

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

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**Missouri River Foothills  
Travel Management Plan and Environmental Assessment**



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# CHAPTER 1: PURPOSE AND NEED FOR ACTION

## 1.1 Introduction

This Travel Management Plan (TMP) and Environmental Assessment (EA) proposes a plan (Proposed Action) for designating and managing a travel route network for Bureau of Land Management (BLM) – administered lands (BLM lands) within the Missouri River Foothills (MRF) Planning Area (PA). The EA portion of this document discusses the impacts of the Proposed Action and the impacts of three alternatives to that action on the PA’s natural and physical environment. Publication of this proposed TMP/EA will be followed by a 30-day public review period.

This TMP/EA assists the BLM in project planning in accordance with the National Environmental Policy Act (NEPA). It also helps the BLM make a determination as to whether any “significant” impacts would result from the actions analyzed in this document. Significance is defined by NEPA and is found in regulation 40 CFR 1508.27. An EA provides evidence for determining whether to prepare an Environmental Impact Statement (EIS) or a “Finding of No Significant Impact” (FONSI). If the appropriate decision maker determines that this project has significant impacts following the analysis in this TMP/EA, then an EIS would be prepared for the project. If not, a Decision Record (DR) may be signed for the EA. This DR would select a preferred alternative, which could be the Proposed Action or another alternative. The DR and FONSI would document the reasons why implementation of the selected alternative would not result in significant environmental impacts beyond those already addressed in the *Approved Record of Decision and Butte Resource Management Plan (2009 Butte RMP)* (BLM 2009b).

## 1.2 Background

This TMP/EA identifies a proposed travel network that consists of roads, primitive roads, and a trail. It discusses how this route network would be used and maintained over the next 10 years or more, as well as detailed information about proposed travel management actions that would be carried out on BLM lands within the Missouri River Foothills Travel Management Area (TMA). For the purposes of analysis, the TMA consists of BLM- lands within the Missouri River Foothills PA, although characteristics of other nearby lands are also addressed. BLM lands within the PA are largely scattered and isolated. The travel management action alternatives addressed in this TMP/EA are Alternatives B, C, and D. Alternative A is the “No Action” alternative. Alternative C is the BLM’s Proposed Action.

The Missouri River Foothills PA is located in Broadwater County and Lewis and Clark County in southwest Montana (Map 1). BLM lands within the PA are primarily positioned at the base of the Big Belt Mountains and near the Helena National Forest, which is managed by the United States Forest Service (USFS). The PA is within Townships 7 to 14 North, Ranges 1 to 3 West, and Ranges 1 to 5 East, Principal Meridian Montana.

The PA contains approximately 434,741 total acres of land with multiple jurisdictions. Table 1 illustrates major landownership within the PA. The BLM’s Butte Field Office manages approximately 16.32 miles of travel routes within the PA as depicted on Map 1.

Table 1. Missouri River Foothills PA Acreages by Major Landowner Categories

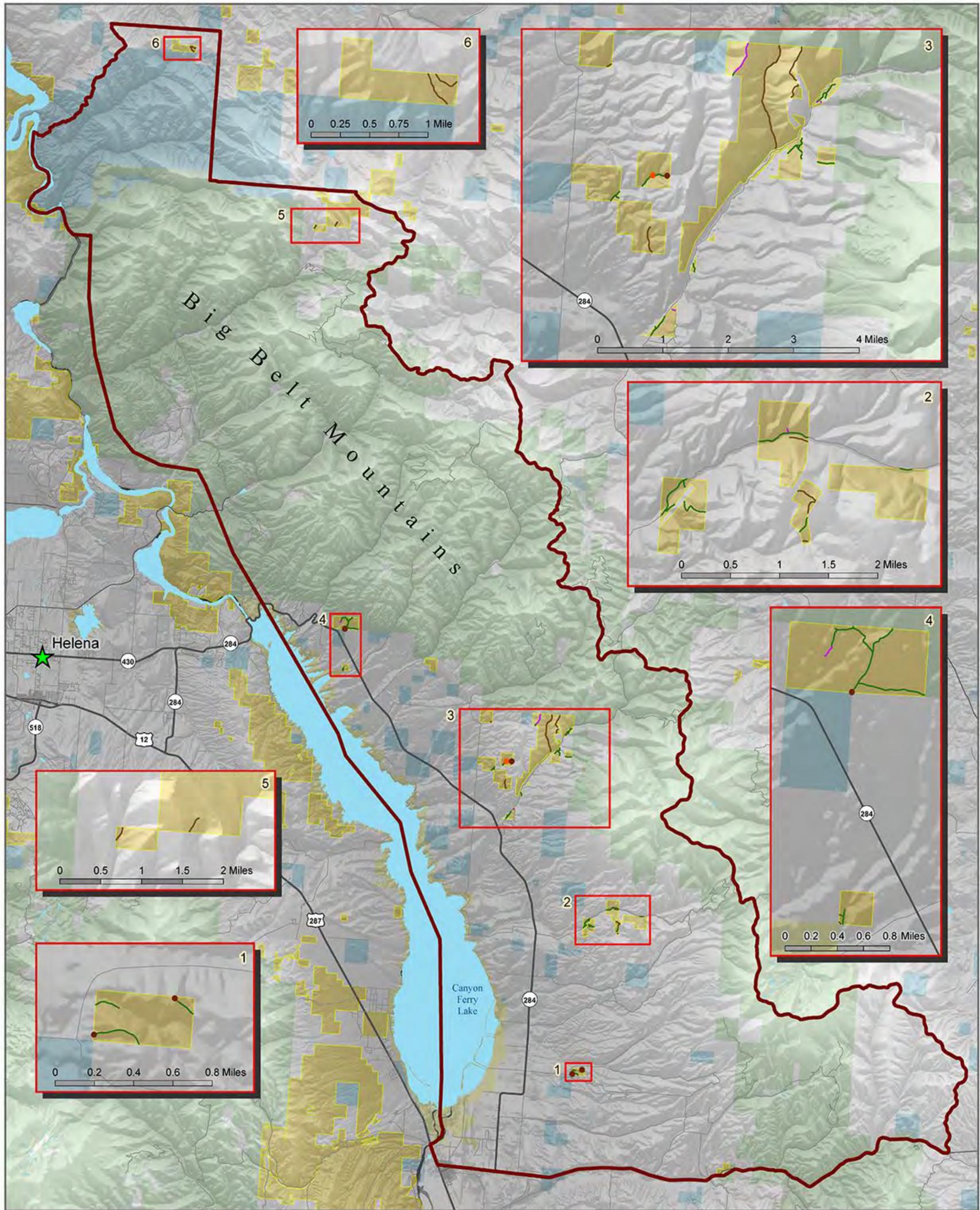
Jurisdiction	BLM	USFS	State	Local Government	Private Lands	Total
Number of Acres	5,468	215,067	15,599	259	158,195	394,588



Figure 1. A primitive road meanders along a hill in the TMA.



Figure 2. A primitive road crosses an isolated 80-acre parcel of BLM territory near private farmland in the Missouri River Foothills PA.



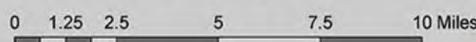
### 2012 Route Network Inventory, Missouri River Foothills Travel Management Area (TMA)

BLM, Montana, Butte Field Office - Missouri River Foothills Planning Area (PA); TMA = BLM Land in the PA

This product may not meet BLM standards for accuracy and content. Different data sources and input scales may cause some misalignment of data layers. This map is intended to assist the Butte Field Office with transportation management planning. It is not intended for any other purpose. The scope of BLM management decisions is limited to BLM lands. The BLM does not have jurisdiction over private lands or routes passing over private lands.



Datum: North American 1983 (NAD 83)  
 Projection: Albers  
 Map Scale: 1:84,000  
 Created By: Advanced Resource Solutions, Inc.  
 Created On: April 4, 2014  
 Sources: BLM, NED, ARS, State of Montana



#### Route Inventory Data

- Open GPS Inventoried Route
- Open Route Digitized from NAIP 2011 Imagery
- Open Reclaiming Route
- Digitized from NAIP 2011 Imagery
- Culvert
- Gate

#### MDT Routes

- Highway or State Route
- Primary or Secondary Route
- Local Route

#### Land Ownership

- U.S. Forest Service
- U.S. Bureau of Land Management
- U.S. Bureau of Reclamation
- Private Land
- State of Montana
- Missouri River Foothills PA

## 1.3 Purpose and Need for Action

### 1.3.1 Regulation and Policy Adherence

Federal agencies are directed to manage motorized vehicle use on public lands by President Nixon's 1972 Executive Order 11644 (see Appendix 3) and President Carter's 1977 Executive Order 11989, which were incorporated into the Code of Federal Regulations under 43 CFR 8342.1. They require that BLM-administered lands are designated in land use plans as either Open, Limited, or Closed to OHV use. The Missouri River Foothills TMA was given a "limited area" designation in the *Record of Decision: Off-Highway Vehicle Environmental Impact Statement and Proposed Plan Amendment for Montana, North Dakota and South Dakota (2003 OHV EIS for MT, ND, and SD)* (BLM 2003) and in the *2009 Butte RMP*.

In addition to "Area" designations, each individual travel route must also be designated as "Open," "Limited," "Limited (Administrative or Non-motorized)," or "Closed" to wheeled motorized travel. Currently, wheeled motorized vehicle travel in the TMA is only allowed on travel routes that were present when the Record of Decision (ROD) was issued for the *2003 OHV EIS for MT, ND, and SD*. That ROD provides temporary guidance for travel management on BLM lands until site-specific TMP/EAs can be completed for particular PAs. Once this TMP/EA is finalized, it will replace the temporary guidance found in the *2003 OHV EIS for MT, ND, and SD*. Over Snow Vehicles (OSV) designations will also be made in this TMP.

### 1.3.2 Specific Purpose/Need Components

Essentially, the purpose/need for preparing a TMP is to:

- Address the increased use of motorized routes in the TMA and the resulting impacts to the Area's natural and cultural resources.
- Identify travel-related management actions to meet or maintain Land Health Standards (see glossary for definition) in the TMA.
- Provide for clear delineation of (and appropriate use on) designated travel routes through informational kiosks, maps, signing, and local educational forums.
- Designate travel routes within the TMA by applying current national management strategies and guidance for OHV use on public lands.
- Follow the *2009 Butte RMP's* travel management direction:

"The purpose of site-specific travel planning is to develop travel plans that meet the needs of public and administrative access, are financially affordable to maintain, and minimize user conflicts and natural resource impacts associated with roads and trails, as per 43 CFR 8342" (BLM 2009b, 7).

"There is a need to do this because in many portions of the Butte Field Office, travel planning has not ever been conducted in a manner to establish a managed transportation network that meets the criteria within these regulations and fully considers public and administrative needs, user conflicts, and natural resource impacts" (BLM 2009b, 7).

### 1.3.3 Goals and Desired Future Conditions

Goals and desired future conditions (DFCs) are broad statements that set far-reaching direction for management. They can be an important part of the purpose and need for action. Goals for travel planning and other resources were established in the *2009 Butte RMP* and are incorporated into this TMP/EA by reference. Tables 2 and 3 (below) show the most relevant goals and DFCs that apply to the TMA. These tables also include a list of Missouri River Foothills travel management objective numbers that correlate with each DFC for the TMA and with each *2009 Butte RMP* goal. These objectives are described following the tables. Below is a list of meanings for the tables' abbreviations, which categorize goals and DFCs.

TM = Travel management and access

TF = Transportation and facilities

RM = Recreation management

WF = Wildlife, fish, wildlife habitat, special status and priority plant and animal species

MRF = Missouri River Foothills

Table 2. *2009 Butte RMP* Travel Management Goals

Goals	Relevant Travel Management Goals from the <i>2009 Butte RMP</i>	Missouri River Foothills Travel Management Objectives
Goal TM1	Provide a balanced approach to travel management that provides a sustained flow of local economic benefits, minimizes user conflicts, safety concerns, and resource impacts while taking into consideration the unique attributes and values of the various Travel Planning Areas.	1, 2
Goal TF1	Maintain facilities, roads, and trails to provide for public and/or administrative use and safety while mitigating impacts to resources.	2, 3
Goal RM1	Provide a diverse array of recreational opportunities while maintaining healthy public land resources.	1, 2
Goal RM3	Manage commercial, competitive, or special events with special recreation permits that eliminate or minimize impacts on resources and conflicts with other users.	1, 2
Goal WF2	Conserve, enhance, restore, or minimize impacts to areas of important wildlife habitat such as rare or limited seasonal habitats, corridors, and blocks of intact functional habitat across the landscape, areas of low road-density, and foraging areas.	2, 4, 5

Table 3. Missouri River Foothills Desired Future Conditions for Travel Management

DFCs	Descriptions of Desired Future Conditions (DFCs) Specific to the Missouri River Foothills Planning Area	Missouri River Foothills Travel Management Objectives
MRF 1	Develop and maintain a transportation system to protect recreation and non-recreation access to the public lands within the planning area. Access will be protected, not inhibited. The network would provide the foundation for avoiding unnecessary closures or restrictions stemming from preventable resource damage/disturbance or user conflicts.	1, 2, 3, 4
MRF 2	Where possible, opportunities would be sought to disperse or distribute users to help provide a quality recreational experience.	1
MRF 3	Working with cooperating agencies and willing private land owners, BLM would seek to create some form of general access to currently inaccessible public lands within the PA. Lands without all-encompassing access would be managed as “Limited to Authorized Users” until general right of entry can be provided.	3
MRF 4	Travel management would enhance activities such as hunting, antler shed hunting, hiking, wildlife watching, and camping—while protecting resources.	1, 2

### 1.3.4 Management Objectives

Management objectives play a key role in allowing the BLM to fulfill the purpose of its proposals and meet various needs. Using the goals and DFCs shown in Tables 2 and 3, as time and resources allow, the BLM proposes the following objectives for managing travel within the TMA:

Objective 1: After publication of the decision approving this plan, the majority of visitors to public lands within the TMA would report having a satisfactory experience using the defined transportation network. This objective would be measured through visitor contacts at recreation sites (e.g., trailheads and parking areas), through the BLM website, and through local community information centers (e.g., the Helena or Townsend chambers of commerce or visitor bureaus).

Objective 2: The majority of visitors in the TMA should be able to comply with travel rules once the BLM has made rule adherence information available online and through maps, signs, and information kiosks. Rule information would include travel rules for responsible cross-country over snow vehicle (OSV) use (between December 2 and May 15<sup>th</sup>). Five years after publication of maps and online information—and after the successful installation of the majority of travel

route markers, there would be a reduction in the formation of travel routes or a reduction in evidence of cross-country travel by motorized vehicles. To measure unauthorized use, a Geographic Information System (GIS) database of newly found travel routes would be maintained and evaluated for effectiveness in the elimination of new, unauthorized travel routes.

Objective 3: The BLM (in conjunction with local groups, private landowners, community planners, and other agencies) would develop a prioritized list of locations and methods to be used to ensure access would remain open to federal lands from state, city, county, and local roads. The BLM would continue to partner with the Southwest Montana Interagency Access Council and Travel Management Committees to evaluate issues related to maintaining public land access.

Objective 4: Following the completion of the installation of travel route designation markers/signs, the majority of the 23 travel routes eliminated through this TMP/EA's Proposed Action would not be conspicuous at intersections. Reduction of route visibility would be accomplished through natural restoration or rehabilitation methods. Photo monitoring would be used to measure the effectiveness of management actions taken to eliminate travel on closed routes.

Objective 5: Over the life of this plan, areas characterized as significantly disturbed by human activity would be reduced in key regions (as identified by BLM) next to travel routes. Significant human activity disturbance includes any disturbances created by dispersed camping within 300 feet of authorized travel routes. The intention of this objective is to maintain or improve land health as indicated by the BLM core indicators of vegetation cover and bare ground. The BLM's Land Health Standards and characteristics associated with these standards are described in the Butte District sections of the *Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Public Lands Administered by the Bureau of Land Management for Montana and the Dakotas* (BLM 1997). To measure route width expansion, a GIS database and photographic monitoring would be maintained and evaluated.

## **1.4 Decisions to be made**

Should this TMP/EA result in a FONSI determination, a Decision Record document will be prepared designating the analyzed routes as "Open," "Limited,"<sup>1</sup> "Limited (Administrative or Non-motorized)," or "Closed." Routes designated as "Open" could be subject to additional management measures (i.e. mitigation), if monitoring deems necessary.

## **1.5 Conformance with 2009 Butte RMP**

The 2009 Butte RMP provides overarching guidance for this TMP/EA. The RMP requires that "future site-specific travel planning" must designate individual roads, primitive roads, and trails as "Open," "Limited," "Limited (Administrative or Non-motorized)," or "Closed." This TMP/EA conforms to the 2009 Butte RMP because it provides such designations.

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<sup>1</sup> In the analysis performed for this TMP/EA, the "Limited" category involves various forms of limited designations, including those based on vehicle type or season. No route received a designation that was merely labeled "Limited." Type of limitation was always specified to some extent.

## **1.6 Relationship to Statutes, Regulations, and Other Plans**

Statutes, regulations, and policies documented in the *2009 Butte RMP* (BLM 2009b, pages 10-13) apply to this TMP/EA. Additionally, the following regulations, policies, and planning documents provide specific guidance for the formation of travel management actions. All documents can be found online and are listed in the works cited/bibliography.

- 43 CFR 8340: Off-Road Vehicles, Subparts 8340-8342.3 (GPO 2014a)
- 43 CFR 9268: Recreation Programs (GPO 2014c)
- *Manual 1626: Travel and Transportation* (BLM 2011d)
- *Handbook H-8342: Travel and Transportation* (BLM 2012c)
- *Record of Decision: Off-Highway Vehicle Environmental Impact Statement and Proposed Plan Amendment for Montana, North Dakota and South Dakota* (BLM 2003)
- *National Mountain Bicycling Strategic Action Plan* (BLM 2002)
- *National Management Strategy for Motorized Off-Highway Vehicle Use on Public Lands* (BLM 2001a)
- *Recreation 2000: A Strategic Plan* (BLM 1988)

## **1.7 Issues**

### **1.7.1 Issue Identification Process**

Over the past two years, the BLM staff had informal conversations about travel management with individuals, community groups, neighboring landowners, and federal, state, and local agencies. These informal discussions contributed to the initial identification of travel management issues and concerns. Scoping letters were also sent to local tribes, but no responses were received.

In a letter dated September 24, 2013, the BLM initiated formal external public scoping, requesting input on the management of various resources in the Missouri River foothills PA. The notice was sent to local media and the BLM's mailing list (people and organizations that have requested BLM notification regarding future projects). It was also posted on the BLM website at:

[http://www.blm.gov/pgdata/etc/medialib/blm/mt/field\\_offices/butte/missouri\\_river\\_foothills.Par.72176.File.dat/Missouri%20River%20Foothills%20Scoping%20Letter.pdf](http://www.blm.gov/pgdata/etc/medialib/blm/mt/field_offices/butte/missouri_river_foothills.Par.72176.File.dat/Missouri%20River%20Foothills%20Scoping%20Letter.pdf).

Formal public scoping meetings were not held. The official comment period closed on November 12, 2013. During the comment period, the BLM received five written responses. These comments and the issues identified during scoping are detailed below and have helped shape the development of the Proposed Action and alternatives to the Proposed Action for this TMP/EA.

### **1.7.2 Issues Identified for Analysis**

The following is a summary of the comments, issues, and concerns that were gathered through external and internal scoping and considered in the formation of the Proposed Action and alternatives to the Proposed Action for this TMP/EA.

#### External scoping identified the following issues and concerns:

- Desire for new routes (mostly trails; both non-motorized and motorized)
- Prohibition of ATVs
- Noxious weed control
- Trail access deficiencies
- Impacts of grazing on bicycle use of trails
- Off-road ATV travel in wet areas and across old mining dumps
- Need for more BLM monitoring of route use
- Need for a good turnaround spot up Hellgate where the old mining work is located
- Loss of motorized recreation opportunities
- Cumulative impacts (social, economic, etc.) of motorized closures
- Imbalance between non-motorized and motorized trails
- Segregated route use

#### Internal BLM scoping identified that travel management decisions could impact:

- Recreation
  - How would the proposed travel network or its alternatives affect recreation access to public lands?
  - Would routes that were traditionally used for motorized access that are newly designated as non-motorized under the plan or alternatives affect hunting and other recreational opportunities?
  - How would closing and decommissioning routes under the proposed travel management action or its alternatives affect non-motorized use on public lands?
  - Over Snow Vehicle (OSV) Use
- Rangeland management
  - How would the proposed action or the alternatives affect required or permitted access to range improvements?
  - Would recreational use on the travel network potentially impact the working condition of range facilities and/or the health of grazing animals?
- Human health and public safety
  - Does the selection of a specific travel network decrease or increase the potential for the public to endanger themselves in areas known to be unsafe, such as abandoned mine lands or other hazardous areas within the Missouri River Foothills TMA?
- Noxious weeds
  - Under each of the alternatives, how might vehicle traffic on open roads and trails affect the transportation of noxious weeds? Specifically spotted knapweed and Dalmatian toadflax weeds from BLM lands to and from private lands?
  - How might decommissioned routes affect the ability of the BLM to carry out weed control operations?

- Wildlife (including special status species)
  - How might implementation of the proposed travel route network (or its alternatives) result in landscape fragmentation and habitat loss?
  - How would the proposed travel route network (or its alternatives) work toward meeting RMP direction for reducing road density in big game winter range?
- Minerals materials and mining
  - What would be the effect of the proposed action or its alternatives on access to minerals for exploration, delineation, and development?
  - How would repeated access by miners with travel variances on roads limited to authorized users influence the other visitors?
- Cultural resources
  - How would the proposed route network and the alternatives affect the protection of historic districts, historic sites, and other cultural resources?
- Soil and water quality
  - Would the proposed travel network or its alternatives affect riparian areas, wetlands, or areas having hydric soils?

### **1.7.3 Issues Eliminated from Detailed Analysis**

During scoping for the TMP, one resource management issue considered but eliminated from detailed analysis was that of tribal interest/Native American traditional cultural practices. Scoping did not identify tribal interest or Native American issues in the TMA.

Considering the isolated nature of the routes and the overall number of miles considered relative to those in Montana, albedo (reflection of light off an object) would contribute no discernible difference to climate change. Also, considering the TMP/EA's miles and routes in the context of a relatively small cumulative contribution of greenhouse gases produced in Montana, differences between alternatives would be negligible. Management actions under the various alternatives would not result in climate change effects, and thus this issue has been dropped from further consideration.

## **CHAPTER 2: DESCRIPTION OF ALTERNATIVES AND PROPOSED ACTION**

### **2.1 Introduction**

This chapter presents a range of reasonable alternatives to address the relevant travel planning issues identified during scoping. It also compares and contrasts these alternatives. Alternatives mostly differ by how they assign route designations and management actions. Alternatives include continuation of current management or no action (Alternative A), emphasizing route closures and natural resource protection (Alternative B), and emphasizing motorized access and keeping routes open (Alternative D). The BLM's Proposed Action for travel management in the TMA is Alternative C, which provides a balanced approach in the middle of the alternative range. Alternatives were developed with the aid of route inventory and evaluation.

### **2.2 Development of Alternatives**

#### **2.2.1 Goals of Alternatives**

Alternatives were formulated as part of the BLM's efforts to develop, designate, and maintain a transportation network that addresses the issues identified during scoping in a manner that protects recreational, commercial, administrative, and jurisdictional access to public lands while minimizing impacts to:

- Recreation
- Travel and transportation access
- Rangeland management
- Minerals materials and mining
- Soil and water
- Noxious weeds
- Wildlife (including special status species)

In determining travel management actions, the BLM guiding principle of multiple use was taken into consideration to provide a balanced range of alternatives. The Federal Land Policy and Management Act (FLPMA) defines "multiple use" to mean:

". . . management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people; . . . a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and non-renewable resources, including, but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish, and natural scenic, scientific and historical values; and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output" (BLM 2001b, 2).

### **2.2.2 Travel Route Inventory**

Performing an inventory of existing routes in the Missouri River Foothills TMA was an important early step in the alternative development process. In 2011, the BLM contracted with Advanced Resource Solutions, Inc. (ARS) to complete a comprehensive travel route inventory. ARS created maps from existing maps and the most current aerial photography/satellite imagery to help their field crews conduct the route inventory. They also gathered information on any additional routes observed in the field that had not been previously identified. The ARS team tracked their movements using global positioning system (GPS) devices and took photos along each route. Map 1 provides an overview of the BLM travel route network in the TMA (as inventoried by ARS).

### **2.2.3 Travel Route Evaluation Process**

After the route inventory was completed, inventory information was evaluated to support more informed development of travel management alternatives. The BLM contracted with ARS to develop a systematic, standardized method to collect data and evaluate criteria affecting each travel route and the resources around them. During this process, an Interdisciplinary (ID) team of BLM staff specialists and an ARS facilitator carefully and systematically discussed and examined factors related to both the overall TMA and each individual travel route contained within it. The evaluation team also considered how travel route designations fit within the entire travel network managed by the BLM and adjacent or nearby transportation systems (e.g., those managed by the USFS, State of Montana, Broadwater County, Lewis and Clark County, and local agencies).

As a result of route evaluation, a database was created that includes statutory-driven criteria and issues that may affect resources and the use of travel routes within the TMA. The database incorporates issues discussed in Travel Management Appendix D of the *Approved Butte Resource Management Plan (2009 Butte RMP)* (BLM 2009b) as well as public concerns.

Table 4 contains the actual criteria used during the evaluation process. Criteria for the route evaluation database created for the Missouri River Foothills TMA fall under three general categories:

- Commercial, administrative, private property, and economic issues (CAPE)
- Public use
- Special resource concerns

Four options (Alternatives A, B, C, and D) for a comprehensive travel route network (that protects public access and natural resources) were considered and refined through the BLM/ARS evaluation process. BLM staff reviewed the issues identified during scoping along with the travel needs for the TMA, which resulted in the development of three action alternatives (B, C, and D). Alternative A is the “No Action” alternative in which current management would continue.

Table 4. Route Evaluation Criteria

CAPE	RESOURCES	PUBLIC USES
<p><b><u>Jurisdictional Access</u></b>            BLM adjacent FO, DO, or SO            UFS adjacent Ranger District            County lands or parks            City lands or parks            Private lands            State lands or parks            MT Fish, Wildlife &amp; Parks lands</p> <p><b><u>Agency Facilities</u></b>            Monitoring sites</p> <p><b><u>Lease Facilities</u></b>            Communications site            ROW - power line            ROW - gas pipeline            ROW - road            ROW - power            ROW - telephone/communications            Timber/woodland product sales area</p> <p><b><u>Mineral Facilities</u></b>            Mine active            Mine inactive            Mining claim            Oil/gas lease            AML site - environmental            AML site - physical safety            AML site - reclaimed physical safety            AML site - reclaimed environmental            Locatable - mineral production            Minerals exploration            Mine monitoring well            Adit/mine shaft</p> <p><b><u>Range Facilities</u></b>            Allotment/pasture fences            Exclosure fence            Pipeline            Developed water            Gate            Cattle guard            Active allotment            Tank/trough            Monitoring study areas            Non-functioning reservoirs            Spring source            Water storage tanks</p> <p><b><u>Recreation Facilities</u></b>            Campground developed            Parking area undeveloped            Day-use area            Staging area            Trailhead undeveloped            Vista            Recreational Shooting Site            (Undeveloped)</p>	<p><b><u>VRM</u></b>            Class I            Class II            Class III            Class IV</p> <p><b><u>Recreational Setting Characteristics</u></b>            Back Country (Semi-Primitive Non-Motorized)            Middle Country (Semi-Primitive Motorized)            Front Country (Roaded Natural-Appearing)            Roaded-Modified</p> <p><b><u>Cultural</u></b>            Eligible cultural resource (<i>critical A, B, or C</i>)            Cultural resource (<i>not eligible</i>)            Historic site            Historic district            Eligible cultural resource (<i>critical D</i>)            No survey</p> <p><b><u>Special Status Animals</u></b>            Bald eagle            Black-backed woodpecker            Bobolink            Brewer's sparrow            Canada lynx            Ferruginous hawk            Flammulated owl            Fringed myotis            Golden eagle            Gray wolf            Great gray owl            Grizzly bear            Long-billed curlew            Long-eared myotis            Long-legged myotis            McCown's longspur            Milksnake            Mountain plover            Peregrine falcon            Plains spadefoot toad            Sage sparrow            Sage thrasher            Sprague's pipit            Swainson's hawk            Three-toed woodpecker            Townsend's big-eared bat            Western toad</p> <p><b><u>Resource Issues</u></b>            Dumping/littering            Route proliferation            Noxious weeds            Mine hazard            Invasive vegetation            Public safety issue</p> <p><b><u>Miscellaneous Resources</u></b>            Erosive soils (<i>moderate potential</i>)            Cave            Hydric            Soil/Wetland</p> <p><b><u>Water Resources</u></b>            Lake/reservoir            Perennial            Ephemeral            Intermittent            Spring            Well            Riparian</p>	<p><b><u>Mode of Transportation</u></b>            ATV            Motorcycle            Stock 4WD            Modified 4WD            UTV            Bicycle            Foot            Horse            Snowmobile            2WD</p> <p><b><u>Activities</u></b>            Hunting            Hiking            Birding            Cultural/historical exploration            Horseback riding            Fishing            Geocaching            Bicycling            Rock hounding            Sightseeing            Photography            Wildlife watching            Spiritual visitor            Vehicle exploration            Hill climbing            Backpacking            Wood cutting            Antler shed hunting            Dispersed camping</p> <p><b><u>Criterion Acronym Definitions</u></b>            AML = abandoned mine land            DO = District Office            FO = Field Office            SO = State Office            ROW = right-of-way            UTV = utility type vehicle            VRM = visual resource mgt.</p>

### 2.2.4 Travel Route Terminology

To better understand the alternatives for the TMA and how they were developed, it helps to understand the route terminology covering both transportation assets and route designations. The main action in travel planning is to designate a travel route network that meets the purpose, need, goals, and objectives that were described in Chapter 1. The BLM defines and categorizes its travel routes into three categories of transportation assets: roads, primitive roads, and trails. Table 5 provides definitions for these assets along with the travel route quantities and miles that were inventoried for each category.

Table 5. Transportation Assets (Existing Travel Route Network)

Inventoried Transport Assets within the Planning Area		
Asset	Definitions	Inventoried Routes
Road	A route managed and maintained for regular and continuous use by low clearance vehicles having four or more wheels.	3 Routes 2.56 Miles
Primitive Road	A route able to be traversed by four-wheel drive or high clearance vehicles. Primitive roads do not normally meet any BLM road design standards.	32 Routes 13.43 Miles
Trail	A route managed for human-powered, stock, or OHV forms of transportation or for historical or heritage values. Trails are not generally managed for use by four-wheel drive or high clearance vehicles.	1 Route 0.33 Miles
Totals		36 Routes 16.32 Miles

Each individual travel route would be designated as “Open,” “Limited,” “Limited (Administrative or Non-Motorized),” or “Closed” to wheeled motorized vehicle travel.<sup>2</sup> These designations are based on Code of Federal Regulations 43 CFR 8342.1 definitions and the *2009 Butte RMP*.

