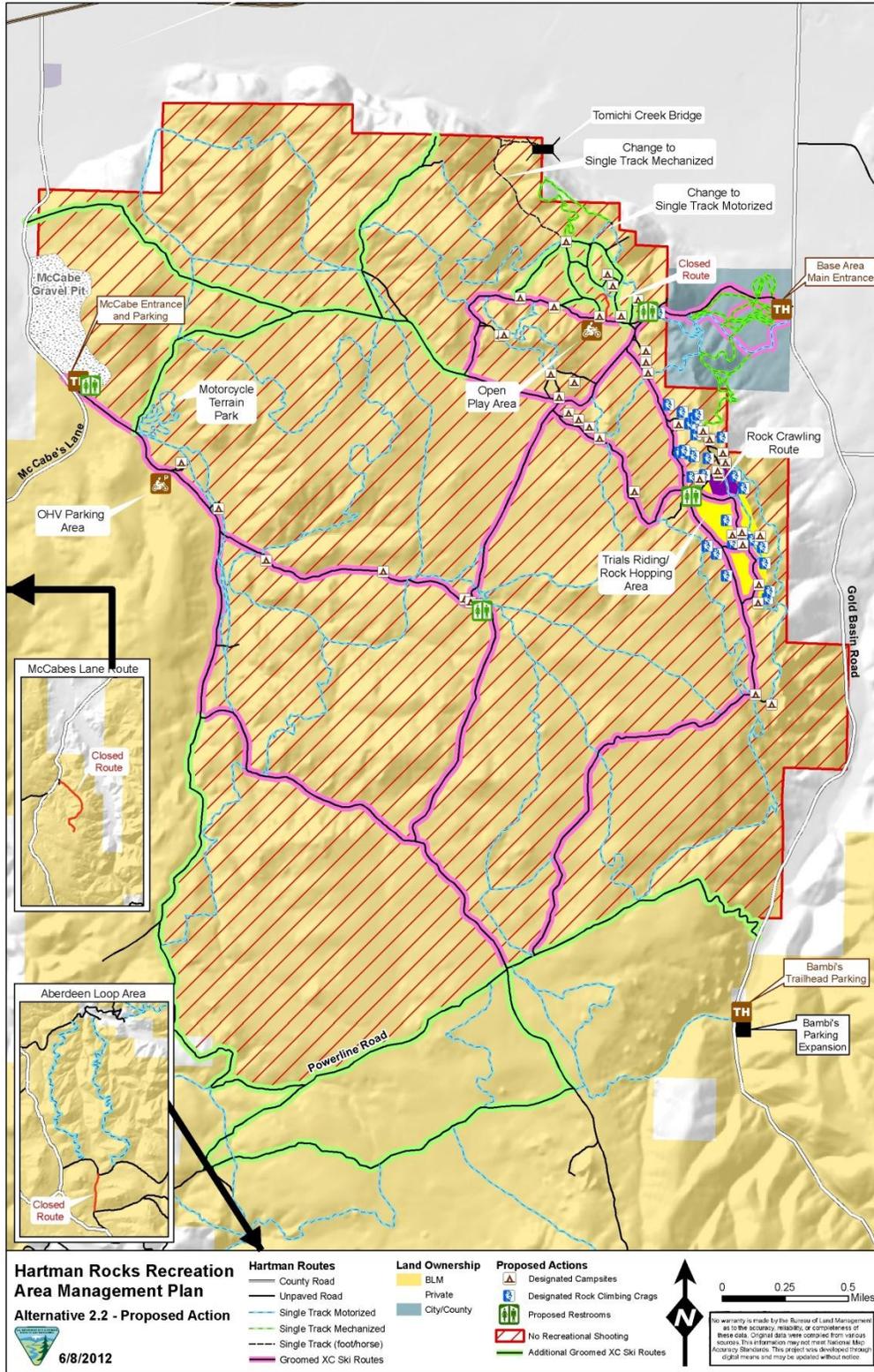
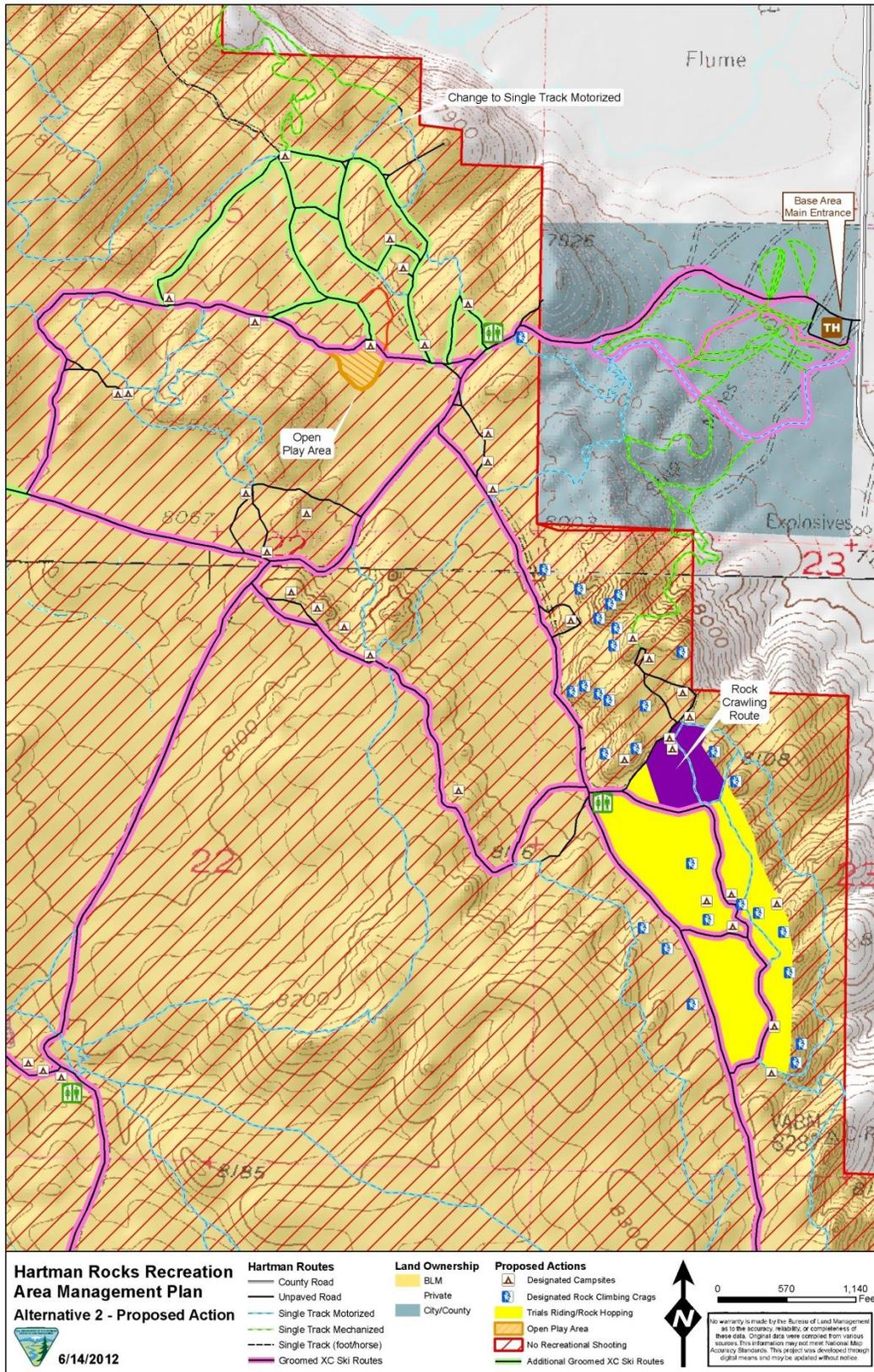


Figure 2.2b Proposed Action Map Close-up of Front County Area

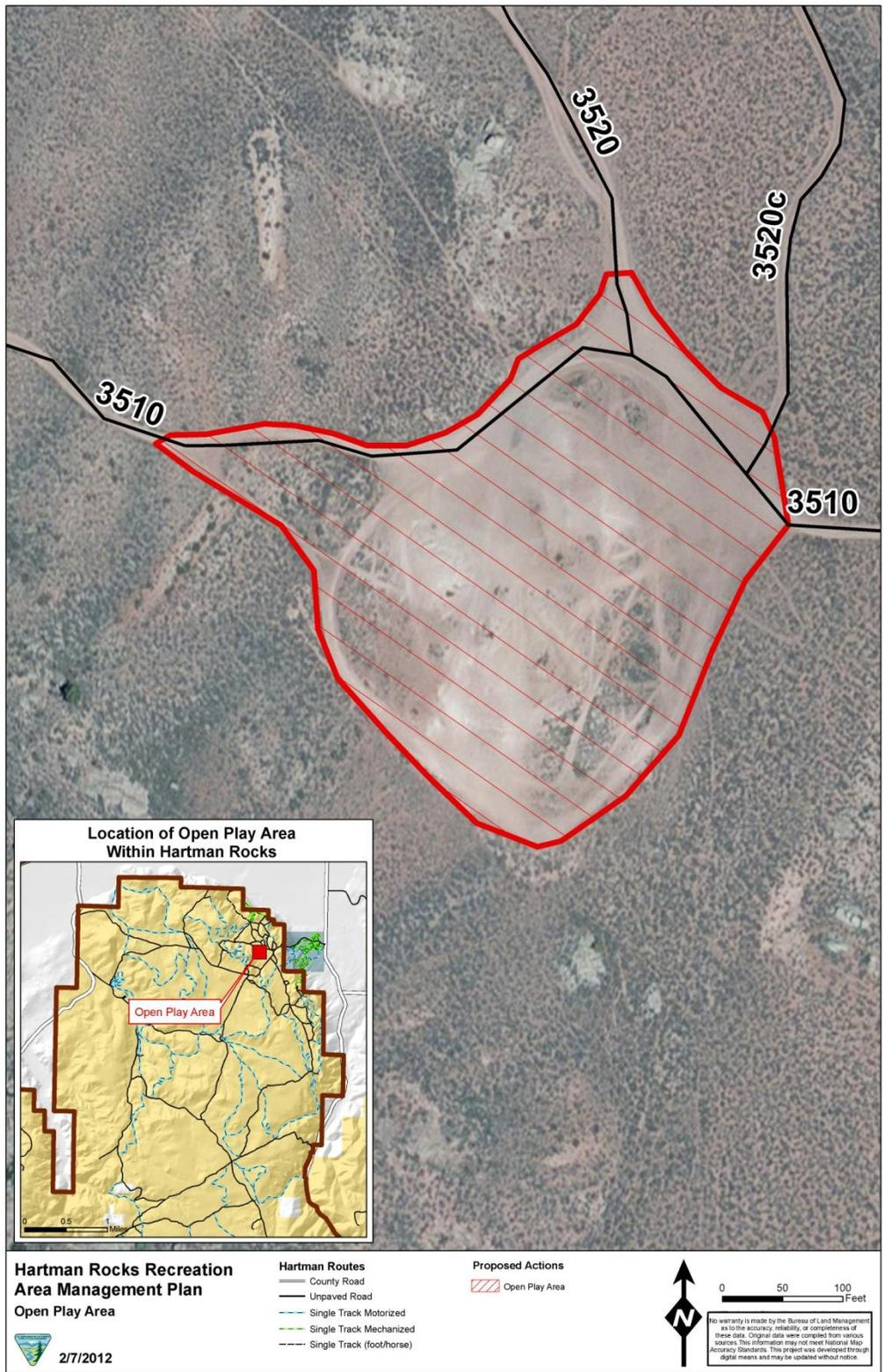


### **2.2.1 Open Play Area**

An old gravel pit at the top of Kill Hill remains as a play area for ATV's, mountain bikes and motorcycles. Although trails within this open play area were designated in 2006 as single track trails the area is being used as an open play area. It is a difficult area to manage as a single track trail system. It is growing in size with loss of vegetation around and within the 3 acre area. This plan proposes to designate the area as an open play area for motorized and mechanized vehicles. A fence or boundary would be constructed around the perimeter of the open play area to stop vegetation loss and stop the area from growing larger. A parking area would be developed within or near the open play area. See Figure 2.2.1a Map of Open Play Area.

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Figure 2.2.1a Map of Open Play Area



### **2.2.2 Rock Crawling Route/Trail**

Rock crawling (extreme 4 wheel drive) route(s) would be created in the designated area near the Ring Dike. It would be signed to let potential users know what to expect and discourage folks with inappropriate vehicles for difficult route(s). The route or route(s) would be delineated with markers. Boundary markers or a fence would be installed to warn other users coming into the immediate area. The route(s) would become designated trails in the proposed action. See Figure 2.2.4a for area map of proposed rock crawling route(s) and trials riding area.

Rock crawling routes would be closed if undesired resource or social issues arise. If no issues arise more rock crawling routes could be constructed/designated within the area designated for trials riding/rock hopping.

### **2.2.3 Motor-cross Track/Terrain Park**

This area was developed as a terrain park in the 2006 Hartman Rocks Plan. This plan would transition the terrain park into a motor-cross track by manipulating the soil to create features that are desirable for this type of use. Prior to a motor-cross style park being constructed the BLM would enter into an agreement with a partnering organization who would then be permitted to construct, maintain and administer a motor-cross track. If a partner is not found then the area would remain as a terrain park.

The Terrain Park which is designed for single track use would be closed during spring closures to prevent damage when trails are wet. This area would be closed along with the rest of the area during the winter when ski trails are being groomed. The rest of the spring, summer and fall the gate would remain open.

Current impact to the resource would stay within the fenced-in park. The track is a designated route and riders would be required to stay on that route. Riding off that route would not be allowed. Additional routes outside or inside the fenced area could be allowed with proper BLM planning and authorization. Possible areas of expansion could be on the west side of BLM Road 3540 or in and around the Sandy Wash trail, east of the Terrain Park. Once the gravel pit area is mined out of material and permitted operators are no longer using the pit, it could also be considered for motorized recreation. Any unauthorized routes would be closed as soon as practical. Adequate parking would be provided near the Motor Cross Track/Terrain Park. See Figure 2.2 Map of Proposed Action.

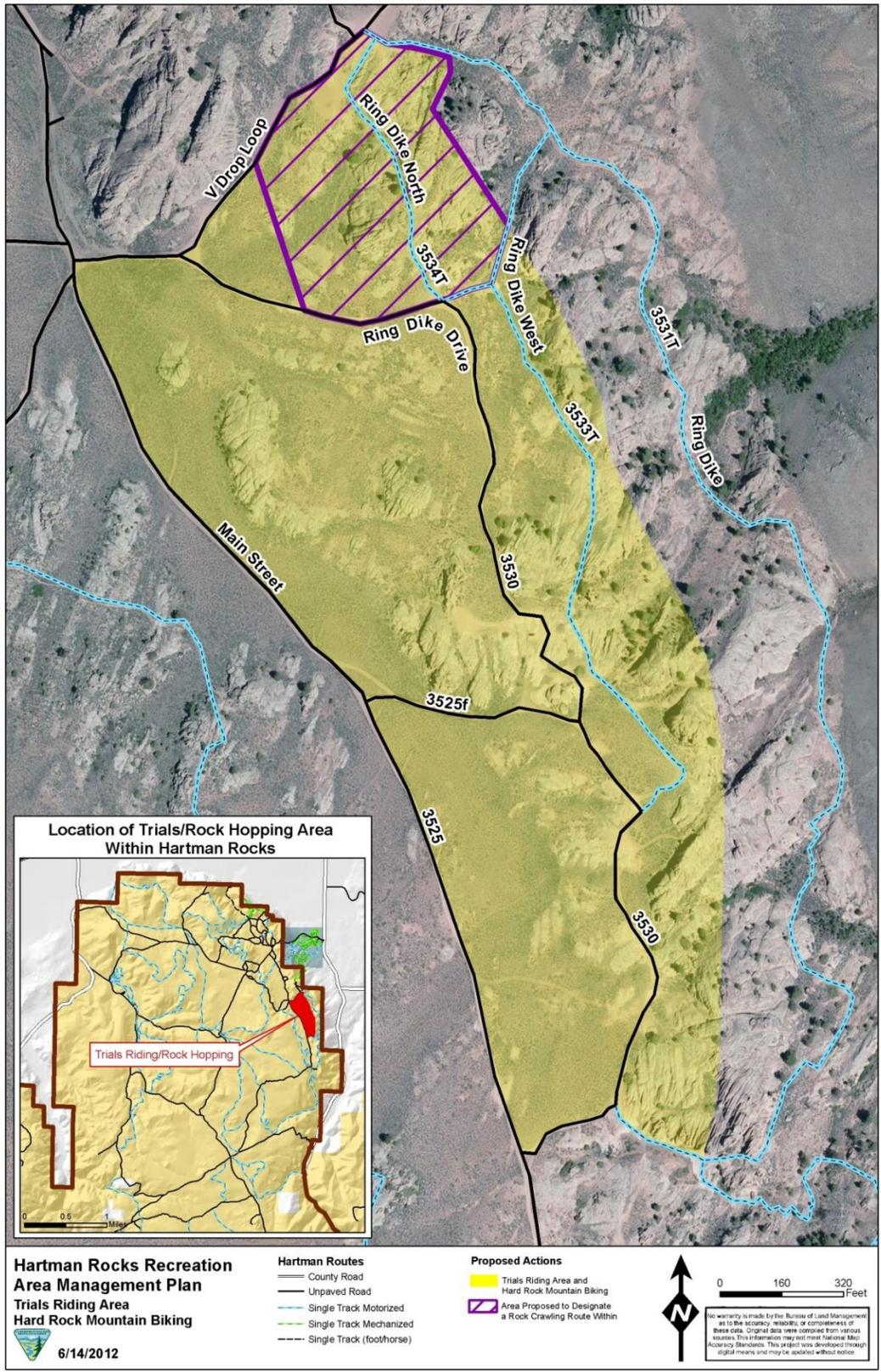
### **2.2.4 Trials Riding Area/Hard Rock Mountain Biking**

This plan would designate a trials riding area for mechanized and motorized two wheeled bikes using low pressure tires designed for such a purpose. Riders would be required to stay on hard rock surfaces and to not disturb vegetation and soil. The BLM would harden routes that tie groups of hard rock surfaces together. This would reduce vegetation disturbance by containing it

to small localized areas. The BLM may need to sign these hardened routes and designate them as trails. The open riding area for trials riding would only be designated in the Ring Dike area. The boundary of the trials riding area would be the Ring Dike Road to the west, the rock ridge to the east, the Ring Dike cut-across to the south and V-drop access road to the north. See Figure 2.2.4a Trials Riding and Rock Crawling Map. Parking would be developed in the Trials Riding Area/Rock Crawling Area to reduce impacts. If the resource begins to degrade from this type of use the Trials Riding Area would be closed and would no longer be available for this type of use.

