

**United States Department of the Interior
Bureau of Land Management**

**Environmental Assessment
DOI-BLM-CO-SO50-2012-0019 EA**

November 2014

**Norwood-Burn Canyon Comprehensive Travel
Management Plan**

Location: San Miguel and Montrose Counties, West of Norwood, CO

**U.S. Department of the Interior
Bureau of Land Management
Uncompahgre Field Office
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ENVIRONMENTAL ASSESSMENT

NUMBER: DOI-BLM-CO-S050-2012-0019 EA

PROJECT NAME: Norwood-Burn Canyon Comprehensive Travel Management Plan

LEGAL DESCRIPTION:

T45N, R14W, Sec. 8, 9, 13-16, 22-27, 33-35; T44N, R14W, Sec. 1-4;
T45N, R13W, Sec. 18-20, 29-32; T44N, R13W, Sec. 5-6.

APPLICANT: BLM and Norwood Park and Recreation District

INTRODUCTION and BACKGROUND

The Norwood-Burn Canyon area is currently seeing increased use from mountain biking, hiking, horseback riding, and hunting due to the increasing popularity of these recreational activities within the local communities and tourism industry. The current level of use is especially high during hunting season. Norwood Park and Recreation District and the citizens from the Town of Norwood have expressed an interest in an inter-connecting route system and increased recreational travel opportunities, especially single track routes.

In 2010, Norwood Park and Recreation District proposed a single track route system for all levels of trail users. They felt the development of a single track route system would enhance the lives of the residents of Colorado's Western Slope and numerous visitors from outside the region. It could also contribute to the local economy as a stopping point for tourists between Telluride and Moab. At that time, BLM was already working on a priority travel management plan (Dry Creek Travel Management Plan) and Resource Management Plan (RMP) Amendments for field office-wide travel management area designations which needed to be completed before any additional comprehensive travel management plans could be undertaken. The RMP amendments were completed June of 2010.

The BLM initially held public scoping for the proposed single track system in April 2012. As a result of receiving numerous comments from the public requesting BLM to complete a more comprehensive analysis of the area, BLM made the decision to complete a comprehensive travel management plan to look at all routes (existing and proposed) in the area. A second public scoping period for the Norwood plan began in August 2012. Comments from both periods of public scoping were considered during alternative development and the route by route analysis.

This Environmental Assessment (EA) analyzes impacts of implementing four different alternatives to address issues relative to travel use of public lands in the Norwood-Burn Canyon Travel Management Planning Area, including motorized and non-motorized travel (see [glossary](#) for definitions) for a variety of purposes, such as for land management and recreational activities. The alternatives include three action alternatives (Proposed Action and Alternatives 1 and 2) and the No Action Alternative. The alternatives would affect travel management decisions on Public Lands managed by the BLM, within San Miguel and Montrose Counties near the community of Norwood. This EA presents and analyzes travel management alternatives with a designated route system*; analyzes changing the existing “Limited to Existing Routes” Off-Highway Vehicle (OHV) designation to “Limited to Designated Routes” through route by route planning, and considers travel management support facilities.

**Designated route system refers to the method of managing a motorized and non-motorized transportation network in which the individual routes could be limited by specific modes of travel and/or times of the year, and are identified on travel maps and posted on the ground with signs.*

The Norwood-Burn Canyon travel management plan (TMP) includes an area of Bureau of Land Management (BLM) lands that total approximately 9,852 acres (see Map 1). The Norwood-Burn Canyon Area is located approximately 2-3 miles west of the Town of Norwood and is bounded on the south by U.S. Forest Service lands, and the north, east and west by private lands. There is one private land in-holding (160 acres), and one parcel (640 acres) within the Norwood-Burn Canyon area managed by the Colorado State Land Board. There are 12.6 miles of County Roads (W35, Z39, and 38Q) located within the planning area.

The travel planning area currently serves as an undeveloped multiple-use route system. The existing routes consist primarily of low standard dirt roads that connect to county roads. Many of these routes were developed to serve needs for temporary or intermittent access such as seismic exploration and suppressing wildfires. Off-road use has also created private trespass issues as the planning area is adjacent to private land and contains a private land inholding.

The OHV designation for the area was recently updated in the 2010 UFO Wide Travel RMP Amendment. This amendment states that the Norwood-Burn Canyon Area is limited to existing routes until further route by route travel planning can be conducted.

Currently, the area does not have proper maps or educational information on site to inform users of the recreation opportunities, user expectations, and/or travel management and other BLM regulations. Users are parking on the side of county roads, which are causing safety concerns, loss of vegetation, erosion, and unplanned site expansion.

Presently there is a lack of quality single track route opportunities in San Miguel County, with the exception of the Telluride area. San Miguel and Montrose Counties are seeing an increase in population and destination tourism due to year-round access to public lands and the availability of a wide array of recreational opportunities. In 2010, Longsight International reported a 6% visitation increase from 2009 for the State of Colorado. The 2010 census data showed that San Miguel and Montrose Counties are both expanding at an average of 2% each year. The City of Montrose is expanding at an average rate of 5% per year. The Town of Norwood is expanding at

an average rate of less than 1% per year. In 2010, the Bureau of Land Management Uncompahgre Field Office (UFO) reported a 5% increase in public land visitation from 2009.

The terrain of the area generally consists of drainages, canyons, narrow ridges, and mesa tops. The area offers views of the San Juan Mountain Range, the La Sal Mountains, and Lone Cone Mountain.

PURPOSE AND NEED FOR THE ACTION

The purpose is to produce recreational travel opportunities in a natural-appearing landscape that provide multiple use opportunities, while maintaining appropriate, sustainable, and reasonable access, and to protect and maintain quality winter habitat for big game and other wildlife species.

The need is to address external requests for a single track trail system and the issues related to routes in the area such as impacts to wildlife populations and cultural sites. The travel management plan also needs to be compatible with the recent U.S. Forest Service travel planning efforts since this planning area is bounded on the south by USFS public land.

Goals

Support outdoor-oriented lifestyles, add to participants' quality of life; foster protection of natural resources while providing for personal, community, environmental, and economic benefits; minimize conflicts between users and resources; maintain or improve land health to meet Colorado Public Land Health Standards; and maintain appropriate, sustainable, and reasonable access.

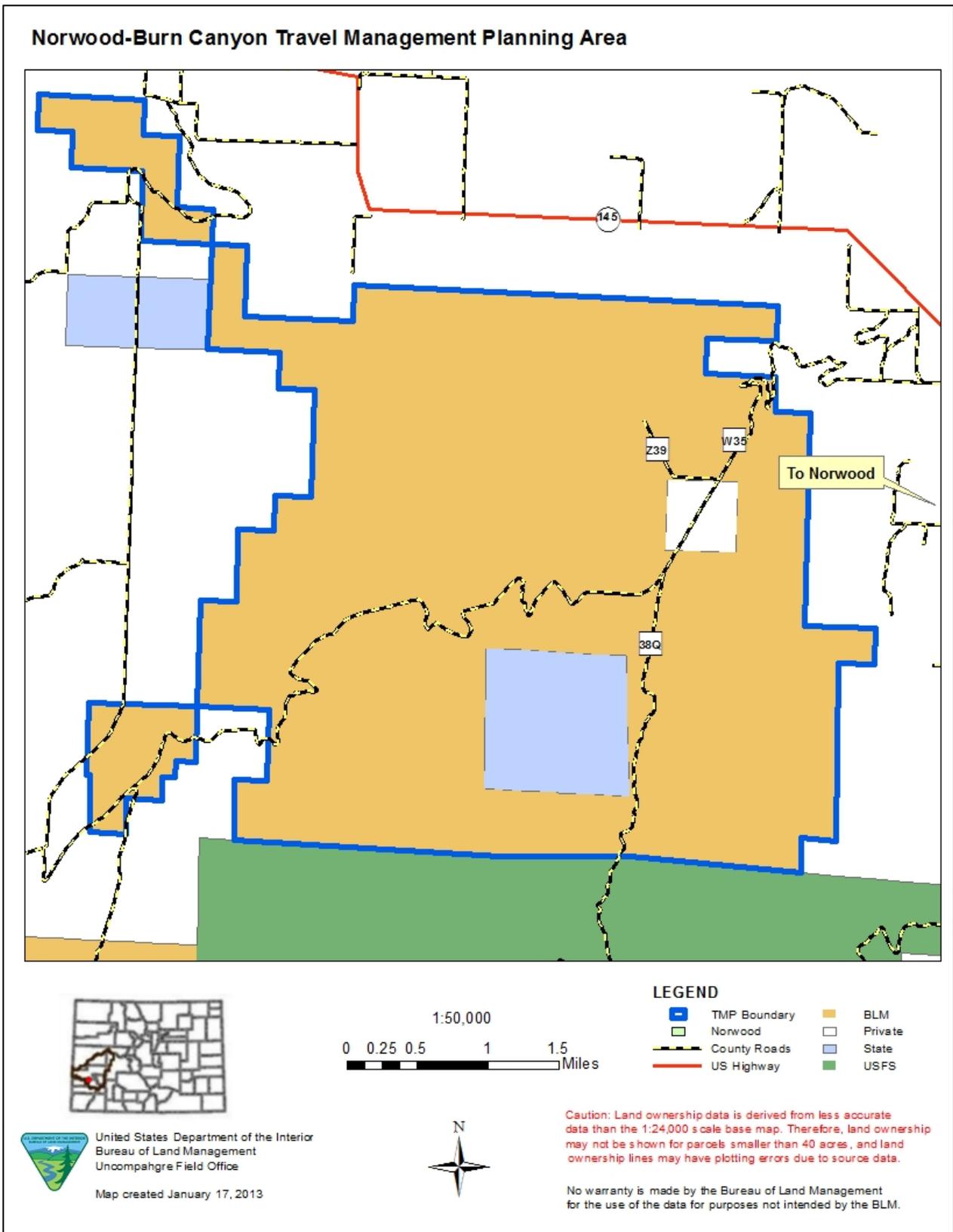
Decision to be Made

Decide whether to implement the proposed travel management plan, implement one of the alternatives, or to not make any changes to the existing travel situation.

ISSUES and CONCERNS

Issues and concerns include impacts to wildlife populations and cultural sites, user conflicts, environmental impacts, local economic impacts, private land access and trespass, conditions of use on routes, additional access needs, loop opportunities, route relocations, and public safety. Travel related support facilities were not addressed in the 1985 RMP; some of the greatest user-created surface disturbing activities occur due to a lack of these facilities. Another issue is the need to have current information and management guidelines which allow for better service, education and compliance.

Map 1. Norwood-Burn Canyon Planning Area



DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

Three action alternatives and the no action alternative are considered. Alternatives were developed considering the existing OHV designations and conditions on the ground, such as impacts to sensitive resources, public input, existing recreational uses, route condition, and the need for administrative access. These alternatives address the purpose and need and the issues and concerns. The decision that will be made are for BLM public lands only; decisions would not apply to private lands, U.S. Forest Service lands, or lands managed by the Colorado State Land Board, but there could be some indirect effects.

Table 1 shows the miles of routes by travel use category within each alternative (see Appendix A for detailed definitions of the Categories). Mileage shown is approximate. These Travel Use Categories will be the foundation of the TMP in the Proposed Action and Alternatives 1 and 2. The Travel Use Categories are also color-coded on maps for each of the alternatives. See Appendix B for maps that illustrate each alternative.

Each Travel Use Category is named for the type of use that it is primarily suited to accommodate (bold in Table 1). The other travel uses (not bold in Table 1) included in the category are considered as secondary uses. For example, routes included in the “Motorized Single Track” Category are primarily suited for or intended for motorcycle use, but the routes would also be available for the other uses listed, including bicycling, hiking, and horseback riding.

Objectives:

The objectives of the Proposed Action and alternatives are:

Proposed Action: Objective is to manage a quality recreation area with non-motorized and motorized travel opportunities.

Alternative 1: Objective is to emphasize enhancing and protecting wildlife habitat while providing quality non-motorized recreation travel opportunities and public access.

Alternative 2: Objective is to manage for a motorized and non-motorized multi-use recreation area.

No Action Alternative: Objective is to continue existing management.

Table 1					
¹Miles of Routes in Travel Use Categories by Alternative					
Travel Use Category See Appendix A for detailed definitions	Primary and Secondary Permitted Uses	Proposed Action	Alternative 1	Alternative 2	No Action
Hiking Only Single Track	Foot	--	--	1.9	--
Non-Motorized/Non-Mechanized Single Track	Equestrian, Foot	2.8	9.5		
Non-Motorized/Non-Mechanized and Administrative Use	Full-Sized Administrative uses, Equestrian, Foot	2.6	2.7	--	--
Non-Motorized Single Track	Bicycles, equestrian, foot	25.6	15.9	4.7	--
ATV 2-Track and Administrative Use ²	Full-Sized Administrative uses, ATVs, motorcycles, bicycles, equestrian, foot	--	--	2.2	--
Motorized Single Track	Motorcycles, Bicycles, equestrian, foot	--	--	19.2	1.7
ATV 2-Track	ATVs, motorcycles, bicycles, equestrian, foot	2.9	--	8.4	--
4WD/2WD – Open	All modes of transportation (Full sized vehicles – 4WD/2WD), ATV, motorcycle, bicycles, equestrian and foot	6.5	3.0	16.7	33.6
Administrative Uses Only	Full-Sized Administrative uses only	2.9	4.4	2.3	--
Existing Routes Closed ³	Closed	17.9	18.6	9.1	--

¹ In addition to miles shown in the table, there are 12.6 miles of County Road (i.e. Table 1 does not include miles of County Road).

²These routes would be available for motorized administrative use and to the public for the designated modes of travel (see maps in Appendix B).

³This category shows existing routes that would be closed under the alternative.

Management Common to All Alternatives

Travel Use Conditions

Travel use conditions describe allowed, restricted or limited travel uses on motorized or non-motorized designated routes. These conditions are as follows:

Any administrative motorized vehicle or equipment use off authorized routes on BLM Public Lands would require prior notification and approval by the authorized BLM official. In the case of an emergency, contact would be made with the authorized BLM official within 72 hours following emergency entry.

All public lands would be available for horseback riding and hiking on routes or cross-country.

Follow-on Actions

Public access would be pursued in the Norwood-Burn Canyon Travel Management Planning area as opportunities arise.

Existing Laws, Regulations, Policy, Guidance, Land Use Authorizations, and Valid Existing Rights

The BLM would manage the public lands in accordance with applicable laws and regulations, and BLM policy and guidance. Implementation of any of these alternatives would be subject to all valid existing rights at the time of the signing of the decisions relative to the Travel Management Plan.

The use of motorized or mechanized modes of travel, including snow machines during the execution of a land use authorization or permit, such as rights-of-way construction, operation or maintenance, or fuel wood and decorative rock gathering would be subject to the terms and conditions of each individual authorization or permit. Additional environmental documentation and analysis would be required in some cases for these authorizations.

Management Common to Proposed Action and Alternatives 1 and 2

Access

Maintain appropriate, sustainable, and reasonable access for visitors, authorized users, and private landowners while reducing private land trespass within the planning area.

Travel Management Plan

Consists of:

1. Travel Management Area designations would be “Limited to Designated Routes”;
2. Selected routes and uses, proposed new routes and routes to be closed to certain or all uses (“travel network system”);
3. Conditions of use and seasonal or travel type restrictions, such as seasonal closures to prevent disturbance to wintering big game, and
4. Proposed travel management support facilities.

No new routes, except for the proposed routes authorized by this Travel Management Plan, would be permitted to be constructed or established unless reviewed, analyzed and authorized by the BLM under separate NEPA documentation. User created routes not identified in the Norwood-Burn Canyon TMP would be closed upon discovery.

Travel Use Conditions

Travel use conditions describe allowed, restricted or limited travel uses on motorized or non-motorized designated routes. These conditions are:

Each alternative identifies the mileage of proposed selected routes, travel use categories, types of uses allowed, and the locations and choices of existing routes that would be designated and available for a variety of travel opportunities. In the alternative descriptions, the term “available” is meant to imply a route where certain travel or uses would be allowed, seasonally or yearlong.

The use of wheeled, muscle-powered game carts or wagons would be permitted off of designated routes to retrieve big game only during Colorado Parks and Wildlife (CPW) authorized big game and mountain lion hunting seasons. Motorized vehicles would not be permitted off designated routes to retrieve big game.

Seasonal Closures

BLM would work cooperatively with Colorado Parks and Wildlife and the counties for assistance with monitoring and implementation decisions on seasonal closures.

The Field Manager may modify the time frames upon consultation with CPW:

- if monitoring information indicates that plant seasonal cycles or animal use patterns are inconsistent with dates established, or
- under mild winter conditions for the last 60 days of the closure (severity of the winter will be determined on the basis of snow depth, snow crusting, daily mean temperature, and whether the animals were concentrated on the crucial winter range during winter months).

Appropriate signing at gates, trailheads and on routes would inform the public of the closures and the rationale for the closures.

Advanced Technology

Any advanced technology in regards to motorized or mechanized vehicles would adhere to the specified route width restrictions mentioned within the Definitions of Travel Use Categories found in Appendix A.

Parking

In order to limit resource impacts and help prevent new user-created routes, users would be allowed to park motorized and/or mechanized vehicles (depending on the designation of the route) immediately adjacent and parallel to the BLM designated routes. Parking would be limited to one vehicle-width from the edge of the route. Users would be encouraged to park motorized or mechanized modes of travel in developed parking areas, already disturbed areas, consider safety and keep routes passable for other users.

Travel Management Support Facilities

Proposed facilities to support the travel management plan include staging areas, trailheads, gates, and portal signs. The staging areas could consist of a maximum of three acres and the trailheads could consist of a maximum of one acre each of disturbed surface. Facilities could include restrooms, kiosks, hardened graveled parking areas, fencing, hitching rails, vehicular control devices, native landscape islands, erosion and drainage control devices, and hardened access routes.

Access onto Public Lands from Private Lands

Motorized and mechanized travel onto public lands from adjacent private lands would be limited to the public access points and designated routes provided in the alternatives (that is, if there is not a designated route, motorized or mechanized access would not be permitted from private land onto public lands). User created or constructed hiking or horseback riding routes would not be allowed off private lands onto public lands.

Design Features

Design features would be implemented to reduce or eliminate impacts to certain resources.

A weed management plan would be prepared and implemented that would identify weed infestations and concerns on all routes and an action plan to eliminate or reduce noxious weeds. Noxious weed educational materials would be placed at all staging areas and these areas would be kept free of noxious weeds.

Seeding with a BLM-approved seed mix would take place in designated areas for rehabilitation where compaction exceeds 3 feet in width and natural re-vegetation is unlikely to occur over the next 3 years, or on closed routes where there are soil erosion concerns. Seed would be scattered on the surface and raked in.

Proposed routes, parking areas and other facilities to be constructed would receive an intensive cultural inventory prior to construction or use. Where existing inventories are sufficient, standard discovery stipulations would apply.

Impacts to currently known eligible cultural properties would be avoided, minimized or mitigated in consultation with State Historical Preservation Office (SHPO), and stipulations contained in applicable existing laws and protocols would be applied to known Sacred Sites and Traditional Cultural Properties. Where National Register eligible sites, or where Sacred Sites and Traditional Cultural Properties, are known to be in danger or are currently being impacted by travel activities, routes would be closed to travel if necessary until the appropriate mitigation has been implemented.

Nothing within this document will abrogate or restrict any rights of access to members of the several Ute Tribes concerning access as granted under the provisions of the Brunot Treaty of 1874. Tribal members and others having recognized rights of access to sacred sites and/or traditional cultural properties and use areas will continue to maintain those rights as guaranteed.

Informational/Directional signs would be installed where needed throughout the planning area, which would include kiosks on entry routes as appropriate. Signing for designated routes would be implemented by BLM over time and as funding allows.

All trailheads and routes would be appropriately signed with allowed uses and seasons of use. Because signs are at times vandalized or removed, the user is responsible for determining the correct mode of travel based on official maps.

If necessary, as use increases, dust generated in localized areas and from specific uses, seasons, or events would be reduced by installing obstacles or rerouting routes in certain locations in a safe manner to reduce speeds and resultant dust.

Surveys for nesting raptors would be conducted during the nesting season prior to construction of proposed routes.

Surveys for BLM sensitive plants would be conducted during the appropriate season for the particular plant species prior to construction of proposed routes.

Surface disturbing activities would not occur within 100 meters of known BLM sensitive plant populations. This buffer zone can be reduced to 50 feet for route maintenance activities following review and approval by the authorized officer.

Surface disturbing activities, surface occupancy, and adverse habitat modification shall not occur within ½ mile of active nests of special status raptor species, or ¼ mile of active nests of non-special status raptor species.

To minimize impacts to migratory bird populations, it is recommended that no surface disturbing activities occur from May 15 through July 15. Project activities shall retain and avoid modifying identified cavity trees, snags, and perches in the planning area.

Reroutes of existing or relocations of proposed new routes needed for erosion or other protection would be limited to a corridor 250 feet wide on either side of the centerline of all designated routes. Resource values to be considered in potential route reroutes include canyon rims, sage brush parks, eligible and/or high density cultural sites, Colorado Parks and Wildlife big game winter range critical areas, soil erosion, and wildlife corridors within canyons.

Proposed routes would be designed and located such that routes are generally greater than 50 feet from canyon rim edges, with vegetation screening used to reduce impacts to wildlife. An occasional segment of a route could be brought to rim's edge for views, but should not be longer than 100 feet along the canyon rim.

Surface disturbance would be kept to a minimum in order to maintain sufficient vegetation to protect soils, and the number of stream crossings would be kept to a minimum, in order to reduce impacts to wetlands and riparian areas.

Route improvements would be implemented at drainage crossings to reduce channel or wetland impacts.

New routes would be located to avoid passing through wetland areas.

Design, construction and maintenance work for routes would be subject to the conditions and guidelines that create sustainable, low maintenance routes and maintain quality recreation. Construction and maintenance of routes would be performed according to the design features, BLM annual work plans, and as funding permits.

Closures, rehabilitation and/or re-vegetation of routes would include ripping with equipment, reseeding, planting vegetation, and/or constructing barriers approximately the first 100 feet of the route or more if determined necessary. Fences and gates would be installed where necessary to increase compliance. The appropriate clearances would be completed prior to implementation or other ground disturbance if necessary.

As directed in 43 CFR 3809.420 - Surface Management - (b)(9) Protection of survey monuments: to the extent practicable, all operators shall protect all survey monuments, witness corners, reference monuments, bearing trees and line trees against unnecessary or undue destruction, obliteration or damage. If, in the course of operations, any monuments, corners, or accessories are destroyed, obliterated, or damaged by such operations, the operator shall immediately report the matter to the authorized officer. The authorized officer shall prescribe, in writing, the requirements for the restoration or reestablishment of monuments, corners, bearing and line trees.

The Public Land Survey conditions in some of these areas are categorized as High Risk according to the latest Geographic Coordinate Data Base (GCDB) inventory. Official records indicate GCDB (and thus GIS) reliabilities to be over 100 ft. When implementing the approved travel management system, the following items related to the protection of the Public Land Survey System will be evaluated by the BLM Cadastral Surveyor in coordination with the project manager:

1. An effort should be made by a qualified individual to locate, and protect any original monuments that may exist in this planning area.
2. Local research should be conducted to identify private survey records that apply to this area. Any private monuments found as a result should be protected.
3. Closure of roads within the planning area near private lands should be determined prior to road closure to avoid closing roads on private land not part of the project.

Maintenance

Any existing or future road use or maintenance agreements with Montrose or San Miguel County would continue according to the terms and conditions of those agreements.

Designated routes and maintenance levels would be incorporated into BLM scheduled

maintenance plan.

Monitoring & Implementation

Implementation would consist of installing signing/informational kiosks, constructing new proposed routes, maintaining or rerouting existing designated routes, installing barriers where needed, installing staging areas/trailheads as designated in the plan, rehabbing closed routes mechanically or manually where identified, as well as other actions identified within the document under the sections: Management Common to All Alternatives, Management Common to Proposed Action and Alternatives 1 and 2, and the Proposed Action which are solely dependent on funding (internal or external) and specialists' capability to work with seasonal staff contractors, and volunteers. A monitoring schedule would be prepared that would include timeframes monitoring which are also solely dependent on funding (internal or external) and specialists' capability to work with seasonal staff, contractors and volunteers. All implementation and monitoring projects would require BLM oversight and administration.

Construction of new routes, facilities, installation of signs, and route maintenance would be coordinated and administered by BLM or a BLM approved contractor.

Monitoring projects would require BLM oversight and administration. Levels and types of uses, and natural resource conditions such as soil erosion, spread of noxious weeds, and impacts to vegetation, would be monitored. Monitoring data is used to assess resource conditions, identify resource conflicts, and determine if resource objectives including land health standards are being met and to periodically refine and update goals and objectives and specific management actions in a process known as adaptive management. Monitoring tools could include traffic counter data, motion activated cameras, on-site patrols, surveys, and analysis of use.

Follow-on Actions

Maps, brochures, and educational material would be developed and made available for the public in print and on the internet.

BLM administrative functions related to a variety of natural resource management objectives (e.g., wildlife habitat and species monitoring and management, noxious weed eradication, resource enhancement and restoration, and fence repair) that could potentially require cross-country travel using motorized vehicles or equipment off designated routes would be addressed at the project level with appropriate project specific and site specific environmental documentation and assessment.

Applications for Special Recreation Permits (SRPs) would be considered, subject to the approved Travel Management Plan designated route system, the existing approved Resource Management Plan and Amendments, and appropriate environmental documentation. Stipulations would be developed during the processing of these applications.

BLM would develop and maintain partnerships with key stakeholders to assist with managing and implementing travel decisions.

The BLM, in cooperation with other agencies and organizations, would prepare and implement a

public education program in a variety of formats to promote wise use on public land, and would include information regarding controlling noise levels while recreating on public lands. Colorado noise level standards pertaining to the operation of motor vehicles, including provisions in Colorado Senate Bill 08-063, and any pertinent regulations that would be promulgated would be incorporated. Accurate maps and other information relevant to travel management for public land visitors as well as contacting visitors on-site by BLM staff, volunteers, and partners would be a part of this program.

Adaptive Management

BLM could further restrict travel and use, by mode of transportation or season, on any route to protect resources (natural or other) or infrastructure from being impacted from vehicular use in the event of extreme winters, wet conditions, to reduce safety hazards, in other unforeseeable situations, or to better manage and protect sensitive resources or other values, such as big game or nesting raptors. These actions could include emergency closures of routes, permanent or seasonal closures of routes, or relocation of routes. These actions would be taken following appropriate emergency closure or after appropriate site-specific NEPA action.

Over time, changes may need to be made to the approved and adopted Travel Management Plan in terms of adding, re-designating, relocating, or closing certain routes, maintenance needs, and seasonal or other use restrictions on routes. These changes would be documented using appropriate BLM Land Use Planning regulations and NEPA procedures.

Proposed Action:

This alternative includes the management objectives and actions in the section above headed “Management Common to All Alternatives” and “Management Common to Proposed Action and Alternatives 1 and 2”.

The objective of the Proposed Action is to manage a quality recreation area with non-motorized and motorized travel opportunities. The proposed action was developed after considering issues raised throughout the planning process; specific resource and environmental values and resource uses; conflict resolution; public input; and laws, guidance, policies, and regulations. It represents the mix and variety of proposed designated routes, uses, and other actions that best resolve the issues and management concerns identified at scoping. See Appendix B for a map of designated routes in the Proposed Action.

Travel Management Plan

This TMP would identify and designate (see Table 1):

- 9.4 miles of motorized routes consisting of
 - 2.9 miles in ATV 2-Track travel use category for ATVs, motorcycles, and non-motorized travel;
 - 6.5 miles in 4WD-2WD travel use categories for motorized and non-motorized travel.
- 31 miles of non-motorized routes consisting of
 - 2.8 miles in the Non-Motorized & Non-Mechanized, Single Track travel use category for hiking and horseback riding (approximately 1.3 miles of proposed route construction

- would occur);
- 2.6 miles in the Non-Motorized & Non-Mechanized, Single Track and Administrative Use category for hiking, horseback riding, and full-size administrative use;
- 25.6 miles in the Non-Motorized Single Track travel use category for hiking, horseback riding, and mechanized use (approximately 24.6 miles of proposed route construction would occur).
- 2.9 miles of routes in the Administrative Uses Only category; motorized or mechanized uses by the public would not be allowed.
- 17.9 miles closed to all modes of travel except for authorized users.

Seasonal Closures

All designated routes in the Norwood-Burn Canyon Area would be closed to motorized and mechanized travel from December 1 to April 30 to prevent disturbance to wintering big game. Any exceptions to the listed dates would be made by the authorized officer and would be implemented according to appropriate notification and posting, and or according to other appropriate regulations. Foot and horse travel would be allowed.

Travel Management Support Facilities

Up to five travel management support facilities would be implemented to support the travel management plan and help ensure success in meeting goals and objectives including meeting the needs of the public and for health and safety concerns. See Appendix B for a map of facility location.

Design Features

The following additional design features would be implemented to reduce or eliminate resource impacts.

- Pets must remain on a leash at all trailheads and under audible or physical control on the routes.
- BLM would make a recommendation to San Miguel County to allow unlicensed OHV vehicle use on County Road W35.
- BLM would make a recommendation to San Miguel County to vacate County Road Z39 past the private land access.

Alternative 1:

This alternative includes the management objectives and actions in the section above headed “Management Common to All Alternatives” and “Management Common to Proposed Action and Alternatives 1 and 2”.

The objective for alternative 1 would emphasize enhancing and protecting wildlife habitat while providing quality non-motorized recreation travel opportunities and public access. Opportunities for all modes of travel would have greater restrictions and would be managed to meet the goals and objectives for this alternative. See Appendix B for a map of designated routes in Alternative 1.

Travel Management Plan

This TMP would identify and designate (see Table 1):

- 3.0 miles of routes in the 4WD-2WD travel use categories for motorized and non- motorized travel.
- 28.1 miles of non-motorized routes consisting of
 - 9.5 miles in the Non-Motorized & Non-Mechanized, Single Track travel use category for hiking and horseback riding (approximately 6.3 miles of proposed route construction would occur);
 - 2.7 miles in the Non-Motorized & Non-Mechanized, Single Track and Administrative Use category for hiking, horseback riding, and full-size administrative use;
 - 15.9 miles in the Non-Motorized Single Track travel use category for hiking, horseback riding, and mechanized use (approximately 12.5 miles of proposed route construction would occur).
- 4.4 miles of routes in the Administrative Uses Only category. Motorized or mechanized uses by the public would not be allowed.
- 18.6 miles to be closed to all modes of travel except authorized users.

Seasonal Closures

All designated routes in the Norwood-Burn Canyon Area would be closed to all modes of travel (motorized, mechanized, horse and hiking) from December 1 to April 30 to prevent disturbance to wintering big game. Any exceptions to the listed dates would be made by the authorized officer and would be implemented according to appropriate notification and posting, and or according to other appropriate regulations.

Travel Management Support Facilities

Maximum of three travel management support facilities would be implemented to support the travel management plan and help ensure success in meeting the goals and objectives, including for health and safety reasons, as well as natural resource protection. See Appendix B for a map of locations of these facilities.

Design Feature

The following additional design features would be implemented to reduce or eliminate resource impacts.

- Pets must remain on a leash at all times, including at trailheads and on the routes.
- BLM would make a recommendation to San Miguel County to vacate County Road Z39.

Alternative 2:

This alternative includes the management objectives and actions in the section above headed “Management Common to All Alternatives” and “Management Common to Proposed Action and Alternatives 1 and 2”.

The objectives for Alternative 2 would emphasize providing for a motorized and non-motorized multi-use recreation area. Opportunities for all modes of travel would be available and managed to meet the goals and objectives for this alternative. See Appendix B for a map of designated routes in Alternative 2.

Travel Management Plan

This TMP would identify and designate (see Table 1):

- 46.5 miles of motorized routes consisting of
 - 19.2 miles in the Motorized Single Track travel use category for motorcycles, bicycles, horseback riding, and hiking (approximately 18.7 miles of proposed route construction would occur);
 - 16.7 miles in 4WD-2WD travel use categories for motorized and non-motorized travel;
 - 8.4 miles in the ATV 2-Track travel use category for ATVs, motorcycles, bicycles, horseback riding, and hiking (approximately 5.6 miles of proposed route construction would occur);
 - 2.2 miles in the ATV 2-Track and Administrative Use travel use category for ATVs, motorcycles, bicycles, horseback riding, hiking, and full-size motorized administrative use (approximately 0.2 miles of proposed route construction would occur).
- 4.7 miles in the Non-Motorized Single Track travel use category for hiking, horseback riding, and mechanized use (approximately 4.6 miles of proposed route construction would occur).
- 1.9 miles in the Hiking Only Single Track travel use category for hiking only (approximately 0.1 miles of proposed route construction would occur)
- 2.3 miles of routes in the Administrative Uses Only category. Motorized or mechanized uses by the public would not be allowed.
- 9.1 miles to be closed to all motorized and mechanized travel.

Seasonal Closures

All designated routes in the Norwood-Burn Canyon Area would be closed to motorized travel from December 1 to April 30 to prevent disturbance to wintering big game. Any exceptions to the listed dates would be made by the authorized officer and would be implemented according to appropriate notification and posting, and or according to other appropriate regulations. Mechanized (bicycles) and non-motorized/non-mechanized (foot and horse travel) would be allowed.

Travel Management Support Facilities

Up to four travel management support facilities would be implemented to support the travel management plan and help ensure success in meeting the goals and objectives. See Appendix B for a map of locations of these facilities.

Design Feature

The following additional design features would be implemented to reduce or eliminate resource impacts.

- Pets must remain under audible or physical control at trailheads and on routes. No

- leashes required.
- BLM would make a recommendation to San Miguel County to allow unlicensed OHV vehicle use on County Road W35.

No Action Alternative:

This alternative includes the actions in the section above headed “Management Common to All Alternatives”.

The objectives of the No Action Alternative would be to continue existing management and priorities wherever possible. BLM would continue the same level of resource management and protection. Management of the routes would continue to emphasize “shared use” travel opportunities along with adequate and appropriate public access within a “Limited to Existing” designation.

Travel Management Plan

Decisions in the 2010 Uncompahgre Field Office Travel Management Plan limit motorized and mechanized travel to existing routes within the Norwood-Burn Canyon Area. Table 1 shows the number of miles in each Travel Use Category for this alternative.