Table 6 lists the 43 CFR 8342.1 designation terms and what they mean in the *2009 Butte RMP*. Because this TMP/EA is tiered from the *2009 Butte RMP*, the RMP designation explanations in Table 6 also apply to the Missouri River Foothills TMA. All limited and closed routes would still be open to non-motorized use.

<sup>2</sup> For analysis purposes, the term “Open” lumps together routes designated as “Open” and those designated as “Open w/ Management.” Both terms are used in official route report designations. Routes listed in this plan as some form of “Limited” or “Limited (Administrative or Non-Motorized)” are designated as “Limited w/ Management” in the Missouri River Foothills route reports. Analysis in this TMP/EA sometimes addresses specific types of limitations. There are variations of the “Limited” designation. For example, some routes may be limited by season, use type, or specified users. Routes designated as “Open w/ Management” or “Limited w/ Management” would receive additional adaptive management, maintenance, mitigation, or monitoring compared to routes that do not have “w/ Management” included in their designation.

Table 6. Travel Route Designation Terminology

Terms Used in Route Designations		
43 CFR 8342.1	<i>Butte RMP</i>	Explanation from <i>Butte RMP</i>
Open	Open Yearlong	Open year-round to public and administrative uses.
Limited	Open with Restrictions	Open to public and administrative uses with seasonal and/or vehicle type limitations.
Limited (Administrative or Non-motorized)	Closed Yearlong	Closed to wheeled motorized public access and subject to administrative or permitted uses based on case-specific exceptions (such as for mining claimants with existing claims accessed by existing routes). Routes identified as closed would have a route bed left intact in case they are needed for valid existing rights only, or in the extended future for administrative purposes. Closed routes would be open to non-motorized use.
Closed	Closed and Decommissioned	A route is closed and reclaimed to eliminate resource impacts (e.g., to eliminate erosion or to restore a riparian area if route is located within a riparian area) and is no longer useable for public or administrative uses.

## 2.3 Proposals Considered During the Planning Process

### 2.3.1 Trail Development Proposals from the Montana Mountain Bike Alliance

The Montana Mountain Bike Alliance (MMBA) proposed developing new trails in three parts of the TMA. The MMBA wants a new trailhead and trail (that could be motorized or non-motorized) in the Little Hellgate area. It would run from Highway 284 to and through Little Hellgate Canyon up to National Forest lands. This trail would be on State, USFS, and BLM lands.

Additionally, the MMBA proposed a new lower elevation trailhead and high quality connector trail in the Confederate Gulch area. This trail would have to be designed to account for motorized use, and it would provide access to National Forest lands. Furthermore, the MMBA proposed trail development on the Duck Creek Allotment. According to the MMBA:

- Such trail development could work if short trail easements across private land are secured. Support of adjacent landowners would be needed.
- The development of a non-motorized trail system would likely be possible in this area.
- Such a system might receive high use because of proximity to Townsend and private residences.

However, the MMBA recognizes that land in the area might work better as wildlife habitat than a trail site. The Alliance also acknowledges that wildlife considerations would be a factor for its Duck Creek trail proposal.

BLM considered each of the proposals from the MMBA, but determined that they would not be carried forward in this TMP because:

- A formal proposal depicting exact trail and trailhead locations using GPS coordinates and GIS information was never received from MMBA.
- The creation of an additional routes that parallel existing routes (MR1004 in the Little Hellgate area for example), which would remain “Open” to non-motorized uses under each of the alternatives, would be considered redundant, and one of the primary purposes of travel planning is to reduce route redundancy.

If a formal proposal from MMBA is received for these items in the future, BLM may analyze these requests in a site-specific NEPA document, as time and resources allow.

### **2.3.2 Route Development Proposals from the Capital Trail Vehicle Association**

The Capital Trail Vehicle Association (CTVA) proposed a 50/50 sharing idea that would provide equal opportunity for users of non-motorized and motorized trails. Additionally, the CTVA proposed creating: new mountain bike and motorcycle trails, ATV trails from roadbeds that are currently open and closed, and ATV trails that connect with converted roadbeds to create loops. Moreover, the CTVA proposed the establishment of four-wheel drive challenge routes that could be made using roadbeds that are both currently open and closed, including historic mining routes. Beyond stating the desires just listed, the CTVA did not provide specific implementation details for these proposals.

The CTVA also proposed a camping area for OHV users that would be located on BLM land between Magpie Gulch and Hellgate Gulch. The CTVA volunteered to assist the BLM with “working out access through the state section to the site.” In response to the campground proposal, the BLM considered the establishment of a primitive campsite along MR1004, which is in the area the CTVA described and also in the vicinity of proposals put forth by the MMBA. However, CTVA is still working on the access component of this proposal.

BLM has considered each of the proposals from CTVA, but determined that they would not be carried forward in this TMP because:

- A formal proposal depicting exact trail and trailhead locations using GPS coordinates and GIS information was never received from CTVA.
- Access through private property has not been secured by CTVA at this time.

If a formal proposal from CTVA is received for these items in the future, and access issues are resolved, BLM may analyze these requests it in a site-specific NEPA document, as time and resources allow.

## 2.4 Description of Alternatives

### 2.4.1 Features Common to All Alternatives (Including the “No Action” Alternative)

Each travel management alternative differs. However, some features are common to all alternatives. For every alternative, travel management would be conducted in a manner that would meet or move toward meeting Land Health Standards (defined in the glossary).

For each alternative, in accordance with the *Record of Decision: Off-Highway Vehicle Environmental Impact Statement and Proposed Plan Amendment for Montana, North Dakota and South Dakota (2003 OHV EIS for MT, ND, and SD)* (BLM 2003), under the “limited area” designation (which applies to the TMA), all cross-country wheeled motorized vehicle travel would be prohibited with the following exceptions:

- Any military, fire, search and rescue, or law enforcement vehicle used for emergency operations
- Official BLM administrative business (prescribed fire, noxious weed control, and range, recreation, and travel management, etc.)
- Other government agency business (surveying, damage control, etc.)
- Administration of a federal lease or permit (livestock permittees maintaining fences, delivering salt, etc.)
- Dispersed camping within 300 feet of an open travel route. Site selection must be completed by non-motorized means, and the site must be accessed by the most direct route causing the least damage.

In addition to sharing the same prohibitions and exceptions regarding cross-country motorized travel, all alternatives share other features. For example, for each alternative, opportunities would be sought to disperse or distribute users to help provide quality recreational experiences. As part of the use dispersion goal, easement agreements would be pursued as needed to gain agency and public access to BLM lands. Moreover, the BLM would continue to participate with the Southwest Montana Interagency Travel Management Committee to maintain map and sign consistency and seasonal restrictions.

### 2.4.2 Description of Alternative A (No Action/Continuation of Current Management)

According to *2009 Butte RMP*, the Missouri River Foothills PA has a “Limited area” designation. Under Alternative A, wheeled motorized vehicle travel on routes within the PA would continue to be managed under the “limited area” designation, which is described in the *2003 OHV EIS for MT, ND, and SD*. “Limited area” means “an area restricted at certain times, in certain areas, and/or to certain vehicular use” (2003, 1). In the case of the Missouri River Foothills TMA, the “limited area” designation means that motorized travel is restricted to existing inventoried routes. The “limited area” designation mentioned in the *2009 Butte RMP* and the *2003 OHV EIS for MT, ND, and SD* is different from the various “limited” designations that are assigned to individual routes.

Under Alternative A, all existing travel routes in the TMA would continue to be managed as “Open Yearlong” to wheeled motorized use. This designation means the routes would be open

all year to public and administrative motorized uses. Throughout this document, the “Open Yearlong” designation is often simply referred to as “Open.”

The BLM commissioned a 2012 inventory of routes on BLM land in the TMA. This inventory resulted in the recognition of 36 travel routes covering approximately 16.32 miles. Under Alternative A, the BLM would accept this inventory as the existing travel network (Map 2 in Section 2.7). This catalog of existing routes would allow management to identify both cross-country use and newly created unauthorized roads and trails. In response, BLM could close/rehabilitate any new ground disturbances created by users. Law enforcement actions would also be based on this network.

#### Over Snow Vehicle Use

The 2003 OHV EIS did not address Over Snow Vehicle (OSV) use. The *2009 Butte RMP ROD* stated that “snowmobile use will be subject to restrictions outlined in specific travel plans.” Therefore, since there are currently no specific restrictions in effect for OSVs on BLM lands in the PA, unrestricted cross-country OSV use would remain in effect under Alternative A.

### **2.4.3 Features Common to Action Alternatives B, C, and D**

Although some travel management elements are common to every alternative, there are some that only apply to the action alternatives: B, C, and D. Below are some features common to Alternatives B, C, and D.

#### Route Designations

All motorized travel would be limited to designated roads, primitive roads, and trails. No cross-country motorized vehicle travel would be allowed, unless otherwise managed (exceptions are listed in Section 2.4.1).

#### Administrative Access (Including Travel Variance)

This “Limited (Administrative or Non-motorized)” designation would limit motorized access to BLM administrative and authorized uses only. BLM employees and authorized users (e.g., permittees, contractors, and personnel from other agencies) would be allowed motorized access for resource management, maintenance, inventory, monitoring, and/or compliance purposes without the need for a travel variance. Public use on these administrative routes would be limited to non-motorized access. Administrative access for rights-of-ways or other permit holders would be limited to authorized or permitted activities only. No motorized recreational use would be authorized on these routes.

#### Access to BLM Lands and Routes across Private Property

Where public motorized access is contingent upon the governing consent of adjoining private landowner(s), the BLM would exercise a reciprocal “All or None” road use policy. This means that as long as the public is allowed access to these roads, no changes in travel management would occur. However, should an adjacent landowner refuse public access, the BLM would reciprocate by closing its travel routes to use by the landowner. This would occur without amending the TMP/EA.

### Water Developments

No new routes would be authorized as a result of new water developments. If new water developments and subsequent access routes to access these developments are proposed in the future, a site-specific analysis would be completed. Existing roads or trails (leading to previously authorized water developments) may be maintained. Permit/lease holders may be authorized to travel along pipeline routes to perform maintenance as defined in their term grazing permit/lease.

### Over Snow Vehicle Use

In areas where cross-country OSV use is allowed, the BLM recommends that OSV riders drive on designated travel routes for their own safety and to safeguard resources. It is the rider's responsibility to avoid locations where wind or topographic conditions may have reduced snow depth and created situations where damage to vegetation or soils could occur, or where vegetation is taller than the protective snow cover. Ecologically sensitive areas could be closed to snowmobiling if resource damage caused or exacerbated by snowmobile activity is found to be occurring in these areas.

#### **2.4.4 Description of Alternative B**

Alternative B emphasizes higher levels of non-motorized use and a higher degree of resource protection than Alternatives C or D. See Map 3 for a depiction of the proposed travel network under Alternative B. Travel routes designated as Decommissioned (closed)<sup>3</sup> would not be considered essential for wheeled motorized vehicle travel for agency personnel or the public. Under Alternative B, there would be three roads designated as "Open" (2.56 miles), eight primitive roads designated as "Limited (Administrative or Non-motorized)" (1.87 miles), and two primitive roads (1.47 miles) with seasonal limitations (Closed to Wheeled Motorized Use December 2 – May 30 each year). Alternative B would decommission 23 travel routes (10.42 miles).

### Over Snow Vehicle Use

OSV use would not be allowed anywhere in the TMA, due to the fact that all BLM lands are located within wildlife winter range and big game security habitat (see map 6). Exceptions to this designation are listed in Section 2.4.1.

#### **2.4.5 Description of Alternative C**

Alternative C is the BLM's Proposed Action. It emphasizes moderate levels of motorized access, resource protection, and restoration. See Map 4 in Section 2.7 for a portrayal of the proposed travel route network under Alternative C. Under Alternative C, there would be a total of 13 routes (that include only roads and primitive roads; 6.01 miles) designated as "Open." Under this alternative, nine routes (4.11 miles) would be designated as "Limited (Administrative or Non-motorized)," and three routes (3.22 miles) would have seasonal limitations. Alternative C would decommission 10 routes (2.65 miles).

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<sup>3</sup> In the context of route designation, the terms "closed" and "decommissioned" mean essentially the same thing: A route is closed and reclaimed to eliminate resource impacts and is no longer useable for public or administrative uses.

### Over Snow Vehicle Use

OSV use would be allowed only on travel routes designated as “Open”, but only during the period between December 2 and May 30 each year. No cross-country OSV travel would be allowed. Exceptions to these designations are listed in section 2.4.1.

### **2.4.6 Description of Alternative D**

Alternative D emphasizes access to public land and a full range of recreational opportunities and experiences (especially for motorized use) while still attempting to reduce travel impacts. Map 5 in Section 2.7 provides an illustration of the proposed travel route network under Alternative D. All 36 routes (including roads, primitive roads, and one trail; 16.32 miles) would be designated as “Open.” No routes would be limited or decommissioned.

### Over Snow Vehicle Use

Between December 2 and May 15, with adequate snow levels permitting, unrestricted cross-country OSV travel would be allowed throughout the BLM managed portions of the PA.

## **2.5 Cumulative Actions for All Alternatives**

### **2.5.1. Introduction**

In the context of BLM planning, cumulative effects of travel management would include the incremental impact of travel management actions when added to the impacts of numerous other past, present, or foreseeable actions (e.g., vegetation treatments, water projects, timber sales, nearby residential development, other agency planning projects, etc.). This section discusses cumulative effects in general. However, it also addresses cumulative effects as they relate to specific BLM management actions.

### **2.5.2 Past and Present Management Actions**

When considering the overall cumulative effects of travel management alternatives, it can be helpful to acknowledge past and present management actions (travel-related or otherwise) in the TMA. The United States Forest Service, Helena National Forest, completed a Travel Management Plan for the North Big Belts area in 2005. Several travel routes from that TMP connect with routes on BLM. The cumulative impacts of these routes are addressed in section 3.11. Additional guidance for past and present management actions in the TMA can be found in the *2009 Butte RMP*. Past travel management actions have been minimal. Before 2012, no route inventory had been completed for the TMA.

### **2.5.3 Reasonably Foreseeable Future Actions**

No other major projects are planned in the TMA at this time.

## 2.6 Preferred Alternative Identification

### 2.6.1 Overview

Alternative C (Map 4 in Section 2.7) is the BLM’s Proposed Action and Preferred Alternative. The *identification* of the Preferred Alternative is not a decision but is intended to inform the public regarding the alternative that, at this time, the BLM believes best fulfills its statutory mission. The Preferred Alternative may change in response to public comment, new information, or based upon revised impact analysis as the environmental review process continues. Upon completion of environmental analysis, a Preferred Alternative will be selected in a decision document.

Using the route evaluation process described in Section 2.2.3, the criteria in Table 4, and the information presented in Tables 3 and 5, the BLM proposes to formally designate its travel routes as “Open,” “Limited,” “Limited (Administrative or Non-Motorized),” or “Closed.” Table 7 summarizes the BLM’s proposed travel route network by asset type. Table 8 provides statistics on routes that would be Closed and Decommissioned under the Proposed Action.

Table 7. Proposed Route Designations by Asset (Alternative C)

Proposed Route Designations by Asset (Alternative C)					
	Open to all uses	Limited by season (Closed to Wheeled Motorized Use Dec 2 – May 30)	Limited administrative (allows authorized & non-motorized uses); Closed yearlong to all other wheeled motorized vehicles	Closed & decommissioned	Totals
Roads	3 routes 2.56 miles	0 routes 0 miles	0 routes 0 miles	0 routes 0 miles	3 routes 2.56 miles
Primitive Roads	10 routes 3.45 miles	3 routes 3.22 miles	9 routes 4.11 miles	10 routes 2.65 miles	32 routes 13.43 miles
Trails	0 routes 0 miles	0 routes 0 miles	1 route 0.33 miles	0 routes 0 miles	1 route 0.33 miles
<b>TOTALS</b>	<b>13 routes 6.01 miles</b>	<b>3 routes 3.22 miles</b>	<b>10 routes 4.44 miles</b>	<b>10 routes 2.65 miles</b>	<b>36 routes* 16.32 miles*</b>

\*NOTE: An error was discovered in Table 7 in the Draft version of the TMP. Route # 1013 (1.66 miles) was inadvertently counted twice (including mileage) because it is Limited to Administrative/ Authorized Uses and by Season. This created a discrepancy in the total number of routes and miles depicted. This error has now been corrected in Table 7.

Table 8. Number of Decommissioned Routes by Asset (Alternative C)

Total number/miles of Plan's decommissioned assets		Number of decommissioned routes by length and percent of total miles of entire network			Number of decommissioned routes by type and percent of total miles of entire network		
		<0.1 mile	0.1 to 0.5 mile	0.5 to 1 mile	Spurs	Currently reclaiming/ non-existent	Redundant routes
Primitive Road	10 2.65	4 1.7%	4 6.6%	2 8.0%	8 12%	5 8%	4 5.88%

Note: No values are presented for routes designated merely as "Roads" or "Trails" because no routes with such designations were closed under Alternative C. Moreover, a route can be described in more than one way. For example, a spur can also be reclaiming. Thus, the percentages for descriptions of route types will not always add up to 100, and the numbers of routes of different types will not always add up to the total number of routes.

### 2.6.2 Over Snow Vehicle Use

Under this alternative, OSV use would be allowed only on travel routes designated as "Open", but only during the time period between December 2 and May 30 each year. No cross-country OSV travel would be allowed. Exceptions to these designations are listed in section 2.4.1.

### 2.6.3 Non-Motorized Use

Travel management is more than management of motorized vehicles. People are allowed to walk or ride horses anywhere in the TMA, unless an area is closed for safety or specific resource protection (e.g., sensitive species habitat). Under the Proposed Action, mountain biking would be limited to all designated routes in the travel network, unless a route is signed to prohibit bicycling. Mountain biking would not be allowed on routes scheduled to be closed. Cross-country mountain bike use would not be allowed. Non-motorized users should understand that if a route is designated as "Closed and Decommissioned," it would not be maintained and could be reclaimed, which would abolish all physical evidence of the route.

## 2.7 Summary of Alternatives

Alternatives can be summarized by looking at the types and quantities of designations that apply to various routes. Figures 5 and 6 (on the next page) and Table 9 display this information. Table 10 shows which routes are closed under the action alternatives (nothing is closed under Alternative A). Additionally, Maps 2-5 on pages 26-29 also help summarize the alternatives.

The following two figures present the differences between the four alternatives by number of routes (Figure 5) and number of miles (Figure 6). These figures divide the "Limited" designation into three categories: routes limited to vehicles that are 50 inches wide or less (Limited <50"), routes limited to administrative or permitted use but open to non-motorized use (Limited Admin), and routes that are limited by seasonal closures (Limited Season). A few routes have more than one type of limitation.

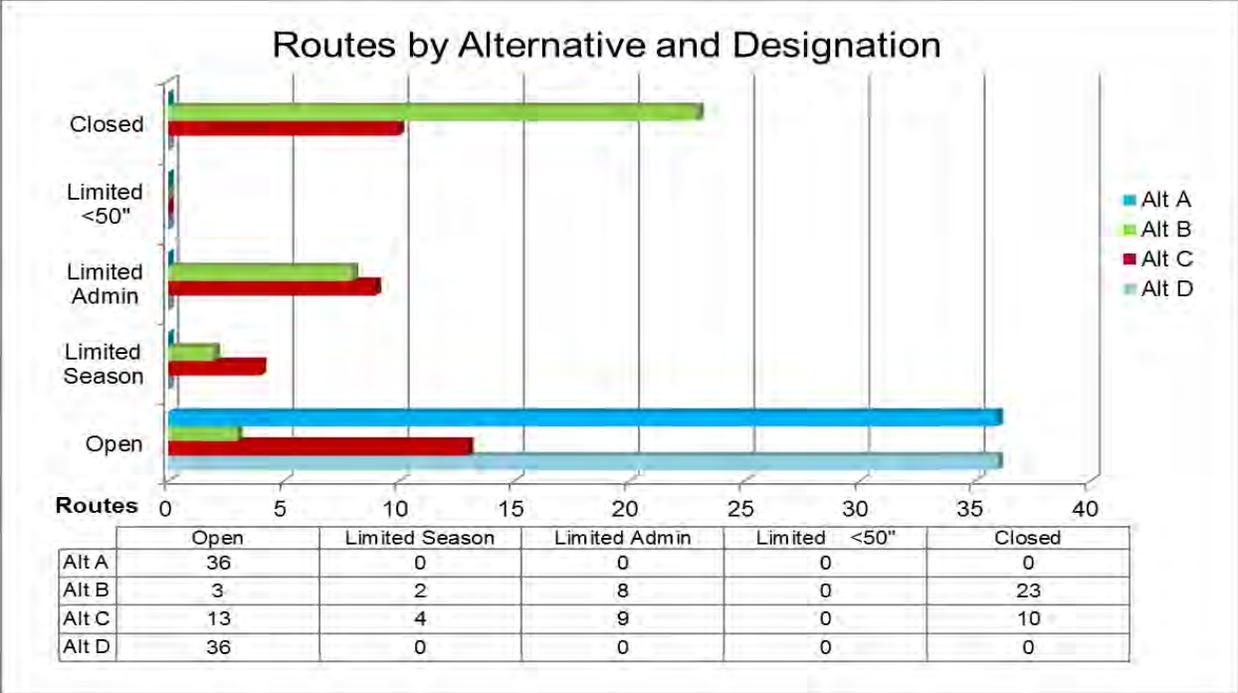


Figure 3. Number of Routes by Alternative and Designation

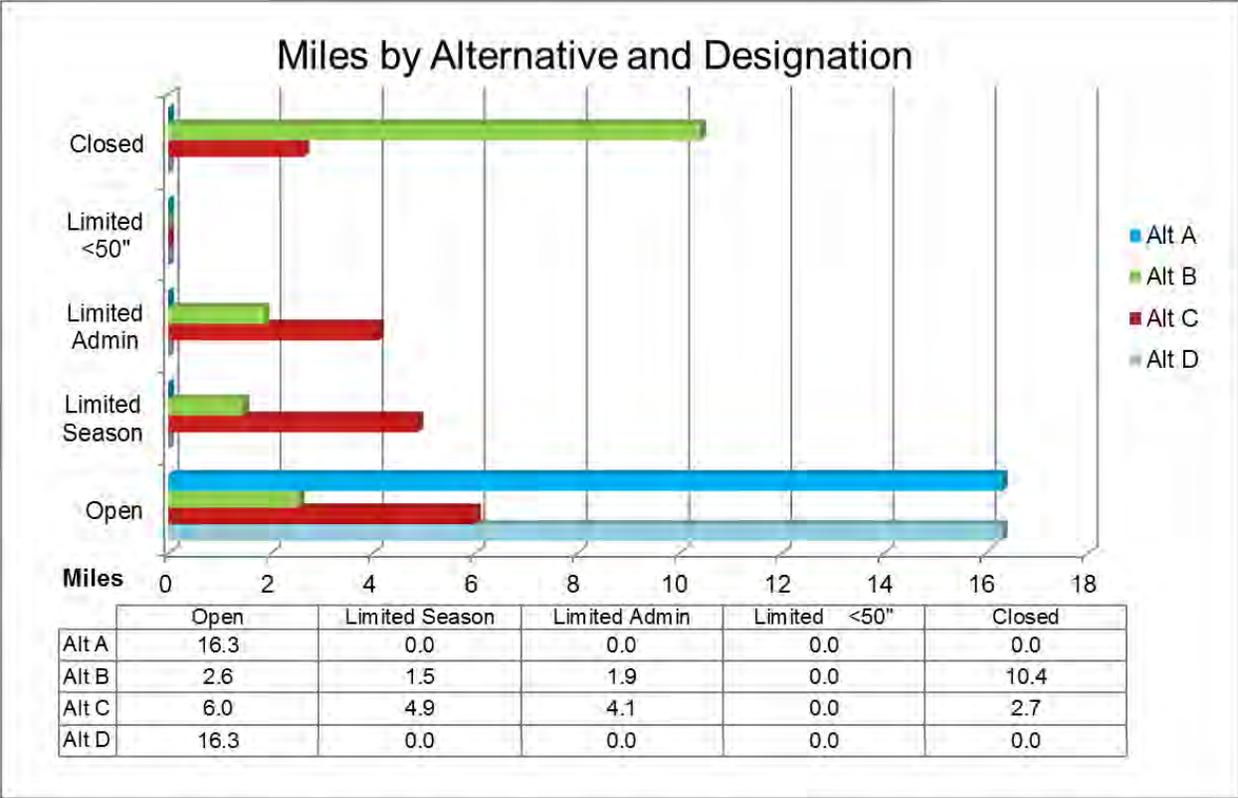


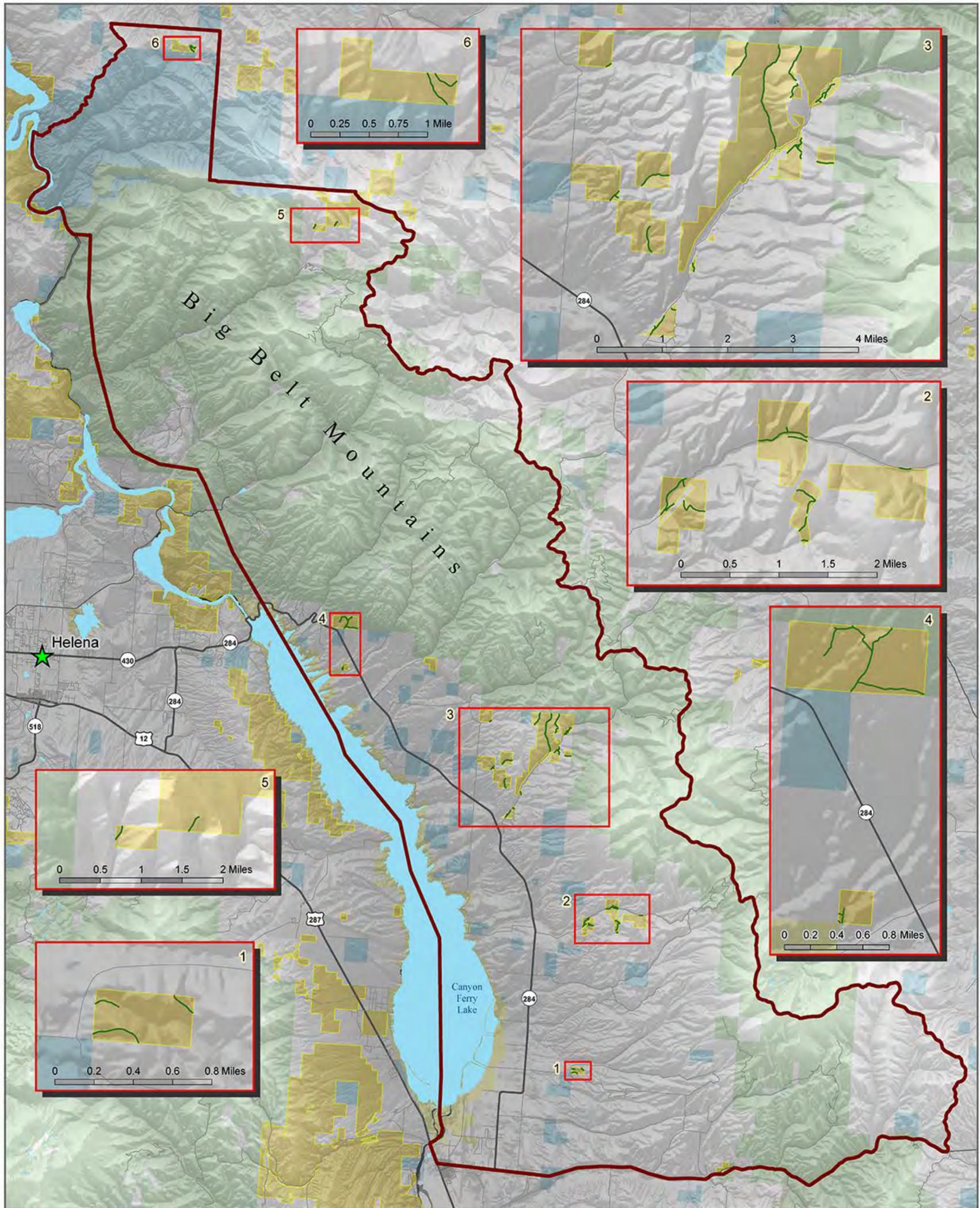
Figure 4. Miles by Alternative and Designation

Table 9. Summary and Comparison of Alternatives

Travel Management	Alternative A	Alternative B	Alternative C	Alternative D
<b>Number of Routes by Alternative</b>	36 Open 0 Limited Season 0 Limited Admin 0 Limited <50” 0 Closed	3 Open 2 Limited Season 8 Limited Admin 0 Limited <50” 23 Closed	13 Open 4 Limited Season 9 Limited Admin 0 Limited <50” 10 Closed	36 Open 0 Limited Season 0 Limited Admin 0 Limited <50” 0 Closed
<b>Miles of Routes by Alternative</b>	16.32 Open 0 Limited Season 0 Limited Admin 0 Limited <50” 0 Closed	2.56 Open 1.47 Limited Season 1.87 Limited Admin 0 Limited <50” 10.42 Closed	6.01 Open 4.88 Limited Season 4.11 Limited Admin 0 Limited <50” 2.65 Closed	16.32 Open 0 Limited Season 0 Limited Admin 0 Limited <50” 0 Closed

Table 10. Decommissioned/Closed Routes

Route Number	Type of Closure		
	Alternative B	Alternative C	Alternative D
MR1000	Natural Rehab	N/A	N/A
MR1001	Natural Rehab	N/A	N/A
MR1002	Natural Rehab	N/A	N/A
MR1003	Natural Rehab	N/A	N/A
MR1006	Natural Rehab	Natural Rehab	N/A
MR1007	Natural Rehab	Natural Rehab	N/A
MR1009	Natural Rehab	N/A	N/A
MR1010	Natural Rehab	N/A	N/A
MR1011	Natural Rehab	Natural Rehab	N/A
MR1012	Natural Rehab	N/A	N/A
MR1013	Natural Rehab	N/A	N/A
MR1016	Natural Rehab	Natural Rehab	N/A
MR1019	Natural Rehab	Natural Rehab	N/A
MR1020	Natural Rehab	N/A	N/A
MR1021	Natural Rehab	Natural Rehab	N/A
MR1024	Natural Rehab	N/A	N/A
MR1025	Natural Rehab	Natural Rehab	N/A
MR1029	Natural Rehab	N/A	N/A
MR1030	Natural Rehab	Natural Rehab	N/A
MR1031	Natural Rehab	Natural Rehab	N/A
MR1032	Natural Rehab	N/A	N/A
MR1033	Natural Rehab	N/A	N/A
MR1034	Natural Rehab	Natural Rehab	N/A



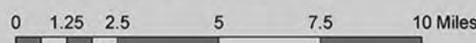
### Proposed Travel Route Designations - Alternative A (No Action)

#### BLM, Montana, Butte Field Office - Missouri River Foothills Planning Area (PA)

This product may not meet BLM standards for accuracy and content. Different data sources and input scales may cause some misalignment of data layers. This map is intended to assist the Butte Field Office with transportation management planning. It is not intended for any other purpose. The scope of BLM management decisions is limited to BLM lands. The BLM does not have jurisdiction over private lands or routes passing over private lands.



