

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

---

**Environmental Assessment  
DOI-BLM-CO-SO50-2011-0011 EA**

---

**May 10, 2013**

***Ridgway Comprehensive Travel Management Plan***

***Location: Ouray County, North of Ridgway, CO  
T45N, R8W, sec. 3, 4, and 9  
T46N, R8W, sec. 22, 23, 26, 27, 34, 35***

---

**U.S. Department of the Interior  
Uncompahgre Field Office  
2465 South Townsend Avenue  
Montrose, CO 81401  
Phone: (970) 240-5300**



**(Left Blank Intentionally)**

## *Table of Contents*

INTRODUCTION and BACKGROUND .....	4
PURPOSE AND NEED FOR THE ACTION .....	6
Need for the Action.....	6
Purpose for the Action .....	6
ISSUES and CONCERNS .....	7
DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES .....	9
Management Common to All Alternatives .....	12
Management Common to Proposed Action and Alternatives 1 and 2.....	13
Proposed Action:.....	17
Alternative 1: .....	19
Alternative 2: .....	20
No Action Alternative:.....	22
IMPLEMENTATION AND MONITORING .....	23
ADAPTIVE MANAGEMENT.....	23
ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD .....	24
SCOPING AND ISSUES .....	24
PLAN CONFORMANCE REVIEW .....	25
Standards for Public Land Health:.....	26
AFFECTED ENVIRONMENT and ENVIRONMENTAL CONSEQUENCES .....	27
AREAS OF CRITICAL ENVIRONMENTAL CONCERN; WILDERNESS; LANDS WITH WILDERNESS CHARACTERISTICS; WILD AND SCENIC RIVERS; FARMLANDS, PRIME AND UNIQUE; CADASTRAL SURVEY; RANGE MANAGEMENT; PALEONTOLOGY .....	28
AIR QUALITY.....	28
CULTURAL RESOURCES .....	30
NATIVE AMERICAN RELIGIOUS CONCERNS.....	31
SOILS .....	32
VEGETATION.....	37
INVASIVE, NON-NATIVE SPECIES .....	42
THREATENED, ENDANGERED, AND SENSITIVE SPECIES .....	44
MIGRATORY BIRDS.....	52
WILDLIFE, TERRESTRIAL.....	57
WILDLIFE, AQUATIC.....	67
WETLANDS & RIPARIAN ZONES.....	68
FLOODPLAINS .....	71
WATER QUALITY, SURFACE AND GROUND.....	72
WASTES, HAZARDOUS OR SOLID.....	79
ENVIRONMENTAL JUSTICE .....	80
SOCIO-ECONOMICS.....	81
ACCESS AND TRANSPORTATION .....	82
REALTY AUTHORIZATIONS.....	87
FIRE AND FOREST MANAGEMENT .....	88
NOISE.....	89
RECREATION .....	91
VISUAL RESOURCE MANAGEMENT .....	97

GEOLOGY AND MINERALS .....	99
LAW ENFORCEMENT .....	101
CUMULATIVE IMPACTS SUMMARY .....	103
PERSONS / AGENCIES CONSULTED .....	111
INTERDISCIPLINARY REVIEW .....	111
REFERENCES .....	112
GLOSSARY .....	116
APPENDICIES .....	I
Appendix 1.....	I
Appendix 2.....	III
Appendix 3.....	V
Appendix 4.....	IX
Appendix 5.....	XVI
Appendix 6.....	XXIII
Appendix 7.....	XXX

**U.S. Department of the Interior  
Bureau of Land Management  
Uncompahgre Field Office  
2465 South Townsend Avenue  
Montrose, CO 81401**

## **ENVIRONMENTAL ASSESSMENT**

NUMBER: DOI-BLM-CO-S050-2011-0011 EA

PROJECT NAME: Ridgway Comprehensive Travel Management Plan

LEGAL DESCRIPTION: T45N, R8W, Sec. 3, 4, and 9; T46N, R8W, Sec. 22, 23, 26, 27, 34, 35

APPLICANT: BLM, Ridgway Trails Group and COPMOBA

### ***INTRODUCTION and BACKGROUND***

The Ridgway area is currently seeing increased use by mountain biking, trail running, hiking, and horseback riding due to the increasing popularity of these recreational activities for the local communities and tourism industry. The citizens from the Town of Ridgway, Ouray County, surrounding communities, and local groups have expressed interest in an inter-connecting trail system to increase recreational opportunities and enhance economic opportunities in a manner consistent with the County's Master Plan, land use code.

In 2007, a local user group, Ridgway Area Trails (RAT) Group, proposed a single track trail system for all levels of trail users that encompassed BLM lands as well as the Ridgway State Park/Bureau of Reclamation lands. They felt the development of a single track trail system would enhance the lives of not only the residents of Colorado's Western Slope, but the numerous annual visitors from outside the region. At that time, BLM was already working on a higher priority 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 amendment was completed June of 2010.

The BLM initially held public scoping for the proposed single-track system in February 2011. As a result of receiving numerous conflicting comments from the public and new information and concerns from Ouray County regarding key access roads and trails within the Ouray County Ridgway Gravel Pit located within the proposed trail system 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 Ridgway plan began in March 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 Ridgway Travel Management Planning Area, as well as the need for motorized and non-motorized travel (see glossary for definitions) for a variety of purposes, including for land management and recreational activities. The alternatives are 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 Ouray County near the community of Ridgway.

The Ridgway travel management plan (TMP) includes three areas of Bureau of Land Management (BLM) lands that total approximately 1066 acres (see Map 1). The Ridgway Area is located approximately 3 miles north of the Town of Ridgway and is bounded on the north by Ouray County Road (OCR) 8, on the south by OCR10, on the west by U.S. Highway 550 and Ridgway State Park, and the east by private lands. There is also a total of 0.6 miles of County Road 10B located within the area which will not be affected by decisions made in this plan. The terrain of the area generally consists of drainages, narrow ridges, and mesa tops. The second area is the Ouray County Ridgway Gravel Pit Area located within the southern end of the Ridgway Area. County Road 10B is used to access the gravel pit. The gravel pit is authorized under a BLM Free-use Permit (FUP) to the county. The third area is the BLM Uncompahgre Riverway Area located on the Uncompahgre River about ¼ of mile north of Ridgway, CO. The area is surrounded by private land and the Town of Ridgway property. There is a concrete trail running through the area starting at the town of Ridgway and going all the way to Ridgway State Park.

The travel planning area currently serves as an undeveloped multiple-use trail system with connectivity to trails along the Uncompahgre River from the Town of Ridgway. Direct connectivity also exists with trail systems within the adjoining Ridgway State Park. The BLM lands within the Ridgway Area are currently managed as “Limited to Existing Routes with Seasonal Restrictions” and the BLM lands in the Uncompahgre Riverway Area are managed as “Limited to Existing Routes Yearlong”. “Limited” designations are locations where motorized travel is limited to existing or designated routes only. Under the current Uncompahgre Field Office RMP in the Ridgway Area, there is a seasonal closure in effect from December 1st through April 30th for winter range wildlife habitat management.

Presently there is a lack of quality single track trail opportunities suitable for mountain biking, trail running, hiking, walking, and horseback riding in Ouray County. The area offers stunning views of the San Juan Mountain Range and the potential to connect to existing non-motorized trails such as the paved Uncompahgre River Trail which connects the Town of Ridgway and Ridgway State Park as well as to the existing developed trail network within the Ridgway State Park and the Dennis Weaver Memorial Park.

The OHV designation for the area was updated in the 2010 UFO Wide Travel RMP Amendment. This amendment states that the Ridgway Area is limited to existing routes with seasonal closures from December 1 through April 30 annually and the Uncompahgre Riverway Area is limited to existing routes yearlong until further route by route travel planning can be conducted.

Montrose and Ouray 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 also showed that Montrose and Ouray Counties are expanding at an average of 2% each year and the City of Montrose is expanding at an average rate of 5% per year. In 2010, the Bureau of Land Management Uncompahgre Field Office (UFO) reported a 5% increase in public land visitation from 2009.

## ***PURPOSE AND NEED FOR THE ACTION***

### **Need for the Action**

The existing trails are not designed sustainably and unplanned trail development has occurred resulting in new user-created routes and private land trespass issues. Because route by route travel management planning has not occurred, the area does not have maps or educational information on-site to inform users of the opportunities and expectations. Users are currently parking on the side of Ouray County Road 10, which is causing traffic congestion, safety concerns, loss of vegetation, erosion, and unplanned site expansion. There are also safety concerns with users on Ouray County Road 10B which is utilized for Ouray County's Ridgway Gravel Pit operations.

Due to increasing multiple use demands, user conflicts and issues related to recreational trails, private land access, rights-of-ways, utility corridors, wildlife protection and other resource impacts, BLM has determined that route by route planning would be beneficial to the area by providing active management and encouraging responsible use. The transportation network needs to be functional and meet multiple uses in this area, including right of ways (ROWs), recreation, and protection and maintenance of quality winter habitat for big game and other wildlife species. Since the Ridgway area is also bounded on the west by Ridgway State Park/Bureau of Reclamation, and the Uncompahgre Riverway area is bounded on the north by the Town of Ridgway (Dennis Weaver Memorial Park), the travel management plan needs to be compatible with the Town of Ridgway and Ridgway State Park/Bureau of Reclamation regulations, management, and travel designations.

### **Purpose for the Action**

Goals of this travel management plan are to: produce quality recreational travel opportunities in a natural-appearing landscape that support outdoor-oriented lifestyles, add to participants' quality of life, and foster protection of natural resources; maintain or improve wintering elk and deer habitat and maintain the areas' capabilities to support wintering deer and elk populations; maintain or improve land health to meet Colorado Public Land Health Standards; and maintain appropriate, sustainable, and reasonable access.

Objectives are to provide single-track trail opportunities in a natural-appearing landscape that ensures visitors are not exposed to unhealthy or unsafe human-created conditions, achieve a minimum level of conflict between recreation participants as well as between recreation and

other resource uses, and provide for quality recreational travel opportunities for personal, community, environmental, and economic benefits. Also, to sustain the undeveloped character of the Ridgway area's wide-open spaces for recreation use and enjoyment, and to maintain appropriate, sustainable, and reasonable access for visitors, authorized users, and private landowners while reducing private land trespass within the planning area.

The purpose is to present and analyze alternative travel management alternatives with a designated route system\*; analyze changing the existing "Limited to Existing Routes Seasonally" OHV designation to "Limited to Designated Routes Seasonally or Yearlong" on approximately 1086 acres; and consider travel management support facilities.

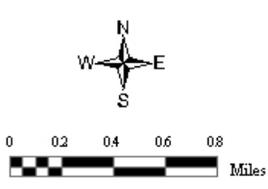
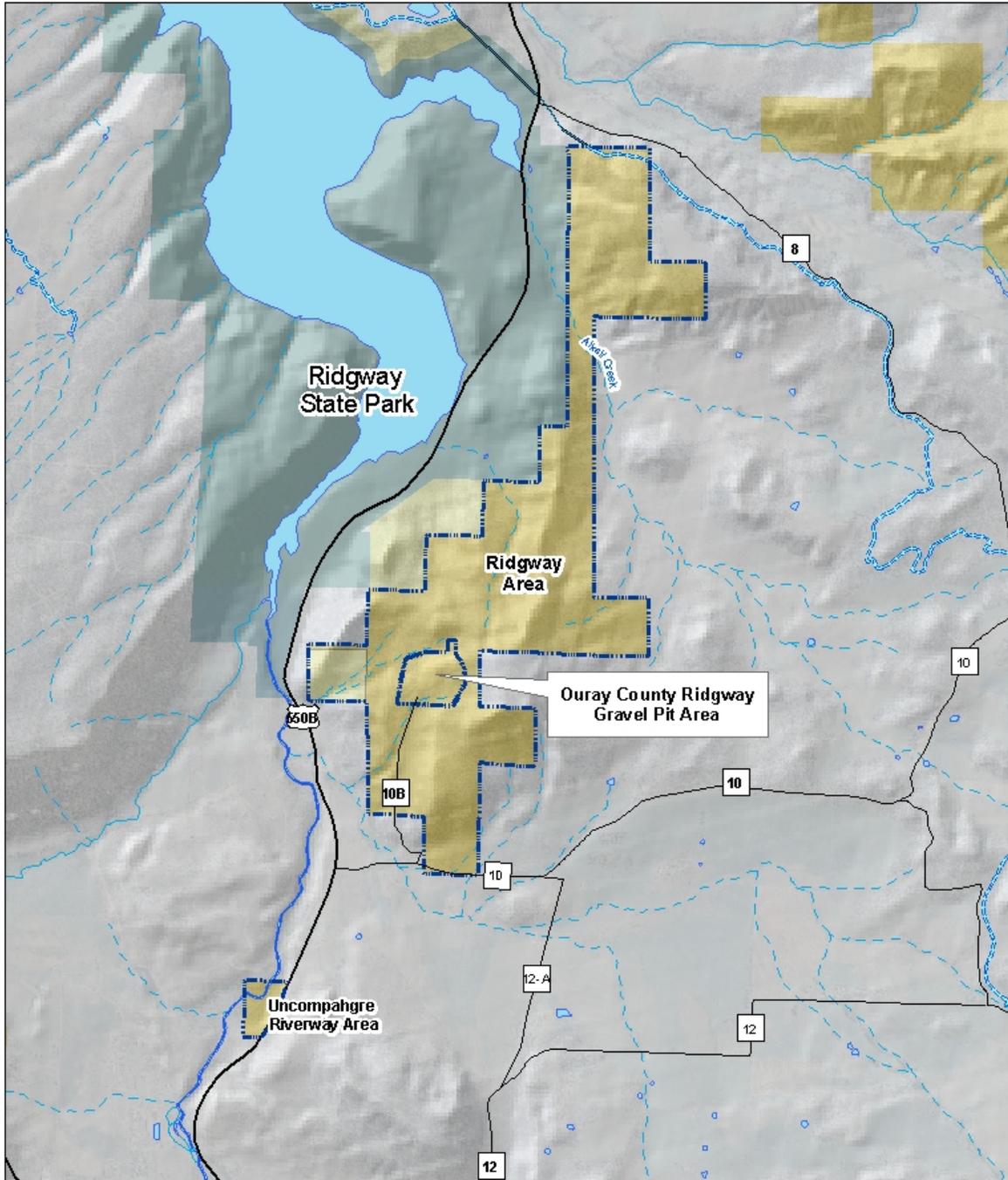
*\*Designated route system refers to the method of managing a motorized and non-motorized transportation network in which the individual routes are limited to specific modes of travel, and are identified on travel maps and posted on the ground with signs. Under the current designation, motorized and mechanized travel is permitted to operate on all existing trails. Under a designated route system, motorized and mechanized travel would be limited to routes that are identified on travel maps and posted as routes on the ground that are available for specified types of uses.*

## ***ISSUES and CONCERNS***

Issues and concerns include impacts to sensitive resources, user conflicts, environmental impacts, local economic impacts, private land access and trespass, safety regulations for the gravel pit, conditions of use on routes, additional access needs, loop opportunities, trail relocations, public safety, and proliferation of user-created routes. Travel related support facilities were not addressed in the 1989 RMP; some of the greatest user-created surface disturbing activities occur due to a lack of these facilities. Another issue is not having current information and management guidelines which allow for better service, education and compliance.

Map 1

Ridgway Travel Management Planning Area



-  Ridgway Planning Boundary
-  Bureau of Land Management
-  Bureau of Reclamation
-  State Parks
-  Private

Map produced by Bureau of Land Management,  
Uncompahgre Field Office, September 21, 2012  
Projection: UTM, Zone 13; Datum: NAD 1983

No warranty is made on the accuracy, reliability, and completeness  
of these data for individual use or aggregate use with other data.  
Spatial data may not meet National Map Accuracy Standards.  
This information may be updated without notification.

## ***DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES***

Three action alternatives and the no action alternative are considered. See Appendix 2 for maps that illustrate each alternative. Alternatives were developed considering the existing OHV designations and conditions on the ground, 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. Decisions are for BLM public lands only; decisions would not apply to Bureau of Reclamation, Ridgway State Park or private lands, but could have some indirect effects. The BLM has been cooperatively working with Ouray County, the Town of Ridgway, Ridgway State Park and Bureau of Reclamation since the beginning of this process and BLM will continue to do so during implementation of the plan. Any route designations that would require crossing boundaries onto the Ridgway State Park/Bureau of Reclamation lands would be contingent upon their management decisions.

For purposes of describing the proposed differences in management and changes in the action alternatives, the area has been delineated into three unique areas. The areas, as shown on Map 1, are Ridgway Area, Uncompahgre Riverway Area, and Ouray County Ridgway Gravel Pit Area.

The Ouray County Ridgway Gravel Pit lies within the travel management planning boundary. The Mine Safety and Health Administration requires that the gravel pit area be closed to all public entry except for authorized personnel. These routes are shown in all alternatives as closed to the public.

Table 1 shows the miles of routes by travel use category within each alternative. Table 2 shows the same information by area for each alternative. Mileage shown in both tables 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 located in Appendix 2 for each of the alternatives. See Appendix 1 for detailed definitions of the Categories.

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.

<b>Table 1 Miles of Routes in Travel Use Categories by Alternative*</b>					
<b>Travel Use Category</b> (see Appendix 1 for detailed definitions)	<b>Primary and Secondary Permitted Uses</b>	<b>Proposed Action</b>	<b>Alternative 1</b>	<b>Alternative 2</b>	<b>No Action</b>
Hiking Single Track	<b>Foot only</b>	0.4	-	-	-
Non-Motorized/Non-Mechanized Single Track	<b>Equestrian, Foot</b>	-	-	0.4	-
Mechanized Single Track	<b>Bicycles, foot</b>	0.9	-	-	-
Non-Motorized Single Track	<b>Bicycles, equestrian, foot</b>	15.1	21.4	0.2	0.2
Non-Motorized Single Track and Administrative Use <sup>1</sup>	<b>Authorized uses and Bicycles, equestrian, foot</b>	0.2	0.2	0.2	0.2
Motorized Single Track	<b>Motorcycles, bicycles, equestrian, foot</b>	-	-	10.1	4.7
ATV 2-Track	<b>ATVs, snow machines, motorcycles, bicycles, equestrian, foot</b>	-	-	-	2.2
Open to Full Sized 4WD/2WD Vehicles Only	<b>Full Sized Licensed Vehicles, bicycles, equestrian, foot</b>	2.3	-	-	-
4WD/2WD – Open	<b>All modes of transportation (Full sized vehicles – 4WD/2WD), ATV, motorcycle, bicycles, equestrian and foot</b>		2.8	2.9	5.5
Administrative Uses Only <sup>2</sup>	<b>Motorized Authorized uses only – Equestrian, foot</b>	1.0	0.3	0.7	0.3
Existing Routes Closed	<b>Closed</b>	7.5	7.4	8.2	1.6

\*Numbers include routes that have been proposed within each alternative except within the “Existing Routes Closed” row

1. These routes would be available for motorized administrative use and to the public for the designated modes of travel (see maps in Appendix 2)
2. These routes fall outside of the Ouray County Ridgway Gravel Pit boundary and would be available for hiking and horseback riding only by the public but available for motorized and mechanized administrative use

Note: In addition to miles shown for “4WD/2WD”, there are 0.6 miles of County Road 10B located within the area.

**Table 2  
Miles of Routes in travel Use Categories by Area by Alternative\***

Travel Use Category (see Appendix 1 for detailed definitions)	Area			Alternative Total Miles	Alternatives
	Ridgway	Uncompahgre Riverway	Ouray County Ridgway Gravel Pit		
Hiking Single Track	-	0.4	-	0.4	Proposed
	-	-	-	-	1
	-	-	-	-	2
	-	-	-	-	No Action
Non-Motorized/Non- Mechanized Single Track	-	-	-	-	Proposed
	-	-	-	-	1
	-	0.4	-	0.4	2
	-	-	-	-	No Action
Mechanized Single Track	0.9	-	-	-	Proposed
	-	-	-	-	1
	-	-	-	-	2
	-	-	-	-	No Action
Non-Motorized Single Track	14.9	0.2	-	15.1	Proposed
	20.7	0.6	-	21.3	1
	-	0.2	-	0.2	2
	-	0.2	-	0.2	No Action
Non-Motorized Single Track and Administrative Use	-	0.2	-	0.2	Proposed
	-	0.2	-	0.2	1
	-	0.2	-	0.2	2
	-	0.2	-	0.2	No Action
Motorized Single Track	-	-	-	-	Proposed
	-	-	-	-	1
	10.1	-	-	10.1	2
	4.2	0.4	-	4.6	No Action
ATV 2-Track	-	-	-	-	Proposed
	-	-	-	-	1
	-	-	-	-	2
	2.2	-	-	2.2	No Action
Open to Full Sized 4WD/2WD Vehicles Only	2.4	-	-	2.4	Proposed
	-	-	-	-	1
	-	-	-	-	2
	-	-	-	-	No Action
<sup>1</sup> 4WD/2WD – Open	-	-	-	-	Proposed
	2.8	-	-	2.8	1
	2.9	-	-	2.9	2
	5.5	-	-	5.5	No Action
Administrative Uses Only	0.7	0.3	-	1.0	Proposed
	-	0.3	-	0.3	1
	0.4	0.3	-	0.7	2
	-	0.3	-	0.3	No Action
Existing Routes Closed	6.0	-	1.5	7.5	Proposed
	5.9	-	1.5	7.4	1
	6.6	-	1.5	8.1	2
	-	-	1.5	1.5	No Action

\*Numbers include routes that have been proposed within each alternative except for “Closed” Category

<sup>1</sup>Note: In addition to miles shown for “All modes of transportation ...”, there are 0.6 miles of County Road 10B located within the area (within each 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 (except within the Ouray County Ridgway Gravel Pit boundary) would be available for horseback riding and hiking on routes or cross-country.

### **Gates**

Locked gates would be maintained at all trail heads in the Ridgway Area from December 1 to April 30 to protect wildlife with appropriate signing to inform the public of the area closures and the rationale for the closures. Locked gates would be maintained at the Ouray County Ridgway Gravel Pit Area to restrict public access throughout the year. BLM would also work cooperatively with Colorado Parks and Wildlife including Ridgway State Park for assistance with monitoring and implementation decisions.

### **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 or maintenance, would be subject to the terms and conditions of each individual authorization. Additional environmental documentation and analysis would be required in some cases for these authorizations.

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

## **Management Common to Proposed Action and Alternatives 1 and 2**

### **Travel Management Plan**

Consists of:

1. Travel Management Area designations would include:
  - a. “Limited to Designated Routes with Seasonal Closures” within the Ridgway and Ouray County Ridgway Gravel Pit Areas
  - b. “Limited to Designated Routes Yearlong” within the Uncompahgre Riverway Area
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. User created routes not identified in the Ridgway TMP would be closed upon discovery.

Construction of new routes identified in this travel management plan would be coordinated and administered by BLM.

### **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.

Motorized and non-motorized travel off designated routes would not be authorized or permitted except as noted in each of the alternative descriptions.

### **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 1.

### **Parking**

In order to limit resource impacts and help prevent new user-created routes, users would be allowed to park motorized or mechanized vehicles, appropriate to mode of travel immediately adjacent and parallel to available 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 already disturbed areas where possible, consider safety and keep routes passable for other users.

### **Travel Management Support Facilities**

Travel management support facilities are proposed. Each area would include a hardened graveled parking area/staging area, trailhead, gates, and kiosk. These facilities would consist of a maximum of one acre each of disturbed surface. Facilities could also include restrooms, fencing, hitching rails, vehicular control devices, native landscape islands, erosion and drainage control devices, and hardened access trails.

### **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). User created or constructed hiking or horseback riding trails 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.

Surveys for nesting raptors would be conducted annually early (April 1- May 15) in the nesting season for five years after the approval of this plan. The purpose of this is to document new nest attempts or if nesting occurs in the known nest site. When nesting attempts are detected those routes that occur within 100 meters of the nest site would be closed until fledging occurs typically July 15th.

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. Need Data Cultural Sites will be avoided including a fifty meter-wide buffer zone. 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.

Proposed routes, parking areas and other facilities to be constructed under these alternatives would be intensively inventoried for cultural resources and surveyed for special status plant/animal species and habitat, prior to construction or use. Where existing cultural inventories are sufficient, standard discovery stipulations would apply.

Re-routes or re-location of routes needed for erosion or other mitigation would be limited to a corridor 125 feet wide on either side of the centerline of all designated routes.

New routes and relocation of routes would be constructed using sustainable trail building practices.

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

Implementation and Monitoring Plan to be prepared, BLM annual work plans, and as funding permits.

Proposed routes would be designed and located such that Visual Resource Management Class Objectives would be met in order to reduce visual contrast and impacts. 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 and riparian impacts.

Closures, rehabilitation and/or re-vegetation of routes would be performed according to the Implementation and Monitoring Plan to be prepared, BLM annual work plans, and as funding permits. This could include reseeding, planting vegetation, and/or constructing barriers. If any ground disturbance is required, such as ripping existing routes, digging post holes for fences, or using rangeland drills, the appropriate clearances would be completed prior to implementation.

Restoring natural drainage patterns, surface topography, and vegetation would be implemented as needed during rehabilitation of routes that are relocated or closed to travel.

During rehabilitation, seeding with a BLM-approved seed mix would take place where areas of compaction exceed 3 feet in width, and natural re-vegetation is unlikely to occur over the next 3 years. Seed would be scattered on the surface and raked in.

A weed management plan would be prepared and implemented that would identify all weed infestations and concerns on all routes and an action plan to eliminate or reduce noxious weeds. Noxious weed surveys would be completed on trails at a minimum every three years to determine if noxious weeds are establishing away from staging areas or Ridgway State Park. Noxious weed educational materials would be placed at all staging area and staging areas would be kept free of noxious weeds.

A noxious weed strategic plan would be completed with the Ridgway State Park prior to construction of new trails connecting the two areas. Noxious weed survey, monitoring and treatment would occur in coordination with the Ridgway State Park when trails connect the two areas.

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

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. Official maps would be made available to the public.

### **Maintenance**

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

Designated routes would be incorporated into the BLM scheduled maintenance plan.

### **Monitoring & Implementation**

An Implementation and Monitoring Plan and schedule would be prepared; it would include timeframes for completion (completed in phases (see Appendix 7)). Route signing, route construction and maintenance, trailhead construction, and facility construction would be covered in implementation.

The plan would also include a schedule for monitoring. Levels of use, type of use, and natural resource conditions such as soil erosion, spread of noxious weeds, and impacts to vegetation would be monitored. Monitoring baseline conditions would determine if quality of recreation, protection of sensitive resources, and land health are being achieved in order to meet management goals and objectives. Monitoring tools could include traffic counter data, motion activated cameras, on-site patrols, surveys, and analysis of use.

Implementation and monitoring are dependent on funding (internal or external) and specialists' capability to work with contractors and volunteers. All implementation and monitoring projects would require BLM oversight and administration.

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

### **Follow-on Actions**

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 and stipulations that 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.

Public access would be pursued in the Ridgway Travel Management Planning area as opportunities arise.

### **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, or 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 analysis.

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 for a quality non-motorized multi-use recreation area. 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 2 for a map of designated routes in the Proposed Action.

## **Travel Management Plan**

This TMP would identify and designate:

- 2.4 miles of routes in the Open to Full Sized 4WD/2WD Vehicles Only category.
- 16.6 miles of non-motorized routes consisting of
  - 0.4 miles in the Hiking Single Track travel use category for hiking only;
  - 15.1 miles in the Non-Motorized Single-Track travel use category for hiking, horseback riding, and mechanized use;
  - 0.9 miles of Mechanized Single Track for mechanized and hiking only; and
  - 0.2 miles in Non-Motorized Single Track and Administrative Use travel use category for hiking, horseback riding, mechanized use, and full size motorized administrative use.
- 1 mile of route in the Administrative Uses Only category; motorized or mechanized uses by the public would not be allowed.
- 6 miles of existing routes to be closed to all motorized and mechanized travel and 1.5 miles closed to all modes of travel except for authorized users.
- Approximately 12.8 miles of proposed non-motorized route construction would occur.
- All routes in the Ridgway Area would be closed to all modes of travel (including equestrian and foot) from December 1 to April 30 to prevent disturbance to wintering big game. Any variances to the listed dates would be made by the authorized officer in conjunction with Colorado Parks and Wildlife and would be implemented according to appropriate notification and posting, and or according to other appropriate regulations.

## **Travel Use Conditions**

The use of wheeled, muscle-powered game carts or wagons would be permitted off 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.

Snowmobile use would be prohibited throughout the planning area.

## **Travel Management Support Facilities**

Travel management support facilities currently exist with State Parks and Town of Ridgway. Two additional travel management support facilities (see “Common to Proposed Action and Alternatives 1 and 2”) are proposed in the Ridgway Area to support the travel management plan and help ensure success in meeting goals and objectives. See Appendix 2 for a map of facility location.

## **Design Feature**

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

Animals must remain on a leash at all trailheads and under audible or physical control in all other areas with the exception of the Uncompahgre Riverway Area. Within the Uncompahgre Riverway Area, animals must remain on a leash at all times.

## **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 objectives for alternative 1 are to maximize mountain biking travel opportunities and public access. Identified issues and concerns would be resolved with a focus on providing non-motorized recreational activities. Increased mechanized travel opportunities would be an important consideration when actions are implemented.

See [Appendix 2](#) for a [map](#) of designated routes in Alternative 1.

## **Travel Management Plan**

This TMP would identify and designate:

- 2.8 miles of routes in the 4WD-2WD travel use categories for motorized and non-motorized travel
- 21.5 miles of restricted non-motorized routes consisting of
  - 21.3 miles in the Non-Motorized Single-Track travel use category for hiking, horseback riding, and bicycle use; and
  - 0.2 miles in Non-Motorized Single Track and Administrative Use travel use category for hiking, horseback riding, mechanized use, and full size motorized administrative use.
- 0.3 miles of routes in the Administrative Uses Only category. Motorized or mechanized uses by the public would not be allowed.
- 5.9 miles of existing routes to be closed to all motorized and mechanized modes of travel and 1.5 miles to be closed to all modes of travel except authorized users.
- Approximately 17.5 miles of proposed non-motorized single track route construction would occur.
- All routes in the Ridgway Area would be closed to motorized and mechanized modes of travel from December 1 to April 30 to prevent disturbance to wintering big game. Any variances to the listed dates would be made by the authorized officer

in conjunction with Colorado Parks and Wildlife and would be implemented according to appropriate notification and posting, and or according to other appropriate regulations.