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Figure 2.2.4a Trials Riding and Rock Crawling Map



### **2.2.5 Recreational Shooting**

Due to the popularity of Hartman Rocks Recreation Area and the amount of use it receives this plan proposes to no longer allow recreational shooting north of the Power Line Road (BLM 3550), east of BLM Road 3555, and northeast of BLM Road 3500 in Hartman Rocks Recreation Area. See Figure 2.2a, Proposed Action Map. Hunting would continue to be allowed throughout Hartman Rocks.

This alternative would close the existing target shooting location. The existing Target Shooting Area would be mitigated and reclaimed. However, people can continue to enjoy dispersed target shooting behind the new OHV Parking Area. The OHV parking area is located east of the Terrain Park near the McCabe's Lane entrance to Hartman Rocks. This popular dispersed shooting area is near the old Target Shooting Area (approximately 0.2 mile away), offers similar shooting opportunities, and is situated outside the proposed recreational shooting closure area.

The Bureau of Land Management (BLM) may authorize shooting sports areas such as target ranges on public lands where they are consistent with the goals and objectives in the applicable resource management plan and would enhance public land management by improving public safety, providing recreational opportunities, providing firearms or archery safety and hunter education training for the community, or consolidating opportunities for dispersed target shooting. Currently, the methods for allocating public land for shooting sports areas and related facilities are through direct sale under Section 203 of the Federal Land Policy and Management Act (FLPMA), or through patents issued under the Recreation and Public Purposes Act of 1926 (R and PP). The preferred method is by the use of direct sales under the FLPMA. BLM has entered into a Memorandum of Understanding with Federal Lands Hunting, Fishing, and Shooting Sports Roundtable to maintain and disseminate good information. Should the BLM adopt a broader policy concerning recreational target shooting the Gunnison Field Office will seek to accommodate this use, consistent with this plan, after additional analysis to ensure public safety and provide the recreation opportunity for target shooting.

Paintball activities would continue to be allowed throughout Hartman Rocks Recreation Area. Excessive paint on rocks would be considered as graffiti and would be dealt with through BLM law enforcement. Paintball participants are encouraged to clean up paint after paintball activities.

### 2.2.6 Winter Use

The proposed action alternative would allow grooming of additional cross-country ski trails on all system roads north of the Power Line Road, BLM Road 3555, BLM Road 3550 east of the intersection of BLM Road 3575, BLM Road 3575, and BLM Road 3580 between BLM Roads 3550 and 3575. Proposals to expand from this system would require additional analysis.

Tracked vehicles would be allowed to use any system road that is groomed for cross-country skiing. Using tracked vehicles on ungroomed routes would not be allowed at Hartman Rocks Recreation Area.

### 2.2.7 Proposed Use Change on Roads:

- **Road 3515b**, which is a dead end road near The Ridge Trail. This road provides vistas of Gunnison. The road is steep and goes straight up a hill to a dead end vista. At end of the road is also a night life party spot. Partiers have been known to throw empty bottles and cans at the house below The Ridge Trail. The proposed action would close this road to full size vehicles and keep it open for single track motorized use.
- **Road 3515C**, which is a dead end road near The Ridge Trail. This road provides vistas of Gunnison. The road is steep and goes straight up a hill to a dead end vista. At end of the road is also a night life party spot. Partiers have been known to throw empty bottles and cans at the house below The Ridge Trail. This road will stay open to full size vehicle traffic to allow visitors a scenic vista. If vandalism continues in this area the BLM would consider closing and obliterating this road and converting it to a single track motorized trail.

See Figure 2.2a Proposed Action Map

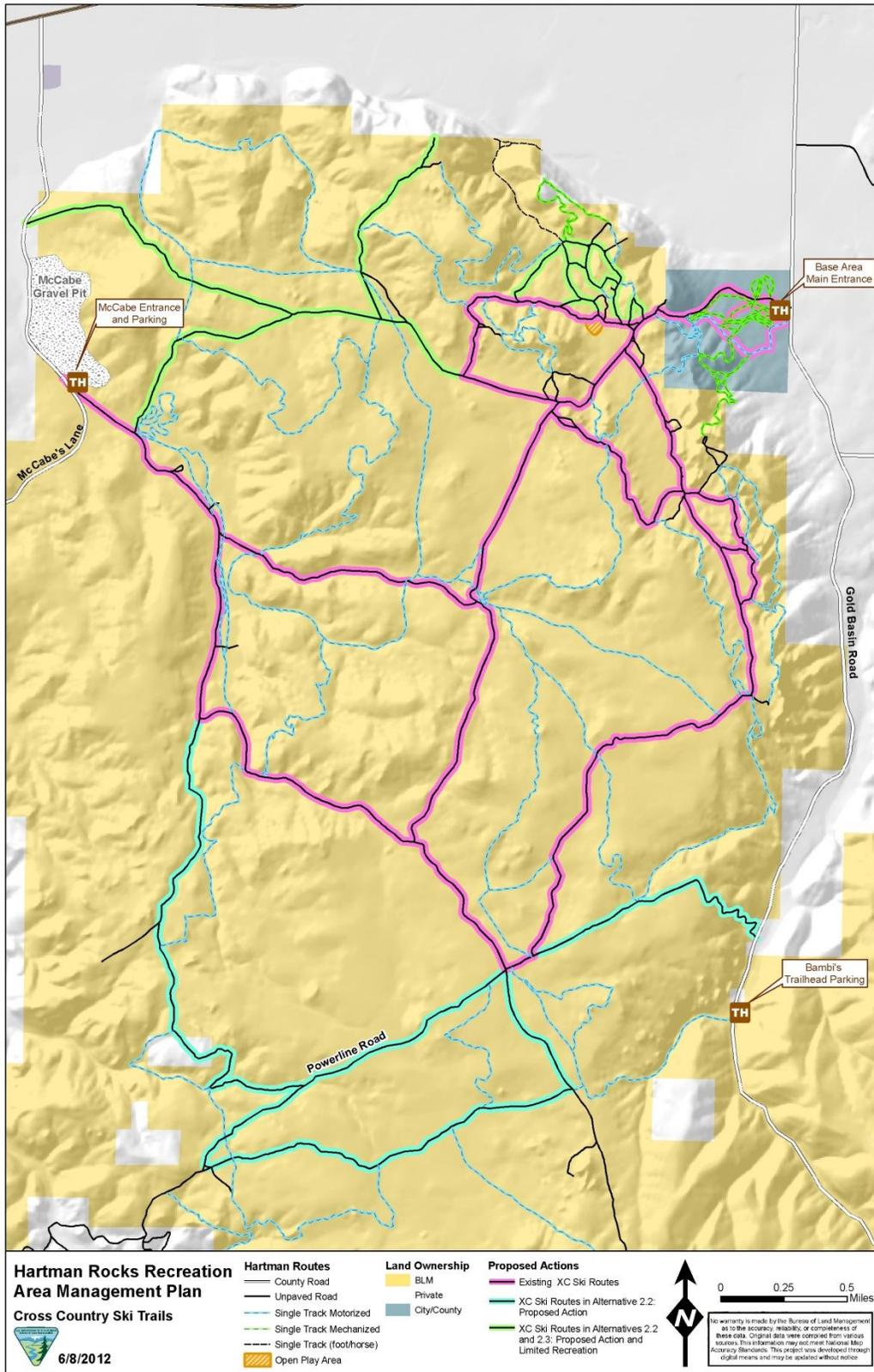
### 2.2.8 Regulations and Enforcement

Supplemental Rules would be written to allow law enforcement to enforcement resource related issues in Hartman Rocks. This proposed action would add Supplemental Rules listed below.

The additional supplemental rules would be:

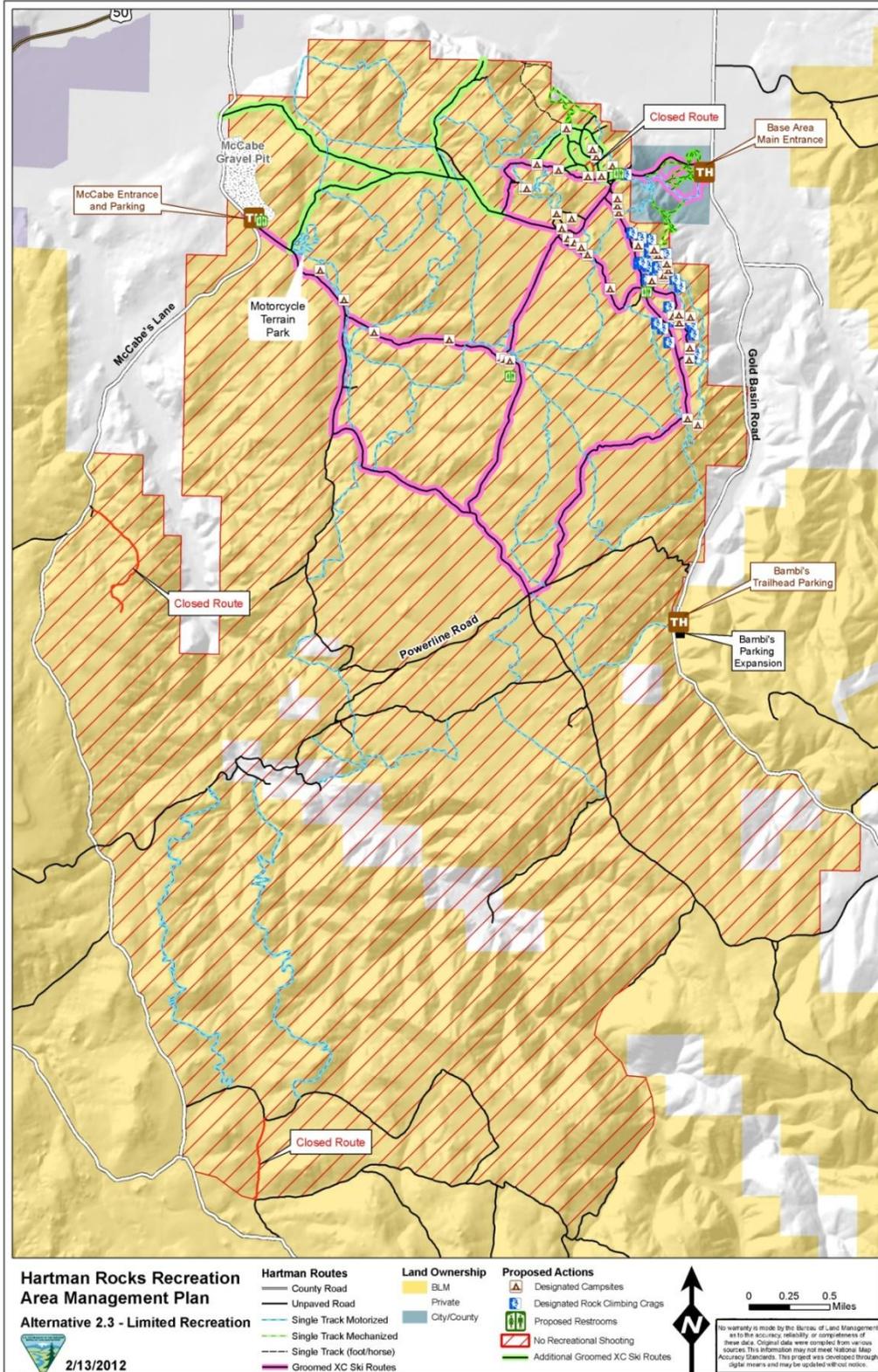
- To allow mountain bike riding and motorized trails riding on slick rock surfaces in the Ring Dike area as described in the attached map as long as that use does not create measurable lasting resource damage. Only low pressure tires designed for such use would be allowed to ride on this open slick rock area.
- To allow Open Area riding on Kill Hill gravel pit.
- No recreational shooting north of the Power Line road and East of BLM Road 3555 except in designated areas. Hunting would continue to be allowed throughout Hartman Rocks.

Figure 2.2.6a - Cross Country Ski Trail Alternatives



## 2.3 Alternative 3 – Limited Recreation

Figure 2.3 – Limited Recreation Alternative



### **2.3.1 Open Play Area**

In this alternative the old gravel pit at the top of Kill Hill would be closed to all uses, including single track trails, and area will be restored.

### **2.3.2 Rock Crawling Route**

Rock crawling routes/trails would not be considered within Hartman Rocks Recreation Area. Rock crawling events would not be considered under this alternative.

### **2.3.3 Motor-cross Track/Terrain Park**

The Terrain Park would continue as a terrain park with no dirt moving to create trail riding features or jumps.

Impact to the resource would stay with-in the fenced in park. The track is a designated route and riders would be required to stay on that route. Riding off that route would not be allowed. The creation of additional routes within the park would not be allowed without permission of the BLM. Any unauthorized routes would be closed as soon as practical.

### **2.3.4 Target Shooting Area**

This alternative would not provide shooting opportunities in Hartman Rocks. Target shooting would not be allowed anywhere within Hartman Rocks Recreation Area. Hunting would continue to be allowed throughout Hartman Rocks.

### **2.3.5 Winter Use**

The limited recreation alternative proposed to allow cross country ski trail grooming on all roads north of BLM Road 3550 except the portion of BLM Road 3555 south of BLM Road 3560, and BLM Road 3550 east of BLM Road 3570, and BLM Road 3550 west of BLM Road 3565. Snowmobile use would not be allowed in or around Hartman Rocks Recreation Area except for the purpose of grooming cross country ski trails.

### **2.3.6 Regulations and Enforcement**

Supplemental Rules would be written to allow law enforcement to enforcement resource related issues in Hartman Rocks. This proposed action would add Supplemental Rules listed below in addition to other regulations listed in section 2.1.

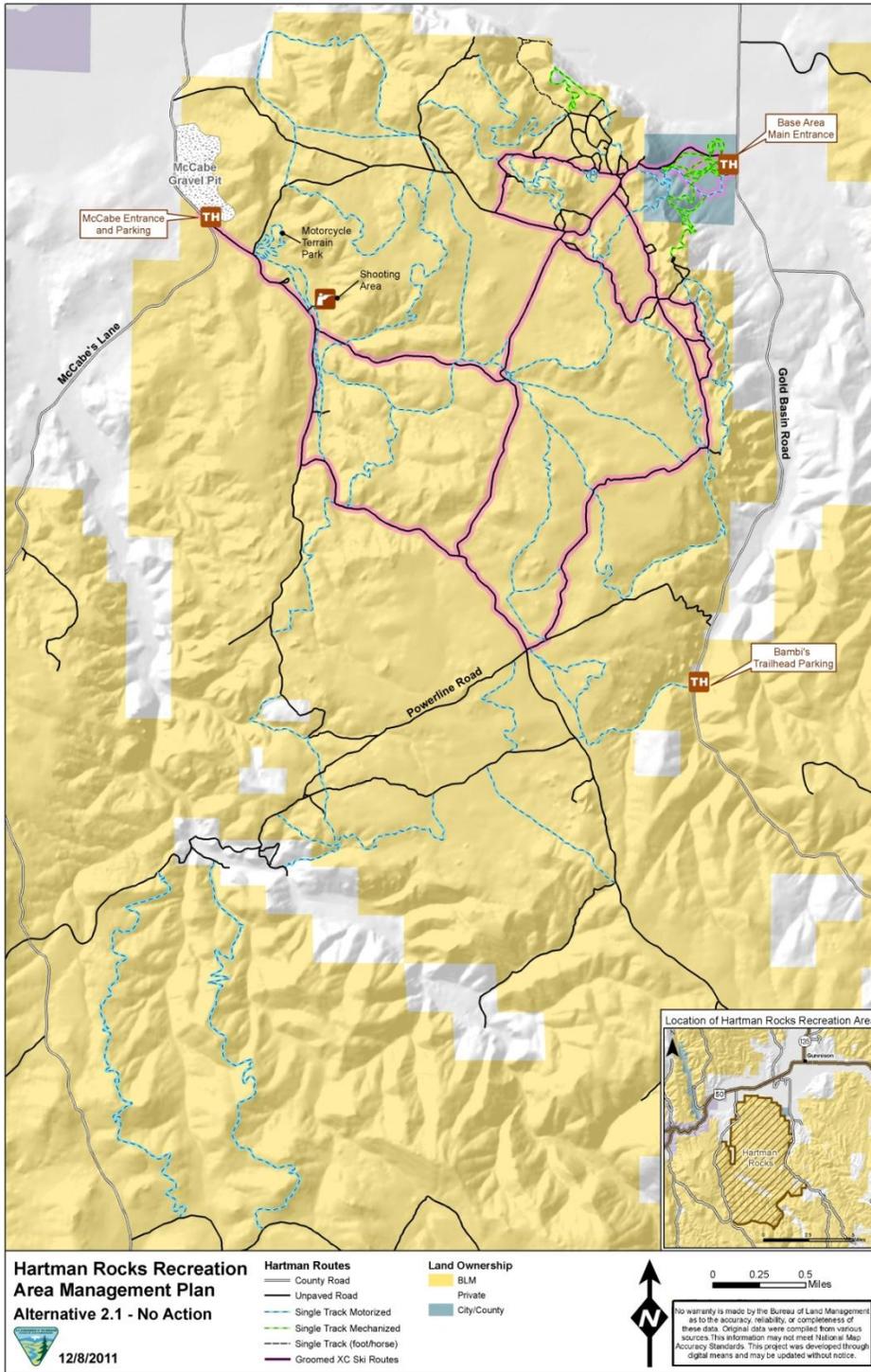
The additional supplemental rule would be:

- Close Hartman Rocks to all recreational shooting.
- Close Hartman Rocks to snowmobile use except to permitted use related to cross-country ski trail grooming.

## 2.4 Alternative 1 - No Action

The No Action Alternative is to continue to manage under the direction of the 2006 Hartman Rocks Recreation Area Management Plan (RAMP.)

Figure 2.4 No Action Alternative Map



#### **2.4.1 Road and Trails**

The 2006 RAMP designated system roads and trails. It also designated types of use on those trails. It instituted seasonal closures to help with Gunnison sage-grouse conservation. Off route travel with motorized and mechanized vehicles is not allowed under this alternative.

#### **2.4.2 Rock Crawling**

Two rock crawling routes were allowed under the 2006 RAMP but were never established. Stipulations were put in place that a route could be established at Site 1 and after a period of time Site 2 would be evaluated after 2 years if Site 1 did not have resource or safety concerns. No competitive events would be permitted for this type of use.

#### **2.4.3 Terrain Park**

The 2006 RAMP developed the terrain park. Dirt moving to create jumps is not allowed. Competitive events would not be allowed at the Terrain Park. No opportunity to expansion of the terrain park is discussed in this alternative.

