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Bureau of Land Management  
and  
National Park Service**

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**Environmental Assessment ID-230-2007-EA-332**

**Craters of the Moon National Monument and Preserve  
Comprehensive Travel Management Plan**

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# CHAPTER 1. INTRODUCTION

## **BACKGROUND**

The background section provides information about Travel Management Planning and Craters of the Moon National Monument and Preserve (Monument) history, and is useful in interpreting this travel management plan. It also defines the sidebars and decision space allowed by the Craters of the Moon National Monument and Preserve Management Plan (MMP), Proclamation, and other established direction.

The MMP set the sideboards for many of the decisions to be made in this Comprehensive Travel Management Plan (Travel Plan). Most management direction related to travel and access is covered by management zone allocation within the MMP. Management zones are defined below:

### **Frontcountry Zone**

The Frontcountry Zone is defined by structures and grounds provided for visitor support services such as information, education, and recreation. Access will be easy and convenient, and the encounter rate very high. High maintenance and intervention will be required to accommodate concentrated visitor use. Challenge and adventure is less important compared to other zones. Zone corridor will be 660 feet wide along routes.

### **Passage Zone**

The Passage Zone is intended to accommodate the flow of people and vehicles from one place to another and to provide minimal accommodations such as parking, trailheads, primitive campsites, and information kiosks or signs for people preparing to venture into the Primitive and/or Pristine Zones of the Monument. Where the zone is only a narrow corridor following a road (660 feet wide), the expectation is that a particular road will be maintained to a consistent standard along the length of the corridor, normally a Class B (Road) or Class C (Primitive Road) route from one end of the corridor to the other.

### **Primitive Zone**

The Primitive Zone provides an undeveloped, primitive, and self-directed visitor experience while accommodating motorized and mechanized access on designated routes. Facilities will be rare and provided only where essential for resource protection.

### **Pristine Zone**

The Pristine Zone includes mostly lava flows, designated Wilderness, and Wilderness Study Areas. This zone provides an undeveloped, primitive, and self-directed visitor experience, generally without motorized or mechanical access. Facilities will be virtually nonexistent.

The Desired Future Conditions (DFC) established by the MMP related to travel management include:

- a net decrease in road mileage within the Monument.

- protect those resources and values for which the Monument was established while providing access for visitors, permittees, non-federal landowners, and administrative needs.
- coordination of road management inside and outside of the Monument in a cooperative fashion with local governments, and state and federal agencies so that the transportation system is managed in a comprehensive and logical manner.
- provide appropriate access to the Monument, including the private land inholdings, cooperatively with local governments, and state and federal agencies.
- support of efficient response time for fire suppression activities.
- emphasize continuity of habitat for special status species and wildlife.

Presidential Proclamation 7373 of November, 9, 2000, expanded the boundary of the Monument to 737,700-acres of federal land (from about 53,000-acres) to include many more of the area's volcanic features, including the 60-mile Great Rift Volcanic Zone. It identified "objects of interest" including the many unique volcanic features, the Great Rift, "kipukas" which are defined as areas of older vegetated terrain surrounded by newer volcanic rock, and the Kings Bowl and Wapi Lava Fields.

About two-thirds of the Monument area is managed by the National Park Service (NPS) and includes most of the exposed lava features. The remaining sage-steppe is managed by the Bureau of Land Management (BLM). The area managed by BLM contains the vast majority of the routes within the Monument. This Travel Plan addresses routes in the entire Monument, including both the NPS and BLM administered lands. Almost 70 percent of the lands within the Monument are designated Wilderness, Eligible Wilderness or Wilderness Study Areas (WSAs). All of these areas are located within the Pristine Zone and there are no Roads or Primitive Roads in any of these designated areas.

Routes throughout the Monument are needed for agency resource management, recreation and administering livestock operations. Recreationists use the transportation network for pleasure and scenic driving to visit Monument features, hunting and for off-highway vehicle (OHV) touring experiences, among other activities. The primary use periods are spring and fall. Much of the use in the spring is related to wildflower viewing, while most use in the fall is related to hunting. Before the Monument expansion, the BLM acres were considered "open", meaning most forms of cross-country travel were permissible. Now, according to the MMP and Proclamation 7373, motorized and mechanized travel is "limited" to designated routes. The majority of roads in the Monument were either user created or created during fire suppression activities.

Visitor use is currently low in the expanded portion of the Monument. According to BLM's Recreation Management Information System (RMIS) data there were 3326 visits and 4178 visitor use days in 2008. In the NPS Monument visitation averaged 202,458 from 2004 to 2008.

A route density analysis of existing routes throughout the Monument was conducted and reveals that an average road density of 0.68 miles per square miles currently exists. This analysis breaks

up the entire Monument into quarter mile squares and assigns density values to each based on the number of miles of routes within the surrounding square mile area. This was used to inform the development of the proposed action.

The MMP characterized travel and access using four categories of roads (A-D) and two classes of trails (type 1 and 2):

**Table 1-1: MMP Road & Trail Classification**

Class	Description
A Roads	paved surface roads
B & C Roads	improved, maintained, constructed roads with natural or aggregate surface
D Roads	primitive roads established through use with no maintenance
Type 1 Trails	restricted to non-motorized/non-mechanized travel; wheelchairs allowed
Type 2 Trails	open to motorized/mechanized travel with a footprint no wider than an 18-inch tread

Since completion of the MMP and the start of this planning process the BLM on a national level has requested, for consistency purposes, the use of the following new definitions for Roads, Primitive Roads and Trails (*BLM Roads and Trails Terminology Report 2006*). The previous system of classification (Roads A-D) took into consideration much of the same criteria that were used in developing these new definitions which allows for an easy crosswalk between the two. The reclassification is summarized in the following table

**Table 1-2: MMP & Travel Plan Road & Trail Classification Crosswalk**

MMP Classification	Travel Plan Classification
Class A & B Roads	Roads
Class C & D Roads	Primitive Roads
Type 1 & 2 Trails	Type 1 & 2 Trails

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

**Roads, Primitive Roads, and Trails** - Terms that are utilized to describe specific categories of transportation linear features and represent sub-sets of the BLM’s transportation system.

- **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.
  - Roads will be maintained to a graded, drained, graveled and/or paved standard along the entire length of the corridor. Roads will be maintained on an ongoing basis.
- **Primitive Road** - A linear route managed for use by four-wheel drive or high-clearance vehicles. Primitive Roads do not normally meet most BLM road design standards.
  - Primitive Roads will be maintained as needed to provide a roadbed adequate for their intended purpose, or to prevent or repair related damage to adjacent resources.
- **Trail** - A linear 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.

- Trails will be maintained to an adequate level for the purpose for which they were intended, or to prevent or repair related damage to adjacent resources.

## **TYPE 1 AND TYPE 2 TRAILS**

The MMP allows the conversion of routes closed through this travel management planning process to be converted to Type 2 Trails depending on zone allocation. No motorized trails can be created within the Pristine Zone (MMP, page 14). During scoping for this EA, a few comments suggested creating exclusive loop riding opportunities for OHVs. Since OHV use on the Monument is limited to designated motorized routes and mountain biking use is very low, it is not in the spirit of the MMP or enabling legislation to create new trails without an identified need for them. All routes outside the Pristine Zone that are closed either through the MMP or through this Travel Plan could still be converted to Type 2 Trails in the future, and Type 1 Trails may also be considered in any zone. If the need arises in the future to provide motorized and non-motorized trail opportunities beyond what is already identified within this plan, they will be considered on a case-by-case basis.

For the purposes of this travel management planning process, Roads, Primitive Roads and Trails within the Management Zones designated in the MMP as well as those routes that define the boundary of the Monument were considered. The following is a break-down of the total mileage of Roads, Primitive Roads, and Trails considered in this plan.

**Table 1-3: MMP Roads, Primitive Roads & Trails Mileage**

<b>Travel Plan Classification</b>	<b>Approximate Mileage</b>
Roads	101
Primitive Roads	614
Type 1 Trails	14
Type 2 Trails	0

## **TRAVEL MANAGEMENT PLANNING**

Comprehensive travel management planning has become a priority for federal land management agencies over the past decade. Increasing population throughout the western United States, shifts in demographics (age and mobility, amount of available leisure time, proximity of population centers to public lands, etc.) and technological advances in various motorized and mechanized methods of transportation (size, power, stability, and ease of control) have out-paced conventional agency transportation planning. Whereas many public lands have traditionally been open to cross country traffic without restriction, these new pressures have necessitated a national level change from passive to active transportation management.

This project is a Travel Plan affecting public lands located within the Monument, located in south central Idaho in portions of Blaine, Butte, Lincoln, Minidoka, and Power counties. The Monument is within a one to two-hour drive of Twin Falls, Idaho Falls, Pocatello, and other population centers along the Interstate 84 (I-84), I-86, and I-15 corridors. This environmental assessment (EA) is a cooperative effort between the BLM Shoshone Field Office and the NPS Craters of the Moon National Monument and Preserve Headquarters.

## **NATIVE AMERICAN RIGHTS AND INTERESTS**

The BLM and the NPS have a unique relationship with federally recognized Native American tribes and are responsible for maintaining a formal government-to-government relationship with tribal leadership. As outlined in treaties, executive orders, legislation, and federal policies, this relationship focuses on ensuring that the rights and/or interests of tribes are considered and protected. This includes consulting with tribal representatives on identifying and protecting important archaeological, religious and/or sacred sites, as well as providing tribal members appropriate access to these sites. Also included are provisions for reasonable access for tribal members to gather and harvest plant, animal, and aquatic resources on certain state and federal lands where these activities are not otherwise prohibited.

## **MOTORIZED AND MECHANIZED USE**

OHV use in the Monument includes off-highway motorcycles, all-terrain and utility vehicles, snowmobiles, and other motorized or mechanized vehicles. Most OHV use in the Monument occurs during hunting seasons or in association with other land uses such as livestock operations. The amount of OHV specific recreational activity in the Monument is small (Recreation Management Information System (RMIS) data estimates less than 3500 visits per year). Most OHV activity takes place on the route network, since no trails have been designated for motorized use. No OHV use is permitted on NPS lands.

A small amount of mountain biking occurs in the expanded Monument. In the area of the NPS Monument, bicycle use occurs on most roads.

US Highway 20/26/93 enters the Monument near the town of Carey and runs for about 25 miles before exiting near the town of Arco.

## **HIKING AND HORSEBACK RIDING**

Most hikers use designated trails in the NPS Monument. Hiking trails in the NPS Monument are the North Crater Flow, North Crater, Devil's Orchard, Inferno Cone, the Big Craters/Spatter Cones area, Broken Top Loop, Tree Molds, and the Caves Area. The wilderness trail takes hikers and backpackers to Echo Crater and the Watchman and Sentinel cinder cones area out in the designated wilderness where opportunities for solitude abound. Hikers in the developed area of the Monument regularly see other visitors due to the high use of the area. Opportunities for solitude are limited; however, the Craters of the Moon Wilderness and much of the Pristine Zone of the Monument offer outstanding opportunities for self-directed hiking and horseback riding with an excellent chance to experience solitude. Unless specifically addressed, this Travel Plan does not restrict non-mechanized cross-country travel, including hiking and horseback riding.

## **AUTHORIZED ADMINISTRATIVE ACCESS**

For the purpose of this Travel Management Plan the term “Administrative Access” is defined as motorized or mechanized special access and considerations not extended to the general public. The Agencies recognize there are periodic needs for cross-country motorized or mechanized access. To the extent possible, motorized or mechanized cross-country travel will be minimal and utilized only when necessary.

Decisions to authorize administrative motorized or mechanized cross country access would be made on a case-by-case basis. The BLM Monument Manager or NPS Superintendent, or delegate thereof, will consider the resource values involved, potential effects of the activity, and appropriate/reasonable mitigation measures to be applied before rendering a decision. In most cases, prior written approval will be required to authorize motorized or mechanized cross country administrative access. Determinations of authorized access for motorized or mechanized cross country travel related to the administration of livestock activities, where practical, will be made in advance of the grazing season. Emergency response requires no prior authorization. The NPS will authorize administrative access on NPS managed lands, and BLM will authorize administrative access on BLM managed lands.

Livestock permittees will be granted motorized and mechanized administrative access to conduct normal day-to-day operations, consistent with current practices. However, to the extent possible, motorized or mechanized cross-country travel will be minimal and utilized only when necessary.

Administrative access needs of an urgent non-emergency nature, as determined by the authorized official, may be granted verbally prior to need, to be followed up with written documentation. Authorized administrative access by law enforcement entities, Idaho Department of Fish and Game, as well as the agencies, will be determined prior to granting access.

Examples of potential administrative access include but are not limited to:

- emergency response
- rehabilitation/restoration activities
- non-native invasive plants and noxious weed control efforts
- science/research
- agency monitoring and compliance
- facilities maintenance
- grazing permittee/lessee operations.

## **MONUMENT HISTORY**

The original NPS Monument, the first national monument in Idaho, was established on May 2, 1924, via Presidential Proclamation 1694 to protect some of the unusual landscape of the Craters of the Moon Lava Field and was administered entirely by the NPS. This “lunar” landscape was thought to resemble that of the moon and was described in the proclamation as “a weird and

scenic landscape peculiar to itself.” Since 1924, the original Monument was expanded and boundary adjustments have been made through five presidential proclamations issued pursuant to the Antiquities Act (34 Statute 225, 16 U.S. Code 431). Presidential Proclamation 1843 of July 23, 1928, expanded the Monument to include certain springs for water supply and additional features of scientific interest. Further adjustments to the boundaries were made in Presidential Proclamation 1916 of July 9, 1930; Presidential Proclamation 2499 of July 18, 1941; and Presidential Proclamation 3506 of November 19, 1962. In 1996, Section 205 of the Omnibus Parks and Public Lands Management Act of 1996 (PL 104-333, 110 Statute 4093, 4106) made a minor boundary adjustment to the Monument. Presidential Proclamation 7373 of November 9, 2000, expanded the boundary to 737,700 acres of Federal land (from about 53,400-acres) to include more of the area’s volcanic features including the 60-mile-long Great Rift. Presidential Proclamation 7373 also enlarged the Monument’s administration by adding the efforts of the BLM to those of the NPS, all under the direction of the Secretary of the Interior. Federal legislation (PL 107-213, 116 Statute 1052), on August 21, 2002, made one further adjustment by designating the area administered by the NPS within the expanded Monument as a National Preserve; allowing hunting on lands that were closed to this activity by the November 2000 proclamation. Copies of these documents are included in the MMP and can be obtained via the internet at [http://www.blm.gov/id/st/en/fo/shoshone/travel\\_management.html](http://www.blm.gov/id/st/en/fo/shoshone/travel_management.html).

## **PURPOSE AND NEED FOR ACTION**

Proclamation 7373 requires that a transportation (i.e. travel) plan be prepared that addresses the actions, including road closures or travel restrictions, necessary to protect the objects identified in Proclamation 7373. The Record of Decision for the MMP, and the MMP itself identified the travel plan to be completed as the first and highest priority implementation-level plan.

According to the MMP, the road system in the planning area provides access for visitors, permittees, non-federal landowners, and administrative needs while protecting those resources and values the Monument was established to preserve.

The MMP emphasizes protection and restoration of physical and biological resources and processes, including sagebrush-steppe habitat, and objects of scientific interest within the Monument. Additionally, the MMP provides for a variety of outdoor recreation opportunities, ranging from pristine and remote backcountry to accessible sites with amenities such as restrooms, campsites, trails, and interpretive media. The MMP also provides guidance for continued livestock grazing under existing BLM policies and regulations.

The use and proliferation of routes within the Monument provides avenues for the spread of noxious weeds and non-native invasive plants, and the possibility of vehicle and other user-related wildfire starts which compromise significant resources in the Monument.

A Travel Plan which addresses these issues is needed to minimize threats, prevent the spread of noxious weeds and non-native invasive plants, reduce the risk of human-caused wildfires, and eliminate the potential for route proliferation.

The management zones, road and trail classification system, and other provisions of the MMP provide the framework for developing this Travel Plan. In addition to identifying potential route closures or travel restrictions, this Travel Plan includes specific standards for route maintenance and/or improvement and a map/brochure that will be published for public use, showing route standards, maintenance levels, and appropriate uses.