See Table 1 for mileages for each of the Travel Use Categories

### **Travel Use Conditions – Game Retrieval**

Only non-motorized/non-mechanized modes of travel (hiking and horseback riding) would be permitted off designated routes to retrieve big game only during Colorado Parks and Wildlife (CPW) authorized big game and mountain lion hunting seasons. Motorized and mechanized vehicles would not be permitted off designated routes to retrieve big game.

### **Travel Management Support Facilities**

Travel management support facilities currently exist with State Parks and Town of Ridgway. One additional travel management support facility (see “Common to Proposed Action and Alternatives 1 and 2”) is proposed in the Ridgway Area to support the travel management plan and help ensure success in meeting goals and objectives. See Appendix 2 for a map of the facility location.

### **Design Feature**

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

Animals must remain on a leash at all trailheads and under audible or physical control in all other areas with the exception of the Uncompahgre Riverway Area. Within the Uncompahgre Riverway Area, dogs must remain on leash at all times.

### **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 enhancing wintering elk and deer habitat while providing a minimal level of multi-use travel opportunities and public access. Identified issues and concerns would be resolved with a focus on enhancing biological values. Opportunities for all modes of travel would have greater restrictions and would be managed to meet the goals and objectives for this alternative. Minimal multi-use travel opportunities would be emphasized.

See Appendix 2 for a map of designated routes in Alternative 2.

## **Travel Management Plan**

This TMP would identify and designate:

- 13 miles of motorized routes consisting of 10.1 miles in Motorized Single-Track for motorcycles, bicycles, horseback riding, and hiking; and 2.9 miles in 4WD-2WD travel use categories for motorized and non-motorized travel
- 0.8 miles of non-motorized routes consisting of
  - 0.4 miles in the Non-Motorized & Non-Mechanized, Single Track travel use category for hiking and horseback riding;
  - 0.2 miles in the Non-Motorized Single-Track travel use category for hiking, horseback riding, and mechanized use; and
  - 0.2 miles in Non-Motorized Single Track and Administrative Use travel use category for hiking, horseback riding, mechanized use, and full size motorized administrative use.
- 0.7 mile of routes in the Administrative Uses Only category. Motorized or mechanized uses by the public would not be allowed.
- 6.7 miles of existing routes to be closed to all motorized and mechanized travel and 1.5 miles closed to all modes of travel except authorized users.
- Approximately 7.5 miles of proposed motorized single track and 0.5 miles of proposed 4WD-2WD route construction would occur.

Selected routes, identified on the map, would be closed to all modes of travel (including equestrian and foot) from December 1 to April 30 to prevent disturbance to wintering big game. Any variances to the listed dates would be made by the authorized officer in conjunction with Colorado Parks and Wildlife and would be implemented according to appropriate notification and posting, and or according to other appropriate regulations.

See Table 1 for mileages for each of the Travel Use Categories

### **Travel Use Conditions – Game Retrieval**

Only non-motorized/non-mechanized modes of travel (hiking and horseback riding) would be permitted off designated routes to retrieve big game only during Colorado Parks and Wildlife (CPW) authorized big game and mountain lion hunting seasons. Motorized and mechanized vehicles would not be permitted off designated routes to retrieve big game.

### **Travel Management Support Facilities**

Travel management support facilities currently exist with State Parks and Town of Ridgway. Two additional travel management support facilities (see “Common to Proposed Action and Alternatives 1 and 2”) are proposed in the Ridgway Area to support the travel management plan and help ensure success in meeting goals and objectives. See Appendix 2 for a map of facility location.

### **Design Feature**

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

Animals must remain on a leash at all times

### **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.

### **Travel Management Plan**

Decisions in the 1989 Resource Management Plan and 2010 Resource Management Plan Travel Amendment restrict motorized and mechanized travel to existing routes with seasonal closures December 1 through April 30 annually within the Ridgway Area and restrict travel to existing routes yearlong within the Uncompahgre Riverway Area. All modes of travel (except authorized uses) would also be eliminated from the Ouray County Ridgway Gravel Pit boundary. In this alternative, these decisions would continue to be under-implemented until further travel planning could be completed, resulting in continued private land trespass, user created routes, and overall safety issues. Table 1 shows the number of miles in each Travel Use Category for this alternative.

### **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:

There would continue to be a lack of 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 2 for a map of the No Action Alternative for existing inventoried routes.

Except as otherwise noted, travel on horse or by foot would continue to be permitted on routes or cross-country year-round. Motorized and mechanized use would continue to be permitted on all existing trails outside of the seasonal closure period (December 1 to April 30).

Existing policies pertaining to motorized and mechanized travel would continue to be permitted to travel off existing routes for parking, camping, and retrieving game. 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 analyzed under a separate EA.

### **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 trails.

### **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.

## ***IMPLEMENTATION AND MONITORING***

An implementation and monitoring plan would be completed following approval of the Ridgway Travel Management Plan (TMP). The implementation and monitoring plan would contain detailed schedules and frequencies necessary to monitor and implement all decisions in the TMP. Cost estimates for the implementation of decisions would also be included. Several follow-on activity plans for the planning area would be prepared during implementation of the Ridgway TMP, such as a weed management plan.

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.

## ***ADAPTIVE MANAGEMENT***

As the Travel Management Plan decisions begin to be implemented and monitored, each one would be observed as to 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 range of alternatives, as required by NEPA. 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 Uncompahgre Field Office started the initial phase of the environmental assessment for the Ridgway trail proposal in February 2011. The original proposal only entailed constructing new single track trails within the Ridgway Planning Area. During the scoping period approximately 47 comments were received revealing several issues requiring attention in conjunction with the proposal of new trails. 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 April 2012. The public was notified through press releases, web site postings, and letters sent to approximately 174 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 32 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:

- Access and Transportation
- Lands, Rights-of-Way (ROW), and Withdrawals
- Law Enforcement and Public Safety
- Noise
- Recreation
- Multiple-use
- Socioeconomics
- Soils
- Vegetation
- Wildlife

See Appendix 3 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 defining the area boundaries as well as goals and objectives for the planning area. Areas were delineated where there were similar issues and concerns.

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: Uncompahgre Resource Management Plan

Date Approved: July 1989

Decision Number/Page and Language:

*Recreation Resource Management Decisions – Chapter 2, pg. 39:* Management Units 2, 3, 5, 7, 9, 10, 11, 13, and 16 will be managed for extensive recreational use to meet public demands for dispersed recreation.

*Management Decisions – Chapter 3, pg. 14:* The management unit will be managed to improve the areas' capabilities to support wintering deer, elk, and bighorn sheep populations. Land treatment projects and other facilities designed to improve the quality and quantity of winter habitat will be developed. Wildlife will have first priority for all additional forage made available as a result of BLM habitat improvement projects. All other land uses will be permitted if they will not degrade the areas' winter range capabilities. Disturbances will be minimized from December 1 through April 30 on crucial deer and elk winter range (37,007 acres).

Name of Plan: Uncompahgre Resource Management Plan Amendment

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".

The UFO RMP revision will delineate Travel Management Areas for the "limited" designated areas and to the extent possible produce a schedule to complete the route by route travel management planning. As per BLM's planning handbook guidance this should not exceed 5 years after the RMP revision has been completed. The need for travel management support facilities, new routes, re-routes and closures would be evaluated at that time. Also at that time, the "Limited to Existing Routes" designation would be changed to "Limited to Designated Routes".

BLM also has a responsibility to conform to the laws and policy directions.

**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 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, executive order, or the Standards for Public Land Health, and 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.

Cumulative impacts of the Proposed Action and alternatives are shown in the analysis of each element. Past, present and reasonably foreseeable actions known to the BLM that may occur within the affected area are shown at the end of this section.

Potential effects to the following resources/concerns were evaluated to determine if detailed analysis is necessary. Consideration of some elements is to ensure compliance with laws, statutes or Executive Orders that impose certain requirements upon all Federal actions. Other items are relevant to the management of public lands in general, and to the BLM UFO in particular.

Any element not affected by the Proposed Action or alternatives will not be analyzed in this document; the reasons for no impact will be stated.

Element	Not Applicable or Not Present	Present, But No Impact	Applicable & Present; Brought Forward for Analysis
Air Quality			X
ACEC	X		
Wilderness	X		
Lands with Wilderness Characteristics	X		
Wild and Scenic Rivers	X		
Cultural			X
Native American Religious Concerns			X
Farmlands, Prime/Unique	X		
Soils			X
Vegetation			X
Invasive, Non-native Species			X
Threatened and Endangered Species			X
Migratory Birds			X
Wildlife, Terrestrial			X
Wildlife, Aquatic			X
Wetlands & Riparian Zones			X

Floodplains			X
Water -- Surface			X
Water -- Ground			X
Wastes, Hazardous or Solid			X
Environmental Justice			X
Socio-Economics			X
Access		X	
Transportation			X
Cadastral Survey	X		
Realty Authorizations			X
Range Management	X		
Fire and Forest Management			X
Noise			X
Recreation			X
Visual Resources			X
Geology and Minerals			X
Paleontology	X		
Law Enforcement			X

**AREAS OF CRITICAL ENVIRONMENTAL CONCERN; WILDERNESS; LANDS WITH WILDERNESS CHARACTERISTICS; WILD AND SCENIC RIVERS; FARMLANDS, PRIME AND UNIQUE; CADASTRAL SURVEY; RANGE MANAGEMENT; PALEONTOLOGY**

There are not any Areas of Critical Environmental Concern, Wilderness or Wilderness Study Areas, Lands with Wilderness Characteristics, Wild and Scenic Rivers, or Prime and Unique Farmlands within, adjacent to, or impacted by the planning area and Proposed Action/alternatives. Cadastral Survey, Range Management and Paleontology will also not be impacted.

**AIR QUALITY**

**Affected Environment:**

The closest Class I air-shed in the vicinity of the proposed project is the Black Canyon of the Gunnison Wilderness, approximately 24 miles north. Notable Class II air-sheds in the vicinity include: the Uncompahgre Wilderness, approximately 5 miles southeast; and the Sneffels Wilderness, approximately 11 miles southwest. The nearest community in the area is the adjacent town of Ridgway. Highway 550, the major transportation corridor between the town of Ridgway and the city of Montrose, runs adjacent to the Planning Area.

Air quality in this area complies with federal air quality standards according to the most recent Colorado Air Quality Control Commission’s Report to the Public (CDPHE 2012). Air quality

concerns in this area are primarily from motor vehicles, the Nucla coal-fired power plant, coal mines, sand and gravel operations, windblown dust, wildfires, and prescribed fires.

### **Environmental Consequences/Mitigation:**

#### **Proposed Action:**

The Proposed Action reduces the total miles of routes available to be traveled by motorized transportation in the planning area. This could affect motorized use by either increasing the concentration of motorized vehicles to available routes or it could reduce the motorized use in the area; neither scenario would result in an increase in vehicle emissions.

Any construction equipment associated with trail building and support facilities would have short-term and localized impacts on air quality within 300 feet of the equipment. Fumes from the machine engines and windblown dust would contribute to overall short-term air quality degradation. The distance windblown dust will travel will likely increase during periods of low soil moisture and breezy conditions, which can be mitigated by wetting the surface of the disturbed soil with water. Degradation would terminate each day upon equipment shut-down, as well as upon completion of the project.

Fugitive dust and machine engine emissions exist in the area with the operations associated with the Ouray County Ridgway Gravel Pit, and no increase in air quality degradation will result due to activities within this Proposed Action.

#### **Alternative 1:**

Analysis regarding this alternative is the same as in the Proposed Action. No increase in air quality degradation will result due to activities within this Alternative.

#### **Alternative 2:**

Analysis regarding any construction equipment associated with this alternative is the same as in the Proposed Action. This alternative increases the miles of routes available to motorized vehicles and any associated increase in motorized use could increase vehicular emissions. However, any reasonably foreseeable increase in emissions and dust associated with motorized traffic in the area is negligible in relation to the operations associated with the Ouray County Ridgway Gravel Pit.

#### **No Action Alternative:**

The impacts of road dust from unpaved roads depend on factors such as the amount of travel, size and speed of the vehicle, climatic conditions, and geology. Compared to all other alternatives, the No Action alternative would have the greatest potential for new user created motorized routes and trails due to anticipated increases in motorized and mechanized cross-country travel and a poor quality travel system. Given the unconfined and incrementally increasing extent of user-created routes, and assuming growth in recreational use over a 5-10 year period, the risk of adverse impacts is increased due to greater cross country travel and disturbed soils. Under the No Action, fugitive dust and pollution would be expected to increase in the planning area and could potentially reach intensities that impact air quality on or as seen from neighboring private, BLM-managed lands, and other federal lands in the

immediate short-term.

**Cumulative Impacts:**

Urbanization, resort development, and operations within the Ouray County Ridgway Gravel Pit in or near the planning area bring additional impacts on localized air pollution. Wildfires, fire management activities on public lands, and private landowners burning fields and ditch vegetation in the spring would also affect air quality in the immediate short-term when their smoke inundates communities and other sensitive areas.

Degradation associated with construction of facilities would terminate upon completion of the facilities. Impacts to air quality associated with travel activities in all action alternatives would generally add incrementally for short periods of time with no measurable cumulative impacts beyond localized area.

**CULTURAL RESOURCES**

**Affected Environment:**

The planning area is situated on a series of upland benches above the Uncompahgre River, in an area characterized by Pinyon-Juniper steppe. Cultural Resources in this area have been mainly found to consist of proto-historic Ute occupations and historic homesteading land use. File searches indicate a moderate site density in the area.

**Environmental Consequences/Mitigation:**

**Proposed Action**

Alpine Archaeological Consultants inventoried the Ridgway Travel Management Planning area in 2010 (BLM project #10UN-12, Reed et al 2010 and BLM project #85UB-29, R. Fike 1985). The survey found 39 cultural sites and 42 isolated finds. Of the 39 sites, three were found to be eligible for nomination to the National Register of Historic Places. None of these three sites were within the Area of Potential Effect (APE) of the planning area. Alpine returned to the planning area in April of 2012 to inventory the additional 5.3 linear miles of trail for the proposed addition (BLM project #12UN-08). The second inventory located an additional 11 cultural properties and 9 isolated finds. The potentially eligible historic properties are sites 5OR 422, 5OR 423, 5OR 425, 5OR 2030, 5OR 2033 and 5OR 2034. All six sites are historic localities of unknown function and consist mainly of charcoal stains, with some sites also exhibiting surface scatters of historic artifacts and/or modified logs. Of the six sites, four (422, 423, 2033 and 2034) are situated well outside the Area of Potential Effect (APE) and buffer zone of the project as originally presented. Two of the sites (425 and 2030) are outside the APE but potentially within a 50 meter buffer zone of trail segment 2200 as originally proposed. BLM has required moving a portion of that trail segment some 10 meters in order to leave both need data sites outside the buffer zone as well. As constituted in the proposed action, all six need data sites will be avoided by the trail and a fifty meter-wide buffer zone and no further work is required. If these recommendations are followed, no impacts to any known National Register or otherwise eligible historic property are anticipated.

**Alternative 1:**

Alternative 1 includes segments of proposed trail which may result in adverse impacts to two known National Register eligible cultural properties. Trail segments should be re-routed to avoid these historic properties. If avoidance is not a feasible option, the appropriate mitigation plan must be implemented in consultation with the Colorado State Historic Preservation Office prior to the commencement of any construction or trail use activities.

**Alternative 2:**

Same as the proposed action analysis above. Since there are no eligible cultural properties within the APE of the action, changes in the character and/or type of trail use will result in no additional impacts or change in recommendations. No impacts to any known National Register or otherwise eligible historic property are anticipated.

**No Action Alternative**

There will not be new impacts to any known National Register eligible properties. Undiscovered historic properties that may exist within the trails and developed areas would continue to receive impacts from recreational users.

**Cumulative Impacts:**

Cumulative impacts to cultural resources may include secondary impacts to eligible cultural properties as yet undiscovered which lie outside the actual APE of the planning area. Increased visitation to an area may result in an increase in secondary impacts. The proposed trails system is situated in an area in which the density of eligible cultural sites is low, and while some secondary impacts can be anticipated, the incidence of such impacts is also predicted to be low. The future discovery of such impacts (e.g. vandalism, collection, increased erosion of stable cultural surfaces, etc.) which result in the adverse effects to or loss of integrity of an eligible historic property would result in the creation of a mitigation plan in cooperation with the Colorado State Historic Preservation Office.

**NATIVE AMERICAN RELIGIOUS CONCERNS**

**Affected Environment:**

The Ridgway area is known to have been a culturally significant area to the historic Ute people, and many historically important people, places and events are known, generally within the valley bottom between Ouray and Montrose. Elevated benches above the valley are less likely to contain known culturally important localities, although some such properties are occasionally found, including burials, wickiup sites and traditional gathering areas. No such areas have been identified in this project.

**Environmental Consequences/Mitigation:**

**Proposed Action, Alternative 1 and Alternative 2**

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 this project. Should future inventories or consultations with Native American Tribes reveal the presence of sacred sites, landscapes or traditional cultural properties in the area, the appropriate actions and/or mitigation will be taken.

#### **No Action Alternative**

No new impacts to any Native American Religious Concerns would be anticipated.

#### **Cumulative Impacts**

There are no cumulative impacts.

### **SOILS** (includes a finding on Standard 1)

#### **Affected Environment:**

The soils within the Ridgway travel management planning area are largely a product of the local geologic parent material, climatic conditions, and the topographic position on the landscape. Glacial outwash and alluvium cover much of the area. Below the alluvium and outcropping on hillsides and valley bottoms is the Mancos Shale. The inter-bedded sandstone and shale units of the Dakota formation are located below the Mancos Shale and can be found outcropping in a few locations on the West side of the area near the Ridgway Reservoir.

The Ridgway Area Soil Survey has not been completed in this area. The Natural Resources Conservation Service has collected field data but has yet to publish the results. Generally in this area, deeper soils with little rock content are found on the interior portions of mesa tops and alluvial valleys. Shallower, rocky soils with cobbles are found along mesa rims and side slopes. The soils on the lower slopes are mostly derived from Mancos Shale and are primarily clay loam in texture. These soils are easily eroded and prone to sloughing and sliding in steeper areas.

Biological soil crusts are mostly absent in the area possibly due to the 16-18" of precipitation the area receives. This level of moisture typically increases the competition from herbaceous vegetation and reduces the ability for complex crusts to form. In several areas, there is some evidence that cyanobacteria filaments are present in the upper layers of the soil but the level of development is very low. The lack of moss and lichens on the soil surface is further evidence of the low levels of crust development.

The area presently supports a network of 2-tracks and trails totaling 15 miles. Most of the 2-tracks are the result of access roads bulldozed for power lines or formed from repeated use during recreational activities such as hunting. The single track trails likely formed through repeated motorcycle, horseback and mountain bike use. Some of the existing routes have drainage and erosion problems due to poor alignment or steep slopes.

The 2008 Land Health Assessment (LHA) classified the area as "meeting" land health standards for upland soils. The only problems cited were low litter cover when the survey was conducted.

### **Environmental Consequences/Mitigation:**

Erosion is a natural process of abrasion or detachment of soil particles by wind or water. Erosional processes can be accelerated by human activities. The degree of impact depends on local climate, geology, vegetation, and topographic conditions (Dunne and Leopold, 1978).

Type of trail use can impact erosion rates, compaction and widening of trails. Wilson and Seney (1994) evaluated tread erosion from horses, hikers, mountain bikes, and motorcycles and found that horses made significantly more sediment available for erosion than the other uses. Other motorized use such 4-wheel drive vehicles and all-terrain vehicles can cause even more substantial abrasion impacts to vegetation, roots and soils; compaction to soils; shearing of the soil creating ruts; and displacement of soil particles by mechanical movement (Meyer 2002). Marion and Olive (2006) found that tread width was the most significant factor in determining the amount of soil erosion by use category. In a study of trails confined to a single use, they found all-terrain vehicles trails generate the highest rate of soil loss followed in order by: horse only trails, hiking only trails and bicycle only trails. The study also found trail alignment/grade and water control/maintenance were the most important factors in soil erosion.

Recreational guidelines provided by the BLM (USDI, BLM 2000), for Meeting Public Land Health Standards in Colorado suggest maintaining sufficient vegetation on upland areas to minimize wind and water erosion. Since the width of routes and slope are critical to maintain sufficient vegetation, two factors will be analyzed to determine the potential impacts of each alternative: number of miles of routes on steep slopes and type of route use. These indicators are not completely representative since each route is dependent on route grade, position on the landscape, amount of use, and drainage maintenance. However, it would be difficult to analyze the length of each trail using these additional indicators, so steepness of slope and type of use were chosen as the best quantifiable measures. In addition, the construction of any new routes would be constructed using sustainable trail building practices. Some of these practices include:

- Design trails with sustainable grades and avoid fall-line alignments.
- When possible, build trails in dry, cohesive soils that easily compact and contain a larger percentage of coarse material or rocks. These soils better resist erosion by wind and water or displacement by feet, hooves and tires.
- Minimize tread muddiness by avoiding flat terrain, wet soils, and drainage-bottom locations.
- Use grade reversals to remove water from trail treads. Grade reversals are permanent and sustainable - when designed into a trail's alignment they remain 100 percent effective and rarely require maintenance.

### **Proposed Action:**

The Proposed Action would result in 19.9 miles of open routes and 16.6 miles of non-motorized single track. Of the existing routes, 7.6 miles would be closed and prevent further erosion from these poorly aligned and wide surface area routes that often follow directly down the fall line. The 16.6 miles of non-motorized single track would include 12.8 miles of newly created routes that would likely generate erosion through the removal of vegetation and dispersal of the soils during construction. Horseback use on these non-motorized trails would likely generate the greatest disturbance and potential for erosion particularly if used when trail conditions are wet. The seasonal closure from December 1 through April 30

within the Ridgway and Ouray County Ridgway Gravel Pit Area would reduce the potential for trail use when the tread is wet or saturated.

Of the 12.8 miles of newly created single track trails, 2.26 miles would be constructed on slopes between 30-39% and 0.82 miles would be built on slopes greater than 40%. These trail sections would require proper alignment and route maintenance to ensure the trail treads don't become conveyances for water.

<b>Proposed Action</b>	<b>Total Miles</b>	<b>Miles existing Slopes 30-39%</b>	<b>Miles proposed Slopes 30-39%</b>	<b>Miles existing Slopes greater than 40%</b>	<b>Miles proposed Slopes greater than 40%</b>
Admin. Only	0.9	0.30		0.00	
Close	7.4	0.86		0.23	
Open to Bikes, Hikers, Equestrians	16.6	0.35	2.26	0.11	0.82
Open to Full Sized Vehicles	2.4	0.25		0.15	
<b>Grand Total</b>	<b>27.3</b>	<b>1.76</b>	<b>2.26</b>	<b>0.49</b>	<b>0.82</b>

Two travel management support facilities are proposed. Each would be less than one acre, and include a parking area and trailhead. Areas identified are relatively level ground that would be cleared of vegetation and surfaced with gravel. The gravel surface would minimize soil loss by providing increased surface roughness, slowing runoff, and allowing for infiltration. Concentrating the impacts to the hardened gravel parking areas would reduce the amount of parking along the sides of roads where soils could be mobilized on steep unsurfaced slopes.

**Finding on the Public Land Health Standard for upland soils:** Soil health and productivity would likely continue to meet Land Health Standard 1 if trails are constructed and maintained according to BLM standards. Since the majority of the routes in this alternative are single track, the width and associated surface area is unlikely to reduce the soil health in the area including the riparian areas in the Ridgway Area.

**Alternative 1:**

Alternative 1 would contain 24.6 miles of open routes and 21.5 miles of non-motorized single track requiring 17.5 miles of newly created routes. The new trail construction would likely create more erosion than the Proposed Action by removing more vegetation and dispersal of the soils during construction, however would create less erosion than the No Action due to trails being built more sustainable. Of the existing routes, 7.4 miles would be closed and prevent further erosion. Horseback use on these non-motorized trails would likely generate the greatest disturbance and potential for erosion particularly if used when trail conditions are wet. The seasonal closure from December 1 through April 30 within the Ridgway and Ouray County Ridgway Gravel Pit Area would not restrict hiking and equestrian use during the winter closure; therefore potential for trail use when the tread is wet or saturated would exist.

Of the 17.5 miles of newly created single track trails, 2.98 miles would be constructed on slopes between 30-39% and 0.87 miles would be built on slopes greater than 40%. This is nearly 1 more mile than the Proposed Action and could increase the potential for erosion and sediment production on these steeper sections.

<b>Alternative 1 Miles</b>	<b>Total Miles</b>	<b>Miles existing Slopes 30-39%</b>	<b>Miles proposed Slopes 30-39%</b>	<b>Miles existing Slopes greater than 40%</b>	<b>Miles proposed Slopes greater than 40%</b>
Admin. Only	0.3	0.13		0.00	
Close	7.4	1.01		0.38	
Open to Bikes, Hikers, Equestrians	21.5	0.37	2.98	0.11	0.87
Open to all vehicles	2.8	0.25		0.00	
<b>Grand Total</b>	<b>32</b>	<b>1.76</b>	<b>2.98</b>	<b>0.49</b>	<b>0.87</b>

One travel management support facility is proposed. It would be less than one acre, and include a parking area and trailhead. The area identified is relatively level ground that would be cleared of vegetation and surfaced with gravel. The gravel surface would minimize soil loss by providing increased surface roughness, slowing runoff, and allowing for infiltration. Concentrating the impacts to the hardened gravel parking areas would reduce the amount of parking along the sides of roads where soils could be mobilized on steep unsurfaced slopes.

**Finding on the Public Land Health Standard for upland soils:** Soil health and productivity could begin to decline due to the increased surface area of trail tread exposed to wind and water erosion and the potential for disturbance during the winter months when the routes could be muddy and wet. This could result in Land Health Standard 1 not being met or meeting with problems.

**Alternative 2:**

Alternative 2 would contain 14.5 miles of open routes and 10.1 miles of motorized single track requiring 8 miles of newly created routes. There would be less trail construction than the Proposed Action and would likely result in less erosion during construction. Alternative 2 would also create less erosion than the No Action due to trails being built more sustainably. Of the existing routes, 8.2 miles would be closed and prevent further erosion. The seasonal closure from December 1 through April 30 within the Ridgway and Ouray County Ridgway County Gravel Pit Area would restrict all use during the winter closure, therefore there would be less potential for trail use when the tread is wet or saturated.

Of the 8 miles of newly created single track trails, 1.64 miles would be constructed on slopes between 30-39% and 0.59 miles would be built on slopes greater than 40%. This is less than the Proposed Action and could decrease the potential for erosion and sediment production on these steeper sections.

<b>Alternative 2 Miles</b>	<b>Total Miles</b>	<b>Miles existing Slopes 30-39%</b>	<b>Miles proposed Slopes 30-39%</b>	<b>Miles existing Slopes greater than 40%</b>	<b>Miles proposed Slopes greater than 40%</b>
Admin. Only	0.7	0.27		0.00	
Close	8.2	1.08		0.30	
Open to Motorcycles, Bikes, Hikers, Equestrians	10.9	0.15	1.64	0.04	0.59
Open to all vehicles	2.9	0.25	0.08	0.15	
<b>Grand Total</b>	<b>22.7</b>	<b>1.76</b>	<b>1.72</b>	<b>0.49</b>	<b>0.59</b>

Two travel management support facilities are proposed. Each would be less than one acre, and include a parking area and trailhead. Areas identified are relatively level ground that would be cleared of vegetation and surfaced with gravel. The gravel surface would minimize soil loss by providing increased surface roughness, slowing runoff, and allowing for infiltration. Concentrating the impacts to the hardened gravel parking areas would reduce the amount of parking along the sides of roads where soils could be mobilized on steep unsurfaced slopes.

**Finding on the Public Land Health Standard for upland soils:** Soil health and productivity would likely continue to meet Land Health Standard 1 if trails are constructed and maintained according to BLM standards. Since the majority of the routes in this alternative are single track, the width and associated surface area is unlikely to reduce the soil health in the area including the riparian areas in the Ridgway Area.

**No Action Alternative:**

The No Action contains 13.1 miles of open routes and 4.7 miles of motorized single track, 2.2 miles of ATV routes and 5.5 miles open to all vehicles. This alternative would not have any new construction of routes. Of the existing routes, 1.5 miles would be closed. This would leave many of the wide routes with poor alignment open for all vehicles. These routes would continue to carry water and generate large amounts of sediment in deep rills and ruts. The seasonal closure from December 1 through April 30 within the Ridgway and Ouray County Ridgway Gravel Pit Area would restrict all motorized use during the winter closure, but the potential for foot and equestrian use would continue to impact routes when the tread is wet or saturated.

Of the existing routes 1.76 miles are on slopes between 30-39% and 0.49 miles are located on slopes greater than 40%. This is less than the Proposed Action although these routes often are aligned directly down the fall line of the slope and concentrate water creating rills and ruts.

No Action Miles	Total Miles	Miles existing Slopes 30-39%	Miles existing Slopes greater than 40%
Admin. Only	0.3	0.25	0.00
ATV (<50’)	2.2	0.44	0.25
Close	1.5	0.04	0.01
Open to Motorcycles, Bikes, Hikers, Equestrians	5.1	0.25	0.04
Open to all vehicles	5.5	0.77	0.19
<b>Grand Total</b>	<b>14.6</b>	<b>1.76</b>	<b>0.49</b>

**Finding on the Public Land Health Standard for upland soils:** 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. However, most of the existing routes show signs of significant erosion and sediment delivery to offsite locations. This will likely result in some areas failing to meet Land Health Standard 1 without some route re-alignment, closure or maintenance.

**Cumulative Impacts:**

All alternatives, when combined with the past, present and reasonably foreseeable actions, could elevate the potential for deterioration of soil health. Surface disturbance associated with existing routes and newly constructed routes could magnify other impacts from activities on private and federal lands in the watershed. Other activities causing impacts to soils on BLM, State Park and BOR lands in the watershed include: grazing, rights of ways, recreation and travel infrastructure. Impacts to soils also result from activities associated with private property in the watershed, including: cultivation, irrigation, livestock production, and residential and commercial land development. The types of impacts expected from other actions in the watershed would be similar to those described for the Proposed Action. The cumulative effect of all the impacts in the watershed could contribute to decreased soil health.