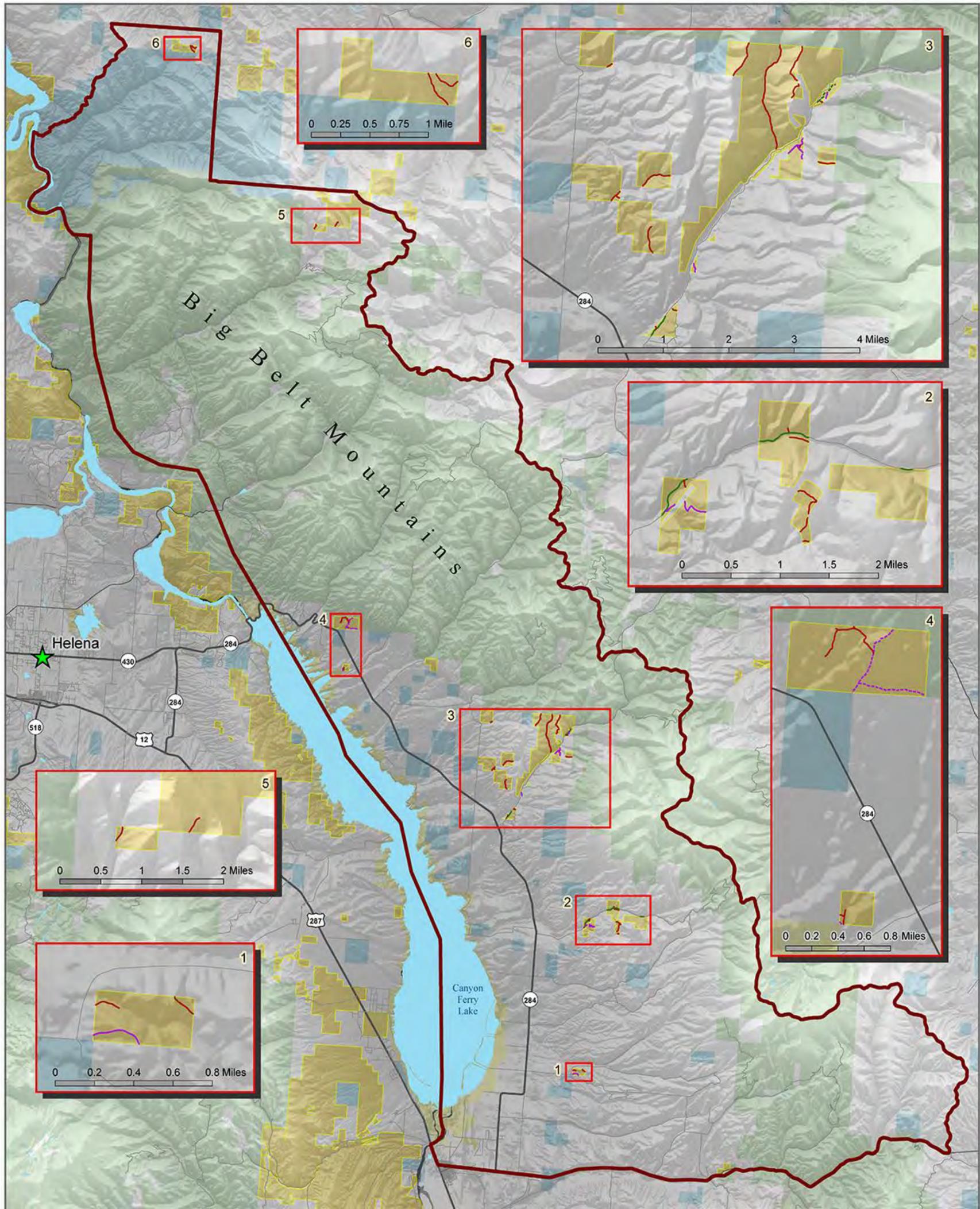
Datum: North American 1983 (NAD 83)  
 Projection: Albers  
 Map Scale: 1:84,000  
 Created By: Advanced Resource Solutions, Inc.  
 Created On: April 4, 2014  
 Sources: BLM, NED, ARS, State of Montana



**Route Designation, Alternative A**  
 — Open to All Uses

**MDT Routes**  
 — Highway or State Route  
 — Primary or Secondary Route  
 — Local Route

**Land Ownership**  
 U.S. Forest Service  
 U.S. Bureau of Land Management  
 U.S. Bureau of Reclamation  
 Private Land  
 State of Montana  
 Missouri River Foothills PA



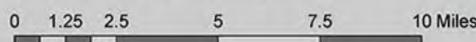
### Proposed Travel Route Designations - Alternative B

BLM, Montana, Butte Field Office - Missouri River Foothills Planning Area (PA)

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Datum: North American 1983 (NAD 83)  
 Projection: Albers  
 Map Scale: 1:84,000  
 Created By: Advanced Resource Solutions, Inc.  
 Created On: April 4, 2014  
 Sources: BLM, NED, ARS, State of Montana



#### Proposed Route Designation, Alternative B

- Open to All Uses
- - - Open to All Uses with Additional Management
- Limited to Authorized Users with Additional Management
- - - Seasonal Motorized Closure to the Public
- Closed

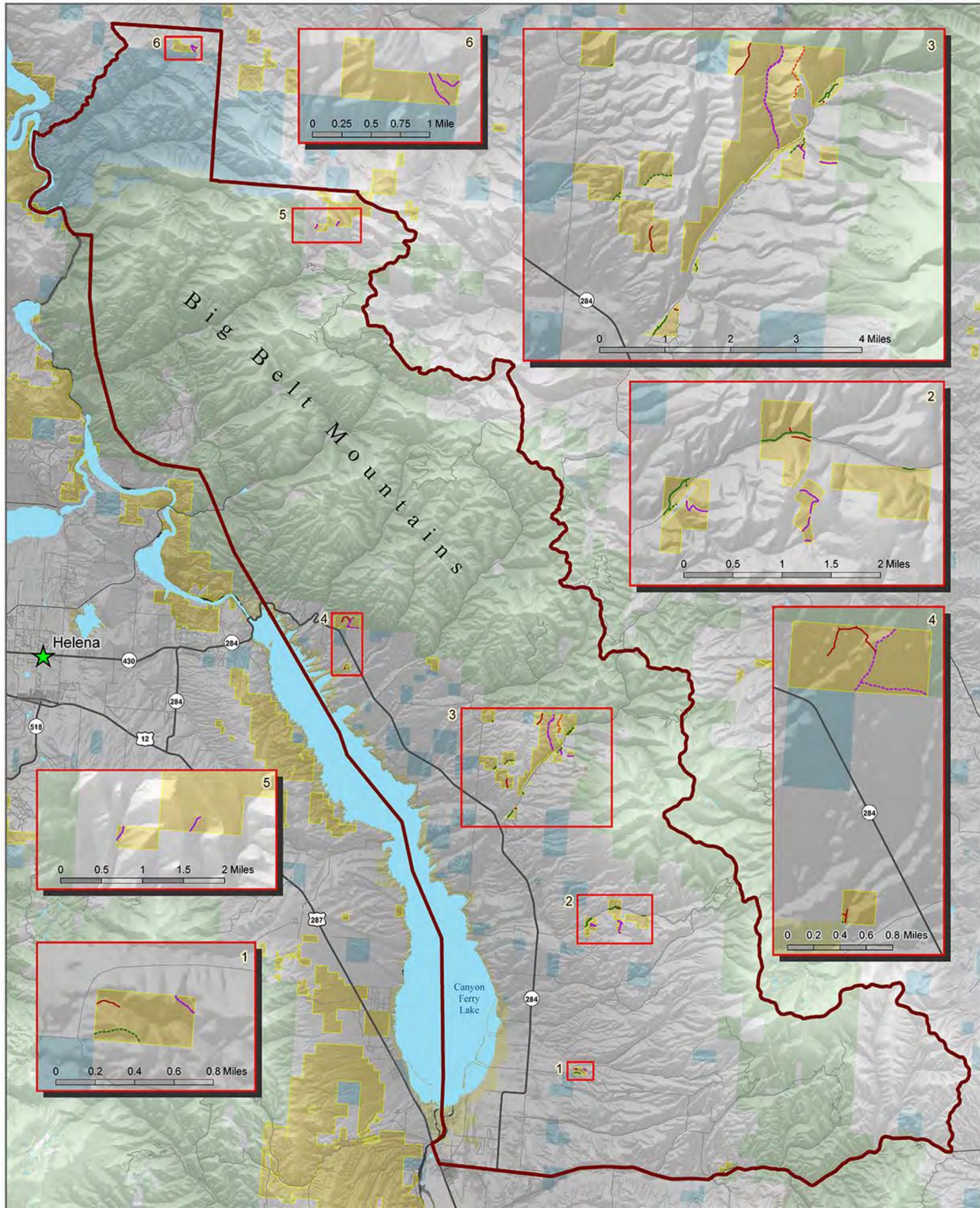
#### MDT Routes

- Highway or State Route
- Primary or Secondary Route
- Local Route

#### Land Ownership

- U.S. Forest Service
- U.S. Bureau of Land Management
- U.S. Bureau of Reclamation
- Private Land
- State of Montana
- Missouri River Foothills PA

Map 4. Proposed Travel Route Designations (Alternative C)

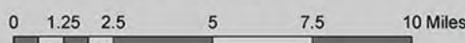


**Proposed Travel Route Designations - Alternative C**  
**BLM, Montana, Butte Field Office - Missouri River Foothills Planning Area (PA)**

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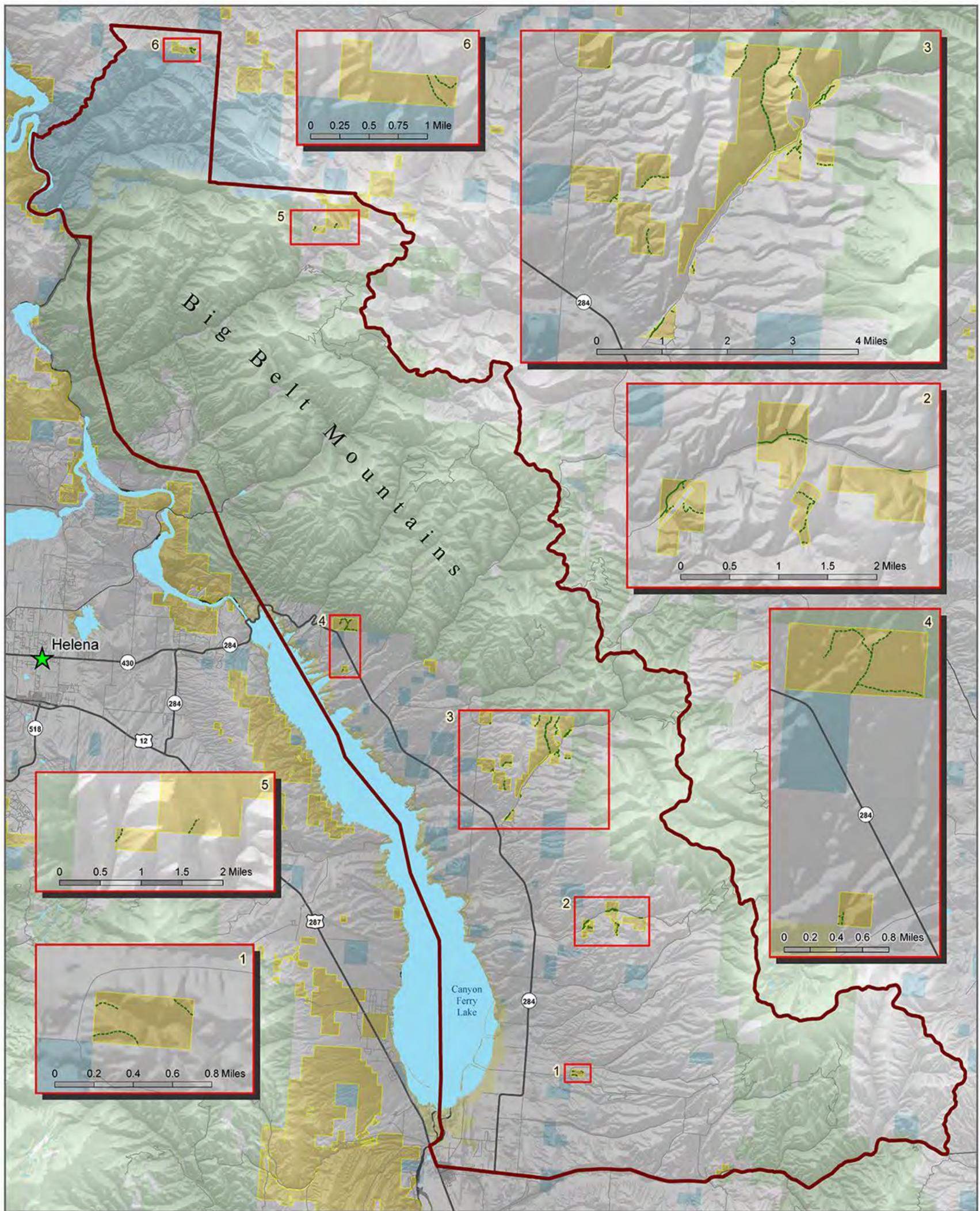
Datum: North American 1983 (NAD 83)  
 Projection: Albers  
 Map Scale: 1:84,000  
 Created By: Advanced Resource Solutions, Inc.  
 Created On: April 4, 2014  
 Sources: BLM, NED, ARS, State of Montana



- Proposed Route Designation, Alternative C**
- Open to All Uses
  - - - Open to All Uses with Additional Management
  - Limited to Authorized Users with Additional Management
  - Seasonal Motorized Closure to the Public
  - Limited to Authorized Users with Additional Management
  - - - Seasonal Motorized Closure to the Public
  - Closed to All Uses

- MDT Routes**
- Highway or State Route
  - Primary or Secondary Route
  - Local Route

- Land Ownership**
- U.S. Forest Service
  - U.S. Bureau of Land Management
  - U.S. Bureau of Reclamation
  - Private Land
  - State of Montana
  - Missouri River Foothills PA



### Proposed Travel Route Designations - Alternative D

#### BLM, Montana, Butte Field Office - Missouri River Foothills Planning Area (PA)

This product may not meet BLM standards for accuracy and content. Different data sources and input scales may cause some misalignment of data layers. This map is intended to assist the Butte Field Office with transportation management planning. It is not intended for any other purpose. The scope of BLM management decisions is limited to BLM lands. The BLM does not have jurisdiction over private lands or routes passing over private lands.



Datum: North American 1983 (NAD 83)  
 Projection: Albers  
 Map Scale: 1:84,000  
 Created By: Advanced Resource Solutions, Inc.  
 Created On: April 4, 2014  
 Sources: BLM, NED, ARS, State of Montana



0 1.25 2.5 5 7.5 10 Miles

#### Route Designation, Alternative D

- Open to All Uses
- - - Open to All Uses with Additional Management

#### MDT Routes

- Highway or State Route
- Primary or Secondary Route
- Local Route

#### Land Ownership

- U.S. Forest Service
- U.S. Bureau of Land Management
- U.S. Bureau of Reclamation
- Private Land
- State of Montana
- Missouri River Foothills PA

# **CHAPTER 3: AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES**

## **3.1 Introduction**

Activities associated with travel management may have both beneficial and detrimental consequences to the environment. In this analysis, the terms “effects” and “impacts” are used interchangeably. The analysis will determine whether possible impacts directly or indirectly affect resources or resource uses. Additionally, BLM analysis of impacts will qualify impacts as negligible, minor, moderate, major, short-term, or long-term. Definitions of these impact classifications are in the glossary under “Impacts (Common Terms).”

To focus the analysis, under each resource category, “affected environment” issues are stated as questions. Additionally, descriptions of affected environments are provided to give the reader context before the environmental impacts analysis is presented.

## **3.2 Travel and Transportation**

### **Issues for Analysis**

- ✓ Would the proposed action or its alternatives have an impact on non-BLM local transportation systems or private properties?
- ✓ Would the various maintenance intensities assigned to designated routes affect the range of travel opportunities and travel experiences provided by the network?

### **Description of Affected Environment**

The TMA currently contains about 13.43 miles of primitive roads, which are its most common route type. Primitive roads are routes that can be traversed by four-wheel drive or high clearance vehicles. Primitive roads do not normally meet any BLM road design standards. The TMA also hosts 2.56 miles of routes merely called roads, which are routes managed and maintained for regular and continuous use by low clearance vehicles having four or more wheels. Only 0.33 miles of trail exist in the TMA. Trails are routes managed for human-powered, livestock-based, or OHV forms of transportation or for historical or heritage values. Trails are not generally managed for use by four-wheel drive or high clearance vehicles.

While all routes are open to both motorized and non-motorized travel, pickup trucks and ATVs make up the majority of motorized use in the TMA. Such vehicles are used to access sites visited for hunting and antler shed hunting on foot. In addition to accessing sites, pickups and ATVs may also be used to actively hunt antler sheds. Additionally, routes in the TMA may be used by BLM and other authorized users (e.g., permittees) to maintain facilities and manage resources like wildlife and vegetation. It is presumed that motorized OHV use and other forms of outdoor recreation are expected to continue to increase as human population increases.

Five inventoried routes on BLM lands directly connect to county or state public roads. All other routes in the TMA must be accessed via some use of private roads. Fifteen inventoried routes cross BLM lands and provide primary access to neighboring sections of private land. The BLM

does not encourage access across private lands to public lands, and such access may require a landowner's prior approval.

### **Environmental Impacts**

Differences in travel management alternatives can affect the range of experiences users get from the existing route network. For a comparison of the four alternative travel networks, see Section 2.7.

#### Alternative A

Under Alternative A (No Action), wheeled motorized vehicle travel would continue to be limited to the existing route network. The current inventory describes all existing travel routes in the network and helps the BLM determine whether new routes have been illegally created. Without on-the-ground identification of which routes are open to motorized and mechanized travel, the public may continue to create new travel routes. This existing situation would have detrimental environmental impacts because it would fail to manage or control route proliferation produced by illegal cross-country travel. Both non-motorized and motorized travel would be hindered by a lack of clearly defined travel routes.

Road maintenance intensity levels<sup>4</sup> can determine degrees of environmental impact. For Alternative A, 33 routes have Level 1 maintenance intensity, which means minimal maintenance is required, and roads may be impassible for extended periods of time. In Alternative A, three routes have Level 5 maintenance intensity, which means they require high maintenance because of year-round needs or significant use.

#### Alternatives B, C, & D

All three of the other alternatives (the action alternatives) would involve posting signs throughout the travel network. The action alternatives would also involve monitoring, signing, and minor route maintenance to ensure that vehicle travel stays on designated routes. These measures would help limit route proliferation and would provide a well-defined travel network that would benefit all users.

Alternative B has a major long-term impact to transportation access because it decommissions 63.84% of the existing route mileage. Alternative C closes 16.24% of the network's mileage, and Alternative D closes 0% of the mileage. Decommissioning routes would affect the travel network's effectiveness and some users' range of experiences. For example, route decommissioning would benefit non-motorized users and some hunting experiences. Closed routes have a Level 0 maintenance intensity, which means they receive no maintenance. Under Alternative B, 23 routes would be closed and no longer maintained and 10 routes would have a maintenance intensity of Level 1. Compared to Alternative A, which has 33 routes with Level 1 maintenance intensity, there would be a direct reduction in the range of travel opportunities. Alternative C has 23 routes with Level 1 intensity, so it would also reduce travel opportunities but not as much as Alternative B. For Alternatives B, C, and D, the three routes (2.56 miles) with Level 5 maintenance intensity would retain that intensity, so users of Level 5 routes would not have their travel opportunities affected.

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<sup>4</sup> See Table 17 in Section 4.6.2 for definitions of maintenance intensity levels.

Alternative B designates approximately 11.46% of existing miles in the network as “Limited (Administrative and Non-Motorized Only).” This designation provides the wheeled motorized vehicle access needed by BLM and permittees. It also creates travel routes for non-motorized users, including mountain bikers. However, wheeled motorized vehicle access for public users would be reduced.

In contrast, Alternative C designates 25.18%, and Alternative D designates 0% of miles in the network as “Limited (Administrative and Non-Motorized Only).” Alternative C also designates 0.33 miles of trail exclusively for non-motorized use. Furthermore, Alternative C designates approximately 19.75% (3.22 miles) of route miles as closed to vehicles during the fall/winter or winter/spring periods.

Table 11 (below) shows the number of routes identified during the evaluation process as providing primary access to neighboring private lands. Alternative B is the only alternative that proposes closing primary private land access routes. It proposes closing five primary private land access routes: MR1000, MR1010, MR1013, MR1024, and MR1032.

Table 11. Primary Access to Private Lands

Number of Routes with Primary Access to Private Land				
	Alt A	Alt B	Alt C	Alt D
Open	15	2	9	15
Limited	0	8	6	0
Decommissioned	0	5	0	0

Under Alternative B, closure of two routes (MR1000 and MR1013) would occur in areas where nearby routes provide similar access to BLM land. The closure of MR1000 would not notably impact private land access from outside BLM land. The closure of MR1013 would block motorized access to a 16.48-acre mining claim parcel and block one avenue of access to USFS land. However, the USFS land is also accessible via a nearby route. Under Alternative B, the closure of MR1010 would block access to two BLM parcels (collectively occupying 367 acres). It would also isolate some routes on private land and may reduce the convenience of private land access.

The closure of MR1032 would block access to a 59-acre BLM parcel that is completely surrounded by private land. Private land access from outside BLM land would not be affected. The remaining primary private land access route that would be closed under Alternative B (MR1024) extends for a mere 0.05 miles on BLM land and then extends about 0.11 miles on private land before reaching a dead end. The closure of MR1024 would not affect private land access from outside BLM land. It would also not notably limit access to BLM land.

Alternative C does not close any routes that provide primary access to private land. Alternative D does not close or limit any route access to private lands. Alternatives B and C limit use on several routes. Landowners wishing to use routes designated as “Limited (Administrative and Non-Motorized Only)” would require a permit or variance from the BLM to use these routes. Alternative B would impact private land access more than Alternatives C or D.

### 3.3 Recreation

#### Issues for Analysis

- ✓ How would the proposed travel network or its alternatives affect recreation access to public lands?
- ✓ Would routes that were traditionally used for motorized access that are newly designated as non-motorized under the plan or alternatives affect hunting and other recreational opportunities?
- ✓ How would closing and decommissioning routes under the proposed travel management action or its alternatives affect non-motorized use on public lands?

#### Description of Affected Environment

The Missouri River Foothills PA includes isolated parcels of BLM land (a total of approximately 5,468 acres) that are widely separated. BLM parcels range in size from two to 1,544 acres. Thus, they provide scattered opportunities for recreation in settings of highly contrasting sizes. Lands (approximately 215,067 acres) managed by the USFS constitute the majority of public land acreage in the PA. USFS lands occupy the eastern and northern reaches of the PA. Significant BLM acreage is contiguous with USFS land to the east and private land to the west. These sandwiched BLM parcels can serve as staging areas for recreation that occurs on both USFS and BLM lands. While USFS lands in the PA mainly occur in high, forested mountain environments, the BLM lands exist at lower elevations that include barren foothills and regions bordering agriculture. These settings provide recreationists with experiences that are unique in the PA and different than those on USFS lands.

To gain a better understanding of the kinds of opportunities recreationists can expect on routes crossing BLM land in the PA, it helps to use a classification scheme called the Recreation Opportunity Spectrum (ROS). The ROS was developed in the 1970s by the USFS (PSTPTC 2011). According to the USFS, the “ROS allows accurate stratification and definition for classes of outdoor recreation environments. It can be applied to all lands, regardless of ownership or jurisdiction” (USFS 1996, 9).

The list below shows ROS classifications used for the TMA. It indicates the acres of BLM lands in each classification in the TMA and how many routes occur within each classification.

- Semi-Primitive Non-Motorized (54 Acres / 0 routes)
- Semi-Primitive Motorized (1,448 Acres / 4 routes)
- Roaded Natural (3,940 Acres / 32 routes)

Appendix 2 contains a detailed description of these ROS categories. The majority of the TMA’s routes occur on lands classified as “Roaded Natural.” According to the *2009 Butte RMP*, “Roaded Natural” areas include the characteristics below.

- Mostly equal opportunities to affiliate with other groups or be isolated from sights and sounds of man
- Generally natural landscapes with modifications moderately evident
- Concentration of users is low to moderate, but facilities for group activities may be present. Challenge and risk opportunities are generally not important.
- Opportunities for both motorized and non-motorized activities

The isolation of BLM lands (often surrounded by private land) in the PA limits public access. For example, 27 parcels (containing a total of 5,442 acres) of the 29 BLM parcels in the PA are contiguous with at least some private land. Sixteen BLM parcels in the PA are completely surrounded by private land. Reports on the types and amounts of recreational use on the inventoried travel network are limited due to the isolated access.

No studies were found that directly address recreation in the PA. However, a region that includes the Missouri River Foothills PA is analyzed in the Montana Institute for Tourism and Recreation Research report entitled: *MT SCORP Public Recreational Use Study: 2012* (MITRR 2013). The counties below make up the study's Southwest Region, which includes the Missouri River Foothills PA.

- Beaverhead
- Broadwater
- Deer Lodge
- Granite
- Jefferson
- Lewis and Clark
- Madison
- Powell

The study involved a series of surveys conducted across the state. In the study's report, Nickerson and Metcalf caution against making regional assumptions for survey results that have small sample sizes. Their caveat applies to the Southwest Region, which had only 50 respondents. Survey respondents indicated a need to increase particular recreation-related facilities and areas. The top categories from the survey are listed below in order of most to least needed.

1. Off-road ATV trails
2. Natural or wild areas
3. Hiking trails
4. Scenic byways
5. Wildlife viewing areas

During route evaluation, inventoried routes were linked with various recreation activities by the BLM ID Team. These activities are shown in Figure 8 along with the percentage of number of routes and percentage of miles with which they are associated. Hunting, antler shed hunting, hiking, birding, and wildlife viewing are the top five forms of recreation in the TMA.

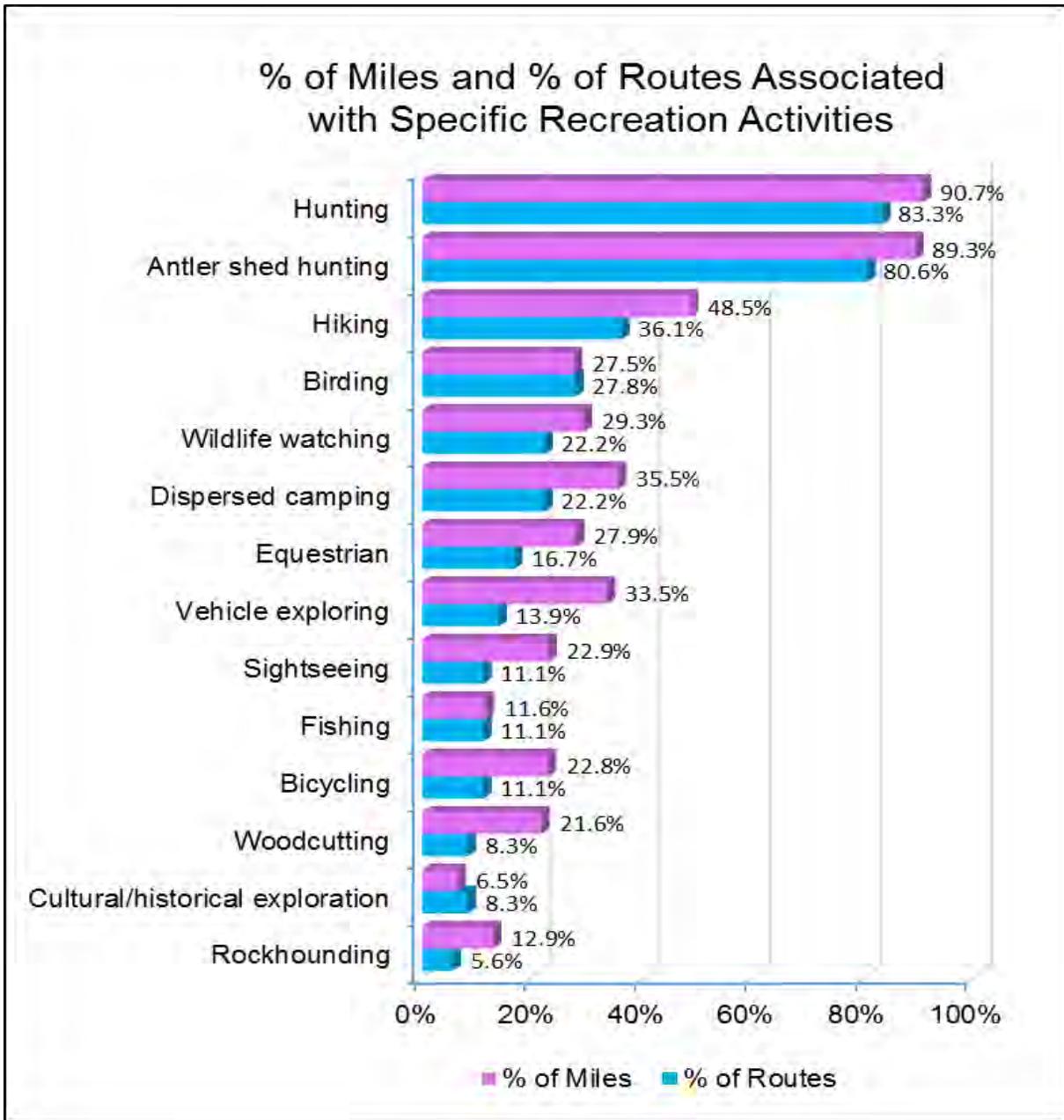


Figure 5. Recreation Activities by % of Miles and Routes

Examining disparities between route number percentages and route mileage percentages shows that some forms of recreation are more widely dispersed than others. For example, both hunting and antler shed hunting are associated with about 90% of the routes and about 80% of the miles in the travel network. These are the most widely dispersed activities. In contrast, vehicle exploring occurs on only five routes (13.9% of the total number) but actually covers 5.47 miles (33.5% of the total miles) in the network. The disparities in recreation dispersion indicate that the routes and lands in the TMA possess contrasting qualities that cause selective route use.