The Travel Plan is also needed to provide use designations for routes identified in Map 1 in order to protect the objects of interest and facilitate the purposes for which the expanded Monument was established.

## **DECISIONS TO BE MADE**

The Travel Plan will identify a system of all motorized and non-motorized access within the Monument. All decisions in the Travel Plan will apply only to federal lands within the Monument. Management zones were defined in the Monument Plan that will guide the level of service and access the BLM and the NPS provide to the public.

The area managed by BLM contains the large majority of routes within the Monument. This Travel Plan addresses routes in the entire Monument, including both the NPS and BLM administered lands. The majority of decisions proposed in this travel plan are related to routes located on BLM managed land. BLM was the lead agency in the development of this plan; **however, both Agencies will prepare and sign separate Decision Records.**

All federal lands within the Monument were designated as either “limited” or “closed” to motorized use in the MMP. Working within the confines of the MMP, there will be no net increase in the 709 total route and trail miles. This Travel Plan evaluates motorized and non-motorized travel and transportation uses of each designated route and trail within the Monument.

This travel planning effort focuses on identifying the types of uses and seasons of use appropriate on Roads, Primitive Roads, and Trails. The basis for the evaluation of various alternatives in the Travel Plan will be those Roads, Primitive Roads, and Trails contained in the MMP (see Figure 4, p. 83). Any routes not identified in Figure 4 were closed in the MMP. Any new user established routes will be closed.

The MMP characterizes the existing route and trail network using the best available data on current condition and historical maintenance practices.

Including route closures implicit in the application of Pristine Zone areas, as stated in the MMP, there will be a net decrease in route mileage within the Monument. All motorized and mechanized travel and access will be limited to designated Roads, Primitive Roads and Type II Trails. Routes were evaluated by agency staff and organized using the road and trail classification system to provide for a reasonable baseline data set to be used within the context of the MMP.

## **CONFORMANCE WITH APPLICABLE LAND USE PLAN(S)**

The Proposed Action is in conformance with the MMP (September 2006) and the MMP Record of Decision (September 2006). The MMP directed that a comprehensive travel management plan be written as an implementation-level plan.

The MMP Record of Decision and MMP (p. 104) directed this Travel Plan to “be the first implementation level plan completed and it will be the top implementation planning priority... The NEPA analysis which accompanies the Comprehensive TMP will include, at a minimum, cumulative effects assessments of road density and fragmentation of sage grouse habitat.”

## **RELATIONSHIP TO STATUTES, REGULATIONS OR OTHER PLANS**

Presidential Proclamation 7373 (November, 2000) established the most recent expansion of the Monument, set direction for land use planning, directed the completion of a travel management plan and closed the entire area to cross country motorized travel. The Conservation Plan for Greater Sage-grouse in Idaho (2006), and the BLM Sage-grouse National Sage-Grouse Conservation Strategy (2004) provide guidance for land managers to help safeguard and improve sage-grouse populations and habitats.

Proposed herbicide vegetation treatments would be tiered to the 2007 *Vegetation Treatments Using Herbicides on BLM lands in the 17 Western States Programmatic EIS* (Vegetation Treatments EIS 2007). The Record of Decision for the Final EIS identified herbicide active ingredients that were approved for use on BLM lands and standard operating procedures to use when applying herbicides. Only herbicide active ingredients approved for use in the ROD would be used.

The Shoshone Noxious Weed Control EA (#ID050-EA-92-031) analyzed control activities for noxious weeds. Any activities to control noxious weeds and non-native invasive plants will comply with the current direction for these activities.

## **SCOPING, PUBLIC INVOLVEMENT, AND ISSUES**

This project has been listed on the Idaho NEPA Database since September 1, 2007. Scoping was initiated for the Travel Plan in October 2007 with the mailing of a newsletter to the interested public mailing list identified through development of the MMP. This newsletter included a questionnaire to help focus public comment to the “decision space” available for this Travel Plan.

The newsletter also provided information on how to comment by letter, phone, the internet and email. BLM and NPS staff also offered to meet personally with any individuals or groups. In addition to providing background information and a guide to providing public comments, the newsletter also published the dates and times of four separate public meetings designed to gather public comment in an open-house type setting. The meetings were held in 2007 in American Falls October 16, Rupert October 18, Carey October 23, and Arco October 25, with an attendance of 10-50 people per meeting. At these meetings BLM and NPS staff accepted public comment through markup of maps, completion of a questionnaire, flipchart comments, personal

contact note-taking, and by providing materials to submit at a later time for those who wished to provide more detailed comment. In advance of these meetings, advertisements were run in each of the local newspapers.

The following questions were posed in the newsletter:

1. What is the road (route) used for?
2. Does its purpose justify potential threats to the resources for which the Monument was established?
3. Is this road adequate to provide access for all of its intended purposes?
4. Who needs access to this road?
5. Is it appropriate to limit access to roads based on intended uses?
6. Where (and when) will access be limited to administrative uses including fire suppression, restoration activities, livestock management, or research activities?
7. Is there a need for further recreational use restrictions for ATVs, snowmobiles, horses, and/or mountain bikes?
8. What options do we have to address other issues related to roads?
  - Access restrictions
  - Road/Trail Closures
  - Conversion to Trails
  - Consideration of upgrades

In response to scoping efforts hundreds of public comments were received and combined into a “scoping summary” database that identified 55 separate substantive comments. All of the scoping comments were considered during the preparation of this EA.

## **CHAPTER 2. PROPOSED ACTION AND ALTERNATIVES**

### **PROPOSED ACTION**

This project is a comprehensive travel management plan for the Monument, which defines the types and amount of access allowed within the planning area.

The overall goal of the proposed action is to provide an appropriate travel network while protecting the resources for which the Monument was established. The proposed action provides a transportation and access system that protects the resources and identified objects of interest contained within the Monument, while continuing to provide access for multiple use activities.

Within the context of comprehensive travel management planning, this plan also protects sensitive plants, prevents the spread of non-native invasive plants and noxious weeds, provides for proactive wildfire management, restores vegetative communities to a more native condition, restores quality sage-steppe habitat for sage-grouse and other wildlife, protects resources from the proliferation of user-created routes, reduces route densities in sensitive wildlife habitat areas, and protects sensitive archaeological sites.

No changes are proposed to the developed portion of the Monument located near the NPS Visitor Center.

This project will be implemented through the use of a “Toolbox” of route treatment options, as described below, and through the production of a Monument travel map, which will both describe and depict the decisions made in this Travel Plan. Maintenance schedules will be changed to incorporate decisions made in the plan including upgrades.

Actions specific to this Travel Plan include:

- maintain Roads, as defined on page 2 of this Travel Plan, to consistent standard to support wildfire operations.
- seasonally close routes in Big Game Winter Habitat when needed.
- seasonally close and limit routes to protect sage-grouse.
- restrict occupancy in areas of known active sage-grouse leks during the breeding season.
- limit some Primitive Roads to administrative use only in order to minimize human-caused wildfire threats and the spread of non-native invasive plants and noxious weeds.
- allow administrative use only on some routes to Monument infrastructure such as range improvements associated with grazing and livestock operations, wildlife management, and exclosures.
- construct vehicle parking areas in order to minimize human-caused wildfire threats and the spread of non-native invasive plants and noxious weeds.
- close and remove/rehabilitate some Primitive Roads in the Pristine Zone to protect archeological and geological resources.
- provide access for motorized and non-motorized recreational activities.
- develop and analyze “toolbox” of options for route closures.
- protect valid existing rights.

## **TOOLBOX OF ROUTE CLOSURE /ADMINISTRATIVE USE ONLY PRESCRIPTIONS**

All closed routes will be rehabilitated in order to remove them from the landscape. This will be accomplished in a variety of ways ranging from simply removing it from the travel map, to

aggressive mechanical obliteration and reseeded. The “Toolbox” is a series of options designed to effectively assure that routes closed are rehabilitated and revegetated. The minimum necessary, or “least impacting” treatment analyzed in the Toolbox will be applied to each closed route in order to achieve these outcomes. The most effective method of reclaiming a route and preventing further use is to disguise its location. This process favors a natural form of recovery where possible and is the most cost-effective way to rehabilitate closed routes.

### **REMOVE FROM TRAVEL MAP**

In cases where the routes in question are unused or overgrown, or have already disappeared, they will simply be removed from the travel map showing designated Roads, Primitive Roads, and Trails. All routes closed through this Travel Plan will not appear on the travel map associated with this Travel Plan.

### **DISGUISE THE ROUTE WITH NATURAL MATERIALS**

This method, sometimes referred to as “vertical mulching,” is used to hide the route from view. If the route is not on the travel map, and is not evident to Monument visitors, it will be unlikely to receive additional use. Often the first several hundred feet of the closed route will be disguised to look like the surrounding area by placing rocks, deadwood and plants, and in some cases planting live vegetation, in a natural looking arrangement. Where possible, materials used, such as rocks, should be large enough and abundantly placed in order to deter persons familiar with the route location from easily removing them. In some cases, mechanical tools such as shovels, rakes and other hand tools may be employed to obliterate embankments, ruts, water-bars and ditches.

### **RIP AND RESEED THE ROUTE**

This process mechanically removes the route from the landscape and revegetates it. Native seed mixes will be used where practical and within the Pristine Zone, as directed by the MMP. Mechanical removal may be accomplished by hand or with the use of power equipment, harrow or seed drills, among other methods. Re-vegetation may be facilitated through the use of herbicides as well. Based on site-specific conditions, seeding and planting treatments may include:

- prepare seedbed
- select appropriate seed mix
- apply seed
- cover seed.

Due to the broad spectrum of situations encountered, all possible treatment options and combination of treatments may be considered, as allowed within the MMP. This process ultimately results in the closed route becoming undetectable.

## **INSTALL NATURAL OR HUMAN MADE BARRIERS, INCLUDING FENCES AND GATES**

In locations where it is impractical to employ any of the previous methods, such as on open lava or extremely rocky areas, and in areas where administrative use may occasionally be required on a route closed to the public, it may be necessary to install natural or human made barriers such as large boulders, fences with gates or other barriers to physically prevent unauthorized use. Where possible and practical, these measures would be removed when the route is rehabilitated or fully disguised.

## **CLOSE THE ROUTE USING INFORMATIONAL SIGNS**

This measure would be employed in cases where the previous measures have failed, but ripping and seeding or the use of physical barriers is impractical or ineffective. It may also be used on routes to establish an administrative use only designation, or to identify seasonal closures. Signs would be clearly marked and placed in a location where they would be highly visible. Signs would be removed when the route is rehabilitated or fully disguised.

## **UPGRADES**

In cases where Primitive Roads were identified for upgrade to Roads, either within the MMP or through this plan, roadbeds would be graded, drained, and graveled. Local or imported materials may be used. According to the MMP, within the Passage Zone, upgrades and improvements may be authorized within a 660 foot corridor (MMP Table 1, p.14).

## **HERBICIDE SEEDBED TREATMENT**

Herbicide pretreatment would be used when it is necessary to control non-native invasive plants and noxious weeds prior to utilization of other toolbox treatments. Control activities would follow standard operation procedures found in the Vegetation Treatments EIS 2007 and the Shoshone District Noxious Weed EA. Special attention will be given to upgraded Roads both before and after construction to prevent non-native invasive plants and noxious weeds that may establish from imported seeds, or through existing roadbed disturbance.

## **SENSITIVE PLANTS**

Proposed project areas would be inventoried for the presence of special status plants. If special status species are found to occur in a site-specific project area, the area would be examined for habitat quality and Toolbox methods selected based upon presence and needs of these species.

Picabo milkvetch and Obscure phacelia are the primary sensitive plants of concern within the project area. Based on habitat needs Obscure phacelia is not expected to be impacted under the proposed action or alternatives. Picabo milkvetch is expected to be found along some of the closure areas. If sensitive plants are found the following criteria would be utilized to design an appropriate Toolbox treatment.

- No broadcast treatment of a broadleaf herbicide would be allowed.

- Herbicide spot treatment of individual plants would be acceptable dependent on density of non-native invasive plants and noxious weeds.
- Light application (8 ounces/acre rate) of *Glyphosate*, or other approved herbicides at their appropriate rates, would be acceptable for cheatgrass control.
- No ripping of a roadbed area would be allowed.
- An appropriate native seed mix would be utilized.
- Harrowing or drilling for seed cover would be an acceptable Toolbox method.
- Parking areas would not be developed in areas supporting special status plants.

## MONITORING

Because visitor use is low on the expanded portion of the Monument, specific data is lacking and current and emerging trends are not well understood. However, BLM’s Recreation Management Information System (RMIS) data estimated 3326 recreational visits and 4178 visitor use days in 2008, and the amount of recreation use in the expanded Monument appears to be steady. Visitor use data related to travel and transportation within the Monument would be collected through the use of vehicle counters and other methods to identify a more accurate picture of how the Monument is being used, and what visitor use trends exist or are emerging.

Currently there is only one existing lek route monitored by Idaho Department of Fish and Game (IDFG) to track active sage-grouse leks within the Monument, located in the North Laidlaw Park area. At least two new routes or other similar methods of monitoring active sage-grouse leks would be created in the southern and eastern portions of the Monument. One would be established near the Bear Trap Cave area in the Southern portion of the Monument, and another in the south part of Laidlaw Park leading to the eastern boundary.

Data related to Big Game Winter Habitat would be obtained from IDFG on an ongoing basis and, in combination with BLM and NPS’s best available data, used to identify areas where wintering wildlife may experience changing levels of motorized or mechanized vehicle disturbance. If monitoring identifies a conflict, the Agencies in cooperation with IDFG, will consider implementing Big Game Winter Wildlife Habitat closures as analyzed in this Travel Plan.

Permittees and other regular users of the expanded Monument transportation system would be asked to support data collection through various means, including visitor use reports, wildlife observation logs, authorized administrative use logs, and other methods.

## ACTIONS

Travel Plan Classification	Approximate Mileage
Roads	101
Primitive Roads	568
Trails	14

These are the actions the Agencies are proposing in this Travel Plan. All actions listed below are depicted in Map 2, and described in Appendix 3.

## **CLOSURES**

### **MMP ROUTE CLOSURES**

Many routes within the Pristine Zone of the Monument were already closed by the MMP. These closures are reiterated below for clarity. Please refer to the “Toolbox” above for specific information on how routes will be closed.

Closed routes include: All or portions of route segments 761, 762, 771, 776, 800, 828, 845, 846, 847, 848, 849, 850, 851, 852, 853, 855, 856, 857, 858, 859, 861, 862, 863, 864, 865, 866, 3414, 3430, 3435, 3437, 12209, 12212, 12216, 12231, 12234, 12235, 12236, 12237, 12238, 12239, 39113, 39117, and 39118 (~27 miles).

### **TRAVEL PLAN ROUTE CLOSURES**

#### **Routes that Lead to a Pristine Zone Closure**

Certain routes that lead into MMP Pristine Zone allocations have no intersection or spurs, or any other identified purpose, other than motorized access to routes closed within the Pristine Zone. These routes would be closed to the nearest intersection outside the Pristine Zone, rather than abruptly closing the route at the boundary of the Pristine Zone.

Closed routes include: All or portions of route segments 828 and 12216 (~2 miles).

#### **Routes that are Redundant, Unused, or Unneeded**

These are routes that were identified as redundant, unused, or unneeded. Redundant means at least one other available route exists to the same destination or serves the same purpose. Unused means no justifiable purpose for the route was identified during scoping or planning, and the route shows signs of vegetative recovery or is now invisible due to overgrowth or was obliterated during fire rehabilitation work. Unneeded routes were identified as having no justifiable useful purpose.

Closed routes include: All or portions of route segments 772, 773, 774, 777, 779, 780, 781, 793, 802, 803, 819, 854, 860, 872, 874, 3411, 3416, 3424, 3436, 12208, 12209, 12210, 12212, 12217, 12219, 12220, 12223, 12234, and 12243 (~45 miles).

### **Limit Access for Resource Protection, Retain Access for Facilities Maintenance and Resource Management**

The following routes were identified as located in, or leading to sensitive resources, or are exclusively used for administrative purposes. They would be closed to all motorized or mechanized use except authorized administrative access.