**VEGETATION** (includes a finding on Standard 3)

**Affected Environment:**

Upland vegetation in the planning area is primarily composed of pinyon-juniper woodland, which makes up about 78% of the area, with small areas of sagebrush occupying 22%. The pinyon-juniper woodland in the planning area can be subdivided into pinyon-juniper/mountain shrub mix which makes up roughly 31% of the area, pinyon-juniper/sagebrush mix (22%), and pure pinyon-juniper woodland (16%). Riparian vegetation makes up less than 1% of the planning area. A detailed description of these vegetation classes can be found in the Colona Land Health Assessment (Uncompahgre Field Office 2007-2008).

The Colorado Natural Heritage Program has identified the entire riparian area within the Uncompahgre Riverway Area as important for biodiversity conservation. The *Populus*

*angustifolia* / *Salix eriocephala* var. *ligulifolia* - *Shepherdia argentea* plant community that grows there is a relict riparian community that was probably once more abundant along the river, and is considered of moderate biodiversity significance. No other areas or vegetation communities of important biodiversity value have been noted within the planning area.

The state of vegetation health has recently been determined by the Colona Land Health Assessment. The ratings for Standard 3 are shown in the table below by total acreage.

Std 3 Rating for Healthy Plant Communities	Total Acreage in Plan Area (percentage in parentheses)
Meeting	141 (13%)
Meeting with Problems	631 (59%)
Not Meeting	0 (0%)
Unknown or Not Upland	295 (28%)

Known vegetation problems include low browse shrub vigor, heavy hedging on browse shrubs, and low cool season perennial grass and forb cover in portions of the planning area. Wildlife use, an old fire, and the seral stage of the vegetation are the primary factors contributing to these vegetation problems.

**Environmental Consequences:**

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). On travel areas, vegetation degradation ranges from complete loss of vegetation on the route surface to impacts on the adjacent plant community. These impacts include erosion and sedimentation associated with routes, introduction of weeds (which is discussed in the Invasive Species section), production and deposition of dust, increased browsing levels from enhanced animal access in dense vegetation types, and loss of vegetation or other impacts from increased human presence, such as woodcutting, human-caused fires, littering, and other activities. 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, if all other factors are equal. For the purposes of this analysis, 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. This occurs because of lower use levels which result from excluding some uses (there are some exceptions to this).
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, semidesert 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, so in areas where the compacted soil area is wide or particularly dense, re-vegetation will be enhanced by seeding. Seeding will be limited to a few native species to reduce impacts from introducing non-local genetic material and weeds.

The density of routes 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 evaluation of the different alternatives.

**Proposed Action:**

The Proposed Action would result in a route density of 12.3 miles per square mile, potentially affecting about 12% of the vegetation in the planning area (more than under the No Action Alternative). Just over 11% of that route density would be open to full size vehicles with no restrictions on use type, which would probably result in the full level of vegetation impact as described above on 1.3% of the vegetation in the planning area which is less than under the No Action Alternative. The degree of vegetation impact would be reduced on the remaining 12.7% of impacted vegetation in the planning area. The most notable restriction in this alternative is that 75% of the route miles would be limited to non-motorized single track, foot or horse use. This in turn would reduce direct and indirect impacts to vegetation associated with route width, and with use type. About 4.2 miles of routes pass through low-stature sagebrush or grass vegetation types in this alternative, which would lead to higher levels of vegetation impacts associated with these routes, as discussed above. This is more than the No Action Alternative, however most of these routes would have use restrictions, reducing vegetation impact. Another 0.9 miles of route passes through

the riparian plant community identified as important for biodiversity conservation, but the highest level of use would be 0.2 miles of route classified as non-motorized single track, reducing impacts to the riparian vegetation as compared with the No Action Alternative. Construction of two travel management support facilities may result in loss of up to two acres (up to one acre each) of vegetation for larger facilities, which is more than the No Action Alternative. It is assumed the parking areas would reduce the amount of parking adjacent to roads, which would reduce impacts from vegetation being crushed

**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 12.7 miles of route in areas that are currently meeting Standard 3 with problems. Vegetation impacts would be reduced on 10.7 miles of these routes due to use or size restrictions. Current land health problems are related to wildlife use, past fire and vegetation seral stage. The types of impacts associated with limited use routes are unlikely to affect the current the status of these problems, or this land health rating.

**Alternative 1:**

Alternative 1 would result in a higher route density (15.2 miles per square mile) than the No Action Alternative, and slightly higher than the Proposed Action, with a slightly higher percentage of the vegetation (about 15 %) potentially affected. This alternative has a similar proportion of routes (11%) than the Proposed Action classified as open, resulting in overall slightly more vegetation in the planning area (1.7%) receiving unmitigated, route-related impacts. This amount is less than the No Action Alternative. Use restrictions and limitations would reduce extent and degree of impacts on the remaining impacted 13.3% of vegetation in the planning area. The largest factor in this would be the 83% of route miles limited to mechanized, single track use. This alternative has more (6.1) miles of route passing through sagebrush and low stature vegetation than the Proposed Action or the No Action Alternative, with the associated greater impacts. The construction of one trailhead facility would remove up to one more acre of vegetation as compared with the No Action Alternative, although it is assumed that trailhead construction would reduce vegetation damage associated with travelers pulling off the road to park. Another 0.9 miles of route passes through the riparian plant community identified as important for biodiversity conservation, but the highest level of use would be 0.6 miles of route classified as nonmotorized single track, reducing impacts to the riparian vegetation as compared with the No Action Alternative.

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

Alternative 1 would allow a total of 15 miles of route in areas that are currently meeting Standard 3 with problems. Vegetation impacts would be reduced on 12.7 miles of these routes due to use or size restrictions. Current land health problems are related to wildlife use, past fire and vegetation seral stage. The types of impacts associated with limited use routes are unlikely to affect the current status of these problems, or this land health rating.

**Alternative 2:**

Alternative 2 would result in a lower route density (9.1 miles per square mile) than the Proposed Action, with a lower percentage of the vegetation (about 9%) in the unit potentially

affected, however, route density would be higher than the No Action Alternative. This alternative has a higher proportion of routes (19%) than the Proposed Action classified as open, resulting in overall slightly more vegetation in the planning area (1.7%) receiving unmitigated, route-related impacts, as compared with the Proposed Action, but less than the No Action Alternative. Use restrictions and limitations would reduce extent and degree of impacts on the remaining 7.3% of impacted vegetation in the planning area. The largest factor in this would be the 62% of route miles limited to motorized, single track use. This alternative has fewer routes (3.3 miles) passing through sagebrush and low stature vegetation than the Proposed Action, with fewer impacts from widening and sediment transport as noted above. As with the Proposed Action, the construction of two trailhead facilities would remove up to two more acres of vegetation compared with the No Action Alternative, although it is assumed that trailhead construction would reduce vegetation damage associated with travelers pulling off the road to park. Another 0.9 miles of route passes through the riparian plant community identified as important for biodiversity conservation, but the highest level of use would be 0.2 miles of route classified as non-motorized single track, reducing impacts to the riparian vegetation as compared with the No Action Alternative.

**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 10.9 miles of route in areas that are currently meeting Standard 3 with problems. Vegetation impacts would be reduced on 8.5 miles of these routes due to use or size restrictions. Current land health problems are related to wildlife use, past fire and vegetation seral stage. The types of impacts associated with limited use routes are unlikely to affect the current the status of these problems, or this land health rating.

**No Action Alternative:**

The No Action Alternative would result in a route density of 8.3 miles per square mile, potentially affecting about 8% of the vegetation in the planning area. This alternative has just under 37% of routes classified as open, resulting in 3% of the vegetation in the planning area potentially receiving unmitigated, route-related impacts. Vegetation impacts are reduced on the remaining 5% of impacted vegetation by limited route widths which restrict use to motorcycles on 32% of routes, and ATVs on 15% of routes. This alternative has 2.5 miles passing through sagebrush and low stature vegetation, with these areas being subject to higher levels of vegetation impacts associated with trail widening and sediment transport. About 0.9 miles of route passes through the riparian plant community identified as important for biodiversity conservation. Of these routes, 0.4 miles are classified as motorized single track, with the rest classified at lower use levels which would be less impacting to vegetation.

**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 allows a total of 8 miles of route in areas that are currently meeting Standard 3 with problems. Current land health problems are related to wildlife use, past fire and vegetation seral stage. The types of impacts associated with these routes are unlikely to affect the current status of these problems, or this land health rating.

**Cumulative Impacts:**

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

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

**Affected Environment:**

One of the BLM's priorities is to promote ecosystem health and one of the greatest obstacles to achieving this is the rapid expansion of weeds across public lands. Invasive plants can dominate and often cause permanent impacts to natural plant communities.

Noxious weeds located within the planning area include Russian knapweed, musk thistle, Canada thistle, houndstongue, and cheatgrass. In addition, lands adjacent to the planning area support infestations of spotted knapweed, diffuse knapweed, meadow knapweed, and oxeye daisy. All of these species are on the BLM Species List of Concern and State of Colorado's noxious weed list.

Russian knapweed and Canada thistle are long lived perennial species which can spread either by seed or root stock and can establish in many different vegetation communities. In addition to this characteristic both plants have the ability to produce chemicals that reduce vigor and eliminate germination of other plants surrounding the infestation, which can lead to large monocultures of these species if left untreated.

Cheatgrass is an annual species. Houndstongue and musk thistle are biennial or winter annuals. These plants produce large amounts of seed which are carried by the wind or left near the host plant. Once established, they are difficult to eradicate from an area and containment and control in some cases is the best strategy.

Noxious weeds on the fringes of the planning area are all annual or biennial except for oxeye daisy, which is a creeping perennial (reproduces by seed and rhizomes).

**Environmental Consequences/Mitigation:**

**Proposed Action:**

The Proposed Action has a route density of approximately 12.3 miles per square mile and two support facilities with parking, each less than 1 acre. Support facilities and designated

routes are areas where noxious weeds could be introduced and establish. However, by designating routes and support facilities, the area for potential new weed introduction is limited and monitoring of these facilities is focused. Design features would be brought forward to survey, monitor and treat noxious weeds. With these measures in place noxious weed establishment should be kept to a minimum.

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

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

Because routes and facilities are identified and because the Proposed Action includes education, development of a noxious weed strategy, monitoring, and treating problem areas, the planning area should continue to meet standard one for invasive and non-native species.

**Alternative 1:**

This alternative has a route density of 15.2 miles per square mile, and one support facility. Since the density of routes is higher in this alternative, the area for noxious weed introduction and establishment is increased. However, design features would be brought forward to survey, monitor and treat noxious weeds associated with the support facility and routes. With these measures in place noxious weed establishment should be kept to a minimum.

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

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

Same as the Proposed Action.

**Alternative 2:**

Alternative 2 has a route density of 9.1 miles per square mile. This alternative has the fewest miles of routes, which would decrease the area where noxious weeds could potentially be introduced and establish. This alternative also has two support facilities with parking, each less than one acre. This alternative also has design features in place to minimize impacts.

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

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

Same as the Proposed Action.

**No Action Alternative:**

There would not be specific design features to mitigate weeds, although weeds would be treated in a similar manner as in other areas in the field office. Users would use existing routes, but education material would not be at trailheads.

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

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

It is expected that Standard One would continue to be met, but at a lower potential than the other alternatives.

### **Cumulative Impacts:**

Reasonably foreseeable actions that may affect noxious weed introduction and establishment over the next 10 years on private and public lands include continued residential growth, fire fuels reduction/habitat projects, county road maintenance and upgrades, utility corridor maintenance and upgrades, and new road rights-of-way. Other future activities on public lands in the travel planning area that could also potentially impact noxious weed introduction and establishment and require mitigation include Bureau of Reclamation and Ridgway State Park projects, local land use planning, soil research, vegetation treatments, county road upgrades, special recreation permits and activities, and utility rights of way and corridors. The cumulative impacts to noxious weed introduction and establishment from all action alternatives would be dispersed and long-term and require on-going monitoring and mitigation by BLM and partners. The management alternatives will have negligible impacts, cumulatively, when design features are followed.

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

#### **Affected Environment:**

The Uncompahgre Field Office 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 2012). 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.

Appendix 4 lists potentially occurring federally listed species within the UFO and provides assessments for their occurrence within the planning area (BLM 2012). Appendix 5 lists potentially occurring BLM listed sensitive species within the UFO and provides assessments for their occurrence within the planning area (BLM 2012). No threatened, endangered, or federally protected species or habitats occur in the planning area. Only those species where the project is within the known range of the species and with potential habitat or known occurrences are discussed below.

#### *Western yellow-billed Cuckoo*

Suitable habitat (mature cottonwood stands) for this species are present within the Uncompahgre Riverway Area with the closest known occupations occurring primarily on private lands in the North Fork Valley area near Hotchkiss and Paonia. Since 2003, this species has been confirmed every year in the North Fork of the Gunnison Valley. In 2008, Rocky Mountain Bird Observatory conducted surveys for yellow-billed cuckoo within the UFO. Survey areas included the San Miguel River, North Fork Valley, and several drainages on the east slope of the Uncompahgre Plateau. Based on broadcast call surveys, yellow-billed cuckoos were detected in the North Fork Valley on private land near Hotchkiss in Delta County. Breeding was also confirmed that year in the same area. There have also been reports of this species on private lands along the Uncompahgre River in the Montrose, Colorado area.

### *BLM Sensitive Fish & Amphibians*

The Uncompahgre Riverway Area may contain populations of Colorado River Cutthroat trout, flannelmouth sucker, and bluehead sucker. The Uncompahgre River is also a popular sport fishery which the Colorado Division of Wildlife has stocked with rainbow trout and brown trout for many years. In addition the Uncompahgre Riverway Area contains amphibians (including substantial leopard frog populations), possibly canyon tree frogs, reptiles, invertebrates, and other species that depend on aquatic habitats for “welfare factors” (i.e., life stages, cover, food, water, etc.). The Ridgway dam and various diversions and canal infrastructure poses a barrier to fish migration and has altered stream morphology and riparian vegetation communities, thereby altering habitat quality for fish and other aquatic species. Such factors greatly limit the extent and population size of many species including the BLM sensitive flannelmouth sucker, and bluehead sucker.

### *BLM Sensitive Raptors (Bald Eagle, Golden Eagle)*

The Uncompahgre Riverway Area is identified as a Bald eagle winter concentration area as well as a communal roost site by CPW. Bald Eagle roost sites are also identified immediately west of the larger 1000 acre planning unit that lies east of highway 550. Bald Eagles are routinely observed within the Uncompahgre River riparian corridor during the winter months and may forage in the upland portions of the planning area as well.

Golden eagles were observed at two different areas in 2011. (Beason 2011). No nesting locations were detected and given the level of effort placed into surveying the study area a nest would have been located if present. Nesting is unlikely given the limited cliff and rock outcroppings of sufficient size in the planning area to support nesting Golden Eagles. Likely the two observations were of individuals moving through the planning area foraging.

### *Brewer’s Sparrow*

Breeds primarily in sagebrush shrublands, 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 woodlands. Brewer’s Sparrows were not detected in the planning area in 2011, but were present in 2010. (Beason 2011)

### *BLM Sensitive Bats (Allen’s big-eared bat, big free-tailed bat, spotted bat, Townsend’s big-eared bat, fringed myotis)*

All of the sensitive bat species that may occur in the planning area are cliff/cave roosting species. They may have roosting habitat in adjacent cliffs, but would use the river corridor for foraging and as a travel corridor to other habitats and forage broadly feeding on insects and utilizing the existing water resources of the area.

### *Midget faded rattlesnake & Milk snake*

Midget faded rattlesnakes and Milk snakes may be present, but no population health or trend data is available. The distribution of midget faded rattlesnakes and milk snakes are uncertain and both species may or may not be present. Based on broad habitat descriptions for both species there is at least potential habitat for both species.

## **Environmental Consequences/Mitigation:**

### **Impacts Common to all Alternatives:**

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 special status species populations and habitat from motorized and non-motorized 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 or habitat mortality rates, noise, and other disturbance factors.

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 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 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 barriers to movement of some species. Reluctance to cross even narrow trails similar in width to routes created by OHV travel may alter or preclude the movements of various species. The cumulative effects of route networks proliferating across the landscapes may have ecological consequences for species reluctant to cross OHV routes.

Recreational routes also generate conditions unlikely to occur in environments unaffected by such routes; in turn, these conditions can facilitate range extensions and invasions of non-native and/or opportunistic species. Motorized and mechanized route use can contribute directly to mortality (and possible population declines) of wildlife species through direct collisions with vehicles, nest destruction, and collapsing of burrows. Noise generated by motorized and mechanized trail use 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 recreational trail activities also have the potential for eliciting stress responses from a broad spectrum of wildlife taxa. Indeed, 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 collisions, 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 road or 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. Another indirect effect of route use on wildlife mortality is the proliferation of routes that provide greater access to remote places by hunters, poachers, and people seeking several forms of non-consumptive recreation, including flushing animals off nests; unnecessary energy expenditures; and displacement of animals from food, shelter, and other vital resources.

In summary, recreational routes 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.

For impacts to Brewer's sparrow see the **Migratory Bird** section. For impacts to BLM sensitive fish and amphibians see the **Aquatic Wildlife** section.

#### **Impacts Common to Alternatives 1, 2, and the Proposed Action:**

Changing the existing OHV designation to "Limited to Designated Routes Seasonally" for the Ridgway and Ouray County Ridgway Gravel Pit Area and "Limited to Designated Routes Yearlong" in the Uncompahgre Riverway Area, thereby eliminating the creation of additional user created routes and by restricting motorized and non-motorized travel to specific designated routes, and adopting a plan for travel management, would greatly reduce existing and potential impacts to these sensitive resources.

#### **Proposed Action:**

The Proposed Action would increase the collective miles of routes within the planning area from 13.1 miles to 19.9 miles or a 51% increase relative to the current situation (No Action). All of the increases in routes would be associated with single track non-motorized trail development. Under this alternative 6.8 miles of routes currently available for motorcycle and ATV use would either be closed and reclaimed or designated for non-motorized use only. Existing levels of disturbance and habitat fragmentation would be expected to increase in varying degrees, because of the increase in miles of new routes proposed through sensitive species habitat that would be available for motorized and/or non-motorized travel.

Two travel management support facilities are proposed within the Ridgway Area. Each would be less than one acre, and include a parking area and trailhead. The facilities proposed under this alternative would be purposefully sited outside of sagebrush steppe habitats which would minimize impacts to Brewer's sparrows within the planning area. Impacts from

developing these facilities on the remaining species analyzed would be commensurate with those impacts analyzed for the trail network.

*Federally Listed/Candidate Species:*

Route management in suitable habitat for yellow-billed cuckoo is essentially the same across all alternatives therefore impacts will only be assessed under this alternative. For the Western yellow-billed cuckoo suitable habitat can only be found on the Uncompahgre Riverway Area, no additional impacts beyond those that have occurred or are ongoing would be anticipated from the alternatives. The trail network on the Uncompahgre Riverway Area would be designated as available for foot, horseback, and non-motorized travel only within the existing footprint that currently exists. Thus no additional surface disturbance to suitable habitat would occur. Removing the potential for motorized use of the trail network within suitable habitat may increase the potential for cuckoo to establish a nesting territory within the area. Disturbance from human presence would continue to occur which may or may not be a cause for no recent documented occupation by cuckoo.

*BLM Sensitive species:*

Route management in crucial Bald Eagle habitat is essentially the same across all alternatives therefore impacts will only be assessed under this alternative. Closing all the routes outside of the Uncompahgre Riverway Area to all modes of travel from December 1- April 30 will reduce impacts to wintering Bald eagle foraging or potentially roosting in the portions of the planning unit east of highway 550. Impacts to wintering Bald eagle on the Uncompahgre Riverway Area would be expected to continue unchanged from current conditions as no additional routes are proposed. Winter recreational use is expected to increase from current levels which could have impacts to wintering eagles. Based on the number of wintering eagles observed in recent years and the fact that no additional routes are proposed within crucial habitats such impacts may be negligible or undetectable. Continued monitoring of winter Bald eagle use patterns by CPW and BLM staff will be necessary to fully ascertain the true level of impact from increasing use.

Foraging opportunities may be diminished for Golden eagles due to the addition of new routes and increased use by recreationists.

Developing additional routes may impact sensitive bat species roosting sites, however those impacts may be diminished by limiting route use to non-motorized modes of travel reducing noise impacts that may cause roost sites to be abandoned.

Because little is known regarding midget faded rattlesnake and milk snake occupation, population trends, habitat use, home ranges, and other key life processes BLM assumes that increasing the routes as proposed under this alternative will impact these species. Impacts are expected to be similar in nature to those described in the Impacts Common to all Alternatives. Impacts from this alternative are expected to be less than those of alternative 1 and greater than alternative 2 and the No Action alternative.

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

The lands within the planning unit 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 unit. While impacts 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:**

Alternative 1 would increase the collective miles of routes within the planning area from 13.1 miles to 24.6 miles or an 87% increase relative to the current situation (No Action). All of the increases in routes would be associated with single track non-motorized trail development. Under this alternative 6.8 miles of routes currently available for motorcycle and ATV use would either be closed and reclaimed or designated for non-motorized use only. Existing levels of disturbance and habitat fragmentation would be expected to increase in varying degrees, because of the increase in miles of new routes proposed through sensitive species habitat that would be designated and available for motorized and/or non-motorized travel.

One travel management support facility is proposed within the Ridgway Area. It would be less than one acre, and include a parking area and trailhead. The facility proposed under this alternative would be purposefully sited outside of sagebrush steppe habitat which would minimize impacts to Brewer's sparrows within the planning area. Impacts from developing this facility on the remaining species analyzed would be commensurate with those impacts analyzed for the trail network under this alternative.

See the *Federally Listed/Candidate Species* and the *BLM Sensitive species* descriptions within the Proposed Action for information that applies to all alternatives.

*BLM Sensitive species:*

Foraging opportunities may be diminished over a greater percentage of the planning area than the Proposed Action for Golden eagles due to the addition of new routes and increased use by recreationists.

Developing the additional routes may impact sensitive bat species roosting sites, however those impacts may be diminished by limiting route use to non-motorized modes of travel reducing noise impacts that may cause roost sites to be abandoned.

Because little is known regarding midget faded rattlesnake and milk snake occupation, population trends, habitat use, home ranges, and other key life processes BLM assumes that increasing the routes as proposed under this alternative will impact these species. Impacts are expected to be similar in nature to those described in the Impacts Common to all Alternatives. Impacts from this alternative are expected to be greater than those of the No Action alternative, alternative 2 and the Proposed Action due to the additional miles of routes proposed.

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

This alternative 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 unit. While the anticipated impacts would be greater than the Proposed Action 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 2:**

Alternative 2 would increase the collective miles of routes within the planning area from 13.1 miles to 14.5 miles or a 10% increase relative to the current situation (No Action). All of the increases in routes would be associated with motorized single track trail development. Existing levels of disturbance and habitat fragmentation would be expected to increase the least under this alternative, as there would only be a net increase 1.2 miles of new routes proposed through sensitive species habitat that would be designated and available for motorized and/or non-motorized travel.

Two travel management support facilities are proposed within the Ridgway Area. Each would be less than one acre, and include a parking area and trailhead. Impacts from the support facilities proposed under this alternative would be the same as those impacts discussed under the proposed action.

See the *Federally Listed/Candidate Species* and the *BLM Sensitive species* descriptions within the Proposed Action for information that applies to all alternatives.

*BLM Sensitive species:*

Foraging opportunities would be diminished the least under this alternative for Golden eagles due to the least amount of new routes developed which would leave larger blocks of prey habitat unaffected by routes and recreational use.

This alternative would develop the least amount of new routes that impact sensitive bat species roosting sites, however those potential roost sites closest to motorized trails may be more heavily impacted by motorized modes of travel that may cause roost sites to be abandoned.

This alternative is expected to be the least impacting to midget faded rattlesnake and milk snake potentially inhabiting the planning area because the least amount of new single track trail would be developed leaving greater portions of potential habitat intact. Because motorcycles utilize trails at greater rates of speed, impacts from collisions to snake species may be greater but due to less miles of routes developed snake encounters with trails should be lower than the other proposed alternatives.

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

This alternative 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 unit. Since this alternative proposes the least amount new trail development it offers the greatest

assurance that anticipated impacts would not 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.

**No Action Alternative:**

Existing routes and management would continue along with existing levels of associated resource disturbance and habitat fragmentation. New user-created routes would continue to potentially further impact habitat and/or the species discussed above 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.

In addition, increased travel routes may improve predator efficiency or increased opportunistic predation. This could lead to potential increased indirect mortality or increased competition for the same prey resources.

*Federally Listed Species:*

Travel within the Uncompahgre Riverway Area, would continue to be limited to designated routes. Although there is potential for unauthorized routes to be created in habitats that are suitable for yellow-billed cuckoo occupation, it is not likely within this area.

*BLM Sensitive species:*

Existing routes would continue to affect sensitive species habitats. There would continue to be a lack of specific route restrictions or designations and route rehabilitation efforts, leaving the area susceptible to route proliferation in habitats that are suitable for all the sensitive species discussed above. Bald Eagles could be especially susceptible to impacts under this alternative as the identified crucial wintering habitats would be available to motorized trail use. Additionally there would be no winter use restriction on such activity.

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

The lands within the planning unit currently meet land health standards for T&E and sensitive species. The lack of specific route restrictions or designations and the potential for continued route proliferation may cause the planning unit to not meet the standard for sensitive species at some point in the future as use and route density increases as anticipated. Impacts would be especially acute for Bald Eagles and Brewer's sparrow as their habitat types are limited in extent within the planning area. Loss or population decline of such species could facilitate a not meeting rating. While impacts are anticipated they are not expected to cause population decline such that any of the species discussed could result in declines that would warrant federal listing for protection under the Endangered Species Act.

**Cumulative Impacts:**

In addition to growth in recreational travel, other reasonably foreseeable actions that could affect sensitive species in the foreseeable future on private and public lands include residential growth, new road construction on private land, fuels reduction projects, utility corridor maintenance and upgrades, and new buried utility rights-of-way. Activities on public lands in the travel planning

area that could also potentially impact sensitive species include Forest Service, State Parks and BOR projects, local land use planning, vegetation treatments, continued population growth, county road and state highway upgrades, gravel extraction, and utility rights of way and corridors. Some of these activities may benefit migratory birds and their habitat. Cumulative impacts from these activities to sensitive species from all action alternatives will be long-term and ongoing.

## **MIGRATORY BIRDS**

### **Affected Environment:**

Plant communities within the analysis 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 complete this analysis (USFWS 2008). Appendix 6 identifies the species from this list which are known or have potential to occur in the UFO and which are protected under the Migratory Bird Treaty Act (MBTA), and assesses their potential for occurring in the planning area (BLM 2012).

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 appropriate to these vegetation types in their current successional state (e.g., dense piñon-juniper regeneration typically supports bird communities depauperate in abundance and richness). Birds associated with the project site are widely distributed and common throughout the resource area and adjacent public and private lands in extensive suitable habitats. The planning area is not inhabited by any species that is narrowly endemic or highly specialized.

Table 3 below contains a complete list of bird species observed within the planning area during 2011 surveys for raptors and other sensitive bird species on the proposed Ridgway trail system. Four raptor species were detected in the study area during surveys; however, no active nests were located in 2011. Other BLM sensitive bird species were detected in the study area and one species (Cassin's Finch) could be considered abundant. (Beason 2011)

**Table 3**  
**Complete list of birds detected during Ridgway Trails Project Survey, April - May 2011**

Common Name	Scientific Name
Canada Goose	<i>Branta canadensis</i>
Wild Turkey	<i>Meleagris gallopavo</i>
Turkey Vulture	<i>Cathartes aura</i>
Osprey	<i>Pandion haliaetus</i>
Sharp-shinned Hawk	<i>Accipiter striatus</i>
Red-tailed Hawk	<i>Buteo jamaicensis</i>
Golden Eagle	<i>Aquila chrysaetos</i>
Mourning Dove	<i>Zenaida macroura</i>
Great Horned Owl	<i>Bubo virginianus</i>
Black-chinned Hummingbird	<i>Archilochus alexandri</i>
Broad-tailed Hummingbird	<i>Selasphorus platycercus</i>
Downy Woodpecker	<i>Picoides pubescens</i>

Common Name	Scientific Name
Northern Flicker	<i>Colaptes auratus</i>
Gray Flycatcher	<i>Empidonax wrightii</i>
Dusky Flycatcher	<i>Empidonax oberholseri</i>
Ash-throated Flycatcher	<i>Myiarchus cinerascens</i>
Western Kingbird	<i>Tyrannus verticalis</i>
Plumbeous Vireo	<i>Vireo plumbeus</i>
Steller's Jay	<i>Cyanocitta stelleri</i>
Western Scrub-Jay	<i>Aphelocoma californica</i>
Pinyon Jay	<i>Gymnorhinus cyanocephalus</i>
Black-billed Magpie	<i>Pica hudsonia</i>
American Crow	<i>Corvus brachyrhynchos</i>
Common Raven	<i>Corvus corax</i>
Violet-green Swallow	<i>Tachycineta thalassina</i>
Mountain Chickadee	<i>Poecile gambeli</i>
Juniper Titmouse	<i>Baeolophus ridgwayi</i>
Bushtit	<i>Psaltriparus minimus</i>
Red-breasted Nuthatch	<i>Sitta canadensis</i>
White-breasted Nuthatch	<i>Sitta carolinensis</i>
Rock Wren	<i>Salpinctes obsoletus</i>
House Wren	<i>Troglodytes aedon</i>
Ruby-crowned Kinglet	<i>Regulus calendula</i>
Blue-gray Gnatcatcher	<i>Polioptila caerulea</i>
Mountain Bluebird	<i>Sialia currucoides</i>
Townsend's Solitaire	<i>Myadestes townsendi</i>
Hermit Thrush	<i>Catharus guttatus</i>
American Robin	<i>Turdus migratorius</i>
Virginia's Warbler	<i>Vermivora virginiae</i>
Yellow-rumped Warbler	<i>Dendroica coronata</i>
Black-throated Gray Warbler	<i>Dendroica nigrescens</i>
Western Tanager	<i>Piranga ludoviciana</i>
Green-tailed Towhee	<i>Pipilo chlorurus</i>
Spotted Towhee	<i>Pipilo maculatus</i>
Chipping Sparrow	<i>Spizella passerina</i>
Vesper Sparrow	<i>Poocetes gramineus</i>
Song Sparrow	<i>Melospiza melodia</i>
Dark-eyed Junco	<i>Junco hyemalis</i>
Black-headed Grosbeak	<i>Pheucticus melanocephalus</i>
Western Meadowlark	<i>Sturnella neglecta</i>
Brewer's Blackbird	<i>Euphagus cyanocephalus</i>
Brown-headed Cowbird	<i>Molothrus ater</i>
Cassin's Finch	<i>Carpodacus cassinii</i>
House Finch	<i>Carpodacus mexicanus</i>
Pine Siskin	<i>Spinus pinus</i>

In 2009 BLM observed a successful nest attempt of a Coopers Hawk approximately 20 meters south of route #2174 (see Appendix 2 for maps). Subsequent surveys in 2010 and 2011 found that the nest site remains intact but no nest attempts have occurred (Beason 2011). Coopers hawks are known to utilize several different nest locations over numerous years and may return to nests previously thought to be abandoned in subsequent years. This is likely due to sanitary issues associated with the nest (parasites etc.) so there is potential for this location to be utilized in the future by Coopers hawk or other accipiter species.