#### **2.4.4 Open Play Area**

The 2006 Ramp designated the proposed open play area as single track trails.

#### **2.4.5 Climbing**

The 2006 RAMP would manage rock climbing as a valid use. It does not identify or designate specific climbing crags. The 2006 RAMP allows climbing in the Ring Dike area but does not encourage climbing in other portions of Hartman Rocks.

#### **2.4.6 Shooting**

Shooting is permitted in the area but improvements would be installed to attract shooters to the safest shooting areas to reduce conflicts and safety concerns. Target frames and backstops will be established. If measures are not effective at confining the majority of shooting activity then regulations may be established to require that shooters only use these selected areas. Hunting would be allowed but not encouraged. No shooting allowed with-in terrain park. No competitive shooting events would be considered.

#### **2.4.7 Winter Use**

Cross country ski trails would occur on 15.7 miles of routes under this alternative. Snowmobiling can occur on the same routes as skiing. Off route snowmobiling would not be allowed at Hartman Rocks.

#### **2.4.8 Camping**

Camping would continue to be allowed under this alternative. Brochures would recommend preferred locations to avoid sensitive areas. This alternative does not designate camping sites.

#### **2.4.9 Parking**

Small parking areas (8-10 vehicles) would be established at Kill Hill, Bambi's and McCabes Lane. Facility development would be considered where appropriate to enhance recreational experiences or reduce resource impacts.

#### **2.4.10 Use Levels and Education**

The 2006 RAMP states that visitor use is only from local community. It does not address Hartman Rocks Recreation Area as a destination location for people outside the Gunnison Basin. This alternative does not allow media coverage, brochures or promotion of Hartman Rocks outside the Gunnison Basin.

### **2.5 Alternatives Considered But Not Analyzed in Detail**

An alternative considered but not studied in detail was to move the Sandy Wash Trail and Terrain Park to a new location and allow shooting to happen along the existing mountain side. This was dismissed because of the cost of the infrastructure of the terrain park. Also, shooting is allowed on 98+ % of public lands and motorized recreation is limited to existing roads and motorized trails. The BLM feels it is easier to move shooting than it is to move motorized recreation facilities.

<b>2.6 COMPARISON OF ALTERNATIVES TABLE</b>			
<b>Issue Category</b>	<b>No Action Alternative (Alternative 1)</b> Current Management under the 2006 Hartman Rocks Recreation Area Management Plan	<b>Preferred Alternative Maximize Recreation (Alternative 2)</b>	<b>Limited Recreation Alternative (Alternative 3)</b>
<b>Recreation Management</b>			
	No management zones.	Divided Hartman Rocks into 3 different zones; Front Country, Middle Country and Back Country	Divided Hartman Rocks into 3 different zones; Front Country, Middle Country and Back Country
	No direction on future development	Proposed development at Hartman Rocks Recreation Area should be in accordance with the description in these zones setting.	Proposed development at Hartman Rocks Recreation Area should be in accordance with the description in these zones setting.
	The planning area does not include the Aberdeen Loop.	Planning area includes the Aberdeen Loop.	Planning area includes the Aberdeen Loop.
<b>Roads and Trails</b>			
	Motorized and mechanized travel will not occur off designated routes.	Motorized and mechanized travel will not occur off designated routes.  A priority will be made to obliterate and restore closed routes prior to constructing new routes.	Motorized and mechanized travel will not occur off designated routes.  A priority will be made to obliterate and restore closed routes prior to constructing new routes.

	Any proposals for new trails would be evaluated using special criteria.	Routes added to the trail and road system at Hartman Rocks through future analysis will be added to the BLM Map of Record Database for travel management.  If new routes are considered for analysis they should meet special criteria.	Routes added to the trail and road system at Hartman Rocks through future analysis will be added to the BLM Map of Record Database for travel management.  If new routes are considered for analysis they should meet special criteria.
	Adaptive sports trails not addressed.	Adaptive sports trails will be considered when adding routes.	Adaptive sports trails will be considered when adding routes.
	33.08 miles of roads open to public use. Does not include roads in the south end of Hartman Rocks.	44.56 miles of roads open to public use (additional miles due to larger planning area)	44.56 miles of roads open to public use (additional miles due to larger planning area)
	40.05 miles of trail. Did not include the Aberdeen Loop reroute.	46.04 miles of trails (additional miles due to larger planning area)	46.04 miles of trails (additional miles due to larger planning area)
	No additional road closures.	Close BLM Roads 5320C, 3054a, and 3585a. Change BLM Road 3515b from a 4x4 road to a motorized single track route.	Close BLM Roads 5320C, 3054a, and 3585a.
<b>Rock Crawling</b>			
	A single rock crawling route would be created at site #1 approximately .2 miles in length. After 2 years of success a second course could be constructed at site #2.	Rock crawling (extreme 4 wheel drive) route(s) would be created in the designated area near the Ring Dike.	No Rock Crawling Routes in Hartman Rocks.

	No events	Events could be considered.	No Events
<b>Open Play Area (old gravel pit at top of Kill Hill)</b>			
	This area would remain as a designated single track trail system.	Contain the area with a fence or signs and allow open play within the area for all forms of motorized and non-motorized recreation.	Close the area to all forms of uses and restore the area.
<b>Terrain Park</b>			
	Keep natural feature terrain park with no construction of artificial jumps. It will not be a motor-cross style track.	This plan would transition the terrain park into a motor-cross track by manipulating the soil to create features that are desirable for this type of use. Prior to a motor-cross style park being constructed the BLM would entering into an agreement with a partnering organization who would then be permitted to construct, maintain and administer a motor-cross track. If a partner is not found then the area would remain as a terrain park.	Keep natural feature terrain park with no construction of artificial jumps. It will not be a motor-cross style track.
	No Events.	Events may be considered.	Events may be considered.
	10 car parking lot development adjacent to access road.	Adequate car/trailer parking near motor-cross track will be developed.	No new parking at terrain park.
	No expansion of track.	Expansion of the track can be considered with proper NEPA and	No expansion of track.

		planning.	
<b>Shooting</b>			
	No shooting allowed within terrain park. Shooting permitted in the rest of the area but improvements would be installed to attract shooters to the safest shooting areas to reduce conflicts and safety concerns. Target frames and backstops will be established. If measures are not effective at confining the majority of shooting activity then regulations may be established to require that shooters only use these selected areas.	No recreational shooting north of the power line road. Can close areas south of the power line if safety becomes an issue.	No recreational shooting in Hartman Rocks Recreation Area.
	Leave target shooting area in its current location.	This alternative would close the existing target shooting location. The existing Target Shooting Area would be mitigated and reclaimed. However, people can continue to enjoy dispersed target shooting behind the OHV Parking Area.	Do not provide a target shooting area in Hartman Rocks Recreation Area.
	Hunting allowed in all areas of Hartman Rocks but not encouraged.	Hunting allowed in all areas of Hartman Rocks.	Hunting allowed in all areas of Hartman Rocks.
	No competitive shooting events would be considered.	N/A	N/A

<b>Dog Walking</b>			
	Not addressed	Dog owners would be encouraged to walk dogs on leashes. Owners would also be encouraged to remove dog waste from trails. Dog related issues can be reevaluated at any time if needed and new regulations or education programs could be implemented.	Dog owners would be encouraged to walk dogs on leashes. Owners would also be encouraged to remove dog waste from trails. Dog related issues can be reevaluated at any time if needed and new regulations or education programs could be implemented
<b>Rock Climbing</b>			
	Climbing is managed as a valid use primarily in the main rocks of the Ring Dike.	This proposal would designate climbing crags at Hartman Rocks.	This proposal would designate climbing crags at Hartman Rocks.
	Not addressed	Delineate parking, incorporate signage at popular crags, adopt and improve some user created access routes (where appropriate), restore and naturalize extraneous access routes, and (where appropriate) delineate and improve belay areas.	Delineate parking, incorporate signage at popular crags, adopt and improve some user created access routes (where appropriate), restore and naturalize extraneous access routes, and (where appropriate) delineate and improve belay areas.
	The BLM would not be responsible for the soundness or integrity of bolts placed by climbers.	The BLM would not be responsible for the soundness or integrity of bolts placed by climbers.	The BLM would not be responsible for the soundness or integrity of bolts placed by climbers.
	The no action would continue to authorize	The proposed action would continue to	The proposed action would continue to

	commercial guiding for this activity in the Ring Dike area.	authorize commercial guiding for this activity in the area.	authorize commercial guiding for this activity in the area.
	Climbing not encouraged in other portions of the planning area.	Climbing in sensitive portions of the planning area would be discouraged.	Climbing in sensitive portions of the planning area would be discouraged.
<b>Camping</b>			
	Camping allowed anywhere in Hartman Rocks but preferred locations are recommended.	Camping only in designated dispersed campsites in Front Country Area. Amenities will be added to these sites as needed. Fire grate and picnic table.	Camping only in designated dispersed campsites in Front Country Area. Amenities will be added to these sites as needed. Fire grate and picnic table.
	Not addressed	Back Country Zone and Middle Country Zone will allow dispersed camping anywhere as long as resource impacts are minimal.	Back Country Zone and Middle Country Zone will allow dispersed camping anywhere as long as resource impacts are minimal.
	Not addressed	Install toilets at strategic locations throughout Hartman Rocks Recreation Area in the Front Country Zone.	Install toilets at strategic locations throughout Hartman Rocks Recreation Area in the Front Country Zone.
<b>Parking</b>			
	Small parking areas (8-10 vehicles) would be established at Kill Hill, Bambi's and McCabes Lane.	Enlarge Bambi's Parking	Enlarge Bambi's Parking
	Not addressed	Designate parking at	Designate parking at

		strategic locations along the Ring Dike.	strategic locations along the Ring Dike.
	Not addressed	Provide parking spaces at dispersed campsites.	Provide parking spaces at dispersed campsites.
	Not addressed	Develop OHV parking near McCabes Lane entrance.	N/A
	Not addressed	Develop additional Parking at Motor Track/Terrain Park.	N/A
	Facility development would be considered where appropriate to enhance recreational experiences or reduce resource impacts.	Small parking areas would be developed at various locations to reduce resource impacts from unconfined parking at campsites, climbing areas, and trail/road intersections.	Small parking areas would be developed at various locations to reduce resource impacts from unconfined parking at campsites, climbing areas, and trail/road intersections.
<b>Winter Use</b>			
	15 miles of designated cross country ski trails. Grooming completed by partners.	28 miles of designated cross country ski trails.	21 miles of designated cross country ski trails.
	Tracked vehicles allowed on designated ski trails. No off route snowmobiling.	Tracked vehicles allowed on designated ski trails. No off route snowmobiling.	No snowmobiling allowed at Hartman Rocks.
<b>Trials Riding / Rock Hopping</b>			
	Not Addressed	Designated a trials riding/ rock hopping area.	Off route use would not be allowed, precluding trials riding/rock hopping.

## 2.7 Conformance Review

The Proposed Action is subject to, has been reviewed for, and been found to be in conformance with, the following plan (43 CFR 1610.5, BLM 1617.3). The plan conformance review included consideration of Standard Management (pgs. 2-1 to 2-19), Management Unit Prescriptions (pgs. 2-19 to 2-39), and Standards for Public Land Health (pgs. 4-7).

Name of Plan: Gunnison Resource Area Resource Management Plan (including Adoption of Standards for Public Land Health and Guidelines for Livestock Grazing Management in Colorado)

Date Approved: February 1993 (amended February 1997, August 2000, December 2008, January 2009, August 2011)

Management Unit(s):

MU 8 (South Beaver Creek ACEC)

MU 13 (contains "I" category livestock grazing allotments)

MU 16 (general resource lands)

Decision Number/Page:

Standard Management Direction, pgs. 2-1 to 2-19;

Decision Language: (pg. 2-13) Recreation "management will focus on resource protection, visitor services and information, and the construction, operation and maintenance of recreation facilities. Efforts will be placed on providing a variety of recreation opportunities and experiences through visitor awareness, information, interpretation, signing, and protection. Efforts will be made to expand and strengthen cooperative partnerships with Federal, State, and local agencies, the private sector and volunteers to enhance recreation opportunities and tourism."

(pg. 2-13) "Public lands not within a special recreation management area (SRMA) will make up the Gunnison Extensive Recreation Management Area (ERMA), and will be managed for a diversity of recreation opportunities."

(pgs. 2-13 to 2-14) "The BLM will continue to recognize and respond to the need for seasonal closures in the planning area in order to prevent or mitigate potential resource damage by installing gates at key access points, for instance, to restrict spring access until roads have dried out."

Management Unit 8 Direction, pgs. 2-29 to 2-30;

Decision Language: “The unit will be managed to protect and enhance existing populations and habitat of skiff milkvetch. ... Surface disturbing activities will be restricted to protect the species and potential habitat.

“To prevent accidental destruction of skiff milkvetch populations, and existing habitat, motorized vehicular traffic in the unit will be limited to designated routes...”.

Management Unit 13 Direction, pgs. 2-34 to 2-36;

Decision Language: “The unit will be managed to improve or maintain ecological conditions.”

Management Unit 16 Direction, pgs. 2-38 to 2-39;

Decision Language: There is no specific direction pertaining to the proposed action.

## **3.0 AFFECTED ENVIRONMENT / ENVIRONMENTAL EFFECTS**

### **3.1. Recreation Management**

#### **3.1.1. Affected Environment**

Hartman Rocks Recreation Area is a popular urban interface recreation area about 2 to 6 miles southwest of Gunnison. Its proximity to Gunnison makes it easy to access for local residents for a quick recreation experience. It is also becoming a destination location for mountain biking, rock climbing and single track motorized enthusiasts. The area contains 44 miles of roads and 46 miles of single track trails. It is estimated that it receives about 40,000 users each year. Visitors practice a variety of recreation activities including mountain biking, motorcycling, ATV riding, 4 wheeling, rock climbing, bouldering, camping, trail running, horseback riding, cross country skiing, snowmobiling, dog sledding, hill parties, target shooting, hunting and more.

Growing population puts additional pressure on recreational facilities and public lands. The changing composition of the population in terms of age and other factors further results in changing preferences and demands for recreation. According the Colorado Statewide Comprehensive Outdoor Recreation Plan (SCORP), the population in Gunnison County is expected to grow by 38% from 2007 to 2030.

#### **3.1.2. Environmental Effects/Mitigation**

##### **3.1.2.1. Actions Common to All Alternative Except the No Action Alternative**

###### Direct and Indirect Effects

The proposed action divides Hartman Rocks into three recreation management units, Front Country, Middle Country and Back Country. This assists in future recreation development and expansion at Hartman Rocks.

Roads and Trails – The proposed action would allow the BLM to obliterate closed routes as necessary to reduce soil compaction, erosion, and address negative visual impacts. It also allows for trail expansion and technical hard rock riding for both motorized and non-motorized users. The proposed action gives direction as to where the expansion of trails and roads would be preferred. Winter trails would be expanded to allow for visitor use increase. The proposed action also allows for Hartman Rocks to open earlier in the spring to alleviate recreation pressure in areas with Gunnison sage-grouse leks.

Opportunities for trail and road users would continue in most locations except that three roads currently designated as open in the Gunnison Basin Federal Lands Travel Management Plan would be closed.

- BLM road 3520c, located just north of the open play area, is proposed to be closed due to erosion issues. This road is a parallel route and closing this road will not stop reasonable access to that area of Hartman Rocks. Therefore the consequence of closing this route will have little impact to the recreating public.
- BLM Road 3054a is proposed to be closed due to accelerated erosion. This road is located off of McCabes and has no other access or exit points. It is unknown as to the exact recreation benefit visitors receive from this route. It is more than likely used by 4x4 vehicles exploring the area. BLM Road 3054s is disconnected from the majority of recreation activities at Hartman Rocks and will have little effect on the majority of recreation users. However, closing this route could displace a minor number of recreation users.
- The BLM would close BLM Road **3585a**, which is a cut-across route between 3585 and 3557. The route is rarely used, it has caused soil erosion and does not meet land health standards. The route is a cut across route just south of the Aberdeen Loop. Because it receives little use the closure would have little effect on the recreating public.

Climbing – Designating climbing routes in the proposed action has no impact on current recreation use at Hartman Rocks Recreation Area. However, if future BLM management actions put bolting moratoriums in place or close climbing routes this could have an impact on the climbing community. Depending on factors such as number of routes closed and the area a bolting moratorium would encompass, the BLM may need to reassess how to meet the needs of the climbing community through a separate climbing plan. The proposed action will attempt to minimize route proliferation, soil compaction and vegetation loss in access and belay locations. These actions should have minimal impact on climbers. Human waste around climbing crags is being addressed in this plan through facility development and would be a positive impact to climbers for health and safety reasons.

Camping/Campfires – The proposed action would stop the number of campsites from increasing and stop campsites from developing in undesirable locations. The plan leaves discretion for BLM managers to close campsites or develop new campsites based on changing conditions. This is a positive action for visitors as managers can attempt to meet the needs of visitors yet provide some form of resource protection. Designating campsites may ease visitors in finding adequate campsites through information and signing. However, it may make some visitors feel too regulated at Hartman Rocks Recreation Area and those individuals may decide to move to other areas outside Hartman Rocks Recreation Area. The proposed action would slow vegetation encroachment around campsites by delineating campsites. It also addresses safety issues with living spaces and vehicles. Campfires being contained to improved firegrates will reduce wildfire risks in the urban interface. Not allowing firewood gathering would reduce tree and

vegetation loss throughout Hartman Rocks Recreation Area. The proposed action addresses human waste issues related to camping. This should improve health and safety.

Not allowing pallet burning at Hartman Rocks may impact some users financially and benefit others. When people burn pallets as campfire wood they leave behind the nails. The nails are then often a source of flat tires. They can also become a hazard to people with no shoes or thin soled shoes. Purchasing firewood from local stores or gathering firewood in advance of a camping trip may be a financial burden and an inconvenience for some users. Other would benefit from the safety aspect and the financial aspect of not having tires repaired. This proposal would eventually decrease maintenance costs at Hartman Rocks. Seasonal crews and volunteers spend countless hours cleaning up nails around fire rings. Maintenance time will be reduced with the proposed action.

Parking - With growing population parking areas are too small and the proposed action will benefit visitors with adequate parking.

Use Levels and Education – The proposed action addresses use levels through facility development. As visitation increases at Hartman Rocks Recreation Area the BLM will be able to manage that use through facility development to minimize resource impacts and trail construction to disperse users. Most recreationists want a certain amount of isolation and solitude and the proposed action tries to continue to provide that for most visitors. However, visitation continues to trend upward and the proposed action does not guarantee isolation and solitude for every visitor. This alternative encourages BLM to develop and increase interpretive and education programs which will help reduce visitor resource impacts. However, this may be too regulatory for some visitors and they may choose another area away from Hartman Rocks to enjoy recreation activities.