Currently, major trail systems designated for only non-motorized uses or only for motorized uses are not found within the TMA.

## **Environmental Impacts**

### Alternatives A, B, C, & D

Alternative A (No Action) would keep approximately 16.32 miles of travel routes “Open” yearlong to wheeled motorized vehicles. While the number of routes open to such uses would remain the same and provide (along with Alternative D) the highest level of wheeled motorized access among the four alternatives, beneficial experiences and outcomes would not be maximized because of the uncoordinated nature of the existing travel route system. Under Alternative A, there is the potential for detrimental impacts to natural conditions. Natural conditions are among the values that recreationists expect to find in the much of the TMA. Detrimental impacts (extra dust, noise, erosion, habitat damage, wildlife disturbance, etc.) would be derived from the continuation of route proliferation, especially the proliferation of smaller spurs and redundant routes.

The other three action alternatives (B, C, and D) would create a clear and defined travel route network and would include travel route signing, mitigation, monitoring, and focused law enforcement (as described in Chapter 4) to reduce or limit route proliferation. Alternatives B and C would close or decommission routes that have the highest potential to impact resources. Thus, these closures would help ensure positive recreational outcomes (e.g., opportunities, experiences, and benefits) while continuing to provide access. However access would occur at varying levels. Alternative B closes and restricts the highest number of travel routes available for motorized vehicle access, which improves recreational outcomes for non-motorized users but creates negative outcomes for motorized users.

In contrast, Alternative D does not close or restrict any routes. Though Alternative D is similar to Alternative A, it still provides a clear and defined travel route network, unlike Alternative A. Alternative D creates negative outcomes for non-motorized users but positive outcomes for motorized users. Alternative C closes and restricts moderate numbers of travel routes open to wheeled motorized vehicle access and thus provides more balanced outcomes for both motorized and non-motorized users.

As previously stated, public lands within the MRF PA are identified with specific ROS classes. Therefore, the Proposed Action or its alternatives could alter the types of recreational experiences available to the public by determining where they happen. Table 12 (below) displays how alternative route designations would impact levels of access in ROS classes. The TMA did not contain any routes that were designated as “Rural,” “Roaded Modified,” or “Semi-Primitive Non-Motorized.” Thus, those ROS classes were left out of Table 12.

Table 12. Route Designation by Recreation Opportunity Spectrum (ROS)

ROS Classes	Designation	Alt A		Alt B		Alt C		Alt D	
		Routes	Miles	Routes	Miles	Routes	Miles	Routes	Miles
<b>Roaded Natural</b>	Decommissioned	0	0.0	19	9.42	10	2.65	0	0.0
	Limited	0	0.0	10	3.34	9	6.66	0	0.0
	Open	32	15.32	3	2.56	13	6.01	32	15.32
<b>Semi-Primitive Motorized</b>	Decommissioned	0	0.0	4	1.0	0	0.0	0	0.0
	Limited	0	0.0	0	0.0	4	1.0	0	0.0
	Open	4	1.0	0	0.0	0	0.0	4	1.0

For lands classified as “Semi-Primitive Motorized,” route designation does not have a notable impact on recreation users’ access and opportunities. Only four routes (constituting one mile) are impacted in only two alternatives (B and C). In Alternative B, the four routes are closed. In Alternative C, the four routes are limited. For lands classified as “Roaded Natural,” route designation has a more notable impact. In Alternative B, for these lands, 19 routes (9.42 miles) are closed, and 10 routes (3.34 miles) are limited. Only three routes are left open. Alternative B could eliminate motorized recreational experiences on these lands to the point of creating additional non-motorized areas or roadless backcountry.

While the decommissioning (closing) of routes would increase opportunities for primitive recreation, it would also decrease opportunities for non-primitive recreation. The opportunity for slightly more developed recreation often depends on motorized vehicle access. Hunting serves as an example of this. It does not require vehicle access. In fact, one cannot legally shoot from a vehicle. However, access to hunting areas, camps, or downed game can involve motorized vehicles. No limited routes in the TMA were identified as Game Retrieval routes (see the glossary for a definition).

The impact of Alternative B on recreational access to public lands would be a major change from current management (Alternative A). In terms of closures and limitations, Alternative D does not alter motorized or non-motorized recreational opportunities in the ROS classes because it does not limit or close any routes. Alternative C balances the range of designation actions found in Alternatives B and D. Its resulting impacts on recreation are less than Alternative B. Alternative C closes only 10 routes (2.65 miles) and limits nine routes (6.66 miles).

Under Alternative C, only one route (0.33 miles) is limited to non-motorized use and classified as a trail. This trail is located in the far northern reaches of the PA. It starts at the border between the Beartooth Wildlife Management Area and BLM land and continues north before it terminates at private land. There is not public access to this route, and it is short, so limiting it to non-motorized use would not significantly impact hunting or other forms of recreation.

### 3.4 Minerals

#### Issues for Analysis

- ✓ What would be the effect of the proposed action or its alternatives on access to minerals for exploration, delineation, and development?
- ✓ How would repeated access by miners with travel variances on roads limited to authorized users influence the other visitors?

#### Description of Affected Environment

Confederate Gulch was one of the richest placer mining districts in Montana. However today most of the gold has been mined out and there is little use beyond small miner activity.

Casual use activity is the type of mining most often affected by route designations. Under federal mining regulations, casual use for mineral exploration and mining is defined as “activities ordinarily resulting in no or negligible disturbance of the public lands or resources” (43 CFR 3809.5). Actions are considered casual use if they do not involve the use of explosives, mechanized earthmoving equipment, or motorized vehicles in areas designated as closed to off-road vehicles. At this time, miners are not allowed to employ cross-country vehicle travel as part of mineral exploration. However, if miners wish to travel cross-country, a variance or permit allowing them to do so may be issued under an approved Plan of Operations or Notice.

Currently, the inventoried travel network (36 routes covering 16.32 miles) is open to vehicles and available for mineral development. Four routes (3.93 miles) are associated with an inactive mine or mines. Eleven routes (6.10 miles) are associated with a mining claim or claims. Five routes (1.18 miles) are associated with mineral exploration.

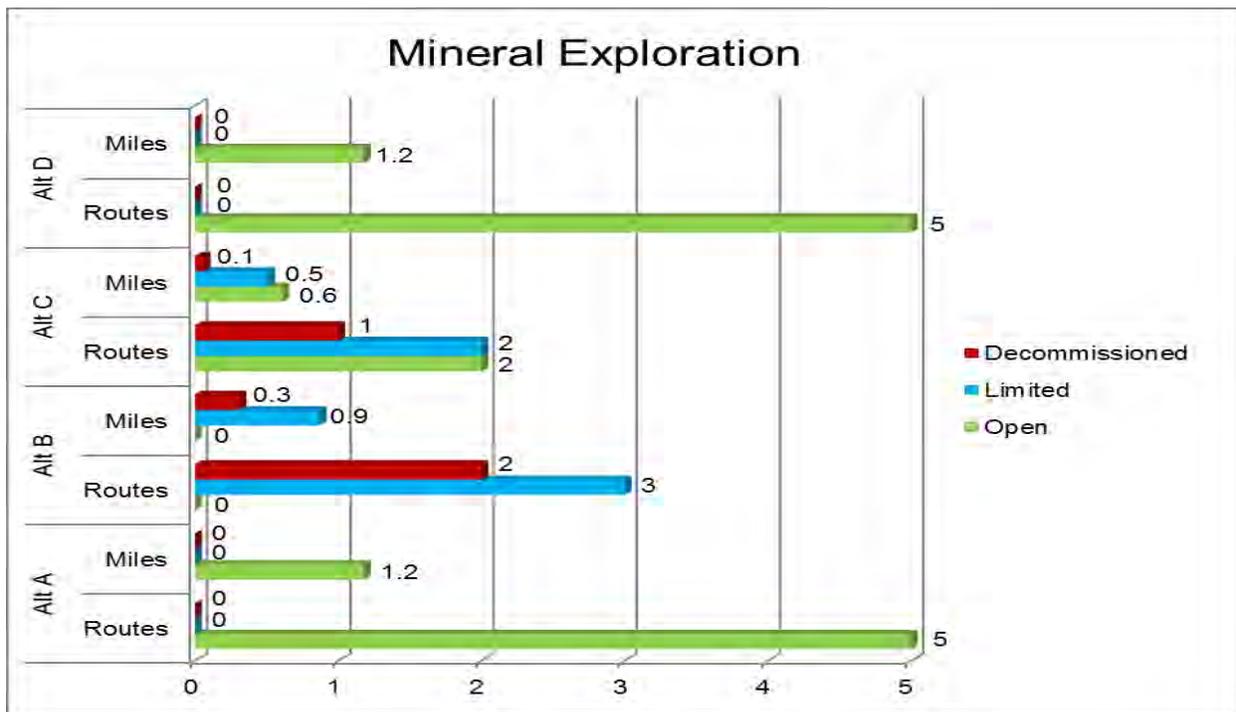


Figure 6. Designations of Routes Identified with Mineral Exploration

## **Environmental Impacts**

The choice of network alternatives can affect casual mining use by restricting where vehicles can travel on open routes. Primitive roads are often used for access to prospecting or exploration areas. Alternatives A and D provide 13.43 miles of open primitive road access for mining, Alternative B provides 0 miles, and Alternative C provides 3.45 miles. All alternatives provide 2.56 miles of open non-primitive road access. As long as the roadbeds are not reclaimed

Alternative B would not affect casual use mining, because access could be obtained through a travel variance. Should road beds be removed, then casual use activity would be limited to foot access or cross-country vehicle travel, larger projects would require the miner to construct roads. Alternative C could have a moderate effect, and Alternative D could have a minor effect if any.

Figure 8 (above) focuses this analysis on routes specifically identified with mineral exploration. Regarding routes associated with mineral exploration, Alternative B would decommission two routes (0.3 miles) and limit three routes (0.9 miles)—and Alternative C would decommission one route (0.1 miles) and limit two routes (0.5 miles). While these closures and limitations would restrain casual use, less restricted vehicle access for mining could still be obtained with either a Plan of Operations or a Notice.

## **3.5 Human Health and Public Safety**

### **Issues for Analysis**

- ✓ Does the selection of a specific travel network decrease or increase the potential for the public to endanger themselves in areas known to be unsafe, such as abandoned mine lands or other hazardous areas within the Missouri River Foothills TMA?

### **Description of the Affected Environment**

During route inventory, no abandoned mine lands (AMLs) were detected near routes in the TMA. However, a few AMLs still exist in the Missouri River Foothills PA. AMLs and their associated hazards (improperly closed shafts, adits, tailings, impoundments, waste rock piles, etc.) can be significant public safety concerns in much of the Butte Field Office's management area. In the PA, several small open adits and pits have been identified to date and most have been reclaimed or are located on private property. These mines (as well as any additional mines discovered) will be evaluated for their resource significance. AML closure methods will be designed to maximize safety while minimizing or mitigating impacts to AMLs' existing resources. The objectives of the BLM's AML program are to:

- Mitigate environmental and physical safety issues associated with abandoned mines through inventorying, assessing, and reclaiming mines on a prioritized basis.
- Continue the inventory and closure of abandoned mines on BLM lands.

Independently of this TMP/EA, the AML program will continue to inventory and assess the impacts of abandoned mines on BLM lands as mandated by the *2009 Butte RMP*, the 1997 Surface Mining Control and Reclamation Act, the 2008 Montana Strip and Underground Mine Reclamation Act, and two internal memoranda prepared to reduce or eliminate risks to human health from hazardous mine openings and to implement immediate temporary or permanent measures to mitigate known dangerous sites. Once mines have been evaluated, the appropriate closures, reclamation, or mitigation would be conducted as funding and/or staffing allow.

Closure methods would be determined on an individual basis in future Categorical Exclusions or EAs, as appropriate. Aside from AMLs, during route evaluation, no special major public safety issues were detected for the TMA.

### Environmental Impacts

BLM routes could contribute to public access of AMLs, which could have detrimental impacts on public safety. Alternatives A and D would provide the most potential for access to AMLs, and alternative B would provide the least potential.

## 3.6 Rangeland Management

### Issues for Analysis

- ✓ How would the proposed action or the alternatives affect required or permitted access to range improvements?
- ✓ Would recreational use on the travel network potentially impact the working condition of range facilities and/or the health of grazing animals?

### Description of Affected Environment

Table 13 (below) features all BLM allotments in the Missouri River Foothills PA. It includes the number and miles of inventoried BLM routes that pass through the portions of allotments that are in the TMA. Amount and type of range facilities are also shown, but most allotments lack facilities near routes. Range facilities shown in the table are located on BLM lands. At least one route accesses a facility on private land.

Table 13. Routes and Miles on BLM Land in Grazing Allotments

Inventoried Routes (Alternative A)			Range Facilities on BLM	
Allotment	Routes	Miles	Point	Linear
Avalanche Creek	2	0.16		
Confederate Gulch	6	6.55		1 Fence Gate <sup>5</sup>
Cottonwood Creek	2	0.59		
Duck Creek	3	0.96		
Hidden Hollow	4	1.04		
Hunter Creek	1	0.09		
Klondike Claim	2	1.22		
Little Hellgate	3	1.83		
Lower Duck Creek	4	1.10		
Middle Creek	0	0.00		
Ray Creek	3	0.71		2 Fence Gates
Wickiup Creek	1	0.22	1 Spring, 1 Tank	1 Allotment Fence
Windy Hollow <sup>6</sup>	2	0.19		

Note: 24 individual routes are identified with active allotments.

<sup>5</sup> A fence gate is a gate that looks like a fence and has to be dragged to be opened. A fence gate has a loop wire that ties it to the rest of a fence. Many fence gates are of barbed wire construction. These contrast with swinging gates, which are solid metal or wood and placed on hinges.

<sup>6</sup> Managed by the BLM Lewistown Office

## **Environmental Impacts**

The route designations in the proposed route network or its alternatives would have moderate impacts on permitted access to range improvements and grazing management. Changes would be measurable and have consequences, but their effects would be relatively local, and mitigating measures found in section 4.10 area expected to meet the needs of the permittees/lessees. Nine of the 10 routes that would be closed under the Proposed Action (Alternative C) cross grazing allotments. However, in the allotments where route closures occur, alternate routes provide similar access.

Any open route is available for allotment operators or permittees to maintain their facilities and access blocks of BLM public land. There are also exceptions to the PA's current "Limited to Existing Routes" area designation. For example, for range management, cross-country vehicle travel is allowed for the administration of a federal lease or permit. The BLM encourages allotment managers to travel on designated routes, but their leases will allow for necessary cross-county vehicle travel, regardless of which travel management alternative is chosen. In addition to common activities like checking on livestock, maintaining water facilities, and providing salt blocks, allotment users may need access for vegetation control, including weed management.

Alternative B decommissions 23 routes (about 64% of the travel network's miles), and Alternative C decommissions 10 routes (about 16% of the travel network's miles). Alternative D does not decommission any routes. Other factors not reflected in the analysis are the current condition of facilities and the frequency of maintenance visits. Overall, the potential impact of implementing any of the alternatives would only have negligible impact on livestock management.

## **3.7 Soil and Water**

### **Issues for Analysis**

- ✓ Would the proposed travel network or its alternatives affect riparian areas, wetlands, or areas having hydric soils?

### **Description of Affected Environment**

The estimated soil or surface disturbance created by the existing 16.32-mile network is around 4.91 acres. This area for the network's route disturbance was estimated by multiplying the average width of routes crossing soils prone to erosion (sandy and loamy soils) by their lengths. So, the 4.91-acre area is the amount of land that routes (crossing erodible soils) physically cover in, and of, themselves.

Slope, surface roughness, soil erodibility, vegetative cover, amount of vehicle use, and average precipitation all factor into the amount of sedimentation a route network contributes in a watershed. Watersheds are regions that drain into particular bodies of water, and they can be considered hydrologic unit boundaries. The Missouri River Foothills PA is almost completely contained in the Upper Missouri River sub-basin hydrologic unit.

Lands within the TMA contain segments of several Upper Missouri River sub-basin streams that are classified as impaired water bodies in Table 3-3 of the *Proposed Butte Resource Management Plan and Final Environmental Impact Statement* (BLM 2008c). These streams are Beaver Creek, Deep Creek, and the Missouri River.

Table 14 (below) lists probable impairment types and sources for each of these streams. In the table, types and sources happen to be listed side-by-side, but they are not necessarily meant to correlate with each other.

Table 14. Impaired Streams on BLM Lands in the Missouri River Foothills PA  
(adapted from Table 3-3 of the *2008 Proposed Butte RMP*)

Beaver Creek		Deep Creek		Missouri River	
<i>Probable Impairment Types</i>	<i>Probable Impairment Sources</i>	<i>Probable Impairment Types</i>	<i>Probable Impairment Sources</i>	<i>Probable Impairment Types</i>	<i>Probable Impairment Sources</i>
Habitat alterations (including wetlands), Nitrogen, Nutrients, Sedimentation, Metals and Lead	Irrigated crop production, Logging road construction and maintenance, Range grazing-riparian	Flow alterations, Habitat alterations (including wetlands), Sedimentation	Agriculture (grazing-related; crop-related) Habitat modifications (other than construction), Removal of riparian vegetation, Bank or shoreline modification and destabilization	Flow alterations, Habitat alterations (including wetlands), Phosphorous, Nitrogen, Nutrients, Sedimentation, Metals, Lead	Irrigated crop production Range grazing-riparian, Hydro-modification, Abandoned mines

Riparian areas are found along perennial streams, springs, wet meadows, and small standing ponds. Essentially, riparian areas are areas that hold or are adjacent to water. Dominant plant species in riparian areas include sedges, rushes, willows, red osier dogwood, water birch, aspen, and cottonwoods. Presence of hydric soils is the defining characteristic of riparian areas. Hydric soils form under saturation that lasts long enough during the growing season to cause the development of anaerobic (absence of free oxygen) conditions in the upper part of soil. The Natural Resources Conservation Service’s (NRCS’s) Web Soil Survey map application identifies approximately 85.66 acres of soil map units on BLM lands in the TMA that contain some percentage of hydric soil (NRCS 2014). In the TMA, five routes cross NRCS soil map units that include hydric soil.

### **Environmental Impacts**

Physical space actually occupied by routes in the existing route system (Alternative A) covers approximately 18.27 acres (0.33%) of BLM lands in the TMA. Alternative B closes 10.36 acres by decommissioning routes and eliminating their potential ground disturbances. In comparison, Alternative C closes 2.63 acres, and Alternative D closes zero acres.

The dynamic of soil/surface retention of water can change based on potential vegetative growth and the absence of vehicle-caused soil disturbance. Route closures could have long-term (but minor) reductions to water source sedimentation in the TMA. The TMA's existing network has a minor impact on watershed sedimentation.

No actively eroding areas were found as part of the TMP effort. As part of implementing this TMP/EA, stream and route monitoring would identify location/spot specific impacts to hydric soils, riparian conditions, and water quality. Adaptive management at stream crossings would be applied to prevent sedimentation, erosion, and compaction of hydric soils.<sup>7</sup> In any of the three action alternatives, impacts to hydric soils would be considered minor because of the small acreage affected. Within the TMA, direct impacts to water resources (due to additional sedimentation from ground disturbance caused by vehicles crossing riparian soils) would be localized and addressed through ongoing maintenance.

### **3.8 Noxious Weeds**

#### **Issues for Analysis**

- ✓ Under each of the alternatives, how might vehicle traffic on open primitive roads and trails affect the transportation of noxious weeds? Specifically spotted knapweed and Dalmatian toadflax weeds from BLM lands to and from private lands?
- ✓ How might decommissioned routes affect the ability of the BLM to carry out weed control operations?

#### **Description of Affected Environment**

During route evaluation, 31 (14.85 miles) of the 36 existing routes (16.32 miles) were identified as having potential for increasing the spread of invasive weeds. Invasive weeds are often considered noxious because they can be harmful. Spotted knapweed and Dalmatian toadflax are among the invasive weeds present in the PA. The Montana Weed Control Association webpages provide detailed descriptions, photographs, and recommended possible actions for weed control in general (<http://www.mtweed.org/weed-identification/>). Figure 10 (on the next page) shows the number of miles of routes (by designation and alternative) that have weed concerns.

#### **Environmental Impacts**

Preventing vehicle traffic by closing routes should decrease the potential for the spread of invasive weeds. These plants are highly adaptable, and most species prefer disturbed soils. Methods used to close or decommission routes have an influence on invasive weeds. Invasive weeds could infest closed routes' disturbed areas before native species take hold. Monitoring and mitigation would be essential for minimizing invasive weed impacts, regardless of the alternative chosen.

Alternative B closes approximately 63.84% of the total existing network mileage, limits 11.45% to administrative and non-motorized uses, and limits 9.01% by season. In Alternative C, the percentages are: 16.24% closed, 25.18% limited to administrative and non-motorized uses, 19.75% limited by season, and 2.02% limited to non-motorized use. In Alternative D, 0% of existing total network miles are closed or limited.

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<sup>7</sup> See Section 4.10 for information on mitigation measures that could be employed in riparian areas.

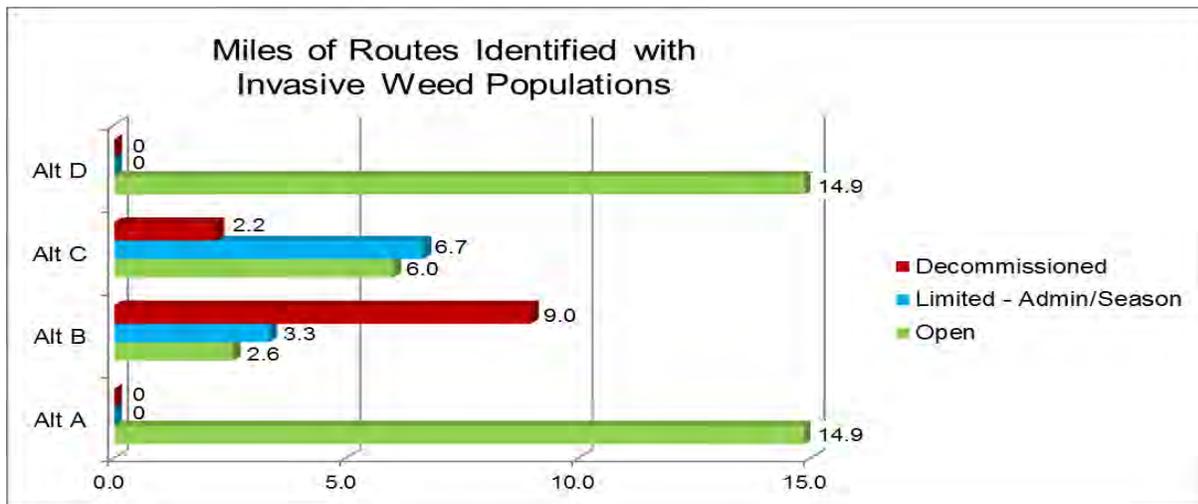


Figure 7. Mileage of Routes with Weed Concerns

Closing more miles of the existing routes could slow the spread of weeds and yield a beneficial long-term impact. However, the closure of routes could also have a minor impact by limiting the BLM in its ability carry out weed control.

### 3.9 Cultural Resources

#### Issues for Analysis

- ✓ How would the proposed route network and the alternatives affect the protection of historic districts, historic sites, and other cultural resources?

#### Description of Affected Environment

Old structures and remains of mining operations are the primary cultural resources in the PA. Confederate Gulch is a prominent topographic feature in the TMA. In 1864, gold was discovered in Confederate Gulch, which caused a rush of settlement and mining activity. At one point, 10,000 people lived in Confederate Gulch. The community of Diamond City (located just east of the TMA) was the primary settlement in the area. By 1880, its population had decreased to about 60 people. Aerial imagery and maps reveal that Diamond City is no longer an established community. The Confederate Gulch area supported gold extraction via lode mining and dredging at least up into the late 1940s (State of Montana 2009). The Lewis and Clark National Historic Trail barely enters the western part of the PA but does not cross any portions of the TMA, so travel within the TMA would not directly impact it.

Cultural and historic sites or areas are not displayed on maps or in the TMA route reports because of the sensitivity of the information. Cultural properties within the PA were described during the route evaluation process as part of a historic district with identified historic sites.

## **Environmental Impacts**

The eight routes (3.31 miles) in the Confederate Gulch Historic Mining District have the potential to directly impact cultural resources. One of those routes (0.54 miles) has the potential to indirectly impact cultural resources. The three routes (2.12 miles) proximate to historic sites have the potential to indirectly impact unevaluated cultural resources north of Confederate Gulch. The two routes (0.36 miles) in sites that are potentially eligible for listing in the National Register of Historic Places under Criterion A have the potential to directly impact cultural resources. Sites fitting under this criterion “are associated with the events that have made a significant contribution to the broad patterns of our history.” (NPS 1997.2) However, changing the designation of the county road into Confederate Gulch is outside the scope of this travel plan.

Direct impacts include physical displacement of cultural resources by traffic over routes and/or routine maintenance that may be required for keeping routes available for travel. Primitive roads or trails may also have indirect potential to affect cultural resources when they lead to or are proximate to cultural properties. Intensity and long-term impacts depend on the potential for actual disturbance of resources. Indirect impacts come about from activities associated with motorized recreation, and not the use of the vehicles themselves.

Under Alternative A: Three sites eligible for listing on the National Register of Historic Places are vulnerable to indirect impacts.

Under Alternative B: Two unevaluated sites would gain protection from road closures. The three sites eligible for listing on the National Register of Historic Places would still be vulnerable to indirect impacts.

Under Alternative C: Road closures would protect the two unevaluated sites, but the three eligible sites would still be vulnerable to indirect impacts.

Under Alternative D: the two unevaluated sites would be vulnerable to indirect impacts, as well as the three eligible sites.”

Miles of open routes in each alternative indicate the extent of environmental impacts each alternative would have the potential to generate.

Mitigating route uses’ detrimental impacts on cultural resources begins with evaluating sites for their potential for listing in the National Register of Historic Places. Sites that are found not eligible for listing do not need further consideration. Sites that are determined to be eligible are most easily protected by moving or closing routes. However, relocation/closure situations must be monitored regularly for effectiveness. Lastly, a site that is determined to be eligible—but located in a very high traffic area—may need to be removed (excavated). Tribal considerations may preclude an invasive form of data recovery. If that is the case, a noninvasive form of mitigation may be needed.

### 3.10 Wildlife/Special Status Species

#### Issues for Analysis

- ✓ How might implementation of the proposed travel route network (or its alternatives) result in landscape fragmentation and habitat loss?
- ✓ How would the proposed travel route network (or its alternatives) work toward meeting RMP direction for reducing road density in big game winter range?

#### Description of Affected Environment

##### Introduction

Wildlife in the PA is typical of southwestern Montana. Basic life history and habitat requirement information on all species mentioned in this document can be found in the Montana Field Guide (<http://fieldguide.mt.gov/>), and numerous other sources. Species location information is largely obtained from Montana Fish, Wildlife, and Parks GIS layers and Montana Natural Heritage Program information provided to BLM.

##### Mammals

The PA and TMA provide important big game habitat. The most commonly found big game species in the TMA are elk and mule deer. The most important habitat types for these species are those used for winter range, calving, and security. Much of the Missouri River Foothills PA is winter range for these species. A total of 261,571 acres (60.21%) of the PA is considered winter range for elk and mule deer. A total of 4,709 acres (86.1%) of BLM lands in the PA is considered winter range for these species. Elk calving occurs in the TMA in Travel Management Zone (TMZ) 3 (Confederate Gulch area). Security habitat, as defined by Hillis et. al. (1991), must be a nonlinear block of hiding cover  $\geq 250$  acres in size and  $\geq \frac{1}{2}$  mile from any open road. Most of TMZ 5 (Wickiup Creek area) is in this classification.

Summer habitat for elk includes the whole PA, except for private land on the east side of Canyon Ferry Lake. Their winter habitat includes all TMZs in the TMA except for upper elevations of TMZ 5 (Wickiup Creek area). Mule deer occupy the entire PA during summer. Their normal winter range covers all TMZs, except for TMZs 1 and 5 (Wickiup Creek and Ray Creek areas).

Less wide-ranging big game species include white-tailed deer, which mostly occur in and near riparian corridors. Pronghorn antelope range includes TMZ 1 (Ray Creek area) and the south parcel of TMZ 4 (Little Hellgate area), and the western portions of TMZ 3 (Confederate Gulch area). Moose may be found in TMZs 2 and 3 (Confederate Gulch and Duck Creek areas). Bighorn sheep and mountain goats are rarely found on BLM land in the PA, but sheep may occur in TMZ 6 (Cottonwood Creek area) in summer. Mountain goats may range out of USFS lands into the north portion of TMZ 4 (Little Hellgate area).

Predators in the PA include mountain lions, bobcats, coyotes, black bears, and badgers. The gray wolf has moved into the PA in recent years. Canada lynx, classified as Threatened under the Endangered Species Act, may occur in forested areas in higher elevations. Grizzly bear, also classified as Threatened, may occasionally occur or disperse through the PA. Numerous small mammals are present in the area as well, including shrew species, many rodent species, and several bat species.

## Birds

Many species of migratory and non-migratory birds are found in the PA. Species commonly seen in the lower elevation grassy habitats include the horned lark, vesper sparrow, and western meadowlark. Examples of species associated with mature closed-canopied forested areas include golden-crowned kinglet, brown creeper, pine grosbeak, northern goshawk, boreal owl, hermit thrush, and Townsend's warbler. Many birds are more general in habitat preferences and may be found in shrub and coniferous habitats including the American robin, chipping sparrow, dark-eyed junco, mountain chickadee, pine siskin, Clark's nutcracker, and quite a few others. Raptors recorded in the area include bald eagle, kestrel, ferruginous hawk, red-tailed hawk, and northern harrier.

## Reptiles and Amphibians

Reptiles that could occur in the project area include the gopher snake, terrestrial and common garter snakes, eastern racer, rubber boa, and prairie rattlesnake. Amphibians that could occur in the project area are the Columbia spotted frog, western toad, and plains spadefoot. Other reptiles and amphibians are unlikely to occupy the area.

## Fish

Stream segments on TMA lands known to support fish are listed in table 15 below (Montana Fisheries Information System 2014).

Table 15. Fish Species Present on TMA Stream Segments.