Three species of nocturnal raptors (owls) were recorded in the study area. Due to their nocturnal habits, these species should not be impacted by recreational activities occurring during daylight hours.

### **Environmental Consequences/Mitigation:**

#### **Impacts Common to all Alternatives**

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 migratory bird populations and habitat from motorized and non-motorized 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 or habitat mortality rates, noise, and other disturbance factors.

OHV activities may have effects to migratory bird populations similar to those described in the Threatened Endangered and Sensitive Species (TES), and Terrestrial 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 the complexity and difficulty in measuring potential impacts to migratory bird populations, BLM assumes that any reduction in existing routes, or a reduction in the level or class of vehicular use (i.e., from motorized to non-motorized use) would, in general, improve migratory bird habitats.

As described above, migratory birds utilize many habitats for their life functions. Changes and differences among the four alternatives result in changes in the miles of routes that would be ultimately available for various uses in various wildlife habitats, and thus in the degree to which these habitats would be affected. 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.

Piñon Jay is a species that could be impacted by recreational trail use in the planning area because they initiate courtship and nest-building activities early in the spring before recreational trail use would be expected to begin. If Piñon Jay colonial nest sites are developed near a trail their nesting success could be negatively impacted once recreationists begin to use the trail system. Maintaining the seasonal closure of the area will greatly reduce

impacts on Cassin's finch, the most common species of conservation concern observed within the planning area. This species is likely utilizing the area during the winter and spring and then migrating up to higher elevation coniferous habitats to breed.

For raptors detected within the planning area, such as Coopers Hawk, design features have been incorporated into the action alternatives to reduce impacts on those species. By surveying the trail network for active raptor nest sites, including the previously identified nest site, early in the nesting season (April-May 15<sup>th</sup>) and temporarily closing those routes that occur within 100 meters of an active nest site until fledging has occurred, typically July 15<sup>th</sup>, the impacts from the action alternatives on raptor species are expected to be minimized.

**Proposed Action:**

The Proposed Action would increase the collective miles of routes within the planning area from 13.1 miles to 19.9 miles or a 51% increase relative to the current situation (No Action). All of the increases in routes would be associated with single track non-motorized trail development. Such activities are thought to be less impacting to avian species than motorized recreation due to lower speeds and less noise impacts. Under this alternative 6.8 miles of routes currently available for motorcycle and ATV use would either be closed and reclaimed or designated for non-motorized use only which is expected to reduce impacts associated with noise disturbance. Much of the routes proposed under this alternative would bisect relatively intact pinyon-juniper woodland habitats or further increase route density in already fragmented woodlands due to the presence of existing trails, roads and user created routes. Impacts to migratory bird species would be expected to increase under this alternative as there would be less intact habitat (approximately 356 acres) where trails and human activity are less likely to impact avian life processes. The impacts to avian species are expected to be greatest in those woodlands that are relatively intact or without routes currently utilized by recreationist as described in the Impacts Common to All Alternatives.

Two travel management support facilities are proposed within the Ridgway Area. Each would be less than one acre, and include a parking area and trailhead. The facilities proposed under this alternative would be purposefully sited outside of sagebrush steppe habitats which would minimize impacts to sagebrush obligate species within the planning area. Impacts from developing these facilities on woodland obligate species would be commensurate with those impacts analyzed for the trail network.

Routes and facilities proposed under this alternative would be purposefully sited outside of sagebrush steppe habitats or on the edges of such habitats to minimize impacts to the BLM sensitive Sage sparrow and other sagebrush obligate species known to inhabit the planning area.

**Alternative 1:**

Alternative 1 would increase the collective miles of routes within the planning area from 13.1 miles to 24.6 miles or an 87% increase relative to the current situation (No Action). All of the increases in routes would be associated with single track non-motorized trail development. The routes proposed under this alternative would affect a greater amount of acreage of relatively intact pinyon-juniper woodland and sage steppe habitats or further

increase route density in already fragmented woodlands due to the presence of existing trails, roads and user created routes. Impacts to migratory bird species would be expected to increase under this alternative as there would be less intact habitat (approximately 270 acres) where trails and human activity are less likely to impact avian life processes. The impacts to avian species are expected to be greatest in those woodlands that are relatively intact or without routes currently utilized by recreationist as described in the Impacts Common to All Alternatives.

One travel management support facility is proposed within the Ridgway Area. It would be less than one acre, and include a parking area and trailhead. The facility proposed under this alternative would be purposefully sited outside of sagebrush steppe habitat which would minimize impacts to sagebrush obligate species within the planning area. Impacts from developing this facility on the remaining species analyzed would be commensurate with those impacts analyzed for the trail network under this alternative.

Routes and facilities proposed under this alternative would not be purposefully sited outside of sagebrush steppe habitats or on the edges of such habitats. This is expected to increase impacts to the BLM sensitive Sage sparrow and other sagebrush obligate species known to inhabit the planning area.

#### **Alternative 2:**

Alternative 2 would increase the collective miles of routes within the planning area from 13.1 miles to 14.5 miles or an 10% increase relative to the current situation (No Action). All of the increases in routes would be associated with single track motorized trail development. The routes proposed under this alternative would affect the least amount of acreage of relatively intact pinyon-juniper woodland and sage steppe habitats. Much of the routes proposed under this alternative would occur in areas where existing routes currently fragment habitats due to the presence of existing trails, roads and user created routes. Impacts to migratory bird species would be expected to slightly decrease under this alternative as it affords the greatest amount of intact habitat (approximately 477 acres) where trails and human activity are less likely to impact avian life processes. While this alternative would provide the greatest amount of relatively undisturbed habitat for avian species impacts from the presence of motorcycles on the route system will to some degree limit the gains in habitat quality under this alternative due primarily to noise impacts as well as greater traveling speeds.

Two travel management support facilities are proposed within the Ridgway Area. Each would be less than one acre, and include a parking area and trailhead. Impacts from the support facilities proposed under this alternative would be the same as those impacts discussed under the proposed action.

Routes and facilities proposed under this alternative would be purposefully sited outside of sagebrush steppe habitats or on the edges of such habitats to minimize impacts to the BLM sensitive Sage sparrow and other sagebrush obligate species known to inhabit the planning area.

**No Action Alternative:**

This alternative currently has 13.1 collective miles of routes within the planning area with approximately 524 acres of habitat not currently influenced by human activities. Implementing this alternative could result in the continuation of additional user created routes being developed throughout the planning area, due to the anticipated population growth and increase in the demand for access to public lands in the planning area by motorized and non-motorized uses. Combined with the existing routes, the incremental increase in the number of miles of routes in this alternative would result in increasing effects over the life of this analysis period to migratory bird habitat by increasing or worsening current habitat fragmentation, patch size differences, changes in edge to interior ratios and barriers to movement, the facilitation of invasions of non-native and/or opportunistic species, species or habitat mortality rates, noise, and other disturbance factors.

**Cumulative Impacts:**

In addition to growth in recreational travel, other reasonably foreseeable actions that could affect migratory bird habitat in the foreseeable future on private and public lands include residential growth, new road construction on private land, fuels reduction projects, utility corridor maintenance and upgrades, and new buried utility rights-of-way. Activities on public lands in the travel planning area that could also potentially impact migratory bird habitat include Forest Service, State Park and BOR projects, local land use planning, vegetation treatments, continued population growth, county road and state highway upgrades, gravel extraction, and utility rights of way and corridors. Some of these activities may benefit migratory birds and their habitat. Cumulative impacts from these activities to migratory bird habitat from all action alternatives will be long-term.

**WILDLIFE, TERRESTRIAL** (includes a finding on Standard 3)

**Affected Environment:**

The Ridgway Travel Management planning area supports a wide variety of terrestrial wildlife species. Table 4 below 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 variety of small mammal, bird, and reptile species are scattered throughout the area where their specific habitats are present. Habitat variety is primarily mature pinyon-juniper woodlands, sagebrush steppe, and riparian woodlands. Additional discreet diversity occurs with topography, slope and aspect. The description of the existing vegetation in the vegetation section provides a good description of most wildlife habitats that occur.

<b>Table 4            Most Common or Noted Terrestrial Wildlife Species, Groups of Species, Their Occurrence, and Basic Habitat Types in the Planning Area (Colona Land Health Assessment, BLM 2008)</b>		
Species (Common Name)	Habitat Type	Occurrence
Mule deer	Pinyon-juniper, oak-mountain shrub, riparian, sagebrush, grassland.	Common, year long, mostly during winter
Elk	Pinyon-juniper, oak-mountain shrub, riparian, sagebrush, grassland.	Common, mostly during winter.
Mountain lion	All types, mostly along rim-rock areas.	Common, year long, mostly during winter
Black bear	All types	Uncommon, spring and fall
Bobcat	All types	Uncommon, year long
Coyote	All types	Common, year long
Cottontail rabbit	All types	Common, year long
Porcupine	Pinyon-juniper, riparian	Common, year long
Raptor; Eagles, Hawks.	All types	Common, year long
Merriam's Turkey	Riparian forests, Pinyon-juniper, Oak-mountain shrub	Riparian communities and PJ in the winter
Neo-tropical birds	All types	Common, warm season
Small mammals	All types	Common, year long
Amphibians-Reptiles	All types	Common year long

Mule deer and elk are probably the most noted wildlife species that occur due to their historic prominence in the ecosystem and their high social and economic value to the area and region. Both species may use the area yearlong, but primarily they use it as winter range, coming from higher elevation summer ranges on Cimarron Ridge and the Uncompahgre Wilderness. The intensity of use by each species varies widely from year to year, and is controlled primarily by population size, and the variation in timing and amount of snowfall. 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 nearly all the area as severe winter range and winter concentration areas. The severe winter range and winter concentration areas constitute BLM's crucial winter range. The Uncompahgre Basin Resource Management Plan identifies the entire planning area as a wildlife emphasis area due to big game crucial winter ranges. The primary objective for this area is to "permit all other land uses if they will not degrade the areas' winter range capabilities." Within the planning area, vegetation condition suggests that wintering big game are stressed as much of the shrubs important for winter forage exhibit heavy browsing and much of the juniper across the unit are highlined from browse pressure.

The CPW manages big game on a herd, or population basis, using Data Analysis Units (DAU), with sub-regions of Game Management Units (GMU). The planning area occurs within DAU D-40 for mule deer and E-35 for elk. The stated long-term population objective for D-40 is 15,000 individuals. The 2011 post harvest population estimate for deer within the DAU was 8,220 animals. The long-term elk population target for E-35 is 5,500 individuals. The 2011 post harvest population estimate for elk within the DAU was 5,010 animals.

Merriam turkey habitat within the general area is found mostly on the higher mesas with woody habitat, and along the major stream drainages. They use the larger canyon bottoms at lower

elevations as winter range and the piñon-juniper, oak/serviceberry areas at higher elevations for breeding, nesting, and brood rearing. No specific mapping of seasonal use areas or assessment of habitat quality is available for this species at this time.

Large predators, such as coyote, mountain lion, and black bear use the area regularly as parts of their larger overall ranges. Of the predators, coyotes are the most numerous and widespread. Black bear primarily use the major drainages with well-developed riparian vegetation, and the higher elevation oak/serviceberry areas, especially during spring, late summer, and fall for feeding. Mountain lion likely utilize the area coincident with elk and deer winter use as they commonly follow the seasonal migration of these primary prey sources. While the exact status of these predator populations is unknown, they are all believed to be doing well.

### **Environmental Consequences/Mitigation:**

#### **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.

There is a large body of evidence documenting the effects of roads and travel routes on habitat quality for a wide variety of big game species (Foreman et al. 2003, Hebblewhite 2008, Nietvelt 2002, Sawyer et al. 2006 and 2009). While many studies quantify the effects of roads and road densities on wildlife and habitat quality, few distinguish between road classifications, traffic volumes, or specific road types and their corresponding effects on wildlife. Road density appears to be the most studied parameter related to roads and their effects on wildlife (Foreman et al. 2003, Hebblewhite 2008, Nietvelt 2002). For this reason, BLM has chosen to use route density as a means to characterize habitat quality within the planning area which is mapped as crucial winter range for big game. Doherty et al. (2008), Hebblewhite (2008), Sawyer et al. (2009), Wilbert et al. (2008), and others have used spatial models to characterize the effects of route density on overall habitat quality within a given geographic area.

The response to routes for individual big game species varies. In many cases responses have been documented as displacement distances or avoidance buffers for individual species. When the average documented displacement distance or avoidance buffer for a given species exceeds the distance to the nearest road across available habitats, the habitat quality for that species has decreased substantially and may result in population level adverse effects (Hebblewhite 2008, Doherty et al. 2008, Ingelfinger and Anderson 2004, Sawyer et al. 2006 and 2009).

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. Similar route density threshold has been

implicated for maintaining sustainable populations of sage grouse, large carnivores and bears (Doherty et al. 2008, Van Dyke et al. 1986, and Clevenger et al. 1997).

Big game habitat quality within the geographic boundary of the Ridgway travel management planning area can be characterized as described in Table 5 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 and adjusted down for stand density and topography which can act to reduce avoidance distances.

**Table 5**  
**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

**Proposed Action:**

Under this alternative the collective miles of routes would increase from 13.1 miles available for various modes of travel to 19.9 miles of routes. These increases would result in 16.6 miles of non-motorized single track, 2.4 miles of motorized routes available to the public, and 0.9 miles of route available for administrative purposes only. Analysis for this alternative suggests that impacts to terrestrial wildlife would be expected to be greatest on 720.2 (Table 6) acres of the planning area where route densities are greater than 0.5 -1.0 mile of route/sq. mile. Figure 1 depicts spatially where route densities exceed 0.5 mile of route/sq. mile (habitat categories 2-4). Recreational and other travel activity effects to wildlife may include displacement or avoidance and may be similar to those described in the TES, and Migratory Bird sections of this document. Such impacts would be expected to be greatest for game species utilizing the planning area. Small mammals and reptiles may be less influenced by recreational trail use as habitat use may occur over a smaller spatial extent.

**Table 6**  
**Habitat categories by alternative**

Habitat Category	No Action		Proposed Action		Alternative 1		Alternative 2	
	Acres	% Δ	Acres	% Δ	Acres	% Δ	Acres	% Δ
1	473.8	-	305.8	-35.45	226.1	-52.29	425.2	-10.25
2	50.1	-	50.2	0.18	44.8	-10.52	52.2	4.13
3	45.7	-	47.5	3.87	42.0	-8.15	46.2	1.07
4	456.6	-	622.5	36.33	713.4	56.25	502.4	10.04

Surface disturbance from development of the trail system and facilities is expected to result in approximately 4.98 (2.98ac trails, 2ac trailheads) acres of additional habitat and forage loss distributed throughout the planning area. Forage loss is expected to be minimal as much

of the trail development would occur within mature pinyon-juniper woodlands where forage production is suppressed. Losses in forage will be more than offset by the 52.6 acres of mechanical thinning and seeding that occurred in the southeastern portion of the planning unit between 2008 and 2009. Routes and facilities proposed under this alternative would be purposefully sited outside of sagebrush steppe habitats or on the edges of such habitats to minimize impacts to key winter forage habitats. The greatest importance of the planning area for game species is as crucial winter range, so closing the route system in the Ridgway and Ouray County Ridgway Gravel Pit Area from December 1 to April 30 for all modes of travel is expected to maintain the areas function as crucial winter range and reduce the potential for increased impacts to adjacent private lands. Design features for project level monitoring will ascertain that the general public is adhering to the winter closure and if not appropriate adaptive management would be employed to reduce impacts to wintering game species.

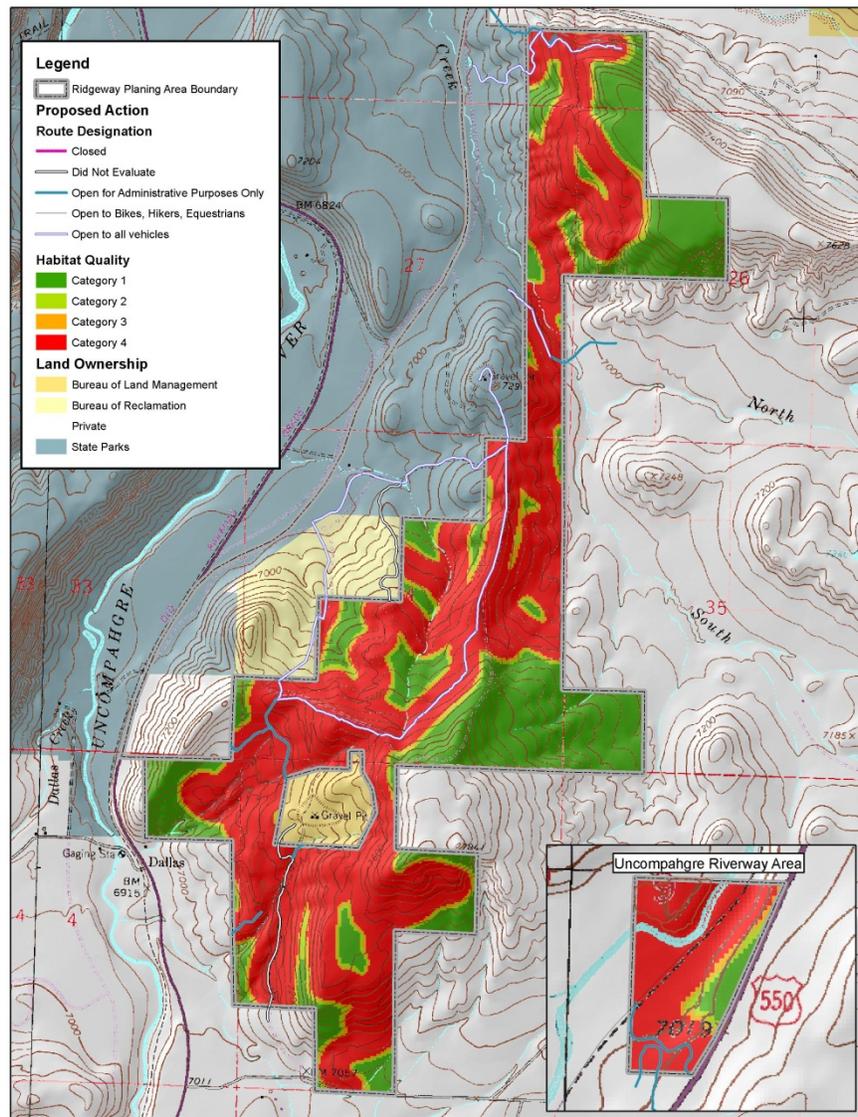


Figure 1 Route Densities and habitat quality Proposed Action

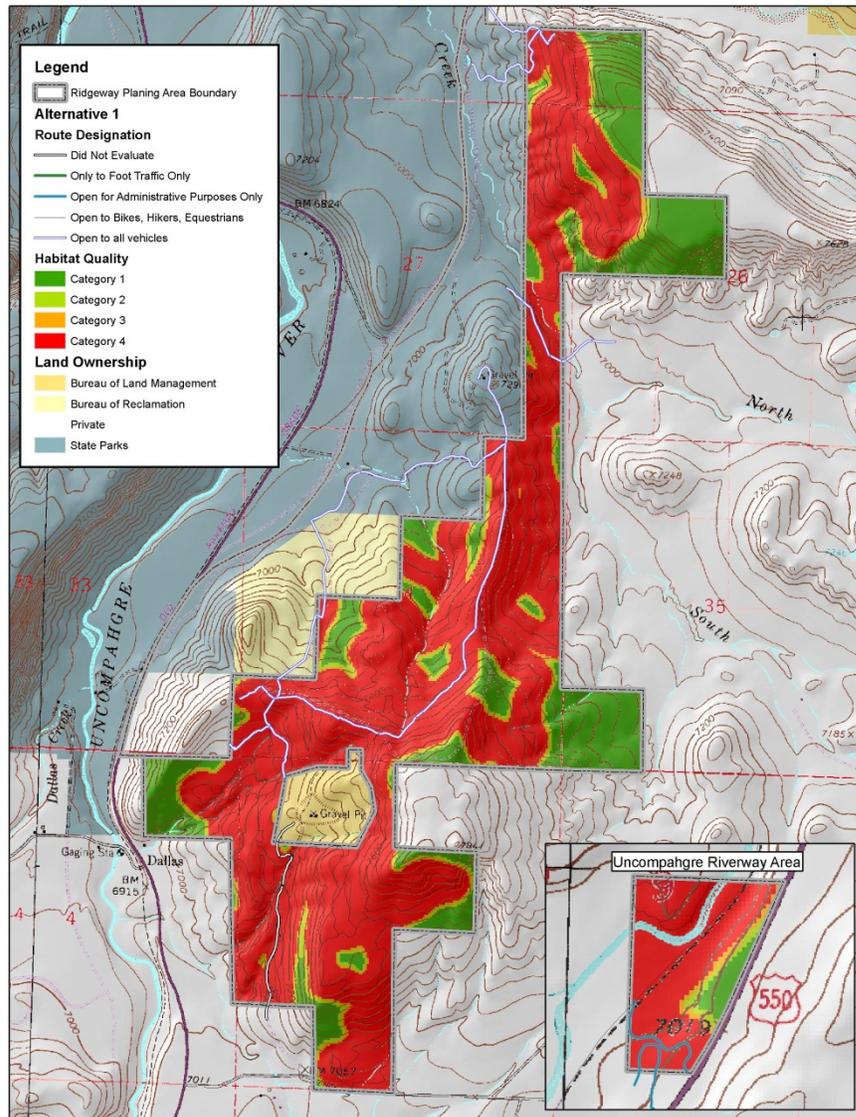
### **Finding on the Public Land Health Standard for plant and animal communities**

(partial, see also Wildlife, Aquatic; Wildlife, Terrestrial; and Invasive, Non-native Species): Much of the planning area contains severe winter range and/or winter concentration areas for elk and deer. These areas experience relatively heavy pressure from big game, particularly during harsh winters. The Colona Land Health Assessment found that much of the area was meeting LHA standards with problems due to heavy browse use and lower than expected herbaceous cover and composition. As these problems are associated with wildlife use and seral stage the Proposed Action is not expected to influence the current status of these problems, or this land health rating.

### **Alternative 1:**

Under Alternative 1, the collective miles of routes would increase from 13.1 miles available for various modes of travel to 24.6 miles of routes. These increases would result in 21.5 miles of non-motorized single track, 2.8 miles of motorized routes available to the general public, and 0.3 miles of route available for administrative purposes only. Analysis for this alternative suggests that impacts to terrestrial wildlife would be expected to be greatest on 800.2 (Table 6) acres of the planning area where route densities are greater than 0.5 -1.0 mile of route/sq. mile. Figure 2 depicts spatially where route densities exceed 0.5 mile of route/sq. mile (habitat categories 2-4). Recreational and other travel activity effects to wildlife may include displacement or avoidance and may be similar to those described in the TES, and Migratory Bird sections of this document. Such impacts would be expected to be greatest for game species utilizing the planning area. Small mammals and reptiles may be less influenced by recreational trail use as habitat use may occur over a smaller spatial extent.

Surface disturbance from development of the trail system and facilities is expected to result in approximately 4.93 (3.93ac trails, 1 ac trailheads) acres of additional habitat and forage loss distributed throughout the planning area. Forage loss is expected to be minimal as much of the trail development would occur within mature pinyon-juniper woodlands where forage production is suppressed. Losses in forage will be offset by the 52.6 acres of mechanical thinning and seeding that occurred in the southeastern portion of the planning unit between 2008 and 2009. Routes proposed under this alternative would not be purposefully sited outside of sagebrush steppe habitats or on the edges of such habitats thus impacts to key winter forage habitats would occur. The greatest importance of the planning area for game species is as crucial winter range so closing the route system in the Ridgway and Ouray County Ridgway Gravel Pit Area from December 1 to April 30 to motorized and mechanized uses is expected to reduce impacts to crucial winter range. Since the trail system would be available for hiking, skiing, and snowshoeing effects to wintering big game would be greater than the Proposed Action. Big game could be forced to abandon the area for lower quality habitats and greater snow depths causing more stress or mortality. Additionally there would be greater potential for increased impacts to adjacent private lands. Design features for project level monitoring will ascertain that the general public is adhering to the winter closure for motorized and mechanized travel and if not appropriate adaptive management would be employed to reduce impacts to wintering game species.



**Figure 2 Route Densities and habitat quality Alternative 1**

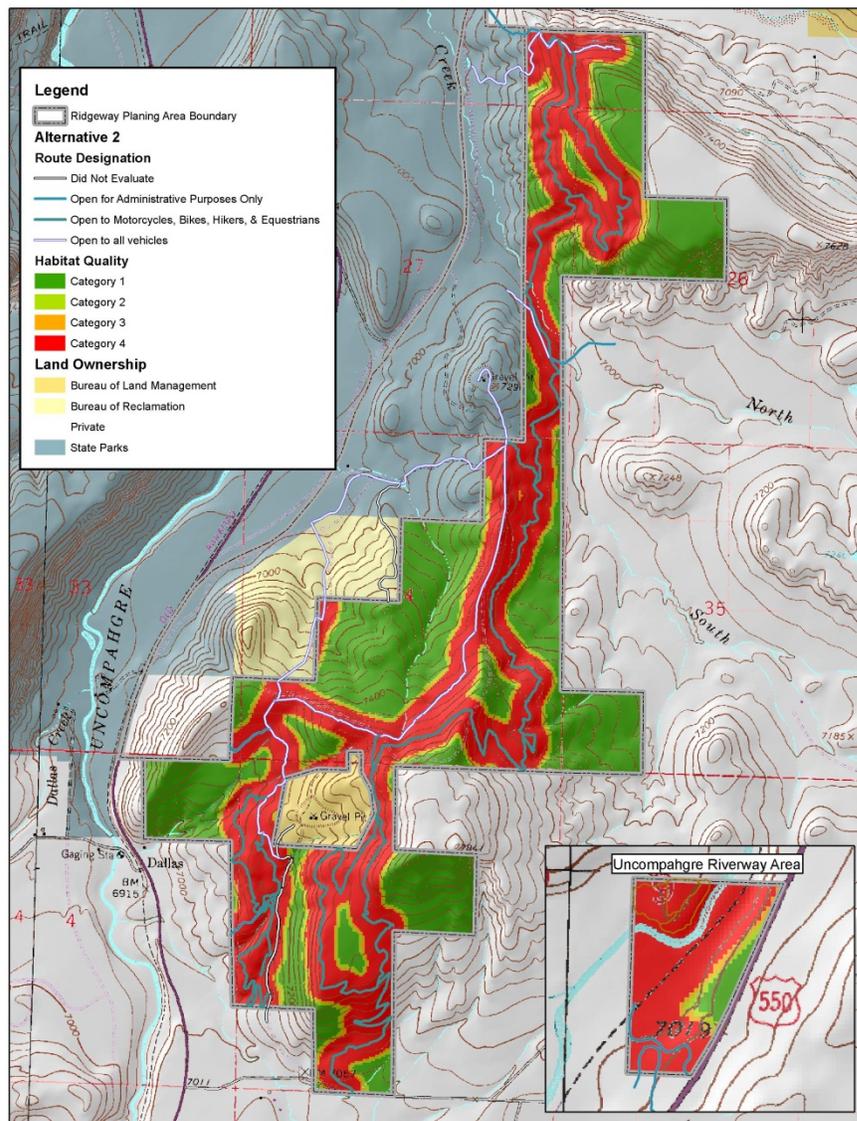
**Finding on the Public Land Health Standard for plant and animal communities**

(partial, see also Wildlife, Aquatic; Wildlife, Terrestrial; and Invasive, Non-native Species): Much of the planning area contains severe winter range and/or winter concentration areas for elk and deer. These areas experience relatively heavy pressure from big game, particularly during harsh winters. The Colona Land Health Assessment found that much of the area was meeting LHA standards with problems due to heavy browse use and lower than expected herbaceous cover and composition. As these problems are associated with wildlife use and serial stage Alternative 1 is not expected to influence the current status of these problems, or this land health rating.

**Alternative 2:**

Under Alternative 2, the collective miles of routes would increase from 13.1 miles available for various modes of travel to 14.5 miles of routes. These increases would result in 10.1

miles of motorized single track, 0.8 miles of non-motorized single track, 2.9 miles of motorized routes available to the general public, and 0.7 miles of routes available for administrative purposes only. Analysis for this alternative suggests that impacts to terrestrial wildlife would be expected to be greatest on 600.8 (Table 6) acres of the planning area where route densities are greater than 0.5 -1.0 mile of route/sq. mile. Figure 3 depicts spatially where route densities exceed 0.5 mile of route/sq. mile (habitat categories 2-4). Recreational and other travel activity effects to wildlife may include displacement or avoidance and may be similar to those described in the TES, and Migratory Bird sections of this document. Such impacts would be expected to be greatest for game species utilizing the planning area. Small mammals and reptiles may be less influenced by recreational trail use as habitat use may occur over a smaller spatial extent.