Travel Use Conditions

There would not be specific route restrictions or designations, travel management analysis or plan preparation, and route rehabilitation efforts, leaving the area susceptible to route proliferation. Based on current trends, visitor use levels and resource concerns would continue to increase. Management to address route rehabilitation, public and administrative access needs, protect sensitive resources, promote public safety and minimize conflicts among various uses of public lands would continue to be under- implemented. See Appendix B for a map of the No Action Alternative for existing inventoried routes.

Motorized and mechanized use would continue to be permitted on all existing routes.

All Public Lands and uses on Public Lands would continue to be managed according to new BLM policies or regulations as they become effective.

Travel Management Support Facilities

Facilities to support travel management would be considered on a case-by-case basis in this alternative, and evaluated/approved after additional NEPA analysis.

Access onto Public Lands from Private Lands

Motorized and non-motorized entry onto public lands from adjacent private lands would continue to be permitted on existing routes.

Follow-on Actions

The actions below would be implemented:

Special Recreation Permits would be considered, subject to appropriate environmental

documentation and stipulations that would be developed during the processing of these applications.

ADAPTIVE MANAGEMENT

As the Travel Management Plan decision begins to be implemented and monitored, it would be observed whether the goals and objectives are being achieved over time. Determinations would be made based on monitoring results, and adjustments in implementation or monitoring would be made as needed in order to assure that the goals and objectives are being achieved. Adaptive management would be applied as the TMP is being implemented. Monitoring is an essential component of the adaptive management strategy. Adaptive management also recognizes that sometimes there is incomplete data when managing natural resources and that through continued research and monitoring of the effects of implementing decisions and actions, new information will be developed. This information can be reevaluated and incorporated into the management plan, and practices can be adjusted accordingly.

ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD

Numerous other alternatives could have been developed for this Travel Management Plan; however, the three action alternatives adequately address a reasonable range of alternatives. In addition, the alternatives brought forward in this Environmental Assessment (EA) cover a wide variety of options for many of the routes.

SCOPING AND ISSUES

The BLM initially held public scoping for the proposed single track system in April 2012. The original proposal entailed constructing new single track routes within the Norwood-Burn Canyon Planning Area. During the scoping period approximately 33 comments were received revealing several issues requiring attention in conjunction with the proposal of new routes. In order to address these issues, the decision was made to conduct a comprehensive travel management plan for the area. A second scoping comment period was initiated in August 2012. The public was notified through press releases, web site postings, and letters sent to approximately 93 individuals and groups who had expressed an interest in participating in the travel management planning effort. Comments from both periods of public scoping were considered during alternative development and the route by route analysis.

At the close of the second public scoping period, the Uncompahgre Field Office had received comments from 84 individuals and organizations. These comments along with the original comments were placed into subject categories and summarized. These categories were determined to be the issues and concerns to be addressed in the different alternatives:

- | | |
|--|---|
| <input type="checkbox"/> Access and Transportation | <input type="checkbox"/> Noise |
| <input type="checkbox"/> Cultural and Historic Resources | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Land Health and Threats | <input type="checkbox"/> Multiple-use |
| <input type="checkbox"/> Law Enforcement and Public Safety | <input type="checkbox"/> Socioeconomics |

- Soils
- Vegetation

- Water Quality
- Wildlife

See Appendix C for a general summary of the comments.

After identifying the agency and stakeholder group issues and concerns, the BLM Travel Management Planning Team began working on goals and objectives for the planning area.

Stakeholder comments were an important part of the planning process, especially for identifying social component issues, which were considered by the team when drafting the goals and objectives for this plan. The goals and objectives then guided the analysis of the routes within the travel network system alternatives.

PLAN CONFORMANCE REVIEW

The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5-3, BLM 1617.3):

Name of Plan: San Juan/San Miguel Planning Area Resource Management Plan

Date Approved: September 1985

Decision Number/Page and Language:

Recreation Resource Management Decisions – Chapter 2, pg. 13-14:

General: A wide range of outdoor recreation opportunities will continue to be provided for all segments of the public, commensurate with demand. Routes and other means of public access will continue to be maintained and developed where necessary to enhance recreation opportunities and allow public use. Developed recreation facilities receiving the heaviest use will receive first priority for operational and maintenance funds.

Travel Planning and Motorized Vehicle Use: Travel planning, including the designation of areas open, limited, and closed to motorized vehicle access, will remain a priority for public land. Major limited categories include: areas limited except for existing (or designated) routes (or ways), and other limitations as needed by management objectives.

Wildlife Management Decisions – Chapter 2, pg. 12: Seasonal restrictions will continue to be applied where they are needed to mitigate the impacts of human activities on important seasonal wildlife habitat. The major types of seasonal wildlife habitat and the time periods when restrictions may be needed are shown in Table 2. (Elk and mule deer winter range seasonal closures from December 1 through April 15.)

Name of Plan: Uncompahgre Resource and San Juan/San Miguel Management Plan Amendments

Date Approved: June 2010

Decision Number/Page and Language:

OHV Designation Changes – Proposed Action, pg. 7 (Table 1) and 8

OHV designations on BLM-managed lands within the planning area would be changed to “Limited to Existing Routes”.

Standards for Public Land Health: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. A finding for each standard, is applicable, will be made in the environmental analysis (next section).

Standard	Definition/Statement
#1 Upland Soils	Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate, land form, and geologic processes. Adequate soil infiltration and permeability allows for the accumulation of soil moisture necessary for optimal plant growth and vigor, and minimizes surface runoff.
#2 Riparian Systems	Riparian systems associated with both running and standing water, function properly and have the ability to recover from major surface disturbances such as fire, severe grazing, or 100-year floods. Riparian vegetation captures sediment, and provides forage, habitat and bio-diversity. Water quality is improved or maintained. Stable soils store and release water slowly.
#3 Plant and Animal Communities	Healthy, productive plant and animal communities of native and other desirable species are maintained at viable population levels commensurate with the species and habitat's potential. Plants and animals at both the community and population level are productive, resilient, diverse, vigorous, and able to reproduce and sustain natural fluctuations, and ecological processes.
#4 Threatened and Endangered Species	Special status, threatened and endangered species (federal and state), and other plants and animals officially designated by the BLM, and their habitats are maintained or enhanced by sustaining healthy, native plant and animal communities.
#5 Water Quality	The water quality of all water bodies, including ground water where applicable, located on or influenced by BLM lands will achieve or exceed the Water Quality Standards established by the State of Colorado. Water Quality Standards for surface and ground waters include the designated beneficial uses, numeric criteria, narrative criteria, and anti-degradation requirements set forth under State law as found in (5 CCR 1002-8), as required by Section 303(c) of the Clean Water Act.

AFFECTED ENVIRONMENT and ENVIRONMENTAL CONSEQUENCES

This chapter provides a description of the human and environmental resources that could be affected by the Proposed Action or Alternatives, including Elements specified by statute, regulation or executive order. Other items are relevant to the management of public lands in general, the Standards for Public Land Health, or to the BLM Uncompahgre Field Office (UFO) in particular. This chapter presents comparative analyses of the direct, indirect and cumulative effects on the affected environment stemming from the implementation of the Proposed Action or other alternatives.

Potential effects to the resources/concerns in the table (below) were evaluated to determine if detailed analysis is necessary.

Elements	¹ Not Present	² Present / No Analysis Needed	³ Present / Requires Further Analysis	Rationale if not Analyzed
Air Quality		X		Air Quality was considered. Preliminary analysis showed there would not be noticeable difference between alternatives.
ACEC	X			There are not any Areas of Critical Environmental Concern in the planning area.
Wilderness	X			There are no wilderness areas or WSAs in the planning area.
Lands with Wilderness Characteristics	X			There are not any lands with wilderness characteristics in the planning area.
Wild and Scenic Rivers		X		Naturita Creek has been determined to be eligible for inclusion in the National Wild and Scenic River System. Although some routes would be within (slightly) the .25 mile study corridor, they would not be seen, affect the ORVs or change the preliminary classification.
Cultural			X	
Native American Religious Concerns		X		There are no known Traditional Cultural Properties or culturally sensitive sites or Areas within the planning area. There are no known or anticipated Native American Religious Concerns for the planning area.
Farmlands, Prime/Unique	X			There are not any prime or unique farmlands in the planning area.
Soils			X	
Vegetation			X	
Invasive, Non-native Species			X	
Threatened and Endangered Species			X	
Migratory Birds			X	
Wildlife, Terrestrial			X	
Wildlife, Aquatic			X	

Elements	¹ Not Present	² Present / No Analysis Needed	³ Present / Requires Further Analysis	Rationale if not Analyzed
Wetlands & Riparian Zones		X		No routes in any of the alternatives cross riparian zones; there will be no impacts to riparian zones. Any new routes in the vicinity of wetland vegetation will be located to avoid the wet areas and thereby eliminate impacts to the wetland features.
Floodplains		X		Neither the Proposed Action nor Alternatives 1 and 2 have any proposed travel routes that would directly disturb the floodplain associated with Naturita Creek. Accelerated sediment from route construction would not be great enough to interfere with the floodplain.
Water -- Surface			X	
Water -- Ground			X	
Wastes, Hazardous or Solid		X		There is the potential for trash dumping in all alternatives, as well as incidental spill of oil or fluids from vehicles. It is not considered to be an issue that warrants analysis.
Environmental Justice		X		Environmental justice concerns associated with this project are not anticipated. Full analysis is not needed.
Access			X	
Transportation			X	
Cadastral Survey		X		Trails will not impact survey markers, and are not close enough to boundaries to warrant a cadastral survey.
Realty Authorizations		X		No impacts would occur to existing land use authorizations
Range Management		X		Administrative access routes to maintain range improvement projects, as shown on the Proposed Action and Alternative maps, will remain open. Other than miles of route livestock may use, there is not noticeable difference in impacts between alternatives.

Elements	¹ Not Present	² Present / No Analysis Needed	³ Present / Requires Further Analysis	Rationale if not Analyzed
Fire and Forest		X		Limiting use type on some routes could increase the response time for firefighting apparatus, but emergency entry will be allowed for emergency equipment
Noise			X	
Recreation			X	
Visual Resources		X		Potential visual impacts from new routes or travel management support facilities would be minimal as a result of good design and site location. There would not noticeable difference in impacts between alternatives.
Geology and Minerals		X		All public lands would remain available for leasable, locatable, and saleable minerals. Mineral material activities would be conducted according to BLM authorizations and subject to stipulations included in the authorizations.
Paleontology		X		Route construction and use will not excavate into the bedrock outcrops, and the potential for causing significant impacts to paleontological resources is low.
Law Enforcement			X	
Socio-Economics			X	

¹Not present: the element is not present in the area impacted by the proposed or alternative actions.

²Present but no analysis needed: the element may be present, but not affected to a degree that detailed analysis is required.

³Present and requires further analysis: the element is 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.

CULTURAL RESOURCES

Affected Environment:

BLM conducted a Class III Cultural Resource Inventory for Phase 1 of the planning area in 2012 which consisted of approximately 1800 acres. The Cultural Resource Inventory included field visits to the area and a file search through the BLM and online through the Colorado Historical

Society, Office of Archaeology and Historic Preservation, as well as a search for relevant traditional cultural properties. This review indicated that there were eight re-evaluated sites and forty-six isolated finds recorded during the inventory. This survey found that there were three prehistoric sites field evaluated as potentially eligible for listing on the National Register of Historic Places (NRHP). The remaining sites and isolated finds were field evaluated as not eligible.

Environmental Consequences:

Proposed Action, Alternative 1 and Alternative 2:

There are three eligible sites within the Area of Potential Effects. After seeing the results of the Class III Cultural Resource Inventory, BLM re-designed the affected routes to avoid the eligible historic properties. BLM in consultation with Colorado SHPO finds that with the resulting avoidance of the sites and monitoring program, there will be no impact to any eligible cultural resources under any action alternative.

No Action Alternative:

There will be no new impacts to known National Register eligible properties. Undiscovered prehistoric cultural resources that may exist within the planning area would continue to receive impacts from recreational users.

SOILS (includes a finding on Standard 1)

Affected Environment:

The soils on the planning area are largely a product of the weathering of the local geologic parent material, climatic conditions, and the soils topographic position on the landscape. The sedimentary sandstone and shale formations that dominate the surface geology of the area produce soils having textures dominated by loams and fine sandy loams. The deeper soils with little rock content are mostly found on the interior portions of mesa tops and terraces adjacent to drainage channels. The shallower, rocky soils are found along mesa rims and canyon side slopes. The soils in the lower and more arid portions of the planning area are mostly classified in the soil orders Aridisols (soils of dry climate regimes) and Entisols (soils with very limited development), and have little organic matter throughout their vertical profile. At the higher elevations, soils are mostly in the soil order Mollisols (soils having darkened, organic matter enriched surfaces). The soils on the planning area are described in more detail in the Soil Survey of San Miguel Area, Colorado (USDA, Natural Resources Conservation Service).

The vegetation cover over most of the planning area is dominated by either Pinyon-juniper woodland or sagebrush/grass communities. Another important soil cover component is Biological Soil Crust (BSC). BSC are an important component of arid soils and are comprised of a complex mosaic of cyanobacteria, green algae, lichens and mosses, and other bacteria. BSC serve many beneficial functions to protect and enhance soil productivity, including acting as a soil surface stabilizer to protect soils from erosive forces (USDI, Bureau of Land Management 2001). BSC are most prevalent on the more arid portions of the planning area, and on the less steep slopes.

During the years 2005-2006 a Land Health Assessment (LHA) was conducted on the planning area. Soil health was assessed using the following indicators: evidence of excessive rills and pedestals, active gullies, appropriate groundcover and plant canopy cover (including BSC), adequate plant litter accumulation, minimal litter movement, appropriate soil organic material, and plant species diversity and presence of vigorous, desirable plants. Much of the planning area's soils were rated as meeting the soil standard but with problems, meaning at least two of the above soil surface indicators were not adequate for the site. The specific ratings for the planning area are contained in the Norwood Land Health Assessment 2005-2006.

The soil map units that occur on the planning area are listed in Table 6 and shown in Figure 1, and all have the following similar characteristics: they have no or little potential for flooding, are low in salinity, have moderate to low potential for wind erosion, and most of the soils have a high or very high runoff potential, especially on the steeper slopes. The exceptions are the Barx and Mitch soils which have low to medium runoff potential. Selected soil ratings that show a high level of variability and could affect the impacts of the plan implementation are shown in Table 6 and explained in the Table's footnotes.

None of the affected soils are considered suitable for prime farmland, except for Acree, Barx, Callan and Mitch loams but only if irrigated.

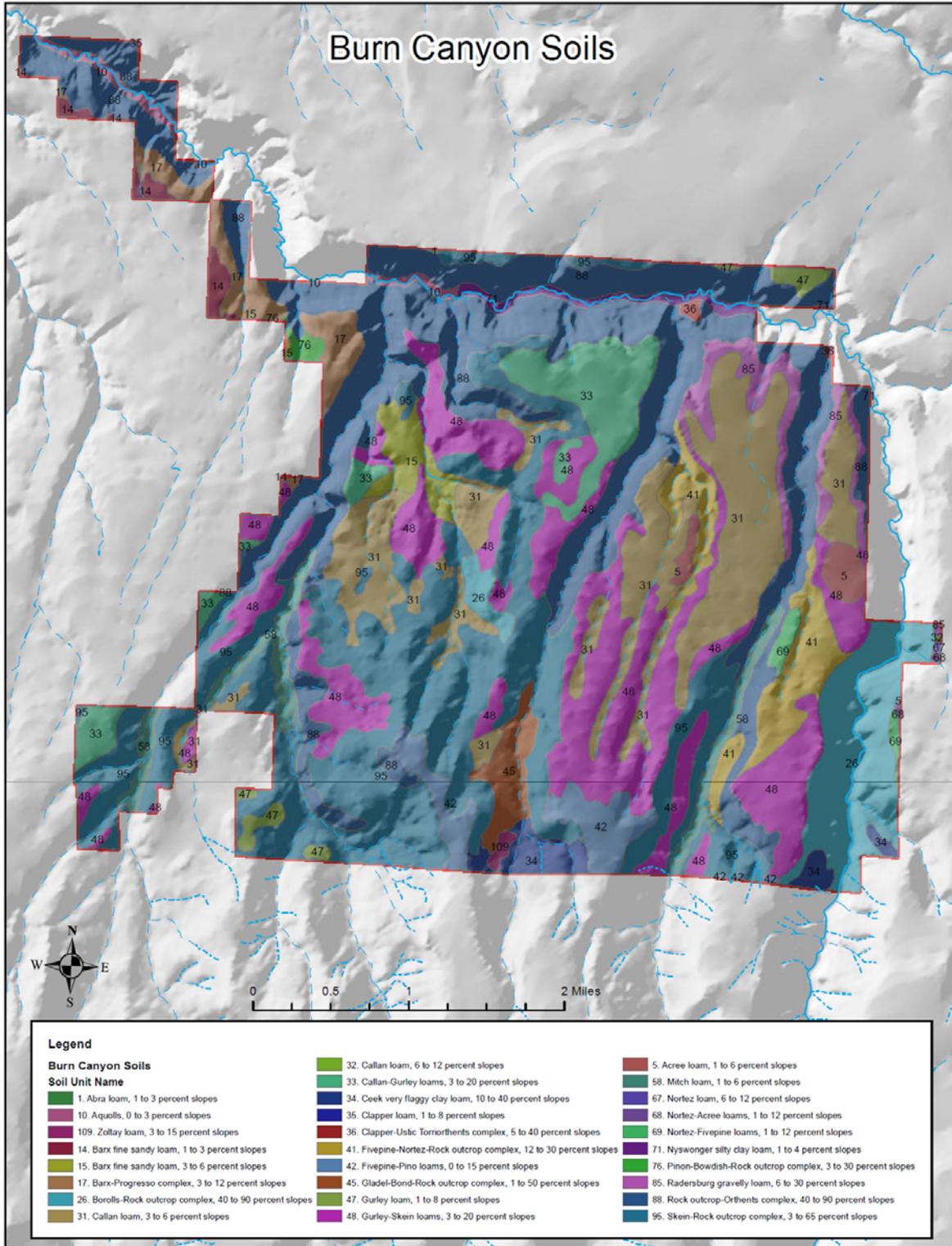


Figure 1. Soil Map Units in the Burn Canyon Travel Management Planning Area

Table 6. Soil Units Within the Travel Management Planning Area and Selected Soil Attributes¹

Soil Map Unit	Landform	Acres in Planning Area	Wind Erodibility Class²	Soil Limitations for Paths, Routes, and Off Road Motorcycle Routes³	Erosion Hazard from Unsurfaced Routes⁴
5 - Acree loam, 1 to 6 percent slopes	Mesas and Structural Benches	76	6	No Limitations	Moderate
14 - Barx fine sandy loam 1-3% slopes	Mesas and Terraces	63	3	No Limitations	Slight
15 - Barx fine sandy loam 3-6% slopes	Mesas and Terraces	134	3	No Limitations	Moderate
17 - Barx-Progresso Complex 3-12% slopes	Mesas and Terraces	214	3	No Limitations	Moderate
26 - Borolls-Rock outcrop complex, 40 to 90 percent slopes	Canyons and Mesas	565	3	Very Limited (steep slopes and large rock)	Severe
31 - Callan loam, 3 to 6 percent slopes	Mesas and Terraces	1,255	5	Somewhat Limited (dust)	Moderate
33 - Callan-Gurley loams, 3 to 20 percent slopes	Mesas and Terraces	424	5	Somewhat Limited (dust)	Severe
34 - Ceek very flaggy clay loam, 10 to 40 percent slopes	Mountain Slopes	139	8	Very Limited (steep slopes and large rock)	Moderate
41 - Fivepine-Nortez-Rock outcrop complex, 12 to 30 percent slopes	Mesas	348	6	Somewhat to Not Limited (steep slopes)	Severe
42 - Fivepine-Pino loams, 0 to 15 percent slopes	Mesas	223	6	No Limitations	Moderate
45 - Gladel-Bond-Rock Outcrop complex 1-50% slopes	Escarments, Mesas, Structural Benches	129	3	Very to Somewhat Limited (steep slopes)	Severe
48 - Gurley-Skein loams, 3 to 20 percent slopes	Mesas and Terraces	1,621	6	Somewhat Limited (dust)	Severe
58 - Mitch loam 1-6% slopes	Drainage ways, Valley Floors	223	6	No Limitations	Moderate
85 - Radersburg gravelly loam, 6 to 30 percent slopes	Mesas, Ridges, and Terraces	213	7	Somewhat Limited (dust and steep slopes)	Moderate
88 - Rock outcrop-Orthents complex, 40 to 90 percent slopes	Canyons, Mesas, and Structural Benches	2,443	NA	NA	Severe

Soil Map Unit	Landform	Acres in Planning Area	Wind Erodibility Class ²	Soil Limitations for Paths, Routes, and Off Road Motorcycle Routes ³	Erosion Hazard from Unsurfaced Routes ⁴
95 - Skein-Rock outcrop complex, 3 to 65 percent slopes	Canyons and Mesas	2,273	6	Somewhat Limited (dust and steep slopes)	Severe
109 - Zoltay loam 3-15% slopes	Alluvial Fans, Canyons, Mesas	14	6	No Limitations	Slight

¹ Data Source: Soil Survey of San Miguel County, Colorado

² A wind erodibility group (WEG) consists of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas (unsurfaced travel routes experience disturbance approximating cultivated soils). The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible.

³ Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the recreational uses. **Not limited** indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. **Slightly limited** indicates that the soil has features that are favorable for the specified use. The limitations are minor and can be easily overcome. Good performance and low maintenance can be expected. **Somewhat limited** indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. **Very limited** indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

⁴ The ratings in this interpretation indicate the hazard of soil loss from unsurfaced routes. The ratings are based on the soil erosion factor K, slope, and content of rock fragments. The hazard is described as "slight," "moderate," or "severe." A rating of "slight" indicates that little or no erosion is likely; "moderate" indicates that some erosion is likely, that the routes may require occasional maintenance, and that simple erosion-control measures are needed; and "severe" indicates that significant erosion is expected, that the routes require frequent maintenance, and that costly erosion-control measures are needed.

Environmental Consequences:

Impacts Common to all Alternatives:

Commonly, routes alter and expand drainage patterns, and collect and concentrate runoff which can accelerate erosion rates above natural conditions. Routes across the planning area include locations in both uplands and small channel bottoms, with variable soil conditions. Routes on areas dominated by either rock outcrop or high rock content in the soil matrix are somewhat resilient to surface impacts, while the finer textured soils containing little rock in the near surface horizons are more prone to accelerated erosion when disturbed. Soil impacts from routes commonly include an increase in the soils bulk density from compaction, loss of vegetation and Biological Soil Crust (BSC), and destabilization of physical soil surface crusts and aggregates, all of which can accelerate soil loss from erosion. Overall, soil surface erosion from routes is dependent on physical soil factors, route grade and position on the landscape, traffic type and volumes, the effectiveness of drainage structures and maintenance, and user education.

Due to the design features to locate, monitor, and maintain routes to minimize erosion, and the “adaptive management” principles this plan would follow, neither the Proposed Action nor Alternatives 1 and 2 would alter the soil resource to result in changes to the ratings in the LHA.

Recreation Guidelines developed by the BLM (USDI, Bureau of land Management 2000)

are intended to be applied to all public lands. The intent of the guidelines is to achieve and sustain healthy soil resources from recreational activities, including modes of travel, and include:

1. Manage recreational activities to maintain sufficient vegetation on upland areas to protect the soil from wind and water erosion and to buffer temperature extremes.
2. Minimize disturbances and manage recreation use in riparian areas to protect vegetation, fragile soils, springs, and wetlands.
3. Plan and locate routes and developments away from riparian and wetland areas, and highly erosive soils.
4. Reduce stream crossings to the minimal number dictated by the topography. Reduce sedimentation and compaction associated with stream crossings.

Since the above guidelines would be applied to some degree on the planning area for all alternatives, including the No Action Alternative, the primary attributes that impact soils resources between the alternatives include the miles and types of routes on sensitive soils (erodible soils or soils with limitations (Table 6), the miles of routes proposed for closure and rehabilitation, the implementation of design features to protect soils, implementing a monitoring and maintenance plan, the construction of support facilities, user education, and implementing the plan under “adaptive management” principles, allowing for corrective action to be taken as needed, such as route relocation, and seasonal closure due to excessively wet or dry periods.

Proposed Action:

Under the Proposed Action, travel would be restricted to designated routes, and all off-route travel would be prohibited except for horseback or foot travel. About 17.9 miles of existing routes, 9 miles of which are on soils with a severe erosion potential, would be closed and rehabilitated, reducing soil erosion. Compared to the No Action Alternative there would be a 51% reduction in routes, which includes a 74% reduction in motorized routes.

Approximately, 30 miles of designated (proposed or existing) routes occur on soils with a severe hazard for water erosion (Table 6), a 31% increase from the No Action Alternative. These routes may require more intensive monitoring and maintenance compared to routes on other soil types. Approximately 7.9 miles of designated routes occur on soils with a high potential to produce fugitive dust with some types of motorized use (Table 6), a 78% reduction from the No Action Alternative. These routes may have periods with restricted use or closures, especially during drought conditions. Most of the proposed routes occur on soils that the 2005-2006 LHA found to be “meeting with problems”. However, with the implementation of this plan’s support facilities, public education, design features, the monitoring and maintenance plan, and adhering to “adaptive management” principles, accelerated soil erosion from both wind and water would be minimized on the proposed designated route system. Some small amount of accelerated soil erosion would be expected with implementing the proposed action, especially during construction activities.

Proposed Action, Standard 1 finding:

Soil productivity and soil surface conditions would improve over time as selected existing routes are closed and rehabilitated. The proposed routes and support facilities would be designed and maintained in accordance with the Design Features which complies with the

BLM's Recreation Management Guidelines to Meet Public Land Health Standards. Collectively, these components of the proposed action would result in substantially less impact to the soil resource than the No Action Alternative and would meet the intent of Colorado's Public Land Health Standard #1.

Alternative 1:

With the implementation of Alternative 1, travel would be restricted to designated routes, and all off-route travel would be prohibited except for horseback or foot travel. About 18.6 miles of existing travel routes, 9.2 miles of which are on soils with a severe erosion potential would be closed and rehabilitated, reducing soil erosion. Approximately, 22.8 miles of designated (proposed and existing) routes occur on soils with a severe hazard for water erosion (Table 6), a 12% increase from the No Action Alternative. These routes may require more intensive monitoring and maintenance compared to routes on other soil types. Approximately 2.2 miles of designated routes occur on soils with a high potential to produce fugitive dust with some types of motorized use (Table 6), a 94% reduction from the No Action Alternative. These routes may have periods with restricted use or closures, especially during drought conditions. Most of the proposed routes occur on soils that the 2005-2006 LHA found to be "meeting with problems". However, with the implementation of this plan's support facilities, public education, design features, the monitoring and maintenance plan, and adhering to "adaptive management" principles, accelerated soil erosion from both wind and water would be minimized on this alternative's designated route system. Some small amount of accelerated soil erosion would be expected with implementing Alternative 1, especially during construction activities.

Alternative 1, Standard 1 finding:

Soil productivity and soil surface conditions would improve over time as selected existing routes are closed and rehabilitated. The proposed routes and support facilities would be designed and maintained in accordance with the Design Features which complies with the BLM's Recreation Management Guidelines to Meet Public Land Health Standards. Collectively, these components of Alternative 1 would result in less impact to the soil resource than the No Action Alternative and would meet the intent of Colorado's Public Land Health Standard #1.

Alternative 2:

With the implementation of Alternative 2, travel would be restricted to designated routes, and all off-route travel would be prohibited except for horseback or foot travel. About 3.5 miles of existing routes that occur on soils with a severe erosion hazard would be closed and rehabilitated, reducing soil erosion. Approximately 39 miles of designated routes occur on soils with a severe hazard for water erosion (Table 6), a 47% increase from the No Action Alternative. These routes may require more intensive monitoring and maintenance compared to routes on other soil types. Approximately 14.2 miles of routes occur on soils with a high potential to produce fugitive dust with some types of motorized use (Table 6), a 61% reduction from the No Action Alternative. These routes may have periods with restricted use or closures, especially during drought conditions. Most of the proposed routes occur on soils that the 2005-2006 LHA found to be "meeting with problems". However, with the implementation of this plan's support facilities, public education, design features,

the monitoring and maintenance plan, and adhering to “adaptive management” principles, accelerated soil erosion from both wind and water would be minimized on the proposed designated route system. Some small amount of accelerated soil erosion would be expected with implementing the proposed action, especially during construction activities.

Alternative 2, Standard 1 finding:

Soil productivity and soil surface conditions would improve over time as selected existing routes are closed and rehabilitated. The proposed routes and support facilities would be designed and maintained in accordance with the Design Features which complies with the BLM’s Recreation Management Guidelines to Meet Public Land Health Standards. Collectively, these components of Alternative 2 would result in substantially less impact to the soil resource than the No Action Alternative and would meet the intent of Colorado’s Public Land Health Standard #1.

No Action Alternative:

With the No Action Alternative all of the 35.3 miles of existing roads would remain open to motorized use. Of these travel routes, 18.5 miles occur on soils with a severe hazard of water erosion (Table 6) and 35.3 miles occur on soils with a high potential to produce fugitive dust with some types of motorized use (Table 6). About 19.2 miles occur on soils that the 2005-2006 LHA found to be “meeting with problems”. Although the BLM Uncompahgre Field Office Travel Management Plan Amendment applies to the area, some additional user created routes would be expected over time. User-created routes typically do not receive the expertise needed to properly locate, or close and rehabilitate, resulting in progressively increasing accelerated soil erosion. Most of the existing routes (34.4 miles) occur on slopes less than 30%, the lack of design features and adequate monitoring and maintenance would result in some accelerated soil erosion. Other actions that would increase erosion include; the lack of support facilities such as the designed trailhead, and parking facilities to the extent of the other alternatives, which would result in progressively more acres being disturbed from diffuse parking and route use. Additionally, public education efforts to minimize impacts to soil resources would not occur at the intensity that would occur under the other alternatives and proposed action. Thus, with the No Action Alternative impacts to soil resources would progressively increase over time and result in secondary impacts to water resources described in the Surface and Ground Water Quality section.

No Action, Standard 1 finding:

Under this alternative, in the short term, soil health and productivity would likely continue to meet Land Health Standard 1 since these routes were in existence during the last Land Health Assessment, 2005-2006. However, soil productivity would be expected to decline over time as more user created routes and diffuse travel use increases. The lack of design features to keep route erosion at a minimum would also add to the decline of soil productivity. Consequently, ground surface disturbance would increase, decreasing the potential for healthy native vegetation communities and result in accelerating soil erosion, likely resulting in some areas failing to meet Land Health Standard 1 in the future.

VEGETATION (includes a finding on Standard 3)

Affected Environment:

Upland vegetation in the planning area is primarily composed of existing and burned pinyon-juniper woodland, which makes up about 83% of the area. Small areas of sagebrush occupy approximately 15% of the area and riparian vegetation makes up the remaining 2%. The 2002 Burn Canyon Fire burned 3,068 acres across the southern portion of the planning area. Low stature sagebrush/grass and mountain shrub/grass communities now make up the majority of vegetation in this burned area. A detailed description of these vegetation classes can be found in the Norwood Land Health Assessment (Uncompahgre Field Office 2005-2006).

The Colorado Natural Heritage Program (CNHP) has identified Naturita Creek, in the north-central part of the planning area, as important for biodiversity conservation. CNHP describes this Coyote Willow/Mesic Graminoid plant community as a good occurrence and globally demonstrably secure. No other areas or vegetation communities of important biodiversity value have been noted within the planning area.

The state of vegetation health in the planning area was determined in 2005-2006 in the Norwood Land Health Assessment. The ratings for Standard 3 (Healthy Native Plant Communities) are shown in the table below by total acreage and percentage.

Standard 3 Rating for Healthy Plant Communities	Total Acreage in Planning Area (% in parentheses)
Meeting	5,614 (57%)
Meeting with Problems	3,476 (35%)
Not Meeting	0 (0%)
Unknown or Not Upland	762 (8%)

The majority of the planning area has been documented to be in relatively good condition. Low cool and warm season grass cover, low perennial forb cover, pinyon-juniper invasion and pinyon decline, and the presence of exotic plants (mostly along county roads and Naturita Creek) are the primary problems identified in the planning area. Past vegetation treatments and the seral stage of the vegetation are the primary factors contributing to these problems, while drought is also a contributing factor.

Environmental Consequences

Impacts Common to all Alternatives:

Routes generally degrade native vegetation. This has been well documented by numerous researchers in many locations (Forman and Alexander, 1998, Walker and Everett, 1987, Trombulak and Frissell, 2008). Vegetation degradation ranges from complete loss of vegetation on the route surface to lesser impacts on the adjacent plant community. These lesser impacts include reductions in plant vigor due to erosion, sedimentation, and dust deposition, introduction of weeds, increased browsing levels from enhanced animal access in dense vegetation types, and impacts such as woodcutting, fires, and littering, from increased human presence. These off-route impacts often extend up to many feet on either

side of a route in an effect researchers have termed “the road influence zone” (RIZ). In general, an area with more routes (expressed as higher route density) would have more degraded vegetation than an area with lower route density, with all other factors being equal. A route density of one route mile per square mile of land area is estimated to directly or indirectly impact approximately 1% of the vegetation within that square mile, assuming a RIZ of 25’ measured from the midline of the route.

The amount of degradation can vary depending on different route characteristics. These characteristics include the route width, the type and level of use the route receives, the type of vegetation the route passes through, and the substrate the route passes over. The impacts of these characteristics are described as follows:

Route Width: Wider routes remove and impact more vegetation than narrower routes.

Use Level: Heavily used routes introduce more weeds, generate more dust and erosion, and require more maintenance, creating more off-route impacts to vegetation than less heavily travelled routes.

Use Type: BLM assumes for this analysis that routes with limited uses generally have fewer off-route impacts to vegetation than routes which have less limitations. Lower use levels are the result of excluding some users.

Vegetation Type: Tall, impenetrable, or sprouting vegetation is more likely to resist route widening and reduce the width of the RIZ for sediment transport, dust spread, and off-route human disturbance. Low, non-sprouting, semi-desert vegetation generally does not present as much of a barrier, and as a result, has a wider RIZ for these types of degradation.

Substrate: Routes which pass over soft substrates and mud generally cause more impacts to vegetation than those which pass over rocks or sandy soils.

Closing existing routes can allow for natural re-vegetation to occur. Because of soil compaction, this can often take many years. In areas where the area of compacted soil is wide or particularly compacted, re-vegetation will be enhanced by loosening the soil and seeding.

The density of routes as calculated across the entire planning area is used as the primary measure to assess impact on upland vegetation. This is in turn evaluated by use type (which encompasses route widths), and Land Health Standard 3 ratings for healthy native plant communities. The impacts will be discussed in more detail under the evaluation of the different alternatives.