Special Events and Special Recreation Permits (SRP) – SRPs and events can sometimes displace users that intend to recreate at Hartman Rocks Recreation Area and this can sometimes have a short term negative affect on the visitor. People sometimes feel intimidated by the size of the event and don't feel welcome even though events and SRPs are not allowed exclusive use. SRPs and Special Events often have an economic benefit to the local community.

Law Enforcement and Regulations – The proposed action would implement supplemental rules that would allow Law Enforcement Officers to enforce regulations that would be put into place for Hartman Rocks Recreation Area. These regulations will help resource protection on BLM lands but may make people feel over regulated and they may choose an area away from Hartman Rock to enjoy their recreation activities.

Cost Increase to Field Office to Maintain and Pump Toilets - It is anticipated that the Field Office will increase maintenance costs to pump toilets by approximately \$4000 annually. The BLM is already cleaning campsites and that maintenance work load will not change with the proposed action compared to what is happening now.

Cumulative Effects:

Recreation will continue to increase in the Gunnison Basin and the proposed action develops the framework to deal with increased visitor use by defining future actions at Hartman Rocks Recreation Area. The action alternatives would mitigate the effects of human use impacts from increased recreation use. Hartman Rocks is the only open area for people to recreate during severe winters and every spring due to sage-grouse conservation closures. Hartman Rocks Recreation Area takes recreation pressure off of other areas of the field office during these closures.

**3.1.2.2. Alternative 2 - Proposed Action**

Direct and Indirect Effects

The proposed action provides opportunity for facility growth and other management actions to minimize impacts and so to facilitate visitor use increases.

The tourism and outdoor recreation economies in Gunnison County benefit from a balanced year-round visitor base. The Proposed Action Alternative offers year round recreation thus helping the local economy.

The road proposed to be closed to full-size vehicles will help prevent littering and vandalism on the adjacent private property. This closure may have an effect on people looking for an easy to drive to vista of the Gunnison Basin. Three other known vistas exist in the nearby area and people that enjoyed that vista will be directed to those other areas. The party spot at the end of BLM Road 3515b will not become a designated campsite. Nightlife partiers will be directed to campsites that contain approved fire grates.

Shooting – The proposed action allows for dispersed recreational target shooting yet minimizes recreational shooting and trail use conflicts in Hartman Rocks Recreation Area. People can continue to enjoy dispersed target shooting behind the new OHV Parking Area. The OHV parking area is located east of the Terrain Park near the McCabe's Lane entrance to Hartman Rocks. The proposed action may result in the displacement of recreational target shooters to undesirable locations. South of the Power Line is open to recreational target shooting and single track trails exist south of the Power Line. If people shoot towards trails south of the Power Line, use conflicts and potential safety hazards will still exist. People will hear gunshots just as they did at the existing Target Shooting Area.

Hunting would continue to be allowed at Hartman Rocks Recreation Area. There would be no effect to people hunting.

Terrain Park – The Proposed Action Alternative allows for the expansion of the Terrain Park and identifies potential locations of the expansion if desired. The proposed action allows for a motor-cross track to be constructed if a partner is found who would maintain and administer the motor-cross track. The motor-cross track may alleviate over-crowding on single track trails during heavy use times by drawing more motorcycles to the track that would rather have the track experience instead of the trail experience. This was part of the reasoning to construct the Terrain Park after the 2006 Hartman Rocks Recreation Area Management Plan was complete. The Terrain Park receives low use. It is not certain as to why the use has not increased. Some users feel that a motor-cross track would provide what is desired by this user group. Some people say the track is too hard with too many turns. Others say that the track is not fun to use and does not contain enough jumps. The proposed action attempts to provide the direction for the motor-cross track option.

Open Play Area - The Open Play Area is growing in size and the proposed action addresses this by installing a barrier around this area. This would contain use within a boundary that currently does not exist. The open play area was designated as single track trails but the area is being used as a playground for all kinds of vehicles. This alternative allows all uses. The proposed open play area is constantly being used by people recreating and keeping this site for motorized use will assist the BLM in meeting the demand for this type of use. Noise around the site could be an issue for private land owners below. However, BLM has not received any complaints from private home owners that the current noise levels are an issue. The BLM does not foresee a dramatic change in how this area will be used in the future.

#### Cumulative Effects

Recreation will continue to increase in the Gunnison Basin and the proposed action develops the framework to deal with increased visitor use by defining future actions at Hartman Rocks Recreation Area. The proposed action including: installing toilets; designating campsites; concentrating specific uses to small geographic areas; designating climbing access routes; imposing firewood regulations; and pallet burning regulations would mitigate the effects of human use impacts from increased recreation use. Hartman Rocks is the only open area for people to recreate during severe winters and every spring due to sage-grouse conservation closures. Hartman Rocks Recreation Area takes recreation pressure off of other areas of the field office during these closures. The construction and use of a motor-cross track and building more motorized opportunities may alleviate single track motorized use in other areas of the field office during the snow free season. Recreational target shooters will be displaced and have to find other shooting opportunities inside and outside the planning area.

### **3.1.2.3. Alternative 1 - No Action**

#### Direct and Indirect Effects

The No Action Alternative is to continue to manage under the direction of the 2006 Hartman Rocks Recreation Area Management Plan (RAMP.) The 2006 Plan has some good direction and most of the projects in that plan have been completed. Increased visitor use and human use issues have led us to the point of tweaking the 2006 plan to help guide us into the future, thus a new plan. The no action alternative does not specifically address visitor use increases and human use impacts. It does not give specific direction for current shooting conflicts, camping impacts, climbing impacts or route restoration.

Under the No Action Alternative visitor health and safety could be jeopardized because shooting conflicts are not clearly addressed and conditions have changed since the 2006 plan. Selecting this alternative has the potential to have a negative impact on human health and safety.

This alternative does not give clear direction on camping or climbing at Hartman Rocks Recreation Area and these activities would continue to have visitor use impacts that are not contained or planned. This would eventually negatively affect the recreation resource.

The 2006 RAMP designated open routes and all other routes were closed but the RAMP did not specify how those routes would be closed. This has a negative impact on the resource in general because routes have been closed with signs but the scars on the ground were not been addressed in the 2006 RAMP. This alternative would result in a continued negative visual effect on the recreation resource.

#### Cumulative Effects

The No Action alternative does not mitigate the effects of increased recreation use and human use impacts associated with increased visitation at Hartman Rocks. Selecting this alternative has the potential to have a negative impact on human health and safety. Not addressing issues would eventually negatively affect the recreation resource.

### **3.1.2.4. Alternative 3 - Limited Recreation Action**

#### Direct and Indirect Effects

The Limited Recreation Action Alternative addresses many issues at Hartman Rocks Recreation Area by placing limits on development. . It eliminates the Open Play area and restores the old gravel pit to a natural condition. This would negatively affect the people currently using the old gravel pit area by displacing them and not providing them a place or facility to recreate.

The Rock Crawling Route would not be constructed in this alternative. The closest rock crawling trails to Gunnison are located in Montrose. People are currently using hard rock features at Hartman Rocks for very limited rock crawling. Not providing rock crawlers a place

to recreate could cause more resource damage in Hartman Rocks and around the Field Office because users would go elsewhere to pursue this activity in areas that are more sensitive than Hartman Rocks Recreation Area.

This alternative would close all of Hartman Rocks Recreation Area to Recreational Target Shooting. The Target Shooting Area would be closed in this alternative. Although this may reduce conflicts between users it would displace many shooters and not give them a place to go. This could increase conflicts in other areas of the field office.

The cross country ski trail system would expand slightly under this alternative but not as much as the proposed action. This alternative does not give options for the future expansion and visitor use increase.

### Cumulative Effects

This alternative does not mitigate the effects of increased recreation use at Hartman Rocks. It does not allow shooting, the construction of a rock crawling route, or the designation of the open play area. This alternative does not address where these people will go to recreate after they are displaced and could force people to go elsewhere to pursue recreation activities in areas that are more sensitive than Hartman Rocks Recreation Area

## **3.2. Migratory Birds**

### **3.2.1. Affected Environment**

The Migratory Bird Treaty Act (MBTA) of 1918 was passed to regulate the taking of native birds. In 2001, President Clinton signed Executive Order 13186 (66 FR 3853), which directs federal agencies to further implement the MBTA by considering the effects of projects and actions on migratory birds. Pursuant to this Executive Order, the US Fish and Wildlife Service (USFWS), BLM and Forest Service are developing a Memorandum of Understanding which requires agencies to review the USFWS Birds of Conservation Concern (BCC) list for species that may breed within a project area. When reviewing the effects of projects and actions on migratory birds, species on the BCC list should be emphasized. Birds on the list for the Southern Rockies/Colorado Plateau region which may breed within Hartman Rocks recreation area are the golden eagle (*Aquila chrysaetos*), peregrine falcon (*Falco peregrinus*), prairie falcon (*Falco mexicanus*), Lewis woodpecker (*Melanerpes lewis*), and sage sparrow (*Amphispiza belli*).

Golden eagles, peregrine falcons, and prairie falcons all nest on cliffs such as those found in the Hartman Rocks area. Lewis woodpeckers breed primarily in riparian habitats where they nest in mature cottonwoods (Kuenning 1998). They typically choose snags, trees weakened by fire, and natural cavities for nesting sites. Sage sparrows nest within sizable (>30 acres), low-elevation

(<8400 ft) stands of big sagebrush or mixed big sagebrush and greasewood. They construct cup nests, usually at mid-bush level with sufficient foliage above to conceal the nest (Lambeth 1998).

### **3.2.2. Environmental Effects/Mitigation**

#### **3.2.2.1. Proposed Action and Actions Common to All Alternative Except the No Action Alternative**

##### Direct and Indirect Effects

The proposed action protects areas where rock-climbing may adversely impact cliff-nesting birds, including eagles and falcons, by instituting rock-climbing closures around their nests during the breeding season (May 15 through July 15). Designated climbing crags will be monitored each spring to determine if there are active nests in the area. These mitigation measures should eliminate the risk of taking cliff nesting birds or their nests.

To avoid take of migratory birds or their nests, construction of trails, parking lots, and other infrastructure where vegetation will be cleared should occur outside the passerine breeding season of May 15 through July 15. If done within this time period, nest surveys will be conducted before work is initiated.

##### Cumulative Effects:

Recreation will continue to increase in the Gunnison Basin and this plan develops the framework to deal with the increased amount of recreation in this area by defining future actions at Hartman Rocks. Although there will be a small increase in the total amount of roads and trails in the region, the proposed action will help decrease impacts from increased use and define where these actions need to take place to lower threats across the region. By focusing on recreation in this area, surrounding areas may receive less impact from recreation and therefore a lower impact on migratory birds overall.

#### **3.2.2.2. No Action Alternative**

##### Direct and Indirect Effects

The no action alternative currently protects cliff-nesting birds, including eagles and falcons, by instituting rock-climbing closures around their nests during the breeding season (May through July 15). Designated climbing crags will be monitored each spring to determine if there are active nests in the area. Under this alternative rock climbing closures will eliminate the risk of taking cliff nesting birds or their nests

Under this alternative timing restrictions occur only on building new trails within the terrain park and jeep course. This will prevent harassment of these birds.

### Cumulative Effects

By not specifically defining the future of recreation in the Hartman Rocks area by providing for the needs of increased recreation, activities such as camping in undesignated spots, trampling vegetation with parking, and other impacts associated with recreation will have a greater impact to migratory birds in the region. It may also push recreation into areas outside the recreation area which will have a greater impact on migratory birds.

### **3.2.2.3. Alternative 3 – Limited Recreation Alternative**

#### Direct and Indirect Effects

Effects will be similar to the no action alternative as there will be no construction of a motocross park. Less of an area will be cleared of vegetation but construction conducted outside of migratory nesting periods would mitigate this issue.

#### Cumulative Effects

Recreation will continue to increase in the Gunnison Basin and this plan develops the framework to deal with the increased amount of recreation in this area by defining future actions at Hartman Rocks. Although there may be a small increase in the total amount of roads and trails in the region, the proposed action will help decrease impacts from increased use and define where these actions need to take place to lower threats across the region. By focusing on recreation in this area, surrounding areas may receive less impact from recreation and therefore a lower impact on migratory birds overall.

## **3.3. Wildlife**

### **3.3.1. Affected Environment**

The Hartman Rocks Recreation Area has a variety of habitat types including sagebrush shrublands, gravelly slopes with dry site vegetation including juniper and yucca, perennial and intermittent streams with associated riparian areas, and rock outcrops with cliffs, ledges, and talus slopes. These varied habitats support a diversity of wildlife including deer, elk, pronghorn, cottontails, white-tailed jackrabbits, coyotes, bobcats, a variety of small mammals, raptors, and migratory birds. Deer are found in the analysis area throughout the year. The entire recreation area is within elk and mule deer winter range and includes severe winter range in the northern part of the analysis area. Deer are found in large concentration during winter in the area, while elk tend to use it in severe winters. The majority of wintering deer in the analysis area are found near the flats along South Beaver Creek and south of the powerline.

### **3.3.2. Environmental Effects/Mitigation**

#### **3.3.2.1. Proposed Action and Actions Common to All Alternative Except the No Action Alternative**

### Direct and Indirect Effects

Recreation has been occurring in the Hartman Rocks area for many years, with most trails designated under this Proposed Action already established. Generally, wildlife will be maintained and benefit from the more defined management goals in this proposed action based from the increased management and monitoring of recreational activity in the Hartman Rocks area. By continuing the designation of specific routes that are open to recreationists and closing any unauthorized trails that are created, existing wildlife habitat will be maintained and disturbances will not extend into areas without designated trails. With designated routes, recreational use can be more predictable, allowing wildlife to find secure areas where recreationists are less likely to intrude.

Winter recreation is a concern to big game in the area. The expansion of ski trails to the west of existing trails and south of the power line, under the Proposed Action, will continue to push wintering game out of the area. Currently, there is a buffer between heavy winter use and where the concentration of game is along South Beaver Creek and south of the powerline. The new trails will decrease the buffer and cause disturbance to animals already at low body reserves and will displace animals to other areas.

### Cumulative Effects:

Recreation will continue to increase in the Gunnison Basin and this plan develops the framework to deal with the increased amount of recreation in this area by defining future actions at Hartman Rocks. Although there may be a small increase in the total amount of roads and trails in the region, the proposed action will help decrease impacts from increased use and define where these actions need to take place to lower threats across the region. By focusing on recreation in this area, surrounding areas may receive less impact from recreation and therefore a lower impact on wildlife overall.

### **3.3.2.2. No Action Alternative**

#### Direct and Indirect Effects

With this alternative, wildlife will not benefit from the priority to obliterate and restore closed trails. Fragmentation is high in the project area with current management under the existing plan, fragmentation is not addressed to the level that is necessary to ensure habitat continues to provide the necessary functions for wildlife.

This alternative does offer the needed protection of wintering habitat since there are no additional miles of groomed ski routes in winter/ severe winter habitat offering big game the higher value winter habitat.

### Cumulative Effects

By not specifically defining the future of recreation in the Hartman Rocks area by providing for the needs of increased recreation, activities such as camping in undesignated spots, trampling vegetation with parking, and other impacts associated with recreation will have a greater impact to wildlife in the region. It may also push recreation into areas outside the recreation area which will have a greater impact on wildlife.

### **3.3.2.3 Alternative 3 – Limited Recreation**

#### Direct and Indirect Effects

Recreation has been occurring in the Hartman Rocks area for many years, with most trails designated under this alternative already established. Generally, wildlife will be maintained and benefit from the more defined management goals in this alternative based from the increased management and monitoring of recreational activity in the Hartman Rocks area. By continuing the designation of specific routes that are open to recreationists and closing any unauthorized trails that are created, existing wildlife habitat will be maintained and disturbances will not extend into areas without designated trails. With designated routes, recreational use can be more predictable, allowing wildlife to find secure areas where recreationists are less likely to intrude.

Winter recreation is a concern to big game in the area. The expansion of ski trails to the west of existing trails under this action will continue to push wintering game out of the area. Currently, there is a buffer between heavy winter use and where the concentration of game is along South Beaver Creek. The new trails will decrease the buffer and cause disturbance to animals already at low body reserves and will displace animals to other areas.

#### Cumulative Effects

Recreation will continue to increase in the Gunnison Basin and this plan develops the framework to deal with the increased amount of recreation in this area by defining future actions at Hartman Rocks. Although there will be a small increase in the total amount of roads and trails in the region, the proposed action will help decrease impacts from increased use and define where these actions need to take place to lower threats across the region. By focusing on recreation in this area, surrounding areas may receive less impact from recreation and therefore a lower impact on wildlife overall in the region.

## **3.4. Threatened, Endangered, and Sensitive Species**

### **3.4.1. Affected Environment**

Of the plant and animal species occupying the Gunnison Field Office area that are federal or state listed threatened, endangered, or candidate species, or BLM sensitive species, those that warrant discussion under this Environmental Analysis are the bald eagle (*Haliaeetus leucocephalus*), Gunnison Sage-grouse (*Centrocercus minimus*), Gunnison's prairie dog

(*Cynomys gunnisoni*), skiff milkvetch (*Astragalus microcymbus*), Gunnison milkvetch (*Astragalus anisus*), and Crandall's rock-cress (*Boechera crandallii*). The Gunnison Sage-grouse, Gunnison's prairie dog, and skiff milkvetch are candidate species for listing under the Federal Endangered Species Act; the bald eagle and Crandall's rock-cress are BLM sensitive species.

Bald eagles occupy the Gunnison Basin during the winter. The northern 20% or so of the Hartman Rocks recreation area is within a bald eagle winter concentration area as designated by the Colorado Division of Wildlife (<http://www.ndis.nrel.colostate.edu>). This portion of the Hartman Rocks recreation area is just south of and above the Gunnison River. In the winter, eagles may venture to this area to roost and hunt. Although they are primarily fish eaters, bald eagles will also feed upon carrion and small mammals, especially rabbits which are common in the Hartman Rocks area.

The entire Hartman Rocks Recreation Area is within Gunnison Sage-grouse (GUSG) occupied habitat. There are two active sage grouse leks within the recreation area and one active lek exists within about two miles of its boundary; another 3 inactive leks are about two miles from the recreation area. The Gunnison Sage-Grouse Rangewide Conservation Plan [RCP] (Gunnison Sage-Grouse Rangewide Steering Committee 2005) designates areas within a 4-mile radius of a lek as non-lek breeding habitat and summer-fall habitat. This is based upon studies of GUSG which indicate that 85% of all GUSG nests and 81% of all GUSG breeding and summer-fall seasonal locations are within four miles of the lek of capture. Almost the entire Hartman Rocks recreation area is within 4 miles of a lek, and therefore within non-lek breeding habitat and summer-fall habitat. The recreation area includes nesting/early brood-rearing habitat and winter habitat within stands of sagebrush, and brood-rearing habitat along riparian areas.