**Figure 3 Route Densities and habitat quality Alternative 2**

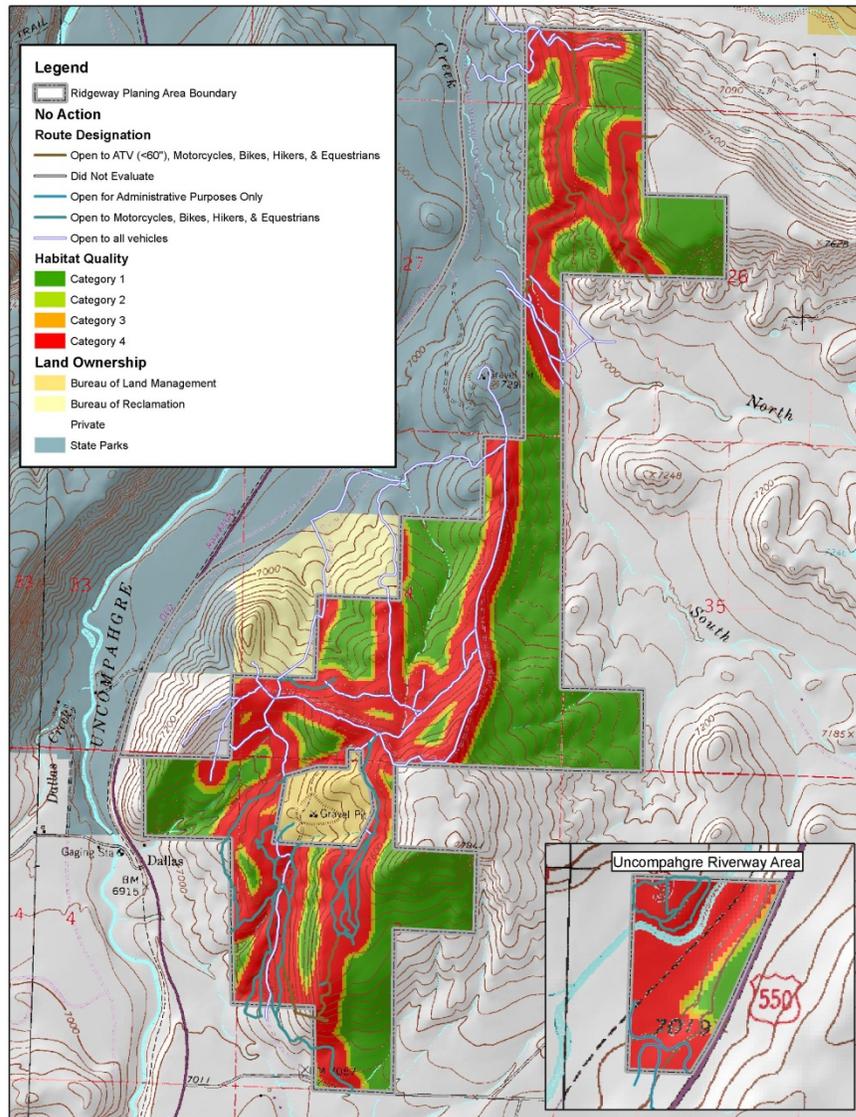
Surface disturbance from development of the trail system and facilities is expected to result in approximately 3.98 (1.98ac. trails, 2ac. trailheads) acres of additional habitat and forage loss distributed throughout the planning area. Forage loss is expected to be minimal as much of the trail development would occur within mature pinyon juniper woodlands where forage production is suppressed. Losses in forage will be offset by the 52.6 acres of mechanical thinning and seeding that occurred in the southeastern portion of the planning unit between 2008 and 2009. Routes and facilities proposed under this alternative would be purposefully sited outside of sagebrush steppe habitats or on the edges of such habitats to minimize impacts to key winter forage habitats. The greatest importance of the planning area for game species is as crucial winter range, so closing the route system in the Ridgway and Ouray County Ridgway Gravel Pit Area from December 1 to April 30 for all modes of travel is expected maintain the areas function as crucial winter range and reduce the potential for increased impacts to adjacent private lands. Design features for project level monitoring will ascertain that the general public is adhering to the winter closure and if not appropriate adaptive management would be employed to reduce impacts to wintering game species.

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

(partial, see also Wildlife, Aquatic; Wildlife, Terrestrial; and Invasive, Non-native Species): Much of the planning area contains severe winter range and/or winter concentration areas for elk and deer. These areas experience relatively heavy pressure from big game, particularly during harsh winters. The Colona Land Health Assessment found that much of the area was meeting LHA standards with problems due to heavy browse use and lower than expected herbaceous cover and composition. As these problems are associated with wildlife use and seral stage alternative 2 is not expected to influence the current status of these problems, or this land health rating.

**No Action Alternative:**

There are currently 13.1 miles of collective routes available for various modes of travel. There are 4.7 miles of motorized single track, 0.4 miles of non-motorized single track, 2.2 miles of ATV two-track, 5.5 miles of motorized routes available to the general public, and 0.3 miles of route available for administrative purposes only. Analysis for this alternative suggests that current impacts to terrestrial wildlife are greatest on 552.4 (Table 6) acres of the planning area where route densities are greater than 0.5 -1.0 mile of route/sq. mile. Figure 4 depicts spatially where route densities exceed 0.5 mile of route/sq. mile (habitat categories 2-4). Recreational and other travel activity effects to wildlife may include displacement or avoidance and may be similar to those described in the TES, and Migratory Bird sections of this document. Existing routes would continue to affect wildlife species habitats. There would continue to be a lack of specific route restrictions or designations and route rehabilitation efforts, leaving the area susceptible to continued route proliferation and degradation in crucial wildlife habitats. Such impacts are thought to be greatest for game species utilizing the planning area. Small mammals and reptiles may be less influenced by recreational trail use as habitat use may occur over a smaller spatial extent.



**Figure 4 Route Densities and habitat quality No Action**

Surface disturbance from user created route development would be expected to continue. Routes would not be purposefully sited outside of sagebrush steppe habitats or on the edges of such habitats increasing impacts to key winter forage habitats. The greatest importance of the planning area for game species is as crucial winter range, so closing the route system in the Ridgway and Ouray County Ridgway Gravel Pit Area from December 1 to April 30 to motorized and mechanized uses may reduce impacts to crucial winter range. Except as otherwise noted, travel on horse or by foot would continue to be permitted on routes or cross-country year-round. Existing policies pertaining to motorized and mechanized travel would continue to be permitted to travel off existing routes for parking, camping, and retrieving game further influencing wildlife habitats. Design features for project level monitoring will ascertain that the general public is adhering to the winter closure and if not appropriate adaptive management would be employed to reduce impacts to wintering game species.

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

(partial, see also Wildlife, Aquatic; Wildlife, Terrestrial; and Invasive, Non-native Species): Much of the planning area contains severe winter range and/or winter concentration areas for elk and deer. These areas experience relatively heavy pressure from big game, particularly during harsh winters. The Colona Land Health Assessment found that much of the area was meeting LHA standards with problems due to heavy browse use and lower than expected herbaceous cover and composition. As these problems are associated with wildlife use and seral stage the Proposed Action is not expected to influence the current status of these problems, or this land health rating.

**Cumulative Impacts:**

In addition to growth in recreational travel, other reasonably foreseeable actions that could affect wildlife species/habitat in the foreseeable future on private and public lands include the development of a complementary route system on the Ridgway State Park, residential growth, new road construction on private land, fuels reduction projects, utility corridor maintenance and upgrades, and new buried utility rights-of-way. Activities on public lands in the travel planning area that could also potentially impact sensitive species include Forest Service, State Park and BOR projects, local land use planning, vegetation treatments, continued population growth, county road and state highway upgrades, gravel extraction, and utility rights of way and corridors. Some of these activities may benefit some wildlife species and their habitat. Cumulative impacts from these activities to sensitive species from all action alternatives will be long-term and ongoing.

**WILDLIFE, AQUATIC** (includes a finding on Standard 3)

**Affected Environment:**

Aquatic wildlife species and their habitats are limited to perennial streams and some intermittent streams. Within the planning area, aquatic species would only be found within the Uncompahgre Riverway Area. Native fish species potentially found within the Uncompahgre River include white sucker, bluehead sucker, flannelmouth sucker, speckled dace, and longnose sucker. The non-native brown trout, rainbow trout and brook trout are found in this segment of the river as well. Some frogs, including northern leopard frogs, toads, and snakes are known to be present in the riparian and wetlands on the Uncompahgre Riverway Area. Based on the good to excellent condition of the riparian and wetlands on this parcel, the abundance and composition of aquatic species are considered appropriate for the habitat types. No Federally listed fish are expected to be present in the streams.

There are small numbers of waterfowl, including mergansers, Canada geese, mallards, and green wing teal that utilize the area seasonally, and some nesting may occur along the wetlands and Uncompahgre River.

**Environmental Consequences/Mitigation:**

**Impacts Common to all Alternatives:**

Because travel management does not look substantially different across all alternatives

relative to aquatic species habitats the impacts are believed to be similar in nature and extent and unchanged from current conditions. Trail use will continue to disturb nesting waterfowl, limit nesting attempts, or cause certain species not to utilize suitable habitat types. Reptiles and amphibian species impacts would largely continue unchanged from the current condition, species will be subject to collision with cyclists, flushing from hikers, equestrians, and cyclists that would otherwise not occur if human use was not focused in the riparian corridor. Fish species will continue to receive angling pressure commensurate with current use levels, subject to CPW fishing regulations irrespective of the alternatives. A positive impact from conducting travel management on the aquatic habitat types in the planning area is that such habitat types would not be subject to the potential of additional user created 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 aquatic and riparian habitat types found within the planning area currently meet public land health standards for healthy productive plant and animal communities.

Implementing travel management decisions would greatly limit the potential for additional user created route proliferation in aquatic species habitat types which will ensure that such lands and resources continue to meet land health standards into the future.

**Cumulative Impacts:**

Population growth and residential development of surrounding private lands, along with other resource impacting trends, will occur throughout the greater region that will result in increased amounts of recreational usage on public lands. Increases in the miles of routes would create additional acres of semi-permeable and non-permeable surfaces that would result in increased amounts of runoff, erosion, and drainage changes. Other activities that may contribute to cumulative impacts include Forest Service, State Park and BOR projects, local land use planning, continued population growth, continued population growth, vegetation treatments, county road upgrades, special recreation permits and activities, and utility rights of way and corridors. Some of these activities may benefit aquatic species and habitats. Refer to the main Cumulative Impacts section of this document for a more detailed description of these activities and their potential impacts.

**WETLANDS & RIPARIAN ZONES** (includes a finding on Standard 2)

**Affected Environment:**

There is just over one mile of perennial and intermittent streams on public lands in the planning area. A 0.2 mile stretch of the Uncompahgre River flows through the Uncompahgre Riverway Area, and about 0.9 miles of the intermittent Alkali Creek flow through the northern end of the Ridgway Area. The Uncompahgre River supports a diverse riparian community that includes stands of sandbar willow, stands of mature narrow leaf cottonwood, and silverleaf buffaloberry. Alkali Creek supports a primarily herbaceous community of rushes and reed canary grass, with limited growth of sandbar willow.

Alkali Creek was assessed for land health in 2006. It was found to meet Standard 2 at that time. The Uncompahgre River has been determined to meet Standard 2 with problems that relate mainly to weeds and altered sediment and flow conditions, due to nearby agriculture, gravel mining, road encroachment in some areas, and flow regulations from Ridgway Reservoir.

**Environmental Consequences/Mitigation:**

Routes generally degrade riparian and wetland areas. This has been well documented by numerous researchers in many locations (Forman 2008, Trombulak and Frissell 2008). In addition to direct loss of and impacts to riparian vegetation for the width of the route (estimated here as 6 meters in width including shoulder area for full size routes), 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). Riparian vegetation in this zone is at a greater risk of being degraded. Degradation includes weeds invading undisturbed riparian vegetation, sediment deposits onto the riparian vegetation, and increased erosion within the riparian zone. The amount of degradation varies depending on different route characteristics. These characteristics include the route’s orientation within the riparian zone, its proximity to the stream, the substrate the route passes over, route width and the type and the level of use the route receives. The impacts of these characteristics are described as follows:

- Orientation: Routes which are oriented perpendicular to the stream course generally remove and impact less riparian vegetation than those which parallel the stream course.
- Proximity: Routes which travel through the riparian zone have a direct impact on riparian vegetation. Routes located adjacent to riparian areas generate reduced off-route impacts, compared to routes within the riparian area, and these impacts generally decline with increasing distance between the route and the riparian zone.
- Substrate: Routes which pass over soft substrates and mud generally cause more impacts to riparian vegetation than those which pass over rocks.
- Use Level: Heavily used routes introduce more weeds, generate more dust, and require more road maintenance, creating more off-route impacts to riparian vegetation than less heavily travelled routes.
- Use Type: When routes exclude some users, they generally have lower use levels with fewer off-route impacts to riparian habitat than routes which have multiple uses. For the purpose of this analysis BLM assumes that limited use routes would have lower use levels than unrestricted routes.
- Route Width: Wider routes remove and impact more riparian vegetation than narrower routes.

In general, these impacts are additive, so that an area with more routes in and near riparian vegetation and wetlands would have more degraded riparian systems than similar areas with fewer routes.

Based on BLM's Recreation Guidelines, the Public Land Health Standards, and the potential impacts described above, the mileage of routes passing through the riparian zone (defined here as the zone within 325' from the middle of the stream) is used as the primary measure to assess impact to the riparian zone. These are in turn evaluated by vehicular use type on routes (which encompasses route widths), and riparian health Standard 2 ratings.

**Proposed Action:**

There would be 1.5 total miles of route in the riparian zone under this alternative. About 0.7 miles of route would affect Alkali Creek, and of that 0.27 miles would be newly constructed mechanized single track. The remaining 0.8 miles of riparian routes within the Uncompahgre Riverway Area would affect the Uncompahgre River, and these would be largely limited to foot and horse traffic. Around 0.2 miles of route affecting Alkali Creek would be open to full size vehicles.

**Finding on the Public Land Health Standard for riparian systems:** Under this alternative, there would be 0.8 miles of route in riparian zones which meet Standard 2 with problems. All of this distance would have use (including width) restrictions placed upon it. Because the nature of disturbance associated with this type and level of use is unlikely to change the existing land health problems, there would be no change in land health status for riparian areas under this alternative.

**Alternative 1:**

Under Alternative 1, there would be a similar amount of mileage in both the Alkali Creek and Uncompahgre River riparian zones as under the Proposed Action. The only difference is that mechanized travel would be allowed on the single track trails along the Uncompahgre River, and that there would be another 0.02 miles of route open to full sized vehicle travel along Alkali Creek. Both of these differences would result in slightly greater riparian impacts under this alternative as compared with the Proposed Action.

**Finding on the Public Land Health Standard for riparian systems:** Impacts and outcomes to Standard 2 would be similar to the Proposed Action.

**Alternative 2:**

Under Alternative 2, a slightly lesser mileage (1.22 miles) of route are proposed in riparian areas as compared with the Proposed Action. This difference is in the Alkali Creek riparian zone, and includes 0.12 miles of existing route that would be closed, and 0.16 miles routes that would not be constructed. This alternative proposes a slightly higher level of use along 0.19 miles of route in the Alkali Creek riparian zone, calling for motorized instead of mechanized single track, slightly increasing the level of riparian impact from these routes. Overall this alternative would probably result in a slightly lower level of riparian impacts, as compared with the Proposed Action.

**Finding on the Public Land Health Standard for riparian systems:** Impacts and outcomes to Standard 2 would be similar to the Proposed Action.

**No Action Alternative:**

The No Action Alternative includes 1.23 miles of route in the riparian zone, slightly less than under the Proposed Action, with the difference lying in the Alkali Creek area. However, this alternative allows routes in the Alkali Creek area to stay in the open classification, which is the most damaging to riparian values. The mileage along the Uncompahgre River is similar to the Proposed Action, except that this alternative allows for motorized single track travel along 0.31 miles of route, which impacts riparian resources more than foot and horse classification as in the Proposed Action.

**Finding on the Public Land Health Standard for riparian systems:** Impacts and outcomes to Standard 2 would be similar to the Proposed Action.

**Cumulative Impacts:**

The Proposed Action, when combined with past, present and reasonably foreseeable actions will have negligible impacts to riparian zones or wetlands at the watershed level. Minimal, localized riparian improvements which result from improving route and recreation management and the creation of unauthorized routes will likely be offset by localized loss or impacts to riparian vegetation from creation of new, authorized routes. These localized and low level impacts have very minor influence to riparian health across the watershed. Riparian areas at the larger, watershed scale are experiencing more substantive impacts on federal and private lands. On federal lands, these include: water depletion, flow alterations, wildfire, mining activities, livestock grazing and wildlife use, rights of ways, recreation and travel infrastructure. Additional impacts arise from activities on private property in the region. These include: cultivation, irrigation, livestock production, residential and commercial land development, and road construction and maintenance.

## **FLOODPLAINS**

**Affected Environment:**

Floodplain areas are associated with streams and rivers that occur in the travel management planning area. The Uncompahgre River has a well-developed floodplain and is mapped as a FEMA floodplain. Most of the other drainages are ephemeral and lack any developed floodplains or riparian vegetation. Alkali creek is an intermittent stream that is deeply incised but has some remnants of a floodplain as it passes through BLM.

The BLM is required to meet the objectives of federal floodplain policy. Executive Order 11988 (21), as amended, established this policy and directs agencies to “avoid to the extent possible the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practical alternative”. The objectives of avoiding development and modification of floodplains are to 1) reduce the hazard and the risk of flood loss, 2) minimize the impact of

floods on human safety, health, and welfare, and 3) restore and preserve the natural and beneficial floodplain values.

### **Environmental Consequences/Mitigation:**

#### **Proposed Action, Alternative 1 and Alternative 2**

These alternatives have 0.73 miles of existing routes in the Uncompahgre River floodplain. There is one crossing of Alkali Creek that would likely require a foot bridge consisting of several logs bolted together and anchored on both side of the drainage. This structure could become entrained in flows during a large storm event and possibly impound water or debris.

#### **No Action Alternative:**

The same potential impacts exist as in the Proposed Action; however, there is not an existing bridge across Alkali Creek.

#### **Cumulative Impacts:**

This travel management plan, when combined with the past, present and reasonably foreseeable actions could slightly decrease the ability of the floodplain to dissipate flooding events. Increased numbers of routes could magnify other impacts in the watershed on private and federal lands due to the increased surface disturbance in floodplains. Additional activities on BLM and Forest Service lands in the watershed include: grazing, rights of ways, recreation and travel infrastructure. Impacts associated with private property in the watershed include; cultivation, irrigation, livestock production, residential and commercial land development, and urban runoff.. The types of impacts expected from all of the cumulative actions in the watershed would be similar to those described for the Proposed Action. The cumulative effect of all the impacts in the watershed could contribute to decreased ability of the floodplain to dissipate flooding events.

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

### **Affected Environment:**

#### ***Hydrology***

Average annual precipitation is about 17 inches at the lower elevations in the valley bottom. Much higher precipitation falls in the form of snow at the higher surrounding elevations. Precipitation from frontal events occurs during winter and spring months. 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 events.

The main river in the travel planning area is the Uncompahgre River. Other major drainages nearby include Dallas Creek and Cow Creek, however, neither of these flow through the travel planning area. The Ridgway Area contains several intermittent channels including Alkali Creek which seasonally carries irrigation return flows. These drainages experience high flows from both snowmelt and rainfall events. Snowmelt is typically generated from the high elevation headwater areas. Short duration flood flows occur from high intensity monsoon events in mid to

late summer. These summer floods are typically localized and have the greatest impact on intermittent and ephemeral channels.

***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 (Colorado Water Quality Control Commission 2012).

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.

The Water Quality Classifications below lists the water quality classifications for the surface waters influenced by the travel management area:

4 <sup>th</sup> Level Watershed	Stream Segment	Stream Classification <sup>1-5</sup>
14020006 Uncompahgre River	Mainstem of the Uncompahgre River from a point immediately above the confluence with Red Mountain Creek to the Highway 90 bridge at Montrose.	Aq Life Cold 1 Recreation E Water Supply Agriculture
	Mainstem of Coal Creek from the source to the Park Ditch, mainstem of Dallas Creek from the source of the East and West Forks to the confluence with the Uncompahgre River; mainstem of Cow Creek, including all tributaries, lakes and reservoirs, from the Uncompahgre Wilderness Area boundary to the confluence with the Uncompahgre River; Billy Creek; Onion Creek and Beaton Creek from their source to their confluences with Uncompahgre River; mainstem of Beaver Creek from source to the confluence with East Fork of Dallas Creek; and mainstem of Pleasant Valley Creek from the source to the confluence with Dallas Creek.	Aq Life Cold 1 Water Supply Agriculture Nov. 1 to April 30 Recreation N May 1 to Oct. 31 Recreation P

- 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- Recreation Class P - Potential Primary Contact Use. These surface waters have the potential to be used for primary contact recreation.
- 4- Recreation Class N - Not Primary Contact Use
- 5- Waters that are suitable for irrigating crops usually grown in Colorado.
- 6- 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.

The impaired surface waters table below shows the surface waters in the area that are on Colorado’s impaired waters, 303(d) or Monitoring and Evaluation list (CDPHE, Water Quality Control Commission, 5 CCR 1002-93).

**Impaired Surface Waters in the Area.**

Segment Description	Portion	Colorado’s Monitoring & Evaluation Parameter(s)	Clean Water Act Section 303(d) Impairment	303(d) Priority
COGUUN03b Ridgway Reservoir	all	Pb, Zn		
COGUUN11 Coal, Dallas, Cow, Billy, Onion, Beaton, Beaver and Pleasant Valley Creeks	Billy Creek, Onion Creek	Se		
COGUUN11 Coal, Dallas, Cow, Billy, Onion, Beaton, Beaver and Pleasant Valley Creeks	Cow Creek	SO4		

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.

### ***Selenium***

Selenium is a naturally occurring soluble non-metal found in the marine sediments of the Mancos Shale. Selenium can be easily mobilized by applying irrigation water to soils derived from Mancos Shale or from surface disturbing activities on Mancos Shale, and delivered to nearby waterways by irrigation return flow, groundwater, or overland flow. Once in the waterways, selenium can move through the aquatic environment, bio-accumulate in organisms and potentially reach toxic levels (Lemly, 2002).

In 1997, the Colorado State Water Control Commission revised the chronic aquatic-life criterion for dissolved selenium from 17 µg/L to 4.6 µg/L. The Selenium Task Force was created soon after to address selenium issues. The group is comprised of private, local, state, and federal agencies including the BLM.

As required by the Clean Water Act and the 303(d) listing, the Colorado Water Quality Control Division released the TMDL in 2009 for the Gunnison River and tributaries and the Uncompahgre River and tributaries. Remediation strategies are implemented in part by the Selenium Task Force.

Also in 2009, the Fish and Wildlife Service issued a Programmatic Biological Opinion (PBO) under the Endangered Species Act to address the recovery of endangered fish species. The PBO addresses the Bureau of Reclamation's Aspinall Unit operations as well as all other public and private uses in the Gunnison Basin. The primary requirements of the PBO are the reoperation of the Aspinall Unit and the implementation of a Selenium Management Program. The BLM is a signatory to a Memorandum of Understanding with the Bureau of Reclamation, State of Colorado, and local irrigation companies, to assist in the development and implementation of a long-range plan. In the MOU, the BLM agreed to, "Evaluate options to conform to a goal of no net new selenium loading from land exchanges, sales, and other actions involving public lands."

### ***Salinity***

Salts are another naturally occurring component of the Mancos Shale and are easily mobilized. The soluble mineral content of the Mancos Shale can be as high as 20% but is typically more like 6%, and the major mineral is typically gypsum (Schumm and Gregory, 1986). The Bureau of Reclamation has estimated that half of the present salt concentration in the Colorado River system is due to natural sources while the remainder is human induced by sources such as agriculture. The annual salt loading above imperial dam to the Colorado River is estimated to be 10 million tons and the Gunnison River basin contributes roughly 1.1 million tons (Leib,2008).

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.

### ***Water quality Data***

Existing water quality data collected by the BLM is limited in the area. The BLM conducts water quality sampling and macroinvertebrate monitoring in coordination with Land Health Assessments. Complete data and results from BLM monitoring in 2006-2007 can be found in the 2008 Land Health Assessment Report for Colona and found on the web at:

[http://www.blm.gov/co/st/en/fo/ufo/land\\_health.html](http://www.blm.gov/co/st/en/fo/ufo/land_health.html). Water Quality sampling conducted on Cow Creek and Alkali Creek resulted in no water quality exceedances. Macroinvertebrate monitoring found significantly lower invertebrate abundance in Cow Creek than the region averages; possibly due to irrigation diversions, low base flows, and high sediment bedloads.

More routine monthly and quarterly water quality sampling is conducted by local watershed groups such as, the Uncompahgre Watershed Partnership, and the River Watch Network, funded by the State of Colorado. Additional water quality sampling is conducted by the State's Water Quality Control Division for the assessment and listing of impaired waters.

The Uncompahgre Watershed Partnership compiled a water quality report for the entire watershed and portions of the report are available in draft form. The report found the Uncompahgre River between Ouray and Ridgway Reservoir to have numerous exceedances for cadmium, copper, lead and zinc due to the hard rock mining legacy in the headwaters region. The number of exceedances dropped to less than 3% of the 40 samples collected between 2002 and 2007 upstream of Ridgway Reservoir near the travel management plan site. The decreased number of exceedances is likely due to increasing hardness and flow dilution (UWP, 2010).

### ***Water Rights***

There are approximately 3 ponds located in the travel management planning area. These ponds are used for livestock watering and only hold water seasonally. There is another pond/wetland located adjacent to the Uncompahgre River that is fed by river flows and groundwater springs. Each of these structures is listed in the Colorado Decision Support System database.

### ***Groundwater***

There are no groundwater resources impacted in the travel management planning area.

### **Environmental Consequences/Mitigation:**

The greatest potential for water quality impacts from the travel management planning area is from erosional processes and spills from motor vehicles. Increased erosion from new and existing routes could mobilize sediment and the two constituents on the State Monitoring and Evaluation list, Selenium and Sulfate. Large monsoon events would be the most likely to transport sediment to stream channels. These types of events typically deliver large volumes of sediment to downstream water bodies, but for a short duration of time. The following factors will be evaluated to quantify the impacts from each alternative:

- Proximity of routes to stream channels that could disturb riparian vegetation
- Routes in or close to channels that could concentrate chemical contaminants such as motor oil, grease, fuel, antifreeze or heavy metals from tire wear.

- Number of stream crossings

**Proposed Action:**

The Proposed Action has 0.24 miles of routes either in ephemeral channels or in close proximity to them. There are 9 route crossings of ephemeral channels and 1 intermittent crossing of Alkali Creek. Of the 12.8 miles of new trail construction, there would be 7 new ephemeral crossings, a new intermittent stream crossing, and 0.14 miles of new routes located in or near a drainage.

There are also two new travel management support facilities proposed. Each would be less than one acre, and include a parking area and trailhead. Areas identified are relatively level ground that would be cleared of vegetation and surfaced with gravel. The gravel surface would minimize sediment production by providing increased surface roughness, slowing runoff, and allowing for infiltration. Concentrating the impacts to the hardened gravel parking areas would reduce the amount of parking along the sides of roads where sediment could be easily mobilized on steep unsurfaced slopes disturbed by vehicles and foot traffic.

**Water Quality Proposed Action, Standard 5 finding:** Water Quality would likely continue to meet Land Health Standard 5 if routes are constructed and maintained according to BLM standards. Since the majority of the routes in this alternative are non-motorized single track, the potential for chemical contamination from oils, greases and antifreeze is very low. The width and associated surface area is unlikely to produce a substantial increase in sediment production that could be delivered to downstream water bodies over natural conditions.

**Alternative 1:**

Alternative 1 has 0.34 miles of routes either in ephemeral channels or in close proximity to them. There are 12 route crossings of ephemeral channels and 1 intermittent crossing of Alkali Creek. Of the 17.5 miles of new trail construction, there would be 10 new ephemeral crossings, a new intermittent stream crossing, and 0.24 miles of new routes located in or near a drainage. The increased number of ephemeral stream crossings and trails located adjacent to or in stream channels could increase the potential for water quality impacts associated with the proposed routes.

There is also one new travel management support facility proposed. It would be less than one acre, and include a parking area and trailhead. The area identified is relatively level ground that would be cleared of vegetation and surfaced with gravel. The gravel surface would minimize sediment production by providing increased surface roughness, slowing runoff, and allowing for infiltration. Concentrating the impacts to the hardened gravel parking area would reduce the amount of parking along the sides of roads where sediment could be easily mobilized on steep unsurfaced slopes disturbed by vehicles and foot traffic.

**Water Quality Alternative 1, Standard 5 finding:** Water Quality would likely continue to meet Land Health Standard 5 if routes are constructed and maintained according to BLM standards. Since the majority of the routes in this alternative are non-motorized

single track, the potential for chemical contamination from oils, greases and antifreeze is very low. The width and associated surface area is unlikely to produce a substantial increase in sediment production that could be delivered to downstream water bodies over natural conditions.

**Alternative 2:**

Alternative 2 has 0.1 miles of routes either in ephemeral channels or in close proximity to them. There are 5 route crossings of ephemeral channels and 1 intermittent crossing of Alkali Creek. Of the 7.5 miles of new trail construction, there would be 3 new ephemeral crossings and one new intermittent stream crossing. The reduced number of stream crossings and routes located near channels would reduce the amount of potential erosion and sediment that could be mobilized during storm events. However, since the majority of the routes in this alternative are motorized, the potential for chemical spills in channels is slightly increased.

There are also two new travel management support facilities proposed. Each would be less than one acre, and include a parking area and trailhead. Areas identified are relatively level ground that would be cleared of vegetation and surfaced with gravel. The gravel surface would minimize sediment production by providing increased surface roughness, slowing runoff, and allowing for infiltration. Concentrating the impacts to the hardened gravel parking areas would reduce the amount of parking along the sides of roads where sediment could be easily mobilized on steep unsurfaced slopes disturbed by vehicles and foot traffic.

**Water Quality Alternative D, Standard 5 finding:** Water Quality would likely continue to meet Land Health Standard 5 if routes are constructed and maintained according to BLM standards. The potential for chemical contamination from oils, greases and antifreeze is slightly higher than the Proposed Action. The width and associated surface area is unlikely to produce a substantial increase in sediment production that could be delivered to downstream water bodies over natural conditions.