Proposed Action:

The proposed action would result in a route density of 3.2 miles per square mile, potentially affecting about 3.2% of the vegetation in the planning area. This is more than in the No Action Alternative. Approximately 10% of that route density would be open to full size vehicles with no restrictions on use type for BLM-administered routes. That would likely result in the full level of vegetation impact as described above on approximately 0.3% of the vegetation in the planning area, which is less than the No Action Alternative. The degree of

impact would be reduced on the remaining 2.9% of impacted vegetation in the planning area. About 43% of the route miles in the Proposed Action would be limited to non-motorized single track which would have the effect of reducing direct and indirect impacts to vegetation when compared to unlimited use types and greater route widths.

Approximately 17 miles of routes pass through low stature sagebrush and other vegetation which would lead to greater levels of vegetation impact, as discussed above. However, this is less than the No Action Alternative. None of the routes in the Proposed Action pass through areas of riparian vegetation. Approximately 3 acres of vegetation would be disturbed by the construction of travel management support facilities.

Finding on the Public Land Health Standard for plant and animal communities

(partial, see also Wildlife, Aquatic; Wildlife, Terrestrial; and Invasive, Non-native Species):

The Proposed Action would allow a total of 16.1 miles of route in areas that are currently meeting Standard 3 with problems. Vegetation impacts would be reduced on approximately 14.5 miles of these routes due to use or size restrictions. Current land health problems are related to past vegetation treatments and the seral stage of the plant community. The types of impacts associated with limited use routes are unlikely to affect the current status of these problems or the land health rating.

Alternative 1:

Alternative 1 would result in a lower route density (3.1 miles per square mile) than all other alternatives except for the No Action Alternative, with 3.1% of the vegetation in the planning area potentially affected. This alternative has 8% of routes classified as open to full sized vehicles which would mean that only 0.2% of the vegetation in the planning area would be subject to unmitigated, route-related impacts. This amount of impact is also less than all other alternatives. Use restrictions and limitations would reduce the extent and degree of impacts on the remaining impacted 2.9% of vegetation in the planning area. Approximately 25% of the routes in this alternative would be limited to non-motorized/non-mechanized single track and another 33% would be limited to non-motorized single track. Alternative 1 has 16.4 miles of routes that will pass through sagebrush and other low stature vegetation which is less than the Proposed Action and No Action alternatives. No routes pass through riparian areas and the amount of vegetation disturbance associated with the construction of travel management support facilities will be the same as the proposed action.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic; Wildlife, Terrestrial; and Invasive, Non-native Species):

Alternative 1 would allow a total of 13.7 miles of routes in areas that are currently meeting Standard 3 with problems. Vegetation impacts would be reduced on approximately 13.0 miles of these routes due to use or size restrictions. Current land health problems are related to past vegetation treatments and the seral stage of the plant community. The types of impacts associated with limited use routes are unlikely to affect the current status of these problems or the land health rating.

Alternative 2:

Alternative 2 would result in a higher route density (3.5 miles per square mile) than any of

the other alternatives, with a higher percentage of the vegetation (3.5%) in the planning area potentially affected. This alternative has a higher proportion of the BLM-administered routes (29%) than the Proposed Action and Alternative 1 classified as Open, resulting in 1.0% of the vegetation in the planning area receiving unmitigated, route-related impacts. Use restrictions and limitations would reduce extent and degree of impacts on the remaining 2.5% of impacted vegetation in the planning area. The largest factor in this would be the 8% of the route miles limited to non-motorized, single track use. This alternative has 20.3 miles of routes passing through sagebrush and low stature vegetation. This is more than the all the other alternatives and would create more impacts from widening and sediment transport as noted above. No routes pass through riparian areas and the amount of vegetation disturbance associated with the construction of travel management support facilities will be the same as the proposed action.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic; Wildlife, Terrestrial; and Invasive, Non-native Species):
Alternative 2 would allow a total of 18 miles of route in areas that are currently meeting Standard 3 with problems. Vegetation impacts would be reduced on approximately 10.5 miles of these routes due to use or size restrictions. Current land health problems are related to past vegetation treatments and the seral stage of the plant community. The types of impacts associated with limited use routes are unlikely to affect the current status of these problems or the land health rating.

No Action Alternative:

The No Action Alternative would result in a route density of 3.1 miles per square mile, potentially affecting about 3.1% of the vegetation in the planning area. This alternative has approximately 69% of the routes classified as open, resulting in 2.1% of the vegetation in the planning area potentially receiving unmitigated, route-related impacts from BLM-administered routes. That is higher than any of the other alternatives. This alternative results in 17.2 miles of routes passing through sagebrush and low stature vegetation. No routes pass through riparian areas. There would be no additional disturbance from the construction of new travel management support facilities but there would continue to be impacts to vegetation associated with unrestricted vehicle parking along existing routes.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic; Wildlife, Terrestrial; and Invasive, Non-native Species):
The No Action Alternative would allow a total of 9.8 miles of routes in areas that are currently meeting Standard 3 with problems. Vegetation impacts would not change. Current land health problems are related to past vegetation treatments and the seral stage of the plant community and will not likely change with the implementation of the No Action Alternative.

INVASIVE, NON-NATIVE SPECIES (includes a finding on Standard 3)

Affected Environment:

The following noxious or invasive species are known to be present in the planning area and

surrounding areas: Russian knapweed (*Ascription repens*), musk thistle (*Carduus nutans*), bull thistle (*Cirsium vulgare*), Canada thistle (*Cirsium arvense*), hoary cress (*Cardaria draba*), common burdock (*Arctium minus*), common mullein (*Verbascum L.*), downy brome (*Bromus tectorum*), horehound, (*Marrubium vulgare*), salt cedar (*Tamarix chinensis*), and field bindweed (*Convolvulus arvensis*).

Sulphur cinquefoil (*Potentilla recta*) and spotted knapweed (*Centaurea stoebe*) are two Colorado “A List” Species that are not known to be present in the planning area but have been found within 3 miles. Colorado law requires that any discovery of these two species be reported to the county weed manager and immediate control efforts must be taken.

Environmental Consequences

Impacts Common to all Alternatives:

Noxious weed species have the potential to establish along lines of disturbance created by new route and facility construction and use. Weed propagules may enter the disturbed area by natural dispersal mechanisms, on equipment used during the construction phase of routes and facilities, on vehicles and on recreation equipment. Invasion by exotics may displace native vegetation, alter the visual character of the landscape, and, if the weeds are annuals, increase susceptibility of soils to erosion or increase frequency and intensity of wildfires.

Integrated Weed Management methods appropriate to the planning area include the use of herbicides, manual removal, and mechanical removal where necessary. All herbicide applications would follow label directions and cautions, and BLM restrictions and guidelines.

Impacts Common to Proposed Action and Alternatives 1 and 2:

The proposed action and alternatives would likely create additional use in the area, which could also increase the probability of spreading existing, and introducing additional, noxious weeds into the area. Designing a sustainable designated route system and trailhead facilities would reduce noxious weed spread by concentrating use within approved areas that are easier to monitor for establishment of noxious weeds. Long term impacts would be reduced by placing weed information for trail users at trailheads and kiosks, and by implementing Design Features which minimizes route erosion and seed transport. With the successful implementation of all Design Features, long term effects to the area from invasive non-native species are expected to be neutral, and possibly improved from the current condition.

Proposed Action:

The Proposed Action has a route density of approximately 3.2 miles/square mile of planning area with associated support facilities. That is slightly higher than the No Action Alternative and could result in an increased potential for weed invasion within the planning area. However, this alternative proposes to reduce the miles of routes open to full sized vehicles (4WD/2WD) by 27.1 miles when compared to the No Action Alternative and would limit use type and level on 33.9 miles of routes (excluding administrative use). As described in the preceding Vegetation section, this will have the effect of reducing the potential for the spread of weeds.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic; Wildlife, Terrestrial; and Vegetation): With the successful implementation of the Design Features, including education, monitoring, and treatment, the proposed action should be neutral or possibly beneficial in controlling adverse impacts of noxious weeds. The proposed action therefore would maintain or improve the current status of the planning area with respect to Standard 3.

Alternative 1:

Alternative 1 proposes a route density of approximately 3.1 route miles/square mile of planning area with associated support facilities. That is lower than all other alternatives and would accordingly reduce the potential for weed spread within the planning area. This alternative would result in 30.6 fewer miles of routes classified as open to full sized vehicles (4WD/2WD) when compared to the No Action Alternative and would place restrictions on use type and the level of use on 28.1 miles of routes (excluding administrative use). As described in the preceding Vegetation section, this will have the effect of reducing the potential for the spread of weeds.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic; Wildlife, Terrestrial; and Vegetation):

With the successful implementation of the Design Features, including education, monitoring, and treatment, Alternative 1 should be neutral or possibly beneficial in controlling adverse impacts of noxious weeds. Alternative 1 therefore would maintain or improve the current status of the planning area with respect to Standard 3.

Alternative 2:

Alternative 2 proposes a route density of approximately 3.5 miles/square mile of planning area with associated support facilities. That is higher than all other alternatives and would accordingly increase the potential for weed spread within the planning area when compared to the Proposed Action and Alternative 1. However, this alternative would result in 16.9 fewer miles of routes classified as open to full sized vehicles (4WD/2WD) when compared to the No Action Alternative and would place restrictions on use type and the level of use on 36.4 miles of routes (excluding administrative use). As described in the preceding Vegetation section, this will have the effect of reducing the potential for the spread of weeds when comparing potential impacts to the No Action Alternative.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic; Wildlife, Terrestrial; and Vegetation):

With the successful implementation of the Design Features, including education, monitoring, and treatment, Alternative 2 should be neutral or possibly beneficial in controlling adverse impacts of noxious weeds. Alternative 2 therefore would maintain or improve the current status of the area with respect to Standard 3.

No Action Alternative:

Under the No Action Alternative, the route density would be 3.1 route miles/square mile of planning area. There would be no reduction in the miles of routes classified as open to full sized vehicles (4WD/2WD) which would create no potential for reducing weed spread.

There would be no new use limitations and restrictions or specific design features to reduce weed spread. Use of existing routes would continue, educational material would not be placed at trailheads, and an improved monitoring and treatment program would not be initiated.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic; Wildlife, Terrestrial; and Vegetation):

Under the No Action Alternative, the current status of this area with respect to Standard 3 would likely not change with no potential to improve. The potential for existing weed infestations to increase would continue to exist.

THREATENED, ENDANGERED, AND SENSITIVE SPECIES (includes a finding on Standard 4)

Affected Environment:

The Uncompahgre Field Office(UFO) utilizes the U.S. Fish and Wildlife Service Information, Planning, and Conservation System (IPaC) to generate the most current species list to analyze the effects of a Proposed Action on threatened, endangered and candidate species and designated critical habitat for these species (USFWS, 2013). Appendix D lists federally proposed, candidate, and listed species potentially occurring within the UFO and provides assessments for their occurrence within the planning area. Based upon this assessment, no threatened, endangered, or proposed species or critical habitats occur in the planning area, or have the potential to be affected by the proposed action, and there will be no further discussion of these species.

The list of BLM sensitive species is based upon the Colorado State Director’s Sensitive Species List (2011). Appendix E lists potentially occurring BLM sensitive species within the UFO (USDI BLM, 2012) and provides assessments for their occurrence within the planning area. In accordance with BLM Manual 6840, the goal of management is to prevent a trend toward federal listing or loss of viability for sensitive species.

Based upon this assessment, several BLM sensitive species may occur within the planning area and/or be potentially affected by the proposed project. Those species where the planning area is within the known range of the species, is likely to contain suitable habitat, and includes potential or known occurrences of that species are shown below and are discussed at the beginning of Appendix E. There will be no effect to any of the other species listed for the UFO, and there will be no further discussion of these species.

Potential Sensitive Species in the Planning Area
(See Appendix E for a discussion on each)

Bald eagle - <i>Haliaeetus leucocephalus</i>	Midget-faded rattlesnake - <i>Crotalus oreganus concolor</i>
American peregrine falcon – <i>Falco peregrines anatum</i>	Milk snake - <i>Lampropeltis triangulum taylori</i>
Northern goshawk - <i>Accipiter gentilis</i>	Northern leopard frog - <i>Lithobates pipiens</i>
Brewer’s sparrow - <i>Spizella berweri</i>	Canyon treefrog - <i>Hyla arenicolor</i>

Potential Sensitive Species in the Planning Area
(See Appendix E for a discussion on each)

Long-billed curlew - <i>Numenius americanus</i>	Roundtail chub - <i>Gila robusta</i>
White-faced ibis - <i>Plegadis chihi</i>	Bluehead sucker - <i>Catostomus discobolus</i>
Fringed myotis - <i>Myotis thysanodes</i>	Flannelmouth sucker - <i>Catostomus latipinnis</i>
Spotted bat - <i>Euderma maculatum</i>	Grand Junction milkvetch - <i>Astragalus linifolius</i>
Big free-tailed bat - <i>Nyctinomops macrotis</i>	Naturita milkvetch - <i>Astragalus naturitenis</i>
Allen's big-eared bat - <i>Idionycteris phyllotis</i>	San Rafael milkvetch - <i>Astragalus rafaensis</i>
Townsend's big-eared bat - <i>Corynorhinus townsendii</i>	Paradox Valley (Payson's) lupine - <i>Lupinus crassus</i>
	Paradox breadroot - <i>Pediomelum aromaticum</i>

Environmental Consequences:

Impacts Common to all Alternatives:

Ecosystems of the west are especially vulnerable to OHV-related activities on unpaved (gravel or dirt) routes due to the travel effects on soils and vegetation, which may take centuries to recover (Webb, 1982; Lovich and Bainbridge, 1999). Impacts of OHV activities on wildlife and their habitats are numerous and well documented (Ouren 2007). Networks of routes fragment habitat, reduce patch size, and increase the ratio of edge to interior. This may have serious consequences for sensitive species (those that cannot carry out certain aspects of their life cycles without large blocks of habitat or corridors linking habitat patches), predator-prey relationships, and overall population dynamics. In particular, fragmentation and edges created by OHV routes may have strong effects on animal movement patterns. Precluding or inhibiting animal movements effectively diminishes dispersal to and re-colonization in other areas, thus increasing the likelihood of local extirpations. Overall, studies demonstrate that even narrow routes (paved and unpaved) can represent major barriers to movement of animals. Reluctance to cross even narrow routes similar in width to routes created by OHV travel may alter or preclude the movements of various species. The cumulative effects of OHV-route networks proliferating across the landscapes may have serious ecological consequences for species reluctant to cross OHV routes.

Noise generated by OHVs may alter animal behaviors, breeding populations, the abilities of some species to detect predators (through auditory cues), and can stimulate estimating animals to emerge from their underground burrows at inappropriate times. Noise, lights, and other disturbances associated with OHV activities also have the potential for eliciting stress responses from a broad spectrum of wildlife taxa. Studies have shown that ungulates, birds, and reptiles all experience accelerated heart rates and metabolic function during disturbance events; in turn, animals may be displaced and experience reproductive failure and reduced survivorship.

Direct wildlife mortality can result from vehicular impact, removing individuals from populations; thus, habitats containing routes may represent population sinks for any species that commonly attempts to move from one habitat fragment to another by crossing routes. If

mortality rates exceed rates of reproduction and immigration, wildlife populations decline (Beier, 1993; Bruinderink and Hazebrook, 1996; Moore and Mangel, 1996; Forman and Alexander, 1998). Mortality rates vary widely according to habitat and route characteristics. Even where the frequency of wildlife mortality is relatively low most of the year, it may increase during certain seasons or when traffic frequency increases. Furthermore, population dynamics can be altered if low mortality rates nonetheless cause disproportionate mortality among specific sex and/or age classes.

In summary, OHV activities may have effects to wildlife, fish and plant populations in the following areas: habitat fragmentation, patch size, edge to interior ratio, barriers to movement, facilitation of invasions of non-native and/or opportunistic species, mortality rates, noise and other disturbance factors. Measuring indicators of all these factors for the numerous species of interest would be an excessively difficult task. In addition, for most of the species of interest, the relationships between these factors and population dynamics are not well understood. Because of these difficult to measure potential impacts to sensitive wildlife and plant populations, we assume that any reduction in routes, or reduction in class of use (from motorized to non-motorized) would in general improve wildlife, fish and plant habitats in the area.

Based upon the analysis contained in Appendix D (USDI BLM, 2013) no threatened, endangered, or proposed species or critical habitats occur in the planning area, or have the potential to be affected by the proposed project. Therefore, the proposed alternatives for this project will have no effect upon any federally listed species or critical habitat, and no mitigation measures are necessary for this proposal.

Several BLM sensitive species may occur within the planning area and be potentially affected by the proposed project (Appendix E). The effects of the project are based upon the habitats affected and species occurrence within the planning area.

There would continue to be routes of all types at varying levels in all alternatives. Thus, implementing any alternative would continue to have some degree of impacts to BLM sensitive species populations and habitat from motorized and non-motorized travel. Each alternative will have relative differences in the amount of habitat directly impacted by route construction and maintenance, based on miles of routes.

Sensitive species potentially occurring within the planning area that are most vulnerable to direct impacts (crushing/mortality) are sensitive plants. Construction, maintenance, and decommissioning of routes when they are located within suitable, occupied habitat could have impacts to individuals of sensitive plant, reptile, small mammal and ground nesting bird species. Individuals can be crushed or physically removed by construction and/or maintenance equipment. Species most vulnerable to indirect/disruptive impacts include three species of raptors. Disturbances in close proximity to active nests during the breeding season can result in abandonment of the nest and loss of eggs or young. Each alternative will have relative differences in the magnitude of disturbance based upon the route density, type of uses permitted on those routes, the proximity of those routes to nesting and roosting sites, and the season of use.

To alleviate indirect impacts to sensitive plant, animals, and active raptor nests during the design, construction, and maintenance phases of the travel plan, the BLM has developed design features which are noted on page 10. Potential impacts to individuals during subsequent public use of the designated route system would remain.

Proposed Action:

When compared to the No Action alternative the collective miles of routes would increase from 35.3 miles available for various modes of travel to 43.3 miles of routes (including administrative use), or a 22.7% increase compared to the No Action alternative.

The Proposed Action would result in the second highest amount of ground disturbing activities caused by new route construction. The 17.9 miles of route decommissioning could cause ground disturbance on portions of the route (generally the first 100 feet of the route), which would be short term. The Proposed Action would include approximately 26 miles of new route construction for non-motorized and/or non-mechanized use.

The proposed route construction and decommissioning would occur in all habitat types present within the planning area. Species most vulnerable to the direct impacts to suitable habitats and individuals in the population include the sensitive plant species, ground-nesting birds, bats, and reptiles. The required pre-construction surveys for sensitive plants would identify the locations of populations that may occur on or adjacent to the proposed route locations. Additionally, the required pre-construction surveys for nesting raptors would identify locations to be avoided. Final route locations would then be adjusted to avoid these plant populations and raptor nests with the buffers specified in the design features.

Pre-construction surveys are not required for the other sensitive animal species. Their presence is currently unknown within the planning area and new route construction and decommissioning could directly impact suitable habitats and individuals of these species.

By decommissioning some routes and constructing new routes in better locations with design features, ongoing impacts from recreational uses should be reduced. Recreational use of the designated route system could have impacts to individuals of BLM sensitive species, however the level of impact would not be at the level to cause population declines or need for listing of these species.

Finding on the Public Land Health Standard for Threatened & Endangered species:

The lands within the planning area currently meet land health standards for T&E and sensitive species. The Proposed Action as designed is not expected to change the land health standard rating relative to sensitive species or the habitat they may utilize within the planning area. While impacts to individuals are anticipated, they are not expected to cause substantial habitat or population impacts such that any of the species discussed could result in declines that would warrant federal listing for protection under the Endangered Species Act.

Alternative 1:

The collective miles of routes would stay about the same, increasing from 35.3 miles currently available for various modes of travel to 35.5 miles of routes (including administrative use).

The 18.6 miles of route decommissioning could cause ground disturbance on portions of the route (generally the first 100 feet of the route), which would be short term. Alternative 1 would include approximately 18.8 miles of new route construction for non-motorized and/or non-mechanized use.

The proposed route construction and decommissioning would occur in all habitat types present within the planning area. The anticipated direct effects to sensitive plants, reptiles, bats, and ground-nesting birds are similar to those described in the Proposed Action. The direct and indirect effects to sensitive species would be similar to the Proposed Action, but proportional to the relative route densities.

Other than the No Action alternative, Alternative 1 would result in the lowest open route density within the planning area. Reduced open route density and non-motorized recreation is also emphasized on the proposed designated route system, which would reduce the magnitude of the anticipated impacts from those described in the Proposed Action and Alternative 2.

Finding on the Public Land Health Standard for Threatened & Endangered species:

Findings are the same as the Proposed Action.

Alternative 2:

The collective miles of routes would increase from 35.3 miles available for various modes of travel in the No Action Alternative to 55.4 miles of routes (including administrative use), or a 56.9% increase compared to the No Action Alternative. When compared to the No Action alternative this alternative would result in the greatest increase in overall open route density, and the greatest amount of motorized routes within the planning area (48.8 miles, including administrative use) for the action alternatives.

Alternative 2 would result in the greatest amount of ground disturbing activities caused by new route construction. The 11.2 miles of route decommissioning could cause ground disturbance on portions of the route (generally the first 100 feet of the route), which would be short term. This alternative would include approximately 24.5 miles of new route construction for motorized routes and 4.6 miles for non-motorized routes.

The anticipated direct effects to sensitive plants, reptiles, bats, and ground-nesting birds are similar to those described in the Proposed Action. The direct and indirect effects to sensitive species would be similar to the Proposed Action, but proportional to the relative route densities.

Recreational use of the proposed designated route system has the greatest potential for disturbance to sensitive species, especially raptors. This alternative would result in the

highest OHV route density within the planning area. Of particular concern to raptors is the proximity of proposed routes to the canyon rims. The canyon rims are the most likely sites for raptor nests and roosting sites. Under this alternative, several of the proposed new route segments would be located near or along the canyon rims, including a primary motorized route on the rim of Naturita Canyon. The required pre-construction raptor surveys would locate currently active nests within the planning area, and identify the proximity of those nests to the proposed routes. As a result, route construction activities would be prohibited within the specified distance during the period from nest establishment to dispersal of the young from the nest that year. These design features would protect the nest from disturbance during the construction phase of the project but not from subsequent use of the designated route system following construction.

Alternative 2 also includes the construction of new single-track non-motorized routes into the bottom of Burn Canyon. This route would be accessed off the proposed designated route system on the east side of Burn Canyon, down each tributary and extend almost to its confluence with Naturita Canyon before looping back up the steep canyon slope to the top. This portion of the designated route system would provide access into both canyons that are currently inaccessible to motorized and mechanized travel. Canyons like these are key movement corridors for various wildlife species. Additionally, canyon habitat that is otherwise unaffected in other alternative, would have additional potential impacts to midget faded rattlesnake, milksnake, sensitive raptor and bats species. With the addition of route access into this canyon, additional disturbance could have impacts to sensitive wildlife species that use these areas as movement corridors and as habitat.

Finding on the Public Land Health Standard for Threatened & Endangered species:
Findings are the same as the Proposed Action.

No Action Alternative:
The no action alternative represents the current condition within the planning area where the recreation objective would be to continue current management. The existing system of routes within the planning area includes 35.3 miles of BLM routes open to all modes of travel (in addition to the 12.6 miles of County Roads). Many of these routes were established to access range improvements or to explore for oil and gas resources. Several routes became reestablished during the 2002 Burn Canyon wildfire and have continued to be used and expanded by public travel.

Existing routes and management would continue to affect BLM sensitive species through maintenance and use. Existing routes are located within all habitat types present within the planning area. The impacts of maintenance activities are currently very minor. Maintenance of BLM routes is very sporadic and mainly occurs on the primary routes. Secondary routes and other local “two track” routes receive no regular maintenance. Without focused recreation objectives, current levels of activity on existing routes may continue at the current level. Access to much of the rim and habitat away from the county road is not well maintained or accessible to the general public, reducing the amount of impact that could occur to sensitive species in the area.

Finding on the Public Land Health Standard for Threatened & Endangered species:

The lands within the planning area currently meet land health standards for T&E and sensitive species. Continuation of the No Action alternative is not expected to change the land health standard rating relative to sensitive species or the habitat they may utilize within the planning area. While impacts to suitable habitats and individuals of the population are presently occurring, they are not expected to cause substantial habitat or population impacts such that any of the species discussed could result in population declines that would warrant federal listing for protection under the Endangered Species Act.

MIGRATORY BIRDS

Affected Environment:

Plant communities within the planning area provide habitats for a variety of migratory bird species. The U.S. Fish and Wildlife Service list of Birds of Conservation Concern was used to identify the species from this list which are known or have potential to occur within the Uncompahgre Field Office and which are protected under the Migratory Bird Treaty Act. Appendix F provides an assessment of the potential for suitable habitat, species occurrence, and likely effects to migratory birds within the planning area.

Site specific surveys have not been conducted within the planning area to determine species occurrence. The determination of species occurrence is based upon BLM survey data and assessments from the Norwood Land Health Assessment (USDI BLM, 2006), Colorado Breeding Bird Atlas data for the Redvale SE and Norwood SE atlas blocks from 2007-2011, personal knowledge of BLM and contract biologists, and the likelihood of occurrence based on habitat associations. Seven species expected in the planning area show population declines for the Rocky Mountain Region (Appendix F). These include golden eagle, long-billed curlew, yellow-billed cuckoo, Lewis' woodpecker, willow flycatcher, pinyon jay and juniper titmouse.

A wide variety of migratory birds fulfill reproductive functions in the planning area's shrubland and woodland communities from late May through mid-July. The abundance and composition of nesting birds are anticipated to be appropriate to these vegetation types in their current successional state. Birds associated with the planning area are widely distributed and common throughout the resource area and adjacent public and private lands in extensive suitable habitats. The planning area is not likely to be inhabited by any species that is narrowly endemic or highly specialized.

Environmental Consequences:

As described above, migratory birds utilize a wide variety of the habitats present within the planning area for their life functions. The scale of the impact is dependent upon the abundance of habitat, the magnitude of the disturbance, and the resulting fragmentation and isolation of habitats and species. Changes and differences in the alternatives result in changes in the miles of routes that would be ultimately available for various uses in various migratory bird habitats, and thus in the degree to which these habitats would be affected.

Impacts Common to the Proposed Action and Alternatives 1 and 2

Each alternative, because of the different actions regarding travel use conditions and routes that would be available for motorized and non-motorized mechanized travel, also directly affects the amount of disturbed soil and vegetation in these habitat types, resulting in varying degrees of impacts or removal of important migratory bird habitat.

There is a potential for impacts to individual migratory birds from the construction, maintenance, and decommissioning of routes when they are located within suitable, occupied habitat. There would continue to be routes open to all types of travel at varying levels in all alternatives. Thus, implementing any alternative would continue to have some degree of impacts to migratory bird populations and habitat from motorized and mechanized travel in the form of habitat fragmentation, changes to patch size, edge to interior ratio, and barriers to movement, the facilitation of invasions of non-native and/or opportunistic species, species mortality or habitat degradation rates, noise, and other disturbance factors.

To alleviate the potential adverse impacts that are likely to result in habitat modifications, design features were developed for migratory birds and are part of the proposed action and alternatives.

Potential impacts to migratory birds are based upon habitats present within the planning area and the potential for those species to be present. The timeframe specified in the design features section encompasses the core breeding season for the majority of migratory birds of conservation concern that may occupy the planning area. Tree clearing for route construction would be limited in scope under each alternative. In addition, the protection of cavity nesting habitat and perching sites would retain these structural habitat features.

Based on the design features, the proposed action and alternatives may impact individual migratory birds, but those actions are not expected to have a measurable impact on migratory bird populations or species viability on a landscape scale.

The potential impacts to raptors are based upon the modification or disturbance to known or potential nest sites within the planning area. Site specific surveys are required prior to construction activities to locate nests and determine if they are active. The timing restrictions and spatial restrictions are designed to avoid disturbance to nesting raptors during construction and maintenance activities. These requirements do not apply to subsequent recreational use activities.

Additional analysis of potential impacts to migratory birds and their habitats can be found in the TES section of this analysis.

Proposed Action

Under this alternative the recreation objective is to manage a quality recreation area with non-motorized and motorized travel opportunities. When compared to the No Action alternative the collective miles of routes would increase from 35.3 miles available for various modes of travel under the No Action Alternative to 43.3 miles of routes (including

administrative use), or a 22.7% increase compared to the No Action alternative. Also included is the decommissioning of 17.9 miles of existing routes, which include spur roads and user-developed routes.

The Proposed Action would result in the second highest amount of ground disturbing activities caused by new route construction. In addition to the 17.9 miles of route decommissioning, the Proposed Action would include approximately 25.9 miles of new single-track route construction for non-motorized and/or non-mechanized use.

The proposed route construction and decommissioning would occur in all habitat types present within the planning area. Nest sites for migratory birds are the most vulnerable to the direct impacts of new route construction. The loss or abandonment of occupied nests would lead to a direct loss of individuals in the population. The design features would help alleviate these impacts.

The disturbance associated with route construction, maintenance, and recreational use of the route system can cause nest failures as well, particularly with raptors. Of particular concern is the proximity of the activities associated with route construction, maintenance, and use to an active nest. Within the planning area the cliffs and larger trees associated with the canyon rims are the most likely sites for raptor nests and roosting sites. Under this alternative several proposed non-motorized routes would be located along the canyon rims in the planning area.

The required pre-construction raptor surveys would locate currently active nests within the planning area, and identify the proximity of those nests to the proposed routes. As a result, route alignment could be adjusted and construction activities would be prohibited within the specified distance during the period from nest establishment to dispersal of the young from the nest that year. Seasonal restrictions would also be in effect for maintenance activities. These design features would protect the nest from disturbance during the construction phase and future maintenance of the project but not from subsequent use of the route system.

Alternative 1

Under this alternative the recreation objective is to emphasize enhancing and protecting wildlife habitat while providing quality non-motorized recreation travel opportunities and public access. The collective miles of routes would increase from 35.3 miles available for various modes of travel under No Action to 35.5 miles of routes (including administrative use), or a 0.6% increase compared to the No Action alternative.

In addition to the 18.6 miles of route decommissioning, Alternative 1 would include approximately 18.8 miles of new single-track route construction for non-motorized and/or non-mechanized use.

The proposed route construction and decommissioning would occur in all habitat types present within the planning area. The anticipated impacts to migratory birds and their habitats would be similar to those described in the Proposed Action. However, the scope and magnitude of those impacts would be less than Alternative 2 and the Proposed Action.

The direct loss of suitable nesting and feeding habitat would be less under this alternative as a result of reducing the total miles of proposed new route construction and overall miles of route (excluding administrative use routes). Potential losses of individuals due to nest failures or direct mortality would be proportionally reduced.

Similarly the indirect effects of disturbance to nesting raptors would also be less under this alternative. Alternative 1 has a lower density of proposed single-track routes near the rims of the canyons than the Proposed Action or Alternative 2, and those route systems are non-motorized. The required pre-construction raptor surveys would locate currently active nests within the planning area, and identify the proximity of those nests to the proposed routes. As a result, route alignment would be adjusted to reduce impacts to these nest sites and construction activities would be prohibited within the specified distance during the period from nest establishment to dispersal of the young from the nest that year. These design features would protect the nest from disturbance during the construction phase of the project, and seasonal restrictions would also be in effect for maintenance activities. Subsequent use of the designated route system following construction could have impacts to individuals.

Alternative 2

Under this alternative the recreation objective is to manage for a motorized and non-motorized multi-use recreation area. The collective miles of routes would increase from 35.3 miles available for various modes of travel under No Action to 55.4 miles of routes (including administrative use), or a 56.9% increase compared to the No Action Alternative. This alternative would result in the greatest increase in overall route density, and the greatest amount of motorized routes within the planning area.

Alternative 2 would result in the greatest amount of ground disturbing activities caused by new route construction. In addition to the 19.1 miles of route decommissioning, this alternative would include approximately 29.2 miles of new route construction for motorized routes (24.5 miles) and non-motorized single-track routes (4.7 miles).

The proposed route construction and decommissioning would occur in all habitat types present within the planning area. The anticipated impacts to migratory birds and their habitats would be similar to those described in the Proposed Action. However, the scope and magnitude of those impacts would be greater than Alternative 1 and the Proposed Action.

The direct loss of suitable nesting and feeding habitat would be the highest under this alternative as a result of increasing the total miles of proposed new route construction. Potential losses of individuals due to nest failures or direct mortality would be proportionally increased.

Similarly the indirect effects of disturbance to nesting raptors would also be the greatest under this alternative. Under this alternative, several of the proposed new routes would be located near or along the canyon rims, including several motorized routes on the rim of

Naturita and Burn Canyon, and crossing McKee Draw on the canyon walls. Additionally there is motorized (McKee Draw) and non-motorized (Burn Canyon) single track proposed in the bottoms of canyons with potential raptor nesting habitat. The required pre-construction raptor surveys would locate currently active nests within the planning area, and identify the proximity of those nests to the proposed routes. As a result, route alignment would be adjusted to reduce impacts to these nest sites and construction activities would be prohibited within the specified distance during the period from nest establishment to dispersal of the young from the nest that year. These design features would protect the nest from disturbance during the construction phase of the project, and seasonal restrictions would also be in effect for maintenance activities. Subsequent recreational use of the designated route system following construction could have impacts to individuals depending on the timing and intensity of recreational activities.

No Action

The No Action alternative represents the current condition within the planning area and the recreation objective would be to continue existing management. The existing system of routes within the planning area includes 12.6 miles of County roads, and 35.3 miles of BLM routes open to all modes of travel. Many of these routes were established to access range improvements, or to explore for oil and gas resources. Several routes became reestablished during the 2002 Burn Canyon wildfire and have continued to be used and expanded by public travel.

Existing routes and management would continue to affect migratory bird species through maintenance and use. There would be no seasonal restrictions for maintenance activities. Existing routes are located within all habitat types present within the planning area. The impacts of maintenance activities are currently minor. Maintenance of BLM routes is sporadic and mainly occurs on the primary routes. Secondary routes and other local “two track” roads receive no regular maintenance. Use of the planning area is currently limited by seasonal weather patterns and road conditions.

No notable changes, from the current environment, in habitat conditions area are anticipated to occur that would have a measurable impact, positively or negatively, on migratory bird populations or species viability on a landscape scale.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment:

The Burn Canyon Travel Management planning area supports a wide variety of terrestrial wildlife species. Table 7 shows a list of the most common or noted wildlife species, their occurrence, and the basic habitat types in which they are found. Some species are year-long residents, while others are migrants.