<i>Fish Species Present on TMA Stream Segments</i>		
<b>Waterbody Name</b>	<b>Travel Management Zone (TMZ) / Area</b>	<b>Fish species present</b>
Duck Creek	TMA 2 - Duck Creek	Brook trout – common Brown trout – common Common carp – rare Mottled sculpin – common Rainbow trout – rare Sucker – common Westslope cutthroat trout – rare
Spring Creek	TMA 3 - Confederate Gulch (NE portion)	No data
Confederate Gulch	TMA 3 - Confederate Gulch	Brook trout – abundant Brown trout – common Burbot – rare Longnose dace – rare Longnose sucker – rare Mottled sculpin – common Rainbow trout – common Rainbow X cutthroat – unknown Westslope cutthroat trout – rare White sucker – rare
Little Hellgate Gulch	4 - Little Hellgate	No data
Dry Gulch Creek	5 - Wickiup Creek	No data
North Fork Beaver Creek	5 - Wickiup Creek	brook trout – abundance unknown rainbow trout – abundance unknown westslope cutthroat trout - rare

ESA Listed Species

Three species listed under the Endangered Species Act have the potential to occur in the TMA:

Table 16. Endangered Species Act Listed Species

<i>Endangered Species Act Listed Species With Potential to Occur in the TMA.</i>		
<b>Species</b>	<b>Status</b>	<b>Notes</b>
Lynx	Threatened	Habitat with suitable characteristics for lynx occurs on the Wickiup Creek, Confederate Gulch, Duck Creek, and Klondike Claim allotments. Lynx have not been documented in the TMA. The majority of habitat suitable for lynx in the PA occurs on USFS lands.
Grizzly bear	Threatened	May occasionally occur or disperse through the PA. There are no recent records of grizzly bear within the PA. The PA is within Zone 2 as defined in the NCDE Grizzly Bear Conservation Strategy (2013 draft). Zone 2 is managed to provide grizzlies the opportunity to move between the NCDE (Northern Continental Divide Ecosystem and other ecosystems, such as the Greater Yellowstone. Management emphasis in on conflict prevention and response.
Sprague’s Pipit	Candidate	Could occur in grassland habitat but has not been documented in the TMA. MT NHP habitat suitability mapping shows some areas of low habitat suitability for this species in the PA.

Sensitive Species

Species designated “sensitive” by the BLM may occur in the area (see the table below). Species requiring special management consideration to promote their conservation and reduce the likelihood of future Endangered Species Act listings are designated “sensitive” by BLM State Directors.

Table 17. BLM Listed Sensitive Species.

<i>BLM-listed Sensitive Species With Potential to Occur in the PA.</i>		
<b>Species</b>	<b>Documented in TMA or PA?</b>	<b>Notes</b>
Fringed myotis	TMA & PA	Roosts in caves, mines and rock crevices.
Townsend’s big-eared bat	TMA & PA	Prefers caves and abandoned mines for roosting. Known to overwinter in one gated abandoned mine in the area.
Long-eared myotis	no	Undocumented in the area but could occur. Associated with forested stands with old-growth characteristics.
Long-legged myotis	no	Uses tree bark or caves for summer roost sites. Could occur in the area. Occurs in aspen and mixed conifer forests.
Gray wolf	PA only	Wolves now occur throughout western Montana. However, no resident packs are known to occur in the TMA.

Wolverine	PA only	May rarely occur in the TMA. Wolverines prefer higher elevations, are wide-ranging and unlikely to be significantly affected by any travel alternative. The majority of habitat suitable for wolverines in the PA occurs on USFS lands.
Bald eagle	PA only	Commonly found near the Missouri River and Canyon Ferry Lake.
Black-backed woodpecker	PA only	Unlikely to occur in TMA. Prefers recently burned forests.
Bobolink	PA only	Prefers tall and mixed prairie grass.
Brewer's sparrow	no	Prefers sagebrush habitat.
Ferruginous hawk	PA only	Hunts in open grassland habitats.
Flammulated owl	PA only	Nests in cavities excavated by woodpeckers. Occurs in mature forest habitat.
Golden eagle	PA only	Not documented in the TMA but is likely to occur. Hunts over open country.
Great gray owl	no	Has not been documented but could occur in the area. Prefers dense forest and has large home range.
Long-billed curlew	PA only	Prefers grassland habitat.
McCown's longspur	no	Prefers short grass habitat.
Mountain plover	no	Usually associated with prairie dog towns. There are no prairie dog towns in the TMA.
Peregrine falcon	TMA & PA	Has been documented as occurring on TMA but unlikely to nest on BLM land. Nests on cliffs.
Sage sparrow	no	Could occur but the area is at the northern end of the range of this species.
Sage thrasher	no	Prefers sagebrush habitats.
Swainson's hawk	no	Has not been documented but is likely to occur. Hunts primarily in agricultural land and grasslands.
Three-toed woodpecker	no	Could occur in the area. Nests in cavities, often near water.
Milksnake	no	Area is on the western edge of species' range, preferred grassland habitat is present.
Plains spadefoot toad	no	Could occur in riparian areas with soft or gravelly soils.
Western toad	no	Likely to occur in or near riparian areas.
Westslope cutthroat trout	TMA & PA	Rare occurrence as listed in table above. Genetically pure individuals may not exist in the PA.

## Environmental Impacts

### General Road Impacts

In general, roads have negative impacts on wildlife and ecosystems. The U.S. public road system ecologically affects an estimated one-fifth of the country's land area (Trombulak and Frissell 2000; Forman 2000). Road impacts on wildlife and ecosystems include:<sup>8</sup>

- Mortality to organisms from road construction
- Mortality from collision with vehicles
- Modification of animal behavior
- Disruption of movement patterns
- Habitat fragmentation
- Alteration of the physical environment
- Spread of exotics
- Increased use of areas by humans

High speed, high traffic, and wide roads (e.g., interstate highways) have more impacts on wildlife and ecosystems than low speed, low traffic, and narrow roads. Highways can impact wildlife that occurs up to a half mile or more from the actual roadway. Alternatives in this TMP/EA only address road on BLM lands within the PA, and these roads are generally low-speed gravel or two-track dirt roads. Major factors in road impacts on wildlife are the amount, timing, and type of use a route receives. There have been no visitor use studies or wildlife effect studies for routes within the PA.

Elk are one of the most studied species where road effects are concerned, and elk are an important species in the PA. Road avoidance is characteristic of large animals such as elk. Elk avoidance of forest roads by distances of 300 to 600 feet is common. Roads result in habitat changes, modified animal behavior, and changes in wildlife populations (USFS 2001). In addition to mortality from vehicle collisions, the direct impacts of roads and associated traffic on elk include (USFS 2005a):<sup>9</sup>

- Avoidance of areas near open roads
- Vulnerability to mortality from legal and illegal hunter harvest increases as open road density increases.
- Higher levels of stress and increased movement rates in areas of higher road density

### Road Densities in Big Game Winter Range

One objective in the *2009 Butte RMP* is to reduce open road densities in big game winter and calving ranges where they currently exceed one mile per square mile (1 mi./square mi.) (*2009 Butte RMP* Goals WF2, WF4, WF5, SE4). Elk and mule deer winter range cover the majority of BLM land in the PA. To determine how each alternative would meet the RMP objective of reducing road density in winter range, GIS analysis was performed on each of the TMP areas, and results are shown in the tables below:

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<sup>8</sup> List items taken from Trombulak and Frissell 2000 *and* Forman 2000

<sup>9</sup> List items taken from USFS 2005a

Table 18. Road Density in Big Game Winter Range and Elk Calving Areas

<b>Road Density in Big Game Winter Range and Elk Calving Areas</b>						
<b>Alternative</b>	<b>Travel Management Zone (TMZ)/Area</b>	<b>Total Square Miles</b>	<b>Square Miles in Winter Range, Calving Areas</b>	<b>Miles of Open Road in Winter Range, Calving Areas</b>	<b>Number of Open Roads Contributing to Mileage in Winter Range, Calving Areas</b>	<b>Density of Road Miles Per Square Mile</b>
Alternative A	1 Ray Creek	0.13	0.13	0.53	3	4.08
	2 Duck Creek	1.0	1.0	2.29	8	2.29
	3 Confederate Gulch	4.1	4.1	5.96	15	1.45
	4 Little Hellgate	0.59	0.52	1.8	5	1.54
	5 Wickiup Creek	1.9	0.19	0	0	0
	6 Cottonwood Creek	0.30	0.30	0.59	2	1.97
Alternative B	1	0.13	0.13	0	0	0
	2	1.0	1.0	1.04	1	1.04
	3	4.1	4.1	0.76	1	0.18
	4	0.59	0.52	0	0	0
	5	1.9	0.19	0	0	0
	6	0.30	0.30	0	0	0
Alternative C	1	0.13	0.13	0.27	1	2.08
	2	1.0	1.0	1.22	3	1.22
	3	4.1	4.1	2.15	6	0.52
	4	0.59	0.52	0	0	0
	5	1.9	0.19	0	0	0
	6	0.30	0.30	0	0	0
Alternative D	1	0.13	0.13	0.53	3	4.08
	2	1.0	1.0	2.29	8	2.29
	3	4.1	4.1	5.96	15	1.45
	4	0.59	0.52	1.8	5	1.54
	5	1.9	0.19	0	0	0
	6	0.30	0.30	0.59	2	1.97

Table 19. Summary Table of Open Routes per Square Mile

<b>Summary Table of Open Routes per Square Mile in TMP Zones (in Big Game Winter Range and Elk Calving Areas) by Alternative</b>				
	<b>Alternative A</b>	<b>Alternative B</b>	<b>Alternative C</b>	<b>Alternative D</b>
Zone 1	4.08	0	2.08	4.08
Zone 2	2.29	1.04	1.22	2.29
Zone 3	1.45	0.18	0.52	1.45
Zone 4	1.54	0	0	1.54
Zone 5	0	0	0	0
Zone 6	1.97	0	0	1.97

Impacts of Alternatives

Under all travel alternatives, there would be no new road construction, so additional habitat loss and fragmentation would not occur from roads being built. Road kills would not be expected to occur due to the low speed nature of routes. Only negligible impacts to BLM listed sensitive species are anticipated to occur under any alternative.

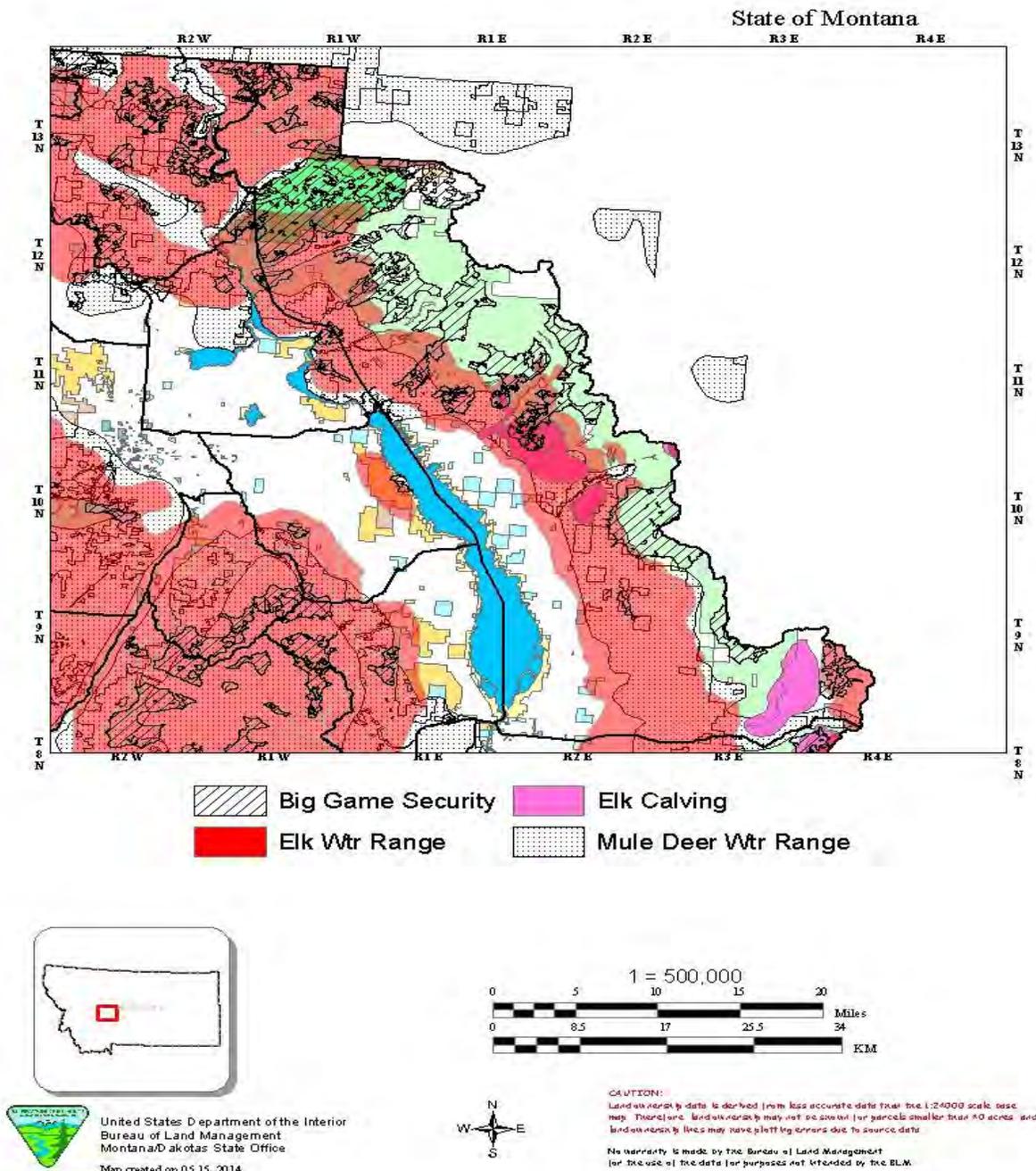
Under Alternative A, there would be no change in current effects to wildlife from motorized travel. Motorized travel use could increase over time and gradually cause more disturbance than currently exists. OSV use would continue to occur on all BLM lands in the TMA, and could result in disturbance of wildlife on big game winter range. Cross-country OSV use could impact any lynx using the area from disturbance or creating access to higher elevations than normally used by competitors of lynx such as bobcat and coyote. Currently 0.4 miles of road in TMZ 5 (Wickiup Creek area) are considered open that are in big game security habitat, although there is no access to this road for the general public. (The RMP objective of reducing road mileage in winter habitat and calving areas does not extend to security habitat.)

Alternative B would result in the most improvement of conditions for wildlife by reducing roads more than other alternatives and prohibiting OSV use in big game winter range. The limitation/closure of routes could reduce some detrimental impacts to wildlife (e.g., poaching, harassment, habitat disturbance, etc.) by reducing visitor use in the TMA. The 0.4 miles of road in TMZ 5 (Wickiup Creek area) that are in big game security habitat would be closed. The closure to OSVs could have beneficial effects to any lynx using the area by removing that source of winter disturbance and eliminating possible packed-trail avenues that competitors of lynx such as bobcats and coyotes could use to access higher elevations than they normally would. No effects to grizzly bear or Sprague’s pipit are foreseen.

Alternative C would considerably reduce open roads overall, especially in big game winter range (see table 19). The limitation/closure of routes could reduce some detrimental impacts to wildlife (e.g., poaching, harassment, habitat disturbance, etc.) by reducing visitor use in the TMA. OSVs would not be permitted to travel cross-country in big game winter range, greatly reducing the potential for wildlife disturbance during this critical time of the year. The six miles of year-round open routes that OSVs would be permitted on between December 2 and May 30 would not affect lynx, grizzly bear, or Sprague’s pipit. A study in northwest MT found that seasonal resource selection patterns of lynx were little affected by forest roads with low vehicular or snowmobile traffic (Squires et al. 2010). The 0.4 miles of road in TMZ 5 (Wickiup Creek Area) that are in big game security habitat would be limited.

Alternative D would be similar to Alternative A, and not reduce open road mileage. OSV use would be allowed on all BLM land, effectively nullifying the RMP road reduction objective for winter range. However, provisions under this alternative for most roads to be 'open with management' would allow for changes to occur if detrimental effects to wildlife are documented by monitoring. Cross-country OSV use could affect any lynx using the area from disturbance or creating access to higher elevations than normally used by competitors of lynx such as bobcat and coyote. No effects to grizzly bear or Sprague's pipit are foreseen.

Map 6. Big Game Winter Range, Elk Calving Areas, Security Habitat



### **3.11 Cumulative Effects of Alternative A**

Under Alternative A, all existing travel routes in the TMA would continue to be open to motorized use all year, and no new special travel management actions would be implemented. Without on-the-ground identification and a sign plan addressing which routes are open and closed to motorized travel, the public may continue to create new travel routes, which may contribute to imbalanced recreation and could have detrimental cumulative environmental impacts (soil/plant damage, invasive weed spread, etc.) because it would fail to manage or control route proliferation produced by illegal cross-country travel. Both non-motorized and motorized travel could be detrimentally impacted by a lack of clearly defined travel routes. The efficacy, scope, and intensity of the BLM's land management actions could also be hindered by a confusing and expanding travel network.

### **3.12 Cumulative Effects of All Action Alternatives**

Alternatives B, C, and D share basic management actions when considering their long-term, direct, and indirect cumulative impacts. These three alternatives are similar in nature, except they have a different number of miles allocated to each type of route designation. A travel network with all routes designated as either "Open", "Limited (Administrative or Non-motorized)," or "Closed" is expected to address public and administrative access needs, protect resources, promote public safety, and minimize conflicts among the various users of public lands. Every effort was made to match adjacent U.S. Forest Service Designations, where appropriate.

### **3.13 Cumulative Effects of Alternative B**

Alternative B is intended to provide the greatest protection of resources by reducing the number of primitive roads and increasing non-motorized use. It is anticipated that by reducing the number of routes through closures and rehabilitation, Land Health Standards would be maintained and overall impacts to vegetation, visual resources, wildlife, and cultural resources would be reduced. However, it cannot be assumed that the numbers of visitors and commercial users of the travel network would be reduced. It is reasonable to assume that users would be concentrated on the fewer remaining staging areas and open and limited routes. This shifted concentration of use could increase impacts on or near remaining routes. Managing grazing, vegetation, and fencing may be easier with a clearly mapped and signed travel network, but it might also be more difficult because of decommissioned routes limiting access.

### **3.14 Cumulative Effects of Alternative C**

Alternative C is intended to provide resource protection while providing an optimal travel network for visitors and commercial users. Like Alternative B, it might limit access, which could increase the difficulty of management actions and influence their cumulative effects accordingly.

### **3.15 Cumulative Effects of Alternative D**

Alternative D provides the greatest amount of access and would likely provide the least amount of resource protection of the action alternatives. The extent of the route network in this alternative could be difficult to manage and monitor because of limited funds and personnel. However, it would provide a clearly signed and mapped route network, so it may reduce negative cumulative effects. However, with a relatively large number of routes open to public motorized use, effects of some actions could be influenced because of reduced efficacy. For example, high levels of travel could spread invasive weed seeds and increase vegetation/soil damage. This may make vegetation control/restoration more difficult and thus influence its cumulative effects.

# CHAPTER 4: TMP IMPLEMENTATION

## 4.1 Introduction

Implementation of this TMP would involve a variety of actions:

- Publication of a route network map
- Sign plan implementation
- Education
- Enforcement
- Maintenance
- Restoration/rehabilitation
- Adaptive management and monitoring
- Mitigation
- Plan revision and amendment

This chapter discusses these actions and also provides detail on the Butte Field Office's implementation priorities and standard operating procedures.

## 4.2 Publication of a Route Network Map

As part of implementing this TMP, BLM would assign a navigational identification number to each open or limited travel route in the TMA's network. The BLM already assigned preliminary numbers to routes as part of the inventory and evaluation processes. However, numbers and designations will likely change before the Missouri River Foothills route network is finalized.

After assigning numbers, the BLM would publish a map online that depicts travel routes and their respective number labels. Travel routes that are designated as "Limited (Administrative or Non-motorized)" would be shown on the final map but typically as non-motorized routes open to hiking, bicycling, and horseback riding. A general information campaign would be undertaken to announce the online map. Part of this campaign would include contacting public mapping sources and agencies to request information updates that could improve the map.

Initially, draft maps printed by the BLM would be provided to groups, agencies, or individuals upon request. If funding permits, a new *Southwest Montana Interagency Visitor/Travel Map* may be published in cooperation with the Montana Interagency Travel Management Committee.

## 4.3 Sign Plan Implementation

### 4.3.1 Introduction

Travel management signage is an important way of communicating with public land users. Signing of travel and transportation networks is necessary for adequate management of public lands. Route users want to know what modes of travel are allowed or not allowed on routes they would like to use. So, directional and informational signs (and the placement of these signs) are critical for the safety and enjoyment of public lands, for compliance with rules and regulations, and for protection of resources. Proper signing can improve visitors' experiences by providing the necessary information to ensure visitors are aware of regulations, safety, and uses.

Sign plans are the primary documents in BLM signage efforts and are required components of TMP/EAs. This section of Chapter 4 (Section 4.3) serves as this TMP/EA's sign plan. According to the *BLM Sign Guidebook*, "a sign plan provides for the systematic and uniform development and maintenance of a sign system for a given area" (BLM 2004, 8). A sign plan is necessary to ensure that signs placed in an area are consistent with all applicable laws, regulations, and policies, including land use/planning documents. Sign plans are also created so signs will adhere to consistent themes. Signing is a key element for implementing comprehensive travel and transportation plans on the ground.

#### **4.3.2 Scope of Signing**

Presently, very little signing is found throughout the Missouri River Foothills TMA. Under this TMP/EA, various types of signs and markers would be installed according to the current BLM policies and guidance for recreation and travel management signing. Signs would be placed along roads, primitive roads, and a trail. A variety of signs would be placed in the TMA, including:

- Area and public land identification signs
- Entry kiosks and informational kiosks
- Bulletin boards
- Signs for routes' identification numbers and designation statuses
- Area map boards

Signing would be kept to the minimum necessary for visitor management and assistance. Signing would also be used as a tool for resource protection and regulatory and informational purposes. Initially, all routes would be signed at intersections. Then, at a minimum, signs would be placed every one mile beyond intersections. Signing would also occur at other points where following a primitive road or trail might be difficult or confusing to visitors. If necessary, signing for shooting area buffers and closures would be placed at reasonable intervals to ensure that users understand where closures exist.

Signing would be designed to provide the public with clear and correct information in an effort to prevent off-network travel and user conflicts. To issue citations to rule-breaking visitors, law enforcement staff must be able to prove to a magistrate that there was ample information readily available for visitors to do the right thing. Through monitoring and ongoing public group input, strategies would be developed to constantly improve signing effectiveness. Maintenance procedures and schedules would be developed for signs and markers. Such procedure and schedules would include anticipated replacement needs. A sign inventory and database would be created to facilitate tracking of sign locations and sign maintenance. It is expected that during the first few years following implementation of this TMP/EA, many signs will be removed or destroyed and would be replaced or updated with a new communication or engineering technique.

#### **4.3.3 Portal/Entry Signs**

Large wooden portal signs (see figure below) would be installed at the beginning of popularly used areas, routes, or entrance points. If this TMP/EA is approved, these signs would be utilized. Over Snow Vehicle use would also be displayed where applicable.

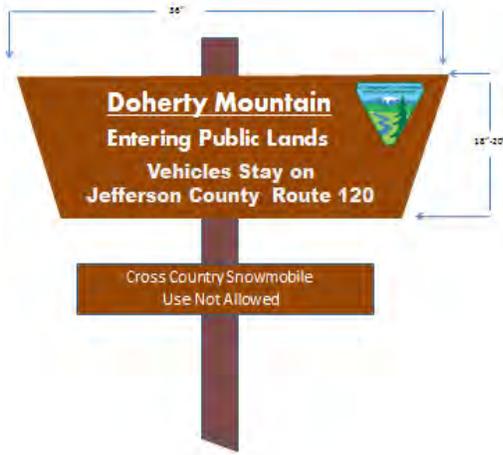


Figure 8. Wooden portal sign



Figure 9. Over Snow Vehicle limitation sign

#### 4.3.4 Designated Route Markers

Each travel route may have up to three identifying numbers. The first number is assigned during field inventory. During the route evaluation process, field inventory numbers are often modified or changed to clarify segments into transportation assets (e.g., roads, primitive roads, and trails). These evaluation numbers are used in the route reports and on the alternative maps in this TMP/EA. A third and final navigational (or route ID) number is eventually assigned for marking routes on the ground and in future published maps. All three identifying numbers are maintained in the office database to allow historical tracking of routes from the inventory stage through the implementation stage.

A consistent numeric system would be applied to the route network. All route identifiers within the TMA would have a four-digit number, starting with the number 1000. Long distance routes, touring loops, or routes to specific destinations may have a route name or symbol in addition to a number (e.g., 1000 Bull Mountain Trail). Local input would be sought when naming loops and trails. The numbering system would be flexible, and numbers may not always follow in numeric order. Routes that travel between field offices or planning areas would use the navigation number that was assigned in the jurisdiction or area that had the earliest designation date.

The majority of primitive roads and trails would be marked with fiberglass markers. These markers would usually be placed on metal U-channel posts with tamper-proof fasteners.

#### Open and Limited Travel Routes

Markers for travel routes that are open and/or limited to wheeled motorized vehicle travel would follow the basic layout depicted at the far left of Figure 12. Starting from the top, each marker post would contain an arrow, route number, symbols of allowed uses (Open to) and prohibited uses (Closed to), and the BLM logo. Markers may also have a decal with GPS coordinates marked at strategic locations. Markers for travel routes where wheeled motorized vehicle travel is allowed but limited (with various restrictions) would use the signs depicted in the first two images on the left side of Figure 12.



Figure 10. Route designation, restriction, and closure signs

### Limited (Administrative or Non-Motorized) Travel Routes

Markers for travel routes where wheeled motorized vehicle travel is limited to administrative or non-motorized use only would use the third sign from the left in Figure 12.

### Closed and Decommissioned Travel Routes

Markers for travel routes that are closed to all forms of wheeled motorized vehicle travel (including administrative use) would also use the third sign from the left in Figure 12. Markers for travel routes that are closed to all forms of wheeled motorized vehicle travel and are scheduled to be decommissioned would also use third sign from the left in Figure 12. Once a route has been decommissioned or has recovered naturally, these signs would be removed so as not to attract attention to the fact that a travel route once existed in a particular location.

### Additional Sign Examples

In addition to portal/entry signs, designated route marker signs, and closure/limitation signs, the signs depicted in Figure 11 may be used. Moreover, the sign at the far right of Figure 11 might be placed at the beginning of a closed route that is only open to motorized use for the purposes of retrieving downed game animals.



Figure 11. Additional travel management signs

### 4.3.5 Proposed Sign Locations

Route markers would be placed (at a minimum) at each major intersection and as needed and noted in the BLM's sign database. At each sign placement site, care would be taken to visually ensure that the message conveyed by a particular sign is generally positive (where possible), simple, and easy to read.

To limit the overall number of markers at each intersection, two routes may be identified on one post with arrow symbols. When adding a route name or where more than one or two international symbols are needed to convey a restriction or use, the BLM may develop unique decals that clearly identify needed messages or trail names. If a volunteer group adopts a route, they may be allowed to develop a decal to place on the route's markers. On sign marker posts, trail names or "Trail Adopters" may be identified and labeled above route numbers. Not all route markers need to include a route name and numeric route identifier. Thus, some marker information could be used interchangeably on different markers. One route can have more than one identifier (e.g., name vs. number), and all route markers on a particular route will not be exactly the same.

### 4.3.6 Maintenance and Monitoring of Travel Management Signs

Generally, maintenance of travel management markers would be completed according to Chapter 5 of the BLM's Sign Guidebook, which can be found at:

<http://www.blm.gov/pgdata/etc/medialib/blm/wy/signs/docs.Par.61916.File.dat/guidebook.pdf>.

A sign inventory (stored in a database) would be incorporated into this sign plan and maintained as time and funding permit. Current markers and signs should be inventoried as soon as possible after acceptance of this TMP/EA. The database of sign inventory details would include the following information for each sign:

- Location/GPS coordinates
- Installation date
  - On larger signs, installation dates should be written on the back of signs.
- Inventory date
- Name of individual(s) who conducted installation/inventory
- All language on the sign
- Sign layout
  - Height
  - Length
  - Color
  - Shape (truncated, rectangle, square, marker)
- Lettering
  - Size
  - Color
  - Font
- Sign and post materials
- Sign condition (good, fair, needs repair or replacement)
- Number of times sign has been replaced (via ongoing count)
- Photos of signs

All photos of signs should be linked to their GPS locations and maintained in the sign inventory database in subfolders labeled by year. All visitors should be encouraged to report missing or damaged signs. Volunteer efforts should be developed to help install, monitor, and replace route markers and signs. Cost of replacement signs should be a line item in annual budget projections. These costs should be identified through the sign inventory database.

#### **4.4 Education**

An education and outreach program for this TMP/EA would be developed in collaboration with federal, state, and county entities and with established and emerging organizations and programs. The education/outreach program would also be developed with public participation. To the extent possible, the BLM would seek to create alliances with local and regional groups and entities such as:

- OHV dealerships and user groups
- Hunters and sports enthusiasts
- Hiking and equestrian clubs
- Communities of Helena and Townsend
- Grazing permittees
- Montana Fish, Wildlife and Parks
- Broadwater County
- Lewis and Clark County
- Southwest Montana Interagency Travel Management Committee
- Montana State Historical Preservation Office

Additionally, the Butte Field Office would utilize seven target messages/themes for this educational effort:

- Tread Lightly ([www.treadlightly.org](http://www.treadlightly.org))
- Leave No Trace ([www.lnt.org](http://www.lnt.org))
- Share the Trail ([www.imba.com/resources/risk-management/shared-trails](http://www.imba.com/resources/risk-management/shared-trails))
- Respect the rights of private landowners and other users of public land
- Prevent the spread of invasive species
- Prevent wildland fires
- Ensure OHV safety

The BLM would use emerging technology and up-to-date communication methods to convey information and to secure public participation and stewardship for on-the-ground route management and evaluation of the TMP/EA. As time and funding permit, the BLM would establish websites that include downloadable items such as podcasts, maps, land use ethics, rules, fire prevention restrictions, and emergency announcements.

## 4.5 Enforcement

Some of the typical law enforcement concerns related to public use in the Missouri River Foothills TMA include traffic accidents, driving under the influence (DUI) of alcohol and/or drugs, firearm violations, cross-country wheeled motorized vehicle use, and the creation of new travel routes by visitors.

Law enforcement coverage in the TMA is currently provided by one BLM law enforcement officer. Enforcement actions typically occur in response to complaints, and patrols are conducted on a periodic basis, depending on other priorities. Other agencies also patrol the area, including the Broadwater and Lewis and Clark County Sheriff's Departments, the USFS, and Montana Fish, Wildlife and Parks.

To increase BLM presence, the BLM may hire Trail Stewards and recruit volunteers to conduct patrols through Butte Field Office jurisdictions, including in the Missouri River Foothills TMA. These patrols would be focused on visitor services and travel management monitoring. Reports from these patrols could focus formal law enforcement efforts within specific TMAs. Increased BLM presence and Trail Stewards would only occur if adequate funding is acquired. Additional funding would be sought through various BLM channels and through partnering to leverage grants or other available funding.