**No Action Alternative:**

The No Action Alternative has 0.1 miles of routes either in ephemeral channels or in close proximity to them. There are 3 route crossings of ephemeral channels and no intermittent stream crossings. The low number of stream crossings and routes located near channels keeps the area from generating much sediment; however, the existing routes are wide and poorly aligned. This has resulted in deeply rutted routes that have generated some sediment during storm events. There is also the more potential for chemical spills in channels than the Proposed Action since all of the existing routes are motorized.

**Water Quality No Action Alternative, Standard 5 finding:** Water Quality is currently meeting Land Health Standard 5 as of the LHA report of 2008. The potential for chemical contamination from oils, greases and antifreeze is slightly higher than the Proposed Action since all the existing routes are motorized. The width and associated surface area could continue to increase and deliver sediment to downstream water bodies if the existing routes are not rerouted or heavily altered to improve the existing drainage patterns.

### **Cumulative Impacts:**

This travel management plan, when combined with the past, present and reasonably foreseeable actions, could elevate the potential for deterioration of water quality. Surface disturbance and chemical contamination associated with existing routes and newly constructed routes could magnify other impacts from activities on private and federal lands in the watershed. Other activities causing impacts to water quality on BLM and Forest Service lands in the watershed include: grazing, rights of ways, recreation and travel infrastructure. Impacts to water quality also result from activities associated with private property in the watershed, including: cultivation, irrigation, livestock production, and residential and commercial land development. The types of impacts expected from other actions in the watershed would be similar to those described for the Proposed Action. The cumulative effect of all the impacts in the watershed could contribute to decreased water quality.

## **WASTES, HAZARDOUS OR SOLID**

### **Affected Environment:**

Hazardous and solid wastes are not a part of the natural environment. Any level of human activity can introduce solid waste (trash, litter) to the environment. Motorized use in an area can introduce hazardous waste (spilled fuel), although this does not commonly accompany casual motorized use of an area. Full-sized motor vehicle use of an area allows the possibility that trash (including hazardous wastes) can be brought in and dumped in an area.

### **Environmental Consequences/Mitigation:**

#### **Proposed Action:**

The Proposed Action allows the least amount of area for motorized vehicle use and the least amount of area available for the use of full-sized motor vehicles. This would limit the chance trash would be dumped in the area. It would also limit the chance that motor vehicle mishaps would result in spills of fuels and lubricants although this does not typically accompany casual motor vehicle use of an area. Regular monitoring of all areas and prompt and regular cleanup of trash is the best way minimize environmental impacts.

#### **Alternative 1:**

Alternative 1 is similar to the Proposed Action in terms of the amount of area open to use by motor vehicles. Potential impacts would be similar. Regular monitoring of all areas and prompt and regular cleanup of trash is the best way minimize environmental impacts.

#### **Alternative 2:**

Alternative 2 is similar to the Proposed Action and Alternative 1 in terms of the amount of area open to motorized vehicles. It does make additional trail mileage available for motorcycle use. However, fuel spills from motorcycles either rarely occurs or the impacts are negligible and thus are not detected. Regular monitoring of all areas and prompt and regular cleanup of trash is the best way minimize environmental impacts.

**No Action Alternative:**

The No Action Alternative opens the largest area to full sized motor vehicle use and thus maximizes the potential impacts from trash dumping. By the same token it also closes the greatest area to all uses. Only the complete closure of an area to all uses eliminates the potential impacts from solid and hazardous wastes. Regular monitoring of all areas and prompt and regular cleanup of trash is the best way minimize environmental impacts.

**Cumulative Impacts:**

Impacts from all alternatives are likely to be negligible to non-existent as are cumulative impacts.

**ENVIRONMENTAL JUSTICE**

**Affected Environment:**

Presidential Executive Order 12898 mandates that high and/or adverse environmental impacts resulting from federal actions will not be disproportionately borne by minority or low income populations. Disproportionate impacts are those that would affect minority or low-income populations at levels appreciably higher than effects to non-minority or non-low income groups. Minority populations include those of Hispanic or Native American ethnicity.

Census data from 2011 shows that non-Hispanic whites comprised 79.7% of the population in Ouray, Montrose and San Miguel counties, which is higher than the Colorado average of 69.7%. Native Americans represented 1.3% of the populations in the same counties, about the same as the Colorado average of 1.6%. The Hispanic population represented 17.5% of the counties, below the Colorado average of 20.9% (U.S. Department of Commerce, Census Bureau, 2011).

In 2011, 10.5% of the populations in Ouray, Montrose and San Miguel counties earned incomes below the federal poverty level compared to a Colorado average of 12.2% (U.S. Department of Commerce, Census Bureau, 2011).

**Environmental Consequences/Mitigation:**

**Proposed Action, Alternative 1 and Alternative 2:**

These alternatives were developed based on resource conditions and increasing demands for recreation and the resulting impacts; each alternative would designate routes and uses. None of these alternatives would have a disproportionate impact on minority or low income. Horse riding and hiking is allowed on any open route and cross-country. There are also additional BLM public lands and US Forest Service lands near the planning area that allow for a variety of recreational activities, including motorized and non-motorized.

**No Action Alternative:**

The No Action Alternative would not change existing uses within the planning area and recreational uses would not be altered. Although demands and impacts would continue to increase, it is not anticipated this alternative would result in a disproportionate impact on minority or low income populations.

**Cumulative Impacts:**

Measurable cumulative impacts would not be likely as a result of implementing any alternative.

**SOCIO-ECONOMICS**

**Affected Environment:**

The planning area is in Ouray County. Between 2000 and 2010, the population within Ouray County grew 18.5% (the State grew by about 17%). Population is expected to grow by about the same amount over the next ten years. Part of the growth within Ouray County can be attributed to the abundance of nearby public lands managed by the BLM and the US Forest Service.

Median household income in Ouray County in 2010 was \$58,393, which was slightly higher than the Colorado average of \$56,456. Persons below the poverty level in Ouray County in 2010 were 8.2%, which was lower than the Colorado rate of 12.2% (U.S. Department of Commerce, Census Bureau, 2011).

In 2010, Ouray County had 2,457 estimated total jobs. Most of the jobs were in accommodation and food (392), Government (387), construction (382), retail trade (212), professional and business services (191), other services (163), and agriculture (113) (State of Colorado Jobs by Sector [NAICS based], Department of Local Affairs, 2010).

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/rivers 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/Mitigation:**

**Proposed Action:**

Of the three action alternatives, the Proposed Action would provide the most variety of trails, and 6.8 miles more total trails than the no action alternative. Under the Proposed Action, the local economy would likely derive some economic benefit from additional trails designated for mountain biking and hiking. Although there would likely be economic benefits derived, the combination of travel uses on the public lands would probably not have a major effect on population, employment, or income.

Socially, the additional trails for hiking and mountain biking would benefit the local community more than the no action alternative.

**Alternative 1:**

Of the three action alternatives, alternative 1 would provide the most miles of bicycle and foot trails and 11.5 miles more total trails than the no action alternative. Under alternative 1, the local economy would likely derive some economic benefit from additional trails for mountain biking and hiking. Because there would be more bicycle trails than all alternatives, the economic benefit would likely be greatest under alternative 1. Although there would likely be economic benefits derived, the combination of travel uses on the public lands would probably not have a major effect on population, employment, or income.

Socially, the additional trails for hiking and mountain biking would benefit the local community more than the no action alternative and likely slightly more than the Proposed Action.

**Alternative 2:**

Of the three action alternatives, alternative 2 would provide the fewest miles of bicycle and foot trails, and 1.4 miles more total trails than the no action alternative (the fewest of the action alternatives). Under alternative 2, the local economy would likely not derive economic benefit from designating trails. The few (10.1) miles of motorized single track trails would not provide a quality day trip or destination travel for motorcycle trail riders.

Socially, the additional miles of trails would provide a slightly increased opportunity for hiking and mountain biking 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:**

Past and present actions regarding socio-economics include all activities that contribute to the local economy and the way of life. The Proposed Action and Alternative 1, when combined with past, present and reasonably foreseeable actions, would have negligible positive impact to the local economy. Alternative 2 and the no action would not have measurable impacts to the local economy.

**ACCESS AND TRANSPORTATION**

**Affected Environment:**

The UFO Travel Management Plan Amendment (2010) changed the travel designation from open with seasonal restrictions to travel limited to existing routes within the Uncompahgre Riverway Area, and limited to existing routes with seasonal closures from December 1<sup>st</sup> to April 30<sup>th</sup> in the Ridgway and Ouray County Ridgway Gravel Pit Areas. All three areas provide for several right-of-ways (ROWS) and permitted and/or leased actions such as the gravel pit, utility lines, and private land access.

The Ridgway Area is directly adjacent to the Ridgway State Park where only full sized motorized travel is allowed on roads and non-motorized travel is allowed on the roads and trails. All travel within the Ouray County Ridgway Gravel Pit Area is limited to authorized users due to Mining and Safety Health Association (MSHA) regulations. The Ridgway Area can be accessed by Highway 550 on the east, Ouray County Road 10 on the south, and Ouray County Road 8 on the north.

The Uncompahgre Riverway Area is surrounded by private land and Ridgway city property. The area southwest of the Uncompahgre River has a concrete trail running through it starting at the town of Ridgway and going all the way to Ridgway State Park. Easements dictate that travel on this trail remains non-motorized. The area north of the Uncompahgre River is adjacent to the town of Ridgway's property and the Dennis Weaver Memorial Park. The town only allows hiking within the Memorial Park eliminating motorized, mechanized, and horseback riding access to the northwestern piece of the Uncompahgre Riverway Area.

Within the planning area the existing BLM road network consists primarily of low standard dirt routes that are linked to county roads or Highway 550. 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 harvesting forest products, constructing power transmission and telephone lines, and constructing irrigation ditches and pipelines.

In today's environment, BLM routes are needed to serve both functional and recreational needs. Over the years, some routes have been improved to accommodate changes in the types of vehicles using them and to respond to the growing use of the public lands for recreational activities. Routes are still needed for such purposes as access for power line maintenance, but they are also needed for serving a variety of recreational uses.

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.

The inventory identified a total of 15.2 miles of existing routes on BLM-managed public lands, which does not include routes on surrounding private lands or other ownerships that lead onto BLM lands. The total mileage includes 0.6 miles of non-BLM-managed roads that are managed under county jurisdiction 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. There is also ~1 mile of routes within the Ouray County Ridgway Gravel Pit. Subtracting the non-BLM-managed and gravel pit mileage from the total miles leaves a balance of 13.1 miles of routes managed by BLM on public lands. The mileages of existing routes by travel use categories are summarized in Table 1.

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/Mitigation:**

#### **Proposed Action:**

The implementation of the Proposed Action would establish a travel management plan with a system of routes with designated travel uses and seasons of use that would generally benefit the overall management of the transportation system for planning construction and maintenance needs. 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.

Under the Proposed Action, 19.9 miles of motorized and non-motorized routes would be designated, available, and managed for public use. Of these, approximately 2.4 miles would be available for full sized motorized use, and 17.5 miles for non-motorized use only. Under the Proposed Action, 9.4 fewer miles of routes would be managed for motorized use and 16.2 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 and Table 2 located at the front of this document.

Under the Proposed Action, the existing routes that are causing or have the potential to cause environmental impacts because they are poorly located and designed, would either be closed, reconstructed, or designated for travel uses that are less impacting to the environment.

Most of the existing routes with user conflicts or the potential for user conflicts would also be closed or be designated for the appropriate uses. Many existing routes that are experiencing or that would potentially experience environmental impacts from increasing recreation use would be designated for the appropriate uses. New trails would be constructed as to not negatively impact the resources in the affected areas.

The impacts to the management of the transportation system would increase somewhat. 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 implementation of Alternative 1 would establish a travel management plan with a system of routes with designated travel uses that would generally benefit the overall management of the transportation system for planning construction and maintenance needs. 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, seasonally or yearlong.

Under Alternative 1, 24.6 miles of motorized and non-motorized routes would be available for public use. Of these, approximately 2.8 miles would be available for motorized use and 21.8 miles for non-motorized use. Under Alternative 1, 9.6 fewer miles of routes would be managed for motorized use and 21.1 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 and Table 2 located at the front of this document.

Under Alternative 1 most of the existing routes that are causing or have the potential to cause environmental impacts to resources because they are poorly located and designed, would be designated for travel uses that would result in fewer impacts to the environment. Most of the existing routes with user conflicts or the potential for user conflicts would also be closed or be designated for appropriate uses. Many existing routes that are experiencing or that would potentially experience environmental impacts from increasing recreation use would be designated for appropriate uses. New trails would be constructed as to not negatively impact the resources in the affected areas.

This alternative, however, includes the construction of many new routes and allows non-motorized travel uses on the most miles of existing and additional routes. Consequently, of the three action alternatives, Alternative 1 would have the greatest impact on the management of the transportation system. Alternative 1 would generate the immediate need for additional construction, maintenance and improvements to support the designated travel management system. 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:**

By implementing Alternative 2, a travel management plan with a system of routes with designated travel uses that would generally benefit the overall management of the transportation system for planning construction and maintenance needs would be adopted. The existing BLM transportation system would be modified with minimal additional routes and closures. The use of motorized and mechanized modes of travel would be limited to

designated routes.

Under Alternative 2, 14.5 miles of motorized and non-motorized routes would be available for public use. Of these, approximately 13.7 miles would be available for motorized use and 0.8 miles for non-motorized use. Under Alternative 2, 1 more mile of route would be managed for motorized use and 0.4 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 and Table 2 located at the front of this document.

Under Alternative 2 all of the existing routes that are causing or have the potential to cause environmental impacts to resources because they are poorly located and designed, would either be closed, maintained, reconstructed, or designated for travel uses that are less impacting to the environment. Most of the existing routes with user conflicts or the potential for user conflicts would also be closed or be designated for the appropriate uses. Many existing routes that are experiencing or that would potentially experience environmental impacts from increasing recreation use would be designated for the appropriate uses. New trails would be constructed as to not negatively impact the resources in the affected areas.

Of the three action alternatives the impacts to transportation management would increase the least under Alternative 2. Transportation management would increase in that many more existing routes would have restricted travel conditions, and more would be closed to travel. Alternative 2 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. Use and travel by motorized and non-motorized vehicles would be allowed on all the routes except where not currently permitted. Decisions in the current Resource Management Plan for the Uncompahgre Field Office restrict motorized travel in certain parts of the planning area from December 1 through April 30 annually. A high potential exists for new user-created routes to be developed through use by visitors and others.

The “Limited to Existing Routes” designations would also continue. The current policies allowing the use of bicycles and other mechanized vehicles off existing routes and driving motorized vehicles off routes to park, camp, or retrieve game would be unchanged.

Currently 13.1 miles of motorized and non-motorized routes are located in the area that is recognized as existing, legal routes. Approximately 12.7 miles of these are managed for motorized use, and 0.4 miles are managed for non-motorized use. For a complete summary of the mileages by the individual travel use categories for each alternative, see Table 1 and

Table 2 located at the front of this document.

Under the No Action, the environmental impacts from the increased use of poorly located and designed routes would steadily grow over time. Conflicts resulting from the incompatible uses of routes would also steadily increase. Existing routes that currently have low levels of motorized and mechanized use could steadily experience growing levels of activity, resulting in greater impacts to the resources and an increase in user created routes will continue to increase over time.

Under the No Action, impacts to the management of the transportation system would also steadily grow over time. A need for route maintenance would result from this alternative. However, 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 mitigate 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 conflicts with other uses occur.

### **Cumulative Impacts:**

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 maintenance and upgrades, utility corridor maintenance and upgrades, and new road rights-of-way. Other future activities near the travel planning area that could potentially impact transportation include Bureau of Reclamation and Ridgway State Park projects, local land use planning, soil research, vegetation treatments, county road upgrades, special recreation permits and activities, and utility rights 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.

## **REALTY AUTHORIZATIONS**

### **Affected Environment:**

Various land use authorizations are present within the Ridgway Travel Management Planning Area. Types of right-of-way facilities include the following: powerlines including transmission and distribution lines (aerial and buried) and an associated power substation, telephone and fiber optic cables, a water pipeline, and access roads to private property. Ouray County Road 10B provides public access into the southern portion of the main planning area. The county road has a seasonal closure from December 1<sup>st</sup> through April 30<sup>th</sup> each year which allows only administrative vehicle access during this time period. New rights-of-way, or amendments to existing authorizations, would be considered on a case-by-case basis within the planning area and would require specific environmental analysis in processing the application.

### **Environmental Consequences/Mitigation:**

#### **Proposed Action and Alternative 1 and 2:**

Routes designated for public use would avoid rights-of-way to the extent possible. If they cannot be avoided, caution will be taken to ensure no impacts to facilities or disruption of use occurs. No impacts would occur to existing land use authorizations under the Proposed Action or Alternative 1 or 2.

#### **No Action Alternative:**

No impacts would occur to existing land use authorizations under the No Action Alternative.

#### **Cumulative Impacts:**

No cumulative impacts would occur to land use authorizations.

## **FIRE AND FOREST MANAGEMENT**

### **Affected Environment:**

Most of the Ridgway Travel Plan Area is located within pinyon-juniper woodlands. These woodland stands are interspersed with open areas dominated by sagebrush and mountain shrub communities. The project also would impact sagebrush and mountain shrub within the Uncompahgre Riverway Area.

In 2008, approximately 40 acres within the Ridgway Area were treated to reduce the risk of a damaging wildfire to the Dallas Creek Substation. That process opened the stands of pinyon and juniper and reduced canopy continuity.

The woodlands within the Planning Area range in age from approximately 75-500 years in age and have experienced varying levels of wood cutting by hunters, firewood, and fencepost collectors, as well as small disturbances from wildland fire. Some unauthorized firewood cutting and harvesting has occurred in the Planning Area.

### **Environmental Consequences/Mitigation:**

#### **Proposed Action and Alternative 1:**

Existing and future individual firewood permits and permits for gathering other forest products would be issued, with stipulations that address motorized vehicular access. Closing some routes would limit the public's ability to access forest products in some areas. The closure of routes and the travel conditions of use could also deter unauthorized gathering because of this inconvenience.

Limiting use on some routes to single-track activities such as hiking, equestrian, or mountain bikes could restrict access if forest management activities require the use of motorized, full-size vehicles and could increase the costs of future forest management and may increase response time for firefighting apparatus. Routes restricted to administrative uses only will still allow emergency equipment to respond accordingly to wildfires.

**Alternative 2:**

Under Alternative 2, motorized single track usage would increase. Coupled with growing demands for forest product gathering or cutting, this would result in continued loss of vegetation and an increase in the rate of creation of new routes from cross-country travel for forest product gathering.

**No Action Alternative:** Under the No Action Alternative, motorized usage would remain the same, consequentially allowing for an opportunity for continued illegal firewood cutting and creation of new routes from cross-country travel for forest product gathering.

**Cumulative Impacts:**

The alternatives under consideration create no long-term adverse or beneficial cumulative effects to forest management in the travel planning area when considered with other reasonably foreseeable actions.

**NOISE****Affected Environment:**

Ambient sound and noise levels vary greatly throughout the area. Ambient sound includes the wind and noise originating from vehicle traffic on Highway 550, Ouray County roads and privately owned lands. Other noise sources include industrial activities, farming and ranching activities, aircraft over-flights, recreational target shooting, and activities related to uses around private land areas. Many areas within the planning area are, however, relatively quiet. The preponderance of these quiet areas is found on public lands.

Vehicles on the highway and 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. Those areas that border county roads and state highway are exposed to continuous high levels of traffic noise from cars and large trucks. The level of noise generated by car and truck traffic generally lessens with increased distance from the highway and county 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 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 dirt bike 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 will be trained in test procedures. Education and enforcement of sound limits can have a significant effect on noise emissions throughout the planning area.

Other than implementing the state sound emission limits, the BLM has very little ability to change the noise patterns on the non-federal lands in the planning area. The noise on and from these non-federal lands can also be expected to increase as new subdivisions are created and as traffic on the major routes increases. These increases are fueled primarily by increasing rural residential development and recreational uses.

### **Environmental Consequences/Mitigation:**

#### **Proposed Action:**

Compared to No Action, the Proposed Action, which limits motorized use to designated routes, noise levels can be expected to decrease in most of the areas, while remaining the same or increasing in others. Lower levels of noise are anticipated in areas where routes are closed or are converted from motorized to non-motorized use. Sharp decreases in noise levels resulting from decreased amounts of motorized vehicle use would be found throughout the area. However, those routes that remain available for motorized would lead to increases in noise levels originating from these routes. 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. Less noise disturbance to wildlife, adjacent property owners, and other recreation users would occur throughout the whole area.

#### **Alternative 1:**

Compared to No Action, 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 that designated non-motorized use or have route closures. The overall increase in visitors would probably 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, state and local roads. This would be caused by users of motorized vehicles shifting their use to those routes that remain open.

#### **Alternative 2:**

Compared to No Action, motorized noise levels would be expected to slightly 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. However there would be an increase in motorized noise levels that 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 low to moderate increases in noise levels on those Public Land routes that remain available for motorized use and on adjacent Federal, state and local roads.

This would be caused by users of motorized vehicles shifting their use to those routes that remain open.

**No Action Alternative:**

Noise levels under this alternative would change in a variety of ways. In most areas, noise levels would increase, varying from slight increases in some areas (the less roaded areas) to major 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 vehicle 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. The levels of noise from target shooting would generally remain the same but could slightly increase from increased levels of recreational use in some areas. Disturbance to other recreation users, adjacent private property owners, and wildlife would continue to result from the use and policies.

**Cumulative Impacts:**

In addition to growth in recreational travel, other reasonably foreseeable actions that could affect regional ambient sound and noise levels over the next 10 years on private and public lands include residential growth, new road construction on private lands, fuels reduction projects, utility corridor maintenance and upgrades, continued gravel operations, and new buried utility rights-of-way. Activities near the travel planning area that could also potentially impact ambient sound and noise levels include, Bureau of Reclamation and Ridgway State Parks projects, local land use planning, soil research, continued population growth, vegetation treatments, county road upgrades, special recreation permits and activities, and utility rights of way and corridors. 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**

**Affected Environment:**

Recreationists live throughout America, and they view outdoor recreation as an essential part of their daily lives. Each year, Americans spend \$646 billion on outdoor recreation. Colorado generates about \$13.2 billion of the \$646 billion. Outdoor recreation economy grew approximately 5 % annually between 2005 and 2011. The top five economic impact activities in annual spending from participants (in order) are camping, water sports, bicycling, trail sports, and off-roading. (The Outdoor Recreation Economy, Take it Outside for American Jobs and a Strong Economy, Outdoor Industry Association, 2012)

Federal agencies are major contributors to the recreation amenities in Colorado's southwest region, managing over 66% of the entire land base, of which two million acres are managed by the Bureau of Land Management (BLM). The Uncompahgre Field Office (UFO) manages approximately 900,000 acres of Public Lands and approximately 1,066 acres would be affected by the alternatives and travel management plans presented in this document.

Americans and foreign visitors made nearly 435 million visits to Interior managed lands. These visits supported over 403,000 jobs and contributed around \$48.7 billion in economic activity of which more than 14 billion came from Colorado. This economic output represents about 6.5% of the direct output of tourism related personal consumption expenditures for the United States for 2011 and about 7.6% of the direct tourism related employment. For the Bureau of Land Management recreation is the third major economic contribution to the national economy. (The Department Of The Interior's Economic Contributions Fiscal Year 2011, July 9, 2012)

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). Approximately a million Colorado residents live within a three hour drive of the area. Population growth within Ouray, Montrose and San Miguel counties also has a direct impact on recreation use because many residents and their families and friends recreate on public lands near their homes. Montrose County's population increased by approximately 23.5% from 2000 to 2010. For the same period, Ouray County and San Miguel County populations increased by 18.5% and 11.6%, respectively. (2010 Census Data for Colorado, [dola.colorado.gov](http://dola.colorado.gov))

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 rapid 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, identified, advertised, and mapped system of routes, visitors are uncertain about what routes are available for their use and are more likely to develop additional user created routes and continue to use new user-created routes created by others. The substantial increase in use on public lands has impacted both resources and recreation settings. The increase in recreation use is complimented by 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. In addition, the use season has been extended on much of the public land, which is snow free for a longer period of the year, increasing recreation use.

#### Activities and Opportunities in the Planning Area

The planning area, divided into three Areas, 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 front country setting. Contacts with other people are common, and large groups may be present. Improved facilities such as restrooms may be present. High use areas, such as routes and trailheads, show signs of frequent use. The public lands provide benefits to local communities because they are easily accessible to residents for recreation however it provides for the highest levels of user conflict and resource impacts.

The Ridgway Area currently has a small system of unplanned, user-created single-track trails and two-track routes that are used by recreationists from the Ridgway area and surrounding communities. The area is popular for mountain biking, hiking, horseback riding, and trail running. The area is directly adjacent to the Ridgway State Park which allows for more exposure and marketing of the area. There are currently no developed facilities on the BLM lands; however, there are several facilities offered in Ridgway State Park directly adjacent to the planning area. There has been an informal parking area developed off of County Road 10 where visitors are accessing the planning area.

The Uncompahgre Riverway Area is only approximately ¼ mile from the town of Ridgway and is directly adjacent to the Dennis Weaver Memorial Park. The Dennis Weaver Memorial Park is owned and operated by the town of Ridgway. The area can be easily accessed by a concrete trail starting at the town of Ridgway and going all the way to Ridgway State Park. Easements dictate that travel on this trail remains non-motorized. The town only allows hiking within the Memorial Park. Facilities such as restrooms, picnic tables with cabanas, concrete trail, benches and boardwalks are currently available.

The Ouray County Ridgway Gravel Pit Area is restricted to administrative use only due to safety concerns and MSHA regulations therefore the area does not provide for any recreational opportunities.

#### 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. The impacts of these activities are evaluated by BLM through the NEPA process when permit applications are received. SRPs have been and are being issued within the area. These permits were issued for a variety of activities and events including hunting (big game and mountain lion), horseback riding, and mountain bike tours.

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 and events currently authorized by SRPs to continue. New SRP applications would be evaluated through the NEPA process to determine conformance with travel management decisions and to develop potential stipulations for SRP operations.

Other Important Recreation Planning Considerations: In addition to the above, the following would be considered.

Road and Trail 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 mineral 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 probable 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 recreation plans, capacity models, and 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 Policy: For many BLM Public Lands and National Forests the distance that OHVs are currently permitted to drive off existing or designated routes for parking, camping and game retrieval is 300 feet. This regulation applies generally to most BLM and Forest Service-managed lands, with the exception of developed recreation facilities and other areas of concentrated use where parking or camping is restricted to designated parking areas and camping spurs.

Due to higher levels of public use on Public Lands, BLM managers are concerned that the long-standing 300 foot regulation is outdated and no longer provides adequate protection of vegetation and other resources. One of the major concerns with the 300 foot regulation is that new routes are often created through repeated use, and these new routes in turn become the starting points for additional 300-foot long or longer extensions. As a result of these concerns, the Uncompahgre Field Office allows users to park motorized or mechanized vehicles, appropriate to the mode of travel, immediately adjacent and parallel to BLM designated routes.

### **Environmental Consequences/Mitigation:**

#### **Proposed Action:**

Approximately 19.9 miles of motorized and non-motorized routes would be available for use in this alternative, or 6.8 more miles than would be available in 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 sustaining recreation settings and providing enhanced recreational activities than the No Action. 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 by the development of loop routes.

Routes that would not be included in this alternative or designated for motorized or mechanized modes of travel include those that would not enhance recreational activities, such as: short spurs, parallel routes, and poorly located routes. Compared to No Action, much of the available miles of routes would be improvements to the travel system (connecting routes, new routes, and route conversions) and, in turn, would improve recreation overall for users, such as the potential for reduced user conflicts. Overall, the alternative includes loop routes, adequate parking, and better route location for motorized and non-motorized travel.

For recreation uses authorized by SRPs, 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 somewhat reducing human contact with these species and potentially increase success in tracking and hunting.

The distance that vehicles would be permitted to travel off most designated routes for parking would be restricted to a distance of 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.

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 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 24.6 miles of routes would be available for public use in this alternative, or 11.5 more miles than in No Action. Potential recreational impacts from Alternative 1 would be less than those from implementing 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 and settings. An additional user facility would be constructed. This alternative 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, quality loop opportunities and better public information compared to No Action.

For big game retrieval, Alternative 1 would eliminate mechanized game carts off route which could increase the quality of hunting within the area but would require horse or foot power to retrieve big game off designated routes.

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

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

**Alternative 2:**

Approximately 14.5 miles of routes would be available for public use in this alternative, or 1.4 more miles than would be available in 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 and settings and would minimally enhance the overall recreation compared to the No Action. Potential environmental impacts would be much less than those from implementing the No Action. Minimal new routes and user facilities would be constructed and loop opportunities would be available to the public compared to the No Action.

For recreation uses authorized by SRPs, Alternative 2 would provide fewer acres to access by motorized or mechanized vehicles compared to No Action however it would provide for loop opportunities and better public information. All public lands would continue to be available for horseback riding and hiking.

For big game retrieval, Alternative 2 would be similar to Alternative 1.

Impacts for parking and dispersed camping would be similar to the Proposed Action.

Overall, this alternative would result in greatly 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 many recreational activities the community seeks out. 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 13.1 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 of 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. The No Action would not adequately respond to the needs and issues identified by recreation users.

For recreation uses authorized by SRPs, the activities and events 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 distance and location that motorized and mechanized travel could be driven off existing routes for parking, camping and game retrieval would remain unrestricted. This would continue to result in continued and increased impacts to soils, vegetation and other impacts, such as increased litter, dumping, and other illegal activities.

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.

#### **Cumulative Impacts:**

Population growth and residential development of surrounding private lands, along with other resource impacting trends, will occur throughout the greater region that will result in increased amounts of recreational usage on public lands. Activities near the travel planning area that could also potentially impact recreation include Bureau of Reclamation and Ridgway State Park projects, local land use planning, soil research, continued population growth, 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.

## **VISUAL RESOURCE MANAGEMENT**

#### **Affected Environment:**

The BLM visual resource management system and process was designed and is used to help ensure that as man-made features or surface-disturbing activities are proposed and constructed on public lands, existing landscape character and the visual resources are considered. The BLM Manual 8410-1 Visual Resource Management defines and categorizes visual resource management (VRM) classes that provide objectives for these resources as projects are proposed

and implemented in the landscape. These VRM classes are determined through an inventory process described in the manual mentioned above, and are used to provide guidance to BLM and project proponents when contemplating proposed surface disturbing activities. Class I areas are intended to protect an area from visible change, Class II areas allow for visible changes that do not attract attention, Class III areas allow for visible changes that attract attention but are not dominant, and Class IV areas allow for visible changes that can dominate the landscape.