Administrative use only routes include: All or portions of route segments 772, 775, 785, 12224, 12225, 12226, 12227, and 12233 (~10 miles).

## **Routes Identified for Seasonal/Temporal Closures**

### *Sage-Grouse Seasonal Closures*

The following routes or portions of these routes would be closed to motorized or mechanized use as depicted on Map 2 from March 15 to May 1 from 6 pm to 9 am for all but authorized administrative use to protect sage-grouse. Based on the most current IDFG lek data available, active leks were buffered and closures were applied to routes or areas within 0.6 mile of an active lek. In some cases management discretion would be used to extend closures to logical intersections or to large areas of affected routes. As lekking data changes through annual monitoring, this list of seasonal route and area closures would be updated and applied based on the current IDFG data.

The following routes are included in the seasonal closure, except for those already closed for other reasons: All or portions of route segments 714, 732, 740, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 788, 790, 791, 810, 841, 849, 867, 868, 869, 870, 871, 873, 874, 875, 876, 877, 878, 3206, 3218, 3228, 3229, 3231, 3232, 3405, 3407, 3408, 3409, 3410, 3412, 3413, 3414, 3419, 3426, 3427, 3428, 3429, 3430, 3433, 3438, 3439, 12211, 12213, 12241, and 12242 (~167 miles).

### *Active Sage-grouse Lek Area Occupancy Restrictions*

In areas within 0.6 miles of active sage-grouse leks from March 15 to May 1 between the hours of 6 pm to 9 am, motorized use and trailing of livestock on designated Roads and Primitive Roads would be authorized for the administration of permitted livestock operations.

While normal grazing within these areas would be allowed, based on the most current IDFG data, areas within 0.6 miles of identified active leks would be closed to bedding of sheep from March 15 to May 1 from 6 pm to 9 am. Based on the most current IDFG data, areas within 0.6 miles of identified active leks would be closed to trailing of livestock off of designated Roads and Primitive Roads, from March 15 to May 1 from 6 pm to 9 am. Trailing of permitted livestock is allowed on designated Roads and Primitive Roads. The active lek areas would be signed by agency staff, and a map provided to permittees each year before the start of the grazing season.

Prior to the grazing season, BLM will work with livestock permittees to identify appropriate bed grounds in areas of high sage-grouse lek concentrations.

When unplanned-for circumstances prohibit livestock movement beyond the no occupancy areas, permittees must notify BLM immediately to identify appropriate areas to allow bedding or passage.

### ***Big Game Winter Habitat Seasonal Closure***

BLM and IDFG have identified areas within the Monument as Big Game Winter Habitat. Due to the low amount of motorized or mechanized use in the area, there is not an immediate need to implement seasonal big game winter restrictions to motorized or mechanized use in any areas of the Monument at this time. These area would be adaptively managed to include measures allowing seasonal closure of routes to the general public in the identified Big Game Winter Habitat areas from January 1- March 31, if and when IDFG, BLM and NPS identify a threat, through research, field observation or identified issues or conflicts, to wintering big game resulting from increased motorized or mechanized use.

This seasonal closure would not apply to livestock permittees or other authorized administrative motorized use. Seasonal route and area closures would change on an ongoing basis to reflect identified changes in Big Game Winter Habitat areas. All closures would be identified in advance through public notification in news media, and informational signage at entrances and within the Monument. The Travel Map would also be updated to identify these changes.

### **UPGRADES**

#### **FIRE ROADS**

Approximately 3 miles of route 792, located between the Craters of the Moon Lava Field and Bear Trap Cave, would be upgraded to aid wildfire suppression as a fuel break, and as an important location to stage indirect firefighting tactics. This is intended to prevent frequent wildfire from crossing the “gap” area between the unburnable lava, and provides an opportunity to stop these wildfires before they have a chance to spread into areas on either side of the route. The following route, as depicted on Map 2 would be upgraded to a Road suitable to accommodate firefighting equipment and fire suppression operations, and to minimize vegetation in the roadway.

Improved route for use as Fire Road include: All or portions of route segment 792 (~3 miles).

#### **IMPROVED ACCESS FOR VISITORS, RESOURCE MANAGEMENT, AND FIRE SUPPRESSION**

The following routes would be upgraded to a Road in order to facilitate travel for the purposes of fire suppression, visitor use and resource management. Limited access would mitigate wildfire threats and the spread of non-native invasive plants and noxious weeds.

Improved routes include: All or portions of route segments 3217, and 3414 (~18 miles).

#### **PARKING AREAS**

Hardened parking areas for motorized vehicles would be developed in three areas to prevent wildfire starts from hot exhaust systems and to reduce impacts to vegetation related to parking vehicles near popular features in the expanded Monument. According to the RMIS data visitor use is currently low, 3326 visits estimated in 2008, in the expanded portion of the Monument. Because of this, the identified parking areas would initially be limited to approximately 1000 square-feet in size, and designed to accommodate 5 passenger vehicles or light trucks. The area would be delineated with barriers (such as basalt boulders) and graveled to provide a stable surface and prevent erosion.

Parking areas would be monitored for non-native invasive plants and noxious weed infestations and treated as needed.

Parking areas would be developed at the following locations:

- Junction of route segment 873 and 876, on the northeast corner of the intersection near Pissant Butte feature.
- Junction of route segment number 32184 and unnamed E-W route segment, at the intersection of South Park Well.
- Junction of route segment 793 and 740, adjacent to Bear Trap Cave.

**NO CHANGE**

All other designated routes are retained in order to provide an appropriate travel network while protecting the resources for which the Monument was established.

**SNOWMOBILE USE**

Snowmobiles and over-the-snow motorized or mechanized vehicles are restricted to designated routes, except for authorized administrative use. No over-the-snow routes are designated on NPS lands.

**NO ACTION**

Travel Plan Classification	Approximate Mileage
Roads	101
Primitive Roads	614
Trails	14

Under this alternative, current management direction would continue. Decisions made related to transportation would be based on existing direction. All travel and transportation management would continue based on existing direction within the developed portion of the Monument. Existing designated routes within the Monument would remain open and subject to current

maintenance schedules (see MMP, Figure 4, p. 83). Travel and transportation decisions made in the MMP would be implemented. Motorized travel would be “limited” to existing designated Roads, Primitive Roads, and Type 2 Trails, and motorized/mechanized cross country travel would be prohibited. There would be no net increase in routes. The No Action Alternative is depicted on Map 3.

Non-native invasive plants and noxious weed treatments would continue according to current management.

As with the Proposed Action, many routes within the Pristine Zone of the Monument were already closed by the MMP. These closures are reiterated below for clarity.

Closed routes include: All or portions of route segments 7761, 762, 771, 776, 800, 828, 845 – 853, 855 – 859, 861 – 866, 3414, 3430, 3435, 3437, 12209, 12212, 12216, 12231, 12234 – 12239, 39113, 39117, and 39118 (~27 miles).

#### **NO CHANGE**

All designated routes remain unchanged.

## **CHAPTER 3. ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED STUDY**

### **ALL PRIMITIVE ROADS CLOSED ALTERNATIVE**

The BLM and NPS considered an alternative that would close all Primitive Roads designated by the MMP. The MMP calls for continued administrative access, self-directed motorized experiences, and access for wildfire and livestock operations. Since many of the Primitive Roads within the Monument serve these purposes this alternative was eliminated from detailed study.

## **CHAPTER 4. AFFECTED ENVIRONMENT AND ENVIRONMENTAL IMPACTS**

This chapter summarizes the physical, biological, social, and economic environments of the project area and the effects of each alternative on that environment. It also presents the scientific and analytical basis for the comparison of the alternatives. An interdisciplinary (ID) team completed an analysis of the reasonably foreseeable natural and human-caused changes to the existing condition expected to occur should any of the alternatives be selected.

The following physical, biological, social, and economic topics were included in this environmental analysis based on public comments and the likelihood that these topics would be impacted by the implementation of the Proposed Action or the No Action:

- Fire
- Vegetation
- Access
- Recreation
- Wildlife
- Cultural
- Livestock Grazing.

This list forms the basis for the organization of this chapter. Information for each of the topic areas listed above is presented in a common format. First, the affected environment is described setting the context of the existing conditions. Next, the environmental consequences of the alternatives are presented drawing from the expertise and knowledge of the ID team using the best available information. Finally, if mitigation measures are available to lessen or eliminate potential impacts, then these measures are discussed. Those values were generated based on the GIS data available during the analysis process. Miles calculated by GIS are approximate distances and do not reflect on the ground travel distances. The effects analysis is generally related to or based on miles of route or trail.

Proposed route closure projects would be inventoried for the presence of special status plants and animals and their habitat. If special status plant and/or animal populations are found to occur in a site-specific project area, the area would be examined for habitat quality and tool box methods selected based upon presence and needs of these species. Population ecology (including disturbance and reproductive ecology), biology, status, seasonal sensitivities (e.g. breeding, growing, or dormant seasons), and current habitat quality would be considered in selecting toolbox treatments.

## **FIRE**

### **AFFECTED ENVIRONMENT**

Access due to the quality of route surface and relative remoteness of the area combined with fuels that can exhibit rates of spread which make containment difficult has hampered fire suppression activities in the past. The Upper Snake River District(s) South Central Idaho Fire Management Plan recognized this and in early to mid-2000 two guard stations were constructed and complemented with additional engines in order to reduce response time to the area. The stations were located in Carey and Kimama Crossing, 15 miles north of Paul (see Map 1). While the stations have placed suppression resources closer to the planning area, route condition and availability plays a significant role in the suppression of fires in the area.

BLM works with NPS to provide primary fire suppression within the Monument.

The fire history from 1989 to 2008 provides a picture of the fire situation which exists in this area. During this time, there were 85 fires within the Monument that burned a total of 1,260,609

acres in the Monument and adjacent areas. The number of fires per year is approximately 5 fires burning an average of approximately 70,000 acres which indicates the propensity for fires to grow. Lightning is the predominant cause of fires, 63 percent lightning versus 37 percent human, which may be reflective of access and remoteness of the area.

The majority of the fires are large, 23.5 percent of the fires have been over 5,000 acres and 16.5 percent between 1,000 and 5,000 acres. Table 4-1 shows the major fires over the past 20 years.

**Table 4-1: Fires 5,000 acres and greater between 1990 - 2008**

Year	Fire Name	Acres
1990	Whiskey Butte	7,943
1992	Blackridge	149,951
1992	Great Rift	9,642
1992	Potter Butte	19,580
1994	Hawley 2	15,929
1994	Point Well	22,776
1995	Beartrap	20,523
1996	Cox's Well	219,952
1996	Lake Walcott	12,949
1996	Mule Butte 2	5,879
1996	Richfields	178,167
1999	Mule Butte	139,906
1999	Whiskey Butte	7,194
2000	Flat Top	57,581
2005	Laidlaw B	24,810
2005	Rupert	47,592
2006	Crystal	220,110
2007	Bear Den Butte	29,533
2008	North Minidoka	31,616

Fires with the conditions and propensity to grow large are often times controlled using an indirect method which usually means the use of the route network as an “anchor point” or barrier. However, not all routes are suitable for suppression actions due to width, driving condition, and amount of fuel located in the route. Larger fires require more equipment such as engines, dozers and transports, and water tenders which because of their size and weight tend to degrade routes.

A geographic feature of concern to fire management is the area known as the “Gap”. The Gap is about 6 miles wide and sits between two geological features which impede or stop fire growth: the Craters of the Moon Lava Field and the Wapi Lava Field. Fires generally move from west to east and the Gap is a critical area to keep fires from moving east into a vast area with potential for large fires and differing jurisdiction. Access to the Gap from the west is somewhat slower along Route 3444 than access from a southerly location on the Arco to Minidoka Road. During a 2004 travel simulation conducted by BLM, access was quicker to the Gap (Cream Can Junction) from Kimama by 17 minutes using Highway 24 and the Arco to Minidoka Road.

## **NO ACTION**

## **DIRECT/INDIRECT IMPACTS**

Under the No Action alternative access for fire suppression would essentially remain the same. The Carey-Kimama Road would provide the main access to the majority of the area with no improvement in access times. Use of routes as a barrier or for anchor points would remain unchanged and would be determined by the conditions on any given year.

## **PROPOSED ACTION**

### **DIRECT/INDIRECT IMPACTS**

Improving or keeping the Carey-Kimama Road in a consistent condition would improve travel times to fires within the majority of the planning area. The removal of the specified routes is not expected to impact access to fires due to the relative small amount and length of routes closed. However, the removal of specified routes could result in a reduced number of human-caused wildfire starts related to vehicle exhaust systems and other human activities. Travel time from west to east across the southern end of the planning area would improve with an upgrade to a Road of Route 3444 and provide better access to the area known as “the Gap”. Also, the improvement of Route 792 across the Gap will provide a barrier and anchor point for indirect suppression actions.

## **CUMULATIVE IMPACTS**

Currently there are no plans which would increase the number of engines or increase the number of stations which would respond to the planning area. Any improvement to the route system would increase access times to fires and provide additional barriers and anchor points to suppress fires. However, too much improvement may increase the amount of vehicle traffic and possibly increase the number of fires caused by human activity.

Roads may be closed during periods of high fire danger to reduce the potential risk of human-caused wildfire starts.

The Burley Field Office has plans to develop a fuel break along Route 792 which would improve the effectiveness of the route as a barrier to fire.

## **VEGETATION**

### **AFFECTED ENVIRONMENT**

The plant communities in the project area are included in the Columbia Plateau Eco-region (Dorfman 2001) and the Intermountain Sagebrush Province (Bailey 1995). This Province includes sagebrush-dominated vegetation in Idaho, Nevada, Oregon, and Washington and covers 90,000 square miles. Within the proposed project area, native plant communities predominately occur on three ecological sites, which are listed below:

- Loamy 12-16 inch precipitation zone, threetip sagebrush/bluebunch wheatgrass (*Artemisia tripartita tripartita/Agropyron spicatum*)
- Loamy, 8-12 inch precipitation zone, basin big sagebrush/bluebunch wheatgrass (*Artemisia tridentata tridentata/Agropyron spicatum*)
- Sandy, 8-12 inch precipitation zone, basin big sagebrush/Indian ricegrass/needle-and-thread grass (*Artemisia tridentata tridentata/Oryzopsis hymenoides/Stipa comata*).

#### **NON-NATIVE INVASIVE PLANTS AND NOXIOUS WEEDS**

Non-native invasive plants commonly found in the project area include cheatgrass (*Bromus tectorum*), tumble mustard (*Sisymbrium altissimum*), and prickly lettuce (*Lactuca serriola*). These invasive plants tend to dominate where perennial bunchgrasses such as Thurber's needlegrass, bluebunch wheatgrass, and needle-and thread have been depleted.

The primary noxious weeds found within the project area include rush skeletonweed, leafy spurge, Dyer's woad, Canada thistle, diffuse knapweed, and spotted knapweed. Locations of these weeds have been documented during past treatment activities. The majority of treatments have occurred following wildfires. Treatment data shows that diffuse knapweed and spotted knapweed infestations tend to follow route corridors. Vehicles readily spread weed seed along the disturbed route corridors. Rush skeletonweed may be found in the route corridors and spreads readily across the landscape.

Numerous drill seeding projects as a result of fire rehabilitation and proactive vegetation treatments have been implemented over the last 50+ years to establish a desired perennial dominated plant community to compete against non-native invasive plants and noxious weeds. Introduced grass species, such as crested wheatgrass, were utilized extensively in many of the older (> 20 years old) rehabilitation projects. Recent (< 20 years old) vegetation treatment projects have utilized more native/introduced species mixes because native species have become more readily available and herbicide techniques to reduce non-native invasive plants and noxious weeds have been extensively utilized.

#### **SPECIAL STATUS PLANTS**

Picabo milkvetch (*Astragalus oniciformis*), a Type-3 BLM Sensitive species, is found on sandy loam soils within the project area. Picabo milkvetch is a wiry, diffuse, perennial milkvetch that occurs on deep, stable sandy soils overlying basalt, with flat to rolling topography, at approximately 3,500 to 5,000-foot elevation. This species tends to occur in areas where competing vegetation is sparse. It flowers from May to July. Associated species include Wyoming big sagebrush, basin big sagebrush, threetip sagebrush, thickspike wheatgrass, Indian ricegrass, and needle-and-thread grass.