A large wildfire occurred on public and private lands in 2002 that burned approximately ½ of the planning area. Most of the burn area was reseeded with a mix of native grass, forb, and sagebrush, and much of the pre-burn native shrub community re-sprouted soon after the fire.

Table 7. Most Common or Noted Terrestrial Wildlife Species, Groups of Species, Their Occurrence, and Basic Habitat Type Associations in the Planning Area (Norwood Land Health Assessment, BLM 2006)

Species Common Name	Habitat Type	Occurrence
Mule Deer	Pinyon-juniper, oak-mountain shrub, riparian, sagebrush, grassland.	Common year long, mostly during the winter
Elk	Pinyon-juniper, oak-mountain shrub, riparian, sagebrush, grassland.	Common year long, mostly during the winter
Mountain Lion	All habitat types, mostly in canyons and rimrock areas.	Common year long, mostly during winter
Bobcat	All habitat types	Uncommon year long
Coyote	All habitat types	Common year long
Cottontail rabbit	All habitat types	Common year long
Porcupine	Ponderosa pine, pinyon-juniper, riparian	Common year long
Raptors – eagles, hawks, falcons	All habitat types	Common year long
Merriam’s turkey	Ponderosa pine, pinyon-juniper	Uncommon spring - fall
Migratory birds	All habitat types	Common spring - fall
Small mammals	All habitat types	Common year long
Amphibians	Streams, wetlands, riparian	Uncommon year long
Reptiles	All habitat types	Common year long
Bats	All habitat types	Uncommon spring - fall

A variety of small mammal, bird, and reptile species are scattered throughout the planning area where their specific habitats are present. Habitat is varied and is created by diversity in topography, slope, aspect, vegetation, soils, and climate. The description of the existing vegetation in the vegetation section provides a good description of most wildlife habitats that occur in the planning area.

Mule deer and elk are likely the most noted wildlife species that occur due to their prominence in the ecosystem and their high social and economic value to the local community and region. Both species use the planning area year-long, but the greatest concentrations occur during the winter months.

During most winters there is a high degree of overlap in mule deer and elk use on winter ranges, however, the extent of competition is unknown. Colorado Parks and Wildlife (CPW) has classified the entire planning area as severe winter range for both elk and mule deer. CPW defines severe winter range as “that part of the range of a species where 90 percent of the individuals are located when the annual snowpack is at its maximum and/or temperatures are at a minimum in the two worst winters out of ten”. The upper portion of the planning area that was burned in the 2002 Burn Canyon fire is mapped as a winter concentration area for elk,

while the lower elevations and canyons are winter concentration areas for mule deer. CPW defines winter concentration areas as “that part of the winter range of a species where densities are at least 200% greater than the surrounding winter range density during the same period used to define winter range in the average five winters out of ten”. The severe winter range and winter concentration areas constitute BLM’s crucial winter range.

Large predators, such as coyote and mountain lion use the planning area regularly as parts of their larger overall ranges. Of the predators, coyotes are the most numerous and widespread. Mountain lion are found in the planning area year-long but primarily utilize it coincident with elk and deer winter use as they commonly follow the seasonal migration of these primary prey sources. There appears to be suitable denning habitat in the canyons and rocky cliffs within the planning area. While the exact status of these predator populations is unknown, they are all believed to be doing well.

Environmental Consequences:

Recreational and other travel activities may have effects to wildlife populations similar to those described in the TES, Migratory Bird and Aquatic Wildlife sections of this document. Measuring indicators of all these factors for the numerous species of interest would be an excessively difficult task. In addition, for most of the species of interest, the relationships between these factors and population dynamics are not well understood. Because of these difficult to measure potential impacts to wildlife populations, BLM assumes that any reduction in routes, or reduction in class of use (i.e., from motorized to non-motorized) would in general improve wildlife habitats. Assumptions for reduction in class of use are that, in general, by changing from motorized to non- motorized the noise level associated with those recreational activities would be lower and travel a lesser distance for non-motorized than motorized recreation. This would result in a smaller “foot print” of disturbance and disruption of wildlife habitats.

Impacts Common to All Alternatives:

There would continue to be routes at varying levels in all alternatives. Thus, all alternatives continue to have impacts to wildlife populations from activities relative to habitat fragmentation, patch size, edge to interior ratio, barriers to movement, facilitation of invasions of non-native and/or opportunistic species, mortality rates, noise and other disturbance factors. For many terrestrial wildlife species, potential effects to wildlife from recreational and other vehicular travel-related activities will be similar to those described in the TES and migratory bird sections. Additionally, effects described below for big game could generally be applied to other terrestrial wildlife species.

There is a large and growing body of evidence documenting the effects of travel on routes and the associated recreation activities upon wildlife (Foreman et al. 2003, Hebblewhite 2008, Nietvelt 2002, Sawyer et al. 2006 and 2009). Much of that research is related to the impacts upon elk, and to a lesser extent upon mule deer. In general, big game avoid areas near open routes due to the presence of human activity. This response varies in relation to traffic rates, the extent of vegetative cover adjacent to the routes, topography, and the type of route, and can result in avoidance up to ½ mile from the activity. The type of activity on those routes also influences the magnitude and duration of their response. Elk responded

earlier and moved farther from routes to avoid motorized vehicles, followed by mountain bikes, then hikers, and least of all by horseback riders (Naylor et al. 2009). The ultimate effect of displacement of elk, by motorized traffic as well as other disturbances, is a temporary or permanent reduction in effective habitat for elk. Concomitant with loss of effective habitat are reduced local and regional populations.

According to a recent literature review of ungulate response to route development, substantial impacts to ungulate populations begin to manifest themselves when route densities reach 0.5 -1.0 mile of road/sq. mile. As a result, both deer and elk seek areas of low road density and human activity that provide the security they need for reproduction and survival. Big game security areas within the planning area are primarily associated with the major canyon systems which are inaccessible to motorized and mechanized vehicles. Another large big game security area is located on the ridge between McKee Draw and Naturita Canyon. Each alternative will have effects on these critical big game habitat areas.

BLM has chosen to use route density as a means to characterize habitat quality for big game within the planning area. Doherty et al. (2008), Hebblewhite (2008), Sawyer et al. (2009) and others have used spatial models to characterize the effects of route density on overall habitat quality within a given geographic area.

Big game habitat quality within the geographic boundary of the Burn Canyon travel management planning area can be characterized as described in Table 8 based on route densities analyzed across the alternatives. Route densities were calculated based on the "Kernel Density" tool provided in ArcGIS with a search radius of 100 meters based on the average route avoidance distance for ungulates described in Rost and Bailey 1979, and Freddy et al. 1986.

Table 8. Habitat Quality Categories as a Function of Road Density

Habitat Quality	Existing Route Density and Fragmentation
Category 1	0.0 - 0.5 road miles/sq. mile
Category 2	0.6 - 2.0 road miles/sq. mile
Category 3	2.1 - 4.0 road miles/sq. mile
Category 4	> 4.0 road miles/sq. mile

The Kernel Density model used in this analysis assumes that all routes have an equal effect upon habitat quality regardless of the classification (road or single track trail) or use (motorized, mechanized, or non-motorized/non-mechanized) of the route. The model does not adjust for the magnitude of potential effects of the route on habitat quality as influenced by topography or cover. A series of maps were produced to display the results of this analysis for each alternative (Figures 3-6).

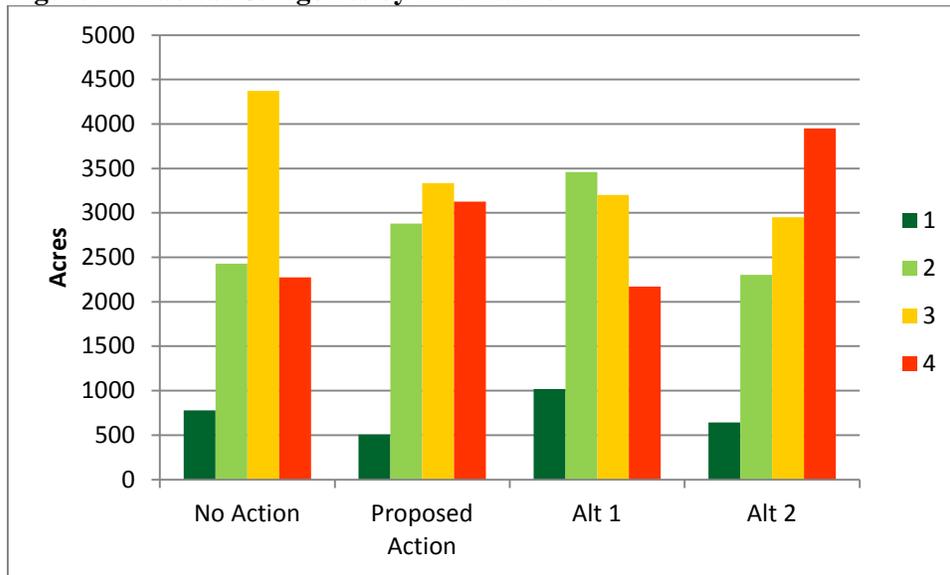
Another indicator of how the alternatives will affect big game habitat quality is shown in Table 9 and Figure 2. This table compares the total acres within each habitat quality category and the percent change from the No Action alternative.

Table 9. Habitat Categories by Alternative

Habitat Category	No Action		Proposed Action		Alternative 1		Alternative 2	
	Acres	% of Planning Area	Acres	% Δ*	Acres	% Δ*	Acres	% Δ*
1	776.9	8	508.2	-34.6	1019.0	31.2	644.1	-17.1
2	2428.0	25	2880.4	18.6	3458.3	42.4	2304.7	-5.1
3	4370.6	44	3334.6	-23.7	3202.3	-26.7	2951.1	-32.5
4	2275.3	23	3127.5	37.5	2171.2	-4.6	3950.9	73.6

*Percent change from No Action alternative

Figure 2. Habitat Categories by Alternative



As described above, the planning area is located within an elk and mule deer severe winter range and winter concentration area, which constitutes BLM’s crucial winter range. To avoid disturbance to wintering big game, a big game timing restriction (closure) would be implemented on BLM’s designated routes.

Disturbance to wintering big game animals results in excitement, and usually sudden movement. Excitements costs energy, vital energy needed for survival in winter or for the growth of the unborn fawn or calf. Weight loss by cow elk during pregnancy is correlated to calf weights at birth and survival to four weeks of age. Data from Thorne et al. (1976) indicated that cow elk losing more than 3% of their body weight between January and just prior to calving produced calves with less than a 50% chance of survival. Any disturbance by humans during the winter may cause more excitement than can reasonably be tolerated by pregnant elk.

While impacts to suitable habitats and individuals within the population are anticipated, they are not expected to cause substantial habitat or population impacts such that any terrestrial

wildlife species could result in population declines that would warrant federal listing for protection under the Endangered Species Act or current land health rating.

Proposed Action

Under this alternative the recreation objective is to manage a quality recreation area with non-motorized and motorized travel opportunities. When compared to the No Action alternative the collective miles of routes would increase from 35.3 miles available for various modes of travel under No Action to 43.3 miles of routes (including administrative routes), or a 22.6% increase compared to the No Action alternative. Across the planning area, this alternative reduces Category 1 (34.6%) and Category 3 habitat (23.7%), while increasing Category 2 (18.6%) and 4 (37.5) as compared to the No Action alternative (Table 9; Figure 2).

Existing big game security areas would be affected both negatively and positively under this alternative. The Proposed Action includes the construction of two new route segments to access the Flatiron road, located on the ridge between McKee Draw and Naturita Canyon. This area is currently an important big game security area. Under the No Action alternative, this route is designated as “Open to all vehicles”, but is affectively closed (except administrative access) due to a gate on Forest Service. The construction of these route segments will provide public access with single-track connector routes to the McKee Draw road. These route segments are proposed as non-motorized/non-mechanized use only, and will provide increased access for this type of use. By decreasing the class of access into this area, it expands the amount of Category 1 habitat in Naturita Canyon and much of the ridge between Naturita Canyon and McKee Draw (See Figure 3).

The Proposed Action retains the roadless character and integrity of Naturita Canyon, McKee Draw, Mud Springs Draw, Callan Draw, and Burn Canyon below the canyon rims which are currently inaccessible to motorized and mechanized use due to their terrain and/or public access. It also greatly enhances the roadless character and habitat quality of the mesas located in the lower Mud Springs and Callan Draws by decommissioning several routes in this area. The single track route that follows the bottom of McKee Draw would also be decommissioned under this alternative, enhancing habitat quality within this portion of the canyon. This alternative generally moves these areas to have more Category 1 and 2 Habitat Quality (See Figure 3). These canyon systems will continue to provide critical security areas and travel corridors for big game and other terrestrial wildlife to access limited water supplies and to move through the landscape.

Figure 3 depicts spatially where areas of high route density and low habitat quality (Category 4) occur within the planning area. One of the primary areas is associated with the mesas above the rims of the lower Burn Canyon and McKee Draw area where open route densities exceed 4.0 miles per section. Most of this area is outside the area burned in the 2002 Burn Canyon wildfire so tree cover is still intact. Compared to the No Action alternative, the Proposed Action would expand the extent of this Category 4 area through construction of new non-motorized single track routes. This expands the area of Category 4 habitat westward to the canyon rims above the confluence of Naturita Canyon and Mud Springs Draw, but the magnitude of this impact could be relatively less than some of the

other alternatives. The presence of live tree cover and restricting recreational uses to non-motorized would help alleviate the impact of high route density.

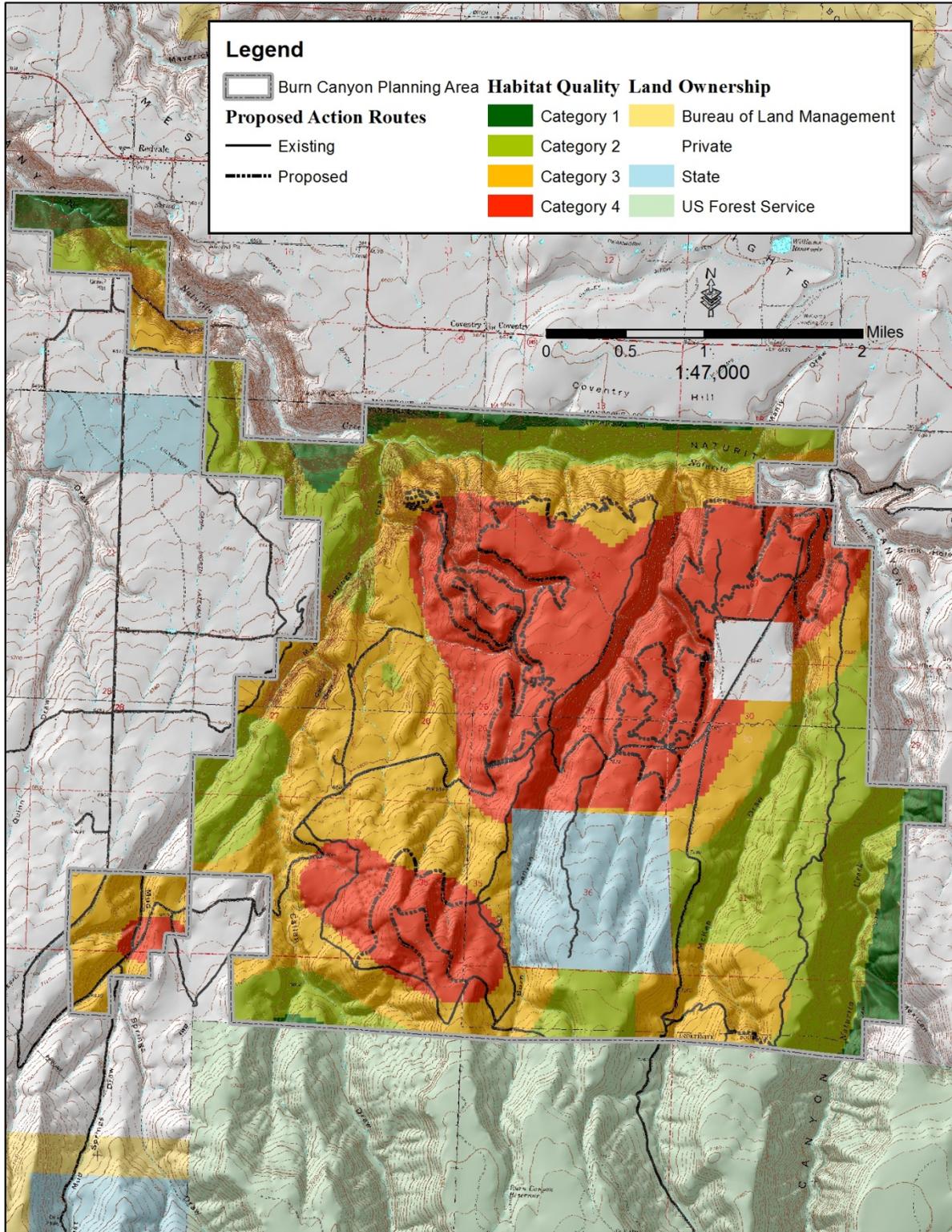
Another primary area of high route density and low habitat quality is associated with the mesas above the rims in the upper portion of the planning area in area of Callan Draw and Burn Canyon. This portion of the planning area is located inside the 2002 Burn Canyon wildfire and has limited available vegetative cover. The area is an extension of similar habitat on the adjacent National Forest to the south and currently contains very few open routes. The Proposed Action includes retention of the existing route into upper Burn Canyon, as an ATV motorized route that connects Burn Canyon to Mud Springs Draw, and construction of two non-motorized single-track routes. The Proposed Action moves the area from predominantly Category 2 habitat under the No Action Alternative to Category 4 under this alternative. Proposed routes in this area would be in previously burned habitat with very limited hiding cover available for big game and other wildlife. The establishment of additional routes in this area would further degrade habitat quality and effectiveness by increasing the magnitude of disturbance to wildlife from increased activity (Naylor et al. 2009) relative to the No Action Alternative.

Seasonal restrictions will be in effect for all motorized and mechanized travel (excluding county roads) from December 1 through April 30. This alternative provides some refuge for wintering big game and other wildlife during these months. The planning area is severe winter range for elk and mule deer. By excluding motorized and mechanized travel in the area, human disturbance to wintering terrestrial wildlife will be reduced during that time period. Motorized and mechanized travel in the area would be restricted to the county road, and non-motorized/non-mechanized travel could occur on all other routes during the closure period.

Finding on the Public Land Health Standard for Plant and Animal Communities

(partial, see also Wildlife, Aquatic; Wildlife, Terrestrial; and Invasive, Non-native Species): The Public Land Health Standard is based upon current vegetation cover, composition, and seral stage as well as wildlife browsing use, not upon the effects of recreational development and activities. The Norwood Land Health Assessment found that much of the area was meeting LHA standards with problems outside the Burn Canyon wildfire area due to over mature and conifer-invaded sagebrush habitats and lower than expected herbaceous cover and composition. As these problems are associated with wildlife browsing use and seral stage, the Proposed Action should not have impacts to the current land health rating.

Figure 3. Habitat Quality – Proposed Action



Alternative 1

Under this alternative the recreation objective is to emphasize enhancing and protecting wildlife habitat while providing quality non-motorized recreation travel opportunities and public access. The collective miles of routes would decrease from 36.3 miles available for various modes of travel to 35.5 miles of routes (including administrative routes), or a 0.02% decrease compared to the No Action alternative. Across the planning area, this alternative reduces habitat in Category 3 (26.7%) and Category 4 (4.6%) while increasing Category 1 (31.2%) and 2 (42.4%) (Table 9; Figure 2).

Existing big game security areas would be affected both negatively and positively under this alternative. As described in the Proposed Action, Alternative 1 includes the construction of two new route segments to access the Flatiron road, located on the ridge between McKee Draw and Naturita Canyon. As previously described, the construction of these route segments will provide public access with single-track connector routes to the McKee Draw road. This will provide increased access for non-motorized/non-mechanized use, however it removes the “open to all vehicles” access under the No Action alternative. By decreasing the class of access into this area, it expands the amount of Category 2 habitat in Naturita Canyon and much of the ridge between Naturita Canyon and McKee Draw, but does not expand Category 1 habitat in the area (See Figure 4).

Alternative 1 retains the roadless character and integrity of Naturita Canyon, McKee Draw, Mud Springs Draw, Callan Draw, and Burn Canyon below the canyon rims which are currently inaccessible to motorized and mechanized vehicles due to their terrain and/or public access. It provides the greatest enhancement of the roadless character and habitat quality of lower Naturita Canyon and the mesas located in the lower Mud Springs and Callan Draws by reducing the planned route density and decommissioning several routes in this area. The single track route that follows the bottom of McKee Draw would also be decommissioned under this alternative, enhancing habitat quality within this portion of the canyon. Similar to the Proposed Action, this alternative generally moved these areas to have more Category 1 and 2 Habitat Quality (See Figure 4). These canyon systems will continue to provide critical security areas and travel corridors for big game and other terrestrial wildlife to access limited water supplies and move through the landscape. Alternative 1 is the only alternative that limits access to the State Land section to administrative use only, which also enhances habitat quality within this area.

Figure 4 depicts spatially where areas of high route density and low habitat quality (Category 4) occur within the planning area. One of the primary areas is associated with the mesas above the rims of the lower Burn Canyon and McKee Draw area where open route densities exceed 4.0 miles per section. Most of this area is outside the area burned in the 2002 Burn Canyon wildfire so tree cover is still intact. Compared to the No Action alternative, Alternative 1 would reduce the extent of this Category 4 area by reducing the planned route density on the west side of Burn Canyon, limiting use to non-motorized/non-mechanized, and increasing the amount of Category 1 and 2 habitat in lower Mud Springs and the mesas between Mud Springs and Burn Canyon. The majority of the designated route system would be located on the east side of Burn Canyon. Route density here would

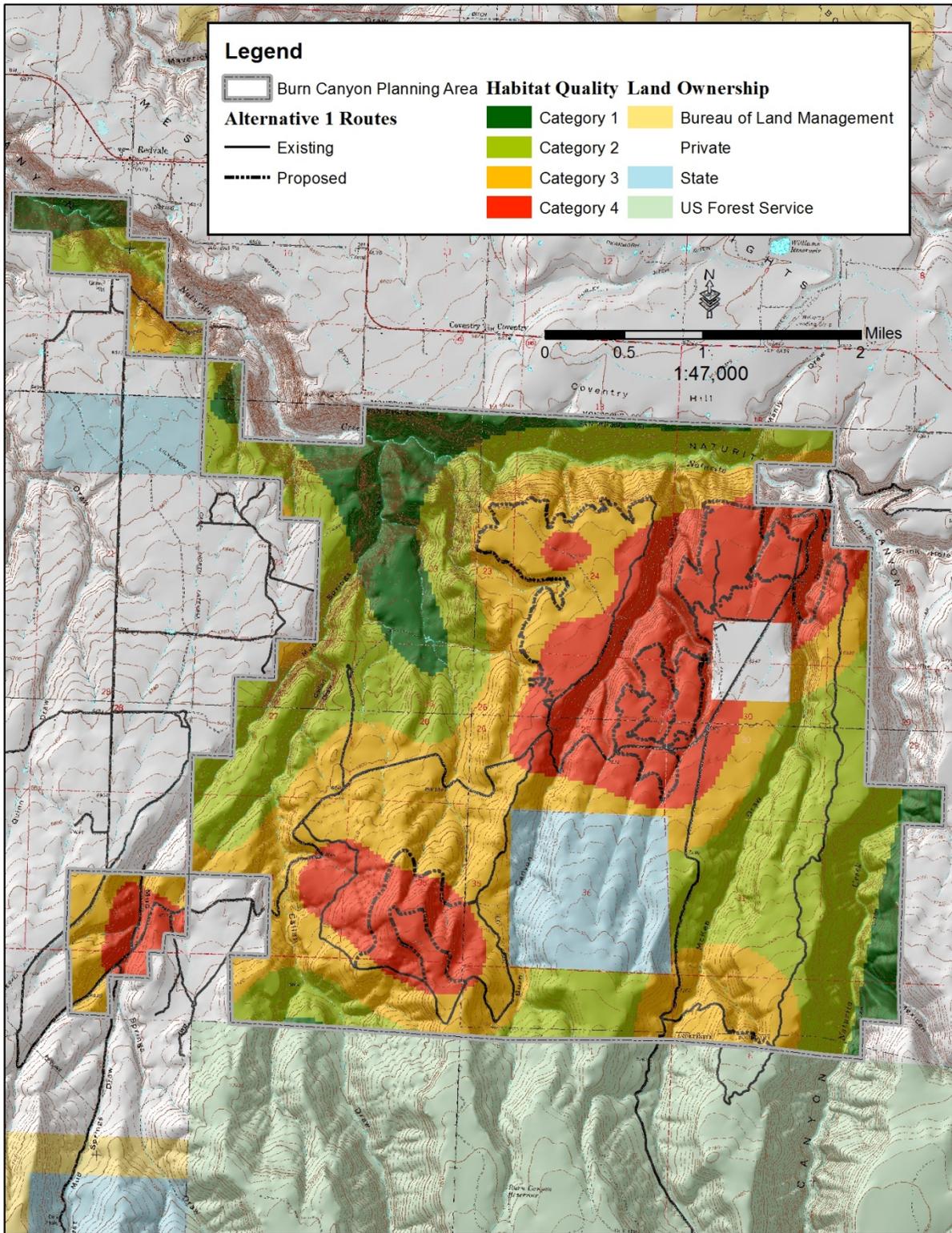
remain high. The magnitude of this impact would be the least compared to Alternative 2 and the Proposed Action. The presence of live tree cover in combination with restricting recreational uses to non-motorized only would help alleviate the impact of higher route densities in this area.

The upper portion of Callan Draw and Burn Canyon would also have route densities that exceed 4.0 miles per section. This portion of the planning area is located inside the 2002 Burn Canyon wildfire and has limited available vegetative cover. The area is an extension of similar habitat on the adjacent National Forest and currently contains very few routes. Alternative 1 includes modifying the existing route in to upper Burn Canyon as non-motorized single-track, and the construction of a system of mountain bike and hiking routes in this area. When compared to the No Action alternative this would increase route densities and reduces big game habitat quality by expanding the area of Category 4 habitat. The lack of cover in combination with building new routes into un-routed habitat would result in a long term impact to habitat quality and big game use in this area.

Under this alternative, all routes (excluding county roads) would be closed to all modes of travel (motorized, mechanized, hiking and horse) from December 1 through April 30. This alternative provides the greatest refuge for wintering big game and other wildlife. The planning area is severe winter range for elk and mule deer. By excluding all modes of travel in the planning area, human disturbance to wintering terrestrial wildlife will be at the lowest level compared to Alternative 2 and the Proposed Action. This would affectively create large areas of Category 1 habitat throughout much of the planning area during the closure period.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic; Wildlife, Terrestrial; and Invasive, Non-native Species):
Determination is the same as for the Proposed Action.

Figure 4. Habitat Quality – Alternative 1



Alternative 2

Under this alternative the recreation objective is to emphasize providing for a motorized and non-motorized multi-use recreation area. The collective miles of routes would increase from 35.3 miles available for various modes of travel under No Action to 55.4 miles of routes (including administrative routes), or a 56.9% increase compared to the No Action alternative. When compared to the No Action alternative this alternative would result in the greatest increase in overall route density, and the greatest amount of motorized routes. Across the planning area, this alternative reduces habitat in Category 1 (17.1%), Category 2 (5.1%) and Category 3 (32.5%), while increasing Category 4 (73.6%) (Table 9; Figure 2).

Alternative 2 would have the greatest impact upon existing big game security areas within the planning area, making the greatest increase in areas of Category 4 habitat (73.6%) (See Fig. 5). This alternative includes the development of a motorized ATV route on the Flatiron ridge area located between McKee Draw and Naturita Canyon. As previously described, this area is currently a very important big game security area. Under this alternative, connector routes would be established and provide access across McKee Draw for ATV, motorcycle, and non-motorized use at both the north and south end, and Full-size administrative access on the southern end.

Compared to the No Action alternative, big game security areas within the rest of the planning area would be reduced to the inner canyons of Naturita Creek, , portions of Mud Springs Draw (Category 1 and 2), and to a limited extent the remaining Mud Springs Draw, Callan Draw and McKee Draw (Category 3). However, increased route densities on the mesas above these canyon areas would likely result in habitat degradation and displacement of big game from the surrounding habitats. Routes on the mesa tops between Naturita Creek, McKee Draw, Mud Springs Draw and Callan Draw result in a much expanded area of Category 4 habitat in the area.

Big game habitat quality and security habitat in the Burn Canyon drainage would be impacted by this alternative. The proposal includes the construction of an extensive system of motorized single track routes on the east side of Burn Canyon that includes construction of new non-motorized single track routes into the bottom of Burn Canyon. This new route would be accessed off the mesa top down each tributary and extend almost to its confluence with Naturita Canyon before looping back up the steep canyon slope to the top. This portion of the route system would provide access into both canyons that are currently inaccessible to motorized and mechanized travel and virtually eliminate the integrity and roadless character of this big game security area and wildlife travel corridor. Once this route system is constructed, the probability of unauthorized user-created routes developing into Naturita Canyon would increase, and would very likely connect to existing livestock routes and driveways in Naturita Canyon, Mud Springs Draw, and Callan Draw. If this occurs, recreational activities would further degrade and fragment wildlife habitat.

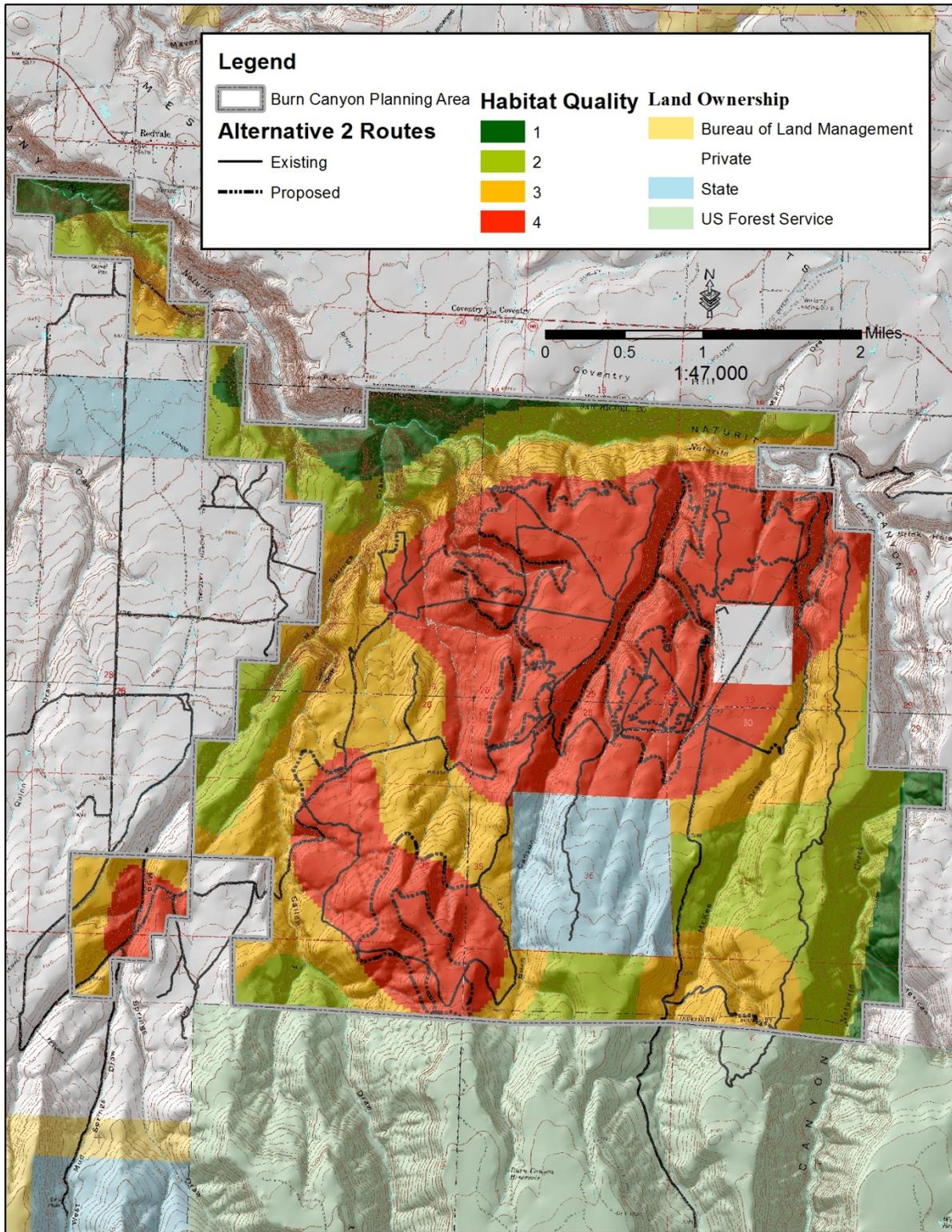
In addition to the route system on the east side of Burn Canyon, there is an equally extensive system of routes proposed on the west side that are connected to other routes within the planning area. Additional routes would be constructed into the area between the upper portion of Mud Springs Draw and Burn Canyon where there are currently very few routes

and limited cover. The effects, while similar to the other action alternatives, would create the largest area of Category 4 habitat of all the Alternatives (3,950.9 acres). This alternative would result in long term degradation of big game habitat quality and loss of security areas within the planning area.

Under this alternative, all routes (excluding county roads) would be closed to motorized travel from December 1 through April 30. This alternative provides refuge for wintering big game and other wildlife, but is the least protection of the action alternatives. The planning area is severe winter range for elk and mule deer. By excluding motorized travel in the area, human disturbance to wintering terrestrial wildlife will be reduced during that time period. Travel in the area would be restricted to the county roads, and non-motorized on all other routes.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic; Wildlife, Terrestrial; and Invasive, Non-native Species):
Determination is the same as for the Proposed Action.

Figure 5. Habitat Quality – Alternative 2



No Action Alternative

The no action alternative represents the current condition within the planning area where the recreation objective would be to continue current management. The existing system of routes within the planning area includes 12.6 miles of County roads, and 35.3 miles of BLM routes open to all modes of travel. Many of these routes were established to access range improvements, or to explore for oil and gas resources. Several routes became reestablished during the 2002 Burn Canyon wildfire and have continued to be used and expanded by public travel. Effects from this alternative would be similar to what is described in Impacts Common to All Alternatives. The planning area is composed of primarily Category 3 habitat across 44% of the area (Table 9). Much of the remaining area is Category 2 (25%) and Category 4 (23%), with a small amount of Category 1 habitat (8%).