The planning area is nestled at the base of the spectacular San Juan Mountains of southwestern Colorado. The area is highly valued by the public and local communities for its scenic overlooks. The area contains pinyon/juniper forests, sagebrush parks, and mesas offering spectacular views of the surrounding mountain peaks of the San Juan Mountain range. The public lands have been inventoried for their visual characteristics, and were classified as Visual Resource Management (VRM) Class III in the current RMP. This means that planning for and implementation of man-made features on public lands would consider these objectives and projects would be designed such that visible changes that attract attention could occur, but would not be so intrusive as to dominate the landscape.

On public lands, the existing man-made features not considered part of a natural landscape include routes, fences, structures, utility lines and rights-of-way, and land treatments (vegetative roller chopping, etc.). On private lands, most of the same features exist, in addition to residential and commercial development. Routes, as well as other man-made features are considered to be visual intrusions but they also provide a means for the public to enjoy the outstanding scenery. These features have become part of the existing landscape character.

The VRM class and management objectives were considered along with many other resource values, such as soil and water values, wildlife and wildlife habitat, vegetation conditions, duplicated routes, safety, and cultural resources during this planning and analysis process. Some existing routes were chosen to be closed and rehabilitated or relocated in order to better meet objectives, including for the visual resources. VRM Class III objectives were considered during the planning and analysis process for new proposed or relocated routes to ensure VRM objectives were achieved.

### **Environmental Consequences/Mitigation:**

#### **Impacts Common to All Alternatives**

Existing man-made features, including fences, routes, vegetation manipulations, routes, and utility facilities would continue to result in visual impacts in the landscapes. Most of the features have been in place for a number of years, and have become part of the characteristic landscape.

#### **Impacts Common to Proposed Action, Alternatives 1 and 2**

Some existing routes and disturbed areas would be closed and rehabilitated, resulting in a decrease in visual impacts, and VRM Class III management objectives being met on those landscapes.

Changing OHV designations to “Limited to Designated Routes Either Seasonally or

Yearlong”, and restricting all motorized and mechanized travel to designated routes either seasonally or yearlong would result in a decrease or elimination of new user-created routes, preventing future visual impacts from occurring. Restricting cross-country vehicular usage for camping or other activities would prevent future surface disturbances and associated visual impacts from occurring.

Potential visual impacts from new routes or travel management support facilities would not exceed visual resource management objectives as a result of good design and site location.

The management objectives for these VRM Class III public lands would be met.

**No Action Alternative:**

This alternative maintains 13.1 miles of existing motorized public and administrative routes in a variety of locations, terrain, and soils. Over time, because of the increase in travel use anticipated for all purposes and the lack of user friendly trail system, the associated visual impacts from these routes would exceed that allowable on these VRM Class III lands, as the routes would begin to dominate the landscapes.

New user-created routes and parking areas related to motorized and mechanized use, including parallel routes, multiplicity of routes going to one destination, and routes that serve no known purpose, would continue to be established through vehicular or other uses, resulting in more visual contrast or impacts in some landscapes and terrain types that offer visual exposure over a wide area. Many existing routes would continue to be widened by the usage of larger vehicles on narrow routes, such as single track or ATV two-track routes, resulting in additional vegetation removal and soil disturbances

**Cumulative Impacts:**

In addition to growth in recreational travel, other reasonably foreseeable actions that could affect visual resources over the next 10 years on private and public lands include residential growth, new road construction on private lands, fuels reduction projects, utility corridor maintenance and upgrades, continued gravel pit operations and new buried utility rights-of-way. Activities on near the travel planning area that could also potentially impact visual resources include Bureau of Reclamation and Ridgway State Park projects, local land use planning, soil research, continued population growth, vegetation treatments, county road upgrades, special recreation permits and activities, and utility rights of way and corridors. The cumulative effects to visual resources from these activities in addition to action alternatives will be long-term and most adverse and dispersed in the No Action alternative, contained and long-term in Alternatives 1, Proposed Action, and Alternative 2 (most to least impacting).

**GEOLOGY AND MINERALS**

**Affected Environment:**

In general, the geology of the planning area has Quaternary Age gravel and alluvium deposits lying unconformable on top of the Cretaceous Age Mancos Shale formation (Km). The

Cretaceous Age Dakota Sandstone is present above the Km. The geology of the Uncompahgre Riverway Area is that of river gravels and alluvium associated with the Uncompahgre River lying on top of Km.

The geology of the Ouray County Ridgway Gravel Pit Area consists of older pre-Bull Lake Age glacial gravels and alluviums in a perched bench lying unconformable on top of the Cretaceous Age Mancos Shale formation.

Mineral potential for this area includes at depth, oil and gas from the Km, coal and coal bed methane gas from the underlying Cretaceous Age Dakota Sandstone Formation, uranium and vanadium from the Jurassic Age Morrison Formation, and sodium, potassium, phosphate and gypsum from the Pennsylvanian Age Paradox Member of the Hermosa Group.

Leasable Minerals: There are no oil and gas leases at this time. Any leases issued would contain stipulations for oil and gas operation activities contained in the current resource management plan for the Uncompahgre Field Office. Much of the public land is available for oil and gas leasing, either yearlong or with seasonal restrictions to prevent disturbance to wintering big game.

No other energy leasable minerals and no non-energy leasable minerals are known to exist at this time.

Saleable Minerals: Motorized access is important for the mineral program, especially for saleable minerals. Saleable permits issued to the public in the FO include vehicular access.

Ouray County holds a free-use permit for a gravel pit located in Sec. 3, T45N, R8W, NMPM. This permit allows Ouray County to extract gravel for road maintenance purposes.

Locatable Minerals: No mining claims are located in the area. Much of the public land is open to mining claim location yearlong.

#### **Environmental Consequences/Mitigation:**

Overall, in all alternatives, a small number of miles of routes would be available for motorized and non-motorized access for minerals management purposes, and 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.

#### **Proposed Action:**

Approximately 3.3 miles would be available for access for minerals management purposes using motorized travel and approximately 16.6 miles of non-motorized routes would be available. Compared to the No Action, implementing the travel management plan in this alternative would result in fewer miles of motorized access routes being available for access to use for minerals management purposes or in exercising mineral material permits. Mineral related activities would be conducted according to BLM issued permits and stipulations

included in permits. From December 1 to April 30<sup>th</sup>, all of the routes within the Ridgway and Ouray County Ridgway Gravel Pit Area would not be available for use in order to prevent disturbance to wintering big game. Some existing routes would be closed, which would limit vehicular access to some public lands.

**Alternative 1:**

The impacts from implementing this alternative are similar to those in the Proposed Action, the difference being that approximately 3.1 miles would be available for motorized travel and 24.6 miles would be available for non-motorized travel for mineral related activities. Mineral material activities would be conducted according to BLM issued permits and stipulations included in permits.

**Alternative 2:**

The impacts from implementing this alternative are similar to those in the Proposed Action, difference being approximately 13.7 miles would be available for motorized travel and 0.8 miles would be available for non-motorized travel for mineral related activities. Mineral material activities would be conducted according to BLM issued permits and stipulations included in permits.

**No Action Alternative:**

There are approximately 13.1 miles of existing routes. About 12.9 miles would be available for use with motorized vehicles. The public lands would continue to be available and all existing routes would be available for access. Mineral material activities would be conducted according to BLM issued permits and stipulations included in permits. Existing policies for the management of use would continue, and probable expansion and proliferation of unplanned and poorly located routes by all users would occur.

**Cumulative Impacts:**

Cumulative impacts particularly for saleable minerals would be measurable by the miles and the designations of those routes within each alternative, ie fewer miles of roads designated as “Open to 4WD or 2WD” results in less areas of public land that would be accessible for motorized travel.

**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. The ability of the Law Enforcement program to increase compliance with existing use regulations is comprised of three main problems:

Manpower Limitations: At present only one law enforcement officer (Ranger) is stationed in the Uncompahgre Field Office (UFO), who covers the UFO and Gunnison Gorge National Conservation Area (GGNCA). The Ranger is responsible for enforcement activities on all public

lands. In addition to enforcing use violations, the Ranger must also handle mineral, land and realty, grazing, recreation, and other program violations.

Current Travel Management Policy: Under the BLM's current OHV regulations, motorized travel is limited to three categories of OHV designations: Open, Limited or Closed. This current OHV designation system is difficult for the public to understand and for the BLM to enforce. 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 trails have been illegally constructed within the Ridgway Travel Management Plan Area. Signs are posted on some "user created" routes indicating that they are closed to use, but many of the signs are ignored or do not stay up for very long.

### **Environmental Consequences/Mitigation:**

#### **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**

Implementation of a designated route system will 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 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. 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 also implement a travel management plan with a designated route management system that would improve the ability of law enforcement personnel to enforce restrictions. 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. 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 could possibly be required.

**Alternative 2:**

Alternative 2 would also implement a travel management plan with a designated route management system that would improve the ability of law enforcement personnel to enforce restrictions. This alternative would, however, require the most law enforcement presence, since the number of road and trails that would be designated for seasonal and yearlong 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.

**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.

**Cumulative Impacts:**

Cumulative impacts that would be measurable would not likely occur as a result of implementation of any alternative.

## ***CUMULATIVE IMPACTS SUMMARY***

### **Introduction**

This section discloses the cumulative effects from all alternatives. Cumulative effects were analyzed above for each resource. This section will analyze additional known cumulative impacts that may not have been identified above, 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). Past activities are those activities whose effects are still present on the landscape. These activities will continue into the future. Future activities are those reasonably foreseeable actions that may add to the cumulative effects on resources and social impacts. Guidance for implementing NEPA (Public Law 91-190, 1970) requires that federal agencies identify the timeframe and geographic boundaries within which they will evaluate potential cumulative effects of an action and the specific past, present, and reasonably foreseeable projects that will be analyzed. For this EA, the timeframe is five to ten

years, from approximately 2012 to 2022. This encompasses a range within which data are reasonably available and forecasts can be reasonably made. The geographic boundary of the 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. These 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.

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

**Past, Present, and Reasonably Foreseeable Actions Considered  
in Determining Cumulative Effects**

<b>Past, Present, and Reasonably Foreseeable Actions</b>	<b>Past</b>	<b>Present</b>	<b>Future</b>
Bureau of Reclamation Planning	✓	✓	✓
Ridgway State Park Planning	✓	✓	✓
Local Land Use Planning	✓	✓	✓
BLM-USGS Soil Research	✓	✓	✓
BLM Uncompahgre Field Office Resource Management Plan and Revision			✓
Continued population growth		✓	✓
Uncompahgre Field Office Vegetation Treatments	✓	✓	✓
Possible Upgrading Of Some Major County Roads In Or Through The Planning Area			✓
BLM Special Recreation Permits	✓	✓	✓

Planned BLM vegetation treatments, biological treatments, upgrading some county roads, and the growth in applications for rights of way and special recreation use permits could add to

impacts from the demand of access onto or through public lands, along with potential transportation elements to facilitate implementation of local master plans.

### **Bureau of Reclamation Planning**

The Dallas Creek Project is located in west-central Colorado near the town of Ridgway. It is named after the Dallas Creek tributary of the Uncompahgre River, which in turn is a tributary of the Gunnison River in the Upper Colorado River Basin. The planning area includes most of the Uncompahgre River Basin covering portions of Montrose, Delta, and Ouray Counties.

Ridgway Dam of the Dallas Creek Project was constructed on the Uncompahgre River in 1987 to increase water supplies for irrigation and municipal and industrial purposes, and to provide flood control. The project also includes recreational development at the reservoir and measures to enhance fishing opportunities on the Uncompahgre River, improve wildlife habitat, and mitigate wildlife losses caused by the reservoir development. No distribution facilities were constructed as part of the project. Water supplies are distributed through existing facilities or facilities constructed by the Tri-County Water Conservancy District or the water users. Recreational development includes facilities for picnicking, camping, boating, hiking, and enjoyment of the scenic setting. Measures to protect and enhance the fish and wildlife resources have been incorporated into the project plans. They include minimum flows in Uncompahgre River, a deer fence along a relocated highway, and acquisition of a wildlife range to offset losses associated with the reservoir. The Ridgway Recreation Area is administered by the Colorado Division of Parks and Wildlife.

The planning area is adjacent to a portion of the lands withdrawn by Bureau of Reclamation (BOR). Coordination of BLM activities sometimes results in BLM adopting standards or specifications that match with BOR guidelines, and vice-versa.

### **Ridgway State Park Planning**

Ridgway State Park Trails - open year-round - are renowned for their beauty and traverse virtually all the eco-zones found in the park. Seven miles of trails connect the north and south ends of the park. About three miles of universally-accessible concrete trails and 11 miles of natural surface trails enable visitors to enjoy the scenery yet remain within easy distance of park facilities.

All three park areas (Pa-Co-Chu-Puk, Dallas Creek, and Dutch Charlie) provide some universally-accessible trails close to picnic areas and restrooms. Three of the park's trails, including the Forest Discovery Nature Trail, are self-guided educational nature trails for visitors to learn more about the vegetation, wildlife and geology of the area.

During the winter months, visitors can snowshoe or cross-country ski on any of the trails. Other times of year, bikers can use all trails except the Dallas Nature Creek Trail. Equestrian use is prohibited on gravel trails but allowed on road shoulders and through meadows. Pets on a six-foot leash are allowed on all park trails, but all pet waste must be carried out and disposed of properly.

The BLM travel management planning area is adjacent to a portion of the lands managed by Ridgway State Park. Coordination of BLM activities sometimes results in BLM adopting standards or specifications that match with Colorado Park and Wildlife guidelines and vice-versa (where possible).

### **Local Land Use Planning**

Ouray County covers 542 square miles and has a population of around 4,560. Two municipalities lie within the county, the city of Ouray and the town of Ridgway. During the late 19th and early 20th centuries the primary industries in the county were mining and agriculture. With the decline of the mining industry, tourism increased with many drawn to Ouray County for its natural beauty and variety of outdoor activities. Ouray County completed its current master plan in December 1999. The city of Ouray has completed a Parks, Recreation, and Trails Master plan in 2009. The city of Ridgway has recently updated their Land Use and Parks, Trails, Open Spaces, and Facilities Master Plans in 2011 and 2012. 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 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. The cumulative impacts of combining additional new uses on private land and existing conditions as written in the No Action is major. As a result of local land use planning, cumulative impacts to all resources will also increase for the Proposed Action and Alternatives 1 and 2 due to the increased number of people and vehicles accessing private lands but will be mitigated by designating and signing roads and trails and closing areas seasonally to protect wildlife.

### **BLM-USGS Soil Research**

The BLM is working with the USGS on Mancos soil research on public lands east of Montrose and other similar adobe watershed areas.

They are analyzing impacts from surface-disturbing activities on the adobe hills and the alluvial bottoms in the Mancos Shale areas. The studies are intended to provide information on how OHV use, grazing, and other surface-disturbing activities on these highly erosive soils need to be managed to meet the BLM's public land health standards.

Research could result in improvements in outcomes for projects that otherwise would create undesirable effects to sensitive resources, such as soil and water, and could hasten rehabilitation.

### **BLM Uncompahgre Field Office Resource Management Plan and Revision**

The existing Uncompahgre Basin Resource Management Plan/Record of Decision (RMP) was approved in 1989. The major issues addressed in the RMP were coal leasing, salinity, forestry, recreation, cross-country vehicles, wilderness, and lands. Decisions were made in most resource management programs that affected travel management in the planning area. Over time, several amendments have been made to the existing RMP, including for fire management, lands management, and the Gunnison Gorge NCA land use plan. The RMP and amendments include many actions that have already been implemented, some of which have taken place within the planning area, and also decisions that have not been implemented. Route by route travel analysis

has not been done for the area. The BLM Uncompahgre Field Office is in the process of revising its 1989 Resource Management Plan with a draft RMP/EIS expected to be completed for public review in mid-2013.

Prior to the 2010 Uncompahgre Basin Resource Management Plan (RMP) Amendment, the 1989 RMP limited travel to designated routes seasonally within the Ridgway and Ouray County Ridgway Gravel Pit area, but because follow-up travel management planning has not been completed, this decision was not implemented and has resulted in cumulative impacts over the years. A large number of the existing routes were established as a result of the under-management of OHV travel. Therefore, it can be assumed that cumulative impacts for the No Action Alternative would also continue to increase. The Uncompahgre RMP revision will set schedules for travel planning in the adjacent public lands, which will contribute long term improvements in the Proposed Action and Alternatives 1 and 2.

### **Continued Population Growth**

Between 2000 and 2010, the population within Ouray County grew over 18%, and over 23% within Montrose County. Over the last decade, from 2000 through 2010, both the town of Ridgway and city of Montrose grew over 60% and the town of Ouray grew over 23%. 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 entire eastern, southern, and northern edged of the Ridgway Area planning area are in private ownership. The Uncompahgre Riverway Area planning area is surrounded by private and city ownership. Most of the private land is irrigated agricultural land, with mixed residential development. 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. As motorized and non-motorized recreation demand escalates and increases, there would be more requests for routes throughout the planning area. This would lead to widespread on-site and off-site impacts on nearby State/Bureau of Reclamation and private lands and potentially a loss of the values for which visitors come to the area to seek.

Routes established as a result of increased population growth and increases in volume of use 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. Urbanization near the planning area has contributed in the development of user created routes that contributes to cumulative soils, vegetation, and watershed impacts. Cumulative effects on aquatic and riparian resources can be mitigated through the application of watershed conservation practices to all well-designed and located agency routes during their construction, reconstruction, and maintenance as outlined in the Proposed Action and Alternatives 1 and 2.

Cumulative actions considered include regional and local growth entailing additional vehicle traffic within and through the planning area. Although vehicular travel on unpaved roads can be heavy during the late spring, summer, and the fall, the most heavily used major county roads

receive magnesium chloride treatments which “holds” soils and road base in place and abates erosion and fugitive dust. Traffic use on the remaining dirt routes and trails in the planning area does create erosion and fugitive dust, noise, and other major disturbance factors throughout the planning area.

Population growth, private land development adjacent to or near the planning area, and the increase in popularity of recreational riding, combined with the continuation of user created routes being created, incremental increases in impacts would occur to soils, air resources, floodplain functions, riparian and wetland habitat, sensitive plant and animal species and habitat, vegetation (removal, impacts, or weed invasion increases), and aquatic and terrestrial species and habitat. At the heart of these impacts is the likelihood of an exponential increase in the rate of establishment of new, user created routes as discussed in the No Action Alternative. Any additional limitations to the transportation system could cause crowding of users and may increase safety concerns and conflicts as discussed in the Proposed Action and Alternatives 1 and 2.

As considered in this analysis under No Action, the risk of adverse impacts is increased due to cross country travel and disturbed soils during the next five to 10 years due to the continuation of new user created routes and the increase in use volume as a result of population growth.

#### **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, however, cumulative use of roads to accomplish projects would be negligible. Overall land health conditions could be improved.

Implementation of treatments can 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, but design features in project plans would mitigate these impacts to vegetation (wildlife habitat, sensitive species and habitat, potentially more weeds introduced), soils, and potentially to water courses.

Cumulative effects for implementing the projects would be similar for the Proposed Action, Alternatives 1 and 2, the No Action Alternative but with the designed features outlined for the Proposed Action and Alternatives 1 and 2 effects would be minimized through rehabilitation of roads and trails that are needed for the project but are not part of the transportation plan.

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

Three major county graveled roads are located within or directly adjacent to 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 and/or the Ouray County Ridgway Gravel Pit. Private high-scale developments on the Ouray County lines have generated increased traffic by construction, visitor, 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. Urbanization near the planning area has contributed in the development of user created routes that contributes to cumulative soils, vegetation, and watershed impacts. If county roads passing through the planning area or adjacent to the planning area are upgraded in the life of this analysis, easier and quicker access to the lands in the planning area would be available, adding to the cumulative effects from increases in use of motorized vehicles for all alternatives but especially for the No Action Alternative however by upgrading the routes then there would be less dust and potentially improving air quality. Cumulative effects on aquatic and riparian resources would be mitigated through the application of watershed conservation practices to all well-designed and located routes during their construction, reconstruction, and maintenance as outlined in the Proposed Action and Alternatives 1 and 2.

### **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 recreational activities provided by commercial and special recreation uses enhance recreation 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 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 No Action, requests for these permits 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.

### **Proposed Action**

The Proposed Action would result in reductions in the incremental cumulative effect that would occur from continuing with the No Action Alternative. This alternative would result in incremental decreases in existing and potential effects by closing routes, rehabilitating routes, and implementing the conditions of use and other measures in this alternative. The land health of the planning area would be improved, air quality standards would not be violated, and other resources would realize the benefits of this alternative.

Effects include reductions in impacts from applying conditions of use, selecting appropriate locations for travel management support facilities, closing existing routes and prohibiting

potential new cross country routes. Cumulative physical effects from past, present, and future action relative to the No Action Alternative would be reduced on sensitive soils and erosive soils, in streams, riparian and wetland habitat, vegetation types, on visual resources, to terrestrial and aquatic wildlife species and habitat, special status plants and animals and their existing and potential habitat, migratory bird habitat, and other related resources.

The cumulative effects from reasonably foreseeable actions above and the effects of the Proposed Action would, when combined, not result in adverse impacts to those resources managed by BLM in the planning area.

### **Irreversible and Irretrievable Commitments of Resources**

Irreversible commitments of resources are the loss of future options and the resource cannot be regained. It applies primarily to the effects of use of nonrenewable resources such as minerals or cultural resources, or the extinction of a species. Irretrievable commitment is a term that applies to the loss of production, harvest, or use of natural resources, and the loss may or may not be permanent. For example, some or all winter wildlife habitat from an area is lost irretrievably while an area is serving as a winter sports site. The habitat lost is irretrievable, but the action is not irreversible. If the use changes, it is possible to regain the wildlife habitat.

The implementation of any of the alternatives, including the no-action alternative, would have no irreversible commitment of resources. The alternatives define the road and trail system, and propose closing of some routes not needed or that would be closed for other reasons. Some limited new route construction and the construction of some new travel management support facilities would be implemented, all of which could be rehabilitated if necessary.

Irretrievable commitment of resources would occur under all alternatives, which would be considered temporary in nature. Irretrievable commitments of resources from roads and trails exist because the travel-way changes the natural landscape to a non-natural, out-of-vegetative-production landscape. The road and trail designations of the Proposed Action and Alternatives 1 and 2 would create temporary losses associated with maintenance of roads and trails or new support facilities. Resources affected would be scenery, vegetation (including rangeland, riparian area vegetation, and woodland stands of pinyon and juniper, and associated wildlife or other animal or plant habitats). Implementation of any of the alternatives would commit these resources over the life of the road or trail.

The alternative with the highest number of miles of designated roads and trails would also cause irretrievable commitments of the most resources. The alternatives ranked from most to least for irretrievable commitment of resources are alternatives No Action Alternative, Alternative 1, Proposed Action and Alternative 2.

### **Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity**

The National Environmental Policy Act (NEPA) requires the consideration of the relationship between the short-term uses of man's environment and the maintenance and enhancement of long-term productivity which would be involved in implementing any of the alternatives being considered in an environmental document. As declared by Congress, this includes using all

practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans (NEPA Section 101).

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

***PERSONS / AGENCIES CONSULTED***

Rocky Mountain Bird Observatory  
 Ridgway State Park  
 Bureau of Reclamation  
 Colorado Parks and Wildlife  
 Alpine Archaeological Consultants

***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 Planner	Recreation; Visual Resources Management; Transportation Floodplains, Water Quality; Soils
Jedd Sondergard	Hydrologist	Air Quality, Fire and Forest Management
Kelly Homstad	Fire Use Specialist	Wetlands & Riparian Zones; Vegetation
Amanda Clements	Ecologist	Cultural; Native American Religious Concerns
Glade Hadden	Archeologist	Wildlife; Threatened, Endangered and Sensitive Species; Migratory Birds
Ken Holsinger	Biologist	Invasive, Non-Native Species
Lynae Rogers	Range Management Specialist	NEPA Review; Environmental Justice; Socio-Economics
Bruce Krickbaum	Planner	Hazardous/Solid Wastes
Alan Kraus	Hazmat Specialist	Access and Realty Authorizations
Linda Reed	Realty Specialist	Geology and Minerals
Rob Ernst	Geologist	Law Enforcement
Ted Moe	Law Enforcement	

## **REFERENCES**

- Beason, Jason P. 2011. Surveys for Raptors and Other Sensitive Bird Species on the Ridgway Trails System for the Colorado Plateau Mountain Bike Trail Association. Tech Rep. SC-RTS-CPMBA-11-1. Rocky Mountain Bird Observatory, Brighton, Colorado. 17 pp.
- Beier, P., 1993, Determining minimum habitat areas and habitat corridors for cougars: *Conservation Biology*, v. 7, no. 11, p. 94–108.
- Bruinderink, G.W.T.A., and Hazebroek, E., 1996, Ungulate traffic collisions in Europe: *Conservation Biology*, v. 10, no. 4, p. 1059–1067.
- BLM 2012. TES Wildlife and Plants Report for 2011-0011 Ridgway Travel Management. Central Files, File Code 6840. Uncompahgre Field Office, Montrose, CO.
- CDPHE. 2012. Colorado Air Quality Control Commission Report to the Public 2011-2012. Colorado Department of Public Health and Environment (CDPHE) Colorado Air Quality Control Commission. [Available online at [www.colorado.gov/cdphe/aqcc](http://www.colorado.gov/cdphe/aqcc)]
- Colorado Department of Public Health and Environment, Water Quality Control Commission, 5 CCR 1002-35 Regulation NO 35, Classifications and Numeric Standards for the Gunnison and Lower Dolores River Basin, amended June 13, 2011, effective January 1, 2012.
- Colorado Department of Public Health and Environment, 2010. Water Quality Control Commission. CCR 1002-94, Regulation #94 Colorado's Monitoring and Evaluation List, and Regulation #93, Colorado's 303(d) list of Water Quality Limited Segments Requiring TMDLs. Adopted March, 2010, Effective April 30, 2010. Dunne, T., and L.B. Leopold. 1978. *Water in environmental planning*. W.H. Freeman and Company, San Francisco, California. 818 p.
- Colorado Division of Water Resources, Colorado Decision Support Systems. Structures Database, 2011.
- Clevenger, A.P., Purroy, F.J., and M.A. Campos. 1997. Habitat assessment of a relict brown bear *Ursus arctos* population in northern Spain. *Biological Conservation* 80:17-22.
- Doherty K.E., Naugle D.E., B.L. Walker B.L., and J.M. Graham. 2008. Greater Sage-Grouse Winter Habitat Selection and Energy Development. *Journal of Wildlife Management* 72(1): 187-195.
- Dunne, T. and L.B. Leopold. 1978. *Water in Environmental Planning*. W.H. Freeman&Co. New York. 818 pp.
- Foreman T.T., Sperling D., Bissonette J.A., Clevenger A.P., Cutshall CD., Dale V.H., Fahrig L., France R., Goldman CR., Heanue K., Jones J.A., Swanson F.J., Turrentine T., and T.C Winter. 2003. *Road Ecology*. Island Press, Washington, D.C 481 pp.

- Forman, R. T. T. In press. The ecological road-effect zone of a Massachusetts (USA) suburban highway. *Conservation Biology* .
- Freddy, D. J., W. M. Bronaugh, and M. C. Fowler. 1986. Responses of mule deer to disturbance by persons afoot and snowmobiles. *Wildlife Society Bulletin* 14:63–68..
- Forman, R.T.T., and Alexander, L.E., 1998, Roads and their major ecological effects: Annual Review of Ecology and Systematics, v. 29, p. 207–231.
- Hebblewhite, M. 2008. A literature *review* of the effects of energy development on ungulates: Implications for central and eastern Montana. Report prepared for Montana Fish, Wildlife and Parks, Miles City, MT. 125 pp.
- Ingelfinger, F. and F. Anderson. 2004. Passerine Response to Roads Associated with Natural Gas extraction in a Sagebrush Steppe Habitat. *Western North American Naturalist*. 64:385-395.
- Kingery, H.E. ed. 1998. Colorado Breeding Bird Atlas. Colorado Bird Atlas Partnership and Colorado Division of Wildlife. Denver, CO.
- Leib, K.J., 2008, Concentrations and loads of selenium in selected tributaries to the Colorado River in the Grand Valley, western Colorado, 2004–2006: U.S. Geological Survey Scientific Investigations Report 2008–5036, 36 p.
- Lemly, A.D., 2002, Selenium assessment in aquatic ecosystems—A guide for hazard evaluation and water quality criteria: New York, Springer-Verlag, 161 p.
- Lovich, J.E., and Bainbridge, D., 1999, Anthropogenic degradation of the southern California desert ecosystem and prospects for natural recovery and restoration: *Environmental Management*, v. 24, no. 3, p. 309–326.
- Marion, J.L.; Olive, N. 2006. Assessing and understanding trail degradation: Results from Big South Fork National River and Recreational Area, Final Research Report. Reston, VA: U. S. Department of the Interior, U.S. Geological Survey. 41p.
- Meyer, Kevin G.. 2002. Managing Degraded Off-Highway Vehicle Trails in Wet, Unstable, and Sensitive Environments. 0223 2821P. Missoula, MT: U.S. Department of Agriculture, Forest Service, Missoula Technology and Development Center. 48 p.
- Moore, T.G., and Mangel, M., 1996, Traffic related mortality and the effects on local populations of barn owls *Tyto alba*, in Evink, G.L., Garrett, P., Zeigler, D., and Barry, J., eds., Trends in addressing transportation related wildlife mortality—Proceedings of the transportation related wildlife mortality seminar, Orlando, Florida, April 30–May 2, 1996: Tallahassee, Florida, State Department of Transportation, Report no. FL-ER-58-96, <http://www.icoet.net/ICOWET/96proceedings.asp>.
- Morgan, R.P.C. 2005. Soil Erosion and Conservation. 3rd ed. Malden, MA: Blackwell Publishing Co.