Picabo milkvetch is endemic to the northern edge of the Snake River Plain, from Gooding east to the Monument, and north to the lower foothills of the Pioneer Mountains near Picabo. While this species is globally rare, populations within the range can be large and genetically diverse (Alexander et al. 2004). Surveys performed in May and June 2005 by BLM staff, identified previously documented (see Moseley and Popovich 1995) populations within the proposed

project area, including areas immediately adjacent to routes and in the middle of two-track routes.

Picabo milkvetch appears to be tolerant of light to moderate disturbances, including grazing, drill-seeding, and harrowing (Popovich and Pyke 1997, Alexander et al. 2004). Threats to the species include activities that disturb the tap-root such as fire, road/trail construction, pipeline construction, and plowing, and activities that impact all vegetation, such as high-intensity livestock use (water trough sites).

Obscure phacelia (*Phacelia inconspicua*), a Type-2 BLM Sensitive Species, is one of Idaho's most rare plants, with only six occurrences (population areas) state-wide, including within the Monument. It is a diminutive annual that occurs on north and east-facing slopes of volcanic-based mountains and buttes. Habitat for this species is primarily in mountain shrub communities. Based upon habitat needs, Obscure phacelia is not expected to be found in areas where route closures are proposed.

## **NO ACTION**

### **DIRECT/INDIRECT IMPACTS**

Maintenance of roads and the current levels of vehicle use would continue to impact roadside vegetation. The present vegetation situation would continue until a wildfire or some other disturbance alters vegetation in the project area.

### **NON-NATIVE INVASIVE PLANTS AND NOXIOUS WEEDS**

Under the no action alternative, there would be no change to the existing plant community. Non-native invasive plants and noxious weeds would continue to persist in disturbed areas along route corridors. Treatment for noxious weeds would continue under the Twin Falls District normal noxious weed control program.

### **SPECIAL STATUS PLANTS**

Under the no action alternative, Picabo milkvetch populations adjacent to and within two-track roads proposed for closure would continue to be disturbed by current levels of vehicle use and other activities. Current levels of use do not appear to be negatively impacting populations. Qualitative observations show that populations appear stable even within lightly used two-track roads where they occur.

## **PROPOSED ACTION**

### **DIRECT/INDIRECT IMPACTS**

The proposed action provides a "toolbox" of options for route closures. The toolbox options include removal from the travel map of designated routes, herbicide treatment, disguising the route with natural materials, rip and reseed, install natural or human made barriers, and closing

the route with informational signs. Impacts associated with this toolbox of options are primarily to vegetative and soil resources.

Removal of a proposed route from a public map would have no direct effect on vegetation. Removal would have an indirect effect of not advertising a travel route to the public which may lead to reduced use of the route. Reduced use would allow existing vegetation adjacent to and within the roadbed to expand and disguise the route over a period of time. Dependent on the amount of past use that occurred this could take from 5-10 years to occur assuming that the route would no longer be utilized.

Installing natural or human natural barriers or closing with informational signs would have similar impacts as removal of a route from a public map. This toolbox option relies on the existing vegetation to expand and disguise the route over time.

Disguising the route with natural materials or “vertical mulching” is one of the least ground disturbing methods in the toolbox. Native materials would be utilized from adjacent areas to provide the mulch needed to disguise the roadbed. Prior to placement of material on the route surface minor soil surface preparation (raking) may occur for coverage of seed that may be broadcast over the area.

Ripping of a roadbed would help relieve soil compaction which generally occurs with repeated vehicle travel. After ripping of a roadbed, uncovered rock within the roadbed may make the route difficult to travel by vehicle. Relieving the soil compaction would increase the success of a follow-up seeding of the roadbed by allowing better water infiltration.

Reseeding of a roadbed would require incorporation of the seed into the soil. This would be accomplished by harrowing after broadcasting the seed or hand raking the soil surface to incorporate the seed. Harrowing and raking would lessen the visual impact of ripping the roadbed to prepare the seedbed. Coverage of the seed would increase germination success of the seed.

Herbicide treatment prior to seeding of a roadbed to reduce the competition from non-native invasive plants and noxious weeds would further increase the success of the seeding. The seed mix developed to reseed a route would be based upon the existing adjacent plant community. It is expected that once seeding occurs it would take from 2-5 years before the seeding would fully disguise a route assuming successful establishment of the seeded species.

#### **NON-NATIVE INVASIVE PLANTS AND NOXIOUS WEEDS**

Development of the four proposed parking areas would permanently remove the existing vegetation from the sites. The sites would then be hardened by graveling the area. Removal of vegetation would create a disturbed area suitable for non-native invasive plants and noxious weeds to invade. Vehicles utilizing the parking areas may transport and deposit invasive plant and noxious weed seeds on these locations. Gravel may also introduce weed seeds. Monitoring of these parking sites would be conducted and herbicide or other treatments would be

implemented to keep the parking areas from becoming a perennial source of undesirable plants such as noxious weeds.

Herbicide treatment prior to mechanical toolbox treatments would increase the success of seeding treatments by reducing the competition from non-native invasive plants or noxious weeds. Herbicide application can also help reduce the non-native invasive plant and noxious weed soil seed bank.

## **SPECIAL STATUS PLANTS**

Routes slated for closure would be inventoried for special status plants prior to implementation of tool box methods. Picabo milkvetch would be the primary sensitive plant species to be impacted by ground disturbing or herbicide toolbox methods.

Impacts to Picabo milkvetch would be primarily due to ripping a roadbed which would disturb the taproot. This tool would not be utilized if Picabo milkvetch were present in the roadbed. Harrowing an area for seed coverage would have minimal affect on Picabo milkvetch and may actually help with seed dispersal.

Herbicide use could also have negative effects on this species dependent on timing, application method, and the herbicide selected for use. Herbicide, such as *Glyphosate*, could be utilized for non-native invasive plant control. *Glyphosate* would not have a detrimental effect on Picabo milkvetch populations or other perennial plant species if utilized at low rates (8 ounces/acre). Within the Shoshone Field Office area *Glyphosate* application has been successfully utilized for cheatgrass (a non-native invasive plant) control within the range of Picabo milkvetch. Monitoring of these populations the first growing season after application showed a short term (< 1 year) reduction in populations. Populations recovered to near pretreatment levels within 2 years of treatment. Where this species is found, design criteria (See Special Status Plants under Tool Box Methods within the Proposed Action) developed for Picabo milkvetch would be followed. Closing a route where Picabo milkvetch is found would maintain habitat for the species by precluding disturbance and potential introduction of non-native invasive plants and noxious weeds.

Parking areas would be inventoried for special status plants. No development would occur in locations containing sensitive plant populations.

## **CUMULATIVE IMPACTS**

### **NO ACTION**

Under the no action alternative, there would be no impact to vegetation resources as it relates to travel management planning. Current maintenance of roads and trails would continue into the future but it is not anticipated there would be an increase or decrease from current levels. The current level of risk of human-caused fires would continue.

## **PROPOSED ACTION**

Since 1990 several large fires have occurred in the Monument. The major fires include the 1992 Potter Butte (19,580 acres), Great Rift (9,642 acres) and Black Ridge (149,951 acres) fires, the 1996 Richfield fire (178,167 acres), the 2005 Laidlaw Butte (24,810 acres) and Rupert (47,592 acres) fires, the 2006 Crystal fire (220,110 acres), the 2007 Bear Den Butte fire (29,533 acres) and the 2008 North Minidoka fire (31,616 acres). The majority of vegetation treatments in the Monument occurred after these fires under the Emergency Stabilization and Rehabilitation program. These treatments were conducted primarily within Laidlaw Park (Potter Butte, Great Rift, Laidlaw Butte, and Bear Den Butte fires), the Wildhorse (Black Ridge and Richfield fires) and Poison Lake allotments (Richfield and Rupert fires), and the North Minidoka desert area (Rupert, Crystal, and North Minidoka fires). Approximately 160,243 acres of vegetation treatment have occurred since 1990. Seeding to establish desired perennial vegetation and non-native invasive plants and noxious weed control treatments were the primary vegetation treatments. The majority of these treatments were successful in establishing desired perennial vegetation.

The proposed action proposes approximately 130 acres of direct vegetation treatment as a result of permanent route closures and development of parking areas. These treatments include direct seeding and non-native invasive plants and noxious weed control efforts. The cumulative effect of the proposed vegetation treatments is small when added to the treatments that have occurred over the last 20 years. The BLM Twin Falls District and NPS noxious weed control programs have treated non-native invasive plants and noxious weeds on an ongoing basis and would continue into the future. Despite some of the short term effects of the proposed action, implementation of the proposed action would continue the trend of establishing functioning, stable, diverse plant communities in the Monument and surrounding areas of the Snake River Plain.

## **ACCESS**

### **AFFECTED ENVIRONMENT**

Primary access to the Monument consists of six main entrances (see Map 1). US Highway 20/26/93 is a paved road to the NPS Visitor Center near Arco. Five other major access points are located at the north and south ends of the Carey-Kimama Desert Road, the north and south ends of the Arco-Minidoka Road, and one entrance located on the southeast side of the Monument near American Falls called the Ice Cave Road. All five of these entrances are located within the Passage Zone as defined in the MMP, and have prominent Monument information kiosks. Other access to and from the Monument consists of dozens of primitive routes generally leading from public land outside of the Monument to the lava's edge or intersecting Passage Zone Roads within the Monument. The internal travel network within the Monument is defined by Figure 4, page 83 in the MMP.

Most Primitive Roads within the Monument were established over time either to facilitate livestock operations, as part of wildfire suppression activities, or for recreation access including

hunting. Before the Monument was expanded in 2000, the entire area outside the NPS administered Monument boundary was considered open to cross-country travel by motorized and mechanized vehicles. Since the expansion, mechanized travel is limited to existing designated routes. All other land within the expanded Monument is designated “closed” to mechanized travel.

## **NO ACTION**

### **DIRECT/INDIRECT IMPACTS**

Under the No Action alternative, travel management would be implemented according to the direction described in the MMP. Other than those routes closed implicitly in the application of the Pristine Zone, as described in the MMP, the status and condition of all routes within the Monument would remain at existing levels, as depicted on Figure of 4 of the MMP, p. 83. Most route maintenance within the Monument would continue at current levels, and routes located in the Passage Zone would be upgraded to Roads.

## **PROPOSED ACTION**

### **DIRECT/INDIRECT IMPACTS**

Under the Proposed Action, access would be changed in two ways. Access would be improved on the main routes located in the Passage Zone through an upgrade to a Road. This would permit a greater number and type of vehicles access along the main travel corridors. A few route segments outside the passage zone would also be upgraded between Bear Trap Cave and the Craters of the Moon Lava Field.

Existing access authorizations would continue to have access. New requests would be considered on a case-by-case basis.

Seasonal closures for sage grouse and big game would reduce access during their effective periods.

Access on Primitive Roads would be reduced under the Proposed Action by closing routes depicted on the Proposed Action Map (Map 2), and through the application of “administrative use only” designations. Most of the closed routes are identified as unneeded, unnecessary, or redundant, so the impact to access on the ground would be minimal, but in some cases, opportunities to access specific areas would be reduced.

## **CUMULATIVE IMPACTS**

Access related to valid existing rights, rights of ways, and private inholdings within the Monument will not be changed by the proposed action, and will continue to impact access in the Monument. There are two reasonably foreseeable future projects that may impact access; however, both of these projects are located outside the Monument. The Mountain States Transmission Intertie power line corridor project is currently undergoing environmental review

and is located outside the travel planning area. If approved, construction and maintenance of this power line is expected to increase vehicle traffic near the Monument and put additional pressure on the route network directly outside the Monument. The second project is the Sunstone pipeline project. The environmental review of the Sunstone pipeline project is currently on hold. If this project is approved, it would have effects similar to the construction and maintenance of the power line.

These projects could lead to a need for additional maintenance of routes directly adjacent to the Monument, in order to maintain the same level of access to areas within the Monument.

The Gateway Transmission line project shows a power line near the southern Monument boundary. The proposed Gateway Transmission line in this area is an existing power line and no construction activities will occur in this area. Maintenance activities associated with this existing line is expected to continue to occur at existing levels and is not expected to impact access within the Monument.

## **RECREATION**

### **AFFECTED ENVIRONMENT**

Visitation to the expanded part of the Monument was estimated at approximately 3326 visits and 4178 user days in 2008, according to BLM's RMIS data. Monument recreation pursuits requiring access include: hunting; driving for pleasure; geologic exploration, including caving; lava hiking and sightseeing; hiking; primitive camping; photography; horseback riding; and mountain biking. Most recreational access to the expanded Monument area is for the purpose of visiting destination locations in the Monument such as Snowdrift Crater, Wapi Park, Kings Bowl, and Bear Trap Cave. A small number of visitors travel to lesser known locations within the Monument for a variety of recreation purposes.

OHV use in the Monument includes off-highway motorcycles, all-terrain and utility vehicles, snowmobiles, and any other motorized or mechanized cross-country travel. Most OHV use in the Monument occurs during hunting seasons or in association with other land uses such as livestock operations. The amount of OHV specific recreational activity in the Monument is small (RMIS data estimates less than 3500 visits per year). Some OHV enthusiast groups take occasional organized rides within the Monument. OHV activity is limited by the MMP to the existing designated route network, except for emergencies and authorized administrative access.

### **NO ACTION**

#### **DIRECT/INDIRECT IMPACTS**

#### **DESTINATION LOCATIONS**

Most destination locations remain easily accessed under this alternative. For those lesser known destinations not located along maintained routes, some deterioration of roadbed quality on primitive roads would occur over time, because those routes are not maintained regularly.

## **DRIVING FOR PLEASURE**

Opportunities for driving for pleasure would be maintained at the current level, with fewer miles of routes upgraded to Roads than in the Proposed Action. This would provide greater access to more remote and seldom visited locations within the Monument, generally accessible only by high-clearance, four-wheel-drive vehicles.

## **PARKING AREAS**

Under the No Action alternative, no parking areas would be constructed. Users would continue to park on or slightly off the route network, and user-created parking areas and turnouts could continue to expand with use, requiring additional monitoring and rehabilitation, as required by the MMP. Human-caused wildfires would continue to be a risk in these areas, since there may not be a convenient place to park a vehicle in a non-vegetated location.

## **PROPOSED ACTION**

### **DIRECT/INDIRECT IMPACTS**

#### **DESTINATION LOCATIONS**

Most popular destination locations such as Wapi Park, Bear Park, Snowdrift Crater, Kings Bowl, and Bear Trap Cave will continue to be easily accessed. Some less-often visited locations within the Monument will see decreased access through the closure, or conversion to “administrative use only” status of routes leading to them. Much of this is the result of the Pristine Zone application in the MMP. In many cases Passage Zone, the southern boundary route, and the routes leading to them will be upgraded to a Road, making access easier. Some seldom used routes, or routes that have been seeded over by fire rehabilitation activities will be closed, resulting in decreased mechanized access.

#### **DRIVING FOR PLEASURE**

Routes identified in the Travel Plan for upgrade to Roads, including routes 714, 792, 3217, 3228, and 3414, will improve opportunities for driving for pleasure by providing Roads with higher maintenance that will allow for a greater number of vehicle types. However, some driving opportunities will be eliminated by the closure and rehabilitation of other routes. The administrative use only designation on route 785 would eliminate a popular motorized loop opportunity.

#### **PARKING AREAS**

In three locations (Pissant Butte, South Park Well, and Bear Trap Cave) parking lots will be provided for user convenience and to protect resources from off-route parking, proliferation of turnouts, and the possibility of vehicle-related wildfire starts. The three parking areas will provide a safe location for visitors to park and unload their vehicles without the fear of a human-

caused wildfire start related to hot exhaust systems. These parking areas will provide a convenient place to park and unload in order to access three of the more popular visited recreation destinations within the expanded Monument.

## **CUMULATIVE IMPACTS**

Currently one outfitter is permitted to take the public on driving tours for sightseeing and hiking in the Monument. Since inception, use has been light, including only one or two trips per year for sightseeing. However, the MMP encourages the use of outfitters and guides for public access to the Monument. If outfitter and guide use increases in the future, additional use of the travel network would occur.