Recreational use of the planning area is currently limited by seasonal weather patterns and road conditions. San Miguel County does not plow snow beyond the private land inholding, and there is usually enough snow to limit travel from early December through early March. Many of the routes are impassible when wet, especially when soils are saturated.

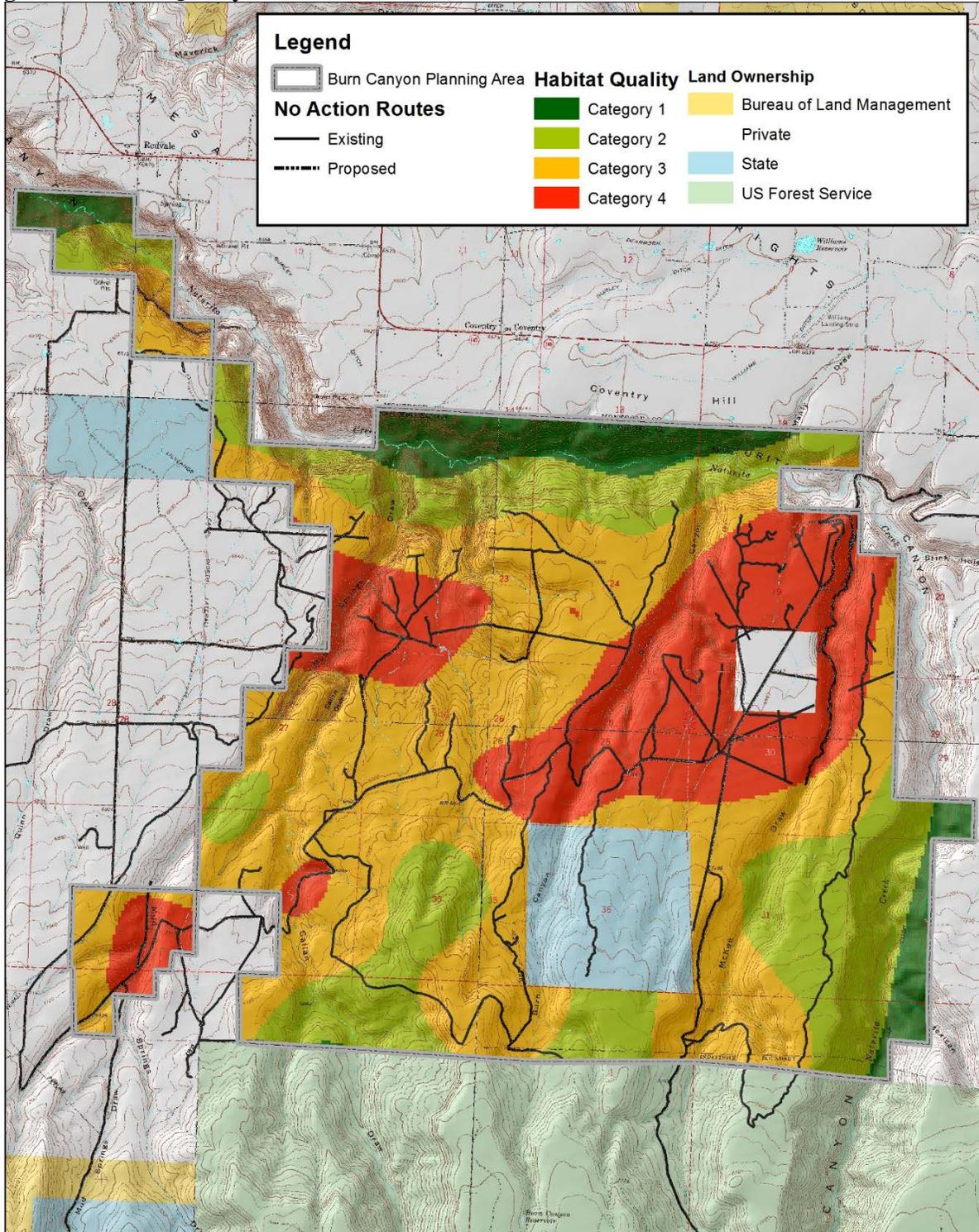
The Forest Service travel plan also influences access on some BLM roads in the area. The Flatiron road, located on the ridge between Naturita Canyon and McKee Draw, is gated at the Forest boundary. While this route is designated as “open to all vehicles” under this alternative, the Forest Service gate limits use of this BLM road to administrative use only. The north end of this administrative road turns into a fire line that extends all the way down to Naturita Creek. However, it is not legally accessible due to the presence of private land. Vehicle and mountain bike access to the rest of this area is limited due to the steep canyon walls and rimrock that extends the entire length of the ridge. This situation has essentially created a large big game security area on this ridge.

As indicated in Figure 6, the other important big game security areas within the planning area are associated with the main canyons. Naturita Canyon, McKee Draw, Mud Springs Draw, Callan Draw, and Burn Canyon below the canyon rims are currently inaccessible to motorized and mechanized use due to their terrain and/or public access. A single track motorized route located along the bottom of McKee Draw degrades the solitude of the lower portion of this canyon. These canyon systems also provide travel corridors for big game and other terrestrial wildlife to access limited water supplies and move through the landscape.

Figure 6 also depicts areas of high open road density and low habitat quality (Category 4). The primary area is associated with the mesas above the rims of the lower Burn Canyon and McKee Draw area where open road densities exceed 4.0 miles per section. Most of this area is outside the area burned in the 2002 Burn Canyon wildfire so tree cover is still intact. The other primary area is associated with the mesas above the rims of the lower portion of Mud Springs Draw and Callan Draw. Two smaller areas are associated with the upper portion of Mud Springs Draw and Callan Draw. This portion of the planning area is located within the area burned in the 2002 Burn Canyon wildfire and has limited cover.

Finding on the Public Land Health Standard for Plant and Animal Communities
 (partial, see also Wildlife, Aquatic; Wildlife, Terrestrial; and Invasive, Non-native Species)
 Determination is the same as for the Proposed Action.

Figure 6. Habitat Quality – No Action Alternative



WILDLIFE, AQUATIC (includes a finding on Standard 3)

Affected Environment:

The planning area is a relatively dry landscape with limited aquatic, wetland, and riparian habitat. Naturita Creek is the only perennial stream that has potential habitat for aquatic wildlife species. Small patches of wetland and riparian habitat may also occur in association with livestock ponds or springs in the area. Seasonal aquatic habitat may be present in ephemeral or intermittent streams.

Two County roads cross Naturita Canyon within the planning area; one at Redvale and the other near Norwood. Both stream crossings include large culverts that are large enough to provide fish passage for the species currently found in Naturita Creek. Surveys have been conducted on various reaches of Naturita Creek by Colorado Parks and Wildlife (CPW) to evaluate fisheries habitat and determine which species are present. Fish species located in the lower warm-water reaches include speckled dace, bluehead sucker, flannelmouth sucker, and roundtail chub. The reaches upstream of McKee Draw support coldwater species such as rainbow and brown trout.

Aquatic habitats within the planning area may also support populations of amphibians such as the canyon tree frog and northern leopard frog. The planning area is within the range of these species, but site specific surveys have not been conducted to determine the presence of these species.

Environmental Consequences:

Impacts Common to all Alternatives

No routes in any alternative cross riparian zones. All alternatives have some level of interaction with ephemeral or intermittent streams. Thus, implementing any alternative would continue to have some degree of impacts to aquatic wildlife species populations and habitat from motorized and non-motorized mechanized travel. These impacts would take the form of habitat fragmentation, changes to patch size, edge to interior ratio, and barriers to movement, the facilitation of invasions of non-native and/or opportunistic species, species mortality or habitat degradation rates, noise, and other disturbance factors.

The scale of the impact is dependent upon the abundance of aquatic habitat, the magnitude of the disturbance, and the resulting fragmentation and isolation of habitats and species. Each alternative will have relative differences in the amount of aquatic habitat directly impacted by route construction and maintenance, based on miles of routes, as well as type of uses permitted on those routes, the proximity of those routes to aquatic habitat, and the season of use.

Additional impacts for each of the alternatives are described for aquatic wildlife species and habitats in the TES and Migratory Bird sections of this analysis.

For all alternatives -- Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic; Wildlife, Terrestrial; and Invasive, Non-native Species): Based upon the Norwood Land Health Assessment (BLM 2006) the aquatic and

riparian habitat types found in the planning area currently meet public land health standards for healthy productive plant and animal communities. It is anticipated that implementing travel management decisions would continue to meet land health standards into the future.

Impacts Common to Proposed Action, Alternative 1, and No Action

Within the Proposed Action, Alternative 1 and the No Action alternative, there are a few locations where open routes are in proximity to potential seasonal aquatic habitat within ephemeral or intermittent streams. Where these occur, quality of aquatic habitat would be reduced as described above in “Common to All”. The No Action alternative will have slightly greater impact than the Proposed Alternative and Alternative 1. These alternatives have very limited channel crossing, whereas the No Action alternative has more channel crossings, and also a few short portions of routes (<0.5 miles total) that follow channel bottoms.

Alternative 2

The travel management objective in Alternative 2 is to emphasize providing for a motorized and non-motorized multi-use recreation area. Included in this alternative is the construction of a new single track route in Burn Canyon that would extend almost to its confluence with Naturita Canyon. This route would provide access into both canyons that are currently inaccessible to motorized and mechanized travel. Directly, the new route system would not have impacts to aquatic habitats or species in riparian habitats. However, this would cause impacts to seasonal aquatic habitats.

WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment:

The average annual precipitation in the planning area is about 17 inches (USGS Stream Stats). Precipitation from frontal events occurs during winter and spring months often in the form of snow. These events are typically low intensity but can last for several days. In contrast, summer precipitation is commonly associated with the southwest monsoon air flow pattern producing short duration, high intensity rain and flood events. These summer floods are typically localized and have the greatest impact on intermittent and ephemeral channels.

The area proposed for the routes and supporting facilities is within the Naturita Creek watershed, a sub basin of the San Miguel Basin (Hydrologic Unit Code (HUC) 14030003). The proposed area includes portions of McKee Draw and Burn Canyon drainages on the eastern boundary and Mud Springs and Callan Draw on the western boundary. These drainages all drain northerly to Naturita Creek. The proposed area also includes portions of six unnamed drainages that vary in size from 0.06 to 0.63 square miles and flow in a northerly direction directly to Naturita Creek (US Geological Survey, Stream Stats). All of the drainages on the subject area flow either intermittently or ephemerally, except for Naturita Creek which flows perennially.

Standards and Classifications

The Clean Water Act of 1972 gives the Environmental Protection Agency (EPA), the authority to set effluent limits on discharges of pollutants into waters of the United States and regulate

water quality standards for surface waters. The Clean Water Act also gives the EPA the ability to authorize state governments to administer the program while retaining oversight.

The State of Colorado passed the Colorado Water Quality Control Act, revised in 2002, granting authority to the Colorado Water Quality Control Commission to classify and assign numeric standards to state waters. State waters are classified according to present beneficial uses, or beneficial uses that may be reasonably expected in the future. Beneficial use classifications include aquatic life, recreation, agriculture, and water supplies for various purposes. Numeric standards are assigned in order to define allowable concentrations of various parameters under the following categories: physical and biological, inorganic and metals. Water quality classifications and numeric standards for surface and downstream receiving waters in the planning area are contained in the Commission’s 5 CCR 1002-31, Regulation No. 35, Classifications and Numeric Standards for Gunnison and Lower Dolores River Basins (CDPHE, Water Quality Control Commission, 5 CCR 1002).

It is BLM policy that agency projects should meet or exceed water quality standards established by the State of Colorado for all water bodies located on or influenced by BLM- administered lands.

Table 10 lists the water quality classifications for the above-described surface waters (CDPHE, Water Quality Control Commission, 5 CCR 1002-35).

Table 10. Water Quality Classifications for Naturita Creek and Tributaries.

<i>^{4th} Field Hydrologic Unit</i>	<i>Stream Segment</i>	<i>Stream Classification¹⁻⁵</i>
14030003 San Miguel Basin	Naturita Creek from Uncompahgre National Forest Boundary to the San Miguel River Confluence	Aquatic Life Cold ¹ Recreation E ² Agriculture ³ Water Supply ⁴
	Tributaries to Naturita Creek	Aquatic Life Cold 2 ¹ Recreation E Agriculture Water Supply

1- Waters are designated either warm or cold based on water temperature regime. Class 1 waters are capable of sustaining a wide variety of cold or warm water biota, while class 2 waters are not.

2- Recreation Class E - Existing Primary Contact Use. These surface waters are used for primary contact recreation or have been used for such activities since November 28, 1975.

3- Waters that are suitable for irrigating crops usually grown in Colorado.

4- Waters that are suitable or intended to become suitable for potable water supplies.

Compliance with section 303(d) of the Clean Water Act requires Colorado to identify water where effluent limitations are not strong enough to attain water quality standards. These waters are placed on the 303(d) list. Each water body on the list must have a Total Maximum Daily Load Assessment (TMDL) prepared. The TMDL calculates the maximum quantity of a pollutant that may be added to a water body from all sources, including point sources, nonpoint sources, and natural background sources, without exceeding the applicable water quality criteria for that pollutant. The assessment also quantifies how much the pollutant would need to be reduced to meet the criteria.

There are no surface waters that directly receive drainage from the areas affected by the proposed routes and facilities that are on Colorado's impaired waters, 303(d) list. However, Naturita Creek from the Uncompahgre National Forest boundary to the San Miguel River confluence is on the Colorado Monitoring and Evaluation List (M and E List) for suspected impairment from excessive concentrations of E. coliform (E. coli.) bacteria and low concentrations of dissolved oxygen (CDPHE, Water Quality Control Commission, 5 CCR 1002-93).

In addition to the state's water quality classifications and numeric standards, all surface waters of the State are subject to the Basic Standards (Colorado Department of Public Health and Environment, Water Quality Control Commission, Regulation NO. 31), which in part reads: state surface waters shall be free from substances attributable to human-caused point or nonpoint source discharge in amounts, concentrations or combinations that:

1. Can settle to form bottom deposits detrimental to the beneficial uses. Depositions are stream bottom buildup of materials which include but are not limited to anaerobic sludges, mine slurry or tailings, silt, or mud; or
2. form floating debris, scum, or other surface materials sufficient to harm existing beneficial uses; or
3. produce color, odor, or other conditions in such a degree as to create a nuisance or harm existing beneficial uses or impart any undesirable taste to significant edible aquatic species or to the water; or
4. are harmful to the beneficial uses or toxic to humans, animals, plants, or aquatic life; or
5. produce a predominance of undesirable aquatic life; or
6. cause a film on the surface or produce a deposit on shorelines.

Water Quality Data

The Colorado River Basin Salinity Control Act passed in 1974 and amended in 1984, directs the BLM to minimize salt contributions to the Colorado River system from BLM administered lands. Since the soils on the planning area are low in dissolvable salts this is not an issue with the proposed action or any of the alternatives.

The sediment yield of the area's streams is largely associated with episodic, high flow events, resulting from intense precipitation events during the summer season. Sediment supplied to the area's streams during these events is from a variety of sources, including both in and near channel, and upland sources. The existing network of routes in the planning area has the potential to intercept and concentrate storm runoff, which increases the sediment yield. The transport and fate of sediment produced from the planning area is delivered to Naturita Creek from its tributaries that occur on the planning area, and eventually in to the San Miguel River.

Groundwater

Ground water is limited within the planning area. The semi-arid climate in the vicinity of the proposed action limits water availability for groundwater recharge, and the deeply incised surface topography is not conducive for the occurrence of extensive, continuous, shallow groundwater aquifers. However, there are springs in Mud Springs Draw and McKee Draw that discharge in or in close proximity to the stream channel. Colorado's well application database shows 3 well permits on or in close proximity to the planning area. Well completion data is

lacking for these well applications which implies they are not developed (Colorado Decision Support System).

Environmental Consequences:

Impact Analysis Common to all Alternatives:

Commonly, routes alter natural drainage patterns, collect and concentrate runoff, and accelerate both runoff and sediment yield. However, the route location on the landscape, soil erodibility and degree of soil compaction on the route surface, and route design and maintenance all factor into the magnitude that hydrologic function and water quality is influenced. Routes located in lower topographic positions, in close proximity to (within 100 feet) or in drainages, have the potential to have the greatest impact to drainage channel stability and water quality. The following are some of the more common impacts to water related resources that occur when routes are located within or close to stream channels.

- At route/stream crossings, channel geometry is altered, affecting channel stability function, resulting in accelerated sediment yield.
- Routes parallel to stream channels often disturb riparian vegetation, if present, which is needed for channel stability and proper hydrologic function of the stream channel. Routes within close proximity to streams also have a shorter flow path to deliver concentrated runoff and sediment to the receiving drainage channel.
- Routes in or close to channels can more easily convey chemical contaminants (e.g., motor and hydraulic oils, grease, fuel, antifreeze, and heavy metals from tire wear) to the water course.
- Routes close to channels also have the potential to intercept surface runoff from the land area upslope, concentrating the runoff and routing it to locations less capable of conveying the flow without eroding.

Routes located on the upper portion of watersheds have less direct influence on drainage channels, but still have the potential to capture, redirect, and concentrate runoff from upslope, often onto the route surface. Surface runoff captured and concentrated on route surfaces can augment high flow peaks in receiving streams. Concentrated flow on routes located on soils that have a high capacity to erode results in accelerated soil erosion and a higher sediment yield to local surface water ways.

Recreation Guidelines developed by the BLM (USDI, Bureau of Land Management 2001) which are intended to minimize soil erosion and subsequent water quality impacts include the following: plan routes away from riparian and wetland areas, minimize surface disturbance to maintain sufficient vegetation to protect soils (especially highly erodible and fragile soils), and reduce the number of stream crossings where possible.

Based in part on BLM's Recreation Guidelines, the Public Land Health Standards, and the potential impacts described above, the metrics used to compare hydrologic impacts between the alternatives presented are the number of stream channel crossings by routes (excluding county roads), and miles of routes within 100 feet of the ephemeral and intermittently

flowing stream channels on the planning area.

Since shallow groundwater resources do not occur on the area, there would be no impact to this resource by implementing any of the alternatives.

Proposed Action:

With the implementation of the Proposed Action, 2.5 miles of routes would occur within 100 feet of stream channels with 26 route crossings. Compared to the No Action Alternative this would be 0.4 miles fewer miles within 100 feet of a stream channel and 7 additional channel crossings. The design feature to harden stream crossings where channel instability could occur would lessen water quality impacts from accelerated sediment. Additionally, 2.3 miles of routes within 100 feet of a stream channel and 10 existing stream crossings would be closed and rehabilitated. Only 0.4 miles of motorized- administrative use only routes would occur within 100 feet of stream channels and 6 channel crossings. This would help minimize the potential for chemical contamination (oil, fuel, antifreeze, etc.) to water quality. Some short term and small amount of accelerated sediment would be expected with implementing the proposed action during construction activities. However, with the implementation of the support facilities, public education, design features, the monitoring and maintenance plan, and adhering to “adaptive management” principles, impacts to water quality would be minimized, and the proposed action would result in substantially less impact to the surface water quality than the No Action Alternative.

Water Quality Proposed Action, Standard 5 finding:

The water quality Land Health Standard #5 was rated as meeting in the 2005-2006 Norwood Land Health Assessment. As noted above, water quality impacts would be minimized. This proposed action would be compliant with the Colorado River Basin- Salinity Control Act and the Colorado State Water Quality Classifications (CDPHE, Water Quality Control Commission, 5 CCR 1002-35). Thus, the proposed action would meet the intent of Colorado’s Public Land Health Standard #5 for both the short and long term.

Alternative 1:

With the implementation of Alternative 1, 2.2 miles of routes would occur within 100 feet of stream channels with 26 route crossings. Compared to the No Action Alternative this would be 0.7 miles fewer miles within 100 feet of a stream channel and 7 additional channel crossings. The design feature to harden stream crossings where channel instability could occur would lessen water quality impacts from accelerated sediment. Additionally, 2.3 miles of routes within 100 feet of a stream channel and 9 existing stream crossings would be closed and rehabilitated. Only 0.3 miles of motorized routes would occur within 100 feet of stream channels and 4 channel crossings. This would help minimize the potential for chemical contamination (oil, fuel, antifreeze, etc.) to water quality. Some short term and small amount of accelerated sediment would be expected with implementing the proposed action during construction activities. However, with the implementation of the support facilities, public education, design features, the monitoring and maintenance plan, and adhering to “adaptive management” principles, impacts to water quality would be minimized, and this alternative would result in substantially less impact to the surface water quality than the No Action Alternative.

Water Quality Alternative 1, Standard 5 finding:
Same finding as with the Proposed Action.

Alternative 2:

With the implementation of Alternative 2, 5.9 miles of routes would occur within 100 feet of stream channels with 41 route crossings. Compared to the No Action Alternative this would be 3 additional miles within 100 feet of a stream channel and 22 more channel crossings. The design feature to harden stream crossings where channel instability could occur would lessen water quality impacts from accelerated sediment. Additionally, 0.5 miles of routes within 100 feet of a stream channel and 3 existing stream crossings would be closed and rehabilitated. Approximately 1.4 miles of motorized routes would occur within 100 feet of stream channels and 34 channel crossings, which would have a higher potential for chemical contamination (oil, fuel, antifreeze, etc.) to water quality compared to the Proposed Action, Alternative 1, and the No Action Alternative. Some small amount of accelerated sediment would be expected with implementing the proposed action, especially during construction activities. However, with the implementation of the support facilities, public education, design features, the monitoring and maintenance plan, and adhering to “adaptive management” principles, impacts to water quality would be minimized, and this alternative would result in slightly less impact to the surface water quality than the No Action Alternative.

Water Quality Alternative 2, Standard 5 finding:
Same finding as with the Proposed Action.

No Action Alternative:

With the implementation of the No Action Alternative, 2.9 miles of motorized routes would occur within 100 feet of stream channels, and 19 channels would have motorized route crossings. This would increase the potential for accelerated yields of sediment and chemical contamination of the planning area’s water courses, potentially reaching Naturita Creek. Sediment and biological pathogens could increase as a result of the lack of support facilities such as parking areas, toilets, and trailheads. Public education efforts to minimize impacts to water resources would also be minimal. Thus, impacts to water quality such as higher concentrations of E. coli and sediment could progressively over time from accelerated soil erosion on routes, and lack of support facilities and user education.

Water Quality No Action Alternative, Standard 5 finding:

The lack of mitigation to keep route erosion and other impacts to water quality (accelerated concentrations of sediment, biological pathogens and chemical contaminants) to a minimum could affect existing water quality. The lack of toilet facilities could result in increased E. coli. concentrations in Naturita Creek, which is on the Colorado Monitoring and Evaluation List for suspected impairment from excessive concentrations of this constituent. Although at present the planning area meets Land Health Standard #5, progressively increasing impacts to water quality could result in the area not meeting the standard in the future.

ACCESS AND TRANSPORTATION

Affected Environment:

The UFO Travel Management Plan Amendment (2010) changed the travel designations from open to limited to existing routes within the planning area. The planning area does provide for several right-of-ways (ROWS) and other permitted or leased actions such as grazing.

The planning area is surrounded by private land except for the southern boundary which is adjacent to U.S. Forest Service land. There are two in-holdings in the planning area, one private (160 acres) and one managed by the Colorado State Land Board (640 acres). Travel on adjacent land managed by U.S. Forest Service is limited to designated routes with seasonal closures from December 1 to April 15.

In preparing for this Travel Management Plan (TMP), existing routes were inventoried. The inventory utilized global positioning satellite (GPS) and geographic information system (GIS) technologies to accurately locate and accumulate information about the routes.

Within the planning area the existing BLM road network consists primarily of low standard dirt routes that are connected to county roads. Many of the BLM routes were developed to serve needs for temporary or intermittent access and were not designed to serve sustained high levels of use. Most of the routes were developed to provide access for specific activities, such as suppressing wildfires, seismic activity, and construction and maintenance of the transmission line. In today's environment, BLM routes are needed to serve both functional and recreational needs.

The inventory identified a total of 35.3 miles of existing routes on BLM-managed public lands. This mileage does not include county roads, roads on the private inholding, or roads on the Colorado State Land Board parcel. The mileages of existing routes by travel use categories are summarized in Table 1.

There are 12.6 miles of county road which are not affected by decisions made in this plan and would remain open to the public under all of the alternatives according to county statutes. San Miguel and Montrose counties both maintain these roads to provide public access. The Redvale to Dry Creek Basin road in the northwest corner of the planning area is maintained year long, as well as a portion of the McKee Draw road up to a private land inholding in the northeast corner of the planning area. The rest of the McKee Draw road and the Burn Canyon road receive summer maintenance only.

Travel within the planning area is currently limited by seasonal weather patterns and road conditions. San Miguel County does not plow snow on their road systems beyond the private land inholding, and there is usually enough snow to limit travel from early December through early March. Many of the roads are impassible when wet, especially when soils are saturated.

Most winter recreation activities currently take place at higher elevations in deeper snow than what is found on the planning area. There are currently no restrictions on winter use of San Miguel County roads in the area. The Naturita Division of the GMUG National Forest has gates

on the McKee Draw road that are used to close the area to all motorized vehicles from December 1st to April 15th to protect big game winter range. People that run snowmobiles in this area may use the Burn Canyon road to connect to the Hamilton road to go to Miramonte Reservoir.

The monetary costs associated with maintaining a given road or trail is directly related to the overall physical makeup of the route (soil type, slope, vegetative cover, aspect, etc.), as well as to the amount and type of traffic that occurs on it. Routes with high levels of traffic, and routes that are used for high-speed modes of travel that cause higher amounts of disturbance to traveling surfaces, require more maintenance than routes with low levels of use and that are used for slow-speed, low impact modes of travel.

Environmental Consequences:

Proposed Action:

The existing BLM transportation system would be modified with additional routes and closures. The use of motorized and mechanized modes of travel would be limited to designated routes with seasonal closures. Seasonal closures would apply to motorized and mechanized modes of travel.

Under the Proposed Action, 43.3 miles of motorized and non-motorized routes would be designated and managed for a range of travel purposes. Of these, approximately 9.4 miles would be available for motorized use, 31 miles for non-motorized use only, and 2.9 miles for full-sized administrative use only. Under the Proposed Action, 23 fewer miles of routes would be managed for motorized use and 31 more miles of routes would be managed for non-motorized use than under the No Action Alternative.

For a complete summary of the mileages by the individual travel use categories for each alternative, see Table 1.

The impacts to the management of the transportation system would increase as this alternative includes construction of 25.9 miles of new routes. The Proposed Action would generate the immediate need for additional maintenance, construction, closure and improvements to support the designated travel management system. Additional signage would be needed to designate the allowable travel uses on most designated routes. The installation of gates, barricades, and other closure devices would be needed to reinforce the travel restrictions. The construction of user facilities, such as parking areas and trailhead facilities would be made to accommodate increased recreation usage.

An outcome of a designated travel management system is that user groups are generally willing to adopt routes that identify with their own interests. Thus, as various user groups develop a sense of ownership for their favorite routes and volunteer to adopt and maintain them, the need to utilize BLM funds for maintaining many of these routes could decline over time.

Alternative 1:

The existing BLM transportation system would be modified by additional routes and closures. The use of motor vehicles and mechanized vehicles and devices would be limited

to designated routes with seasonal closures. Seasonal Closures would apply to all modes of travel.

Under Alternative 1, 35.5 miles of motorized and non-motorized routes would be designated and managed for a range of travel purposes. Of these, approximately 3 miles would be available for motorized use, 4.4 miles for full-sized administrative use only and 28.1 miles for non-motorized use. Under Alternative 1, 27.9 fewer miles of routes would be managed for motorized use and 28.1 more miles of routes would be managed for non-motorized use than under No Action. For a complete summary of the mileages by the individual travel use categories for each alternative, see Table 1.

This alternative includes the construction of 18.8 miles of new routes, primarily for non-motorized travel uses. Alternative 1 would generate the immediate need for additional construction, maintenance and improvements to support the designated travel management system. Transportation management would increase in that many more existing routes would have restricted travel conditions, and more would be closed to travel. Additional signage would be needed to designate the allowable travel uses on the designated routes. The installation of gates, barricades, and other closure devices would be needed to reinforce the travel restrictions. The construction of user facilities, such as parking areas and other trailhead facilities would be needed to accommodate increased recreation usage.

As various user groups develop a sense of ownership for their favorite routes and volunteer to adopt and maintain them, the need to utilize BLM funds for maintaining many of the routes could decline over time.

Alternative 2:

The existing BLM transportation system would be modified with the least amount of closures of all three alternatives. The use of motorized and mechanized modes of travel would be limited to designated routes with seasonal closures. Seasonal closures would apply to motorized travel only.

Under Alternative 2, 55.4 miles of motorized and non-motorized routes would be designated and managed for a range of travel purposes. Of these, approximately 46.5 miles would be available for motorized use, 2.3 miles would be available for full size administrative use only, and 6.6 miles for non-motorized use. Under Alternative 2, 13.5 additional miles of routes would be managed for motorized use and 6.6 more miles of routes would be managed for non-motorized use than under the No Action. For a complete summary of the mileages by the individual travel use categories for each alternative, see Table 1.

Alternative 2 includes the construction of 29.2 miles of new routes, the highest number of proposed new routes of all three alternatives. This alternative would generate the immediate need for additional signage to designate the allowable travel uses on most designated routes. The installation of gates, barricades, and other closure devices would be needed to reinforce the travel restrictions.

As various user groups develop a sense of ownership for their favorite routes and volunteer

to adopt and maintain them, the need to utilize BLM funds for maintaining many of the routes could decline over time.

No Action Alternative:

Under the No Action, the authorized BLM transportation system would be unaltered. The “Limited to Existing Routes” designations for motorized and mechanized modes of travel would remain. Motorized use would remain on all routes. A potential exists for new user-created routes to be developed through use by visitors and others due to the lack of loop opportunities.

Currently 35.3 miles of motorized routes in the area are recognized as existing, legal routes. All of these routes are managed for motorized and non-motorized use. For a complete summary of the mileages by the individual travel use categories for each alternative, see Table 1.

Under the No Action, impacts to the management of the transportation system would steadily grow over time. A need for regular route maintenance would result from this alternative. As recreation uses on Public Lands increase with frequency, the number of miles of routes that would require regular maintenance would also gradually increase. Increased reconstruction and maintenance efforts would be needed to counter the deterioration of routes that were not designed for sustained or high levels of use, but experience increased amounts of traffic. The closure and rehabilitation of some routes would also be required where severe resource impacts or conflict with other uses occur.

NOISE

Affected Environment:

Many areas within the planning area are relatively quiet. Vehicles on the county roads are the largest noise contributors to public lands. Most of the public lands are more influenced by the noise from motor vehicles on routes than from other sources. The level of noise generated by car and truck traffic generally lessens with increased distance from roads but the sounds of traffic can often be heard from many miles away. The degree to which the sounds of traffic noise can be heard away from the highway and county roads is dependent on the nature of the local terrain and wind direction. Noise can be blocked or muted by the surrounding vegetation and topography.

The use of recreational vehicles on BLM routes is another major source of noise in portions of the planning area. As a general rule, ATVs and motorcycles produce more noise than full-size 4WDs and SUVs. ATVs and motorcycles produce more noise because their exhaust systems are not as effective at muffling noise and the machines are often operated at high rpms, whereas full-size vehicles are usually equipped with effective muffling systems and are operated at slower speeds. Consequently, the areas with the highest noise levels are those that contain numerous routes that attract high amounts of ATV and motorcycle use.

Under Colorado State Law 08-063, state and federal agencies have the ability to educate and

enforce state sound limits. The law sets a limit of 96 decibels on most OHVs and authorizes the use of the Society of Automotive Engineers 20 inch sound test. This test makes it possible to field test OHVs for sound education and enforcement purposes. BLM OHV crews and Law Enforcement personnel are trained in test procedures.

Environmental Consequences:

Proposed Action:

Lower levels of noise are anticipated in areas where routes are closed or are converted from motorized to non-motorized use. In the planning area as a whole, there would be an increase in the number and size of areas where low levels of noise are found, as well as some localized areas where noise levels would increase. The overall increase in visitors would probably result in slight increases in noise levels on non-motorized routes and a moderate increase in noise levels on motorized routes.

Alternative 1:

Motorized noise levels would be expected to decrease due to less routes being designated for motorized travel, therefore having a reduction in motorized noise disturbance to wildlife, adjacent property owners, and other recreation users. The decrease would be slight in areas that are currently relatively quiet and greater in those areas with designated non-motorized use or have route closures. If visitor use increases, it could result in a low to moderate increase in noise levels on those public land routes that remain available for motorized use and on adjacent federal and county roads. This would be caused by users of motorized vehicles shifting their use to those routes that remain open.

Alternative 2:

Motorized noise levels would be expected to slightly increase due to more routes being designated for motorized travel, therefore increasing the motorized noise disturbance to wildlife, adjacent property owners, and other recreation users. The increase in motorized noise levels would come from the continuation of use on designated motorized routes, the addition of new routes in certain areas, and the overall gradual increase in use throughout the planning area. The overall increase in visitors would probably result in moderate increases in noise levels on those public land routes that remain available for motorized use and on adjacent federal and county roads.

No Action Alternative:

In most areas, noise levels would increase, varying from low increases in some areas (the less roaded areas) to moderate increases in others. Though some increases in noise levels would come from increasing development on adjacent private lands, most of the increases on public lands would come from recreational motorized use. Overall, under the No Action, as use levels increase, noise levels could slowly but gradually increase throughout the planning area. A variety of noise levels would still be able to be found, as not all areas would experience the same levels and types of increases in noise.

RECREATION

Affected Environment:

Recreational use has increased greatly over the last fifteen years. This increase can be attributed to population growth in Colorado (16.9% increase from 2000 to 2010). Population growth within San Miguel and Montrose Counties also has a direct impact on recreation use because many residents and their families and friends recreate on public lands near their homes. San Miguel County's population increased by approximately 11.6% from 2000-2010 and Montrose County populations increased by 23.5% (Colorado Department of Local Affairs, 2010).

The increase in recreation use of the public lands in and adjacent to the area has had a direct effect on the condition of the existing routes. Many routes were constructed or developed for specific uses such as range improvements, utility corridors, and access to private land. Most of these routes were not designed for the type and amount of use that they are receiving from the recreating public. In popular areas, the increase in use has led to an increase in user created routes, most of which are not planned or designed, and many are poorly located on the land. Without a designated system of routes, visitors are uncertain about what routes are available for their use, there are minimal loop opportunities, creating the desire to develop additional user created routes. The increase in use on public lands has impacted both resources and recreation settings. The increase in recreation use is concentrated in the "urban interface", or the close proximity of public lands to private lands and the local communities and amenities. Increased residential subdivision development adjacent to and near the area has contributed to the growing use on public lands.