- Nietvelt, CG. 2002. The effects of roads on wildlife: bibliography. Report prepared for U.S. Forest Service Bridger-Teton National Forest, Jackson, Wyoming. 73 pp.
- Ouren, D.S., Haas, Christopher, Melcher, C.P., Stewart, S.C., Ponds, P.D., Sexton, N.R., Burris, Lucy, Fancher, Tammy, and Bowen, Z.H., 2007, Environmental effects of off-highway vehicles on Bureau of Land Management lands: A literature synthesis, annotated bibliographies, extensive bibliographies, and internet resources: U.S. Geological Survey, Open-File Report 2007-1353, 225 p.
- Patten, M.A., D.H. Wolfe, E. Shochat, and S.K. Sherrod. 2004a. Habitat fragmentation, rapid evolution, and population persistence. *Evolutionary Ecology Research*. 29 pp. Provisionally accepted for publication.
- Rost, G. and Bailey, J. distribution of mule deer and elk in relation to roads. *The Journal of Wildlife Management* 43(3),634-641. 1979. Allen Press.
- Sawyer, H., Kauffman M.J., and R.M. Nielson. 2009. Influence of well pad activity on winter habitat selection patterns of mule deer. *Journal of Wildlife Management* 73:1052-1061.
- Sawyer, H., Nielson, R., Lindzey, F., and L. McDonald. 2006. Winter habitat selection of mule deer before and during development of a natural gas field. *Journal of Wildlife Management* 70(2),396-403.2006
- Schumm, S.A., Gregory, D.I., Diffuse-Source Salinity: Mancos Shale Terrain. Technical Note 373. USDI Bureau of Land Management, Denver, CO. 169 Pp.
- State of Colorado Jobs by Sector [NAICS based], 2010. Department of Local Affairs. (Available at: [https://dola.colorado.gov/demog\\_webapps/jsn\\_parameters.jsf](https://dola.colorado.gov/demog_webapps/jsn_parameters.jsf))
- Trombulak, S. C. and C. A. Frissell. In press. Review of ecological effects of roads on terrestrial and aquatic communities. *Conservation Biology*.
- US Department of Commerce 2011. United States Census Bureau. State and County Quick Facts (Available: <http://quickfacts.census.gov/qfd/states/08000.html>)
- USFWS 2002. Birds of conservation. Migratory Bird Management, Arlington, Virginia. 99 pp. [Available: <http://migratorybirds.fws.gov/reports/bcc2002.pdf>]
- USFWS 2012. Official Species-list: Ridgeway Travel Management. Western Colorado Ecological Services Field Office, US Fish and Wildlife Service, Grand Junction, CO. Accessed: 10/22/2012.
- USGS Open-file Report 2007-1353, USDI, US Geological Survey, Environmental Effects of Off-Highway Vehicles on Bureau of Land Management Lands: A Literature Synthesis, Annotated Bibliographies, Extensive Bibliographies, and Internet Resources. By: D. Ouren, C. Hass, C. Melcher, S. Stewart, P. Ponds, N. Sexton, L. Burris, T. Fancher, and Z. Bowen.

- Van Dyke, F.B., Brocke, R.H., Shaw, H.G., Ackerman, B.B., Hemker, T.P., and F. G. Lindzey. 1986. Reactions of mountain lions to logging and human activity. *The Journal of Wildlife Management* 50:95-102.
- Walker, D.A. and K.R. Everett. 1987. Road Dust and Its Environmental Impact on Alaskan Taiga and Tundra. *Arctic and Alpine Research* 19: 479-489
- Wilson, J.P. and Seney, J.P. 1994. Erosional Impact of Hikers, Horses, Motorcycles and Off-road Bicycles on Mountain Trails in Montana. *Mountain Research and Development* 14(1): 77-88.
- Woodling, J.D.; Madison, A.; Sauter, S. 2010. Water Quality Analysis for the Uncompahgre River Basin. Uncompahgre Watershed Partnership. 89p.

## ***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.

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 1

### **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 9 categories, of which the first 5 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 6<sup>th</sup> 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 **Open to Full Sized 4WD/2WD Vehicles Only** category includes routes that are intended for use by full sized licensed vehicles only, but are also available for 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 **Mechanized Single Track** category includes routes that are intended for mechanized modes of transportation 36 inches or less in width but are also available for foot travel.

The **Non-Motorized/Non-Mechanized Single Track** category includes routes intended to accommodate horseback riding but are also available for foot travel.

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 jurisdiction over these roads and is not proposing any travel management designations, or restrictions, for these routes in this plan.

The **Administrative Access 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, and where legal public access exists are also available to the public for foot and horse travel.

The **Administrative Uses Only – No Public Entry** category consists of routes that fall within the Ouray County Ridgway Gravel Pit. These routes are **only** available to administrative uses. All other travel is not allowed including 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 2**

### **Maps of the Alternatives**

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

**(Left Blank Intentionally)**

## **Appendix 3**

### **Issues and Concerns for the Ridgway Travel Management Planning Area**

#### **Background**

The Bureau of Land Management Uncompahgre Field Office started the initial phase of the environmental assessment for the Ridgway trail proposal in February 2011. The original proposal only entailed constructing new single track trails within the Ridgway Planning Area. During the scoping period approximately 47 comments were received revealing several issues (included below) requiring attention in conjunction with the proposal of new trails. 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 April 2012. The public was notified through press releases, web site postings, and letters sent to approximately 174 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 32 individuals and organizations in response to the request for public input relating to the Ridgway 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.

#### **How the Stakeholder Comments are used**

The BLM Travel Management Planning Team first reviewed the issues and concerns of stakeholder groups. Then the team began working on defining area boundaries as well as goals and objectives for the planning area. Areas were delineated where there were similar issues and concerns.

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.

#### **Summary of Comments—Issues and Concerns**

##### **Access and Transportation**

- Recommendation to constructing a new trailhead along OCR10 and underpass under Hwy 50 but concerns over the size of the trailhead
- Close routes that lead to private land
- Concerns over parking in other areas to access the trails rather than designated parking areas
- Trail connectivity to the town of Ridgway and Ridgway State Park
- Landowners concerned about parking next to their property.

- Concerns over access from County Rd 10
- Keep the bicycle trails north of the gravel pit and substation
- Recommend that the trails on the east side of Hwy 550 be closed to all public use from January 1 through March 31 annually
- Need for non-motorized trail system to compliment the multitude of motorized trail networks on other BLM lands nearby.
- Trail expansion needed for increasing number of users.
- Terrain is perfectly suited to non-motorized trail system
- Non-motorized will greatly enhance the quality experience of the area
- Town Council and Town of Ridgway would like to see trail connectivity both to and within the area and feel the topography is well suited for this activity and would present a recreational opportunity that greatly compliments existing uses at the Ridgway State Park

### **Lands, Rights-of-Way (ROW), and Withdrawals**

- Develop an easement on the northern boundary of our property (Second Chance Humane Society) that will allow for direct public access to the trail system while eliminating the need to cross Hwy 50 or enter County Rd 10
- Consider impacts to existing ROWs
- All trails within BLM permitted Ouray County Ridgway Gravel Pit boundaries need to be closed down to public use
- Limit public activity near the power substation, the gravel pit, and County Road 10 (dangerous conditions exists due to large trucks going in and out of the pit).

### **Law Enforcement and Public Safety**

- Identify measures to reduce or eliminate the potential for conflicts
- Users currently park along the county road which causes numerous safety and resource concerns
- Mountain bikers have already created issues by ignoring existing trails and riding through wooded hillsides and private land.
- Concern for increase in trash and property destruction

### **Noise**

- Designated as non-motorized use only in order to reduce noise near town
- Landowners concerned about noise next to their property.

### **Recreation**

- Need to create vital outstanding, sustainable, accessible recreational opportunities
- Terrain and altitude of the area will provide a different window of use than other trails in the surrounding area as well as allow for more variation in trail types
- Very few mountain biking opportunities in the area
- Area is ideal for sustainable recreation trails
- Provide stacked loop system for all abilities
- Ideal mountain bike training area for youth
- Need for parking area, kiosks, brochures, maps, and a picnic area if area is developed
- Need to stay consistent with Ridgway State Parks trails

- Proposed trails minimize long site lines and avoid gradients exceeding 10%
- Area allows for visitors to enjoy outstanding views including the Cimarron's and Sneffels Range
- Maximize the use of the 1200 acres
- Area allows visitors to connect with nature and de-stress without driving far
- Opportunities for educational trips, interpretive programs and access to backcountry trails would be improved
- Area lacks hiking and biking opportunities within walking or riding distance to town
- Unauthorized trail construction has been occurring for years within the proposed planning area
- Recommend that the BLM take definitive and necessary steps to ensure development of a trail system does not encourage or invite rouge trail construction
- Dogs should be leashed at all times

### **Multi-use**

- Characteristics make it less suitable for grazing, oil and gas exploration, 4 wheel drive and other motorized exploration, and other activities common on BLM lands
- Concerns over hunter and trail user conflicts

### **Socioeconomics**

- Offer more educational and economic opportunities as well as greater outdoor experiences
- Tourism is the economic engine that sustains the area
- Attract tourist dollars and benefit local economy
- Development of low impact trail system can help our economy
- Larger variety of trails, more miles of trails and a larger diversity will open the doors to many more visitors and even full time residents of Ridgway
- Trail system would help Ridgway become an outdoor destination town
- One of the top goals for Ouray County's economic development plan is to enhance outdoor recreation opportunities for visitors and residents

### **Soils**

- Protect from ongoing erosion
- Designed and constructed trails to minimize potential erosion

### **Vegetation**

- Maintenance of trails needs to address keeping overhanging shrubs and tree branches away from trail corridor
- Reduction in the amount of available forage and security cover to local wildlife species
- Potential increase of noxious weeds

### **Wildlife**

- Need to address benefits for wildlife habitat
- Preservation of winter habitat for deer and elk is critical to the maintenance of healthy herds.

- Need to address the effects of construction on wildlife habitat
- Seasonal closures to protect big game habitat from December 1 to April 30 in order to stay consistent with Ouray County Ridgway Gravel Pit closures
- Migratory birds and raptors reside and nest in the area being considered for the trails
- Loss of wildlife habitat is not acceptable for economic benefit.
- Home to many species of mammals and birds and unsuited for the intended use
- Concerns over the space between trails in order to allow for wildlife to have refuge from activity as they move across the area in all seasons
- Lies within mapped bald eagle winter range, black bear and mountain lion overall range, wild turkey winter range, and elk and mule deer severe winter range, winter range and winter concentration area.
- Any increased activity can cause big game species to abandon high quality winter range habitat for low quality habitat
- Has the potential to greatly impact adjacent habitat outside of the project boundaries.

**Appendix 4**

**THREATENED AND ENDANGERED SPECIES OF THE UFO <sup>1</sup>**

SPECIES	STATUS	HABITAT DESCRIPTION <sup>2</sup>	CRITICAL HABITAT? <sup>3</sup>	KNOWN? <sup>4</sup>	RANGE? <sup>5</sup>	HABITAT? <sup>6</sup>	NO EFFECT? <sup>7</sup>	MENLAE <sup>8</sup>	MELAE <sup>9</sup>
<i>FISH</i>									
Bonytail <i>Gila elegans</i>	E	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"/>
Humpback chub <i>Gila cypha</i>	E	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"/>
Razorback sucker <i>Xyrauchen texanus</i>	E	Warm-water reaches of the Colorado River mainstem and larger tributaries; some reservoirs; low	No	None	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Appendix 4**

**THREATENED AND ENDANGERED SPECIES OF THE UFO <sup>1</sup>**

SPECIES	STATUS	HABITAT DESCRIPTION <sup>2</sup>	CRITICAL HABITAT? <sup>3</sup>	KNOWN? <sup>4</sup>	RANGE? <sup>5</sup>	HABITAT? <sup>6</sup>	NO EFFECT? <sup>7</sup>	MENLAE <sup>8</sup>	MELAE <sup>9</sup>
		velocity, deep runs, eddies, backwaters, sidecanyons, pools, eddies; cobble, gravel, and sand bars for spawning; tributaries, backwaters, floodplain for nurseries							
Colorado pikeminnow <i>Ptychocheilus lucius</i>	E	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"/>

## Appendix 4

### THREATENED AND ENDANGERED SPECIES OF THE UFO <sup>1</sup>

SPECIES	STATUS	HABITAT DESCRIPTION <sup>2</sup>	CRITICAL HABITAT? <sup>3</sup>	KNOWN? <sup>4</sup>	RANGE? <sup>5</sup>	HABITAT? <sup>6</sup>	NO EFFECT? <sup>7</sup>	MENLAE <sup>8</sup>	MELAE <sup>9</sup>
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"/>
<b>MAMMALS</b>									
Black-footed ferret <sup>10</sup> <i>Mustela nigripes</i>	E	Prairie dog colonies for shelter and food; >200 acres of habitat with at least 8 burrows/acre	No	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Canada lynx <i>Lynx canadensis</i>	T	Spruce-fir, lodgepole pine, willow carrs, and adjacent aspen and mountain shrub communities that support snowshoe hare and other prey	No	None	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Appendix 4

### THREATENED AND ENDANGERED SPECIES OF THE UFO <sup>1</sup>

SPECIES	STATUS	HABITAT DESCRIPTION <sup>2</sup>	CRITICAL HABITAT? <sup>3</sup>	KNOWN? <sup>4</sup>	RANGE? <sup>5</sup>	HABITAT? <sup>6</sup>	NO EFFECT? <sup>7</sup>	MENLAE <sup>8</sup>	MELAE <sup>9</sup>
North American Wolverine <i>Gulo 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	None	<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	None	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>BIRDS</b>									
Mexican spotted owl <sup>11</sup> <i>Strix occidentalis</i>	T	Mixed-conifer forests and steep-walled canyons with minimal human disturbance	No	None	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Appendix 4

### THREATENED AND ENDANGERED SPECIES OF THE UFO <sup>1</sup>

SPECIES	STATUS	HABITAT DESCRIPTION <sup>2</sup>	CRITICAL HABITAT? <sup>3</sup>	KNOWN? <sup>4</sup>	RANGE? <sup>5</sup>	HABITAT? <sup>6</sup>	NO EFFECT? <sup>7</sup>	MENLAE <sup>8</sup>	MELAE <sup>9</sup>
Southwestern willow flycatcher <sup>11</sup> <i>Empidonax traillii extimus</i>	E	For breeding, riparian tree and shrub communities along rivers, wetlands, and lakes; for wintering, brushy grasslands, shrubby clearings or pastures, and woodlands near water	No	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gunnison sage grouse <i>Centrocercus minimus</i>	C	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;	No	None	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Western yellow-billed cuckoo <i>Coccyzus americanus</i>	C	Riparian, deciduous woodlands with dense undergrowth; nests in tall cottonwood and mature willow riparian, moist thickets, orchards, abandoned pastures	No	None	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>PLANTS</i>									

## Appendix 4

### THREATENED AND ENDANGERED SPECIES OF THE UFO <sup>1</sup>

SPECIES	STATUS	HABITAT DESCRIPTION <sup>2</sup>	CRITICAL HABITAT? <sup>3</sup>	KNOWN? <sup>4</sup>	RANGE? <sup>5</sup>	HABITAT? <sup>6</sup>	NO EFFECT? <sup>7</sup>	MENLAE <sup>8</sup>	MELAE <sup>9</sup>
Clay-loving wild buckwheat <i>Eriogonum pelinophilum</i>	E	Mancos shale badlands in salt desert shrub communities, often with shadscale, black sagebrush, and mat saltbush; 5200' – 6400' in elevation	No	None	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Colorado hookless cactus <i>Sclerocactus glaucus</i>	T	Salt-desert shrub communities in clay soils on alluvial benches and breaks, toe slopes, and deposits often with cobbled, rocky, or graveled surfaces; 4500' – 6000' in elevation	No	None	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>INVERTEBRATES</i>									
Uncompahgre fritillary butterfly <sup>11</sup> <i>Boloria acrocne</i>	E	Restricted to moist, alpine slopes above 12,000' in elevation with extensive snow willow patches; restricted to San Juan Mountains	No	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<sup>1</sup> U.S. Fish and Wildlife Service. 2009. Federally listed species in Colorado. Official correspondence, February.

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

<sup>3</sup> Designated Critical Habitat in Planning Area

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

- <sup>5</sup> Planning area is within the current known range of the species?
- <sup>6</sup> Planning area contains suitable habitat for the species?
- <sup>7</sup> Project activities will have “No Effect” to the species or it’s habitat
- <sup>8</sup> Project activities “May Effect, Not Likely to Adversley Effect” to the species or it’s habitat
- <sup>9</sup> Project activities “May Effect, Likely to Adversley Effect” to the species or it’s habitat
- <sup>10</sup> Black-footed ferret believed to be extirpated from this portion of its range.
- <sup>11</sup> Species not known to occur within UFO boundaries, but known to occur in close proximity.

## Appendix 5

### BLM SENSITIVE SPECIES OF THE UFO <sup>1</sup>

SPECIES	HABITAT DESCRIPTION <sup>2,3</sup>	KNOWN <sup>4</sup>	RANGE? <sup>5</sup>	HABITAT? <sup>6</sup>	NO EFFECT? <sup>7</sup>	MAI <sup>8</sup>	LFL <sup>9</sup>
<i>FISH</i>							
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	None	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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	None	<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	None	<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 checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>MAMMALS</i>							
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 <sup>14</sup> <i>Cynomys leucurus</i>	Level to gently sloping grasslands and semi-desert grasslands from 5,000' – 10,000' in elevation	None	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Appendix 5

### BLM SENSITIVE SPECIES OF THE UFO <sup>1</sup>

SPECIES	HABITAT DESCRIPTION <sup>2,3</sup>	KNOWN <sup>4</sup>	RANGE? <sup>5</sup>	HABITAT? <sup>6</sup>	NO EFFECT? <sup>7</sup>	MAI <sup>8</sup>	LFL <sup>9</sup>
Kit fox <i>Vulpes macrotis</i>	Semi-desert shrublands of saltbrush, shadscale and greasewood often in association with prairie dog towns	None	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Allen's (Mexican) big-eared bat <i>Idionycteris phyllotis</i>	Ponderosa pine, pinyon-juniper woodland, oak brush, riparian woodland (cottonwood); typically found near rocky outcrops, cliffs, and boulders; often forages near streams and ponds. Thought to be in the West End.	None	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Big free-tailed bat <i>Nyctinomops macrotis</i>	Rocky areas and rugged terrain in desert and woodland habitats; roosts in rock crevices in cliffs and in buildings caves, and occasionally tree holes	None	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Spotted bat <i>Euderma maculatum</i>	Desert shrub, ponderosa pine, pinyon-juniper woodland, canyon bottoms, open pasture, and hayfields; roost in crevices in cliffs with surface water nearby	None	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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	None	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fringed myotis <i>Myotis thysanodes</i>	Desert, grassland, and woodland habitats including ponderosa pine, pinyon/juniper, greasewood, saltbush, and scrub oak; roosts in caves, mines, rock crevices, and buildings	None	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>BIRDS</b>							
Bald eagle <sup>5</sup> <i>Haliaeetus leucocephalus</i>	Nests in forested rivers and lakes; winters in upland areas, often with rivers or lakes nearby	None	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Appendix 5

### BLM SENSITIVE SPECIES OF THE UFO <sup>1</sup>

SPECIES	HABITAT DESCRIPTION <sup>2,3</sup>	KNOWN <sup>4</sup>	RANGE? <sup>5</sup>	HABITAT? <sup>6</sup>	NO EFFECT? <sup>7</sup>	MAI <sup>8</sup>	LFL <sup>9</sup>
American peregrine falcon <sup>5</sup> <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	None	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Northern goshawk <i>Accipiter gentilis</i>	Nests in a variety of forest types including deciduous, coniferous, and mixed forests including ponderosa pine, lodgepole pine, or in mixed-forests with fir and spruce; also nest in aspen or willow forests; migrants and wintering individuals can be observed in all coniferous forest types	None	<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	None	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Burrowing owl <sup>15</sup> <i>Athene cucicularia</i>	Level to gently sloping grasslands and semi-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	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
White-faced ibis <i>Plegadis chihi</i>	Marshes, swamps, ponds and rivers	None	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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"/>

## Appendix 5

### BLM SENSITIVE SPECIES OF THE UFO <sup>1</sup>

SPECIES	HABITAT DESCRIPTION <sup>2,3</sup>	KNOWN <sup>4</sup>	RANGE? <sup>5</sup>	HABITAT? <sup>6</sup>	NO EFFECT? <sup>7</sup>	MAI <sup>8</sup>	LFL <sup>9</sup>
Brewer's sparrow <i>Spizella berweri</i>	Breeds primarily in sagebrush shrublands, 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	None	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Black swift <sup>15</sup> <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"/>
<b>REPTILES AND AMPHIBIANS</b>							
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Midget faded rattlesnake <sup>13</sup> <i>Crotalus viridis concolor</i>	Rocky outcrops for refuge and hibernacula, often near riparian; upper limit of 7500'-9500' in elevation	None	<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>	Variable types including shrubby hillsides, canyons, open ponderosa pine stands and pinyon-juniper woodlands, arid river valleys and canyons, animal burrows, and abandoned mines; hibernates in rock crevices	None	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Northern leopard frog <sup>14</sup> <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	None	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Appendix 5

### BLM SENSITIVE SPECIES OF THE UFO <sup>1</sup>

SPECIES	HABITAT DESCRIPTION <sup>2,3</sup>	KNOWN <sup>4</sup>	RANGE? <sup>5</sup>	HABITAT? <sup>6</sup>	NO EFFECT? <sup>7</sup>	MAI <sup>8</sup>	LFL <sup>9</sup>
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"/>
<b>PLANTS</b>							
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"/>
Grand Junction milkvetch <i>Astragalus linifolius</i>	Sparsely vegetated habitats in pinyon-juniper and sagebrush communities, often within Chinle and Morrison Formation and selenium-bearing soils; elevation 4800' – 6200'	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Naturita milkvetch <i>Astragalus naturitenis</i>	Cracks and ledges of sandstone cliffs and flat bedrock area typically with shallow soils, within pinyon-juniper woodland; elevation 5400' – 6700'	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
San Rafael milkvetch <i>Astragalus rafaensis</i>	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; elevation 4500'– 5300'	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sandstone milkvetch <i>Astragalus sesquiflorus</i>	Sandstone rock ledges (Entrada formation), domed slickrock fissures, talus under cliffs, sometimes in sandy washes; elevation 5000' – 5500'	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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"/>

## Appendix 5

### BLM SENSITIVE SPECIES OF THE UFO <sup>1</sup>

SPECIES	HABITAT DESCRIPTION <sup>2,3</sup>	KNOWN <sup>4</sup>	RANGE? <sup>5</sup>	HABITAT? <sup>6</sup>	NO EFFECT? <sup>7</sup>	MAI <sup>8</sup>	LFL <sup>9</sup>
Fragile (slender) rockbrake <i>Cryptogramma stelleri</i>	Cool, moist, sheltered calcareous cliff crevices and rock ledges	None	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kachina daisy (fleabane) <sup>15</sup> <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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Colorado (Adobe) desert parsley <i>Lomatium concinnum</i>	Adobe hills and plains on rocky soils derived from Mancos Formation shale; shrub communities dominated by sagebrush, shadscale, greasewood, or scrub oak; elevation 5500' – 7000'	None	<input checked="" 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, often in draws and washes with sparse vegetation; elevation 5000' – 5800'	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dolores skeleton plant <sup>15</sup> <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"/>

## Appendix 5

### BLM SENSITIVE SPECIES OF THE UFO <sup>1</sup>

SPECIES	HABITAT DESCRIPTION <sup>2,3</sup>	KNOWN <sup>4</sup>	RANGE? <sup>5</sup>	HABITAT? <sup>6</sup>	NO EFFECT? <sup>7</sup>	MAI <sup>8</sup>	LFL <sup>9</sup>
Paradox (Aromatic Indian) breadroot <i>Pediomelum aromaticum</i>	Open pinyon-juniper woodlands in sandy soils or adobe hills; elevation 4800' – 5700'	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>INVERTEBRATES</i>							
Great Basin silverspot butterfly <i>Speyeria nokomis nokomis</i>	Found in streamside meadows and open seepage areas with an abundance of violets	None	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

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

<sup>3</sup> 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.

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

<sup>5</sup> Planning area is within the current known range of the species?

<sup>6</sup> Planning area contains suitable habitat for the species?

<sup>7</sup> Project activities will have no effect to the species or it's habitat

<sup>8</sup> Project activities may effect individuals of the species or it's habitat, but not likely to result in a trend toward federal listing

<sup>9</sup> Project activities are likely to result in a trend toward federal listing for the species

<sup>10</sup> ESA delisted species.

<sup>11</sup> Federal candidate species; in accordance with BLM policy and Manual 6840, candidate and proposed species are to be managed and conserved as BLM sensitive species. For the Gunnison prairie dog, candidate status includes only those populations occurring in the "montane" portion of the species' range.

<sup>12</sup> Species not known to occur in UFO.

<sup>13</sup> Validity of subspecies designation is in question by taxonomists.

<sup>14</sup> Species was petitioned for listing and is currently under status review by FWS, and a 12-month finding is pending; i.e., listing of the species throughout all or a significant portion of its range may be warranted.

<sup>15</sup> Species not on BLM Colorado State Director's Sensitive List; included at the Field Office level to account for recent sightings, proximate occurrences, and/or potential habitat.

## Appendix 6

### BIRDS OF CONSERVATION CONCERN OF THE UFO <sup>1</sup>

SPECIES	HABITAT DESCRIPTION <sup>2</sup>	RANGE/STATUS <small>2, 3</small>	KNOWN <small>4</small>	RANGE <sup>5</sup>	HABITAT? <sup>6</sup>	NO EFFECT? <sup>7</sup>	MAI <sup>8</sup>	LFL <sup>9</sup>
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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bald eagle <sup>10</sup> <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					

## Appendix 6

### BIRDS OF CONSERVATION CONCERN OF THE UFO <sup>1</sup>

SPECIES	HABITAT DESCRIPTION <sup>2</sup>	RANGE/STATUS <sup>2, 3</sup>	KNOWN <sup>4</sup>	RANGE <sup>5</sup>	HABITAT? <sup>6</sup>	NO EFFECT? <sup>7</sup>	MAI <sup>8</sup>	LFL <sup>9</sup>
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	None	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Peregrine falcon <sup>10</sup> <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 crags	Spring/summer resident, breeding	See assessment under Sensitive Species Section					
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	None	<input checked="" 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	Spring/ fall migrant, non-breeding	See assessment under Sensitive Species Section					
Snowy plover <sup>11</sup> <i>Charadrius alexandrinus</i>	Sparsely vegetated sand flats associated with pickleweed, greasewood, and saltgrass	Spring migrant, non-breeding	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Appendix 6

### BIRDS OF CONSERVATION CONCERN OF THE UFO <sup>1</sup>

SPECIES	HABITAT DESCRIPTION <sup>2</sup>	RANGE/STATUS <sup>2, 3</sup>	KNOWN <sup>4</sup>	RANGE <sup>5</sup>	HABITAT? <sup>6</sup>	NO EFFECT? <sup>7</sup>	MAI <sup>8</sup>	LFL <sup>9</sup>
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	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Yellow-billed cuckoo <sup>12</sup> <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	None	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Burrowing owl <i>Athene cunicularia</i>	Open grasslands and low 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					

## Appendix 6

### BIRDS OF CONSERVATION CONCERN OF THE UFO <sup>1</sup>

SPECIES	HABITAT DESCRIPTION <sup>2</sup>	RANGE/STATUS <sup>2, 3</sup>	KNOWN <sup>4</sup>	RANGE <sup>5</sup>	HABITAT? <sup>6</sup>	NO EFFECT? <sup>7</sup>	MAI <sup>8</sup>	LFL <sup>9</sup>
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	None	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Willow flycatcher <sup>11</sup> <i>Empidonax traillii</i>	Riparian and moist, shrubby areas; winters in shrubby openings with short vegetation	Summer resident, breeding	None	<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	None	<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	None	<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	None	<input checked="" type="checkbox"/>	<input checked="" 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	None	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Appendix 6

### BIRDS OF CONSERVATION CONCERN OF THE UFO <sup>1</sup>

SPECIES	HABITAT DESCRIPTION <sup>2</sup>	RANGE/STATUS <sup>2, 3</sup>	KNOWN <sup>4</sup>	RANGE <sup>5</sup>	HABITAT? <sup>6</sup>	NO EFFECT? <sup>7</sup>	MAI <sup>8</sup>	LFL <sup>9</sup>
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	None	<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	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brewer's sparrow <i>Spizella breweri</i>	Sagebrush-grass 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	None	<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	None	<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	None	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Appendix 6

### BIRDS OF CONSERVATION CONCERN OF THE UFO <sup>1</sup>

SPECIES	HABITAT DESCRIPTION <sup>2</sup>	RANGE/STATUS <sup>2, 3</sup>	KNOWN <sup>4</sup>	RANGE <sup>5</sup>	HABITAT? <sup>6</sup>	NO EFFECT? <sup>7</sup>	MAI <sup>8</sup>	LFL <sup>9</sup>
Brown-capped rosy-finch <i>Leucosticte australis</i>	Alpine meadows, cliffs, and talus and high-elevation parks and valleys	Summer residents, breeding	None	<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	None	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<sup>1</sup> 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/>>].

<sup>2</sup> Cornell Lab of Ornithology. All about birds: bird guide. <<http://www.allaboutbirds.org/guide/>> Accessed 05/15/2009.

<sup>3</sup> 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.

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

<sup>5</sup> Planning area is within the current known range of the species?

<sup>6</sup> Planning area contains suitable habitat for the species?

<sup>7</sup> Project activities will have no effect to the species or it's habitat

<sup>8</sup> Project activities may effect individuals of the species or it's habitat, but not likely to result in a trend toward federal listing

<sup>9</sup> Project activities are likely to result in a trend toward federal listing for the species

<sup>10</sup> ESA delisted species.

<sup>11</sup> Non-listed subspecies/ population.

<sup>12</sup> ESA candidate species.

BIG GAME HABITAT OF THE UFO <sup>1</sup>							
SPECIES	Severe winter range	Winter concentration	Winter range	Production area	Concentration area	Migration Corridors	Highway crossing
Mule deer	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Elk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pronghorn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Desert Bighorn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rocky Mountain Bighorn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Moose	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mountain goat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<sup>1</sup> Based on CDOW big game data and maps

## Appendix 7

### Ridgway Travel Management Planning Area Implementation Zones

All implementation and monitoring would be dependent upon BLM oversight and administration capability as well as available funding. The following map indicates the zones by priority starting with Zone 1.