Gunnison's prairie dogs have established some new colonies along McCabe's Lane on the northern boundary of the recreation area. Prairie dogs are found in colonies throughout the Gunnison Basin. Plague has had a recent effect on several of the populations. Most of the sites that prairie dogs inhabit are sagebrush/grass montane habitats. Prairie dogs are often referred to as a keystone species benefitting a multitude of wildlife species.

In the Gunnison Field Office RMP (1993), the South Beaver Creek Area of Critical Environment Concern (ACEC) was designated to protect the skiff milkvetch. The species occurs as small, scattered colonies throughout the ACEC and surrounding areas, which is the only place in the world this plant is known to occur. The plant grows in dry, sandy to gravelly soils in open sagebrush or juniper-sagebrush dominated communities on relatively steep slopes and at elevations between 7,600 and 8,400 feet (Denver Botanic Gardens 2004). Colonies are typically on SE to SW exposures, although surveys from the past several years have found them on flats near existing colonies.

Although also an endemic to the Gunnison Basin, Gunnison milkvetch is relatively widespread and common in the sagebrush steppe community. During surveys conducted in the Gunnison Basin, four populations of Gunnison milkvetch were identified in the Hartman Rocks recreation area (Wasson 1998). This was not a comprehensive survey of the area, so other populations may exist. The species prefers dry habitat with south to southwestern aspects on slopes of 2 to 20 degrees and at elevations between 7500 and 9400 feet (Wasson 1998, Spackman 1997).

Although there are no known populations of Crandall Rockcress in the Hartman Rocks recreation area, the habitat in the area is suitable. This species prefers rocky sagebrush areas, rock outcrops, cliffs, and talus slopes.

### **3.4.2. Environmental Effects/Mitigation**

#### **3.4.2.1. Proposed Action and Actions Common to All Alternative Except the No Action Alternative:**

##### Direct and Indirect Effects

Bald Eagle: Currently, there are no ski trails in the northern part of Hartman Rocks within the mapped bald eagle winter concentration area. The proposed action identifies groomed trails within this mapped area. Winter habitat is classified as mature cottonwoods and other trees near the stream offering perch sites for eagles. Surveys would be conducted to ensure these trails located within winter concentration did not offer proper habitat for bald eagles.

Gunnison Sage-grouse: As stated in the previous plan, this area offers habitat for all lifestages for the grouse but years of heavy use has probably displaced grouse in the area.

Lekking: Timing limitations (March 15-May 15<sup>th</sup>) already in place south of the powerline will continue to help to reduce disturbance to lekking grouse in the area.

Nesting/Brood Rearing Habitat: By reclaiming closed trails and roads, and continuing to carefully plan where future activities will occur, effects to nesting/brood rearing habitat should not increase under this proposed action.

Winter: With limited winter recreation in the area, the Hartman Rocks area provides quality winter habitat with little disturbance. Under this alternative, ski trails in the area will increase by 13 miles and may have increased impacts on wintering grouse, especially along the South Beaver drainage and along/south of the powerline road. Impacts include increased disturbance from grooming, use of the trails and impacts associated from recreation such as pets, increased noise, and direct disturbance.

Gunnison's Prairie Dog: Currently there is one prairie dog colony within the Hartman Rocks planning area. There are currently no roads or trails planned under the proposed action in the area of the colony and there is no perceived disturbance from the actions on prairie dogs.

Skiff Milkvetch: Currently, fragmentation from recreation is a significant threat to skiff milkvetch in the Hartman Rocks planning area (USFWS 2010). Under the proposed action, closed trails will be revegetated to ensure use on them does not continue. Future routes and realignments will require full field clearances to ensure trails, parking lots, and other recreation infrastructure will not impact known populations and suitable habitat within the planning area.

Gunnison Milkvetch: Although Gunnison milkvetch is endemic to the Gunnison Basin, it is fairly common and widespread. Colonies and potential habitat of this plant will be protected by continuing to limit motorbikes and mountain bikes to designated routes, and closing unauthorized routes that are created.

Crandall Rockcress: If Crandall rockcress exists within the recreation area, it would also be protected by these actions. Because of the habitat this plant tends to occupy, it may be less susceptible to disturbance from recreationists than the other sensitive plants in the area. Future actions would be surveyed for Crandall rockcress prior to approval.

### **3.4.2.2. No Action Alternative**

#### Direct and Indirect Effects

Bald Eagle: Currently, there are no ski trails in the northern part of Hartman Rocks within the mapped bald eagle winter concentration area therefore under this alternative there will be no effects on bald eagles.

Gunnison Sage-grouse: As stated in the previous plan, this area offers habitat for all lifestages for the grouse but years of heavy use has probably displaced grouse in the area.

Lekking: Timing limitations (March 15-May 15th) already in place south of the powerline will continue to help to reduce disturbance to lekking grouse in the area.

Nesting/Brood Rearing Habitat: Under this alternative, it is not a priority to obliterate and restore closed routes prior to constructing new ones so increased fragmentation will occur to nesting/brood rearing habitat under this alternative.

Winter: With limited winter recreation in the area, the Hartman Rocks area provides quality winter habitat with little disturbance. Under this alternative, Hartman Rocks will continue to offer quality sage grouse winter habitat with minimal disturbance from winter recreation.

Gunnison's Prairie Dog: Currently there is one colony of prairie dogs within the Hartman Rocks planning area. There currently are no roads or trails planned and there is no perceived disturbance from the current actions on prairie dogs.

Skiff Milkvetch: Currently, fragmentation from recreation is a significant threat to skiff milkvetch in the Hartman Rocks planning area (USFWS 2010). Under this alternative, priorities do not include the need to obliterate and restore closed routes and fragmentation will continue to threaten current populations of skiff milkvetch.

Gunnison Milkvetch: Although Gunnison milkvetch is endemic to the Gunnison Basin, it is fairly common and widespread. Colonies and potential habitat of this plant will be protected by continuing to limit motorbikes and mountain bikes to designated routes, and closing unauthorized routes that are created.

Crandall Rockcress: If Crandall rockcress exists within the recreation area, it would also be protected by these actions. Because of the habitat this plant tends to occupy, it may be less susceptible to disturbance from recreationists than the other sensitive plants in the area. Future actions would be surveyed for Crandall rockcress prior to approval.

#### Cumulative Effects

By not specifically defining the future of recreation in the Hartman Rocks area by providing for the needs of increased recreation, activities such as camping in undesignated spots, trampling vegetation with parking, and other impacts associated with recreation will have a greater impact to threatened/endangered/sensitive species in the region. It may also push recreation into areas outside the recreation area which will have a greater impact on these species.

### **3.4.2.3. Alternative 3 – Limited Recreation**

#### Direct and Indirect Effects

Bald Eagle: Currently, there are no ski trails in the northern part of Hartman Rocks within the mapped bald eagle winter concentration area. This alternative identifies groomed trails within this mapped area. Winter habitat is classified as mature cottonwoods and other trees near the stream offering perch sites for eagles. Surveys would be conducted to ensure these trails located within winter concentration did not offer proper habitat for bald eagles.

Gunnison Sage-grouse: As stated in the previous plan, this area offers habitat for all lifestages for the grouse but years of heavy use has probably displaced grouse in the area.

Lekking: Timing limitations (March 15-May 15th) already in place south of the powerline will continue to help to reduce disturbance to lekking grouse in the area.

Nesting/Brood Rearing Habitat: By reclaiming closed trails and roads, and continuing to carefully plan where future activities will occur, effects to nesting/brood rearing habitat should not increase under this proposed action.

Winter: With limited winter recreation in the area, the Hartman Rocks area provides quality winter habitat with little disturbance. Under this alternative, ski trails in the area will increase by 6 miles but the concentration of trails are found in the northeast part of Hartman Rocks which is lower quality winter habitat than along South Beaver or south of the powerline. Impacts could include increased disturbance from grooming, use of the trails and impacts associated from recreation such as pets, increased noise, and direct disturbance.

Gunnison's Prairie Dog: Currently there is one colony of prairie dogs within the Hartman Rocks planning area. There are currently no roads or trails planned under this alternative in the area of the colony and there is no perceived disturbance from the actions on prairie dogs.

Skiff Milkvetch: Currently, fragmentation from recreation is a significant threat to skiff milkvetch in the Hartman Rocks planning area (USFWS 2010). Under this alternative, closed trails will be revegetated to ensure use on them does not continue. Future routes and re-alignments will require full field clearances to ensure trails, parking lots, and other recreation infrastructure will not significantly impact known populations and suitable habitat within the planning area.

Gunnison Milkvetch: Although Gunnison milkvetch is endemic to the Gunnison Basin, it is fairly common and widespread. Colonies and potential habitat of this plant will be protected by continuing to limit motorbikes and mountain bikes to designated routes, and closing unauthorized routes that are created.

Crandall Rockcress: If Crandall rockcress exists within the recreation area, it would also be protected by these actions. Because of the habitat this plant tends to occupy, it may be less susceptible to disturbance from recreationists than the other sensitive plants in the area. Future actions would be surveyed for Crandall rockcress prior to approval.

#### Cumulative Effects

Recreation will continue to increase in the Gunnison Basin and this plan develops the framework to deal with the increased amount of recreation in this area by defining future actions at Hartman Rocks. Although there will be a small increase in the total amount of roads and trails in the region, this alternative will help decrease impacts from increased use and define where these actions need to take place to lower threats across the region. By focusing on recreation in this area, surrounding areas may receive less impact from recreation and therefore a lower impact on these species overall.

## **3.5. Rangeland Management**

### **3.5.1. Affected Environment**

There are three cattle grazing permittees authorized to use the lands within the Hartman Rocks area. Grazing practices specific to the area are prescribed in the grazing permits for the Gold Basin Allotment and the Iola Allotment.

Dispersed recreational activities have been occurring at elevated levels in the Hartman Rocks area for more than 20 years. These activities have been steadily expanding in area and increasing in intensity, variety, and seasonal use. As discussed in Section 1.5.13 above, dispersed recreation has an impact on livestock grazing operations; in general, the more human activity that occurs, the greater is the impact on livestock operations. Regardless of the alternative implemented, recreation will continue to occur, to increase, and to have an increasing impact on livestock grazing operations in the Hartman Rocks area. The analysis below will display how well each of the alternatives can minimize, control, and/or allow successful resolution of conflicts between recreation and livestock grazing.

### **3.5.2. Environmental Consequences/Mitigation**

#### **3.5.2.1. Proposed Action and Actions Common to All Alternative Except the No Action Alternative**

##### Direct and Indirect Effects

The action alternatives would have the effect of focusing recreation development (camping facilities, parking areas, interpretation) in the Front Country. This focus on the Front Country may reduce or slow the increase in the amount of human activity in the Middle and Back Country areas. This would be beneficial to livestock operations because it would leave a larger area of less activity to distribute livestock than would be left under the No Action Alternative.

The Proposed Action would also allow additional, more controlled development and improvement of “single use” areas (such as the rock crawling route, open play area, and trial bike areas), and it would allow/encourage public events. These opportunities may attract additional “destination” recreational users, which would increase overall use and have a negative impact on livestock operations. However, these special use areas may also have the effect of drawing more dispersed users into the smaller Front Country areas, which would be beneficial to livestock operations.

#### **3.5.2.2. No Action Alternative**

##### Direct and Indirect Effects

The No Action Alternative would continue to allow relatively uncontrolled expansion of both dispersed and developed recreational activities at Hartman Rocks. Annual instability in where

these activities occur would complicate the livestock management system in the Gold Basin and Iola Allotments, particularly where these uses occur in the Middle and Back Country areas.

### **3.5.2.3. Limit Recreation Alternative**

#### Direct and Indirect Effects

The Limited Recreation Alternative would be the most beneficial for livestock grazing in the short term because it would discourage a number of recreational uses that may attract “destination” users to the Hartman Rocks area. There would be no rock crawling area, play area, extreme motocross area, shooting area, or trials riding/rock hopping area. However, in the long-term, recreationists interested in these special uses will find places to enjoy these activities within or near the Hartman Rocks area. Without a plan to focus these activities, users will decide where to establish these sites; this may result in more activities in Back Country areas which will have more negative impacts on livestock grazing operations in the area.

### **3.5.2.4 Cumulative Effects of All Alternatives**

As the overall population increases, and rural home development in the Gunnison Basin increases, dispersed and concentrated recreation will continue to increase in the Gunnison Basin and in the Hartman Rocks area. Incremental costs that can result from increased recreational use include: materials and labor to repair damaged fences and water developments, labor to gather and return livestock to their prescribed use areas, weight loss on livestock that are forced to travel more or that become separated from calves, direct loss of livestock due to theft, vehicle collisions, or intentional destruction, and operator time to meet with agencies and user groups to minimize conflicts with users and resources. The cumulative impact of these incremental costs to livestock operations will occur, regardless of the alternative chosen. The action alternatives may slow the increase in costs and allow more mechanisms for the livestock operations to determine where the highest impacts occur; however, there will be no overall cumulative effects on livestock grazing in the Gunnison Basin as a result of this plan, regardless of the alternative chosen.

## **3.6. Cultural Resources**

Gunnison Field Office Resource Management Plan includes stipulations that address protection of cultural and archaeological resources, including sites eligible for the National Register of Historic Places (NRHP), traditional cultural properties, and Native American sacred sites.

Specific concerns include:

- Potential impacts to cultural and archaeological resources.

### **3.6.1. Affected Environment:**

The cultural resources in the Gunnison Field Office span approximately 12,000 years and are represented by Paleo-Indian, Archaic, Formative, Ute and Euro-American cultures. Sites include lithic scatters, quarries, temporary camps, extended camps, village, rock shelters, rock art,

wickiups, scarred trees, hunting sites, kill/butchering sites, processing areas, tree platforms, eagle traps, vision quest sites, caves, trails, roads, water resource sites, homesteads, ranches, cabins, mills, railroads, transmission lines, mines, trash dumps, aspen art, isolated artifacts, graves, etc. More specifically, the known cultural resources within the analysis area include a diverse array of prehistoric archaeological sites that make up a unique cultural landscape. Prehistoric site types include open lithic, open camp, and rock art sites. Historic site types are few but include the Aberdeen Quarry where granite was quarried for use in the Colorado State Capitol as well as small homesteads, prospecting/mining pits, and historic roads and trails. Currently there are no known paleontological resources in the analysis area. The potential for paleontological sites within the resource area is low, but does exist.

The analysis area contains historic resources protected under the National Historic Preservation Act (NHPA), the American Indian Religious Freedom Act, the Native American Graves Protection and Repatriation Act, E.O. 13007, and other statutes and executive orders. The BLM will not approve any ground disturbing activities that may affect cultural properties eligible to the NRHP until it completes its obligations under applicable requirements of the NHPA and other authorities. Once a project specific proposal is submitted, an additional Section 106 cultural resource assessment will be completed to identify any cultural resource concerns. If significant resources are located, the BLM will require modification to the project specific proposal to protect such properties, or disapprove any activity that is likely to result in adverse effects that cannot be successfully avoided, minimized or mitigated.

The cultural site density is high within the Hartman Rocks Recreation Area, which includes a diversity of plant and animal species desirable in ancient and historic subsistence regimes. Within the analysis area, there are a high number of sites eligible to the NRHP. Cultural resource information was reviewed and analyzed for the Area of Potential Effect (APE), which is defined as all BLM lands in the analysis area. To date 2,216 acres of the total 14,423 acres in the analysis area have been surveyed at the Class III (most intensive) level. Based on the results of previous cultural resource inventories, the potential for locating additional cultural resources within the APE is high.

### **3.6.2. Environmental Consequences/Mitigation:**

#### **3.6.2.1. Actions Common to all Alternatives Except the No Action Alternative**

##### Direct and Indirect Effects

All subsequent ground disturbing activities are subject to Section 106 of the NHPA. Under the provision of Section 106 and its implementing regulations (36CFR800), the BLM is required to identify, evaluate, and mitigate effects to historic and prehistoric properties within the APE for any undertaking. An intensive cultural inventory would be conducted over all ground disturbing

project areas within the proposed analysis area. Results would be evaluated and mitigated so that effects and impacts of the undertaking would be minimized.

The activities proposed in the analysis area can have severe impacts on the Gunnison Basin's prehistoric and historic cultural resources. Surface and subsurface disturbances of cultural resources can occur in a number of ways:

The act of creating new trails (authorized and unauthorized), the continued use of existing trails, and obliterating closed routes can impact cultural resources in a variety of ways. The creation of trails through archaeological sites can accelerate erosion. Use of trails can lead to the collecting of artifacts, such as cans, bottles and projectile points. New access to previously inaccessible sites by the creation of new trails can also lead to increased vandalism. The ultimate concern is the loss of irreplaceable artifacts, features and structures - once they are removed or destroyed their meaning in time and space and the clues to past cultures are gone forever. Although lithic debitage (generated from the production of stone tools) and tools that are manufactured may seem indestructible, they usually comprise only a part of an archaeological site. Other, more obscure components of the site can contain the more fragile pieces of the puzzle. Hearths (unlined or lined with clay or rocks), postholes, pieces of waddle and daub, and pit shaped depressions are susceptible to being unknowingly disturbed. Recreation uses in areas containing archaeological resources can inadvertently damage or destroy these types of features. Redundant use of campsites, trails, and staging and parking areas are common ways that these features can be destroyed. Constant use of trails can also remove soil and lead to accelerated erosion that can unearth fragile features.

### **3.6.2.2. Proposed Action**

#### **Direct and Indirect Effects**

The projects proposed in the Proposed Action Alternative have the highest potential for direct and indirect effects to cultural and paleontological resources given the increased number of acres in the overall analysis area. As noted in the Environmental Effects section above, cultural and paleontological resources can be negatively impacted by all proposed projects within this alternative. The highest potential for negative direct and indirect effects would occur through any use of heavy equipment to maintain or close existing routes and to install toilet facilities.

However, site-specific analysis before treatment and a close adherence to Section 106 of the NHPA and the BLM's protocol with the Colorado State Historic Preservation Office (SHPO) can easily mitigate any undue impacts to these resources through avoidance or documentation and/or data recovery. With site avoidance, many of the proposed projects will have positive direct and indirect effects to cultural resources. This includes:

- eliminating off road travel
- designating campsites to reduce the creation of new user created campsites

- creating an open play area that attracts motorized and non-motorized users to a large single area
- designating rock climbing areas that avoid fragile rock art

By implementing many of the proposed projects the cultural landscape of Hartman Rocks Recreation Area could be better preserved.