## 4.6 Maintenance

### 4.6.1. Introduction

The maintenance guidelines laid out in the *2009 Butte RMP* would be applied to the Missouri River Foothills TMA. According to the RMP:

Roads and trails will be maintained in accordance with Travel Management Plan guidance and BLM policy. After site-specific travel plan decisions are made, roads included in the transportation system will be assigned maintenance levels, if needed. Roads will be managed in accordance with assigned maintenance levels and in consideration of resource issues.  
(BLM 2009b, 47)

So, each route in the TMA would be assigned a maintenance level and managed accordingly.



Figure 12. Missouri River Foothills TMA route that receives regular maintenance

#### 4.6.2 Maintenance Intensities

The conditions and use levels of routes can determine what maintenance intensities they receive. Travel route conditions, design standards, and guidelines are based on average daily traffic, functional classifications, and terrain type. Physical characteristics of routes help determine what types of use routes receive, and types of route use indicate what vehicles are capable of traveling on particular routes. For example, if a road is passable by a four-wheel drive vehicle, it should also be passable by a two-wheel drive vehicle. Based on resource management needs and functional classifications, roads in the TMA would be assigned maintenance intensity levels from the list shown in Table 16 on the next page. The table's maintenance level descriptions are quoted from the *BLM Roads Manual* (BLM 2011b). No routes with Level 4 or 5 maintenance intensities exist in the TMA, so such intensities are not described here.

Table 20. Maintenance Intensity Levels Under Alternative C

Maintenance Intensity	Descriptions of Routes Under Each Intensity Level	Number of Routes	Miles
Level 0	Existing routes that would no longer be maintained or declared as routes. Routes identified for removal from the Transportation System entirely.	10	2.65
Level 1	Routes where minimal (low-intensity) maintenance is required to protect adjacent lands and resource values. These roads may be impassable for extended periods of time.	23	11.11
Level 3	Routes requiring moderate maintenance due to low volume use (for example, seasonally or year-round for commercial, recreational, or administrative access). Maintenance intensities may not provide year-round access but are intended to generally provide resources appropriate to keep the route in use for the majority of the year.	0	0
Level 5	Routes for high (maximum) maintenance because of year-round needs, high-volume traffic, or significant use. Also may include routes identified through management objectives as requiring high intensities of maintenance or to be maintained open year-round.	3	2.56

#### 4.6.3 Function Classes

Function classes indicate the relative importance of a route's transportation and access purposes. These classes are the basis for design standards and are defined as collector roads, local roads, and resource roads (see the glossary for definitions). All but one of the BLM-managed routes in the TMA function as resource roads. These routes are unpaved, typically single lane or narrower, and have low traffic volume and slow traffic speeds. The only route in the TMA that is not a resource road is a trail limited to non-motorized use.

## **4.7 Restoration and Rehabilitation**

### **4.7.1 Introduction**

The *2009 Butte RMP* provides details on what roads in the jurisdiction of the Butte Field Office would receive restoration/rehabilitation designation or treatment. The RMP guidelines below would be used for management efforts in the Missouri River Foothills TMA:

“Roads and trails closed yearlong that are not needed for specific authorized uses (fire prevention/suppression, mining claims, access to private lands, non-motorized travel, etc.) will be rehabilitated to blend into the surrounding area. Roads subject to special uses under authorized exceptions will be stabilized to prevent unnecessary and undue soil erosion and water quality degradation. A priority list for work will be developed after each travel plan is completed” (BLM 2009b, 41).

The BLM’s strategy for restoring closed/decommissioned or unauthorized travel routes would be accomplished as time and funding permit. Until funding is secured, the travel routes identified for closure under Alternative C (the Proposed Action) in Table 10 (in Section 2.7) would be allowed to naturally recover. Table 10 contains a list of travel routes scheduled for closing/decommissioning under the action alternatives. Table 8 in Section 2.7 features statistics on routes that would be closed/decommissioned under the Proposed Action.

### **4.7.2 General Restoration Techniques**

Where possible, travel along open routes should encourage traffic to be concentrated away from closed routes. Restoration actions may include leaving the first 100 feet from the centerline of an open route unrestored to provide pullout areas or camping opportunities intended to discourage or prevent new ground disturbances elsewhere. Sensitive resources in immediate danger (or those that have been damaged by unauthorized use) would be a high priority for restoration.

The first step in restoration (or decommissioning) would be to visually obliterate obvious routes or tracks. Techniques to accomplish this include hand-raking and cutting track edges or berms to break up straight lines. Additional techniques include placing small rocks on routes and mulching routes with local vegetation or dead plant materials. The aim would be to blend the disturbed area into the landscape. The work would be limited to existing surface disturbance. Minor manipulation of these areas would not require further environmental review. A travel route that has historical significance (e.g., an old wagon trail) would not be subject to any surface disruption.

Restoration would typically be limited to that portion of a closed or unauthorized travel route that is within line of sight from an authorized route. Each decommissioned route would be evaluated on a case-by-case basis, and the most appropriate method of restoration would be used based on geography, topography, soils, hydrology, and vegetation.

### **4.7.3 Substantial Restoration**

Substantial restoration actions to closed/decommissioned routes would take place only after extensive monitoring is completed. Continued signs of unauthorized vehicle use could demonstrate that allowing routes to restore naturally is ineffective. More substantial activities could then be needed. These activities would be subject to BLM review to establish whether an

EA is needed. These measures would include posting the route with closed signs and/or blocking it with barriers to prevent vehicle entry.

Ripping, or subsoiling, the road surface with a small dozer to break up compacted soil and allow maximum moisture retention may also be appropriate. These actions may draw attention to the route itself, so the BLM could provide information signs articulating the need for and value of resource protection. Weed treatment and control measures would be implemented as needed to promote re-vegetation with native plants to control existing weed sources and to prevent any new weed establishment.

For seriously disturbed areas, a closed travel route could be re-vegetated or seeded where necessary to aid restoration. Only local native seed mixtures would be selected for such sites. These mixtures would be based on individual site conditions. Broadcast seeding would generally be completed in the spring or fall. After the seed has been distributed uniformly over the area, the ground would be raked or dragged to cover the seed. After the first year, seeded areas could be fertilized if seedling establishment is sparse.

Techniques such as hydraulic seeding, seed drilling, mulching, water barring, pitting, roughening, contour furrowing, or similar methods might be used as appropriate on a case-by-case basis. A project-specific plan with an accompanying EA may be needed to complete these levels of action. Even with a substantial investment in restoration, significant increases in vegetative cover would require an adequate period of time and may not happen quickly. With resources for travel management implementation limited and the outcomes of restoration efforts typically uncertain, these types of restoration efforts should be reserved for only the most serious disturbances.

## **4.8 Adaptive Management**

### **4.8.1 Introduction**

Adaptive management would be an important part of implementing this TMP/EA. This section first discusses what adaptive management is and how it may be used in the TMA. Then various factors related to adaptive management are discussed. These factors include:

- Changes to the travel route network
- Private landowner access and access needed
- R.S. 2477 claims and BLM administrative determinations
- Emergency closures
- Temporary closures

### **4.8.2 Defining Adaptive Management and its Use in the TMA**

According to the BLM, adaptive management is “a tool designed after the scientific research process. . . . [It] requires a measureable objective, monitoring to determine the effectiveness of the management practices in achieving the objective, evaluation to determine if the objective is being reached, and adaptation based on the results” (BLM 2014).

In the application of the technique described above, the objectives are targets based on best available information. In this TMP/EA, such objectives are the priority tasks listed in Table 17 in Section 4.12. Unless otherwise specified, timeframes for objectives are discussed in the form of phases: Phase I (1-2 years), Phase II (3-5 years), and Phase III (5-10 years).

For the Missouri River Foothills TMA, sufficient monitoring is planned to determine whether adequate progress is being made toward achieving objectives. If progress is insufficient to achieve objectives in a realistic time period, management actions would be revised. Figure 16 (on the next page) shows the cycle of adaptive management.

In adaptive management, problems are assessed, designs are formulated to address problems, and then designs are implemented. During/after implementation, monitoring occurs, data gathered during monitoring are evaluated, and management is adjusted based on new findings. However, new problems could arise or new approaches might be tried after management is adjusted, which would start the cycle over again.

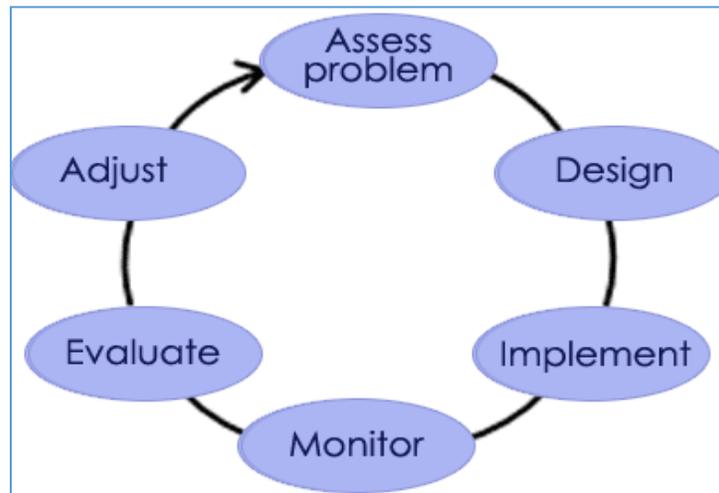


Figure 13. Adaptive management cycle

Adaptive management focuses on changing conditions that could affect the route designations proposed in this plan. Through adaptive management, the BLM might change its travel management practices to respond to a variety of factors that could come up in the TMA. Some examples of factors that might alter management are listed below:

- Need to create new roads to access private property, mining claims, or public utilities
- User-created route proliferation
- Listing of additional special status plant and animal species
- Discovery of additional cultural or historical resources
- Availability of funding

Applying the process of adaptive management is an essential component of travel planning. Throughout the life of this TMP/EA, the BLM would use adaptive management and rely on monitoring data to improve this plan.

#### **4.8.3 Changes to the Travel Route Network**

Changes to the travel network should be rare but may be required. Resource protection or administrative concerns might require the relocation of existing routes. The public might request new routes to improve the overall goals of the network (e.g., creating a travel loop or non-motorized trails). New routes would be proposed through site-specific project plans, permits, or right-of-way requests. The route evaluation process and environmental analysis (both of which may be done concurrently) must occur prior to the implementation or construction of a new route. If a new road is going to be constructed, its design must follow specific guidelines.

According to page 47 of the *2009 Butte RMP* (BLM 2009b), at a minimum, road designs will include:

- Minimizing road and landing locations in Riparian Management Zones
- Minimizing sediment delivery to streams from road surfaces
- Out-sloping roadway surfaces where possible, except in cases where out-sloping would increase sediment delivery to streams or where out-sloping is infeasible or unsafe
- Routing road drainage away from potentially unstable stream channels, fills, and hill slopes
- Minimizing disruption of natural hydrologic flow paths
- Minimizing side casting of soil or snow

All new roads, primitive roads, and trails in the TMA would meet the standards for design, construction, and maintenance found in the BLM's *Roads Design Handbook* (2011a) and *Primitive Roads Design Handbook* (2012a).

Upgrading a road's surface, width, or permanently raising the maintenance intensity level on a specific route are considered to be changes to the network—just like adding a new route would be a change to the travel network. Therefore, such changes would trigger the need to undergo the same evaluation process that occurs when new routes are added. All changes to the network would be included in the Missouri River Foothills travel network database and would need to be posted on the BLM website as part of the TMA's travel network public outreach program.

Temporary routes and maintenance may be key parts of travel management in the TMA. In the *2009 Butte RMP*, the BLM elaborates on travel network changes related to temporary routes and maintenance:

Temporary routes could be constructed where needed and where other routes are not available under approved travel management plans. . . . Temporary routes are not intended to be part of the permanent or designated transportation network system and must be reclaimed when their intended purpose has been fulfilled. (BLM 2009b, 40)

Roads will be designed and maintained in a manner that provides for water quality protection by controlling placement of fill material, keeping drainage facilities open, installing and maintaining appropriately-sized culverts at stream crossings, and by repairing ruts and failures to reduce erosion and sedimentation of aquatic habitats. (BLM 2009b, 48)

#### **4.8.4 Private Landowner Access and Access Needed**

Many routes in the Butte Field Office's travel network cross private and state lands. County roads allow access to some travel routes on BLM-administered sections of land. BLM route designations are not binding on private lands. In this TMP/EA, the BLM is not designating existing routes over private or state property. Route designations only apply to route segments that are on BLM lands. If a route crosses private land (but continues onto BLM land), that does not mean the public has a right to pass over private lands to access public lands. Routes that continue from BLM land onto private land simply follow historical use patterns once they are on private land.

According to the *2009 Butte RMP*:

“BLM will actively seek agency and public easement agreements in order to maintain current access for popularly traveled routes, and seek additional site-specific opportunities as needed to gain agency and public access to BLM lands” (BLM 2009b, 41).

As the travel network is developed, signs would be placed on routes to indicate where land ownership changes. Travelers would be instructed to respect private holdings. Open and limited routes that happen to cross private property before entering BLM lands can be closed by the owners of such private property. However, the *2009 Butte RMP* indicates that blocking public access to BLM land may not be in a landowner’s best interest:

“Where public motorized access is contingent upon the governing consent of adjoining landowner(s), BLM will exercise a reciprocal “All or None” road use policy. This means that as long as the public is allowed access to these roads, no changes in travel management will occur. However, should the adjacent landowner refuse public access, then BLM will reciprocate by closing its roads to their use as well” (BLM 2009b, 41).

If this situation occurs, these routes would have their designations changed to “Limited (Administrative Use Only).” If the private landowner or a permitted user requests motorized access to those travel routes, they would be required to apply for a Travel Variance as required by the *2009 Butte RMP* (see Appendix 5 for information on the variance acquisition process).

#### **4.8.5 R.S. 2477 Claims and BLM Administrative Determinations**

Section 8 of the Mining Act of 1866 states: “and be it further enacted, that the right-of-way for the construction of highways over public lands, not reserved for public uses, is hereby granted.” The statute was self-enacting such that its rights would be established by “construction” of a “highway” on unreserved public lands, without any form of acknowledgement or action by the federal government. This section of the mining statute was later re-codified as Revised Statute 2477 (abbreviated as R.S. 2477). R.S. 2477 was repealed by FLPMA on October 21, 1976 with a savings provision for rights established prior.

The BLM does not have the authority to make binding determinations on the validity of R.S. 2477 right-of-way claims. However, the BLM may make informal, non-binding administrative determinations for its own land use planning and management purposes. Such determinations must be based on the particular laws of each state in which a claimed right-of-way is situated. In Utah, applicable state code provides for the acceptance of a right-of-way pursuant to R.S. 2477 across public lands not reserved for public purposes when a right-of-way had been used by the public for a continuous 10-year period.

As of February 2009, the BLM has been directed not to process or review any claims under R.S. 2477 pending further review and direction from the Secretary of the Interior.

#### **4.8.6 Emergency Closures**

In the event of an emergency, immediate actions (e.g., closures or public land use restrictions) must be taken to prevent or reduce risks to public health or safety, property, or important resources. Emergencies are unforeseen events of such severity that they require immediate action to avoid dire consequences. Section 2.3 of the *BLM National Environmental Policy Act Handbook* (BLM 2008a) defines the following actions as typical emergency situations:

- Cleanup of a hazardous material spill
- Fire suppression activities related to ongoing wildland fires
- Emergency stabilization actions following wildland fires or other disasters

#### **4.8.7 Temporary Closures**

43 CFR 8341.2 provides guidance applicable to BLM lands on a nationwide scale. This guidance will be used in management of the Missouri River Foothills travel route network. According to 43 CFR 8341.2:

“ . . . where the authorized officer determines that off-road vehicles are causing or will cause considerable adverse effects upon soil, vegetation, wildlife, wildlife habitat, cultural resources, historical resources, threatened or endangered species, wilderness suitability, other authorized uses, or other resources, the authorized officer shall immediately close the areas affected to the type(s) of vehicle causing the adverse effect until the adverse effects are eliminated and measures implemented to prevent recurrence” (GPO 2014a).

## **4.9 Monitoring**

### **4.9.1 Introduction**

Monitoring can be a key component of successful adaptive management. In the TMA, both implementation and effectiveness monitoring would be largely conducted by Trail Stewards (seasonal travel management staff). An inventory of travel route conditions and potential monitoring sites would be created as time and funding permit. This inventory should constitute a baseline dataset that would include:

- Photo documentation
- GPS points
- Lists of typical vegetation
- Estimated plant cover
- Identification of where open/limited routes intersect with closed routes
- Extended disturbed areas

These data could be used as a baseline against which future monitoring data could be compared in efforts to detect changes and implement more effective management.

### **4.9.2 Implementation Monitoring**

Implementation monitoring is the most basic type of monitoring. It simply determines whether management actions have been implemented in the manners prescribed by applicable planning documents. The thresholds or indicators required for this type of monitoring in the TMA are included in the task list in Table 17 in Section 4.12. Progress toward plan compliance would be evaluated and reported by staff and posted online as time and funding permit.

### **4.9.3 Effectiveness Monitoring**

Effectiveness monitoring helps to determine whether management actions taken in accordance with this TMP/EA were productive and, if so, how effective they were in achieving objectives. This monitoring can help to quantify OHV user compliance. Effectiveness monitoring would also help evaluate travel route conditions, public safety, and changes in visitor uses (including demands and preferences). Effectiveness monitoring would include the following actions:

- Acquire visitor feedback to monitor whether the Missouri River Foothills TMA has been clearly mapped and signed for the public.
- Signing effectiveness would be monitored through field visits and consideration of amounts of maintenance required.
- Attention to recreational groups, records of field contacts, written trail register comments, and public phone calls to the Butte Field Office would be part of monitoring the effectiveness of travel management in reducing conflict between different types of users.
- Photo-monitoring points would be established to monitor long-term effectiveness of closing/decommissioning routes.
- Illegal off-trail and off-road travel could be measured as linear disturbances or as area impacts, depending on the level and type of use that occurred.
- Traffic counters would be employed to determine levels of use on selected routes.
- Primitive road and trail conditions would be assessed. Informal inspection and discovery would be a major part of the condition monitoring program.

- Assess indicators of potential recreation impact issues (e.g., number of new bare soil areas attributable to visitor use, number of campfire pits, additional litter or trash along primitive roads, etc.).
- As time and funding permit, administer a survey on recreation demand and visitor preferences, uses, satisfaction, and information needs in the TMA.

#### **4.9.4 Resource or Validation Monitoring**

Resource monitoring would document how implementation of a travel plan has influenced natural and cultural resources over time. Documenting the effect management actions have on natural and cultural resources is more difficult than determining whether travel management actions comply with this TMP/EA. Resource monitoring (as well as management) would be adaptive. Monitoring protocols or techniques would be adjusted as new methods are developed or if it is discovered that current monitoring is not meeting management information needs. Resource monitoring would be accomplished through protocols that include the following elements:

- Monitoring should involve establishment of an ecological site inventory following the guidelines of the Land Health Standards (see the glossary for a definition). Ecological site inventories would include transect sites. Transects are strips of ground along which specialists make ecological measurements. Transect sites should be set up by resource specialists during Phase I of this plan. On a recurring basis, transects utilizing the line-intercept method would be taken from identified sites. Both reference sites and affected sites would be monitored.
- Core indicators to be monitored should include:
  - Percentage of bare ground
  - Vegetative composition
  - Percentage of vegetative cover
  - Soil aggregate stability
  - Percentage of terrain with OHV tracks (or at least record the presence/absence of OHV tracks)
- Additional monitoring information that may be collected as part of core data collection could include vegetation height and non-native invasive species compositions.
- Monitoring should address proliferation of non-native species in specific locations (to be determined by resource staff).
- As time and funding permit, cultural resource sites identified by the Butte Field Office's Cultural Resource Specialist would be surveyed. Such sites would include both publicly known sites near designated routes and reference sites that are not located near travel network assets. The BLM may work with authorized universities and cultural contractors to accomplish needed monitoring.

#### **4.9.5 Protection of Special Resources and Travel Route Management**

Monitoring the Missouri River Foothills travel route network would include training Trail Stewards and volunteers to recognize special resources and impact indicators. Stewards and volunteers would be trained to recognize and report sightings of BLM-identified sensitive wildlife and plant species. Trail Stewards and volunteers would also monitor any well-known historical sites (e.g., historic mines).

In relation to Land Health Standards, the *2009 Butte RMP* states: “If an existing road is substantially contributing to Land Health Standards not being met, the road will be considered for redesign, closure, or decommissioning to minimize the adverse impacts” (BLM 2009b, 47).

Analysis consistent with National Environmental Policy Act (NEPA) requirements would be developed prior to any ground disturbance not discussed in this TMP/EA. Impacts to cultural resources or other resource values that may be discovered would be mitigated or avoided. According to the *2009 Butte RMP*:

“As roads and trails identified for decommissioning in site-specific travel plans are prioritized, site inventories will be conducted on cultural resources. To provide protection for known cultural resources and those yet to be discovered, sites will be evaluated to determine eligibility for [the] National Register of Historic Places. Ineligible heritage sites will be preserved in place if possible. If adverse effects threaten a site (on roads proposed for closure or open roads), one or more mitigation measures will be employed to lessen or avoid those effects. These may include: Abandon the project; Redesign the project to avoid adverse effect with protective measures such as signing, fencing, reroute, or closure of road/trail; Data recovery and analysis that could require temporary closure of the area; and/or Avoidance by re-routing” (BLM 2009b, 41-42).

#### **4.10 Mitigation**

Problems (with specific routes and management actions) would be identified through adaptive management monitoring. After identifying problems, appropriate mitigation measures would be employed. Typical mitigation measures are specified best practices that respond to identified conflicts. Not all measures listed in this section may be used, and possible actions are not limited by the lists presented here. Mitigation actions taken should be triggered as a result of monitoring and reaching identified thresholds. Monitoring to identify trends should be done before, during, and after mitigation measure implementation.

Below are examples of possible route management mitigation actions that could address potential problems. Actions are listed under particular conflict scenarios (underlined) that involve designated routes. Under these scenarios, actions are listed numerically in order of possible implementation.

The physical location of a route is degrading riparian condition.

1. Relocate the route to avoid riparian areas.
2. Harden or raise the route above water level if route is necessary and cannot be relocated.
3. Close the route if no suitable mitigation is possible, and make a plan for reclamation.

Human use associated with a route is degrading riparian condition.

1. Place information signs to request positive behavior (e.g., “Use only when dry,” etc.).
2. Harden and/or raise the route above water level or place barriers to keep vehicles and people on routes.
3. Relocate the route to allow riparian condition to improve.
4. Close the route if no suitable mitigation is possible, and make a plan for reclamation.

Human use associated with a route is degrading desired plant communities.

1. Place signs to encourage vehicles and people to stay on routes.
2. Conduct public outreach regarding noxious weeds and conserving vegetation.
3. Fence the area or place barriers to manage people.
4. Develop a program to improve desired plant communities.
5. Close the route, and make a plan for reclamation.

Human use associated with a route is degrading water quality or causing unnatural erosion rates.

1. Review the situation to determine source of degradation; monitor to determine severity.
2. Place water control measures on the route.
3. Take reasonable measures to further harden/stabilize the route.
4. Relocate the route.
5. Close the route if no suitable mitigation is possible.

Human use associated with a route is determined to degrade a wildlife habitat (e.g., habitat of managed or special status species, including threatened and endangered [T&E] species).

1. Educate route users through signs and other information facilities.
2. Place use limitations on the route (time/season of use, type of use, number of users).
3. Review management plans for species and follow recommendations.
4. Design mitigation plans to address:
  - Temporary conditions
  - Seasonal conditions
  - Year-round conditions
5. Develop specific mitigation measures based on the site if species management plans are insufficient.
6. Acquire replacement habitat lands (for T&E and sensitive species).
7. Initiate consultation with the U.S. Fish and Wildlife Service (in the case of T&E species).
8. Review recovery plans and implement mitigations as defined in the plans (T&E species).
9. Replace/enhance habitat to offset problems caused by human use; methods could be to:
  - Augment food/water sources.
  - Place barriers along the route to protect specific habitat features.
  - Relocate or expand reproduction sites to be away from the route.
10. Relocate the route.
11. Close route if no suitable mitigation is possible, and make a plan for reclamation.

Different travel speeds by users cause conflict between recreationists and/or local residents.

1. Place signs and kiosks to raise awareness of need for lawful use in the area.
2. Monitor situation on the ground and request law enforcement support as necessary.
3. Conduct public outreach in an attempt change behavior.
4. Review terrain and improve sight distances if possible.
5. Redesign traffic flow by separating uses or limit traffic by type or time of use.

Sound levels cause conflict between recreationists and/or local residents.

1. Place signs and kiosks to raise awareness of sound issues.
2. Monitor situation on the ground and request law enforcement support as necessary.
3. Conduct public outreach in an attempt change behavior.
4. Implement “Quiet Time” use restrictions.
5. Reroute traffic to minimize conflict.
6. Place sound-reducing vegetative barriers (if applicable).
7. Close route if no suitable mitigation is possible.

A route causes unacceptable changes to the desired Recreation Opportunity Spectrum (ROS) setting (e.g., unplanned OHV play areas, large party sites, dump sites, resource theft, etc.).

1. Investigate the cause and implement signage and law enforcement as necessary.
2. Design mitigation plans to address:
  - Short-term conditions
    - Implement new signing and public outreach to explain desired settings.
    - Implement temporary use restrictions (e.g., no overnight camping).
    - Issue emergency closure order and address conditions during closure.
  - Long-term conditions
    - Implement signing and mapping protocols for the area.
    - If no suitable mitigation is possible, amend resource management plan (RMP) to close the area.
3. Close areas near the route contributing to unacceptable changes.

A proposed route is out of compliance with the Visual Resource Management (VRM) classification of the area.

1. Evaluate the potential for and implement a method to make the route less noticeable (e.g., landscaping)
2. Realign the route.
3. If no suitable mitigation is possible, construction of the proposed route would not be allowed.

A route causes unacceptable impacts to cultural or archaeological resources.

1. Place barriers along the route to keep vehicles from accessing a site.
2. Stabilize the resource, including fencing if needed.
3. Interpret the resource to gain public support for protection.
4. Work with Site Stewards program for monitoring and increase law enforcement presence.
5. Realign the route to avoid further disturbance of the site.
6. Conduct data recovery of the site.
7. Close the route if no mitigation is possible; make a plan for reclamation.

Legal vehicle use of routes limited to administrative use attracts non-permitted vehicle use.

1. Limit the amount or season of authorized use of the routes.
2. Add additional signing to the routes indicating they are limited to administrative vehicle use and public non-motorized use.
3. Fence and gate the routes at their intersections with open routes.

Cross-country use of over snow vehicles (OSVs) is impacting resources.

1. At portal locations, sign and/or provide educational materials on kiosks to encourage the proper use of OSVs.
2. Close the area to cross-country OSV use.

Vandalism (due to use of routes) of range or wildlife improvements.

1. Sign or provide education to the visiting public about the protection of range and wildlife facilities.
2. Close the area around range and wildlife facilities to camping.
3. Designate the route as limited to administrative use.

The use of a route contributes to the spread of invasive weed species.

1. Increase the weed treatment program on the route.
2. Limit the season of use on the route to prevent the spread of seeds.
3. Limit the route to administrative use.

#### **4.11 Plan Revision and Amendment**

This TMP/EA would remain in effect until rescinded or amended by a future management action or a revision of the *2009 Butte RMP*. Adaptive management measures may be undertaken through plan maintenance actions and by implementation of progress monitoring. Any person, organization, or government body may propose that a route designation be changed to another designation (e.g., closing an open road or vice versa). Requests to change route designations should be submitted in writing to the Butte Field Office Manager. In the context of this TMP/EA, that Manager is considered an Authorized Officer. The Authorized Officer has the authority to make final decisions on route changes.

Given that designation of travel routes is a discretionary action, the Manager may determine whether or not proposals have merit and whether or not they constitute significant or minor modifications. If an application for proposing a route designation change is rejected, a letter (stating reasons for refusal) would be sent to the applicant. If accepted, the request would be forwarded to appropriate Butte Field Office staff members. When accepting a proposal, the Authorized Officer should consider cost recovery. A formal decision to accept or reject a specific request for a route change would only be issued after the occurrence of NEPA analysis and evaluation of a proposal's effect on the total travel network. Any proposed change to the travel network in this plan would be documented and appended to this plan.

## 4.12 Implementation Priorities

Past agency experience gives insight into effective implementation actions as well as the order in which they should best occur. The successful implementation of this TMP/EA should proceed in the order listed in Table 17 (on the next page). Table 17 features a timeline based on prioritization hierarchies. However, monitoring, adaptive management, and budget limitations could change priorities and the timeline over the life of this TMP/EA. The timeline in Table 17 starts a month after the time at which the Decision Record for this plan would be issued. The timeframes for these priorities can be discussed in the form of phases: Phase I (1-2 years), Phase II (3-5 years), and Phase III (5-10 years).

Table 21. TMP/EA Implementation Priorities

Priority	Potential Timeline	Task	Implementation Notes
1	Year 1	Assign a navigational identification number to each route that is designated open or open with restrictions.	<i>Update GIS database to “crosswalk” with evaluation and inventory numbers.</i>
2	Year 1	Publish online map of Missouri River Foothills TMA.	<i>This is the first step in the effort to increase public knowledge of the travel network and plans for its future.</i>
3	Starting in Year 1	Develop a communication plan and initiate an outreach program.	<i>This would need State Office External Affairs cooperation.</i>
4	Starting in Year 1	Pursue funding for outreach literature, signs, and staff needed to implement the route-marking effort.	N/A
5	Year 1	Establish databases and requirements for collecting monitoring data. Identify initial sites for resource monitoring.	<i>Clear identification of the information required would result in more effective monitoring and recording of data.</i>
6	Starting in Year 1	Hire seasonal trail ranger(s) or contract for initial signing of network.	N/A
7	Within Phase I	Sign the travel route network and inventory restoration needs.	<i>The principal goal is to make the open and limited travel routes more attractive than closed travel routes.</i>
8	Within Phase I	Recruit and train volunteers to establish volunteer patrols and help in placing route markers. Set up partnerships with existing local groups and clubs.	N/A
9	Phase I	Pursue funding for route and site rehabilitation. Establish restoration priorities using data from inventory and monitoring.	N/A
10	End of phase I	Monitor compliance with the TMP/EA and travel network. Publish an annual report on the Butte Field Office website.	<i>The report should include pictures of actions taken.</i>
11	Phase II	Take actions to restore “Closed and Decommissioned” travel routes that continue to receive vehicle traffic.	N/A
12	Phase II	Develop and publish up-to-date, readily available, and easy-to-understand maps.	<i>To be cost-effective, maps may cover an area larger than just the Missouri River Foothills TMA.</i>
13	All Phases of Plan	Monitor and maintain the open route network markers.	N/A

14	Phase II or III	Install bulletin boards/kiosks where needed.	<i>Only install if sites that require additional visitor information have been identified through monitoring.</i>
15	Phase III	Explore options for completing a visitor survey for the TMA.	N/A

### 4.13 Standard Operating Procedures

Table 18 (below) lists the Standard Operating Procedures (SOPs) for the BLM’s administration of the Missouri River Foothills travel route network. Many of these statements are actions or measures previously listed in the *2009 Butte RMP* or the *Record of Decision: Off-Highway Vehicle Environmental Impact Statement and Proposed Plan Amendment for Montana, North Dakota and South Dakota* (BLM 2003).