The community of Arco has recently been marketing nearby public lands as an OHV riding opportunity destination. As this process continues and potentially expands, more OHV users may begin to use the Monument area, which would increase use and associated impacts.

## **WILDLIFE**

### **AFFECTED ENVIRONMENT**

The United States Fish and Wildlife Service (USFWS) current listed species list (File #: 14420-2008-SL-0519), the IDFG, and the Idaho Natural Heritage Program (INHP) database (<http://fishandgame.idaho.gov/cms/tech/CDC>) were reviewed for the project area and they revealed that both state imperiled, and BLM sensitive animal species should be considered in the planning area of the current travel management plan. Current conservation assessments, species management plans, and scientific literature were reviewed to broaden the knowledge base. Also, the Shoshone Field Office (SFO) resource maps, associated datasets, and environmental documents were reviewed to obtain additional information on the distribution of wildlife species and habitat requirements within the Monument administrative boundary.

The Monument is approximately 737,700 acres, and about 258,500 acres are continuous lava. Thus, the route density within the boundary was analyzed twice (Appendix 2), once with the full acreage and a second time with the continuous non-vegetated lava removed. Because the large, non-vegetated areas provide marginal habitat for many of the special status species discussed, the latter route density was considered in this Travel Plan. Currently, there are approximately 714 miles of roads and primitive roads, and the route density is 0.68 mi/ mi<sup>2</sup>. The effects of route density on wildlife vary by species; however, the literature reveals areas with route density greater than 2 mi/ mi<sup>2</sup> exceed thresholds for many wildlife species (Trombulak and Frissell 2000, Wisdom et al. 2000).

Another cause of wildlife habitat fragmentation on the Monument is wildfire, which temporarily (20-50 years) impacts sagebrush steppe habitat. Wildfire has facilitated the expansion of non-native invasive plants and noxious weeds and their spread throughout the Monument. Travel routes are also known to serve as a vector for the spread of these undesirable plants which compete with native vegetation. Noxious weeds and non-native invasive plants have reduced or degraded wildlife habitat over time.

The actual amount of motorized and mechanized use on expanded Monument routes is low. Currently the majority of the route use within the undeveloped portion of the Monument occurs from livestock permittees, hunters in the fall season, and administrative use. This area receives low levels of recreation use such as OHV riding, driving for pleasure, hiking and sightseeing.

### **SPECIAL STATUS SPECIES: THREATENED, ENDANGERED, AND BLM SENSITIVE**

Special status species are those listed as endangered or threatened under the Endangered Species Act (the Act); candidates or species proposed for listing under the Act; species listed by IDFG as endangered, threatened, or species of greatest conservation need; and/or species listed by the BLM as sensitive. The BLM manages all species identified as sensitive to minimize the need for future listing as threatened or endangered under the ESA.

According to the USFWS threatened, endangered, and candidate species list provided, there are no threatened and endangered animal species in the Monument area. Additionally, there is no designated or proposed critical habitat for any species under the ESA within the project area. However, there are several BLM Sensitive species listed, and the complete list of Idaho BLM sensitive species found within the SFO is available in the project file. This list was reviewed to determine which special status species would be affected by the proposed action.

The USFWS has recently removed gray wolves (*Canus lupus*) from the endangered species list (Federal Register), and the species is now managed as a Type II BLM sensitive species. A wolf management plan was completed by IDFG (2008), and BLM will coordinate with the Department to manage the species. There are two documented packs within relatively close proximity of the Monument. IDFG's current management strategy for wolves in this area is to reduce then stabilize numbers at 2005-2007 levels unless conditions change.

Bald eagles (*Haliaeetus leucocephalus*) were removed from the USFWS threatened and endangered species list on July 9, 2007 (Federal Register, Volume 72, Number 130). Bald eagles are a Type II BLM Sensitive Species and are subject to protections under the Bald and Golden Eagle Protection Act, and the Migratory Bird Treaty Act. In coordination with the federal delisting of the bald eagle, the USFWS provided Guidelines for the continued protection of bald eagles from human-induced disturbances (USFWS 2007). The guidelines concentrate on impacts to nesting sites, though disturbances to foraging activities were also addressed. With regards to routes, the guidelines suggest maintaining a distance from known nests of 330 feet for non-motorized actions and 660 feet for motorized activity.

According to both the INHP occurrence data as well as SFO raptor nest site information, there are no known bald eagle nests within the Monument. However, there is a bald eagle breeding territory adjacent to the west boundary of the Monument near Carey Lake. Wintering bald eagles could be found anywhere in Blaine, Butte, Minidoka, and Power Counties, including portions of the Monument.

Extensive lava flows serve as habitat for at least seven BLM Sensitive bat species, and these species are dependent on cavities in the lava for hibernation sites (NPS and BLM 2007). For

Townsend's big-eared bats (*Plecotus townsendii*), only three maternity colonies have been confirmed in Idaho and these sites are found in the Monument (IDFG 2005, NPS unpublished data). The IDFG Comprehensive Wildlife Conservation Strategy (2005) also states that Townsend's big-eared bat populations in the State appear to be declining and that the largest known populations in Idaho occur within lava flows in the southeastern part of the state. The primary issue facing this species is disturbance and destruction of roost sites through mine closures, renewed mining, recreational caving, and other roost-disturbing activities (Pierson et al. 1999).

The SFO recreation and biology staff coordinate annually to conduct hibernacula bat counts. Monitoring for Townsend's big-eared and western small-footed myotis (*Myotis ciliolabrum*) has taken place since 1987 and approximately 10 caves are visited each winter depending on access. The number of hibernating bats has remained relatively consistent for those caves monitored regularly.

Amphibians and reptiles in the Monument occupy a wide range of habitats. Ten species of reptiles have been identified in the Monument, including five snakes and five lizards. BLM Sensitive western night snakes (*Hypsiglena torquata*) may occupy the area but are rare and difficult to survey (NPS and BLM 2007). Four species of amphibians have been documented within the Monument. IDFG surveyed the SFO area for reptile and amphibian species during 2005-2007 (BLM unpubl. data), and eight of the study sites are located within the Monument boundary. Data for the eight study sites did not identify any occurrences of BLM Sensitive western toad, western night snake, or short-horned lizard. However, the sites IDFG selected and surveyed do provide suitable habitat for the three sensitive species. Western Toads were previously documented in the Monument but may now be extinct (NPS unpubl. data). Short-horned lizards are common in the northern portion of the Monument (NPS unpubl. data).

In May 2009, the U.S. Fish and Wildlife Survey announced it was initiating a 12 month review of the status of the American pika to determine whether listing under the Endangered Species is warranted. The American pika inhabits higher elevation areas of the Craters of the Moon lava field.

Greater sage-grouse, a BLM sensitive species, is discussed separately below. Pygmy rabbits and shrub steppe obligate songbirds are discussed below in the Sagebrush Obligate section. BLM sensitive migratory birds are included under the Migratory Birds section below.

**Table 4-2: Special Status Animal Species in the Monument (14420-2009-SL-0365)\*\*\*\***

SPECIES	STATUS		
	Federal*	BLM**	Idaho***
<b>MAMMALS</b>			
Gray wolf ( <i>Canis lupus</i> )	T		
Townsend's big-eared bat ( <i>Corynorhinus townsendii</i> )		S	S
Western small-footed myotis ( <i>Myotis ciliolabrum</i> )		W	
Pygmy rabbit ( <i>Brachylagus idahoensis</i> )		S	S
<b>BIRDS</b>			
Bald eagle ( <i>Haliaeetus leucocephalus</i> )		S	S
Greater sage-grouse ( <i>Centrocercus urophasianus</i> )		S	
Loggerhead shrike ( <i>Lanius ludovicianus</i> )		S	S

Sage thrasher ( <i>Oreoscoptes montanus</i> )		W	
Brewer's sparrow ( <i>Spizella breweri</i> )		S	
Sage sparrow ( <i>Amphispiza belli</i> )		S	
<p><b>*Federal Designations:</b> T = Federally Listed as Threatened. <b>**BLM:</b> S = BLM Sensitive Species designation is used for species that occur on BLM public lands and for which BLM has the capability to affect the conservation status of the species through management. W = Watch list species: Species that are not BLM Sensitive Species, but current population or habitat information suggests that the species may warrant sensitive species status in the future.</p> <p><b>***Idaho Species of Special Concern:</b> Native species that are either low in numbers, limited in distribution, or have suffered significant habitat losses. E = Endangered S = Special Concern. This list was derived from the June 1, 2009, Semi-annual Species List Update.</p> <p><b>****</b> For a more extensive list of special status animal species in the Monument, see page 31, MMP.</p>			

## GREATER SAGE-GROUSE

After several petitions to list greater sage-grouse (*Centrocercus urophasianus*), the USFWS is currently reviewing the status of the species to determine if the species warrants protection under ESA throughout its range or any significant portion of its range (USFWS, 73 FR 10218). The greater sage-grouse is a BLM sensitive species.

Since 1950, 148 greater sage-grouse leks have been documented in the Monument. Between 1979 and 1983, 83 leks were active (must have been at least one male strutting two out of the last 5 years), and between 1999 and 2003, there were 53 active leks. The 2007 database indicates 39 leks are currently active within the Monument. These observations (made by IDFG and BLM personnel) indicate a 36 percent decrease in occupied sage-grouse leks over the past 25 years.

Due to growing concerns over sage-grouse trends and populations, biologists from multiple federal, state, and local agencies in Idaho collaborated in 2000 and created a sage-grouse habitat planning map for the state. Habitat types included on this map include Key, R1, R2, and R3 habitat. Key sage-grouse habitat is defined as areas of generally intact sagebrush that provide sage-grouse habitat during some portion of the year. R1 habitat is Potential restoration area Type 1 Perennial, which is defined as sagebrush limited areas characterized by perennial grass species composition and/ or structure that should provide suitable potential nesting habitat in the future, once sufficient sagebrush cover (at least 10 percent) is re-established. R2 is Potential Restoration Area Type II- Annual Grasslands, which is defined as areas dominated or strongly influenced by invasive annuals such as cheatgrass or medusahead rye, or similar species. Areas of sagebrush may be present but, in general, understories are not suitable for sage-grouse. R3 is Potential Restoration Area Type III-Conifer Encroachment Areas, which is defined as areas where junipers and/or other conifer species are encroaching into sagebrush habitat areas. The sage-grouse habitat planning map has been updated annually since 2000, based on the past season's wildfire activity, vegetation treatments and successional changes noted by field-level biologists. Based on the 2008 habitat classification for Idaho, the Monument contains 154,900 acres of key habitat, 121,445 acres of R-1 habitat, 28,126 acres of R2 habitat, and no R3 habitat.

Greater sage-grouse are dependent on large areas of sagebrush/grassland habitats with 15-25 percent sagebrush canopy cover for breeding habitat and 10-30 percent canopy cover for winter habitat. A healthy perennial grass and forb understory is also an important component of nesting and brood-rearing habitat (Connelly et al. 2004). Furthermore, sagebrush habitats which contain

the structural components and habitat diversity necessary to meet the life cycle needs of sage-grouse are also likely to provide suitable habitat conditions for other sagebrush obligate species. This approach is consistent with use of the greater sage-grouse as an umbrella species as described in Idaho Bird Conservation Plan (Idaho Partners in Flight 2000).

Roads and routes decrease habitat patch size and diversity, and research indicates that these reductions can cause declines in sage-grouse populations (Connelly et al. 2004 and Braun 2006). Braun (2006) recommends seasonal closures to protect breeding birds (March 15-May 1; 6 pm - 9 am). Page 4-43 of the Conservation Plan for the Greater Sage-grouse in Idaho recommends “Managing existing roads and trails to minimize disturbance to occupied leks or other important seasonal habitats, employ seasonal closures, permanent closures, rerouting of existing roads/trails or other measures as deemed locally appropriate.”

## **SAGEBRUSH OBLIGATES**

Sagebrush steppe communities comprise much of the habitat within the Monument. Many BLM sensitive species are considered sagebrush obligates; species that are restricted to sagebrush habitats during the breeding season or year-round. Sagebrush obligate species that occur in the Monument include: Brewer’s sparrow (*Spizella breweri*), sage sparrow (*Amphispiza belli*), sage thrasher (*Oreoscoptes montanus*), greater sage-grouse (detailed above), and pygmy rabbit (*Brachylagus idahoensis*).

Pygmy rabbits have been documented in several areas of the Monument. Records ranging from the 1930’s indicate locations from the southernmost areas to the original Monument lands (Hoffman 1988). Pygmy rabbit status, in terms of population levels, is unknown in many states, including areas of California, Idaho, Montana, Nevada, Oregon, Utah, and Wyoming (USFWS, 2005). The rabbits generally prefer mature sagebrush stands with a dense canopy cover (Gabler et al. 2001). There are few surveys for the species in southern Idaho, and the distribution and status of the species is not well understood.

Some sagebrush obligate species, such as Brewer’s sparrows, are at their highest densities statewide in ungrazed portions of the Monument (Bart 2001). The ungrazed portions of the Monument are typically those which are inaccessible to livestock, such as vegetated lava flows. Recently, the Idaho Bird Observatory (IBO, 2009 unpubl. data) reported on a breeding bird survey which covers a subsample of the Monument area (South Laidlaw Park). Survey results to date show that the South Laidlaw Park area supports a relatively diverse community of shrub steppe breeding birds, including several sagebrush obligate species such as greater sage-grouse and Brewer’s sparrow. The report presents data for 2005-2008 and shows that Brewer’s sparrow is one of the three most common and widespread breeding bird species in the Laidlaw study area. In contrast, sage sparrows are uncommon in the Laidlaw Park study area. The study showed no sage sparrows were detected in 2005 or 2006, two were found in 2007, and eight were detected in 2008. Possible explanations for why none were found in the first two years and that numbers are apparently increasing recently include annual variability for a species near the northern edge of its range or the possibility of recent colonization of this area by sage sparrows. Sage thrashers were detected consistently, but were relatively few over the 4 years. In a separate but related study from the Laidlaw Park area, Rich (2005) examined changes in bird detection rates along

seven line transects between the early 1980s and early 2000s. Relative abundance results were comparable to the IBO study but Rich (2005) noted long-term declines in two shrub-steppe species (sage thrasher and Brewer's sparrow) and increases for two generalist/grassland species (horned lark and western meadowlark) even though vegetation parameters had not changed significantly.

## **MIGRATORY BIRDS**

The habitat types present within the Monument are comprised primarily of sagebrush steppe communities, but also present are important riparian areas, conifer stands, and lava flows. These communities provide habitat for numerous species of migratory birds. Both short- and long-distance migrants utilize the area for breeding, nesting, stopover, and wintering. There are approximately 200 species of migratory birds known to occur in the Monument (NPS unpubl. data); and of those species, 28 are also BLM Sensitive Species. All of the migrants in the area are further protected from take under the Migratory Bird Treaty Act (<http://www.fws.gov/laws/lawsdigest/migtrea.html>).

The migratory species that are also sagebrush obligates within the Monument include: ferruginous hawk (*Buteo regalis*), black-throated sparrow (*Amphispiza bilineata*), sage thrasher (*Oreoscoptes montanus*), Brewer's sparrow, and sage sparrow. These species rely on sagebrush steppe habitat for breeding and nesting. The breeding season for most species begins as early as mid May, and for the other species will continue through mid June. All of the species will continue to use the habitat for both breeding and nesting throughout the summer. The NPS maintains a wildlife observation database, conducts annual breeding bird transects, and completed a Christmas bird count, on both NPS and BLM managed lands. Since the 1920's, the wildlife observation database has identified over 200 species of migratory birds (NPS unpubl. data). The NPS has conducted breeding bird surveys for over ten years. In 2008, they documented approximately 81 migratory species. Most of the recorded species are also listed as sensitive by the state, BLM, or are Partners in Flight priority species (<http://www.pwrc.usgs.gov/pif/>). The Christmas count (NPS 2008 unpubl. data) recently reported species and numbers for their sixth year and the data identifies 132 individuals and 21 different species. Fourteen of the 21 species are both BLM sensitive and migratory species.