### **3.6.2.3. No Action Alternative**

#### Direct and Indirect Effects

Under the No Action Alternative the negative direct effects would be reduced compared to that of the Proposed Action. Under this alternative, fewer ground disturbing projects are proposed and therefore fewer cultural resources overall would be impacted. Ground disturbing impacts created by route creation and obliteration would be minimized as these activities are not included in this alternative. In addition impacts from the creation of campsites, toilet facilities, designation of climbing routes, enhancement of the terrain park, and increasing parking areas would not occur which would further lessen the impacts to cultural resources. However, the long term indirect effects of this alternative may be more than that of the Proposed Alternative based on the lack of management of the increased use of Hartman Rocks. Continued management under this alternative does not provide guidance toward managing recreation in a way that protects the cultural and paleontological resources of Hartman Rocks.

### **3.6.2.4. Limited Recreation -Alternative 3**

#### Direct and Indirect Effects

Fewer specific projects are proposed in the Limited Action Alternative resulting in a lower potential for direct and indirect effects to cultural and paleontological resources compared with the Proposed Action. However, this alternative does not provide for all types of recreation activities which in the long term may negatively impact cultural resources as recreation increases without management guidance.

### **3.6.2.5. Cumulative Effects of all Alternatives**

The cumulative effect is that over time fewer archaeological resources will be available to learn about past human lifeways, to study changes in human behavior through time, and to interpret the past to the public. Past and future actions that include historic grazing regimes, off-road vehicle use and other recreational activities can result in substantial ground disturbance and cause cumulative, long-term, irreversible adverse effects to paleontological and cultural resources. While it is hard to determine cumulative effects on unidentified archaeological sites, proposed specific projects for all alternatives should not increase the potential for cumulative effects within the analysis area if site-specific analysis is implemented in accordance to Section 106 of the NHPA and the BLM's protocol with SHPO.

### 3.6.2.6 Native American Concerns

Currently, there are no known traditional cultural properties within or adjacent to the project area. Tribal consultation was initiated in March of 2011 to determine any possible locales that have not been previously identified. The BLM did not receive any comments or concerns from the tribes.

## 3.7. Soils (roads/trails, shooting, terrain park, climbing, parking, use levels, law enforcement)

### 3.7.1. Affected Environment

The Hartman Rocks planning area contains 12 soil map units, with 87% comprised of Kezar-Cathedral gravelly sandy loams, Lucky-Cheadle gravelly sandy loams, and Stony rock land (Table 1). Soil textures of the soils within the analysis area are gravelly sandy loam and unweathered bedrock. Aside from bedrock, most of the soils fall within soil hydrologic group C. These soils tend to have low rates of infiltration. Alluvial land which falls within soil hydrologic group A, has high rates of infiltration. Discussions of soil resources will be about soil productivity or soil erosion and soil quality.

Table 1. Soil map units within Hartman Rocks Planning Area.

Soil Map Unit	Surface Texture	Hydrologic Soil Group	Acres	Percent of Area
Alluvial land (Ad)	Loam	A	625	4.2
Alluvial land, wet (Ao)	Loam	D	69	0.5
Dewville loam, 5 to 15 percent slopes (DeB)	Gravelly sandy loam	B	24	0.2
Duffson-Corpening loams, 5 to 35 percent slopes (DrE)	Loam	B	6	0.0
Duffson-Spring creek stony loams, 5 to 40 percent slopes (DsE)	Loam	B	64	0.4
Gas Creek sandy loam, 0 to 1 percent slopes (GaA)	Sandy Loam	D	2	0.0
Kezar-Cathedral gravelly sandy loams, 5 to 35 percent slopes (KcE)	Gravelly sandy loam	C	3,477	23.1
Lucky-Cheadle gravelly sandy loams, 5 to 45 percent slopes (LhF)	Gravelly sandy loam	C	5,509	36.6
Parlin-Hopkins channery loams, 5 to 45 percent slopes (PhF)	Channery loam	C	782	5.2
Parlin-Mergel gravelly loams, 5 to 45 percent slopes (PmF)	Gravelly loam	C	50	0.3
Rock outcrop (Ro)	Unweathered bedrock	D	413	2.7

Stony rock land (St)	Unweathered bedrock	D	4,031	26.8
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Source: USDA NRCS, 2012.

**Soil Productivity.** Soil productivity is primarily addressed by soil erosion, such as rilling, gullyng, and head cuts. To replace soils lost from erosion, it could take between 300 and 1,000 years to form one inch of top soil (Johnson, 1987). Ways to reduce soil erosion are by maintaining ground cover (vegetation), increasing infiltration, and reducing runoff velocities (Brooks et al., 1991).

Table 2 summarizes erosion properties of these soils. Three erosion hazard ratings for soils within the project area discussed and include erosion hazard (off road, off trail; on roads and trails; and erosion factor Kw). Most of the lands within the Hartman Rocks area have a moderate erosion hazard off roads and trails, given that Kezar-Cathedral gravelly sandy loams and Lucky-Cheadle gravelly sandy loams are the predominant soil map units. Moderate erosion hazard indicates that erosion is likely and that some erosion control structures may be required. Stony rock land has a very severe erosion hazard rating and erosion off roads and trails is likely and soil productivity will be lost. That the previously discussed soil map units comprise 87% of the Hartman Rocks planning area, erosion hazard on roads and trails is severe. For trails and roads on these soil map units, frequent maintenance will be required to control erosion. Erosion factor Kw indicates susceptibility to rill and sheet erosion. Values range between 0 and 69, with values at the higher end having a higher likelihood for erosion. Within Hartman Rocks, values generally fall around 0.15, which indicates soils have low susceptibility to sheet and rill erosion.

Table 2. Erosion properties of Soil Map Units within Hartman Rocks Planning Area.

Soil Map Unit	Erosion Hazard (Off Road, Off Trail)	Erosion Hazard (Road, Trail)	Erosion factor (Kw)
Alluvial land	slight	moderate	0.28
Alluvial land, wet			
Dewville loam, 5 to 15 percent slopes	moderate	Severe	
Duffson-Corpening loams, 5 to 35 percent slopes	moderate	Severe	0.15
Duffson-Spring creek stony loams, 5 to 40 percent slopes	moderate	Severe	0.15
Gas Creek sandy loam, 0 to 1 percent slopes	slight	Slight	
Kezar-Cathedral gravelly sandy loams, 5 to 35 percent slopes	moderate	Severe	0.15
Lucky-Cheadle gravelly sandy loams, 5 to 45 percent slopes	moderate	Severe	0.10

Parlin-Hopkins channery loams, 5 to 45 percent slopes	moderate	moderate	0.15
Parlin-Mergel gravelly loams. 5 to 45 percent slopes	moderate	moderate	0.15
Rock outcrop	very severe	Severe	
Stony rock land	very severe	Severe	

Source: USDA NRCS, 2012.

Erosion occurs naturally but is also exacerbated by changes to the land such as construction of a road, campsite, or trailing by cattle. Because of roads and trails, this area doesn't meet land health standard 1 because of headcuts and gully erosion. Within the Hartman Rocks planning area, which is 15,085 acres in area, are 128.7 miles of roads and trails (open and closed). This mileage represents less than 1% of the total area in Hartman Rocks (refer to methodology). Three areas are discussed where roads and close routes have caused accelerated erosion in the form of gullies and headcuts. Hartman Rocks has other areas of erosion, but this section only highlights three of those areas.

Within a 241 acre watershed by the play area by Kill Hill, 7.2 miles of roads and trails comprise 3.1 % of this watershed. Because of the high percentage of compacted surfaces, more water flows off the landscape instead of infiltrating into the ground. This increased surface runoff leaves the watershed at the intersection of BLM road 3510 and 3515 onto HRR 13, a closed route that still remains on the landscape. These compacted surfaces include the Kill Hill play area, closed but not rehabilitated routes, and BLM roads. Consequently, a gully system has formed within soil map units Kezar-Cathedral, rock outcrop, and stony rock land. These map units require erosion control structures for controlling erosion off roads and trails (USDA NRCS, 2012). Within this gully system are 9 active headcuts, which have an associated erosion of 140 cubic yards of soil. Maximum depth of these headcuts ranges between 2 and 7 feet, while maximum width ranges between 4 and 28 feet. The gully system has length of approximately 0.20 miles and is up to 35 feet wide and 7 feet deep (Figure 2). Based on Johnson (1987), it could take at least 25,000 years under ideal conditions to restore these lost soils.

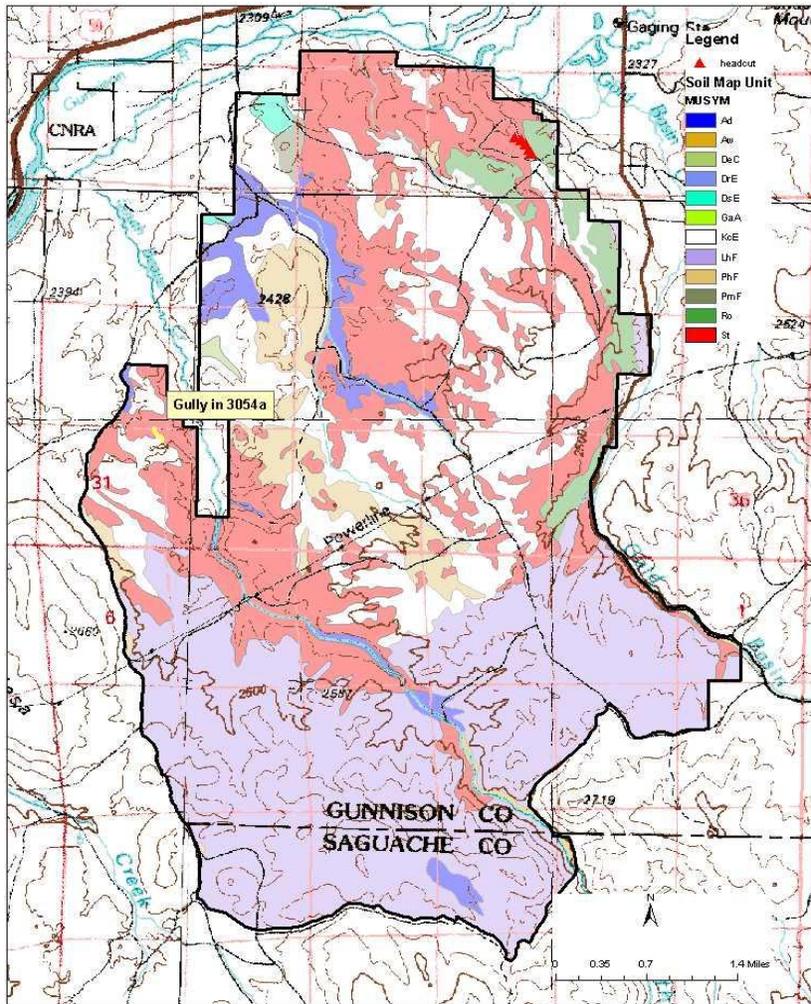


Figure 1. Soil map units within Hartman Rocks Recreational Area

A second area with accelerated erosion is associated with BLM road 3054a, which lies on soil map units Kezar-Cathedral and stony rocky land. Both soil map units have severe erosion hazards on roads and trails. According to NRCS (2012), frequent road maintenance is required for severe erosion hazard ratings for roads and trails (Figure 3a). Within a 0.12 mile segment of the road, a gully between 2 to 3 feet deep has eroded to bedrock. The road travels the lowest spot in the drainage; consequently water runs down the road causing accelerated erosion. There is no way to effectively control runoff on the road and off this segment road. Maintaining this road could be cost prohibitive and this road doesn't access any trail heads, range improvements, or other facilities.

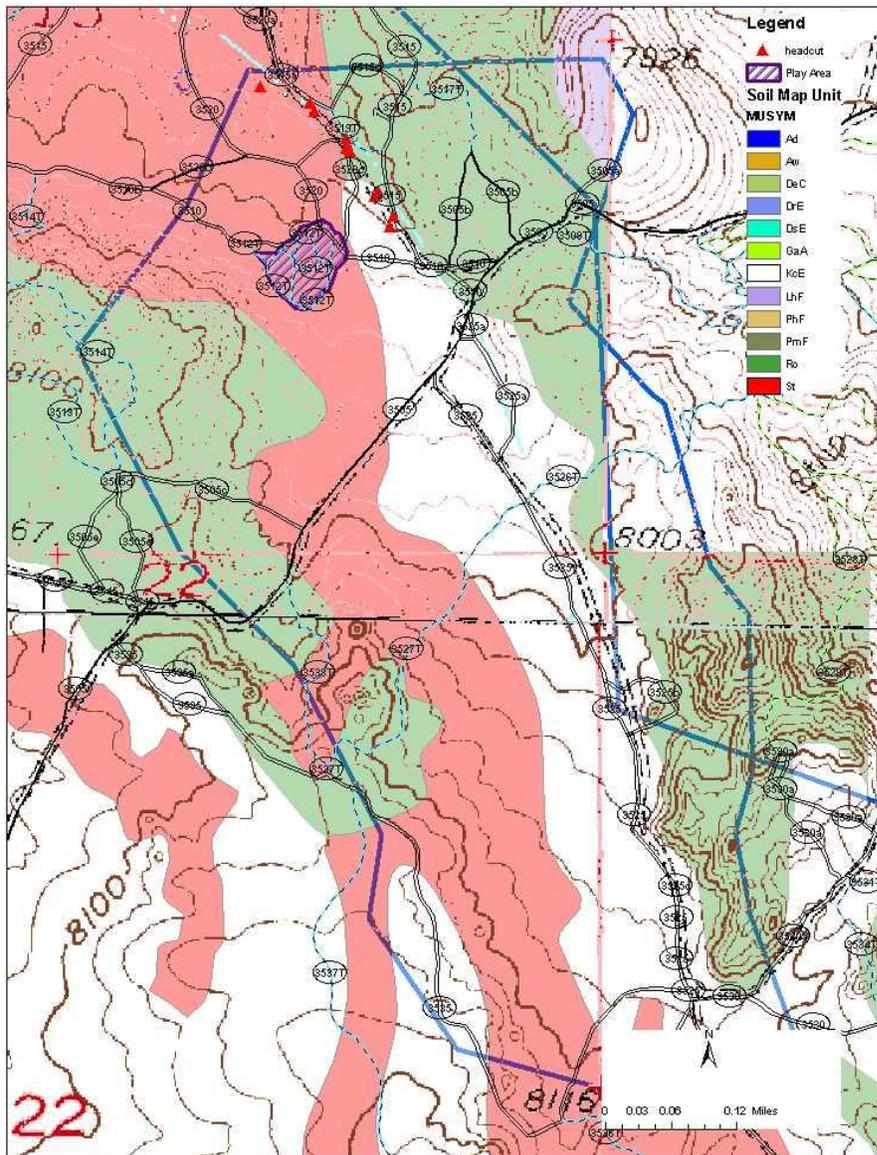


Figure 2. Watershed by Kill Hill Play Area.

Accelerated erosion occurs on BLM road 3545, which sits on map units Kezar-Cathedral, rocky land, stony rocky land (Figure 3b). Two sections of this road within a 0.5 mile road segment have minor gully erosion along the non-engineered road side ditch. The ditch empties into a seasonal drainage. The erosion at this point is manageable, but will become worse without some road maintenance.

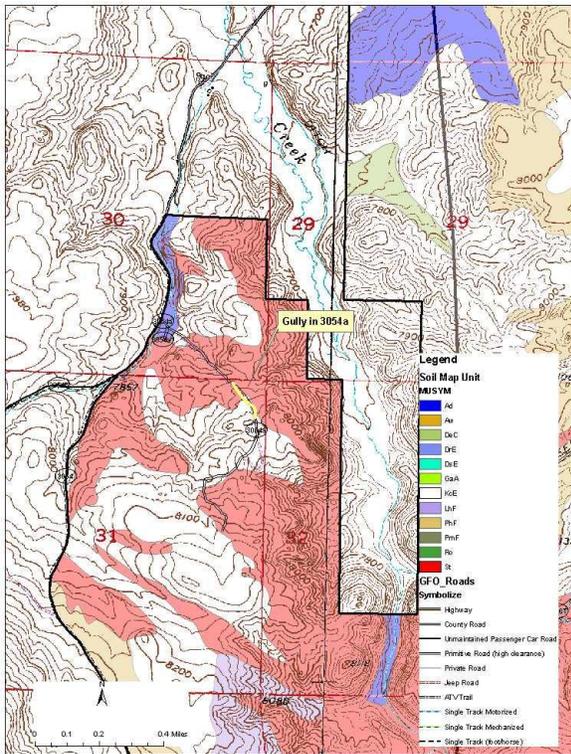


Figure 3a. BLM Road 3540a gully erosion

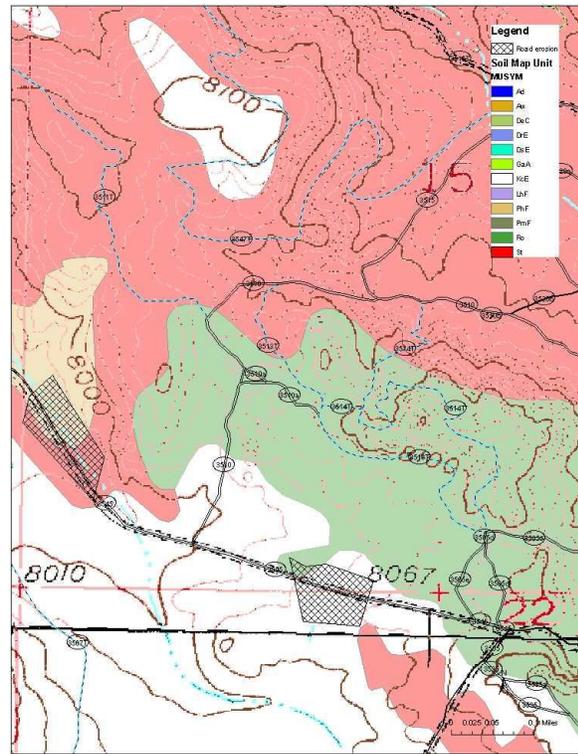


Figure 3b. BLM Road 3545 road problems

**Soil Quality.** Soil quality focuses on lead in the soil from the shooting area by the McCabe's Lane entrance. That shooting area rests on alluvial lands (Ad). Surface soil texture is a loam and the pH is 7.0, which is neutral (USDA NRCS, 2012). Mean annual precipitation for the area is around 10 inches (WRCC, 2012). Because of the soil properties and low precipitation, it is unlikely that there is lead contamination of the soils. Areas with annual precipitation greater than 45 inches result in more dissolution of solid lead and higher movement of lead (US EPA, 2005). Soils with acidic pH less than 6 or greater than 8 can break down and move down into the underlying soils (US EPA, 2005). Sandy soils have more pore space making it easier for the material to move down into the underlying soils (US EPA, 2005).