Activities and Opportunities in the Planning Area:

The planning area maintains a variety of recreation settings and activities for visitors, communities, and the environment. The recreational setting can be characterized as a roaded natural area. This type of setting on public lands is often adjacent to communities, rural residential subdivisions and along improved routes. The area has natural landscapes that are partially modified by routes and utility lines. Recreation activities consist of motorized and non-motorized activities in a middle country setting. The public lands provide benefits to local communities because they are easily accessible to residents for recreation.

The planning area currently has a small system of unplanned, user-created single track routes and two-track routes that are used by recreationists from the Norwood area and surrounding communities. The area is used for mountain biking, hiking, horseback riding, trail running, hunting, and OHV use. The area is directly adjacent to U.S. Forest Service lands to the south which allows for more exposure of the area. There are currently no developed facilities within the planning area. There are several informal parking areas developed off of the Burn Canyon Rd (W35) which is the main access to the planning area.

Commercial and Special Recreation Uses:

BLM evaluates, issues, manages, and monitors Special Recreation Permits (SRPs) for commercial and competitive recreation uses and organized group events on public lands and waters. SRPs are issued within the area, primarily for hunting (big game and mountain lion).

The recreation opportunities provided by commercial and special recreation uses produce important benefits for visitors, businesses, communities, and the environment. The route system on public lands is essential to all of these commercial and special recreation uses, and the impacts of travel management decisions to these activities was considered in developing the alternatives. Each of the alternatives would allow the activities currently authorized by SRPs to continue.

Other Important Recreation Planning Considerations:

Route Assessment: During the route inventory process for this travel planning effort, BLM learned that many of the parallel routes, spur routes leading to private lands, and spur routes leading to past range improvements or current permitted operations were of little or no recreation value and could be considered for possible elimination and closure in the route network to be designated through this travel planning effort, with minimal impacts to recreation users.

Recreation Management and Implementation: Appropriate recreation management is essential to adequately develop and implement the decisions made in any travel management plan. The recreation guidelines and BLM's National Management Strategies provide direction for proper management. Some of the more important points include: educating recreationists; providing clear and consistent maps; signing routes; developing brochures; increasing partnerships with user groups and volunteer efforts; increasing on-the-ground presence; developing support facilities in appropriate locations; developing an inventory and monitoring of recreational uses; and developing adaptive management that would ensure that the goals and objectives are achieved.

Important characteristics for designing, implementing, and managing a good travel plan and route system for recreationists includes: developing user facilities, such as appropriate staging areas, parking lots, and trailheads; locating routes that access desirable features, overlooks, and recreation areas; providing loop opportunities rather than routes that dead-end; locating routes so that they are easily constructed, maintained, and sustained; and providing routes that allow for different types of activities.

Off-Route Parking, Camping, and Game Retrieval: The planning area currently limits users to park motorized or mechanized vehicles, appropriate to the mode of travel, immediately adjacent and parallel to BLM existing routes.

Environmental Consequences:

Proposed Action:

Approximately 9.4 miles of motorized and 31 miles of non-motorized routes would be designated for recreational use. Overall this would provide 5.1 more miles than would be available in the No Action. Potential recreational impacts from the Proposed Action would consist of 31 more miles of non-motorized use and 25.9 less miles of motorized use compared to the No Action. This alternative would result in the adoption of a travel management plan that would create a system designated routes more favorable to sustaining a middle country recreation setting. Motorized and mechanized modes of travel would be restricted to designated routes as well as traveling off-route to park and camp. This

alternative would improve non-motorized recreational activities by providing the construction of new routes and the development of loop opportunities.

Routes that would not be designated for motorized or mechanized modes of travel include those that would not enhance recreational activities. Compared to No Action, much of the available miles of routes would be improvements to the travel system and, in turn, would improve recreation overall for users. Overall, the alternative includes loop routes, adequate parking, and better route location for motorized and non-motorized travel.

For recreation uses authorized by SRPs, the Proposed Action would allow the activities currently authorized to continue. It would enhance activities for commercial outfitters because new routes and quality loop opportunities would be designated and developed over time. It would benefit commercial big game (elk and deer) outfitters by reducing human contact with these species and potentially increase success in tracking and hunting.

The distance that vehicles would be permitted to travel off routes for parking would remain the same, one vehicle width from the edge of the route, and in such a manner so as to be safe and not interfere with other traffic; however they would only be permitted on designated routes compared to No Action in which vehicles would be permitted on existing routes.

Dispersed camping would continue to be allowed in most of the area, but users would be required to park adjacent to and at a safe distance (one car-width) off designated routes, and then walk to the campsite.

Big game retrieval would continue to be allowed using wheeled, muscle-powered game carts or wagons to retrieve big game from all available designated routes only during Colorado Parks and Wildlife (CPW) authorized big game hunting seasons.

The Proposed Action would improve the overall transportation system for motorized and non-motorized recreation and would result in decreased short term, long term, and cumulative impacts. The Proposed Action would meet the goals and objectives for the planning area.

Alternative 1:

Approximately 3 miles of motorized routes and 28.1 miles of non-motorized routes would be designated for recreational use in this alternative. Overall this would provide 4.2 less miles than would be available in the No Action. Potential recreational impacts from Alternative 1 would consist of 28.1 more miles of non-motorized use and 32.3 less miles of motorized use compared to the No Action. This alternative would result in the adoption of a travel management plan that would create a system of planned and designated routes more favorable to non-motorized recreation activities. It would create a system of designated routes more favorable to sustaining a back country recreation setting however more user facilities would be constructed. Overall, Alternative 1 would enhance non-motorized recreational activities compared to the No Action.

For recreation uses authorized by SRPs, Alternative 1 would provide more acres to access

by non-motorized uses, create quality loop opportunities, and provide better public information compared to No Action.

Impacts for parking, dispersed camping, and big game retrieval would be similar to the Proposed Action.

Overall, Alternative 1 would minimally improve the transportation system for motorized and greatly improve the system for non-motorized recreation. This alternative would be moderately compatible with the goals and objectives.

Alternative 2:

Approximately 46.5 miles of motorized routes and 6.6 miles of non-motorized routes would be designated for recreational use in this alternative. Overall this would provide 17.8 more miles than would be available in the No Action. Potential recreational impacts from Alternative 2 would consist of 6.6 more miles of non-motorized use and 11.2 more miles of motorized use compared to the No Action. This alternative would result in the adoption of a travel management plan that would create a system of planned and designated routes more favorable to motorized recreation activities. It would create a system of designated routes more favorable to sustaining a middle to front country recreation setting. Numerous new routes and user facilities would be constructed and it would provide loop opportunities and better public information compared to the No Action.

For recreation uses authorized by SRPs, Alternative 2 would provide more acres to access by motorized or mechanized vehicles compared to No Action.

Impacts for parking, dispersed camping, and big game retrieval would be similar to the Proposed Action.

Overall, this alternative would result in increased short term, long term, and cumulative impacts to recreation uses and users, and result in a travel management plan that would not take advantage of the recreational activities the community seeks. Implementing this alternative would mean that the goals and objectives would potentially be harder to achieve.

No Action Alternative:

The Planning Area currently contains approximately 36.3 miles of existing routes. These routes and the public lands offer a variety of levels of motorized and non-motorized recreational activities and access. These routes would continue to be available for all forms of motorized and non-motorized uses. A high potential exists for new user-created routes to be developed through use by visitors and others.

Although this alternative provides a number of motorized access routes, it does not constitute a travel management plan or route system that would resolve the existing issues, nor does it consider good recreation planning and design factors that could enhance recreation activities and reduce user conflicts and impacts. Loop routes, adequate parking, staging areas and other user facilities, and adequate public information would not be developed and made available. Poorly located and planned existing routes would continue

to be used, resulting in a continuation of impacts associated with this use, including more user-created routes that would not be placed in sustainable locations, and desirable destinations and other features would not get incorporated into the travel system for the public.

The No Action would provide only a limited number of single track routes for users. No routes are currently designated as non-motorized use only. The No Action would not adequately respond to the needs and issues identified by recreation users.

For recreation uses authorized by SRPs, the activities currently authorized would continue, assuming renewal of permitted activities. This alternative would provide the highest level of motorized access. It would not enhance activities for commercial outfitters due to the numerous spur routes and lack of looped opportunities within the area.

The No Action would not provide a planned transportation system that would adequately address user conflicts or enhance recreational activities. The No Action would not be compatible with the goals and objectives. Cumulative impacts concerning noise, route proliferation, resource impacts, safety, and user conflicts would continue or increase as a result of implementing this alternative.

LAW ENFORCEMENT

Affected Environment:

Problems with unauthorized or illegal use on public lands are numerous and growing. In addressing these problems the law enforcement program focuses on education, compliance checks, and issuing written warnings and violation notices.

Under the BLM's current OHV regulations, motorized travel is limited to three categories of OHV designations: Open, Limited or Closed. Many unauthorized "user created" routes have been developed over the years that visitors now regard as existing motorized routes. The creation of such routes often conflicts with other users. Unauthorized single track routes have been illegally constructed within the Norwood-Burn Canyon Travel Management Planning Area. No signs are posted in this area.

Environmental Consequences:

Impacts Common to All Alternatives

In accordance with 43 CFR 8340.0-5, motorized travel within the planning area would not be affected for the following uses: fire management or suppression activities emergencies, or law enforcement vehicles being used for emergency purposes, as well as any vehicle whose use is expressly authorized by the Authorized Officer (permitted/authorized use). Law enforcement personnel would be permitted to use motorized vehicles in the planning area on designated routes, closed routes, and cross-country during official law enforcement or investigative events.

Impacts Common to Proposed Action, Alternatives 1 and 2

The Proposed Action and alternatives would implement a travel management plan with a designated route management system that would improve the ability of law enforcement personnel to enforce regulations and restrictions. Implementation of a designated route system would have a positive impact and benefit for law enforcement in adopting and essentially switching to a designated route system. By providing clear direction with maps and signs, most people will abide by the route designations. Also, public participation and support from stakeholders will form partnerships to educate the public and increase peer pressure. This will assist the Ranger in enforcing user compliance and in court proceedings.

Proposed Action:

The Proposed Action would initially create a greater need for education with the users, and compliance and law enforcement actions, but this would improve over time as users become familiar with the new travel management plan and route system. The seasonal closures to prevent disturbance to wintering big game would, over time, assist law enforcement by providing fewer routes during the closure period to patrol.

Alternative 1:

Alternative 1 would initially create a greater need for education with the users, and compliance and law enforcement actions, but this would improve over time as users become familiar with the new travel management system. This alternative would require the most law enforcement presence, since the number of routes that would be designated for use would be reduced. This could lead to overcrowding and increased user conflicts in some areas, increased violations of OHV use on non-motorized routes, and increased attempts to establish user-created routes.

Alternative 2:

Since more routes would be available for recreational use, in the long term, and users would be distributed over more miles of routes, potentially a lower level of law enforcement presence would be required.

No Action Alternative:

Under the No Action Alternative, law enforcement personnel would continue to operate under current travel management regulations that are difficult for the public to understand and for the BLM to enforce. This alternative also limits the ability to effectively enforce the closures of user created routes.

SOCIO-ECONOMICS

Affected Environment:

The planning area is located primarily in San Miguel County with a few small sections located in Montrose County.

The Longwoods International Colorado Travel Year 2011 report stated 28.9 million visitors traveled to and within Colorado on overnight trips. Overnight touring trips accounted for 3.1 million visitors, and overnight outdoor trips accounted for 2.9 million visitors. The report

illustrates the importance of the outdoors and public lands to the Colorado visitors who cite mountains, wilderness, and lakes/ivers as important elements of their vacation.

Tourism has grown in the Southwest Region fairly steadily since 2000 based on total travel impacts as measured by direct travel spending, tourism-related employment wages, and state and local taxes.

Environmental Consequences:

Proposed Action:

The Proposed Action would provide a variety of routes, and 8 more miles of total routes than the no action alternative. Under the Proposed Action, the local economy would likely derive some economic benefit from additional routes for mountain biking and hiking. Because there would be more non-motorized routes (31 miles) than all alternatives, the economic benefit from non-motorized recreation opportunities would likely be greatest under the Proposed Action. Although there would likely be economic benefits derived, the combination of travel uses on the public lands would likely not have a major effect on population, employment, or income.

Socially, the additional routes would provide increased opportunity for hiking and mountain biking.

Alternative 1:

Alternative 1 would focus primarily on non-motorized use and provide 28.1 miles of non-motorized routes, and 0.2 more total miles than the no action alternative. Under alternative 1, the local economy would likely derive some economic benefit from additional routes for mountain biking. Although there would likely be economic benefits derived, the combination of travel uses on the public lands would likely not have a major effect on population, employment, or income.

Socially, the additional routes would provide increased opportunity for hiking and mountain biking.

Alternative 2:

Of the three action alternatives, alternative 2 would provide the least amount of non-motorized routes (6.6 miles), but the most amount of motorized routes (46.5 miles). Alternative 2 would provide 20.1 miles more of total routes than the no action alternative. Under alternative 2, the local economy would likely not derive economic benefit from designating routes. The limited number of miles for motorized routes would not typically provide a destination for a quality day trip for motorcycle or ATV trail riders.

Socially, the additional miles of routes would provide increased motorized and non-motorized opportunities for the local community.

No Action Alternative:

The No Action Alternative would maintain the status quo. The local economy would likely not derive economic benefit. No changes to the area's population, employment, and income would result under this alternative.

CUMULATIVE IMPACTS

Introduction

This section discloses the cumulative effects from all alternatives, considering past, present and reasonably foreseeable actions.

The Council on Environmental Quality (CEQ) regulations defines cumulative effects as "...the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such actions". The cumulative effects are the direct and indirect incremental effects of the impacts from implementing the proposed changes and projects in each of the alternatives, when added to other past, present, and reasonably foreseeable actions (40 CFR Part 1508.7). The geographic boundary of the cumulative impacts analysis area is the planning area and the surrounding Forest Service-managed and private lands, and the nearby communities.

Major specific actions and activities with the potential to cumulatively affect the resources evaluated in this document are identified below. These actions are generally summarized in the narrative following the table below. Some resources would be affected by several or all of the described activities, while others would be affected very little or not at all.

The Proposed Action and Alternatives 1 and 2 are action alternatives and each change existing OHV designations to "Limited to Designated Routes", such that all motorized and mechanized travel would be limited to designated routes (does not apply to hiking and horseback riding). Each alternative has a unique and different travel plan with different sets of selected routes that would be available, travel use conditions and design features, and travel management support facilities.

The three alternatives would be nearly identical in the degree and nature of cumulative effects that would occur as a result of prohibiting all cross country motorized and mechanized travel in order to prevent new user created routes on public lands. By implementing a travel plan the public would be aware of the routes that would be available for use and which routes would not be available, and fewer conflicts would occur. Reductions of cumulative impacts would occur throughout the entire planning area as a result of this prohibition.

U.S. Forest Service Planning

The U.S. Forest Service has completed travel management planning efforts on the parcel directly south of the BLM travel management planning area. The routes in the USFS planning area are managed as travel is limited to designated routes with seasonal closures. Recreational opportunities in this area include both motorized and non-motorized recreation.

The BLM travel management planning area is adjacent to lands managed by the U.S. Forest Service. Coordination of BLM activities sometimes results in BLM adopting standards or specifications that match with USFS guidelines and vice-versa (where possible).

Local Land Use Planning

San Miguel County covers 1286 square miles and has a population of around 7490 (2011 Census Data for Colorado, dola.colorado.gov). Six municipalities lie within the county (Mountain Village, Norwood, Ophir, Placerville, Sawpit, and Telluride). San Miguel County completed its current master plan in February 2008. The Town of Norwood completed a Land Use Plan in October 2007 and Norwood Park and Recreation District completed a Master Plan in June 2010. These plans will continue to provide tools for growth and outline management direction for projected land use, transportation planning and elements, planning policies, and zoning surrounding the majority of the Norwood-Burn Canyon planning area.

Local master plans could impact public lands by authorizing new subdivisions, open space identification, needs for travel element updates, relocations, or new construction. As a result of local land use planning, cumulative impacts to all resources could increase for the Proposed Action and Alternatives 1 and 2 due to the increased number of people and vehicles accessing private lands. Impacts would be reduced by designating and signing routes and closing areas seasonally to protect wildlife.

Continued Population Growth

Between 2000 and 2010, the population within San Miguel County increased by 11.6% and Montrose County populations increased by 23.5%. These trends are expected to continue over the next ten years. This growth is expected to result in more private agricultural or undeveloped land being converted into residential or commercial uses. The Norwood-Burn Canyon planning area is surrounded on all sides by private ownership with the exception of the southern boundary, managed by U.S. Forest Service. With this growth, new management challenges, including travel management, will face the land management agencies surrounding the communities, and the nearby communities themselves.

Population increases in and around the planning area would result in more demand for public land access for a variety of purposes, both motorized and non-motorized. There could be more requests for routes in the area. This would lead to widespread on-site and off-site impacts on nearby USFS, Colorado State Land Board, and private lands.

Uncompahgre Field Office Fuel Reduction Projects

Projects have been implemented in the past, and projects have been proposed and evaluated in the Field Office that have or would reduce the amount of standing and downed wildfire fuel in the planning area. These projects have and would make the public lands, where this activity occurs, less likely to incur wildfires, and land health conditions could be improved. Use of roads or need to travel cross country with motorized vehicles to accomplish projects would be analyzed for each case. These project have the potential to affect wildlife solitude and habitat forage, fragment migration routes, and add sediment to waterways on a short term basis, and require more temporary new routes; however, mitigation and design features in project plans would likely mitigate these impacts to vegetation, soils, and potentially to water courses.

Possible Upgrading of Some Major County Roads in or adjacent to the Planning area

Three major county graveled roads are located within the planning area that could be upgraded, partially relocated, and or paved during the next 10-15 years in order to provide better and quicker access to private land. Private land development has generated increased traffic by construction, visitors, and resident uses.

Routes established as a result of increased population growth and increases in volume of motorized uses contribute to surface runoff which ultimately reaches perennial and intermittent streams, ponds, riparian habitat, and wetlands and affects the physical and biological components of these areas.

BLM Special Recreation Permits

BLM issues and manages Special Recreation Permits to groups or individuals for organized, commercial, or competitive purposes and events. The BLM has had a growing number of requests for consideration of all types of Special Recreation Permits. These permits are issued for a variety of activities and events including guided horseback rides, hunting (big game and mountain lion), and mountain bike tours. The route system on public lands is essential to all of these commercial and special recreation uses, and the impacts of travel management decisions to these activities was considered in developing the alternatives. Each of the alternatives would allow the activities and events currently authorized by Special Recreation Permits to be considered in the future, under certain circumstances. New applications would be evaluated through the NEPA process and with public input to determine conformance with travel management decisions and to develop potential stipulations for operation, maintenance, and monitoring of permitted activities.

In the No Action Alternative, requests for competitive, commercial, or organized events would continue, possibly resulting in more disturbances in the planning area to soils, water, vegetation and opportunities for solitude. SRP requests will probably increase in the next 15–20 years for the Proposed Action, Alternative 1 and 2. Decisions will conform to the travel management plan thus mitigating cumulative effects from this activity.

Cumulative impacts to resources:

The cumulative effects from the Proposed Action and Alternatives 1 and 2 would differ only in the degree of the effects that would occur to the resources.

Cultural Resources

Cumulative impacts to cultural resources may be categorized as those impacts arising as direct secondary impacts, indirect secondary impacts and unintended impacts to previously undiscovered National Register Eligible properties. Direct secondary impacts to cultural resources are generally those of collecting, looting and vandalism of sites due to increased visitation and access to historic properties previously less accessible. Indirect secondary impacts are also a consequence of improved access, but consist of damages to a site from illegal off-route travel through a site, vehicle parking, camping, and other impacts in which the users are unaware of the presence of cultural sites. Finally, unintended impacts may include

such things as the creation of new erosional channels from route construction and use.

Resources: Soil, Vegetation, Invasive Species, T&E, Migratory Birds, Wildlife, Water Quality

The alternatives, when combined with past, present, and reasonably foreseeable actions, will have negligible impacts to resources at the watershed level. Minimal, localized improvements which result from improving route and recreation management could be offset by localized loss or impacts from creation of new, authorized routes. The level of these impacts will vary by alternative. The localized and low level impacts have a very minor influence on resources across the watershed. Resources on the larger watershed scale are experiencing impacts on federal and private lands such as those associated with wildfire, vegetation treatments, mining, livestock grazing, wildlife use, rights of ways, recreation, adjacent private land inholdings, and travel infrastructure. Impacts resulting from activities on private property in the watershed include cultivation, irrigation, livestock production, residential and commercial land development, and mining.

Impacts to water quality result from activities associated with private property in the watershed, including: cultivation, irrigation, recreation, livestock production, and residential and commercial land development. The cumulative effect of all the impacts in the watershed could contribute to decreased water quality in the future.

Alternative 1, Proposed Action, Alternative 2 and No Action Alternative, from most to least, have the potential to improve long-term productivity by reducing the number of existing miles and routes on the landscape. Once closed, these areas will have the potential to revert to vegetated conditions.

Transportation

In addition to growth in recreational travel, reasonably foreseeable actions that may affect transportation over the next 10 years on private and public lands include continued residential growth, fire fuels reduction/habitat projects, county road and utility maintenance and upgrades, and new rights-of-way. Other future activities near the travel planning area that could potentially impact transportation include U.S. Forest Service and Colorado State Land Board projects, local land use planning, soil research, vegetation treatments, county road upgrades, special recreation permits and activities, and utility right-of-way and corridors. The cumulative impacts to transportation from all action alternatives would be dispersed and long-term and require on-going monitoring and mitigation by BLM and partners.

Noise

Ambient sound and noise levels vary greatly throughout and near the planning area. Ambient sound includes the wind and noise originating from vehicle traffic on Highway 145, San Miguel and Montrose County roads and privately owned lands. Other noise sources include industrial activities, farming and ranching activities, aircraft over-flights, target shooting, and activities related to uses around private land areas. The cumulative effects to ambient sound from these activities in addition to noise from all action alternatives will be long-term and most adverse and dispersed in the No Action Alternative.

Recreation

Population growth and residential development of surrounding private lands will occur throughout the greater region and will result in increased amounts of recreational usage on public lands. Activities near the travel planning area that could also potentially impact recreation include local land use planning, vegetation treatments, county road upgrades, special recreation permits and activities, utility rights of way and corridors, fuels reduction projects, and utility corridor maintenance and upgrades. The cumulative effects to recreation from these activities in addition to action alternatives will be long-term and most adverse and dispersed in the No Action, contained and long-term in Proposed Action, Alternatives 1 and 2.

PERSONS / AGENCIES CONSULTED

Colorado Parks and Wildlife
 Colorado State Historic Preservation Office (SHPO)
 U.S. Forest Service

INTERDISCIPLINARY REVIEW:

The following BLM personnel have contributed to and have reviewed this environmental assessment.

<u>Name</u>	<u>Title</u>	<u>Area of Responsibility</u>
Julie Jackson	Recreation	Recreation; Visual Resources Management; Transportation, Noise
Edd Franz	Recreation Planner	Wild and Scenic Rivers
Jedd Sondergard	Hydrologist	Floodplains, Water Quality; Soils
Kelly Homstad	Fire Use Specialist	Air Quality, Fire and Forest Management
Amanda Clements	Ecologist	Wetlands & Riparian Zones; Vegetation
Glade Hadden	Archeologist	Cultural; Native American Religious Concerns, Paleontology
Ken Holsinger Melissa Siders	Wildlife Biologist	Wildlife; Threatened, Endangered and Sensitive Species; Migratory Birds
Angela Losasso	Range Management Specialist	Rangeland Management; Invasive, Non-Native Species
Jedd Sondergard	Planner	NEPA Review
Teresa Pfifer	Realty Specialist	Lands and Realty
Rob Ernst	Geologist	Geology and Minerals
Alan Kraus	Hazmat Specialist	Hazardous/Solid Wastes

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GLOSSARY

Activity plan: A detailed, site specific plan for management of one or more resource programs. An activity plan provides additional specificity needed to implement RMP decisions. Activity plans are completed only if necessary. When multiple programs are addressed, activity plans may be called Integrated Activity Plans or Coordinated RMPs.

Ephemeral streams: Flow generally occurs for a short time after extreme storms. The channel is usually not well defined.

Intermittent streams: Flow generally occurs only during the wet season (50 percent of the time or less).

Landscape: A defined land area that forms a management unit or basis of analysis.

Long-term effects: Indicated effects to be greater than 5 years.

Mechanized Travel: Moving by means of mechanical devices such as a bicycle; not powered by a motor.

Motorized Vehicle: Moving by means of vehicles that are propelled by motors such as but not limited to cars, trucks, all-terrain vehicles (ATV), Sport Utility Vehicles (SUV), motorboats, and snow machines which include snowmobiles and snow bikes. Synonymous with off-road vehicle.

Non-Motorized Use: Moving by foot, stock or pack animal, boat, or mechanized vehicle such as a bicycle.

Pet means any domesticated or tamed animal that is kept as a companion.

Off-Highway Vehicle: This term is synonymous with the term off-road vehicle (or ORV). Whereas off-road vehicle is used in the regulations and includes any motorized vehicle (see definition above), the term off-highway vehicle (OHV) is a more contemporary term.

Off-Road Vehicle: Any motorized vehicle capable of, or designed for, travel on or immediately over land, water, or other natural terrain, excluding: (1) any non-amphibious registered motorboat; (2) any military, fire, emergency, or law enforcement vehicle while being used for emergency purposes; (3) any vehicle whose use is expressly authorized by the authorized officer, or otherwise officially approved; (4) vehicles in official use; and (5) any combat or combat support vehicle when used in times of national defense emergencies.

Perennial streams: Water flows in the stream at least 90 percent of the time in a well-defined channel.

Short-term effects: Indicated effects to be within 5 years.

Standards for Public Land Health: A description of conditions needed to sustain public land health; the standards relate to all uses of the public lands in Colorado.

Resource Management Plan (RMP): A BLM multiple use planning document, prepared in accordance with Section 202 of the Federal Land Policy and Management Act, that

- a. establishes resource conditions, goals and objectives to be attained;
- b. allocates resources and identifies allowable uses;
- c. identifies land areas for limited, restrictive, or exclusive uses; and
- d. provides guidance for implementation of the decisions made in the plan.

Routes: Multiple roads, trails, and primitive roads; a group or set of roads, trails, and primitive roads that represents less than 100% of the BLM transportation system. Generically, components of the transportation system are described as “routes”.

Transportation Management Plan: A document that focuses on all aspects of transportation in a land area. Transportation planning can also be accomplished within Integrated Activity Plans, or Coordinated RMPs where multiple resource programs are planned for concurrently.

APPENDICIES

Appendix A

Definitions of Travel Use Categories

The Travel Use Categories define the individual routes in terms of the types of uses that are permitted on them. There are 10 categories, of which the first 7 represent the types of designated travel uses that apply to those routes that are available for use by the public and that are controlled by BLM. The 8th category, Non-BLM, are available to use by the public but are controlled by other jurisdictions that regulate use of the roads. The other two categories are routes that are controlled by BLM but that are not available for public use with motorized or mechanized vehicles.

It is important to understand that each Travel Use Category is named for the type of use that it is primarily suited to accommodate. The other travel uses included in the category should be considered as secondary uses. This distinction is important so that it is recognized that just because secondary uses are allowed does not mean that all of the routes in the category are suitable for those uses. All the Travel Use Categories are shown with symbols and/or color codes on the maps of alternatives.

The most inclusive travel uses class is the **4WD/2WD (Open)** category, including all of the various types of routes commonly found on public lands, ranging from maintained dirt and graveled routes to low standard primitive four-wheel drive routes. These routes are designed to accommodate conventional size motor vehicles but are also available for use by ATVs, motorcycles, bicycles, horses, and foot travel.

The **ATV 2-Track** category includes routes that are intended for use by motorized modes of transportation 50 inches or less in width and weighing no more than 1200 pounds, but are also available for motorcycles, bicycles, horses, and foot travel.

The **Motorized Single Track** category includes routes that are intended for motorized modes of transportation 36 inches or less in width but are also available for use by bicycles, horses, and foot travel.

The **Non-Motorized Single Track** category includes routes that are intended for mechanized modes of transportation 36 inches or less in width but are also available for use by horses and foot travel.

The **Non-Motorized Single Track and Administrative Use** category includes routes that are intended for mechanized modes of transportation 36 inches or less in width but are also available for use by horses and foot travel. These routes will also be available to full size motorized vehicle administrative uses.

The **Non-Motorized/Non-Mechanized Single Track** category includes routes intended for equestrian modes of transportation 36 inches or less in width but is also available for foot travel.

The **Hiking Only Single Track** category includes routes intended for foot travel 36 inches or less in width.

The Non-BLM category includes county, state, and Federal highways and roads. As a general rule most of the Non-BLM roads are public roads limited to use with street-legal vehicles and are not open to ATVs or other unlicensed motorized vehicles. Most are paved or graveled roads designed to accommodate high-speed traffic. There are, however, a few county roads that are low standard dirt roads. The BLM does not have management authority over these roads.

The **Administrative Use Only** category consists of existing routes that are not designated for specific recreational travel uses, and are not available to the public for motorized or mechanized travel. Many Administrative Access routes, however, will remain available for administrative uses by authorized personnel and permit holders with motorized or mechanical vehicles, including heavy equipment such as excavators and water hauling semi-trucks, and where legal public access exists are also available to the public for foot and horse travel.

The last category includes the **Closed** routes. These Closed routes are those that are neither available for use by the public nor needed for administrative uses.

Appendix B

Maps of the Alternatives

(Maps are located on CD as separate PDFs if reviewing the document electronically)

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Appendix C

Issues and Concerns for the Norwood-Burn Canyon Travel Management Planning Area

Background

The Bureau of Land Management Uncompahgre Field Office started the initial phase of the environmental assessment for the Norwood-Burn Canyon Recreation Route proposal in April 2012. The original proposal only entailed constructing new single track routes within the Norwood Planning Area. During the scoping period, approximately 33 comments were received revealing several issues (included below) requiring attention in conjunction with the proposal of new routes. In order to address these issues, the decision was made to conduct a comprehensive travel management plan for the area. A second scoping comment period was initiated in August 2012. The public was notified through press releases, web site postings, and letters sent to approximately 93 individuals and groups who had expressed an interest in participating in the travel management planning effort.

At the close of the second public scoping period, the Uncompahgre Field Office had received comments from 84 individuals and organizations in response to the request for public input relating to the Norwood-Burn Canyon Travel Management Plan. These comments, along with the original comments, were placed into subject categories and summarized. This document contains a general summary of the comments. Those issues received but beyond the scope of this EA and are not included (i.e. wilderness designations and RMP revision decisions).

Summary of Comments—Issues and Concerns

Access and Transportation

- Close routes that lead to private land.
- Keep routes away from private land. If new routes are constructed near private land, BLM should conduct a land survey first and post signs indicating private/public land.
- Recommend specifically designating routes to the north (south of Naturita Canyon) non-motorized, as well as those adjacent to Burn Canyon and those leading north from the northern most proposed parking area.
- Landowners opposed to parking areas paralleling/bordering private land.
- Do not allow the following: routes in Burn Canyon or that lead into Burn Canyon, routes in Mud Springs Draw, and routes that lead into Naturita Canyon to limit impacts to natural areas and possible incursions into Naturita Canyon.
- Recommend that the routes have seasonal closures.
- Need for non-motorized route system to compliment the multitude of motorized route networks on other BLM lands nearby.
- Appropriate signing and barriers needed to keep ATVs on two-track routes and off proposed single track routes.
- Address impacts and signing of access roads into Burn Canyon area, including maintenance and access from Redvale if proposed.
- Density of routes too high when factoring in current routes.
- Routes too close together and may cause new user-created loops.
- Route density and specific routes should be analyzed with respect to wildlife

habitat quality and fragmentation, recreational user experience, and potential conflicts with adjacent private landowners.

- Consider route density with respect to adjacent USFS lands and current BLM routes.
- This project should confirm and affirm as a minimum baseline, the 2008 RMP amendment that limits travel to existing routes in the UFO.
- Address cumulative impacts of all routes combined (current and proposed) on other resources, adjacent USFS lands, and recreational values.
- Please analyze existing routes, reroute those necessary, and close undesigned routes.
- Recommend all current routes stay motorized and new routes designated as non-motorized to maintain wild qualities of the area, provide more sustainable routes, and reduce amount of increased noise from motorized users.
- The planning area is not large enough to support motorized use. Please make entire area non-motorized.
- Convert 2-track routes to non-motorized use.
- Allow motorized full-size vehicles only on county roads.
- Designate specific areas as non-motorized only.
- Keep current routes open to all users.
- Create more single track routes, both motorized and non-motorized.
- Create more 2-track routes.
- Create more loop routes and link existing and proposed routes.
- Please limit travel in this area to “designated routes only”.
- Strongly opposed to motorized use due to negative impacts to other resources.
- Opposed to any new routes or development and close some of the existing routes.
- Balance the amount of new routes opened with an equal amount of existing routes closed.
- Consider connecting BLM route system to USFS Thunder Mountain Trails.
- Please add new proposed routes (non-motorized) on the sides of canyons (not in the canyons) to provide a different riding experience.
- Implement the proposal in full submitted by Norwood Park and Recreation District.
- Designate all routes leading toward or near Naturita Canyon as non-motorized.
- Designate the route down McKee Draw as single track – some prefer it to be motorized while some requested non-motorized only.
- In order to insure that RS 2477 does not apply on any routes being considered for closure, proper research must be performed to ensure that the route was not constructed before 1976.
- Separate user groups to reduce potential impacts.
- Consider impacts by motorized recreation vs. non-motorized – noise, dust, pollution, soil erosion.
- Create a new non-motorized route that travels along the perimeter of the planning area, including the far NW corner and connect all the routes.
- Ensure enforcement of route closures and types of uses on designated routes.
- Consider the appropriateness of new routes in previously burned areas. If constructed, designate those areas as non-motorized only.
- Please add new non-motorized routes in the southwest corner of the planning area.
- No new routes in roadless areas, canyons, or important wildlife areas.