Two BLM studies have specifically surveyed for breeding bird species within the Laidlaw Park area of the Monument. Rich (2005) reports on transects that were conducted in the 1980's and again in 2005. His research identified a total of 1,084 individuals and 23 species over the years and transects surveyed. The most common species were Brewer's sparrow, western meadowlark, horned lark, vesper sparrow, and sage thrasher, all of which are migratory species. In January 2009, the Idaho Bird Observatory (BLM unpubl. data) reported on the fourth year of a breeding bird survey focused on the South Laidlaw Park area. Over the four years, 49 migratory species have been detected; 10 of these species are BLM sensitive.

Ingelfinger and Anderson (2004) studied the effects of roads and traffic that were used to access a natural gas development in southwestern Wyoming. The study was conducted during the initial phase of development, during which sagebrush vegetation was still fairly contiguous and unfragmented.

They found that the sagebrush obligate species such as Brewer's and sage sparrows avoided roads with increased traffic. Regardless of traffic volume, they also found that the presence of any road reduced the density of sagebrush obligates and found increased densities of grassland species such as horned larks. They identified the increased availability of a windblown seed source that collected in the lee of the gravel on these dirt roads as a major reason for this composition shift from sagebrush obligates to grassland species.

BLM Instruction Memorandum No. 2008-050 provides BLM interim management guidance to minimize unintentional take as defined by Executive Order 13186 and to optimize migratory bird efforts related to BLM activities. The IM recommends use of the USFWS Species of Conservation Concern list. This list was consulted and contrasted with the list of species known to occur within the Monument, and 28 species overlap.

## **BIG GAME**

Six species of large mammals are known to inhabit the Monument: mule deer (*Odocoileus hemionus*), pronghorn (*Antilocapra americana*), elk (*Cervus elaphus*), cougar (*Puma concolor*), black bear (*Ursus americanus*), and moose (*Alces alces*). Most are widespread throughout the Snake River Plain and Pioneer Mountains and regularly can be found in the Monument (NPS and BLM 2007). The population of elk on the Monument is low, and relatively scattered. Wintering elk herds occur in the northern foothills of the Monument, but in the greater undeveloped portions, elk are not found in large numbers, although observations are both widespread and increasing. Resident and migratory populations of mule deer and pronghorn inhabit the Monument area year-round.

Winter habitat for big game was delineated using big game habitat polygons which were identified through a collaborative process between IDFG and BLM biologists. This dataset is updated as needed and/or when the pertinent areas are involved in a land use planning effort. The current travel management process will reflect the dynamic nature of these datasets, and BLM will update affected routes as they change.

For the purposes of this analysis and based on available information, mule deer, elk, and pronghorn are discussed below.

Mule deer populations across the west and in Idaho have declined for a variety of reasons. However, Lutz and others (2003) suggest that roads can pressure mule deer into using lower-quality habitat, and the use of marginal habitat could potentially lower the viability of a population. The findings presented in this literature source (*Mule Deer Conservation*) were for multiple habitat types across the West, and thus conclusions were drawn for the shrub-steppe habitat found in the Monument.

Similar to mule deer, elk are an important big game species in Idaho. One study suggests that elk habitat effectiveness is reduced by 25 percent with road densities of 1 mi/ mi<sup>2</sup> and up to 50 percent with densities of 2 mi/ mi<sup>2</sup> (Lyon 1983). This study was conducted in a forested area, but general results were applied to the Monument because roads are thought to affect elk less

where cover is available. The degree of animal displacement varies by type of activity and level of use, but research in Wyoming has shown that elk are affected by motorized vehicle use at a distance of 0.6 - 1.2 miles (Powell 2003).

Pronghorn or antelope are a free-ranging species that need large, contiguous, and open habitat. Pronghorns inhabit the sagebrush in southern Idaho, and roam in areas where it is relatively low intermixed with grass. Pronghorn are likely affected by disturbance and route densities similarly to mule deer. Pronghorn have been shown to avoid areas of recreational use (Fairbanks and Tullous 2002).

According to the Idaho Department of Fish and Game, the planning area encompasses portions of four IDFG management units including 49, 50, 52A, and 68. The planning area has a long history of providing hunting opportunities for mule deer under a general season framework. These management units are particularly important for the Magic Valley's mule deer management program because they offer a portion of the region's general deer hunting opportunity. Management of elk and pronghorn harvest is under a controlled hunt framework.

## **NO ACTION**

### **DIRECT/INDIRECT IMPACTS**

#### **SPECIAL STATUS SPECIES: THREATENED, ENDANGERED, AND BLM SENSITIVE**

Current management as it relates to the transportation network would remain as it is described in the MMP. Thus, other than the approximately 27 miles of routes within the Pristine Zone selected for closure, no additional route designations would be made. Sensitive species habitat fragmentation created by the existing route network would remain at current levels, and the route density would remain 0.68 mi/mi<sup>2</sup>.

The current amount of motorized and mechanized use in the undeveloped portions of the Monument is low. RMIS data estimates 3326 visits, and 4178 user days from motorized, mechanized and non-motorized recreation in 2008. Under the No Action alternative, disturbance associated with the passage of motorized and mechanized vehicles would remain at low levels. In the future, if motorized and mechanized travel use increases, these impacts would increase.

Existing routes would continue to be utilized at current levels and potential for human-caused fires would remain unchanged. This potential impact applies to all Special Status Species.

#### **GREATER SAGE-GROUSE**

The no action alternative would allow for continued use of roadways currently identified and designated in the MMP. Road density would remain at 0.68 mi/mi<sup>2</sup>. Thus, sage-grouse would experience continued low levels of motorized and mechanized use during breeding and brood rearing periods.

## **SAGEBRUSH OBLIGATES AND MIGRATORY BIRDS**

The current amount of motorized and mechanized use in the undeveloped portions of the Monument is low. Under No Action, disturbance associated with the passage of motorized and mechanized vehicles would remain at low levels. In the future, if motorized and mechanized travel increases, these impacts would also increase.

Under the No Action alternative, the on-the-ground route density within the Monument would remain 0.68 mi/mi<sup>2</sup>, a level unlikely to impact sagebrush obligate and migratory birds known to occur. The total mileage of roadways is not expected to increase (MMP, 2007), but if the level of use increases (i.e. increase in disturbance, noxious weed and non-native invasive plant spread, and fire potential), the impacts would also increase. Grassland species such as horned larks would continue to maintain current densities with the current density of open roads in the Monument.

### **Big Game**

Big game species are often displaced from habitat adjacent to motorized roads and trails, and will avoid otherwise suitable habitat (Wisdom et al. 2004). Wisdom and his colleagues have studied the impacts of roads on wildlife on public lands across the United States, and this study measured the effects of off-road recreation on mule deer and elk across western North America. Under No Action, the route density would remain 0.68 mi/mi<sup>2</sup>.

The current amount of motorized and mechanized use in the undeveloped portions of the Monument is low year-round. Under the No Action alternative, disturbance associated with the passage of motorized and mechanized vehicles would remain at low levels. In the future, if motorized and mechanized travel increases, these impacts could increase. Existing routes would continue to be utilized at current levels and potential for human-caused fires would remain unchanged.

## **PROPOSED ACTION**

### **DIRECT/INDIRECT IMPACTS**

#### **SPECIAL STATUS SPECIES: THREATENED, ENDANGERED, AND BLM SENSITIVE**

The proposed action would permanently close approximately 45 miles of routes. This mileage is in addition to the 27 miles already closed by the MMP. Closing 45 miles of routes would reduce the route density to 0.63mi/mi<sup>2</sup>. Closing routes would reduce the overall fragmentation of wildlife habitat. All closed routes would be rehabilitated through the application of Toolbox methods (page 11). This would increase vegetative cover, reduce the spread of invasive non-native species and noxious weeds, and reduce chances for human-caused wildfires. Route closures would reduce route density in wildlife habitat; as routes are closed there would be less human-related disturbance to wildlife. As closed routes revegetate, wildlife habitat will improve.

Response by wildlife would vary. For example, for species that exhibit flee response to vehicles on roadways, the increased use of areas where this disturbance is removed would be immediate. For sensitive bat species, an increase in population could take several years as access and disturbance to caves is reduced. The current amount of motorized and mechanized use in the undeveloped portions of the Monument is low. Under the Proposed Action, disturbance associated with the passage of motorized and mechanized vehicles would be even lower than the no action alternative.

The permanent closure of 72 miles of routes would reduce the chance for human-caused wildfires, as well as the potential for the spread of invasive non-native species and noxious weeds, which would lower threats to existing Special Status Species habitat.

The proposed action would also seasonally/temporally close 167 miles of roadways. The seasonal closures reduce human disturbance to species during important and sensitive times in their life cycle, and are discussed fully in the greater sage-grouse section below.

Currently, wolves are managed by the IDFG and the pack (Copper Basin Pack) that utilized the northern portion of the Monument has been terminated according to IDFG records. The occasional wolf in pursuit of wintering big game may utilize the area north of the Monument. At this time, wolves are not documented in the Monument although suitable habitat remains.

Bald eagle guidance as it relates to routes is focused on nesting habitat. Current information does not identify occupied nesting areas within the Monument. Wintering bald eagles are expected to continue to use the project area.

Disturbance and destruction of roost sites has been identified as the biggest issue facing the continued success of Idaho and BLM sensitive bat species. The route closures in the northern portion and within the Laidlaw Park area of the Monument would reduce access to several caves; three have been identified as bat habitat (BLM, unpubl. data). The seasonal closures would also decrease access to two of the caves during the hibernation period which generally occurs between October 15 and May 1. The timeframe would overlap with both the sage-grouse closures (March 15 - May 1) and the potential big game closures (January 1 – March 31).

## **GREATER SAGE-GROUSE**

There are a variety of recommendations in the literature on the distance from occupied leks roadways and their related motorized and mechanized disturbances should be avoided. A 0.6 mile buffer around all of the active sage-grouse leks within the Monument was analyzed based on conservation measures related to human disturbance in the Conservation Plan for Greater Sage-grouse in Idaho (2006). The portion of habitat that falls within 0.6 miles of an occupied lek is approximately 30,200 acres or about 10 percent of the area. Braun (2006) and others have advised seasonal road closures (March 15-May 1). There are approximately 73 miles of route that pass within the 0.6-mile buffer of occupied leks.

The route segments identified for seasonal closure for the proposed action (within a 0.6 mile buffer of active leks) were selected using the statewide lek database. The database is updated

annually based on lek routes, lek counts, or survey data. The current travel management process will reflect the dynamic nature of these datasets, and BLM will update affected routes as they change.

The permanent route closures would eliminate 45 miles (in addition to the 27 miles closed by the MMP) of route reducing the route density to 0.63 mi/mi<sup>2</sup>. These permanent route closures would benefit sage-grouse by creating larger, more contiguous habitat. The permanent closure of these routes would also reduce the chance for human-caused wildfires, as well as the potential for non-native invasive plants and noxious weed spread, which would lower threats to existing wildlife habitat.

Although only about 73 miles of route segments fall within the 0.6-mile buffer, the seasonal closures would reduce disturbance caused by the passage of motorized or mechanized vehicles on 167 miles of roadway because the route segments were extended to a logical closure point such as an intersection, rather than in the middle of a segment, and include a larger area. The seasonal closures would have a temporal component consistent with the breeding season and time of lekking behavior. The seasonal closures would effectively reduce the route density to 0.47 mi/mi<sup>2</sup>. The routes affected by seasonal closures receive low use during the breeding period; however, since roads can cause reductions in sage-grouse populations from both loss of habitat as well as lek abandonment (Braun 1986, Connelly et al. 2004), the elimination of routes and the seasonal reduction in disturbance would have a beneficial effect on sage-grouse by reducing disturbance during important breeding and brood-rearing periods.

The literature reveals that high route density increases habitat fragmentation and thus the potential impacts on sage-grouse. The Conservation Plan for Greater Sage-grouse in Idaho (2006) does list infrastructure as the number two threat. However, the plan lists wildfire as the number one threat, and annual grasslands as the number three threat, and with the route density at a relatively low level and the level of use low, the overall impact of the roads is expected to be low.

## **SAGEBRUSH OBLIGATES AND MIGRATORY BIRDS**

Permanently closing routes would continue a positive trend of establishing functioning, stable, diverse sagebrush steppe habitats. By permanently closing approximately 72 miles and reducing disturbance on 167 miles of route, sagebrush steppe habitats would be less fragmented, habitat patch size would be increased, and sensitive sagebrush obligate species and migratory birds would experience fewer disturbances. Seasonal closures would allow short-term relief from human disturbance during the breeding season. For some species (i.e. sage-grouse), breeding activity begins mid March, and for others, it continues through early August. Both short- and long-term effects would be advantageous for the migratory bird populations that utilize the area for breeding, nesting, stopover, and wintering.

As the closed routes return to their naturally vegetated state, the areas of disturbance would be lowered, habitat patch size would increase (reducing habitat fragmentation), and migratory birds and sagebrush obligates would experience less disturbance.

The closure and restoration of 45 miles of road would likely result in increased densities of sagebrush obligates such as Brewer's and sage sparrows and sage thrashers. Very slight reductions would be expected in densities of grassland species such as horned larks, as shrubs became established on closed roads.

The permanent closure of these routes would also reduce the chance for human-caused wildfires, as well as the potential for the spread of non-native invasive species and noxious weeds, which would lower threats to existing sagebrush obligate habitat.

## **BIG GAME**

The current amount of motorized and mechanized use in areas currently identified as Big Game Winter Habitat is low. If and when the Agencies, in cooperation with IDFG, determine the use of motorized or mechanized vehicles becomes high enough in these areas to cause unacceptable levels of disturbance to wintering big game, the proposed seasonal closures in areas of Big Game Winter Habitat would be implemented. Disturbance associated with the passage of motorized vehicles would be eliminated on routes that are closed.

Through the permanent closures, the route density would decrease to 0.63 mi/mi<sup>2</sup>. The proposed action would potentially seasonally close (January 1- March 31) routes that pass through Big Game Winter Habitat. Potential future seasonal closures, in Big Game Winter Habitat currently identified, would reduce the total route density during the winter months (often a difficult survival period) for big game species. Closing and rehabilitating routes as well as seasonally closing them would reduce the displacement of big game species. Additionally, the landscape fragmentation would decrease, increasing core habitat areas and distance to motorized routes. The permanent closure of 72 miles of routes would also reduce the chance for human-caused wildfires, as well as the potential for non-native invasive plants and noxious weed spread, which would lower threats to existing big game habitat.

## **CUMULATIVE IMPACTS**

### **SPECIAL STATUS SPECIES: THREATENED, ENDANGERED, AND BLM SENSITIVE**

Cumulative impact analysis addresses past, present, or reasonably foreseeable activities other than the permanent and seasonal route closures discussed above that would affect the transportation network in the Monument. Because the MMP mandates no net increase in routes and trails, the footprint of the transportation network is not expected to increase and there would be no cumulative effects to sensitive wildlife species as a result.

However, the proposed Mountain States Transmission Intertie Project (MSTI) would fall directly adjacent to the Monument. A portion of the transmission line is proposed to run just south of the Monument boundary and the Wapi flow.

Additionally, there is a fuel break project planned for the area between the Wapi flow and the Craters of the Moon flow (,the gap'). This fuel break project would implement several treatments (see EA-ID-220-2008-EA-225) along roadways in order to reduce the impact of

wildfire, which will impact sensitive wildlife species by decreasing native habitat along some roadways. By reducing the number, size or severity of fires in the area, sensitive species would benefit due the decrease in habitat degradation caused by fires.

### **GREATER SAGE-GROUSE**

The cumulative impacts specifically associated with sage-grouse would be the same as those described under the threatened, endangered, and BLM sensitive species section above.

### **SAGEBRUSH OBLIGATES**

The cumulative impacts associated with sagebrush obligate species would be the same as those described under the threatened, endangered, and BLM sensitive species section above.

### **MIGRATORY BIRDS**

The cumulative impacts associated with migratory birds would be the same as those described under the threatened, endangered, and BLM sensitive species section above.

### **BIG GAME**

The cumulative impacts associated with big game species would be the same as those described under the threatened, endangered, and BLM sensitive species section above.