### 3.7.2. Environmental Effects/Mitigation:

This section discusses actions that could have an impact on soil productivity and soil quality

- Roads and trails
- Open play area
- Target shooting area

#### 3.7.2.1. Proposed Action and Actions Common to all Alternatives except the No Action Alternative

##### Direct and Indirect Effects

The proposed action is the second best alternative for protecting and restoring soil productivity and soil quality. This alternative will move land health standard 1 towards meeting the standard, as headcuts would be stabilized and infiltration would be restored.

Roads and Trails. Obliterating new roads and trails prior to constructing any new roads will improve soil productivity by de-compacting soils, which will improve infiltration and reduce the potential for erosion on and off the road or trail. Doing so will keep the percentage of roads and trails within Hartman Rocks below 1% of the entire area. Constructing new roads and trails will decrease soil productivity at the site, but spread across the entire planning area, the impacts should be negligible if the correct BMPs are implemented and effective and wheeled vehicles remain on designated roads and trails.

Within the unnamed watershed by the play area at Kill Hill, several actions to reduce erosion will be implemented. The goals of these actions are to increase rates of infiltration and reduce runoff velocities (Brooks et al., 1991). These goals will be achieved by a combination of revegetation, closing roads, ripping compacted surfaces, and hardening unlined drainage paths. These actions are listed below.

Ripping and revegetating 0.4 miles of HRRA28, HR22, user created segment on 3520, and 3520C will improve soil productivity by improving water infiltration. Consequently, less runoff will reach the gully system between BLM road 3510 and 3515 and reduce the potential of accelerated gully erosion and headcut expansion.

Revegetating 0.12 acres of HR22 and a disturbed area off of 3520 will provide ground cover, reducing the potential for erosion. The additional ground cover also will allow precipitation to slowly infiltrate into the ground as opposed to running off and entering the gully system between roads 3510 and 3520.

Stabilizing the 9 headcuts will reduce the likelihood of those existing headcuts from migrating head wards and causing more loss of soil. Controlling headcut and gully migration head wards will protect BLM roads 3510 and 3520 and reduce erosion of those roads. In addition, the roads will remain in their locations on the landscape, reducing the potential of re-routes through productive soils.

Approximately 7.4 cubic yards of riprap would be installed in the road prism and unlined drainage paths on BLM roads 3510, 3515, and 3520. Riprap will reduce runoff velocities into the gully and prevent gully expansion.

Open Play Area. The play area as it is has no defined boundary or way to prevent its use to cause loss of vegetation, which is important in controlling erosion (Brooks et al., 1991). Under the

proposed action this area would become defined with a perimeter fence to prevent future loss of soil vegetation (Brooks et al., 1991), which would maintain soil productivity of the lands adjacent to the play area. Indirectly, soil infiltration would be maintained and these adjacent areas would not become future sources of runoff to the gully system between BLM roads 3510 and 3520. The play area would continue to be a designated use of concentrated use and these soils would not be productivity for other uses aside from recreation.

### Cumulative Effects

Soil Productivity. Cumulatively, compacted area within Hartman Rocks would see a negligible decrease from 0.71% to 0.70%. Actual miles of routes visible on the ground and with low rates of infiltration would decrease from 128.7 miles to 127.4 miles. Within the watershed by the play area, compacted surfaces would decrease from 3.1% to 2.8%. Mileage of roads and closed routes with low rates of infiltration would decrease from 7.2 to 6.2 miles. With the rehabilitation of closed routes and roads within the watershed along with headcut stabilization and other two actions, the gully should become stabilized. There are no plans to rehabilitate the entire gully, as this would be cost prohibitive and would likely be unsuccessful, given the location of the gully system on stony rock land and rock outcrop within the upper one-third of the watershed (NRCS, 2012). Constructing a fence around the play area should prevent the loss of productive soil adjacent to the play area. This action will also allow disturbed areas to revegetate, adding to the overall soil productivity within the watershed. In the short term, soil productivity would remain stable and over the long term, it should improve as infiltration increases and vegetation takes hold.

Soil Quality. Cumulative effects of locating the shooting area to a site on soil map units KcE and PhF would be beneficial to soil quality, as this area would be well managed and lead rounds would be periodically removed. The current shooting area near the McCabe's Lane entrance would be closed and restored.

### **3.7.2.2. No Action Alternative:**

#### Direct and Indirect Effects

Under the no action alternative, soil productivity and soil quality would be the least protected and no restoration would occur. Land health standard one would continue not to be met, as no restoration would take place to stabilize headcuts or to improve infiltration on closed roads and trails.

Erosion would continue and topsoil, which can take between 300 and 1,000 years to form (Johnson, 1987) would be lost.

Soil Productivity. There would be no precedence under this alternative to holistically approach road and trail obliteration from a broad scale. Trails and roads that impact soil productivity by

causing loss of soil from erosion would not be closed, stabilized, or rehabilitated through this planning process. These roads and trail would continue to erode on and off their prisms.

There would be no measures to increase infiltration and reduce runoff velocities. BLM road 3520C and 3054a would remain open. BLM Road 3054a would continue to erode due to mechanical erosion by wheeled vehicles. Such vehicles would cause widening and deepening of the existing gully, as the tires of the vehicle drop into the gully and work away soil from the gully. In addition, runoff would continue to be captured by this gully, resulting in erosion from surface runoff. BLM road 3520C would remain open and it would not be ripped and revegetated. Surface runoff from this road would continue to enter the gully between BLM road 3510 and 3520, causing additional soil loss. The close proximity of this road to the gully precludes effective erosion control and water management on the road.

Closed route HR22 would not be ripped or revegetated. This route would continue to erode and cause expansion of two headcuts. Soil loss would likely exceed the 14 cubic yards from the headcuts.

An 85 foot user created segment along 3520 would not be revegetated and this segment would continue to be a source of surface runoff to the gully. Water would not slowly infiltrate into the ground.

Riprap would not be installed in unlined drainage paths from BLM road 3510, 3515, and 3520 to reduce runoff velocities into the gullies. Consequently, higher velocities of water would continue to enter the gully and the gully would continue to enlarge. More irreplaceable soil would be lost.

Management of the play area would continue as it does currently. A perimeter fence with designated parking would not be constructed. Because a perimeter fence would not be constructed, users of this area will continue to expand their uses into undisturbed areas as visualized by Andrew Breibart on January 4, 2012. Protective ground cover would be lost and these areas would be susceptible to erosion: mechanical, water, and wind.

Soil Quality. The current target area would remain in its current location. As previously discussed in the proposed action, soil quality is likely not being impacted from lead, given the neutral pH of the soils and low annual precipitation of 10 inches.

#### Cumulative Effects

Soil Productivity. Cumulatively, compacted area within Hartman Rocks will remain at 0.71% and actual miles of routes visible on the ground and with low rates of infiltration would remain at 128.7. Within the watershed by the play area, compacted surfaces would remain at 3.1% but

could increase over the short term, as the play area expands despite efforts to contain its current footprint. Mileage of roads with low rates of infiltration would remain at 7.2 miles. There would be no headcut stabilization and high runoff velocities from BLM road 3510, 3515, and 3520 would continue. Consequently, there would be more loss of valuable and irreplaceable topsoil.

Soil Quality. There would be no cumulative effects as current shooting areas would still be utilized. Within these areas, lead is stable; however, periodic removal could reduce the potential of lead being transported off site. As mentioned under the cumulative effects section under the proposed action, it is unlikely lead would reach the Gunnison River.

### **3.7.2.3 Alternative 3 –Limited Recreation**

#### Direct and Indirect Effects

This alternative best maintains and restores soil productivity and soil quality. This alternative will best move land health standard 1 towards meeting the standard, as headcuts would be stabilized and infiltration would be restored on closed roads and routes. In addition the play area would be closed and restored.

Direct and indirect effects are the same as the proposed action, except the play area would be closed and restored. In addition, there would be no shooting areas within Hartman Rocks.

Soil Productivity. Soil productivity would be best protected and restored as the play area would be closed and restored in addition to the other actions in the proposed action. The 2.5 acre play would be restored primarily by a combination of revegetation and construction of erosion control measures. Increased ground cover would increase soil infiltration, thereby reducing the amount of surface runoff available to the gully between BLM road 3510 and 3520.

Soil Quality. Soil quality would be best protected as no shooting would be allowed within Hartman Rocks. Consequently, there would be no risk of lead from bullets degrading soil quality. In addition, lead at the current shooting area would be removed, thereby reducing the risk of lead being mobilized into natural and artificial drainage paths.

#### Cumulative Effects

Soil Productivity. Cumulatively, compacted area within Hartman Rocks would see a negligible decrease from 0.71% to 0.69%, as the play area would be closed and restored. Actual miles of routes visible on the ground with low rates of infiltration would decrease from 128.7 miles to 127.4 miles. Within the watershed by the play area, compacted surfaces would decrease from 3.1% to 1.8%; as the play area which has area of 2.5 acres would be closed and rehabilitated. Mileage of roads and closed routes with low rates of infiltration would decrease from 7.2 to 6.6 miles. Cumulatively, restoration actions along with headcut stabilization should result in the gully stabilizing and beginning a process of soil accumulation as opposed to soil loss. These

actions will also allow disturbed areas to revegetate, improving long term soil productivity within the watershed. In the short term, soil productivity would remain stable until vegetation takes hold.

Soil Quality. There would be a very low risk of lead impacting soil quality, as lead would be removed from closed shooting areas and concentrating shooting areas would not be allowed. Consequently, no new sources of lead from shooting would be allowed.

### **3.7.3 Methods**

Compacted areas were computed through the following steps:

- A watershed was drawn by Andrew Breibart the week of January 16, 2012.
- Mileage of open and closed roads and trails was determined within the watershed and Hartman Rocks through ArcGIS by clipping BLM\_ROD by each area.
- All roads within the given areas were assumed to have a width of 10 feet, while all trails were assumed to have a width of 4 feet.
- Linear feet of each road and trail were multiplied by their respective widths.
- Area in square feet was totaled and converted to acres to give area of compacted land within Hartman Rocks and the watershed by the Play Area.
- Compacted surfaces were computed by dividing the former into the latter and multiplied by 100
- To compute compacted lands in alternative 3, the same steps were followed in addition to subtracting the total compacted area by 2.5 acres for the play area. Andrew Breibart used a Trimble GeoXT to define that area the week of January 9, 2012.

## **3.8. Riparian and Wetlands**

### **3.8.1. Affected Environment**

The project area supports intermittent stream systems and springs with narrowleaf cottonwood/willow (*Populus angustifolia/Salix*) and aspen/narrowleaf cottonwood (*Populus tremuloides/Populus angustifolia*) plant communities. These systems have been impacted in the past by contour plowing, spring development, roads, trails, dispersed camping, and concentrated large herbivore grazing and browsing. Erosion from roads, trails, dispersed camping, and concentrated herbivore use in adjacent uplands continues to add sediment to these stream systems.

### **3.8.2. Environmental Consequences/Mitigation:**

#### **3.8.2.1. All Alternatives except the No Action Alternative** Direct and Indirect Effects

Riparian areas will not be directly impacted by the proposed actions in Alternatives 2 or 3. Obliterating and restoring closed routes prior to constructing new routes and adding small parking areas at campsites, climbing areas, and trail/road intersections may indirectly positively impact riparian areas by allowing vegetation to recolonize compacted areas and decreasing the amount of sediment into riparian areas.

#### Cumulative Effects

The effect of the proposed action and the limited recreation alternative on riparian areas, added to the historical impacts from contour plowing, spring development, roads, trails, dispersed camping, and concentrated large herbivore grazing and browsing, will have no cumulative effects.

#### **3.8.2.2. No Action Alternative**

##### Direct and Indirect Effects

By not obliterating and restoring closed routes prior to constructing new routes and not adding small parking areas at campsites, climbing areas, and trail/road intersections, erosion will continue to occur on closed routes. Recreational use will also continue to reduce vegetation cover holding the soil in place next to campsites, climbing areas, and trail/road intersections. As an indirect effect of this use, sediment will increasingly funnel into riparian areas from these sites during rain storms. Sediment in riparian areas often increases the bedload of spring runoff which ultimately increases stream bottom and stream bank scour.

##### Cumulative Effects

The effect of the No Action Alternative on riparian areas, added to the historical impacts from contour plowing, spring development, roads, trails, dispersed camping, and concentrated large herbivore grazing and browsing, may have cumulative effects on riparian areas. Increasing amounts of soil compaction, plant elimination, and riparian sedimentation will occur by allowing increasing numbers of recreationists to continue to park wherever they desire next to campsites, climbing areas, and trail/road intersections, increasing soil compaction. Routes with no restoration will also continue to erode and funnel sediment to streams.

### **3.9. Fire and Fuels Management**

#### **3.9.1. Affected Environment:**

The vegetation types found within the planning area are all closely associated with fire at different return interval frequencies. Due to historic management and current management most of the planning area has missed at least one fire interval. Due to the increased fuel loading, conditions in the planning area are very susceptible to a wildfire that could be more severe than historically normal. Adjacent private property including year round residences increases the potential for negative impacts from wildfire.

## **3.9.2. Environmental Consequences/Mitigation:**

### **3.9.2.1. All Alternatives except the No Action Alternative**

#### Direct and Indirect Effects

Under these alternatives, users will be required to utilize installed fire grates at identified camping areas in the Front Country. Firewood collection on site and pallet burning will be prohibited reducing oversized fuels being burnt. Currently most camping activities occur in the Front Country, promoting a more responsible use of campfires will likely reduce the possibility of an escaped campfire.

As recreation uses and impacts change in the Middle and Back Country these alternatives allow managers to implement similar management strategies as in the Front Country. Installing fire grates and potentially limiting camping locations will limit the likelihood of an escaped campfire.

#### Cumulative Effects

Known fire history specific to the planning area is limited. Mixed severity, mosaic fires likely occurred at an interval of approximately every 25 years within the planning area. Grazing has increased from livestock and wildlife such as mule deer and elk due to land management practices. Grazing has reduced continuous fine fuels such as grasses and forbs limiting the frequency of low severity fires. Fire suppression has shifted vegetation cover types towards a late seral condition increasing the severity of fires. Increased recreation and the associated increase in human caused wildfire may have an increased negative affect on vegetation and adjacent communities.

### **3.9.2.2. No Action Alternative:**

#### Direct and Indirect Effects

Under the current scenario camp fires, the largest contributor to man caused wildfires, there is a high likelihood of negative effects. Currently campfires are permitted throughout the planning area with no consideration of fire grates or the location of adjacent receptive fuels. The direct effect of this action is that there is a greater number of camp fire locations and a larger area of disturbance to vegetation as additional campsites are created by users. Camp fires are frequently abandoned in improvised rock rings with fuel that is often oversized, greatly increasing the associated risk of wildfire. This alternative greatly increases the likelihood of an escaped campfire.

## **3.10. Invasive, Non-native Species**

### **3.10.1. Affected Environment**

Cheatgrass (*Bromus tectorum*), a State of Colorado List C noxious weed, is well established in a number of locations throughout the Hartman Rocks area. In addition, a number of other State of Colorado List B and C species are found in and around the Hartman Rocks area, including absinth wormwood, black henbane, Canada thistle, scentless chamomile, hoary cress, and field bindweed.

Dispersed recreational activities can introduce and cause existing populations of invasive, non-native species to increase. Weed seeds, roots, and plant parts can be transported into the area from outside and spread within the area on vehicles, clothing/shoes, bicycle tires, dogs, and horses. Disturbance to soil and native vegetation around parking areas, campsites, and restrooms, and along roads and trails can provide seedbeds for non-native species to establish. Once established, these species are frequently better adapted to repeated disturbance than are native species.

Regardless of the alternative implemented, recreation will continue to occur and to increase in the Hartman Rocks area. In all cases, noxious weeds will continue to be treated, whenever possible, given funding and staffing levels. The analysis below will display how well each of the alternatives can minimize and/or control the establishment and spread of non-native, invasive species.

### **3.10.2. Environmental Consequences/Mitigation**

#### **3.10.2.1 Common to All Alternatives**

##### Direct and Indirect Effects

All three alternatives prohibit motorized and mechanized travel off of designated routes. Restricting travel to designated routes minimizes soil disturbance and introduction of non-native plant species from bike tires and vehicles.

#### **3.10.2.2. Proposed Action**

##### Direct and Indirect Effects

The priority placed on obliteration and restoration of closed routes under the Proposed Action would be beneficial for the control of invasive, non-native species in the Hartman Rocks area. Unused routes and trails are particularly susceptible to the establishment of weeds; therefore, restoring these routes to native species would slow and/or prevent the encroachment of invasive, non-native species.

Focusing intensive recreation use on the Front Country would reduce the amount of user created disturbance in the Middle and Back Country. Designating/developing areas for parking and camping in the Front Country would simplify and increase the success of weed control around frequently visited sites.

### **3.10.2.3. No Action Alternative**

#### Direct and Indirect Effects

The No Action Alternative would not focus intensive use in the Front Country or attempt to limit the number and extent of user created parking areas, walking trails, or camp sites. In addition, trail obliteration and restoration work would not be a priority. As a result, weed inventory and control efforts would occur at similar levels of intensity throughout the entire Hartman Rocks area. Limited resources for inventory/control efforts would be spread more thinly and may result in less effective prevention and control of invasive, non-native species.

### **3.10.2.4. Limited Recreation Alternative**

#### Direct and Indirect Effects

The Limited Recreation Alternative would have similar effects on the introduction and spread of invasive, non-native species as the Proposed Action.

In the Limited Recreation Alternative, the prohibition placed on establishing rock crawling routes, use of the old gravel pit as a “play area”, developing trials bike riding trails, and expansion and further development of the terrain park would further reduce the likelihood of invasive, non-native species becoming established in these specific locations. However, as pressure for these types of recreational experiences increases, users will find areas in or near the Hartman Rocks area to recreate, and those areas will be vulnerable to noxious weed encroachment. Therefore, the Limited Recreation Alternative would not be better overall at slowing or preventing the establishment of non-native species than the Proposed Action Alternative.

### **3.10.2.5. Cumulative Effects of All Alternatives**

Populations of invasive, non-native species are steadily increasing throughout the Gunnison Basin. Recent drought events have contributed to the expansion of these populations into native plant communities. Projected long-term changes in climate are expected to further increase the vulnerability of native plant communities in the Gunnison Basin to encroachment of non-native species, particularly cheatgrass. Levels of dispersed recreation are expected to increase, with more recreational vehicles entering the Gunnison Basin from areas with heavy populations of noxious weeds.