- Close the routes marked that led south from County Road W35 into the State School Section. It contributes to habitat fragmentation in the planning unit and is neither suitable nor needed for recreation.
- Close the old road that goes south off of CR W35, skirts the State School Section to the west and goes east to Callan Draw. It should be kept as a wildlife security and movement area. Closure would also avoid encroachment of user created routes onto neighboring Forest Service land that is closed to motorized and mountain bike use. The closure would maintain the whole area east of the State Section and south of CR W35 as an unbroken block effective habitat.
- Close routes in the NW section of this planning area. These routes provides deer and elk winter range and high quality big game hunting and should be closed where possible, except for those serving a specific livestock or energy exploration purpose, or unless a few lend themselves, ecologically and recreationally, to being converted to single track mountain bike routes.
- Close routes in the eastern portion of the planning area in addition to the user-created route in McKee Draw in order to protect habitat and a create a roadless area.
- Close all routes east of County Road 38Q known as Flatiron Mesa and manage as an undisturbed primitive area.
- Route 38Q extends onto FSR608 which is restricted from December 1 through May 15 for soft road bed protection, including travel by snow vehicles. Manage consistently.
- Two unnamed routes on BLM loop onto USFS lands and are in big game winter range with seasonal closures to motorized use from December 1 through April 15. Both of these routes will be decommissioned. Manage consistently.
- Incorporate the route plan submitted to BLM by Singletrack Trails, Inc. as it was completed by a professional trail planner.

Cultural and Historic Resources

- Analyze impacts to cultural, historic and paleontological resources.
- Complete surveys of area prior to any construction.
- An extensive new route system and publicity will increase the exposure of archeological sites to vandalism. This problem should be analyzed and addressed.

Land Health and Threats

- Previous fire and restoration efforts have been implemented in this area. The routes should support and build on this restoration effort and not negatively impact the area.
- Incorporate studies of the ecological values of draws and washes in western ecosystems.
- The proposed route system should consider the larger landscape-wide effects beyond just this BLM parcel.

Law Enforcement and Public Safety

- Concerns regarding lack of management and enforcement now.
- Proper monitoring and enforcement needed to reduce user-created routes.
- Increased workload for law enforcement, both BLM and Colorado Parks and Wildlife

Noise

- Landowners concerned about noise next to their property.
- Increased traffic, especially from motorized use, will cause more noise pollution.
- Designate as non-motorized only to reduce noise.
- Analyze sound impacts, especially in canyons, even from non-motorized use.

Recreation

- Area is ideal for sustainable recreation routes
- Provide stacked loop system for all abilities
- Need for parking area, kiosks, brochures, maps, picnic area, and drinking area if area is developed.
- Clarify trailhead and parking areas and do not locate parking areas in the canyons.
- Minimize number of trailhead facilities and make routes accessible from communities.
- Proposed routes minimize long site lines and avoid gradients exceeding 10%
- Lack of sustainable single track routes in the area within riding distance to town.
- Ensure routes are designed by skilled and experienced trail designers with mountain bikers in mind, not just motorized users.
- Route design should be influenced not only by recreationists but also by those with an ecological/biological background.
- Provide increased education to minimize conflicts and educate on other resource values.
- Increased use and impacts of potential user-created routes may be a problem.
- Give equal representation to all user groups and skill levels.
- Consider one-way, directional routes that are only open to specific user on alternative days to minimize user conflicts.
- Create some separation of user groups for a better experience.
- Consider designated campsites – others believe this should be addressed in the RMP.
- New routes will create more opportunities for the community and provide a healthier lifestyle for people.
- Implement the project in phases to assess impacts as new routes are developed.
- Open routes contingent on user compliance of no new social routes.
- Work with local clubs and volunteers for construction of the new routes.
- Include language in the planning process for off-road, dispersed camping.
- Recommend that the BLM take definitive and necessary steps to ensure development of a route system does not encourage or invite rouge route construction.

Multi-use

- Analyze impacts between various user groups, motorized vs. non-motorized, and hunting.

Socioeconomics

- Attract tourist dollars and benefit local economy
- Route system would help Norwood become an outdoor destination town
- Extent to which the route system will attract visitors is unknown and not worth the expense to build based on other negative impacts to the resources.

- Lack of data to show the need for new routes.

Soils

- Design and construct routes to minimize potential erosion
- New routes would not be sustainable and cause erosion due to type of soil in this area.

Vegetation

- Potential increase of noxious weeds. Weed control needed.
- No new routes in the bottom of Burn Canyon or any other riparian zones, as well as routes that lead to the canyons.

Water Quality

- Analyze impacts to riparian areas, especially Naturita Creek.
- Divert routes and parking areas away from riparian areas.

Wildlife

- Preserve wildlife habitat and corridors and protect current roadless areas.
- Area designated as “critical big game winter range”; need to protect wildlife.
- Implement seasonal closures to mitigate negative effects to wildlife.
- Develop a system for effective enforcement of seasonal closures.
- Ensure steps for maintenance of backcountry habitat for wildlife.
- Keep motorized users away from the escarpments (edge zones) as these areas are important for birds and wildlife.
- No new routes (or only non-motorized) in previously burned areas in order to protect wildlife habitat.
- Keep routes on mesa tops and avoid the rims to protect wildlife and ecological values.

In April 2014, Uncompahgre Field Office initiated another 30-day comment period for the public to review the preliminary Norwood-Burn Canyon Travel Management Plan. The Uncompahgre Field Office received 100 comments from individuals, organizations, and agencies. Below is the summary of preliminary comments received as well as the responses.

Comment	Comment #(s)	Response
I am in favor of alternative 1	157, 159, 746, 754, 775, 801, 1121	Thank You for your comment
I am in favor of alternative 2	143, 147, 148, 149, 150, 151, 153, 154, 735, 736, 737, 738, 740, 741, 742, 743, 744, 750, 751, 752, 755, 756, 757, 759, 760, 761, 762, 763, 764, 765, 766, 769, 770, 771, 772, 774, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 803, 1122	Thank You for your comment
I am in favor of the proposed action	145, 146, 155, 156, 158, 161, 162, 732, 733, 734, 739, 745, 746, 747, 748, 749, 753, 758, 767, 773, 788, 804, 805, 806	Thank You for your comment
I am in favor of the no action	753	Thank you for your comment
Need for more single-track trails in the Norwood area	141, 743	Thank you for the comment. The proposed action and final decision adds single track trails to the area - see Final Decision Map
Against motorized use; less motorized use the less damage and noise	142, 155, 156, 159, 161, 733, 747, 754, 800,	Thank You for your comment

Comment	Comment #(s)	Response
	801, 804, 806	
Need more motorized multi-use trails; San Miguel County lacks motorized routes for users	143, 147, 149, 154, 735, 737, 738, 740, 741, 742, 743, 750, 751, 752, 755, 777, 789, 791, 797, 798	After considering the comment, changes were made in the Final Decision to accommodate motorized use where possible - see Final Decision Record Map. BLM will also work in coordination with the USFS, Town of Norwood, San Miguel County, and Norwood Park and Recreation District to look at additional opportunities that may be provided to connect destination areas for OHV's on county roads similar to the Wagon Wheel Trail System in Rio Blanco County.
Trails will have positive economy and local impacts for Norwood	144, 161, 733, 734, 735, 736, 741, 742, 743, 745, 768, 773, 783, 805, 806	Thank you for you comment
Request that official camping sites/amenities be considered	145, 733, 767, 773, 775, 806	Thank you for the comment. Dispersed camping is currently allowed where users can park directly adjacent to the route or at the end of spur routes to camp.
Change seasonal closure dates	152, 162, 163, 732, 733, 745, 746, 749, 767, 775, 806	After considering the comment, no changes were made due to the lower elevations of BLM lands and the big game are very vulnerable and sensitive during this time of year. Colorado Parks and Wildlife would like to have the seasonal dates remain until April 30th however there is adaptive management allowed for in the proposed action to open later or earlier if BLM and CPW agree that the dates can be modified on a case by case basis each year
Prohibit all users during the seasonal closure dates	739, 1121	After considering the comment, no changes were made due to two county roads running through the middle of the area. BLM feels prohibiting all uses during the seasonal closure would not be manageable unless the county roads were closed seasonally as well. The management of the roads are under San Miguel County's jurisdiction.
USFS administrative access is not needed	152	After considering the comment, changes were made to close routes that led into the USFS with the exception of the route that is needed by the BLM range permittee to access his range improvement project - see Final Decision Map
Routes close to USFS boundaries will encourage unauthorized use on the Forest Service	152	Thank you for the comment

Comment	Comment #(s)	Response
Road/trail densities should be reduced to more consistent with those set on the USFS for the benefit of wildlife	152, 739	Thank you for the comment
Disclose size and level of development for the proposed trailheads	152	Thank you for the comment. The size and level of development is part of the proposed action under the Management Common to Proposed Action and Alternatives 1 and 2 under the heading of Travel Management Support Facilities - see page 9 of the EA
Hiking, horseback riding and mountain biking is incompatible with motorized use	158, 160, 748, 768, 773	Thank you for the comment. The Proposed action and the final decision provides different options for all users - see Final Decision Map
Would like to have McKee Draw Trail open to hikers and link to the east with 3040 at conjunction of 3451	142, 162, 732, 745, 749	After considering the comment, changes were made to the proposed action to include a loop with the McKee Draw Trail. See Final Decision Map
Would like to have McKee Draw Trail open to bikers and below	145, 747,768	After considering the comment, changes were made to the proposed action to include a loop for hikers only to lessen the impacts wildlife with the McKee Draw Trail. See Final Decision Map
No need to require pets on be on a leash since it is already illegal to let dogs chase or harass wildlife or livestock in CO	739	Thank you for the comment - The proposed action requires "Pets must remain on a leash at all trailheads and under audible or physical control on the routes." We felt that trailheads needed a little more control but once on the trail then the decision is consistent with the existing regulations
Don't believe that 3327 or 3072 exist	739	After considering the comment, an on-sight was conducted to verify that route did exist and that it is feasible to keep it open as an ATV designated route as proposed in the Proposed Action
Should not approve trails off of ATV trail 3210 due to sensitive wildlife area.	739, 746	After considering the comment, changes were made to the final decision (see final decision map) to not include the routes due to sensitive cultural and wildlife areas and provide for quality hunting experiences.
Do not support the new proposed routes (3229-3432) that cross McKee Draw because it will open up semi-primitive areas that provide big game security and opportunity for quiet use recreation	739, 759	Thank you for your comment. The routes have been proposed for hiking and equestrian use except for the grazing permittee access to his range improvement project. The area will also be seasonally closed from December 1 to April 30

Comment	Comment #(s)	Response
What is the purpose and what is being proposed on the county road that goes down Mud Springs Draw?	739	San Miguel County currently has jurisdiction over the road and currently makes the decisions on for the route. Please talk with San Miguel County for further information.
In favor of no dogs off leash	746	Thank you for the comment - The proposed action requires "Pets must remain on a leash at all trailheads and under audible or physical control on the routes." We felt that trailheads were currently the only area that needed a little more control but once on the trail then the decision is consistent with the existing regulations
3372 and 3327 should not be upgraded and designated for either motorized or mountain bike use	746	Thank you for the comment. The route 3325, 3327, 3072, 3333, 3330 currently exists on the ground and was originally open to full sized vehicles. In the final decision, the route has been downgraded to an ATV route due to the terrain and the nature of the trail. See Final Decision Map. This will still allow for hunting access and provide a small ATV loop for hunters to return to their camps or vehicles.
Refrain from improving recreation connectivity at the expense of wildlife connectivity	746	Thank you for your comment. Please see Decision Record and Final Decision Map of changes made.
Include a implementation plan with Decision Record and funding availability	746, 762, 763, 769, 770, 771, 774, 779, 781, 783, 798, 806, 1122	After considering the comment, changes in wording were made to reiterate the implementation that is addressed throughout the EA - see Management Common to All Alternatives, Management Common to Proposed Action and Alternatives 1 and 2, and the Proposed Action. There are also route by route decisions made within the database that will guide the implementation of the travel plan. The EA does not address funding since funding sources change annually. BLM utilizes numerous funding options such as appropriated dollars, working with partners to receive outside grants like GOCO, REI, and Colorado State non-motorized and motorized grants, Federal Highways Administration grants, etc. and other places as the opportunities arise.
Use adaptive management	746	Thank you for the comment. Adaptive management has been established in the EA (see pages 12-13 and 17-18).
Disallow permitted competitive or group events.	746	Thank You for your comment. Special Recreation Permits were addressed on page 12 of the EA.
Reduce Trail Access in Wildlife Security/Sensitive Areas	746, 753, 1121	After considering the comment, changes have been made to the proposed action please see Final Decision Map and Decision Record

Comment	Comment #(s)	Response
3207/3420 Western edge of Burn Canyon and leads to the edge of Naturita Canyon, no reason to keep open to all vehicles, should only be for mountain bikes and below	747	Thank you for the comment. This route is an existing full size vehicle route that leads to an overlook and spur route to provide camping opportunities. The route allows for continued hunting access, dispersed camping and scenic overlook of the canyon for those who can not access the area with non-motorized modes of transportation.
3330, 3333, 3072, 3325-3329 This route connecting upper Burn Canyon to Callan Draw should not be constructed - If constructed it should not allow motorized use due to negative impact to important, sensitive big game habitat	753, 759	Thank you for the comment. The route 3325, 3327, 3072, 3333, 3330 currently exists on the ground. In the final decision, the route was designated for ATVs, mountain bikes, horses and hikers due to the terrain and the nature of the trail. This will still allow for hunting access and provide a small ATV loop for hunters to return to their camps or vehicles. All other proposed trails within the area have been not proposed in the final decision. See Final Decision Map.
3211 Should not be constructed - Important big game habitat	753	After considering the comment, changes have been made in the final decision - see Final Decision Map
3210 Should not be constructed - Important big game habitat	753	After considering the comment, changes have been made in the final decision - see Final Decision Map
3434 Should not be constructed keep activity north of CR W35	753	After considering the comment, changes have been made in the final decision due to sensitive wildlife and cultural resources-see Final Decision Map
3371 Should not be constructed keep activity north of CR W35	753	After considering the comment, changes have been made in the final decision due to sensitive wildlife and cultural resources - see Final Decision Map
3396 Comes too close to private property	754, 800	Thank you for the comment, BLM intends to work with local landowners on site to address concerns and issues with trails near their boundaries.
Trails around our land, you are effectively putting us on the frontline to deal with regulation enforcement, injuries and accidents	754, 800	Thank you for the comment, BLM intends to work with local landowners on site when final layout is completed to address concerns and issues with trails near their boundaries.
Request that the whole leg of the trail system (3327, 3313, 3386, 3396, 3383, 3397, 3390) be completely removed due	754, 800	After considering the comment, no changes have been made. The BLM specialists have determined that the route designation is compatible with the other uses in the area. The route is a key connector to link the north and south trail system and be able to provide one key staging area for the single track trails in the

Comment	Comment #(s)	Response
to wildlife and sensitive resources		area.
Private land issues and boundary marking	754, 800, 802	Thank you for your comment, BLM intends to work with local landowners on site when final layout is completed to address concerns and issues with trails near their boundaries. Trails will not be constructed directly on private land and surveys will be completed where necessary as well as signage to respect private property if needed.
Private and county road concerns including 3312 and 3394 for administrative use 3061, 3093, 3092, 3143, 3094 are all on private land	754, 800	Thank you for the comment, administrative use allows for permitted use to access areas such as private land owners to their private land. BLM would only recommend to the county to vacate the part of county road that leads north to the well pad and recommend keeping access for private land owners. BLM is not proposing to close any routes on private land (mapping error and has been fixed - see Final Decision Map)
Safety concerns on County Road W35	754, 800, 802	Thank you for your comment. The BLM will continue to work with San Miguel County and the Town of Norwood to provide the safest access possible if issues arise.
There is no meaningful site-specific or issue-specific analysis to justify these actions; Analysis of most resource specific issues is completely faulty;	757, 779, 781, 1122	Please see pages 20-87 in EA for issue-specific analysis
Unclear if Lands with Wilderness Characteristics (LWC's) was considered	759, 776	After considering the comment, it was determined that Lands with Wilderness Characteristics (LWC's) did not need to be considered because the area does not meet the Lands with Wilderness Characteristics criteria. The San Juan Wilderness Bill does not impart any status to the land adjacent to the area (it is a Bill not a designation); Lands with Wilderness Characteristics have very specific criteria. The area does not meet the size criteria as defined in the BLM Handbook Land Use Planning 1601-1 and BLM Manual 6320 - Considering Lands with Wilderness Characteristics in the BLM Land Use Planning Process (Public).
Not familiar with private roads on public lands. What is private road 3000?	776	Thank You for the comment, San Miguel County currently has jurisdiction over the road and currently makes the decisions for the route. Please talk with San Miguel County for further information.

Comment	Comment #(s)	Response
What is being proposed for the 2-track road that goes down Mud Springs Draw off the County rd near the drill pad located in Section 33? None of the maps indicate the purpose of this route	776	Thank you for your comment, the route is currently under San Miguel County's jurisdiction. BLM will request that the county relinquish this part of the county road (but keep the part that accesses the private land) back to the BLM since the road will no longer be needed with the well pad being reclaimed and no other uses are being proposed within that area.
Preferred alternative fails to address the new opportunities for non-motorized usage in adjacent planning areas such as DENCA and San Juan NF Resource Plan	781, 798, 1122	After considering the comment, it was determined that transportation planning and USFS planning was addressed within the Cumulative Impacts Analysis. (See page 83-87 in the EA)
Current proposed action is not consistent with the purpose and need for the project.	783, 786, 798, 1122	After considering the comment, it was determined that both the proposed action and the final decision are consistent with the purpose and need for the project. Changes have been made to the proposed action. See Final Decision Map and Decision Record.
Would like to see the Burn Canyon Trail added to proposed action	788	After considering the comment, no changes were made due to Burn Canyon being a very sensitive wildlife corridor.
3297, 3293, 3291, 3106, 3288, 3289, 3304, 3300, 3224 - I like this Proposed biking, hiking, equ. Loop	788	Thank you for your comment
3426, 3427, 3285, 3283, 3309, 3308, 3317, 3284, 3300 - Also biking, hiking, equ.	788	Thank you for your comment - the routes are designated for biking, hiking, and equestrian use on Final Decision Map.
3251, 3253, 3258, 3264, 3275, 3215, 3356, 3349, 3004, 3214, 3433, 3428, 3257, 3212, 3269 - Allow mountain bikes, motorcycles, hiking and equ.	788	After considering the comment, changes were made in the Final Decision to accommodate motorized use on these routes - see Final Decision Map
3433, 3432, 3424, 3450, 3451, 3040, 3110, 3090 - Keep open to mix use add a loop trail by providing new mileage	788	After considering the comment, changes were made please see Final Decision Map

Comment	Comment #(s)	Response
on top of McKee Draw to the west of existing burn line trail.		
Add 3229 crossing through McKee Draw for bicycles, hiking, equ.	788	After considering the comment, no changes were made due to sensitive resources
3442, 3449 Allow bikes, hikers, equ.	788	After considering the comment, changes were made to McKee Draw (3442) and route 3449 will remain with the same designation which does allow for bikes, hikers, and equestrian use.
3325, 3327, 3072, 3333, 3330 - Open for ATVs	788	Thank you for the comment - the route will remain designated for ATVs, motorcycles, mountain bikes, equestrian use, and hikers - see Final Decision Map
3221, 3342, 3222, 3279, 3313, 3228, 3392, 3395, 3400, 3223 - bikes, hike, equ. Add to proposed please	788	After considering the comment, no changes were made due to Burn Canyon being a very sensitive wildlife corridor; no changes were made to the Proposed Action. Hikers and equestrian use are allowed cross country so the opportunity does still exist.
Would like to see a phased implementation approach as well as signage for education of the area	806	<p>After considering the comment, changes in wording were made to reiterate the implementation that is addressed throughout the EA - see Management Common to All Alternatives, Management Common to Proposed Action and Alternatives 1 and 2, and the Proposed Action. There are also route by route decisions made within the database that will guide the implementation of the travel plan.</p> <p>BLM utilizes numerous funding options such as appropriated dollars, working with partners to receive outside grants like GOCO, REI, and Colorado State non-motorized and motorized grants, Federal Highways Administration grants, etc. and other places as the opportunities arise due to this BLM will need to implement in a phased approach.</p>
Analysis presented in the EA does not include an adequate discussion to justify discriminating between trail based recreational groups (e.g. mechanized users verse hikers verse motorized user) with respect to each type of activity's impact on displacing big game. CPW finds no	1121	Thank You for the comment, please see EA (Threatened, Endangered, and Sensitive Species, Environmental Consequences, Impacts Common to all Alternatives, pg 39-40) for a discussion of OHV-related impacts likely to occur based on various studies and literature reviews. Impacts of OHV activities on wildlife and their habitats are numerous and well documented. Because of the complexity of potential impacts to various wildlife species from various forms of trail use (motorized, non-motorized), analysis of effects was not distinguish between motorized or non-motorized routes (EA pg 40). "Measuring indicators of all these factors for the numerous species of interest would be an excessively difficult task. In

Comment	Comment #(s)	Response
<p>compelling evidence in the scientific literature or in our professional judgment that user groups, in this case, constitute significant differences with respect to wildlife impacts to warrant separate management actions.</p>		<p>addition, for most of the species of interest, the relationships between these factors and population dynamics are not well understood. Because of these difficult to measure potential impacts to sensitive wildlife and plant populations, we assume that any reduction in routes, or reduction in class of use (from motorized to non-motorized) would in general improve wildlife, fish and plant habitats in the area.”Assumptions for terrestrial wildlife analysis were stated in the EA (pg 50) that "for reduction in class of use are that, in general, by changing from motorized to non-motorized the noise level associated with those recreational activities would be lower and travel a lesser distance for non-motorized than motorized recreation. This would result in a smaller ‘foot print’ of disturbance and disruption of wildlife habitat."Alternatives that discriminated between trail based recreational groups (e.g. motorized, non-motorized) were developed for this project area based on issues that were brought to the proposal.The original proposal from the community for this area was a non-motorized trail area.CPW expressed concerns for protecting crucial habitat areas for big game species in the southern and northwestern portions of the project area from disruptive activities and need for refuge for these species due to the Burn Canyon fire (see EA pg 48-49)The current RMP identifies the entire planning area as a wildlife emphasis area due to big game crucial winter ranges (see EA pg 49-50)</p>

Comment	Comment #(s)	Response
<p>Benefits are asserted from moving to a designated trail system in the planning area are addressed in the EA without addressing the additional benefits that would result from a properly implemented existing route system. Rather than attempting to assert benefits from previous management decisions, the proper question should be how to fund implementation and education of users regarding the newly adopted TMP (UFO TMP in 2010).</p>	<p>1122</p>	<p>After considering the comment, no changes were made to the document. The Land Use Planning decision made the area "Limited" to existing routes until further route by route planning could be conducted. The route by route planning is part of the implementation process. (See page 5, 25, and 26 of the EA and See page 5, 6, 8, and 10 of DOI-BLM-CO-S050-2008-0064, Environmental Assessment, November 2009, Uncompahgre Basin & San Juan/San Miguel Resource Management Plan Amendments and page 1 of the Decision Record; also see BLM Handbook H-8342-1)</p> <p>Also BLM's policy mandates that: "Area designations limiting motorized use to existing roads, primitive roads and trails can only be made on an interim basis as a preliminary step leading to the selection of a designated network of roads, primitive roads and trails." (BLM Handbook H-8342-1, pg. 12)</p>

Appendix D									
THREATENED AND ENDANGERED SPECIES¹									
SPECIES	STATUS	HABITAT DESCRIPTION²	CRITICAL HABITAT (Y/N)³	KNOWN⁴	RANGE⁵	HABITAT⁶	NO EFFECT⁷	MENLAE⁸	MELAE⁹
Birds									
Mexican spotted owl (<i>Strix occidentalis lucida</i>)	T, ST	Larger canyon systems dominated by rock cliffs and ledges, containing streams, riparian vegetation and/or conifer.	No	None	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gunnison sage-grouse (<i>Centrocercus minimus</i>)	C	Sagebrush dominated habitats interspersed with grassy or wet meadows	No	None	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Yellow-Billed Cuckoo (<i>Coccyzus americanus</i>)	C	Larger stream systems supporting woodlands of cottonwood & willow	No	None	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mammals									
Black-footed ferret (<i>Mustela nigripes</i>)	E,SE	Well-established active prairie dog colonies; sagebrush, desert shrublands, grasslands	No	No suitable habitat present. Believed to be extirpated from this portion of its range.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
North American wolverine (<i>Gulo luscus</i>)	C	Alpine and arctic tundra, boreal and mountain forests (primarily coniferous). Limited to mountains in the south, especially large wilderness areas	No	No suitable habitat present. No known populations in this portion of San Miguel or Montrose County.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gunnison's prairie dog (<i>Cynomys gunnisoni</i>)	C	Level to gently sloping grasslands, semi-desert shrublands, and montane shrublands, from 6,000' - 12,000 in elevation.	No	No suitable habitat present within the planning area.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appendix D

THREATENED AND ENDANGERED SPECIES¹

SPECIES	STATUS	HABITAT DESCRIPTION ²	CRITICAL HABITAT (Y/N) ³	KNOWN ⁴	RANGE ⁵	HABITAT ⁶	NO EFFECT ⁷	MENLAE ⁸	MELAE ⁹
Fish									
Bonytail <i>(Gila elegans)</i>	E, SE, CH	Warm-waters of the Colorado River mainstem and tributaries, some reservoirs; flooded bottomlands for nurseries; pools and eddies over rocky substrates with silt-boulder mixtures for spawning	No	None	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Colorado pikeminnow <i>(Ptychocheilus lucius)</i>	E, ST, CH	Warm-waters of the Colorado River mainstem and tributaries; deep, low velocity eddies, pools, runs, and nearshore features; uninterrupted streams for spawning migration and young dispersal; also floodplains, tributary mouths, and side canyons; highly complex systems	No	None	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Humpback chub <i>(Gila cypha)</i>	E, ST, CH	Warm-water, canyon-bound reaches of Colorado River mainstem and larger tributaries; turbid waters with fluctuating hydrology; young require low-velocity, shoreline habitats such as eddies and backwaters	No	None	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Warm-water reaches of							

Appendix D									
THREATENED AND ENDANGERED SPECIES¹									
SPECIES	STATUS	HABITAT DESCRIPTION²	CRITICAL HABITAT (Y/N)³	KNOWN⁴	RANGE⁵	HABITAT⁶	NO EFFECT⁷	MENLAE⁸	MELAE⁹
Razorback sucker (<i>Xyrauchen texanus</i>)	E, SE, CH	the Colorado River mainstem and larger tributaries; some reservoirs; low velocity, deep runs, eddies, backwaters, sidecanyons, pools, eddies; cobble, gravel, and sandbars for spawning; tributaries, backwaters, floodplain for nurseries.	No	None	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Greenback cutthroat trout (<i>Oncorhynchus clarki stomias</i>)	T	Cold water streams and lakes with adequate spawning habitat (riffles), often with shading cover; young shelter in shallow backwaters	No	None	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plants, Reptiles, Amphibians, Invertebrates									
No species listed for the Planning area.									

1 List provided by the USFWS ECOS-IPaC, February 13, 2013.

2 Van Reyper G. 2006. Bureau of Land Management TES [threatened, endangered, sensitive] species descriptions. Uncompahgre Field Office, Montrose, CO, updated 2009/2010. Unpublished document.

3 Designated Critical Habitat in Planning Area

4 Potential and/or known occurrences in Planning Area. Assessment based on UFO files and GIS data, partner data, and local knowledge.

5 Planning area is within the current known range of the species.

6 Planning area contains suitable habitat for the species.

7 Project activities will have “No Effect” to the species or its habitat

8 Project activities “May Effect, Not Likely to Adversley Effect” to the species or its habitat

9 Project activities “May Effect, Likely to Adversley Effect” to the species or its habitat

Appendix E Potentially Occurring BLM Sensitive Species within the UFO

Those species where the planning area is within the known range of the species, is likely to contain suitable habitat, and includes potential or known occurrences of that species are shown below. An evaluation of all potentially occurring BLM sensitive species within the UFO is shown in the table further in this appendix.

● Bald eagle - *Haliaeetus leucocephalus*

In 2007, the bald eagle was delisted from Endangered Species Act protection. The bald eagle was removed from the Colorado list of threatened and endangered species in 2009, but continues as a BLM Sensitive Species.

There are no known nest sites, winter concentration, roost or communal roost sites within or near the planning area. From early December through early April, wintering bald eagles forage throughout the Wright's Mesa area, north of the planning area. Helicopter and ground surveys, conducted by BLM in the early 1980's located a communal night roost site on public land within the San Miguel River canyon north and east of the planning area. Several day roosts are located throughout Wright's Mesa, and bald eagles may forage in the planning area.

● American peregrine falcon – *Falco peregrines anatum*

Within the planning area, Naturita Canyon contains suitable habitat for the peregrine falcon, but has no known eyries. The nearest known breeding pairs are located in the Dolores River Canyon approximately 20 miles west of the planning area.

● Northern goshawk - *Accipiter gentilis*

Throughout their range, goshawks utilize primarily coniferous and deciduous forest habitat, especially in mountains. Preferred nesting habitat in this part of Colorado includes mature to old growth aspen and ponderosa pine forest. Nest trees are large, opened crowned trees with large limbs which can provide a base for their stick nest. Goshawks reuse the same nesting territory year after year and may use the same nest for several seasons. They may have several alternate nest sites within a territory. Site-specific surveys have not been conducted within the planning area to determine the presence of this species.

● Brewer's sparrow - *Spizella berweri*

The distribution of the Brewer's sparrow is roughly correlated to the North American range of big sagebrush. Natural Diversity Information Source (NDIS) data records indicate the Brewer's sparrow occurs in both Montrose and San Miguel Counties. Breeding Bird Atlas (Kingery 1998, Breeding Bird Atlas II) records document the presence of this species in Montrose County as well. There are no records of Brewer's sparrow within the planning area.

The Brewer's sparrow is a sagebrush obligate species. Habitat characteristics correlated with dense populations include a dominance of

stands of moderate-density big sagebrush of mid-height, with high forb cover, low grass cover, and some horizontal diversity. In this sagebrush community, Brewer's sparrows feed in the foliage of the shrubs.

Brewer's sparrows are summer residents of the mesas and foothills of western Colorado. They start to arrive in Mid-April with full numbers at the end of the month. Prolific singing occurs until pair bonding, then singing decreases. Depending on weather conditions, they begin nesting late (mid-May to late June) and nest only once each season. The female lays 3-5 eggs in a ground nest. Incubation takes 16-17 days and young fledge in 21-24 days.

The planning area is within the known range of this species, and suitable habitat is present. Site-specific surveys have not been conducted to determine the presence of this species within the planning area.

●Long-billed curlew - *Numenius americanus*

The long-billed curlew is highly associated with healthy native grassland habitats, primarily shortgrass prairie, with nearby shallow lakes, playas, or ponds for feeding, bathing or drinking.

Within the planning area, Naturita Creek contains wetland and riparian habitat that is suitable for this species. The presence of long-billed curlew in southwestern Colorado is very rare. There are no records of breeding pairs in this area of the State.

●White-faced ibis - *Plegadis chihi*

Populations of white-faced ibis are found in both North and South America. In North America they are primarily found along the Gulf Coast, through the Great Basin, and in other isolated colonies in the plains and southwest. In Colorado, breeding occurs mainly in the San Luis Valley, with some records near Gunnison, Cortez, Greeley, and Browns Park in the northwestern corner of the State. The planning area is within the range of white-faced ibis, and Naturita Creek contains wetland and riparian habitat that is suitable for this species. The Colorado Breeding Bird Atlas includes a record of a white-faced ibis observed in the Norwood SE Atlas Block. However, it does not include the exact location of this observation.

The white-faced ibis is a colonial nester utilizing wetland habitats and flooded agricultural fields. Most ibises nesting in Colorado favor tall emergents such as bulrush and cattail growing as islands surrounded by shallow water. They arrive at their breeding grounds in mid-April and nest in May. Both sexes participate in the construction of the nest which is made from bulrush or cattail stems about three feet above the water level. Incubation and hatching occurs from early June through late July. Young can fly by late July to mid-August. By the fall they migrate to wintering areas south of Colorado.

●Fringed myotis - *Myotis thysanodes*

This bat is a western species, ranging from the Isthmus of Tehuantepec in Mexico north to British Columbia, Montana, and Wyoming. In Colorado, they apparently occur as scattered populations at moderate elevations on the Western Slope, along the foothills of the Front Range and mesas of southeastern Colorado. Maximum elevation of known populations is 7,500 feet.

The fringed myotis is a species of coniferous forest and woodland at moderate elevations in Colorado. Records of occurrence are few and the species isn't common in the State, but is perhaps widely distributed. Typical vegetation of their habitat includes ponderosa pine, pinyon/juniper, greasewood, saltbush and scrub oak. They roost in rock crevices, caves, mines, and buildings. Hibernation occurs in caves and buildings.

Breeding takes place in the fall. Ovulation, fertilization, implantation, and gestation occur in the spring. Up to several hundred females congregate in nursery colonies. A single young is produced after a gestation of 50 days. Growth is rapid, and most young are able to fly in 20 days.

The fringed myotis feeds on arthropods such as moths, daddy long legs, and beetles. They forage along water, above shrubs and woodlands or low over meadows, emerging to feed about 2 hours after sunset.

The planning area is within the known range of this species, and suitable habitat is present. Fringed myotis have been detected within the UFO, and in the Ray Mesa area to the west of the planning area. However, site-specific surveys have not been conducted to determine the presence of this species.

● Spotted bat - *Euderma maculatum*

Spotted bats are found at scattered locations in western North America and is apparently one of the rarest bats in the United States. In Colorado, the spotted bat is known from published records from the vicinity of Dinosaur National Monument, and there are also informal reports from a number of locations at lower elevations on the Western Slope, including the four corners area. There is one occurrence of a spotted bat foraging over oak and sagebrush from the north rim of the Black Canyon near Grizzley Ridge. There are acoustic records for spotted bats from the Fruitland Mesa and Gunnison Gorge area of the Gunnison Gorge National Conservation Area, and the Paradox Valley, west of the planning area.

The spotted bat has been found in a variety of habitats including ponderosa pine, pinyon and juniper woodland, and shrub desert. Early researchers suggested that the species may prefer ponderosa pine forests, but more recent investigations suggest that the species may prefer areas with cliffs and water. They will roost in crevices of rocky cliffs and canyons and forage over a variety of habitats. They have been known to have maternity roosts in cliffs in desert habitat, traveling long distances (25 miles) and up in elevation (4500-6000 feet increase) to forage in high elevation meadows (Rabe et al. 1998, Siders et al. 1999).