Table 22. Standard Operating Procedures

1	The BLM would open or provide a limited opening of a route (when requested) where valid rights of way or easements of record were not accurately identified in the route designation process.
2	Easements may be acquired through donation from landowners or interested parties following the procedures set forth in the <i>BLM Acquisition Handbook</i> (BLM 2002b).
3	“BLM roads within the travel area will continue to be available for a multitude of motorized vehicle travel (2-wheel, 4-wheel, motorcycles, all-terrain vehicles, and snowmobiles), provided safety concerns remain minimal. Should traffic volumes or user conflicts become prevalent and warrant restrictions, then priority will be given to vehicles legally registered to travel on public highways” (BLM 2009b, 41).
4	State vehicle laws apply to motor vehicle use where applicable.
5	There are no posted speed limits on BLM roads, primitive roads, or trails. The speed on primitive roads would generally be 15–25 miles per hour.
6	The BLM would generally not develop, endorse, or publish road or trail ratings in this TMA, unless adaptive management and/or monitoring identify the need to do so. However, the BLM may describe physical characteristics of a route.
7	No travel variance would be required to conduct essential agency administrative actions on any travel route. Travel variances may be issued on a case-by-case basis for permitted and authorized uses. The process and application for such variances was established in the <i>2009 Butte RMP’s</i> Appendix D titled “Travel Management” (page 153) and is incorporated in this plan in Appendix 5.
8	Motorized wheeled cross-country travel for the BLM is limited to official administrative business. Examples of administrative use include management related to prescribed fire, noxious weed control, re-vegetation, and surveying. Where possible, agency personnel performing administrative functions would place a sign or notice in the area where they are working to identify to the public the function they are authorized to perform.
9	Motorized wheeled cross-country travel for other government entities on official administrative business would require authorization from the Authorized Officer. This authorization would be done through the normal permitting processes and/or memoranda of understanding.
10	Wheeled motorized cross-country travel would be allowed for any military, fire, search and rescue, or law enforcement vehicle used for emergency purposes.
11	Motorized wheeled cross-country travel for lessees and permittees is limited to the administration of a federal lease or permit.
12	Use of motorized or mechanized vehicles off designated travel routes for the purpose of working livestock is prohibited, unless otherwise authorized.
13	Permittees (e.g., those taking part in hunting, wood gathering, and livestock operations) must comply with TMP/EA route designations. Exceptions may be made by the Authorized Officer through the permit system.

14	Operators engaged in activities under mining law must obtain advanced approval from the Authorized Officer prior to using wheeled motorized vehicles for cross-country travel. The requirement for approval for wheeled cross-country travel applies to activities that are normally considered to be casual use under 43 CFR 3809.5 (where a Notice or a Plan of Operations is not required).
15	Vehicular access for Native American tribal members to sacred areas without a designated primitive road would be authorized on a case-by-case basis.
16	Any alignment changes made through implementation actions (e.g., moving a route's alignment around a newly identified cultural resource) shall be recorded and kept on file in the Butte Field Office and may require an amendment to this plan.
17	Short site-specific sections of road/trail realignment or reconstruction would continue to be implemented as needed to minimize resource damage and/or provide minor reroutes around private property.
18	In accordance with interagency trail width guidelines, all BLM-designated OHV trails, bridges, and cattle guards would be designed to accommodate vehicles 50 inches in width or less. Vehicles wider than 50 inches would generally be unable to navigate BLM trails.
19	The BLM would replace barbed wire gates (and similar closures) with cattle guards and/or easily operated metal gates wherever problems are known to occur.
20	Signs indicating route closures would be utilized initially but would then be sparsely posted or not used at all after rehabilitation (natural or prescribed) occurs.
21	The BLM maintains the authority to temporarily, permanently, partially, or completely suspend any activity based on safety issues or adverse resource impacts.
22	In accordance with public land regulations, a Special Recreation Permit (SRP) is required for use of public land in connection with commercial, competitive, or organized group activities. Permits are not required for private, non-commercial recreational use.
23	All SRP activities granted by the Butte Field Office would be required to utilize designated travel routes, unless otherwise authorized.
24	Motorized wheeled cross-country travel to a campsite is permissible within 300 feet of a designated travel route. Site selection must be completed by non-motorized means, and sites must be accessed by the most direct route that causes the least damage.
25	Ecologically sensitive areas within 300 feet of roads and trails could be closed to dispersed camping if resource damage is found to be occurring in these areas.
26	Motorized wheeled cross-country travel for big game retrieval is not allowed, unless otherwise authorized.
27	Use of a non-motorized wheeled game carrier off of an open route would be permitted.
28	The BLM would cooperate with Montana Fish, Wildlife and Parks to adjust seasonal travel restrictions in accordance with big game hunting season extensions.
29	"Routes designated for Game Retrieval will be managed to allow retrieval during big game hunting seasons, between the hours of 11:00 AM - 3:00 PM. Under this management, hunters who have tagged an animal will be allowed to use a motorized vehicle to assist in the retrieval. Motorized use is restricted to the designated Game Retrieval route only; no motorized off-road or off-trail use is allowed during the retrieval effort. Animals will need to be dragged, or otherwise moved by non-motorized means to the Game Retrieval route" (BLM 2009b, 39).
30	A power-assisted bicycle is considered a "motorized" vehicle and would be limited to travel routes that are designated as open or limited to wheeled motorized vehicles. A power-assisted bicycle would not be allowed on "Limited (Administrative or Non-Motorized)" travel routes.

## CHAPTER 5: CONSULTATION AND COORDINATION

### 5.1 Scoping Process

The BLM used the scoping process to solicit meaningful participation in the development of the Missouri River Foothills TMP/EA. In the scoping process, the BLM solicits internal (BLM staff) and external (public) input on issues and impacts related to both its proposed actions and potential alternatives to its proposed actions. This TMP/EA is the product of public and agency scoping input accumulated over the past two years. Butte Field Office staff have had informal conversations on issues and opportunities related to travel management. These conversations occurred with individuals, community groups, neighboring landowners, and federal, state, and local agencies. Such discussions contributed to the development of this TMP/EA. Scoping letters were also sent to local tribes, but no responses were received.

In a letter dated September 24, 2013, the BLM formally requested public input on the management of various resources in the Missouri River foothills PA. The notice was sent to local media and the BLM's mailing list (twenty-nine people and organizations that have requested notification regarding future projects). It was also posted on the BLM website at: [http://www.blm.gov/pgdata/etc/medialib/blm/mt/field\\_offices/butte/missouri\\_river\\_foothills.Par.72176.File.dat/Missouri%20River%20Foothills%20Scoping%20Letter.pdf](http://www.blm.gov/pgdata/etc/medialib/blm/mt/field_offices/butte/missouri_river_foothills.Par.72176.File.dat/Missouri%20River%20Foothills%20Scoping%20Letter.pdf)

The scoping comment period closed on November 12, 2013. During the comment period, the Butte Field Office received five written responses. No public scoping meetings were held for the Missouri River Foothills TMP/EA project.

### 5.2 Public Comments on Draft TMP/EA

The Draft Travel Management Plan and Environmental Assessment was released for public comment on May 29, 2015; the comment period concluded on July 9, 2015. The BLM received 3 comment letters..

The BLM has considered and responded to all substantive comments in preparing the final TMP/EA (See Appendix 5).

### 5.3 List of Preparers

The following lists of individuals show the interdisciplinary (ID) team that contributed to the compilation of this document. BLM specialists and the company Advanced Resource Solutions, Inc. (ARS) prepared this TMP/EA together.

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## CHAPTER 6: ACRONYMS, GLOSSARY, AND WORKS CITED/BIBLIOGRAPHY

### 6.1 Acronyms

ARS	Advanced Resource Solutions, Inc.
BLM	Bureau of Land Management
CFR	Code of Federal Regulations
CTVA	Capital Trail Vehicle Association
DR	Decision Record
EA	Environmental Assessment
EIS	Environmental Impact Statement
FLPMA	Federal Land Policy and Management Act
FONSI	Finding of No Significant Impact
ID	Interdisciplinary
MMBA	Montana Mountain Bike Alliance
NEPA	National Environmental Policy Act
NRCS	Natural Resources Conservation Service
OHV	Off-Highway Vehicle
PA	Planning Area
RMP	Resource Management Plan
ROS	Recreation Opportunity Spectrum
T&E	Threatened and Endangered
TMA	Travel Management Area
TMP	Travel Management Plan
USFS	U.S. Forest Service

### 6.2 Glossary

**Adaptive Management:** A process for continually improving management policies and practices by learning from the outcomes of operational programs and new scientific information. Under adaptive management, plans and activities are treated as working hypotheses rather than final solutions to complex problems.

**Adit:** A near horizontal passage (driven from the surface) by which a mine may be entered, ventilated, and dewatered.

**Allotment:** An area of land where one or more livestock operators graze their livestock. Allotments generally consist of BLM lands but may also include other federal lands and private lands. An allotment may include one or more separated pastures. Livestock numbers and periods of use are specified for each allotment.

**All-Terrain Vehicle (ATV):** A wheeled or tracked vehicle designed primarily for recreational use or for the transportation of property or equipment exclusively on trails, undeveloped road rights-of-way, marshland, open country, or other unprepared surfaces.

**Backcountry:** A recreation setting classification characterized by a landscape with a natural appearance and an absence of readily noticeable human modifications.

**Casual Use:** Defined in various places in 43 CFR and is uniformly based on the principal that activity will “not ordinarily lead to appreciable disturbance or damage to lands, resources or improvements.”

**Closed Off-Highway Vehicle Designations:** Are applied to areas or routes where off-road vehicle use is prohibited. Use of off-road vehicles in closed areas may be allowed for certain reasons. However, such use shall be made only with the approval of an Authorized Officer. These designations may be used if they are necessary to protect resources, promote visitor safety, or reduce use conflicts.

**Code of Federal Regulations (CFR):** The Code of Federal Regulations is the codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the federal government.

**Collector Roads:** Roads that are usually double-lane, graded, drained, and surfaced with a 20 to 24-foot travel way. They serve large land areas and are the major access routes into development areas.

**Cross-Country Travel:** Travel not on a road, primitive road, or trail.

**Cumulative Impacts:** See “Effects, Cumulative.”

**Decision Record (DR):** The BLM document associated with an Environmental Assessment that describes an action to be taken when analysis supports a Finding of No Significant Impact (FONSI).

**Designation Terminology:** BLM route designation terms (defined in the table below) have evolved over time and are used differently from document to document. The table below includes terms used in the *2009 Butte RMP* and equivalent terms used during the route evaluation process that was undertaken for the Missouri River Foothills TMA.

<i>2009 Butte RMP</i>	Route Evaluation	Additional Explanation
Open Yearlong	“Open” or “Open with Management”	The public may use motor vehicles.
Open with Restrictions	“Limited” or “Limited with Management”	Limitation may be based on vehicle type, size, season of use, or users with special authorization.
Closed Yearlong	“Limited to administrative and authorized users”	Limited to authorized users. These users can include federal, state, and local agencies, and (in some cases) local landowners, range permittees, mine claimants, etc. These routes are open to public for non-motorized use.
Decommissioned	“Closed”	Route is intended to be closed and removed from all use.

**Effects (or Impacts):** The biological, physical, social, or economic consequences resulting from a proposed action or its alternatives. Effects may be adverse (detrimental), beneficial, cumulative, direct, or indirect.

**Effects, Cumulative:** Impacts on the environment resulting from an action's incremental impact when added to other past, present, or reasonably foreseeable future actions that take place over a period of time, regardless of what agency (federal or non-federal) or person undertakes such actions.

**Effects, Direct:** Effects on the environment which occur at the same time and place as the initial cause or action that created the effects.

**Effects, Indirect:** Effects caused by an action but occurring later or further removed in distance from where/when an action took place.

**Environmental Impact:** The positive or negative effect of any action upon a given area or source.

**Environmental Assessment (EA):** A tool for determining the "significance" of environmental impacts; it provides a basis for rational decision-making. See Appendix 4 for the criteria used to determine significance.

**Evaluation Criteria:** Factors that managers and interdisciplinary teams develop to form judgments about decision-making, analysis, and data collection during planning. Evaluation criteria streamline and simplify resource management planning actions to ensure that actions are tailored to issue(s) previously identified and to ensure that unnecessary data collection and analysis are avoided.

**Evaluation Number:** Identification number assigned to routes; it is assigned during the evaluation process. The evaluation number could be a continuation of the inventory number or changed to a completely new number to clarify a proposed network of routes.

**Executive Order (EO):** A presidential policy directive that implements or interprets a federal statute, a constitutional provision, or a treaty. To have the effect of law, executive orders must appear in the Federal Register (the daily publication of federal rules and regulations). The president's power to issue executive orders comes from Congress and the U.S. Constitution. Executive orders differ from presidential proclamations, which are used largely for ceremonial and honorary purposes.

**Federal Register:** Daily publication which provides a uniform system for making regulations and legal notices issued by the Executive Branch and various departments of the federal government available to the public.

**Federal Land Policy and Management Act (FLPMA):** Act passed in 1976 by Congress for the purposes of establishing a unified, comprehensive, and systematic approach to managing and preserving public lands; provided the BLM with important guidelines.

**Field Office:** The administrative subdivision that is (in most instances) the area for which resource management plans are prepared and maintained. Field Office managers have primary

responsibility for day-to-day resource management activities and resource use allocations in their areas.

**Finding of No Significant Impact (FONSI):** A finding that explains that an action will not have a significant effect on the environment, and therefore, an Environmental Impact Statement will not be required (40 CFR 1508.13).

**Four-Wheel Drive Vehicle (4WD):** A passenger vehicle or light truck having power available to all wheels.

**Game Retrieval Routes:** “Routes designated for Game Retrieval will be managed to allow retrieval during big game hunting seasons, between the hours of 11:00 AM - 3:00 PM. Under this management, hunters who have tagged an animal will be allowed to use a motorized vehicle to assist in the retrieval. Motorized use is restricted to the designated Game Retrieval route **only**; no motorized off-road or off-trail use is allowed during the retrieval effort” (BLM 2009b, 39).

**Goal(s):** Statement(s) of what a plan or action in a plan hopes to accomplish in the long term. Goals state the preferred situation and usually are not quantifiable and may not have established timeframes for achievement.

**Geographic Information System (GIS):** A system of computer hardware, software, data, people, and applications that capture, store, edit, analyze, and graphically display a potentially wide array of geospatial information.

**Hydric Soils:** Soils that are sufficiently wet in their upper parts to develop anaerobic (oxygen-free) conditions during the growing season. Presence of hydric soils is the defining characteristic of riparian areas.

**Impacts (Common Terms):**

- *Negligible Impacts:* No changes to resources would occur, or effects on individuals, populations, or habitat would be at or below the level of detection. If detected, the effects would be considered slight.
- *Minor Impacts:* Changes to resources would be measurable, although the changes would be small, short-term (less than seven consecutive days), and local. Mitigation measures would not be necessary.
- *Moderate Impacts:* Changes to resources would be measurable and would have appreciable consequences, although the effect would be relatively local. Mitigating measures would be necessary but would most likely be successful
- *Major Impacts:* Changes to resources would be measurable, have substantial consequences, and be noticed regionally. Mitigating measures would be necessary, and their success would be uncertain.
- *Short-Term Impacts:* Effects that are not permanent—or can be changed or remediated back to a prior condition in a short amount of time.
- *Long-Term Impacts:* Permanent or unchangeable effects (e.g., the loss of a resource) that cannot be changed or remediated back to a prior condition in a short amount of time.

**Implementation Decisions:** Decisions that take action to implement land use plan decisions; generally appealable to the Interior Board of Land Appeals under 43 CFR 4.410.

**Implementation Plan:** A site-specific plan written to implement decisions made in a land use plan. An implementation plan usually selects and applies best management practices to meet land use plan objectives. Implementation plans are synonymous with activity plans.

**Indian Tribe:** See “Tribe.”

**Instruction Memorandum (IM):** A temporary directive that supplements the Bureau Manual Sections. IMs contain new policy or procedures that must reach BLM employees quickly, interpret existing policies, or provide one-time instructions.

**Interior Board of Land Appeals (IBLA):** The IBLA is part of the Office of Hearings and Appeals of the Department of the Interior, which by regulation has been designated as an authorized representative to carry out and decide hearings, appeals, and other review functions on behalf of the Secretary of the Interior.

**Inventory Numbers:** Identification numbers for linear features that can constitute routes; assigned during the inventory process, which may take place in the field.

**Land Health Standards:** “Statements of physical and biological condition or degree of function required for healthy sustainable rangelands. Achieving or making significant progress towards these functions and conditions is required of all uses of public rangelands as stated in 43 Code of Federal Regulations 4180.1. Baseline, monitoring and trend data, when available, should be utilized to assess compliance with standards” (BLM 2009b, 105).

**Land Use Plan (LUP):** A set of decisions that establishes management direction for land within an administrative area, as prescribed under the planning provisions of the Federal Land Policy and Management Act of 1976; an assimilation of land use plan-level decisions developed through the planning process outlined in 43 CFR 1600, regardless of the scale at which the decisions were developed.

**Land Use Plan Decisions:** Establish desired outcomes and actions needed to achieve land use plan objectives. Decisions are reached by using the planning process in 43 CFR 1600. When these decisions are presented to the public as proposed decisions, they can be protested to the BLM Director. They are not appealable to the Interior Board of Land Appeals.

**Limited Area:** As defined in Title 43, Part 8340, a “limited area” is an area restricted at certain times, in certain areas, and/or to certain vehicular use. These restrictions may be of any type but can generally be accommodated within the following categories:

- Vehicle quantity
- Vehicle type
- Time or season of vehicle use
- Permitted or licensed use only
- Use on existing roads and trails
- Use on designated roads and trails
- Other restrictions

**Linear Disturbance:** Man-made linear feature that is not part of the BLM’s transportation system. Linear disturbances may include engineered (planned) as well as unplanned single and two-track linear features that are not part of the BLM’s transportation system.

**Local Roads:** Normally serve a smaller area than collector roads and connect to collector roads or public road systems. Local roads receive lower volumes, carry fewer traffic types, and generally serve fewer users. User cost, comfort, and travel time are secondary to construction and maintenance cost considerations. Low volume local roads in mountainous terrain (where operating speed is reduced by effort of terrain) may be single lane roads with turnouts.

**Maintenance Intensity:** Designation (ranging from Level 0 to Level 5) that provides guidance for appropriate maintenance “standards of care” to be applied to recognized routes within the BLM.

**Management Area:** An area managed for an emphasized natural resource and common management objectives.

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

**Mining Claim:** Any unpatented mining claim, mill site, or tunnel site which is authorized by U.S. mining laws.

**Mining Operations:** All functions, work, facilities, and activities in connection with the prospecting, development, extraction, and processing of mineral deposits—and all uses reasonably incident thereto, including the construction and maintenance of means of access to and across lands subject to 43 CFR 3800 et seq., whether the operations take place on or off the claim.

**Mitigation:** Measures or procedures which could reduce or avoid adverse impacts, including those to biological, physical, or socioeconomic resources.

**Monitoring:** Collecting and assessing data to evaluate the effectiveness of planning decisions.

**Motorcycle:** Motorized vehicle with two tires and a seat designed to be straddled by an operator.

**Motorized Travel:** Moving by means of vehicles that are propelled by motors (e.g., cars, trucks, OHVs, motorcycles, boats, etc.).

**Motorized Vehicle:** Can be synonymous with off-highway vehicle (OHV). Examples of this type of vehicle include all-terrain vehicles (ATVs), Utility Type Vehicles (UTVs), Sport Utility Vehicles (SUVs), motorcycles, and Over Snow Vehicles (OSV), including snowmobiles.

**Multiple Use:** Major BLM guiding principle defined in FLPMA. It is “the management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people; . . . that takes into account the long-term needs of future generations for renewable and non-renewable resources, including recreation, range, timber, minerals, watershed, wildlife, and fish; natural scenic, scientific, and historical values; and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land. . .” (BLM 2001b, 2).

**National Environmental Policy Act (NEPA):** Federal law (established by Congress in 1969) requiring every federal agency with public involvement to assess the environmental impacts of

all its federal actions, evaluate if there will be any significant environmental impacts from its proposed projects, and disclose its findings to the public.

**Native American Tribe:** See “Tribe.”

**Navigation Number:** Final identification number (assigned to a designated road, primitive road, or trail) to be used on public maps and route signs or markers. This number is assigned to meet a statewide numbering standard for open routes.

**Non-motorized travel:** Moving by foot, stock or pack animal, non-motorized boat, or a mechanized vehicle such as a bicycle.

**Off-Highway Vehicle (OHV):** OHVs are synonymous with Off-Road Vehicles (ORVs). “ORV” is defined in 43 CFR 8340.0-5 (a): “Off-road vehicle means 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.” OHVs generally include dirt motorcycles, dune buggies, jeeps, four-wheel drive vehicles, snowmobiles, and ATVs.

**Official Use:** Use by an employee, agent, or designated representative of the federal government or one of its contractors. Such use occurs in the course of an individual’s employment, actions, or representation.

**Over Snow Vehicle (OSV):** An Over Snow Vehicle is defined as a motor vehicle that is designed for use over snow and runs on a track or tracks and/or a ski or skis while in use over snow. An Over Snow Vehicle does not include machinery used strictly for the grooming of non-motorized trails.

**Plan Amendment:** The process of considering or making changes to the terms, conditions, or decisions of approved plans. With amendments, usually only one or two issues (that involve only a portion of a planning area) are considered.

**Primitive Road:** A linear route managed for use by four-wheel drive or high clearance vehicles. These routes do not formally meet any BLM road design standards.

**Proposed Action:** This is the proposition for the BLM to authorize, recommend, or implement an action which will address a clear purpose and need required in managing public lands. A proposal may be generated internally or externally.

**Public:** Individuals, including consumer organizations, public land resource users, corporations and other business entities, environmental organizations and other special interest groups, and officials of State, local, and Indian tribal governments affected by or interested in public land management decisions.

**Public Land:** Any land and interest in land owned by the United States. Most public lands referenced in this document are administered by the Secretary of the Interior through the Bureau of Land Management.

**Recreation Opportunity Spectrum (ROS):** The distinguishing recreational qualities of any landscape. The ROS is objectively defined along a continuum ranging from primitive to urban landscapes and is expressed in terms of the nature of the component parts of its physical, social, and administrative attributes. These recreational qualities can be classified and mapped. See Appendix 2 for ROS class descriptions.

**Resource Damage:** Significant undue damage or disturbance (including erosion or water pollution) that creates undue degradation of wildlife or vegetative resources (including the spread of noxious weeds). This definition of resource damage applies to areas designated as “Open,” “Limited,” or “Closed” to off-road vehicle use. The on-the-ground determination of whether resource damage has occurred is left to the discretion of the Authorized Officer.

**Resource Management Plan (RMP):** The BLM considers Resource Management Plans synonymous with land use plans (as defined previously), so the terms may be used interchangeably. Land use plan decisions made in RMPs establish goals and objectives for resource management (e.g., desired future conditions), the measures needed to achieve these goals and objectives, and parameters for using public lands. Land use planning decisions are usually made on a broad scale and customarily guide subsequent site-specific implementation decisions.

**Resource Roads:** Are usually roads that provide point access and connect to local or collector roads. They carry very low volume and accommodate only one or two types of uses. Use restrictions are applied to prevent conflicts between users needing the road and users attracted to the road. The location and design of these roads are governed by environmental compatibility and an effort to minimize BLM costs (with minimal consideration for user cost, comfort, or travel time).

**Right-of-Way (ROW):** A linear corridor of land held in fee simple title or as an easement over another’s land. A ROW is held for use as a public utility (highway, road, railroad, trail, utilities, etc.) for a public purpose. ROWs usually include designated amounts of land on either side that serve as buffers for adjacent land uses.

**Right of Way:** The right of one trail user or vehicle to proceed in a lawful manner in preference to another trail user or vehicle.

**Road:** A linear route declared a road by the owner, managed for use by low clearance vehicles having four or more wheels, and maintained for regular and continuous use.

**Road, Primitive Road, and Trail Identification:** For the purposes of this guidance, road and trail identification refers to the on-the-ground process (including signs, maps, and other means of informing the public about requirements) of implementing a road and trail network selected in a land use plan or implementation plan. Guidance on the identification requirements is in 43 CFR 8342.2 (c).

**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.”

**Scoping:** The process by which the BLM solicits internal and external input on the issues and effects that will be addressed (as well as the degree to which those issues and effects will be analyzed) in a National Environmental Policy Act document.

**Sediment:** Solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water. Sediment includes chemical and biochemical precipitates and decomposed organic material such as humus.

**Sensitive Species:** Includes proposed species or candidate species under the Endangered Species Act; state-listed species; and BLM State Director-designated sensitive species (see *BLM Manual 6840: Special Status Species Policy*) (BLM 2008d).

**Settings:**

- *Physical Setting:* Determined by the on-the-ground condition (or degree of environmental modification) of an area resulting from human activity.
- *Social Setting:* Determined by the level and types of contacts between individuals or groups which can be expected in a particular area.
- *Managerial Setting:* Reflects the kind and extent of management services and facilities provided to support recreation use in an area. It also reflects restrictions placed on people's actions by an administering agency.

**Single Track:** Trails wide enough for just one vehicle at a time (usually 18 inches wide).

**Significant Impact:** Involves effects with sufficient context and intensity to require an environmental impact statement. The CEQ regulations at 40 CFR 1508.27(b) include ten considerations for evaluating impact intensity. Criteria for determining significance can be found in Appendix 4.

**Special Recreation Permit (SRP):** A permit issued under established laws and regulations to an individual, organization, or company for occupancy or use of federal lands for some special purpose (e.g., a motorcycle race, outfitter guide activities, etc.).

**Special Status Species:** Includes proposed species, listed species, and candidate species under the Endangered Species Act; state-listed species; and BLM State Director-designated sensitive species (see *BLM Manual 6840: Special Status Species Policy*) (BLM 2008d).

**Sport Utility Vehicle (SUV):** A street legal, high clearance vehicle used primarily on-highway but designed to be capable of off-highway travel.

**Standard:** Statement and/or illustration describing a design recommendation or principle. In travel planning, standards include preferred development techniques that can be used as rules or bases of comparison in measuring maximum or ideal requirements, quantities, qualities, values, etc.

**Stewardship:** Taking responsibility for the well-being of land and water resources and doing something to restore or protect that well-being. Stewardship usually involves the sharing of decision-making—and cooperation among people with different interests. It is generally voluntary. Stewardship is oriented toward sustainable use of resources and the assessment, protection, and rehabilitation of trails and roads.

**Sustainable (Sustainability):** Utilization of natural resources in a way that allows for long-term use while minimizing impacts to resources and minimizing the need for continuing maintenance.

**Trail:** Linear routes managed for human-powered, stock, or OHV forms of transportation or for historical or heritage values. Trails are not generally managed for use by four-wheel drive or high clearance vehicles.

**Trailhead:** An access point to a trail or trail system. Trailheads are often accompanied by various public facilities (e.g., hitching posts for horses, a horse or OHV unloading dock or chute, parking areas, toilets, water, directional and informational signs, a trail use register, etc.). Trailheads are designed and managed for those embarking on overnight or long-distance trips whereas a staging area caters to trail day use.

**Transportation System:** Represents the sum of the BLM's recognized inventory of linear features (roads, primitive roads, and trails) formally recognized, designated, and approved as part of the BLM's transportation system.

**Travel Management Area (TMA):** TMAs are polygons or delineated areas where travel management (either motorized or non-motorized) needs particular focus. These areas may be designated as "Open," "Closed," or "Limited" to motorized use and will typically have an identified or designated network of roads, trails, ways, and other routes that provide for public access and travel across the planning area. All designated travel routes within TMAs should have a clearly identified need and purpose as well as clearly defined activity types, modes of travel, and seasons or times for allowable access. Other limitations may also apply to designated travel routes in TMAs.

**Travel Network:** Network of roads, primitive roads, and trails (motorized and non-motorized) that are selected (recognized, designated, or authorized) for use through the comprehensive travel and transportation planning process.

**Travel Management Plan (TMP):** Document that describes the processes and decisions related to the selection and management of a transportation network.

**Tribe:** Any Indian group in the conterminous United States that the Secretary of the Interior recognizes as possessing Tribal status.

**Utility Type (or Terrain) Vehicle (UTV):** Any recreational motor vehicle (other than an ATV, motorbike, or snowmobile) that is designed for and capable of travel over designated unpaved roads and can be described. A vehicle is a UTV if the following apply:

- Travels on four or more low-pressure tires of 20 psi or less
- Has maximum width less than 74 inches or has a wheelbase of 94 inches or less
- Has maximum weight less than 2,000 pounds

UTVs do not include golf carts or vehicles specially designed to carry a disabled person.

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# APPENDIX 1: SAMPLE ROUTE REPORT

## Introduction

Individual route designation reports are provided online at:

[http://www.blm.gov/mt/st/en/fo/butte\\_field\\_office.html.blm.gov](http://www.blm.gov/mt/st/en/fo/butte_field_office.html.blm.gov).

The online reports are public reports, so they may not include certain sensitive information (e.g., cultural resource locations). Pages later in this appendix feature a sample route report for the Missouri River Foothills TMA. This report and all others for the TMA follow the report format of Advanced Resource Solutions, Inc. Route reports for the TMA are organized to provide an administrative record of discussions (about particular routes) that happened during route evaluation.<sup>10</sup> The header of each page of a route's report displays the number that was used to identify the route during evaluation (e.g., MR1001, MR1002, etc.). The number placed on published maps and used on route signs may not be the same. Route reports include three major sections: "General Background," "Evaluation Information," and "Designation Alternatives."

## General Background

The first part of the "General Background" section of a route report shows the route's evaluation session date (e.g., 12/10/2013), the name of the session's contracted facilitator (in this case, a recreation planner working for Advanced Resource Solutions, Inc.), and the BLM staff specialists (biologists, archaeologists, etc.) involved in discussion about a particular route. The second part of the "General Background" section provides physical information about the route such as length, width, use, jurisdictions over which it passes, and origin (if known). Other information may also be included along with citizen comments and proposals (if any). In the "Citizen Comments and Proposals" subsection, "Author" refers who made a proposal, and "Designation" refers to what designation a citizen proposed. If there are no citizen comments or proposals, "None" will be included in the subsection to apply to all headings in it.