## **CULTURAL AND HISTORIC RESOURCES**

### **AFFECTED ENVIRONMENT**

Cultural Resources within the Monument consist of historic and prehistoric sites, as well as traditional cultural properties. The existing travel network provides access to many of the recorded sites. Segments of the Goodale's Cutoff of the Oregon Trail still serve as primitive routes on the north end of the Monument. Sites within the lava flows of the Monument are more difficult to access as there are no routes and few hardened trails to these areas. Currently, the main impacts on cultural resources are wildfires and wildfire suppression, human vandalism/looting, and livestock grazing concentration area. Fires destabilize site surfaces by removing vegetation and allowing wind erosion to occur. Suppression activities and livestock trampling can have the same effect on site surfaces. In some places, primitive routes themselves bisect sites.

### **NO ACTION**

#### **DIRECT AND INDIRECT**

Under this alternative, existing impacts to cultural resources would continue at current levels. Currently, the main impacts on cultural resources are wildfires and wildfire suppression, human vandalism/looting, and concentrated livestock use. Fires destabilize site surfaces by removing

vegetation and allowing wind erosion to occur. Suppression activities and livestock trampling can have the same effect on site surfaces. In some places, primitive routes themselves bisect sites. Since the no action alternative would not involve any route removal, route upgrade, or parking area construction there would be no impacts from these activities.

## **PROPOSED ACTION**

### **DIRECT AND INDIRECT**

Under the proposed action, there may be some impacts on cultural resources from the process of seeding and closing primitive roadbeds. These impacts will be minimal, as seeding does not generally disturb the soil more than 5 centimeters in depth. Routes to be closed would be surveyed for cultural resources before any ripping occurs so that ripping activities avoid cultural resources. Coordination with agency archaeologists will ensure roadbed ripping does not occur directly on cultural resources. The indirect effects of the proposed action include the reduction of motorized access to cultural resources, which in turn will result in the potential for fewer incidents of looting and human-caused fire.

The proposed upgrade of the Brigham Point Road and the “Gap” Road to aid in fire suppression access and the construction of four 1,000-square foot parking areas has the potential to impact cultural resources. Existing routes to be upgraded would be surveyed for cultural resources before any blading occurs so that cultural resources can be avoided by construction activities. The location of the parking areas would be coordinated with agency archaeologists to ensure none of them are placed in areas that would impact cultural resources. These actions would prevent adverse impacts to cultural resources by the proposed action.

## **CUMULATIVE IMPACTS**

Given the general trend toward population growth in Idaho and the increased use of public lands for recreational purposes, it can be assumed the public’s interest in the Monument may increase in the future. This would have a cumulative effect to cultural resources if primitive routes and trails become more frequently traveled. Sites would receive an increased level of motorized and foot traffic, all of which tends to increase the amount of looting and soil erosion. Increased motorized traffic would also increase the potential for human-caused fires. Fires destabilize site surfaces by removing vegetation and allowing wind erosion to occur. Looting also increases after fires because sites are more easily located when the vegetation is absent.

The proposed action would have fewer cumulative affects to cultural resources as primitive routes and trails are closed and less frequently traveled. Sites would receive a reduced level of motorized and foot traffic, which should reduce the amount of looting and soil erosion. Reduced motorized traffic would also decrease the potential for human-caused fires that destabilize site surfaces by removing vegetation and allowing wind erosion to occur. Upgrading of key access routes on the southern end of the Monument would decrease fire response time, thus decreasing the size of wildfires in the area. Existing impacts related to wildfire suppression, vandalism/looting, and concentrated livestock use would continue.

## **LIVESTOCK GRAZING**

### **AFFECTED ENVIRONMENT**

Three BLM field offices (Upper Snake, Burley, and Shoshone) administer livestock use on 286,000 acres (including BLM, private, and state lands in accordance with 43 CFR 4130.6-1) in the Monument. Sheep and/or cattle graze these lands, which are divided into management units known as allotments.

There are 79 permitted livestock operators within the Monument. Approximately 35 of the livestock permittees annually graze livestock and utilize the existing route network. Livestock operators use the existing route network for a variety of livestock management activities such as trailing livestock, hauling water, moving sheep camps, and maintenance of existing facilities. Maintained routes are used more frequently as primary access in and out of use areas; however, the two-tracks or primitive routes are also used to move sheep camps and distribute livestock evenly across the range.

Route use associated with sheep grazing typically begins around April 1. This coincides with the start of the spring grazing season. It is also the time period that experiences the greatest amount of route use by permittees. By mid-May most of the sheep permittees have moved on to their summer and fall range in higher elevations. Some route use by sheep permittees occurs in the fall from mid-October to December. Only a fraction of the sheep utilize this area in the fall, therefore the amount of associated route use is much smaller than in the spring. There are approximately 10 sheep permittees that have approximately 35-40 bands of sheep. Each band of sheep has a sheep camp/wagon that is moved to a new area on existing routes every 1-5 days. For analysis purposes we estimate one pickup typically uses the route network to move four camps. This equates to approximately 10 vehicles per day using the route network from April 1-May 31 (60 days). Fall route use is estimated at 5 vehicles per day from October 15 - Dec 31 (75 days). Fall sheep grazing would not be impacted by the proposed action. The total amount of use associated with sheep grazing equates to 975 vehicles using the route network per year for all sheep grazing activities.

Route use associated with cattle grazing typically occurs from April 1 to December 31. There are approximately 25 cattle permittees that actively graze approximately 3,500 head of cattle within the Monument. Cattle permittees use the routes to trail or truck livestock in and out of allotments. Once in the allotment, cattle permittees use the route network to haul water, maintain facilities, and check on livestock. For the purposes of this analysis, we estimate that three allotments require daily vehicle use for water hauling. All the other allotment estimated use was based on the total days permitted in the cattle grazing seasons, divided by three (average days per week cattle permittees go to each allotment). This equates to approximately 600 vehicles using the route network per year for all cattle grazing activities.

Combining the cattle and sheep use together yields an estimated 1,575 vehicles using the route network per year for all grazing related activities.

Note that the numbers and dates used above are estimates using professional judgment, and historic use records for the grazing allotments within the Monument boundary. Estimates are required due to the differences in season of use, numbers of livestock, multiple permittees in common use allotments, amount of route related activity by each permittee, and the percentage of each allotment within the Monument boundary.

## **NO ACTION**

### **DIRECT AND INDIRECT**

Under this alternative, existing impacts to livestock grazing would continue at current levels. The MMP closed 27 miles of routes in the Pristine Zones. The MMP route closures are reiterated in this Travel Plan, and these closures impact livestock grazing activities by restricting any motorized or mechanized related activities which are currently conducted in day to day livestock management activities. This prevents livestock permittees from using these closed routes to distribute, gather, haul water, move sheep camps, or check on livestock on these route segments without specific administrative authorization.

The no action alternative would not alter livestock grazing route-related activities such as trailing, hauling water, moving sheep camps, or maintaining existing facilities. Under the current condition, there are an adequate number of routes available for livestock management activities. The current level of route maintenance is also adequate to allow permittee access throughout the various grazing allotments.

## **PROPOSED ACTION**

### **DIRECT AND INDIRECT**

Under the proposed action, there would be several impacts to livestock grazing. For analysis purposes there are few differences between the sheep and cattle grazing impacts, therefore the impacts for each are combined in this section. The proposed action includes closing about 72 miles of routes (27 miles were identified under the MMP). These routes were identified for closure to protect natural resources or were characterized as redundant, unused, and unneeded. Many of these identified segments are short spur routes which end at the MMP Pristine Zone boundaries. Closing an additional 45 miles of route restricts livestock permittees from using and accessing these areas of the Monument with motorized forms of transportation. This would prevent permittees from placing sheep camps in these identified areas, as well as prohibit permittees from accessing these areas with vehicles to gather or check livestock without specifically authorized administration access. While these closures do pose some inconvenience, it would not prevent livestock from grazing in these areas. The majority of the route closure areas are located along the periphery of allotments, and are not vital to livestock grazing operations.

The proposed action also includes approximately 167 miles of seasonal route closures from March 15-May 1 from 6 pm to 9 am to protect sage-grouse during lekking season. It also includes the potential for seasonally closing routes from January 1 – March 31 in identified Big

Game Winter Habitat. These two seasonal closures equate to approximately 27 percent of the routes in the Monument.

Livestock permittees would continue to be granted administrative access to conduct day-to-day operations on designated Roads and Primitive Roads during these seasonal closures. The Monument Manager would still require specific authorization of administrative access for all other motorized livestock related activities off of designated routes. The proposed action also includes a no occupancy area within 0.6 miles of active sage-grouse leks during the seasonal closure time period. A no occupancy area is an active lek area closed to occupancy by permitted livestock from March 15 to May 1 from 6 pm to 9 am for all but specified authorized administrative use. This would prevent bedding of sheep in the identified no occupancy areas. This would also require trailing livestock to stay on the designated Roads and Primitive Roads in the identified no occupancy areas. Normal livestock use of a pasture or geographic area would not be included in the no occupancy restriction. BLM would be responsible for identifying the active lek areas as well as explaining the location of the active leks to livestock permittees prior to the start of the grazing season. The no occupancy restrictions would not impact livestock grazing operations from 9 am to 6 pm because this is outside the active sage-grouse breeding time frame (2006 Idaho Sage-grouse Conservation Plan, p. 4-42).

The proposed action includes upgrading two route segments to a Road. This would impact livestock grazing by decreasing the amount of time required to access areas. Other routes would continue to be maintained to existing standards which are adequate for existing livestock management.

## **CUMULATIVE IMPACTS**

There are no other known cumulative impacts which affect livestock grazing access to the project area.

# CHAPTER 5. CONSULTATION AND PREPARATION

## PERSONS, GROUPS, AND AGENCIES CONSULTED

The agencies consulted with the following groups and agencies:

- Shoshone-Bannock Tribe
- Shoshone-Paiute Tribe
- Idaho Department of Fish and Game
- Blaine, Butte, Lincoln, Minidoka, and Power Counties
- The Wilderness Society
- BLM livestock permittees holding permits on allotments located within the Monument
- The Snake River Trail Machine Riders Association
- Twin Falls District BLM Resource Advisory Committee
- Twin Falls District BLM Resource Advisory Committee Recreation Subgroup

During preparation of the EA, the public was notified of the Proposed Action by posting on the Idaho BLM NEPA database accessible via the internet on September 1, 2007. Scoping was initiated for the Travel Plan in October 2007 with the mailing of a newsletter to the interested public mailing list identified through development of the MMP. A copy of the public mailing list is located in the project file. Four separate public meetings designed to gather public comment in an open-house setting, were held in American Falls October 16, Rupert October 18, Carey October 23, and Arco October 25, with an attendance of 10-50 people per meeting. At these meetings BLM and NPS staff accepted public comment through markup of maps, completion of a questionnaire, flipchart comments, personal contact note-taking, and by providing materials to submit at a later time for those who wished to provide more detailed comments. In advance of these meetings, advertisements were run in each of the local newspapers and radio announcements were aired in those demographic regions.

In response to scoping efforts hundreds of public comments were received and combined into a “scoping summary” database that identified 55 separate substantive comments.

## LIST OF PREPARERS

### BUREAU OF LAND MANAGEMENT

Table 5-1: List of BLM Preparers/Reviewers

Name	Title
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Bonnie Claridge	Wildlife Biologist
Tara Hagen	Realty Specialist
Lisa Cresswell	Archaeologist/Field Office NEPA Coordinator
Codie Martin	Rangeland Management Specialist

Joe Russell	Fire Use Specialist
Mike Aoi	Fire Management Planning Specialist
Katherine Farrell	Planning and Environmental Coordinator
Holly Hampton	Monument Manager

## NATIONAL PARK SERVICE

**Table 5-2: List of NPS Preparers/Reviewers**

Name	Title
John Apel	Integrated Resource Program Manager
Doug Neighbor	Superintendent
JoAnn Blalack	Archaeologist
Doug Owen	Park Geologist
Michael Muntz	Wildlife Biologist

## CHAPTER 6. REFERENCES

- Alexander, J.A., A. Liston, and S.J. Popovich. 2004. Genetic diversity of the narrow endemic *Astragalus oniciformis* (Fabaceae). *American Journal of Botany* 91(12): 2004-2012.
- Bailey, R. 1995. *Ecosystem Provinces*.
- Bart, John. 2001. Personal communication. USGS Wildlife Section.
- Braun, C.E. 1986. Changes in sage-grouse lek counts with advent of surface coal mining. *Proceedings, Issues and Technology in the Management of Impacted Western Wildlife*. Thorne Ecological Institute 2:227-231.
- Braun, C.E. 2006. *Sage-grouse Habitat Conservation Strategies: A Blueprint for Conservation and Recovery*. Grouse Inc. Tucson, Arizona.
- Bureau of Land Management. 1998. Upper Snake River District(s) South Central Idaho Fire Management Plan.
- Connelly, J.W., S.T. Knick, M.A. Schroeder, and S.J. Stiver. 2004. Conservation Assessment of Greater Sage-grouse and Sagebrush Habitats.
- Connelly, J.W., J.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage-grouse populations and their habitats. *Wildlife Society Bulletin* 28(4): 967-985.
- Dorfman, D. 2001. *U.S. Ecoregions*. The Nature Conservancy.
- Federal Register Notice: 73 FR 10218, 2008. <http://www.fws.gov/policy/library/E8-3374.html>
- Forman and Alexander. 1998. Roads and Their Major Ecological Effects. *Annual Review of Ecology and Systematics*, Vol. 29. (1998), pp. 207-231+C2.
- Freddy, D.J., W.M. Bronaugh, and M.C. Fowler. 1986. Responses of mule deer to disturbance by persons afoot and snowmobiles. *Wildlife Society Bulletin*, 14:63-68.
- Gabler, K.L., L.T. Heady, and J.W. Laundre. 2001. A habitat suitability model for pygmy rabbits (*Brachylagus idahoensis*) in southeastern Idaho. *Western North American Naturalist* 61(4):480-489.
- Hoffman, R.A. 1988. Craters of the Moon National Monument Base-line Inventory and Monitoring (Wildlife) Final Report, Report B-88. University of Idaho, Cooperative Park Studies Unit. Moscow, ID.
- Idaho Bird Observatory 2009. 2008 Annual Report Including Inter-annual Comparison of 2005-2008 Data.

- Idaho Conservation Data Center. <http://fishandgame.idaho.gov/cms/tech/CDC>.
- Idaho Department of Fish and Game. 2005. Unpublished survey or observation data from IDFG.
- Idaho Department of Fish and Game. 2007. Shoshone Field Office Herpetological Study.
- Idaho Department of Fish and Game. 2008. Mule Deer Management Plan 2008-2017. March.
- Idaho Department of Fish and Game. pers. comm. 2008.
- Idaho Gap Analysis Project 1999. <http://www.wildlife.uidaho.edu/images/whr/amaja01030.jpg>).
- Idaho Partners in Flight. 2000. Idaho Bird Conservation Plan Version 1.0. January 2000.
- Ingelfinger, F., and S. Anderson. 2004. Passerine response to roads associated with natural gas extraction in a sagebrush steppe habitat. *W. North American Naturalist* 64(3):385-395.
- Leu, M. and C.W. Thompson. 2002. The potential importance of migratory stopover sites as flight feather molt staging areas: a review for Neotropical migrants. *Biological Conservation* 106: 45-56.
- Lutz, D.W., B.F. Wakeling, L.H. Carpenter, D.Stroud, M.Cox, D. McWhieter, S. Rosinstock, L.C. Bender, and A.F. Reeve. 2003. Impacts and changes to mule deer habitat. Pages 13-61 in: de Vos, J.C. Jr., M.R. Conover and N.E. Headrick, Eds. *Mule Deer Conservation: Issues and Management Strategies*. Jack H. Berryman Institute Press, Utah State University, Logan, UT.
- Lyon, L.J. 1983. Road density models describing habitat effectiveness for elk. *Journal of Forestry* 81:592-596.
- Lyon, L.J. and A.G. Christiensen. 2002. Elk and land management. Pages 557-581 in: Toweill, D.E. and J.W. Thomas, Eds. *North American Elk Ecology and Management*. Smithsonian Institution Press, Washington, D.C.
- Moseley, R.K., and S.J. Popovich. 1995. The conservation status of Picabo milkvetch (*Astragalus oniciformis* Barneby). Idaho Bureau of Land Management Technical Bulletin No. 95-9. Unpublished report on file at BLM Shoshone Field Office, Shoshone, ID. 21 pp. plus appendices.
- National Park Service and Bureau of Land Management. United States Department of the Interior. 2007. Craters of the Moon National Monument and Preserve Management Plan.
- National Park Service. 2009. Summary of Bird Monitoring at Craters of the Moon National Monument and Preserve 2008. Munts (NPS) unpublished data.
- Pierson, E.D., M.C. Wackenhut, J.S. Altenbach, P. Bradley, P. Call, D. Genter, C.E. Harris, B.L. Keller, B. Lengus, L. Lewis, B. Luce, K.W. Navo, J.M. Perkins, S. Smith, and L. Welch. 1999.