The spotted bat appears mostly solitary, forming small nursery colonies or groups in hibernation. Little is known about hibernation or annual movement patterns, although they have been found in buildings in Nevada in September. Details of mortality are unknown, although known predators include kestrels and owls.

Little is known of the reproductive biology of the species. A single young is born, probably in late May or mid-June. One newborn weighed 4 grams, which is 25% the weight of its mother.

The preferred food of the spotted bat is moths (Painter et al. 2009). Apparently only the abdomens are eaten as the spotted bat has been observed to remove and discard wings and heads of captured prey. Other food items include beetles, katydids, and grasshoppers. Foraging occurs throughout the night in open habitat, 5-10 meters above the ground.

Suitable habitat is present within the planning area. The spotted bat is rare in western Colorado but may possibly occur within the planning area. Surveys have not been conducted to determine the presence of this species, but acoustic detections have been documented for the Paradox Valley to the northwest of the planning area.

●Big free-tailed bat - *Nyctinomops macrotis*

The big free-tailed bat occurs mainly in southern California, Arizona, New Mexico, Texas and Mexico. This migratory species is a swift, powerful flier, and occasional individuals wander as far north as Canada. Only a few have been documented in Colorado, on both sides of the Continental Divide and as high as Gunnison (at 7,700 feet). Long thought to be an accidental wanderer in Colorado, recent preliminary data now suggest the presence of breeding colonies in southern Utah and adjacent Colorado. Acoustic detections of big free-tailed bats have been documented in various locations within the UFO from Cedaredge to Paradox Valley

The big free-tailed bat frequents rocky canyons and rugged terrain in desert and woodland habitats. For roosting, they prefer rock crevices in high cliffs, but also uses buildings, caves, and occasionally tree holes.

Breeding probably occurs in midwinter while the species is in warmer latitudes. A single young is born in mid-June to early July. Females form small nursery colonies, and the young do not leave the nursery until they are almost full grown.

Moths seem to be the mainstay of their diet, although little data has been collected. This bat emerges late in the evening and forages at high altitudes.

Suitable habitat is present within the planning area. This species may occur within the planning area but site specific surveys have not been completed to determine species presence. Acoustic records for this species have been documented in Paradox Valley, northwest of the planning area.

●Allen's big-eared bat - *Idionycteris phyllotis*

The Allen's big-eared bat is found in extreme southern Nevada, the southern third of Utah, throughout Arizona, in the southwestern quarter of New Mexico, and south through the interior of Mexico. It is considered to be rare in western Colorado.

They are most often associated with ponderosa pine, pinyon-juniper, pine-oak woodland, and riparian habitats above 3,000 feet. Maternity colonies of 30 to 150 individuals have been found in crack in cliff faces, mine shafts, boulder piles, lava beds, and beneath the loose bark of large ponderosa pine snags.

Colonies are most often found in rocky places near riparian habitat or woodlands. These bats feed on moths, soldier beetles, dung beetles, leaf beetles, roaches, and flying ants, either catching them in flight or gleaning them from foliage.

Suitable habitat may be present within the planning area. There are no known occurrences of this species within or adjacent to the planning area but site-specific surveys have not been conducted to determine species presence.

•Townsend's big-eared bat - *Corynorhinus townsendii*

This is a bat of western North America, ranging from southern British Columbia to southern Mexico. Townsend's big-eared bats can be found throughout Colorado except in the eastern plains. Its distribution seems to be determined by the availability of roosts such as caves, mines, tunnels, crevices and masonry structures, and suitable roosting sites are one of the primary limiting factors to this species.

The Townsend's big-eared bat is generally solitary or gathers in small groups, although during the summer females may form larger maternity colonies. In Colorado they occur in mines, caves and structures in woodlands and forests to elevations above 9,500 feet.

Breeding occurs in the fall, with ovulation, fertilization, implantation, and gestation occurring in the spring. Gestation takes 50-60 days to produce one young which is born in mid-June and can fly in 2 ½ to 3 weeks.

This bat feeds mainly on small moths, but also eats beetles, flies, and wasps. The Townsend's big-eared bat is usually a late flier and forages along the edge of vegetation. They sometimes glean insects from the vegetation.

Populations of Townsend's big-eared bat are highly susceptible to disturbance in their nursery and hibernacula. Roost sites need to be protected for species conservation.

Suitable habitat is present within the planning area. Acoustic records for this species have been documented for Paradox Valley northwest of the planning area. This species may occur within the planning area but site specific surveys have not been completed to determine species presence.

•Midget-faded rattlesnake - *Crotalus oreganus concolor*

The midget-faded rattlesnake is one of the smallest rattlesnakes in the Colorado Plateau region of the United States. The Green River formation in Southwestern Wyoming, Eastern Utah, and Western Colorado make up the entire range of the midget-faded rattlesnake. They are known to occur in San Miguel, Delta and Montrose Counties.

Midget-faded rattlesnakes prefer rocky outcrops in areas dominated by sage, but will also utilize riparian, salt shrub, mountain shrub, and pinyon-juniper habitats. The rock outcrops are focal points in their habitat that provide cover and hibernacula. Suitable outcrops typically provide several den sites.

This subspecies typically reproduces biennially, triennially or even longer. Gravid females have been found to only move short distances from the den site after emergence until parturition in late August to mid-September.

These snakes tend to be prey generalists that will feed on anything they can catch and swallow. Small mammals such as mice or lizards are their primary diet.

Suitable habitat is present within the planning area. Midget-faded rattlesnakes may occur within the planning area but site specific surveys have not been completed to determine species presence.

●Milk snake - *Lampropeltis triangulum taylori*

The milk snake ranges from extreme southern Canada to northern South America. There are three subspecies recognized in the State of Colorado. They occur throughout most of eastern and southern Colorado at elevations below 8,000 feet and in west-central Colorado below about 6,000 feet.

The milk snake occurs in a wide variety of habitats in Colorado including shrubby hillsides, canyons, pinyon-juniper woodland, and open stands of ponderosa pine. They hibernate in rock crevices, under logs or other debris. After emergence in June they will remain active until September or October. Females typically lay eggs in the month of July, and the young hatch in August or early September.

The milk snake is a constrictor and eats a variety of small vertebrates including small mammals, birds, lizards, snakes, and bird or reptile eggs.

Suitable habitat is present within the planning area. They are considered to be unusual but locally common in San Miguel and Montrose counties. Site-specific surveys have not been conducted to determine the presence of this species in the planning area.

●Northern leopard frog - *Lithobates pipiens*

The range of the northern leopard frog extends from southern Canada and northern United States south to Maryland, West Virginia, Kentucky, northern Illinois, extreme northwestern Missouri, Nebraska, New Mexico, Arizona, and eastern California. They occur throughout Colorado, excluding most of the southeastern and east-central portions of the state. Elevational range extends from below 3,500 feet in northeastern Colorado to above 11,000 feet in southern Colorado. NDIS data records indicate that the northern leopard frog occurs in both San Miguel and Montrose Counties.

Typical habitats include wet meadows and the banks and shallows of marshes, ponds, glacial kettle ponds, beaver ponds, lakes, reservoirs, streams, and irrigation ditches. Little information is available on northern leopard frog food habits in Colorado, but invertebrates undoubtedly dominate the diet of adults.

The planning area is within the range of the northern leopard frog and Naturita Creek contains wetland and riparian habitat that is suitable

for this species. There are no records of this species occurring within the planning area but site specific surveys have not been conducted to determine the presence of this species.

●Canyon treefrog - *Hyla arenicolor*

The range of the canyon treefrog extends from southern Utah and southern Colorado south through Arizona, New Mexico, and western Texas to central Mexico. It occurs in western Colorado along the southern edge of the Colorado River valley, east to Grand Junction, and along the Dolores River and its tributaries from near the Utah border south into San Miguel County, mainly at elevations of about 4,500–6,300 feet (1,370–1,920 m).

The canyon treefrog occurs along intermittent streams in deep, rocky canyons. Known foods include beetles, ants, caterpillars, caddis flies, centipedes, spiders, and worms.

The planning area is within the range of the canyon treefrog and Naturita Creek contains wetland and riparian habitat that is suitable for this species. There are no records of this species occurring within the planning area but site specific surveys have not been conducted to determine the presence of this species.

●Roundtail chub - *Gila robusta*

The roundtail chub is endemic to the Colorado River Basin in Wyoming and Colorado. Historically, roundtail chub were known to commonly occur in most medium to large tributaries of the Upper Colorado River Basin and in the lower elevation streams including the Colorado, Dolores, Duchesne, Escalante, Green, Gunnison, Price, San Juan, San Rafael, White, and Yampa rivers.

In Colorado they are currently found in the larger rivers and tributary streams, quite often in slow moving waters adjacent to areas of faster water. They utilize warm-water rocky runs, rapids, and pools of creeks and small to large rivers with a cobble-rubble, sand-cobble, or sand-gravel substrate.

●Naturita Creek provides suitable habitat for the roundtail chub within the planning area. Surveys recently conducted by the Colorado Parks and Wildlife (CPW) have located roundtail chub in the San Miguel River and lower Naturita Creek.

●Bluehead sucker - *Catostomus discobolus*

The bluehead sucker is found throughout the middle and upper Colorado River Drainage in Colorado, New Mexico, Arizona, Utah and Wyoming. In Colorado, the species is restricted to Western Slope waters. In some waters, such as the Gunnison River above Blue Mesa Reservoir, this species and the flannelmouth sucker seem to have been replaced by introduced white and longnose suckers since the 1960's. The white and longnose suckers, introduced from East Slope waters, have replaced the flannelmouth and bluehead in the upper Gunnison River. Competition with the introduced species and/or cold water temperatures from reservoir releases probably led to the disappearance of the flannelmouth sucker from the upper Gunnison

The bluehead sucker is found in a wide variety of areas from headwater streams to large rivers. It is absent in areas of standing water, requiring water of moderate-to-fast velocity. The species also prefers a rock substrate. If a river substrate is composed of sand, bluehead suckers are found where rock shoals created by talus slopes reach into the water.

Naturita Creek provides suitable habitat for bluehead sucker within the planning area. Surveys recently conducted by the CPW have located bluehead sucker in the San Miguel River and lower Naturita Creek.

●Flannelmouth sucker - *Catostomus latipinnis*

The flannelmouth sucker is restricted to larger streams and rivers in the middle and upper Colorado River Drainage, including parts of Wyoming, Colorado, New Mexico, Utah, Arizona and Nevada. In Colorado, the flannelmouth sucker is found only in large river systems on the western slope. This species and the bluehead sucker have disappeared from some waters, such as the Gunnison River above Blue Mesa Reservoir, since the 1960's. The white and longnose suckers, introduced from East Slope waters, have replaced the flannelmouth and bluehead in the upper Gunnison River. Competition with the introduced species and/or cold water temperatures from reservoir releases probably led to the disappearance of the flannelmouth sucker from the upper Gunnison.

The flannelmouth sucker inhabits larger streams and rivers in all habitat types including riffles, runs, eddies, and backwaters. The species does not appear to maintain viable populations in impoundments.

Naturita Creek provides suitable habitat for flannelmouth sucker within the planning area. Surveys recently conducted by the CPW have located flannelmouth sucker in the San Miguel River and lower Naturita Creek.

●Grand Junction milkvetch - *Astragalus linifolius*

Grand Junction milkvetch is a member of the Pea Family (*Fabaceae*). It is a Colorado endemic, found on the Eastern base of the Uncompahgre Plateau in Delta, Mesa and Montrose Counties. Known populations grow on sparsely vegetated habitats in pinyon-juniper and sagebrush communities at elevations between 4,800 and 6,200 feet, on soils derived from the Chinle and Morrison Formation and selenium-bearing soils.

The planning area is outside the known range of Grand Junction milkvetch but contains suitable habitat for this species. There are no records of this species occurring within the planning area but site specific surveys have not been conducted to determine the presence of this species.

●Naturita milkvetch - *Astragalus naturitenis*

Naturita milkvetch is a member of the Pea Family (*Fabaceae*). It is found in New Mexico, Utah and Colorado (Mesa, Montezuma, Montrose and San Miguel Counties) and it is known to occur in the Mailbox Park area. It is found in areas with shallow soils over exposed bed rock in pinyon-juniper woodlands, typically between 5000 and 7000 feet in elevation. This plant seems to tolerate and even thrive on some disturbance but is apparently not impacted by livestock grazing on open rangelands. The flowering period for Naturita milkvetch

occurs from April to early June, with the fruiting period between late May and early June.

The planning area is within the possible range of *Naturita* milkvetch and contains suitable habitat for this species. There are no records of this species occurring within the planning area but site specific surveys have not been conducted to determine the presence of this species.

•San Rafael milkvetch - *Astragalus rafaensis*

The San Rafael milkvetch is a member of the Pea Family (*Fabaceae*). It is found in eastern Utah and portions of western Colorado. In Colorado known populations are located in the Dolores River Valley of Montrose County. They are found growing on the banks of sandy clay gulches and hills, at the foot of sandstone outcrops, or among boulders along dry watercourses in seleniferous soils derived from shale or sandstone formations, typically between 4,400 and 6,500 feet in elevation.

The planning area is outside the known range of San Rafael milkvetch but may contain suitable habitat for this species. There are no records of this species occurring within the planning area but site specific surveys have not been conducted to determine the presence of this species.

•Paradox Valley (Payson's) lupine - *Lupinus crassus*

The Paradox Valley, or Payson's lupine is a member of the Pea Family (*Fabaceae*). It is strictly a Colorado endemic, found in the western portion of Montrose County where it is known to occur in the uplands near *Naturita*. Known populations are found in pinyon-juniper woodlands or clay barrens derived from Chinle or Mancos Formation shales. Within these habitat types it is found in draws and dry washes with sparse vegetation, typically between 5000 and 5800 feet in elevation. The flowering period occurs in May with fruiting between May and June.

The planning area is outside the known range of Paradox Valley lupine but contains suitable habitat for this species. Known populations are from a very limited area of Montrose County. There are no records of this species occurring within the planning area but site specific surveys have not been conducted to determine the presence of this species.

•Paradox breadroot - *Pediomelum aromaticum*

The Paradox breadroot is a member of the Pea Family (*Fabaceae*). It is found in Arizona, Utah and Colorado (Mesa and Montrose Counties) where it grows in open pinyon-juniper woodlands, in sandy soils or adobe hills, typically between 4,800 and 5,700 feet in elevation. The flowering period for this species is during May and June, with fruiting in June.

The planning area is outside the known range of Paradox breadroot but contains suitable habitat for this species. At this time known locations for Paradox breadroot are near the Utah border at lower elevations than the planning area. There are no records of this species occurring within the planning area but site specific surveys have not been conducted to determine the presence of this species.

The following table lists all potentially occurring BLM sensitive species in the Uncompahgre field Office

BLM Sensitive Species of the UFO ¹							
SPECIES	HABITAT DESCRIPTION ²	KNOWN ³	RANGE ⁴	HABITAT ⁵	NO EFFECT ⁶	MAI ⁷	LFL ⁸
Birds							
Bald eagle (<i>Haliaeetus leucocephalus</i>)	Nests in forested rivers and lakes; winters in upland areas, often with rivers or lakes nearby	No known breeding occurrences in or near planning area. Wintering bald eagles are common on Wright's Mesa to the north and they may forage in the planning area.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Northern goshawk (<i>Accipiter gentilis</i>)	Breeds primarily in mature ponderosa pine, aspen, and mixed aspen/conifer forests.	Nesting pairs have been documented on the adjacent National Forest.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
American peregrine falcon (<i>Falco peregrines anatum</i>)	Open country near cliff habitat, often near water such as rivers, lakes, and marshes; nests on ledges or holes on cliff faces and crags	Nearest known breeding pairs in Dolores River Canyon approximately 20 miles west of the planning area.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ferruginous hawk (<i>Buteo regalis</i>)	Open, rolling and/or rugged terrain in grasslands and shrubsteppe communities; also grasslands and cultivated fields; nests on cliffs and rocky outcrops.	Primarily occur in eastern plains of Colorado.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brewer's sparrow (<i>Spizella breweri</i>)	Breeds primarily in big sagebrush, but also in other shrublands such as mountain mahogany or rabbitbrush; migrants seen in wooded, brushy, and weedy riparian, agricultural, and urban areas; occasionally observed in pinyon-juniper.	Breeding pairs or migrants may occur in the planning area.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Burrowing owl	Level to gently sloping grasslands and semi-						

BLM Sensitive Species of the UFO ¹							
SPECIES	HABITAT DESCRIPTION ²	KNOWN ³	RANGE ⁴	HABITAT ⁵	NO EFFECT ⁶	MAI ⁷	LFL ⁸
<i>(Athene cunicularia)</i>	desert grasslands; Prairie dog colonies for shelter and food	None	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Columbian sharp-tailed grouse <i>(Tympanuchus phasianellus)</i>	Native bunchgrass and shrub-steppe communities for nesting; mountain shrubs including serviceberry are critical for winter food and escape cover. Thought to be extirpated from UFO.	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Long-billed curlew <i>(Numenius americanus)</i>	Lakes and wetlands and adjacent grassland and shrub communities	Rare species. Not known to occur in the planning area.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
White-faced ibis <i>(Plegadis chihi)</i>	Marshes, swamps, ponds and rivers	None	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
American white pelican <i>(Pelecanus erythrorhynchos)</i>	Typically large reservoirs but also observed on smaller water bodies including ponds; nests on islands	None	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black swift <i>(Cypseloides niger)</i>	Nests on precipitous cliffs near or behind high waterfalls; forages from montane to adjacent lowland habitats	None	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mammals							
Desert bighorn sheep <i>(Ovis canadensis nelsoni)</i>	Steep, mountainous or hilly terrain dominated by grass, low shrubs, rock cover, and areas near open escape and cliff retreats; in the resource area, concentrated along major river corridors and canyons	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
White-tailed prairie dog <i>(Cynomys leucurus)</i>	Level to gently sloping grasslands and semi-desert grasslands from 5,000' – 10,000' in elevation. Common on Wright's Mesa.	None	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kit fox <i>(Vulpes macrotis)</i>	Semi-desert shrublands of saltbrush, shadscale and greasewood often in association with prairie dog towns	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fringed myotis <i>(Myotis thysanodes)</i>	Ponderosa pine, pinyon-juniper, mountain shrub, and desert shrub. Roost in rock crevices, caves, mines, buildings and trees.	Occur in scattered populations in western Colorado. May occur.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

BLM Sensitive Species of the UFO ¹							
SPECIES	HABITAT DESCRIPTION ²	KNOWN ³	RANGE ⁴	HABITAT ⁵	NO EFFECT ⁶	MAI ⁷	LFL ⁸
Spotted bat (<i>Euderma maculatum</i>)	Desert shrub, ponderosa pine, pinyon-juniper woodland, canyon bottoms, open pasture, and hayfields. Roost in rock crevices in cliffs with surface water nearby.	Rare in western Colorado but may possibly occur.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Big free-tailed bat (<i>Nyctinomops macrotis</i>)	Rocky canyons and rugged terrain in desert and woodland habitats. Roost in rock crevices in cliffs and in buildings, caves, and occasionally tree holes	Small scattered populations in Colorado and eastern Utah. May occur.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Allen's big-eared bat (<i>Idionycteris phyllotis</i>)	Mountainous areas of ponderosa pine, pinyon-juniper, pine-oak woodland, and riparian habitats	Rare in western Colorado but may possibly occur.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Townsend's big-eared bat (<i>Corynorhinus townsendii</i>)	Mesic habitats including coniferous forests, deciduous forests, sagebrush steppe, juniper woodlands, and mountain; maternity roosts and hibernation in caves and mines; does not use crevices or cracks; caves, buildings, and tree cavities for night roosts	May occur.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Reptiles and Amphibians							
Longnose leopard lizard (<i>Gambelia wislizenii</i>)	Desert and semidesert areas with scattered shrubs or other low plants; e.g., sagebrush; areas with abundant rodent burrows, typically below 5,000' in elevation	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Midget-faded rattlesnake (<i>Crotalus viridis concolor</i>)	Prefer rocky outcrops in areas dominated by sagebrush. Also utilize riparian, salt shrub, mountain shrub, pinyon-juniper.	Uncommon in San Miguel County. May occur.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Milk snake (<i>Lampropeltis triangulum taylori</i>)	Shrubby hillsides, canyons, pinyon-juniper woodland, ponderosa pine stands; hibernates in rock crevices.	Unusual but locally common in San Miguel and Montrose counties. May occur.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Northern leopard frog (<i>Rana pipiens</i>)	Springs, slow-moving streams, marshes, bogs, ponds, canals, flood plains, reservoirs, and lakes; in summer, commonly inhabits wet meadows and fields; may forage along water's edge or in nearby meadows or fields	Unusual but locally common in San Miguel and Montrose counties. May occur.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

BLM Sensitive Species of the UFO ¹							
SPECIES	HABITAT DESCRIPTION ²	KNOWN ³	RANGE ⁴	HABITAT ⁵	NO EFFECT ⁶	MAI ⁷	LFL ⁸
Canyon treefrog (<i>Hyla arenicolor</i>)	Rocky canyon bottoms along intermittent or perennial streams in temporary or permanent pools or arroyos ; semi-arid grassland, pinyon-juniper, pine-oak woodland, scrubland, and montane zones; elevation 1000' - 10,000'	None	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Boreal toad (<i>Anaxyrus boreas boreas</i>)	Mountain lakes, ponds, meadows, and wetlands in subalpine forest (e.g., spruce, fir, lodgepole pine, aspen); feed in meadows and forest openings near water but sometimes in drier forest habitats	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fish							
Roundtail chub (<i>Gila robusta</i>)	Warm-water rocky runs, rapids, and pools of creeks and small to large rivers; also large reservoirs in the upper Colorado River system; generally prefers cobble-rubble, sand-cobble, or sand-gravel substrate	Species found in San Miguel River and lower Naturita Creek.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bluehead sucker (<i>Catostomus discobolus</i>)	Large rivers and mountain streams, rarely in lakes; variable, from cold, clear mountain streams to warm, turbid streams; moderate to fast flowing water above rubble-rock substrate; young prefer quiet shallow areas near shoreline	Species found in San Miguel River and lower Naturita Creek.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Flannelmouth sucker (<i>Catostomus latipinnis</i>)	Warm moderate- to large-sized rivers, seldom in small creeks, absent from impoundments; pools and deeper runs often near tributary mouths; also riffles and backwaters; young usually in shallower water than are adults	Species found in San Miguel River and lower Naturita Creek.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Colorado River cutthroat trout (<i>Oncorhynchus clarki pleuriticus</i>)	Cool, clear streams or lakes with well-vegetated streambanks for shading cover and bank stability; deep pools, boulders, and logs; thrives at high elevations	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plants							
Debeque milkvetch (<i>Astragalus debequaeus</i>)	Varicolored, fine-textured, seleniferous, saline soils of the Wasatch Formation-Atwell Gulch Member; elevation 5100' – 6400'	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

BLM Sensitive Species of the UFO ¹							
SPECIES	HABITAT DESCRIPTION ²	KNOWN ³	RANGE ⁴	HABITAT ⁵	NO EFFECT ⁶	MAI ⁷	LFL ⁸
Grand Junction milkvetch (<i>Astragalus linifolius</i>)	Grows on the Chinle and Morrison Formations, with pinyon-juniper and sagebrush. Elev. 4800-6200 ft.	Colorado endemic. Found on the Eastern base of the Uncompahgre Plateau in Delta, Mesa and Montrose Counties. Unlikely to occur.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Naturita milkvetch (<i>Astragalus naturitensis</i>)	Sandstone mesas, ledges, crevices and slopes in pinyon-juniper woodlands. Elev. 5000-7000 ft.	Found in New Mexico, Utah and Colorado (Mesa, Montezuma, Montrose and San Miguel Counties.) May occur.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
San Rafael milkvetch (<i>Astragalus rafaensis</i>)	Gullied hills, washes and talus under cliffs; in seleniferous clayey, silty, or sandy soils. Elev. 4400-6500 ft.	Found in Utah and Colorado (Dolores River Valley, Montrose Co.) Unlikely to occur.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Gypsum Valley cateye (<i>Cryptantha gypsophila</i>)	Confined to scattered gypsum outcrop and grayish-white, often lichen-covered, soils of the Paradox Member of the Hermosa Formation; often the dominant plant at these sites; elevation 5200' – 6500'	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fragile (slender) rockbrake (<i>Cryptogramma stelleri</i>)	Cool, moist, sheltered calcareous cliff crevices and rock ledges	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kachina daisy (fleabane) <i>Erigeron kachinensis</i>	Saline soils in alcoves and seeps in canyon walls; elevation 4800' – 5600'	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Montrose (Uncompahgre) bladderpod (<i>Lesquerella vicina</i>)	Sandy-gravel soil mostly of sandstone fragments over Mancos Shale (heavy clays) mainly in pinyon-juniper woodlands or in the ecotone between it and salt desert scrub; also in sandy soils derived from Jurassic sandstones and in sagebrush steppe communities; elevation 5800' – 7500'	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Colorado (Adobe) desert parsley	Adobe hills and plains on rocky soils derived from Mancos Formation shale; shrub						

BLM Sensitive Species of the UFO ¹							
SPECIES	HABITAT DESCRIPTION ²	KNOWN ³	RANGE ⁴	HABITAT ⁵	NO EFFECT ⁶	MAI ⁷	LFL ⁸
<i>(Lomatium concinnum)</i>	communities dominated by sagebrush, shadscale, greasewood, or scrub oak; elevation 5500' – 7000'	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Paradox Valley (Payson's) lupine (<i>Lupinus crassus</i>)	Pinyon-juniper woodlands, or clay barrens derived from Chinle or Mancos Formation shales. Draws and washes with sparse vegetation. Elev. 5000-5800 ft.	Colorado endemic, Montrose Co. May occur.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Dolores skeleton plant (<i>Lygodesmia doloresensis</i>)	Reddish purple, sandy alluvium and colluviums of the Cutler Formation between the canyon walls and the river in juniper, shadscale, and sagebrush communities; elevation 4000' – 5500'	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eastwood's monkey-flower (<i>Mimulus eastwoodiae</i>)	Shallow caves and seeps on steep canyon walls; elevation 4700' – 5800'	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Paradox breadroot (<i>Pediomelum aromaticum</i>)	Open pinyon-juniper woodlands, in sandy soils or adobe hills. Elev. 4,800 – 5,700 Ft.	Found in Arizona, Utah and Colorado (Mesa and Montrose Co.) May occur.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Invertebrates							
Great Basin silverspot butterfly <i>Speyeria nokomis</i>	Found in streamside meadows and open seepage areas with an abundance of violets	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

1 Based on Colorado BLM State Director's Sensitive Species List (Last update: April 15, 2011).

2 Van Reyper G. 2006. Bureau of Land Management TES [threatened, endangered, sensitive] species descriptions. Uncompahgre Field Office, Montrose, CO, updated 2009/2010. Unpublished document. Spackman SB, JC Jennings, C Dawson, M Minton, A Kratz, C Spurrier. 1997. Colorado rare plant field guide. Prepared for the BLM, USFS, and USFWS by the Colorado Natural Heritage Program.

3 Potential and/or known occurrences in Planning Area. Assessment based on UFO files and GIS data, partner data, and local knowledge.

4 Planning area is within the current known range of the species

5 Planning area contains suitable habitat for the species

6 Project activities will have "No Effect" to the species or its habitat

7 Project activities may effect individuals of the species or its habitat, but not likely to result in a trend toward federal listing

8 Project activities are likely to result in a trend toward federal listing for the species

Appendix F
BIRDS OF CONSERVATION CONCERN OF THE UFOi

SPECIES	HABITAT DESCRIPTION ii	RANGE/ STATUS iii	KNOWN iv	RANGE v	HABITAT vi	NO EFFECT vii	MAI viii	LFL ix
Gunnison sage grouse <i>Centrocercus minimus</i>	Sagebrush communities (especially big sagebrush) for hiding and thermal cover, food, and nesting; open areas with sagebrush stands for leks; sagebrush-grass-forb mix for nesting; wet meadows for rearing chicks	Year-round resident, breeding	See assessment under Sensitive Species Section					
American bittern <i>Botaurus lentiginosus</i>	Marshes and wetlands; ground nester	Spring/ summer resident, breeding confirmed in the region but not within the UFO	None	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bald eagle 10 <i>Haliaeetus leucocephalus</i>	Nests in forested rivers and lakes; winters in upland areas, often with rivers or lakes nearby	Fall/winter resident, no confirmed breeding	See assessment under Sensitive Species Section					
Ferruginous hawk <i>Buteo regalis</i>	Open, rolling and/or rugged terrain in grasslands and shrubsteppe communities; also grasslands and cultivated fields; nests on cliffs and rocky outcrops	Fall/ winter resident, non-breeding	See assessment under Sensitive Species Section					
Golden eagle <i>Aquila chrysaetos</i>	Open country, grasslands, woodlands, and barren areas in hilly or mountainous terrain; nests on rocky outcrops or large trees	Year-round resident, breeding	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Peregrine falcon 10 <i>Falco peregrinus</i>	Open country near cliff habitat, often near water such as rivers, lakes, and marshes; nests on ledges or holes on cliff faces and	Spring/summer resident, breeding	See assessment under Sensitive Species Section					

Appendix F
BIRDS OF CONSERVATION CONCERN OF THE UFOi

SPECIES	HABITAT DESCRIPTION ii	RANGE/ STATUS iii	KNOWN iv	RANGE v	HABITAT vi	NO EFFECT vii	MAI viii	LFL ix
	crag							
Prairie falcon <i>Falco mexicanus</i>	Open country in mountains, steppe, or prairie; winters in cultivated fields; nests in holes or on ledges on rocky cliffs or embankments	Year-round resident, breeding	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Long-billed curlew <i>Numenius americanus</i>	Lakes and wetlands and adjacent grassland and shrub communities	Spring/ fall migrant, non-breeding	See assessment under Sensitive Species Section					
Snowy plover ¹¹ <i>Charadrius alexandrinus</i>	Sparsely vegetated sand flats associated with pickleweed, greasewood, and saltgrass	Spring migrant, non-breeding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mountain plover <i>Charadrius montanus</i>	High plain, cultivated fields, desert scrublands, and sagebrush habitats, often in association with heavy grazing, sometimes in association with prairie dog colonies ; short vegetation	Spring/ fall migrant, non-breeding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Yellow-billed cuckoo <i>Coccyzus americanus</i>	Riparian, deciduous woodlands with dense undergrowth; nests in tall cottonwood and mature willow riparian, moist thickets, orchards, abandoned pastures	Summer resident, breeding	See assessment under Sensitive Species Section					
Flammulated owl <i>Otus flammeolus</i>	Montane forest, usually open and mature conifer forests; prefers ponderosa pine and Jeffrey pine	Summer resident, breeding	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Burrowing owl	Open grasslands and low							

Appendix F
BIRDS OF CONSERVATION CONCERN OF THE UFOi

SPECIES	HABITAT DESCRIPTION ii	RANGE/ STATUS iii	KNOWN iv	RANGE v	HABITAT vi	NO EFFECT vii	MAI viii	LFL ix
<i>Athene cucularia</i>	shrublands often in association with prairie dog colonies; nests in abandoned burrows created by mammals; short vegetation	Summer/ fall resident, breeding	See assessment under Sensitive Species Section					
Lewis's woodpecker <i>Melanerpes lewis</i>	Open forest and woodland, often logged or burned, including oak, coniferous forest (often ponderosa), riparian woodland, and orchards, less often in pinyon-juniper	Year-round resident, breeding	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Willow flycatcher <i>Empidonax traillii</i>	Riparian and moist, shrubby areas; winters in shrubby openings with short vegetation	Summer resident, breeding	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Gray vireo <i>Vireo vicinior</i>	Pinyon-juniper and open juniper-grassland	Summer resident, breeding	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pinyon jay <i>Gymnorhinus cyanocephalus</i>	Pinyon-juniper woodland	Year-round resident, breeding	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Juniper titmouse <i>Baeolophus griseus</i>	Pinyon-juniper woodlands, especially juniper; nests in tree cavities	Year-round resident, breeding	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Veery <i>Catharus fuscescens</i>	Deciduous forests, riparian, shrubs	Possible summer resident, observed recently in Gunnison County, possible breeding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bendire's thrasher <i>Toxostoma bendirei</i>	Desert, especially areas of tall vegetation, cholla cactus, creosote bush and yucca, and in juniper woodland	UFO is outside known range	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Grace's warbler <i>Dendroica graciae</i>	Mature coniferous forests	Summer resident, breeding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brewer's	Sagebrush-grass							

Appendix F
BIRDS OF CONSERVATION CONCERN OF THE UFOⁱ

SPECIES	HABITAT DESCRIPTION ii	RANGE/STATUS iii	KNOWN iv	RANGE v	HABITAT vi	NO EFFECT vii	MAI viii	LFL ix	
sparrow <i>Spizella breweri</i>	stands; less often in pinyon-juniper woodlands	Summer resident, breeding	See assessment under Sensitive Species Section						
Grasshopper sparrow <i>Ammodramus savannarum</i>	Open grasslands and cultivated fields	UFO is outside known range	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Chestnut-collared longspur <i>Calcarius ornatus</i>	Open grasslands and cultivated fields	Spring migrant, non-breeding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Black rosy-finch <i>Leucosticte atrata</i>	Open country including mountain meadows, high deserts, valleys, and plains; breeds/ nests in alpine areas near rock piles and cliffs	Winter resident, non-breeding	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Brown-capped rosy-finch <i>Leucosticte australis</i>	Alpine meadows, cliffs, and talus and high-elevation parks and valleys	Summer residents, breeding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cassin's finch <i>Carpodacus cassinii</i>	Open montane coniferous forests; breeds/ nests in coniferous forests	Year-round resident, breeding	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

i U.S. Fish and Wildlife Service. 2008. Birds of Conservation Concern 2008. United States Department of Interior, Fish and Wildlife Service, Division of Migratory Bird Management, Arlington, Virginia. 85 pp. [Online version available at <<http://www.fws.gov/migratorybirds/>>].

ii Cornell Lab of Ornithology. All about birds: bird guide. <<http://www.allaboutbirds.org/guide/>> Accessed 05/15/2009.

iii Status within the UFO. San Juan Institute of Natural and Cultural Resources. Colorado Breeding Bird Atlas. Fort Lewis College, Durango, Colorado. <<http://www.cobreedingbirdatlasii.org/>> Accessed: 05/15/2009.

iv Potential and/or known occurrences in Planning Area. Assessment based on UFO files and GIS data, partner data, and local knowledge.

v Planning area is within the current known range of the species?

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ix Project activities are likely to result in a trend toward federal listing for the species