## Evaluation Information

### Introduction

Evaluation information in a route report is divided into three colored boxes that address the topics of CAPE (yellow), public uses (blue), and special resource concerns (green).

### CAPE

The first part of the "Evaluation Information" section focuses on CAPE issues. "CAPE" is an acronym that represents the umbrella topic of commercial, administrative, and property owner access—and economics. In the CAPE part of the report, the general issue questions for CAPE are answered, and a listing of facilities and access is provided. There are three types of access identified:

- Primary = main access
- Alternate = secondary or backdoor access
- Link = route necessary for use of the primary access

### Public Uses

The second part of the "Evaluation Information" section focuses on public uses. General public use issue questions are answered. Then a list is provided for a route's facilities, modes of

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<sup>10</sup> Section 2.2.3 provides more information on the route evaluation process.

transportation, and activities. As in CAPE, facility access is listed using the categories of: “Primary,” “Alternate,” and “Link.” Mode of transportation and activity are indicated by:

- Primary = Main mode or activity on the route
- Secondary = Other common modes and activities
- Infreq = Infrequent (uncommon modes or activities)

### Special Resource Concerns

The third part of the “Evaluation Information” section focuses on special resource concerns. General issue questions for special resource concerns are answered. Then resources and concerns are identified. These are grouped into general categories such as:

- Biome
- Special status animals
- Managed species
- Resource issues
- Etc.

In the “Special Resource Concerns” box, routes are characterized as:

- In = Route is mostly or completely within the resource or area of concern
- Leads To = Route provides access to the resource or area of concern
- Crosses = Route crosses but only has a small intersection with the resource or area of concern
- Prox = Proximate to; the route is near the resource or area of concern as indicated by the:
- Dist = Proximate distance

### **Designation Alternatives**

The end of a route report provides a listing of the four alternatives discussed for a route during an evaluation session. Alternative A (No Action) simply states the current management of a route and its area designation (no color). The action alternatives (Alternatives B, C, and D) are color-coded to “Open w/ Management” or “Open” (Green), “Limited w/ Management” (Orange), and “Closed” (Pink). The “w/ Management” portion of limited and open designation labels is only found in the route reports, but it is not used in designation labels found earlier in this document. Footnote 2 in Section 2.2.4 further discusses this issue.

For limited designations, “w/ Management” basically indicates that there are types of limitations, and that there will be adaptive management or other specific mitigation, maintenance, and/or monitoring that was identified during evaluation. For the open designations, “w/ Management” refers to adaptive management or other specific mitigation, maintenance, and/or monitoring that was identified during evaluation.

In the “Designation Alternatives” box, a designation is clearly spelled out along with a statutory reference and a rationale for the alternative. Information from memos may also be included. Limited alternatives include specific limitations regarding route use. For alternatives (both open and limited) with management identified, there would be specific management actions identified such as maintenance, monitoring, or mitigation. For closed alternatives, information is provided about how routes would be closed/decommissioned. Also, if a route is redundant to another route, that is specified.

## Actual Sample Route Report

Route report for MR1001

<b>Facilitator(s):</b>	Nate Holland			<b>Evaluation Date:</b>	<b>12/10/2013</b>
<b>Evaluators:</b>	Vickie Anderson Range Technician	John Sandford Natural Resource Specialist	Scot Franklin Wildlife Biologist	Bradlee Matthews GIS Specialist	
	Corey Meier AFM - Non- Renewable Resources	Michael O Brien Forester (ID Team Lead)	Erik Broeder Rangeland Management Specialist (Riparian)	Greg Campbell Fuels Specialist	
	Lacy Decker Range Technician (Weeds)	Joan Gabelman Geologist	Roger Olsen Rangeland Management Specialist (SS Plants)	Dave Williams Geologist	
	Mike Wyatt Lands and Realty				

<b>TMA:</b>	Missouri River Foothills		
<b>Management Zones:</b>	Entire		
<b>Length:</b> 0.33 miles	<b>Width:</b> Dual Track	<b>Class:</b> Trails	<b>Use Level:</b> Low
<b>Route Types</b>	<input checked="" type="checkbox"/> Connector		
<b>Surface &amp; Maint.</b>			
<b>Origin</b>			
<b>Jurisdictions:</b>	<input checked="" type="checkbox"/> BLM	<input checked="" type="checkbox"/> Private	<input checked="" type="checkbox"/> State Land

**Additional Information** No public access to this route.

### Citizen Comments and Proposals

Author	Designation	Comment or Proposal
None.		

Route report for MR1001

### Evaluation Information

#### Commercial, Administrative, Property and Economics

This route provides access to jurisdictions, including BLM and a variety of facilities listed below. Primary access is the main route into a jurisdiction or facility. Alternate access, while leading directly to a jurisdiction or facility, it is not the main access and therefore may not be as important as a primary. Link access does not lead directly to a jurisdiction or facility, but would be required to access a primary access.

#### General Issues

Does this route: **YES**

- either wholly or in part, have a right-of-way grant or is it simply an officially-recognized route with a record of management by another government agency?
- provide commercial, private property, or administrative access (e.g. via permit, ingress/egress rights or management responsibility)?
- provide a principal means of connectivity within a Travel Management Area or sub-region?
- exist as part of an officially recognized as part of an Agency planning document and is subject to maintenance?
- provide an important linkage between Travel Management Areas or planning sub-regions?

Facilities & Access	Specifically	Primary	Alternate	Link	Memo
Jurisdictional Access	Private Lands	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Jurisdictional Access	State Lands or Park	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Range Facilities	Active Allotment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Administered by the Lewistown FO.

**Public Uses**

This route provides access to recreational facilities listed below. The types of access are defined as in the Commercial, Administrative, Property and Economics section above. This route also is used for a variety of public uses, both motorized and non-motorized. Primary uses are the main uses on the route by the public. Secondary uses, while common are not the main use on the route. Infrequent uses are uses that are rare on this route, but have been observed.

**General Issues**

Does this route contribute to recreational opportunities, route network connectivity, public safety, reduction of conflicts between recreation users and/or such users and urban interface areas, or other public multi-use access opportunities enumerated in agency Organic laws? **YES**

Facilities	Description	Primary	Alternate	Link	Memo
None					
Public Uses	Description	Primary	Secondary	Infreq	
Modes of Transportation	By Foot	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Modes of Transportation	By Horse	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Modes of Transportation	ATV	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Public Uses Activities	Hunting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Public Uses Activities	Antler shed hunting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Public Uses Activities	Sightseeing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Public Uses Activities	Birding	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Public Uses Activities	Hiking	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Public Uses Activities	Wildlife Watching	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Route report for MR1001

**Special Resource Concerns**

This route is in, leads to, crossed or is proximate to natural and cultural resources and resource concerns listed below.

**General Issues**

Might the continued use of this route potentially impact **YES**

- State or Federal special status species or their habitat?
- cultural or any other specially-protected resources or objects identified by Agency planning documents, plan amendments?
- any special area designations (e.g. National Monuments)
- any other resources of concern

Can the anticipated potential impacts to the identified resources be avoided, minimized (reduced to acceptable levels), or be mitigated? **YES**

Resource/Concern	Specifically	In	Leads To	Crosses	Prox	Dist	Memo
Biome	Dry Foothills/Woodlands	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Biome	Grassland	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Managed Species	Big Game Winter Range	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1/2 mile	
Managed Species	Big Game Summer Habitat	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
VRM	VRM Class II - Retain existing character	<input checked="" type="checkbox"/>					
RSC	Middle Country (Semi-Primitive, Motorized)	<input checked="" type="checkbox"/>					
Water Resources	Ephemeral Stream	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1/4 Mile	on state

## Alternatives

<b>Alt A</b>	<p>Current Management, No Action Alternative  <b>Area Designation:</b> Limited  <b>Route Management:</b> Open</p>
<b>Alt B</b>	<p><b>Designation:</b> CLOSED</p> <p><b>Closure Method:</b> Natural Rehab  <b>Statutory:</b> 43 CFR 8342.1a Areas and trails shall be located to minimize damage to soil, watershed, vegetation, air, or other resources of the public lands, and to prevent impairment of wilderness suitability.  43 CFR 8342.1b Areas and trails shall be located to minimize harassment of wildlife or significant disruption of wildlife habitats. Special attention will be given to protect endangered or threatened species and their habitats.</p> <p>Can the commercial, private-property, recreation or other public uses of this route be adequately met by <b>NO</b> another route(s) that minimizes impacts to the resources identified as part of this evaluation or that minimizes cumulative effects on various other resources?</p> <p><b>Rationale:</b> Closing this route would contribute to retaining or restoring vegetation and soil cover, minimizing the potential for soil erosion. There is no legal public access to route. Closing this route would reduce overall impact of vehicle use and route footprint in the area.</p>
<b>Alt C</b>	<p><b>Designation:</b> LIMITED W/ MANAGEMENT</p> <p>Public non-motorized uses include: Bicycles, Equestrian, Hiking  Adaptive Management Monitoring  Monitoring of the status and/or integrity of the potentially impacted sensitive resources or resource issues identified as they relate to various factors (e.g. climate cycles, exotic species introduction, visitor use levels [type, intensity, and season of use]).  <b>Statutory:</b> 43 CFR 8342.1a Areas and trails shall be located to minimize damage to soil, watershed, vegetation, air, or other resources of the public lands, and to prevent impairment of wilderness suitability.  43 CFR 8342.1b Areas and trails shall be located to minimize harassment of wildlife or significant disruption of wildlife habitats. Special attention will be given to protect endangered or threatened species and their habitats.  43 CFR 8342.1c Areas and trails shall be located to minimize conflicts between off-road vehicle use and other existing or proposed recreational uses of the same or neighboring public lands, and to ensure the compatibility of such uses with existing conditions in populated areas, taking into account noise and other factors.</p> <p><b>Rationale:</b> This route will be managed as a non-motorized trail. Eliminating motorized access would reduce effects to wildlife and riparian habitats and movement corridor area from such use. Designation would minimize damage to soil, watershed, vegetation, air, or other resources by eliminating motorized use.</p>
<b>Memo(s)</b>	<p>This non-motorized trail provides non-BLM land access. This non-motorized trail provides public recreational access.</p>
<b>Alt D</b>	<p><b>Designation:</b> OPEN W/ MANAGEMENT</p> <p>Adaptive Management Monitoring  Monitoring of the status and/or integrity of the potentially impacted sensitive resources or resource issues identified as they relate to various factors (e.g. climate cycles, exotic species introduction, visitor use levels [type, intensity, and season of use]).  <b>Statutory:</b> 43 CFR 8342.1d Areas and trails shall not be located in officially designated wilderness areas or primitive areas. Areas and trails shall be located in natural areas only if the authorized officer determines that off-road vehicle use in such locations will not adversely affect their natural, esthetic, scenic, or other values for which such areas are established.</p> <p><b>Rationale:</b> The generally low volume of traffic on this route would contribute to the retention of soils and vegetation, minimizing the potential for soil erosion and vegetative loss. This route provides general access for a variety of users with minimal effects to documented resources. The low traffic volume and speed on this route has minimal impacts on soils, vegetation and wildlife habitat.</p>
<b>Memo(s)</b>	<p>This primitive road provides administrative access. This primitive road provides permittee access. This primitive road provides non-BLM land access.</p>

## APPENDIX 2: RECREATION OPPORTUNITY SPECTRUM CLASSES

Defining recreation opportunities helps recreation managers create and maintain appropriate recreation experiences to suit various types of land and visitors. The Recreation Opportunity Spectrum (ROS) continuum characterizes recreation opportunities in terms of setting, activity, and experience. The spectrum contains seven classes described in the table below, which was adapted from page 159 of the *2009 Butte RMP* (BLM 2009b). Note: BLM land in the Missouri River Foothills TMA does not include lands under the “Primitive,” “Roaded Modified,” “Rural,” or “Urban” classes.

ROS Class	Class Descriptions
Primitive	Opportunity for isolation from man-made sights, sounds, and management controls in an unmodified natural environment. Only facilities essential for resource protection are available. A high degree of challenge and risk is present. Visitors use outdoor skills and have minimal contact with other users or groups. Motorized use is prohibited.
Semi-Primitive Non-motorized	Some opportunity for isolation from man-made sights, sounds, and management controls in a predominantly unmodified environment. Opportunity to have a high degree of interaction with the natural environment, to have moderate challenge and risk, and to use outdoor skills. Concentration of visitors is low, but evidence of users is often present. On-site managerial controls are subtle. Facilities are provided for resource protection and the safety of users. Motorized use is prohibited.
Semi-Primitive Motorized	Some opportunity for isolation from man-made sights, sounds, and management controls in a predominantly unmodified environment. Opportunity to have a high degree of interaction with the natural environment, to have moderate challenge and risk, and to use outdoor skills. Concentration of visitors is low, but evidence of other area users is present. On-site managerial controls are subtle. Facilities are provided for resource protection and the safety of users. Motorized use is permitted.
Roaded Natural	Mostly equal opportunities to affiliate with other groups or be isolated from sights and sounds of man. The landscape is generally natural with modifications moderately evident. Concentration of users is low to moderate, but facilities for group activities may be present. Challenge and risk opportunities are generally not important in this class. Opportunities for both motorized and non-motorized activities are present. Construction standards and facility design incorporate conventional motorized uses.
Roaded Modified	Similar to the Roaded Natural setting, except this area has been heavily modified (roads or recreation facilities). This class still offers opportunity to have a high degree of interaction with the natural environment and to have moderate challenge and risk and to use outdoor skills.
Rural	Area is characterized by a substantially modified natural environment. Opportunities to affiliate with others are prevalent. The convenience of recreation sites and opportunities are more important than a natural landscape or setting. Sights and sounds of man are readily evident, and the concentration of users is often moderate to high. Developed sites, roads, and trails are designed for moderate to high uses.
Urban	Area is characterized by a substantially urbanized environment, although the background may have natural-appearing elements. High levels of human activity and concentrated development (including recreation opportunities) are prevalent. Developed sites, roads, and other recreation opportunities are designed for high use.

## APPENDIX 3: EXECUTIVE ORDER 11644

In 1972, President Nixon signed Executive Order 11644 (National Archives 2014), which requires all public lands to be designated as “Open”, “Closed” or “Limited.” This applied largely to areas and specific routes in areas designated as “Limited.” Areas designated as “Closed” or “Open” do not require the designation of specific routes and trails. The following criteria are to be applied to “Limited” areas and were excerpted from Executive Order 11644:

1. Areas and trails shall be located to minimize damage to soil, watershed, vegetation, or other resources of the public lands.
2. Areas and trails shall be located to minimize harassment of wildlife or significant disruption of wildlife habitats.
3. Areas and trails shall be located to minimize conflicts between off-road vehicle use and other existing or proposed recreational uses of the same or neighboring public lands, and to ensure the compatibility of such uses with existing conditions in populated areas, taking into account noise and other factors.
4. Areas and trails shall not be located in officially designated Wilderness Areas or Primitive Areas. Areas and trails shall be located in areas of the National Park system, Natural Areas, or National Wildlife Refuges and Game Ranges only if the respective agency head determines that off-road vehicle use in such locations will not adversely affect their natural, aesthetic, or scenic values.

This Executive Order was codified into Title 43 CFR 8340 – Off Road Vehicles (GPO 2014a). Thus, it became BLM policy and was implemented at a nationwide scale throughout BLM-administered lands.

All BLM-managed public lands require motorized vehicle use designations. Both areas and routes require such designations in accordance with Title 43 CFR 8340 – Off Road Vehicles (derived from Executive Order 11644). The designation categories (excerpted from Title 43 CFR 8340.0-5 definitions) include:

### **Open Area**

Area where all types of vehicle use is permitted at all times, anywhere in the area subject to the operating regulations and vehicle standards set forth in subparts 8341 and 8342 of this title.

### **Limited Area**

Area restricted at certain times, in certain areas, and/or to certain vehicular use. These restrictions may be of any type, but can generally be accommodated within the following type of categories: Numbers of vehicles; types of vehicles; time or season of vehicle use; permitted or licensed use only; use on existing roads and trails; use on designated roads and trails; and other restrictions.

### **Closed Area**

Area where off-road vehicle use is prohibited. Use of off-road vehicles in closed areas may be allowed for certain reasons; however, such use shall be made only with the approval of the authorized officer.

## **APPENDIX 4: TRAVEL VARIANCE PROCESS AND APPLICATION**

Travel plan variances are requests by the public, commercial interests, interagency personnel, and formerly BLM personnel (see “NOTE” below) to *temporarily* use motorized vehicles in a cross-country (off-road) manner and on closed roads and seasonally restricted roads. The following process has been developed to address requests for motorized travel **not already authorized** by a prior decision based on analysis in an existing environmental impact statement, environmental assessment, or the provisions of a permit, lease, memorandum of understanding, or right of way. It is also intended to provide additional oversight for uses already generally authorized under the *Record of Decision: Off-Highway Vehicle Environmental Impact Statement and Proposed Plan Amendment for Montana, North Dakota and South Dakota* (BLM 2003) and Instruction Memorandum #MT-2001-004 (BLM 2000) regarding administrative uses.

Variance requests that cannot be approved due to issues raised during review would be subject to the National Environmental Policy Act (NEPA) process or Documentation of NEPA adequacy (DNA). A DNA is documentation of whether or not there is existing NEPA documentation to cover a variance request. If a request cannot pass this test, additional NEPA documentation would be required, and the NEPA process would need to be started.

The NEPA process is initiated by the BLM program lead who is requesting a variance after receiving an external request from the public, the BLM, or a cooperating agency. The public can make variance requests by using the variance request form found on pages 156-158 of Appendix D of the *2009 Butte RMP* and on the later pages of this appendix. After basic information on the variance form is complete, a flowchart would be circulated among respective BLM specialists for consultation and overall review. This flowchart can be found on page 154 of Appendix D of the *2009 Butte RMP* and on the next page of this appendix. A list of BLM specialist reviewers follows the flowchart.

Examples of requests for variances include (but are not limited to):

- Access to private property (patented mine claim, mining claim location and assessment work, seasonal cabin, etc.)
- Casual use mineral exploration (refer to 43 CFR 3809.5) (GPO 2014b)
- Permit lease administration (firewood collection, recreation, etc.)
- Agency administrative work
- Contract work or contract administration
- Other permit leases

**NOTE:** This TMP/EA would serve as the official travel variance for BLM staff to access any of the travel routes within the Missouri River Foothills TMA (regardless of their designation) for administrative purposes. No formal travel variance would be required in these cases. All other requests would be subject to the formal process described in this Appendix.

### **Variance Request Assessment Flowchart**

(Please document your responses, as needed, in the space next to the question. Use “N/A” for issues and concerns not applicable to the request).

Does the request provide reasonable use of public lands? **No-----No Variance**  
*Must be Yes to continue*

Yes

Are there reasonable alternative routes available? **Yes-----No Variance**  
*Must be No to continue*

No

Is the activity in a WSA? (exceptions: grandfathered rights, valid existing rights, use of an existing way)  
**Yes-----No Variance**  
*Must be No to continue*

No

Is the road safe to use during the requested time period? **No-----No Variance**  
*Must be Yes to continue*

Yes

Can the activity be postponed until the road or area is open to motorized use? **Yes-----No Variance**  
*Must be No to continue*

No

Can resource impacts be sufficiently mitigated? (winter range, spring calving habitat, Threatened and Endangered species habitat, sensitive species habitat, sensitive soils, soils susceptible to erosion, water quality, spread of noxious weeds, etc.) **No-----No Variance**  
*Must be Yes to continue*

Yes

Can social conflicts (as analyzed) be sufficiently mitigated? **No-----No Variance**  
*Must be Yes to continue*

**Yes – Variance may be approved by Authorized Officer** (see Variance Request Form for signature)

**Respective Program Reviewers:**

Program Lead	Signature	Date
CULTURAL		
FIRE/FUELS		
FORESTRY		
GEOLOGY		
HAZMAT/AML		
RANGE		
REALTY		
RECREATION/WILDERNESS/VRM		
RIPARIAN		
SOIL/WATER/AIR		
T&E SPECIES		
TRAVEL MANAGEMENT		
WEEDS		
WILDLIFE		

## Variance Request Form

USDI BUREAU OF LAND MANAGEMENT  
Butte Field Office  
106 North Parkmont, Butte, Montana, 59701  
Telephone 406-533-7600

Authorization No. \_\_\_\_\_

### AUTHORIZATION FOR MOTORIZED USE OF ROAD, TRAIL, OR AREA WITH TRAVEL RESTRICTIONS

When approved by the authorized officer, this permit authorizes:

Name: \_\_\_\_\_

Address: \_\_\_\_\_  
(City, State, Zip)

Telephone Number (s): \_\_\_\_\_ (List additional authorized users on back of form)

To use the following road (s), trails, or area with travel restrictions (indicate entry locations and travel areas):  
\_\_\_\_\_

In order to conduct the following operations: \_\_\_\_\_

Dates/Times of Use: \_\_\_\_\_

Number and Type(s) of Vehicles: \_\_\_\_\_

#### Standard Stipulations

- Copy of variance to be kept with authorized vehicle(s) and displayed in window.
- Variance restricted to authorized (listed) individuals only.
- Permittee shall notify BLM of any changes under this authorization.
- Post sign or notice (on gate or beginning of restricted road) stating reason for use. Close/lock gates when entering and leaving closure area
- Vehicle use limited to ingress and egress only (using the authorized route) and minimum numbers of vehicles and trips.
- No off-road travel allowed, unless specifically authorized under this variance.
- Avoid wet areas; travel only when ground is dry to prevent ruts and resulting erosion.
- Wash vehicles prior to use on BLM lands to prevent introduction of weeds.
- *During fire operations* - May use ATVs and engines on any existing road or trail that accesses treatment area. Off-road use restricted for fire holding, mop up, and any related suppression needs. Off-road vehicle use should be avoided during the general rifle hunting season. No new trails are to be created.
- *During hunting season* - Vehicles shall not be used for hunting purposes on BLM lands. Use limited to ingress/egress only after dark or between the hours of 11 AM to 3 PM (with the exception of emergencies).

I (we) acknowledge that I (we) am (are) required to comply with any conditions or stipulations of the authorized officer when the permit is issued:

\_\_\_\_\_  
(Applicant signature/date)

**Butte Field Office Manager Action** \_\_\_\_\_ Variance Approved (**Special Stipulations if any**):

This application is hereby approved subject to the Standard stipulations/Special stipulations (if any) listed above:

\_\_\_\_\_  
(signature/date)

\_\_\_\_\_ Variance Denied

This application has been denied for the following reasons: See attached letter.

## APPENDIX 5: COMMENTS AND RESPONSES

This appendix contains the substantive public comments received on the Draft Missouri River Foothills Travel Management Plan and Environmental Assessment. The comment period began on May 29, 2015 and concluded on July 9, 2015. The BLM considered and responded to all substantive comments in preparing the complete EA, Finding of No Significant Impact, and Decision Record. A substantive comment requests clarification or more discussion on a relevant topic, gives new information affecting the analysis, questions analytical techniques, or suggests new alternatives. BLM did not prepare responses to comments that simply expressed a preference for a particular alternative or action, but we did consider those comments when completing the analysis and preparing the Decision Record.

The responses to substantive comments are presented below and may also be reflected by changes made to the initial EA.

The following table is a list of commenters and their corresponding comment letter designation. This number is shown at the end of the comment statement in parenthesis to identify the individual(s) or group(s) who made the comment.

**Table 23 – Log of Comment Letters**

Letter No.	Name
1	Montana Fish, Wildlife and Parks
2	Hermes Lynn
3	Robert Mullenix

- Comment:** Montana Fish, Wildlife and Parks supports Alternative C and suggests that noxious weeds be managed as part of the TMP. (1)

**Response:** Management of noxious weeds would continue in cooperation with county, federal and state agencies, private landowners, and other partners under the current Butte Field Office Weed Plan Revision (2009), which allows an integrated management approach to noxious and invasive species. All invasive species on the Montana state noxious weed list will be treated to the degree financial resources allow. Areas where private landowners cooperate, participate, and support the BLM’s weed management strategies are given a higher priority for treatment.

2. **Comment:** I rock climb in the Hellgate area frequently, and would be opposed to any increase in motorized use if a new campground is built. (2)

**Response:** Due to a lack of public access to the proposed campground location in the Hellgate area, BLM will not be constructing a campground at this time. If access issues are resolved in the future, and a campground and associated structures are deemed feasible, BLM would analyze the effects in a separate Environmental Assessment which would be made available for public review and comment.

3. **Comment:** I am an avid motorcycle user and currently only use the trail between Magpie, Little Hellgate and Hellgate. This trail goes through elk wintering area and is closed during elk calving. I understand and accept that. I believe there is currently an adequate supply of motorized roads & trails within the BLM lands for the Little Belts and I do not support any closures of current motorized access. My experiences have shown no user or wildlife conflicts of any kind. (3)

**Response:** The Missouri River Foothills Travel Management Plan represents our best attempt to improve the management of transportation and access on BLM lands in this area. It draws a reasonable balance between strong demands for diverse types of access and the resources that need protection.

In this Travel Management Plan, we outline a direction for transportation management, including the establishment of a designated travel route system. The Preferred Alternative (Alternative C) and the associated Travel Management Plan focus on priorities for managing travel and transportation, including: Establishing a comprehensive approach to travel and transportation management; minimizing the effects of vehicular use on natural and cultural resources; enhancing visitor access while minimizing user conflicts; and, ensuring public health and safety.

4. **Comment:** The draft EA says on page 41, “**Reduced vehicle access could lower the incidence of accidental shooting of grazing animals.**” Is there really a current problem of shooting grazing animals? If so, it should be detailed here. (3)

**Response:** There have been no verified reports of accidental shooting of grazing animals in this area, and thus this statement has been removed from the TMP/EA.

5. **Comment:** The draft EA says on page 43, “**No actively eroding areas were found as part of the TMP effort.**” This section appears to be attempting to fix a problem that doesn’t exist. (3)

**Response:** Each time a travel route inventory is completed; an inspection for actively eroding areas is completed and identified in the associated TMP and EA. This statement is simply disclosing that, at the time this TMP is being completed, no actively eroding areas are present in the Travel Management Area. There are other reasons to change travel route designations besides to correct actively eroding areas. For example, there could be redundant routes in the vicinity, visual impact concerns, safety concerns, high weed potential, sensitive plant species locations, important wildlife habitat, etc.

6. **Comment:** The draft EA says on page 43, “**Preventing vehicle traffic by closing routes should decrease the potential for the spread of invasive weeds. These plants are highly adaptable, and most species prefer disturbed soils. Closing more miles of the existing routes could slow the spread of weeds and yield a beneficial long-term impact. However, the closure of routes could also have a minor impact by limiting the BLM in its ability carry out weed control.**” I find it very offensive that government entities ALWAYS assume motorized travel is the cause of invasive weeds. As a landscaper and lawn care professional, I know that invasive weeds are mostly caused where soil has been disturbed, which can happen by BOTH motorized and non-motorized use. Weed seeds often appear on pets (dogs & horses especially), socks, and clothing, which most users of our public lands generally wear. Therefore, ALL USERS should be shut out from public lands to prevent spread of invasive weeds. (3)

**Response:** Invasive weeds are opportunistic and often non-indigenous plant species that readily invade disturbed areas, sometimes producing monocultures and preventing native plant species from establishing communities. Noxious weeds invade and out-compete native plants after soils are disturbed. Minimizing ground disturbance and compaction is critical. While it is true there are a variety of sources for noxious weed infestation, it is the areas with ongoing surface disturbance that are most susceptible to weed infestation. Even minor to moderate amounts of vehicle traffic can be enough to maintain bare ground conditions, allowing weeds to propagate.

Noxious weed seeds are often carried along roadways in the undercarriage of vehicles. A Montana State University study showed that a vehicle driven several feet through a spotted knapweed infestation could pick up about 2,000 seeds. Only 10 percent of the weed seeds remained on the vehicle 10 miles from the infestation. Similarly, weed seeds are dispersed by machinery. It is important refraining from driving vehicles and machinery through weed infested areas during the seeding period. It is also important to wash the undercarriage of vehicles after driving through an area infested with a seed-producing noxious weed. (Preventing Noxious Weed Invasions by Roger Sheley, former Montana State University Extension Noxious Weed Specialist, and MSU Extension agents, Marko Manoukian, Phillips County, and Gerald Marks, Missoula County)

Wildlife and livestock disperse seeds two ways. First, animals ingest noxious weed seeds. These ingested seeds can pass through the stomach unaffected, introducing seeds into new areas. Second, many weed seeds can become tangled in the hair coat of animals. When animals are moved to new areas these seeds fall to the ground. Little can be done to limit weed seed dispersal by wildlife. However, livestock should not graze weed infested areas during flowering and seeding, or should be transported to a holding area for about 14 days after grazing weed-infested areas and before being moved to weed-free ranges. Sheep and goat grazing must be properly timed and managed to prevent seed transport. If animals graze noxious weeds after seed set, they will spread seeds on their coats and through their feces. Noxious weeds can be dispersed in feed. This is especially true on lands where recreational horseback riding and hunting is permitted, but can be a problem for ranchers as well. On BLM lands using feed that is certified as free of noxious weed seeds is one method of preventing the introduction of noxious weeds. Hikers, campers and other recreationists spread noxious weed seeds on their clothing or as they pick the flowers and discard the wilted parts along trails and recreational access sites. Even though discarded, these plants continue seed

development. Clothing and camping equipment should be brushed and discards should be burned in a hot fire before leaving an area. Prudence in limiting weed seed dispersal is critical for all recreationists.

7. **Comment:** The current travel plan appears to have been in place since 2004 and seems to be working well; therefore, I believe alternative D is the only viable option. (3)

**Response:** The Missouri River Foothills Travel Management Area was given a “Limited” Area designation in the *Record of Decision: Off-Highway Vehicle Environmental Impact Statement and Proposed Plan Amendment for Montana, North Dakota and South Dakota (2003 OHV EIS for MT, ND, and SD)* (BLM 2003) and in the *2009 Butte RMP*.

In addition to “Area” designations, each individual travel route must also be designated as “Open,” “Limited,” “Limited (Administrative or Non-motorized),” or “Closed” to wheeled motorized travel. Currently, wheeled motorized vehicle travel in the TMA is only allowed on travel routes that were present when the Record of Decision (ROD) was issued for the *2003 OHV EIS for MT, ND, and SD*. That ROD provided only temporary guidance for travel management on BLM lands until site-specific TMP/EAs can be completed for particular PAs. Once this TMP/EA is finalized, it will replace the temporary guidance found in the *2003 OHV EIS for MT, ND, and SD*.

The purpose of site-specific travel planning is to develop travel plans that meet the needs of public and administrative access, are financially affordable to maintain, and minimize user conflicts and natural resource impacts associated with roads and trails.