On the other hand, public awareness of the threats that noxious weeds pose to the natural resources, and to the local industries that depend on those resources, is increasing. The

Gunnison Basin Weed Commission, a cooperative of federal, state, county, and local governments, private landowners, and concerned citizens, is working to prioritize and fund weed control and prevention activities, and to educate visitors and private land owners on the importance of preventing the establishment of invasive, non-native species. These efforts are expected to slow, and hopefully reverse, the trend of increasing amounts of invasive, non-native species in the Gunnison Basin.

### **3.11 Cumulative Impacts Summary:**

#### **Recreation**

Recreation will continue to increase in the Gunnison Basin and the proposed action develops the framework to deal with increased visitor use by defining future actions at Hartman Rocks Recreation Area. The proposed action including: installing toilets; designating campsites; concentrating specific uses to small geographic areas; designating climbing access routes; imposing firewood regulations; and pallet burning regulations would mitigate the effects of human use impacts from increased recreation use. Hartman Rocks is the only open area for people to recreate during severe winters and every spring due to sage-grouse conservation closures. Hartman Rocks Recreation Area takes recreation pressure off of other areas of the field office during these closures. The construction and use of a motor-cross track and building more motorized opportunities may alleviate single track motorized use in other areas of the field office during the snow free season. Recreational target shooters will be displaced and have to find other shooting opportunities inside and outside the planning area.

#### **Migratory Birds**

Recreation will continue to increase in the Gunnison Basin and this plan develops the framework to deal with the increased amount of recreation in this area by defining future actions at Hartman Rocks. Although there will be a small increase in the total amount of roads and trails in the region, the proposed action will help decrease impacts from increased use and define where these actions need to take place to lower threats across the region. By focusing on recreation in this area, surrounding areas may receive less impact from recreation and therefore a lower impact on migratory birds overall.

#### **Wildlife**

Recreation will continue to increase in the Gunnison Basin and this plan develops the framework to deal with the increased amount of recreation in this area by defining future actions at Hartman Rocks. Although there may be a small increase in the total amount of roads and trails in the region, the proposed action will help decrease impacts from increased use and define where these actions need to take place to lower threats across the region. By focusing on recreation in this area, surrounding areas may receive less impact from recreation and therefore a lower impact on wildlife overall.

## **Rangeland Management**

As the overall population increases, and rural home development in the Gunnison Basin increases, dispersed and concentrated recreation will continue to increase in the Gunnison Basin and in the Hartman Rocks area. Incremental costs that can result from increased recreational use include: materials and labor to repair damaged fences and water developments, labor to gather and return livestock to their prescribed use areas, weight loss on livestock that are forced to travel more or that become separated from calves, direct loss of livestock due to theft, vehicle collisions, or intentional destruction, and operator time to meet with agencies and user groups to minimize conflicts with users and resources. The cumulative impact of these incremental costs to livestock operations will occur, regardless of the alternative chosen. The action alternatives may slow the increase in costs and allow more mechanisms for the livestock operations to determine where the highest impacts occur; however, there will be no overall cumulative effects on livestock grazing in the Gunnison Basin, as a result of this plan, regardless of the alternative chosen.

## **Cultural Resources**

The cumulative effect is that over time fewer archaeological resources will be available to learn about past human lifeways, to study changes in human behavior through time, and to interpret the past to the public. Past and future actions that include historic grazing regimes, off-road vehicle use and other recreational activities can result in substantial ground disturbance and cause cumulative, long-term, irreversible adverse effects to paleontological and cultural resources. While it is hard to determine cumulative effects on unidentified archaeological sites, proposed specific projects for all alternatives should not increase the potential for cumulative effects within the analysis area if site-specific analysis is implemented in accordance to Section 106 of the NHPA and the BLM's protocol with SHPO.

## **Soils**

Soil Productivity - Cumulatively, compacted area within Hartman Rocks would see a negligible decrease from 0.71% to 0.70%. Actual miles of routes visible on the ground and with low rates of infiltration would decrease from 128.7 miles to 127.4 miles. Within the watershed by the play area, compacted surfaces would decrease from 3.1% to 2.8%. Mileage of roads and closed routes with low rates of infiltration would decrease from 7.2 to 6.2 miles. With the rehabilitation of closed routes and roads within the watershed along with headcut stabilization and other two actions, the gully should become stabilized. There are no plans to rehabilitate the entire gully, as this would be cost prohibitive and would likely be unsuccessful, given the location of the gully system on stony rock land and rock outcrop within the upper one-third of the watershed (NRCS, 2012). Constructing a fence around the play area should prevent the loss of productive soil adjacent to the play area. This action will also allow disturbed areas to revegetate, adding to the overall soil productivity within the watershed. In the short term, soil productivity would remain

stable and over the long term, it should improve as infiltration increases and vegetation takes hold.

Soil Quality - Cumulative effects of locating the shooting area to a site on soil map units KcE and PhF would be beneficial to soil quality, as this area would be well managed and lead rounds would be periodically removed. The current shooting area near the McCabe's Lane entrance would be closed and restored.

### **Riparian and Wetlands**

The effect of the proposed action and the limited recreation alternative on riparian areas, added to the historical impacts from contour plowing, spring development, roads, trails, dispersed camping, and concentrated large herbivore grazing and browsing, will have no cumulative effects.

### **Fire and Fuels**

Known fire history specific to the planning area is limited. Mixed severity, mosaic fires likely occurred at an interval of approximately every 25 years within the planning area. Grazing has increased from livestock and wildlife such as mule deer and elk due to land management practices. Grazing has reduced continues fine fuels such as grasses and forbs limiting the frequency of low severity fires. Fire suppression has shifted vegetation cover types towards a late seral condition increasing the severity of fires. Increased recreation and the associated increase in human caused wildfire may have an increased negative affect on vegetation and adjacent communities.

### **Invasive, Non-native Species**

Populations of invasive, non-native species are steadily increasing throughout the Gunnison Basin. Recent drought events have contributed to the expansion of these populations into native plant communities. Projected long-term changes in climate are expected to further increase the vulnerability of native plant communities in the Gunnison Basin to encroachment of non-native species, particularly cheatgrass. Levels of dispersed recreation are expected to increase, with more recreational vehicles entering the Gunnison Basin from areas with heavy populations of noxious weeds.

On the other hand, public awareness of the threats that noxious weeds pose to the natural resources, and to the local industries that depend on those resources, is increasing. The Gunnison Basin Weed Commission, a cooperative of federal, state, county, and local governments, private landowners, and concerned citizens, is working to prioritize and fund weed control and prevention activities, and to educate visitors and private land owners on the importance of preventing the establishment of invasive, non-native species. These efforts are

expected to slow, and hopefully reverse, the trend of increasing amounts of invasive, non-native species in the Gunnison Basin.

#### **4.0 TRIBES, INDIVIDUALS, ORGANIZATIONS, OR AGENCIES CONSULTED**

Hartman Rocks User Group meetings were held on July 20, 2010; March 2, 2011; November 30 2011; February 6, 2012; February 15 2012; and May 23, 2012 to discuss issues at Hartman Rocks and to discuss potential solutions responsive to these issues.

An Interdisciplinary Team Meeting was held on February 8, 2011; October 26, 2011; January 26, 2012; and May 31, 2012 to discuss internal issues.

A public open house to discuss issues at Hartman Rocks was held on January 20, 2011. Notice of this public open house was advertised in the local paper on January 13, 2011. Approximately 25 individuals, government/agency representatives attended that meeting.

#### **5.0 LIST OF PREPARERS**

<u>Name</u>	<u>Title</u>	<u>Area(s) of Responsibility</u>
Gay Austin	Natural Resource Specialist	Wetlands and Riparian Areas Aquatic Wildlife
Andrew Breibart	Hydrologist	Floodplains Water Quality Hydrology and Water Rights Soils
Brian Brown	Forester	Forest Vegetation/Management
Rebecca Bruno	Surveyor	Cadastral Surveys
Tara de Valois	Rangeland Management Specialist	Invasive, Non-Native Species Upland Vegetation Rangeland Management
Elizabeth Francisco	Archaeologist	Cultural Resources Native American Religious Concerns Paleontology
Russell Japuntich	Wildlife Biologist	Migratory Birds Threatened, Endangered and Sensitive Species Terrestrial Wildlife
David Lazorchak	Geologist	Geology and Minerals Hazardous Materials
Marnie Medina	Realty Specialist/NEPA Coordinator	Lands Authorizations

Kristi Murphy            Recreation Planner

NEPA  
Environmental Justice  
Prime and Unique Farmlands  
Wild and Scenic Rivers  
Wilderness  
Access and Transportation  
Recreation  
Visual Resources

Jake Schmalz            Rangeland Management Specialist

Invasive, Non-Native Species  
Upland Vegetation  
Rangeland Management

## 6.0 REFERENCES CITED

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**APPENDIX A  
INTERDISCIPLINARY TEAM ANALYSIS RECORD CHECKLIST**

**NUMBER:** DOI-BLM-COS060-2011-0004- EA

**PROJECT NAME:** Hartman Rocks Recreation Area Management Plan

**DETERMINATION OF STAFF:** (Choose one of the following abbreviated options for the left column)

NP = not present in the area impacted by the proposed or alternative actions

NA = present, but not affected to a degree that detailed analysis is required

PA = present and requires further analysis because 1) analysis of the issue is necessary to make a reasoned choice between alternatives, or 2) analysis of the issue is necessary to determine the significance of impacts.

<b>PHYSICAL RESOURCES</b>			
<b>Air Quality</b> (Clean Air Act)	Determination	Signature	Date
	<b>NA</b>	<i>Andrew Freibart</i>	<b>7/17/2012</b>
	Rationale for Determination: The amount of fugitive dust created from these actions should not create impacts within the Gunnison Air Basin.		
<b>Geology/Minerals</b>	Determination	Signature	Date
	<b>NA</b>	<b>David Lazorchak</b>	<b>07/17/2012</b>
	Rationale for Determination: The proposed action as identified will have no impact on the geology or minerals within the analysis area.		
<b>Paleontology</b>	Determination	Signature	Date
	<b>NA</b>	<b>Elizabeth Francisco</b>	<b>7/17/2012</b>
	Rationale for Determination: The analysis area is not known to have a high potential for paleontological resources to occur.		
<b>Soils (includes Public Land Health Standard 1)</b>	Determination	Signature	Date
	<b>PA</b>	<i>Andrew Freibart</i>	<b>7/17/2012</b>
	Rationale for Determination: See the discussion under section 3.7 of the EA.		
<b>Floodplains</b> (EO 11988)	Determination	Signature	Date
	<b>NA</b>	<i>Gay Austin</i>	<b>7/17/2012</b>
	Rationale for Determination:		
<b>Water Quality</b>	Determination	Signature	Date

<b>(drinking/ground)</b> (Clean Water Act and others) <b>(includes Public Land Health Standard 5)</b>	<b>NA</b>	<i>Andrew Freibart</i>	<b>07/17/2012</b>
	<b>Rationale for Determination:</b> Eight springs were originally inventoried in 1983 and 1984 and monitored again in May 2011. These springs are helocrenes and pH of 7 of the springs ranged between 6.6 and 9.2 in 1983 and 1984. Water was only found in 3 of the springs in 2011 and pH ranged between 7.12 and 8.01. pH falls within state standards. The inventory of springs revealed minimal disturbance to the springs from recreation and range management.		
<b>BIOLOGICAL RESOURCES</b>			
<b>Fire and Fuels Management</b>	<b>Determination</b>	<b>Signature</b>	<b>Date</b>
	<b>PA</b>	<i>Brian Brown</i>	<b>7/17/2012</b>
	<b>Rationale for Determination:</b> See the discussion under section 3.9 of the EA.		
<b>Invasive, Non-native Species</b> (Federal Noxious Weed Act and EO 13112)	<b>Determination</b>	<b>Signature</b>	<b>Date</b>
	<b>PA</b>	<i>Tara M. de Valois</i>	<b>7/17/2012</b>
	<b>Rationale for Determination:</b> See the discussion under section 3.10 of the EA.		
<b>Forest Vegetation (includes Public Land Health Standard 3)</b>	<b>Determination</b>	<b>Signature</b>	<b>Date</b>
	<b>NA</b>	<i>Brian Brown</i>	<b>7/17/2012</b>
	<b>Rationale for Determination:</b> The proposed action would not have a significant impact to forest vegetation within the project area.		
<b>Upland Vegetation (includes Public Land Health Standard 3)</b>	<b>Determination</b>	<b>Signature</b>	<b>Date</b>
	<b>NA</b>	<i>Tara M. de Valois</i>	<b>7/17/2012</b>
	<b>Rationale for Determination:</b> When compared to current conditions, the proposed action would likely decrease the amount of soil compaction and vegetation disturbance where trails are restored and where parking/camping/special use areas are limited and defined. However, the difference between the three alternatives on the overall health of upland vegetative communities would be minor. Therefore, detailed analysis is not required.		
<b>Threatened, Endangered, Candidate (ESA), and/or Sensitive Plant Species (includes Public Land Health Standard 4)</b>	<b>Determination</b>	<b>Signature</b>	<b>Date</b>
	<b>PA</b>	<i>Russell D. Japuntich</i>	<b>7/17/2012</b>
	<b>Rationale for Determination:</b> See the discussion under section 3.4 of the EA.		

<b>Riparian Zones and Wetlands</b> (EO 11990) <b>(includes Public Land Health Standard 2)</b>	Determination	Signature	Date
	<i>NA</i>	<i>Gay Austin</i>	<i>7/17/2012</i>
	Rationale for Determination: The proposed action would likely decrease the amount of soil and vegetation compaction, restore closed routes, and as a result, decrease sedimentation in riparian areas in the project area.		
<b>Wildlife (includes Public Land Health Standard 3)</b>	Determination	Signature	Date
	<b>PA</b>	<i>Russell D. Japuntich</i>	<i>7/17/2012</i>
	Rationale for Determination: See the discussion under section 3.3 of the EA.		
<b>Migratory Birds</b> (EO 13186 and Migratory Bird Treaty Act)	Determination	Signature	Date
	<b>PA</b>	<i>Russell D. Japuntich</i>	<i>7/17/2012</i>
	Rationale for Determination: See the discussion under section 3.2 of the EA.		
<b>Threatened, Endangered, Candidate</b> (ESA), <b>and/or Sensitive Animal Species</b> <b>(includes Public Land Health Standard 4)</b>	Determination	Signature	Date
	<b>PA</b>	<i>Russell D. Japuntich</i>	<i>7/17/2012</i>
	Rationale for Determination: See the discussion under section 3.4 of the EA.		
<b>HERITAGE RESOURCES and HUMAN ENVIRONMENT</b>			
<b>Cultural Resources</b> (National Historic Preservation Act)	Determination	Signature	Date
	<b>PA</b>	<b>Elizabeth Francisco</b>	<b>7/17/2012</b>
	Rationale for Determination: See discussion under section 3.6 of this EA.		
<b>Environmental Justice</b> (EO 12898)	Determination	Signature	Date
	<b>NA</b>	<b>Marnie Medina</b>	<b>7/17/12</b>
	Rationale for Determination: The proposed action has no disproportionate impact on any racial, ethnic, or socioeconomic group.		
<b>Native American Religious Concerns</b> (American Indian Religious Freedom Act)	Determination	Signature	Date
	<b>NA</b>	<b>Elizabeth Francisco</b>	<b>7/17/2012</b>
	Rationale for Determination: No Native American religious concerns have been identified in the project area. See discussion under section 3.6 of this EA.		
<b>Socio-economics</b>	Determination	Signature	Date
	<b>NA</b>	<b>Kristi Murphy</b>	<b>6/27/2012</b>
	Rationale for Determination:		

	The proposed action may have some socio-economic impact on the Gunnison area but it was beyond the scope of this analysis.		
<b>Visual Resources</b>	Determination	Signature	Date
	NA	<b>Kristi Murphy</b>	<b>6/27/2012</b>
	Rationale for Determination: The VRM Class for the area is a VRM 4 and small section is VRM 3 and the proposed actions will have no effect as proposed on visual resources.		
<b>Wastes (hazardous or solid) (RCRA and CERCLA)</b>	Determination	Signature	Date
	NP	<b>David Lazorchak</b>	<b>7/17/2012</b>
	Rationale for Determination: There are no known RCRA/CERCLA sites within the project area.		
<b>LAND USES and SPECIAL DESIGNATIONS</b>			
<b>Areas of Critical Environmental Concern (FLPMA)</b>	Determination	Signature	Date
	PA	<b>Marnie Medina</b>	<b>7/12/12</b>
	Rationale for Determination: The Hartman Rocks area includes the South Beaver Creek ACEC, which was designated to protect and enhance populations and habitat of skiff milkvetch. See the discussion under section 3.4 of the EA.		
<b>Farmlands (Prime or Unique) (SMCRA and Farmland Protection Policy Act)</b>	Determination	Signature	Date
	NP	<b>Marnie Medina</b>	<b>7/17/12</b>
	Rationale for Determination: There are no prime or unique farmlands in the analysis area. The NRCS has determined that in Gunnison County there are only “Farmlands of Statewide Importance”, and only lands that are under irrigation fall into that category within the Important Farmland Inventory for the State of Colorado. There are no irrigated lands on public land in the analysis area.		
<b>Lands/Realty Authorizations</b>	Determination	Signature	Date
	NA	<b>Marnie Medina</b>	<b>7/17/12</b>
	Rationale for Determination: There are six rights-of-way in the analysis area: 3 buried phone lines, a buried electric line, a water pipeline, and the WAPA electric transmission line and access roads. The proposed action and alternatives would have no effect on these ROWs.		
<b>Rangeland Management</b>	Determination	Signature	Date
	PA	<i>Tara M. de Valois</i>	<b>7/17/12</b>
	Rationale for Determination: See the discussion under section 3.5 of the EA.		

<b>Recreation</b>	Determination	Signature	Date
	<b>PA</b>	<b>Kristi Murphy</b>	<b>6/27/2012</b>
	Rationale for Determination: See the discussion under section 3.1 of the EA..		
<b>Access and Transportation</b>	Determination	Signature	Date
	<b>PA</b>	<b>Kristi Murphy</b>	<b>6/27/2012</b>
	Rationale for Determination: See the discussion under section 3.1 of the EA		
<b>Wild and Scenic Rivers</b> (Wild and Scenic Rivers Act)	Determination	Signature	Date
	<b>NP</b>	<b>Kristi Murphy</b>	<b>6/27/2012</b>
	Rationale for Determination:		
<b>Wilderness</b> (FLPMA and Wilderness Act)	Determination	Signature	Date
	<b>NP</b>	<b>Kristi Murphy</b>	<b>6/27/2012</b>
	Rationale for Determination:		

**FINAL REVIEW:**

<b>Reviewer Title</b>	<b>Signature</b>	<b>Date</b>	<b>Comments</b>
NEPA Coordinator	<i>Marnie Medina</i>	7/17/12	
Field Manager			