Species conservation assessment and strategy for Townsend's big-eared bat (*Corynorhinus townsendii townsendii* and *Corynorhinus townsendii pallescens*). Idaho Department of Fish and Game, Boise, ID.

Popovich, S.J., and D.A. Pyke. 1997. Impacts of wildfire rehabilitation and plow-and-seed land treatments on fitness parameters of an endemic milkvetch. In: Greenless, J.M., ed. Proceedings, 1st conference on fire effects on rare and endangered species and habitats; 1995 November 13-16; Coeur d'Alene, ID Fairfield, WA: International Association of Wildland Fire: 27-36.

Powell, J.H. 2003. Distribution, Habitat Use Patterns, and Elk Response to Human Disturbance in the Jackson Morrow Hills, Wyoming. Master of Science Thesis, University of Wyoming.

Rich, T.D. 2005. Long-Term Changes in Breeding Bird Populations and Habitat, Laidlaw Park, Craters of The Moon National Monument, Idaho. Partners In Flight National Coordinator. U. S. Fish and Wildlife Service.

Rowland, M.M., J. Wisdom, B.K. Johnson, and M.A. Penninger. 2005. Effects of Roads on Elk: Implications for Management in Forested Ecosystems. Pages 42-52 in Wisdom, M. J., technical editor, The Starkey Project: a synthesis of long-term studies of elk and mule deer. Reprinted from the 2004 Transactions of the North American Wildlife and Natural Resources Conference, Alliance Communications Group, Lawrence, Kansas, USA.

Sage-grouse Advisory Committee. 2006. Conservation Plan for the Greater Sage-grouse in Idaho.

Sauer, J.R. and S. Droege. 1989. Geographic patterns in population trends of Neotropical migrants in North America. Pp. 26-42 in Hagan, J.M., III and D.W. Johnston (Eds.). Ecology and Conservation of Neotropical Migrant Birds. Smithsonian Institute Press, Washington.

Trombulak, S.C. and C.A. Frissell. 2000. Review of ecological effects of roads on terrestrial and aquatic communities. *Conservation Biology* 14: 18-30.

U.S. Fish and Wildlife Service 2007. National Bald Eagle Management Guidelines. <http://www.fws.gov/migratorybirds/issues/BaldEagle/NationalBaldEagleManagementGuidelines.pdf>. 25 pp.

Wang, Y., D.M. Finch, F.R. Moore, and J.F. Kelly. 1998. Stopover ecology and habitat use of migratory Wilson's Warblers. *Auk* 115:829-842.

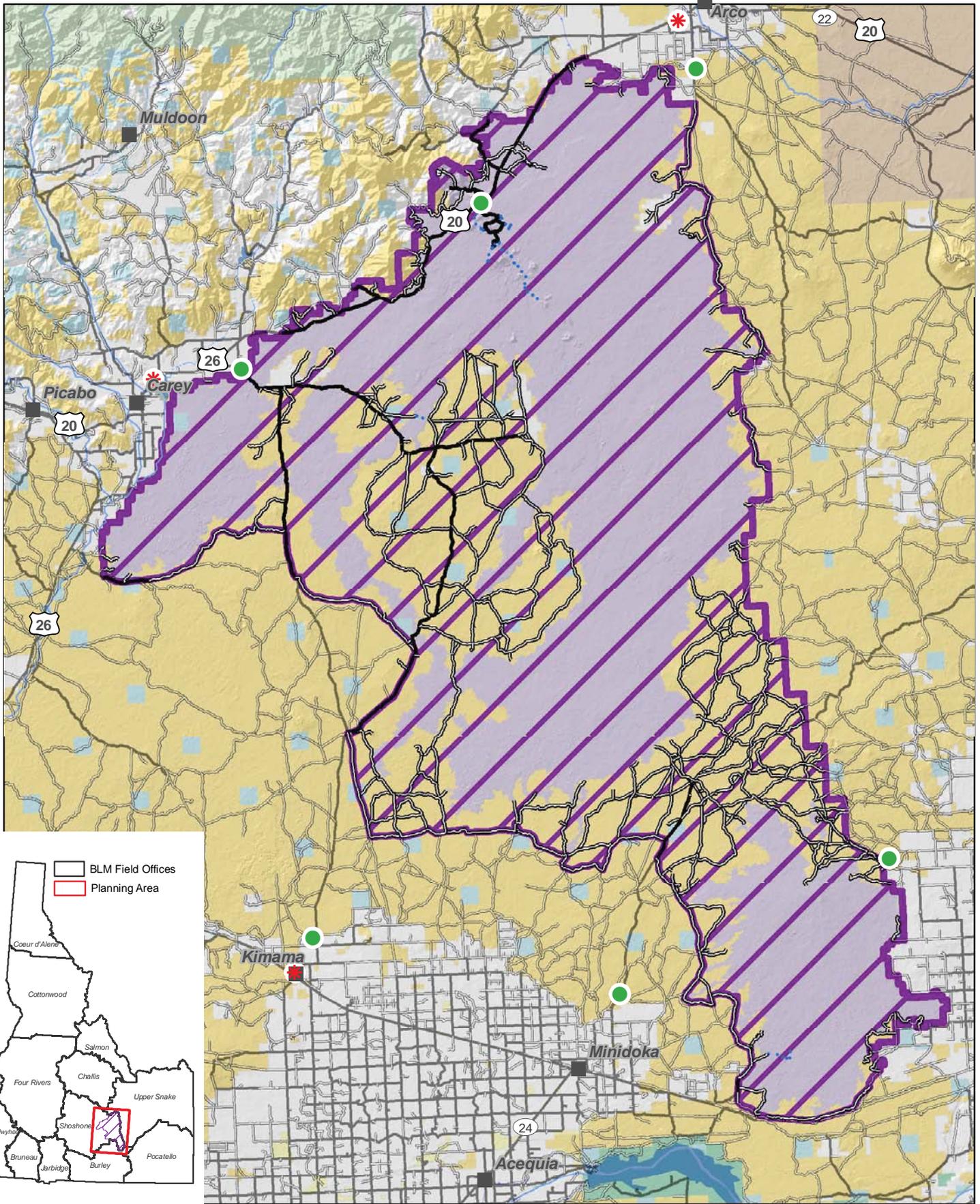
The Wilderness Society. March 2007. An Ecological Analysis of Motorized Routes and Planning for Sustainable Travel Management: Recommendations for the Jarbidge Resource Management Plan Revision Draft EIS.

Wisdom, M.J., H.K. Preisler, N.J. Cimon, and B.K. Johnson. 2004. Effects of off-road recreation on mule deer and elk. *Transactions of the North American Wildlife and Natural Resource Conference* 69.



# APPENDICES

# PLANNING AREA



- |  |                            |  |                           |  |                           |
|--|----------------------------|--|---------------------------|--|---------------------------|
|  | Craters of the Moon NM & P |  | Bureau of Land Management |  | Fish and Wildlife Service |
|  | Guard Stations             |  | Bureau of Reclamation     |  | National Park Service     |
|  | Primary Access Points      |  | Department of Energy      |  | Private                   |
|  |                            |  | Forest Service            |  | State                     |

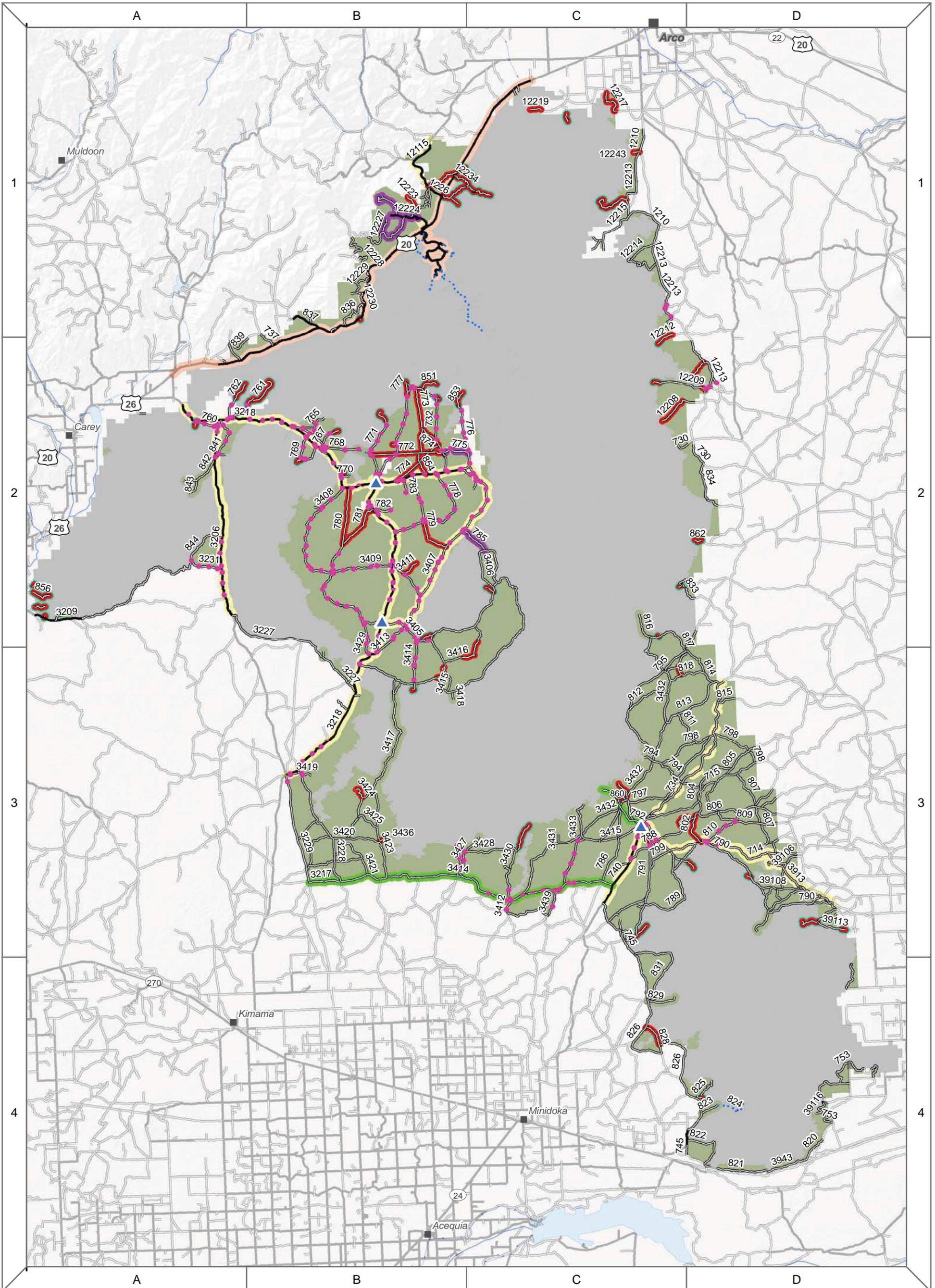


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# PROPOSED ACTION



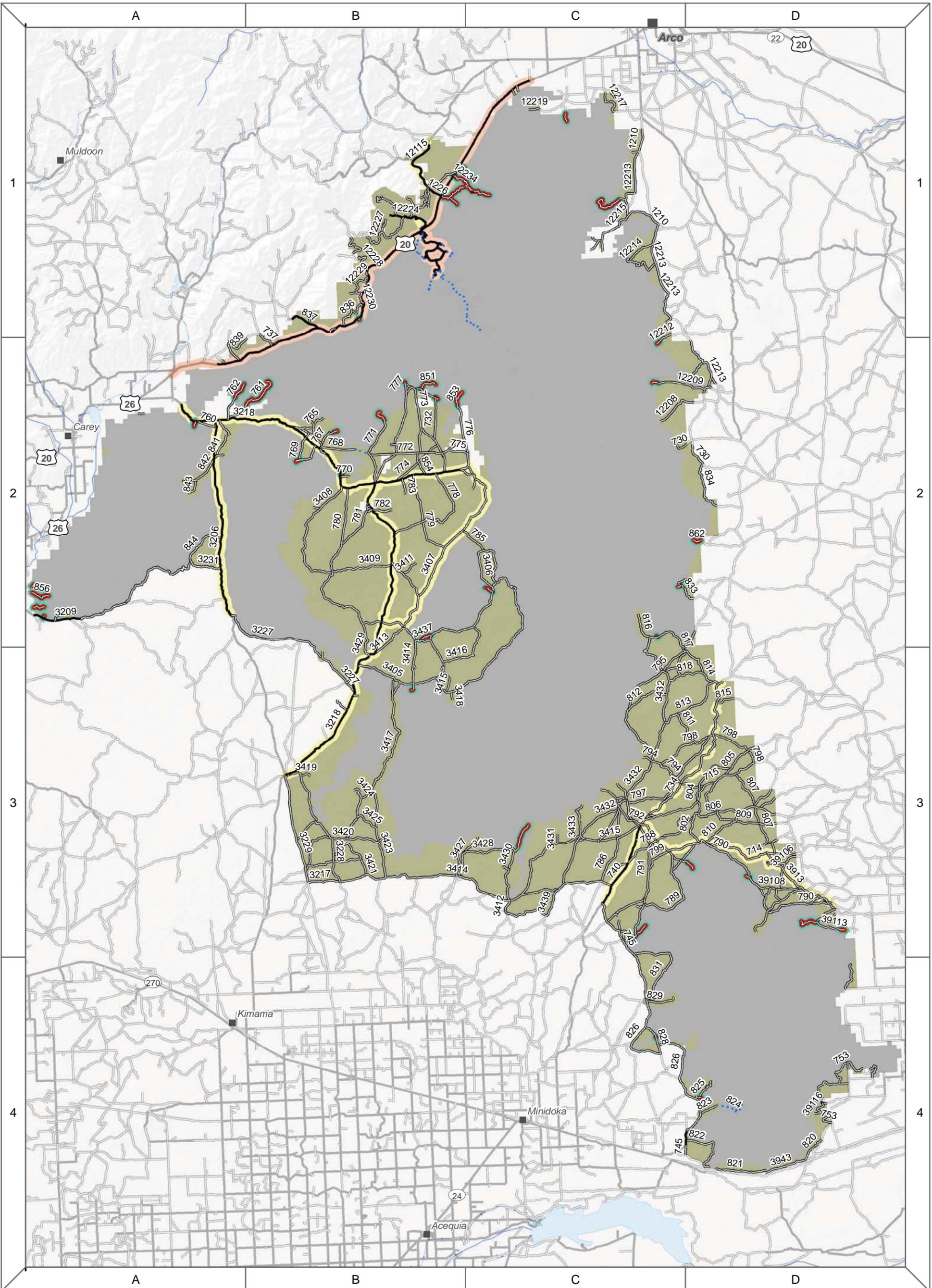
Primitive Road	Upgrade	MMP Closure - Pristine Zone	Frontcountry Zone	Primitive Zone
Road	Closed	Sage-grouse Spring Closures (Closed March 15 - May 1, from 6pm to 9am)	Passage Zone	Pristine Zone
Trail	Admin Use Only	(Management Zone corridors have been oversized for graphic representation at this scale.)		
Parking Areas				

0 1 2 3 4 5 Miles

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# NO ACTION



-  Primitive Road
-  Closed
-  Frontcountry Zone
-  Primitive Zone
-  Road
-  MMP Closure - Pristine Zone
-  Passage Zone
-  Pristine Zone
-  Trail

(Management Zone corridors have been oversized for graphic representation at this scale.)

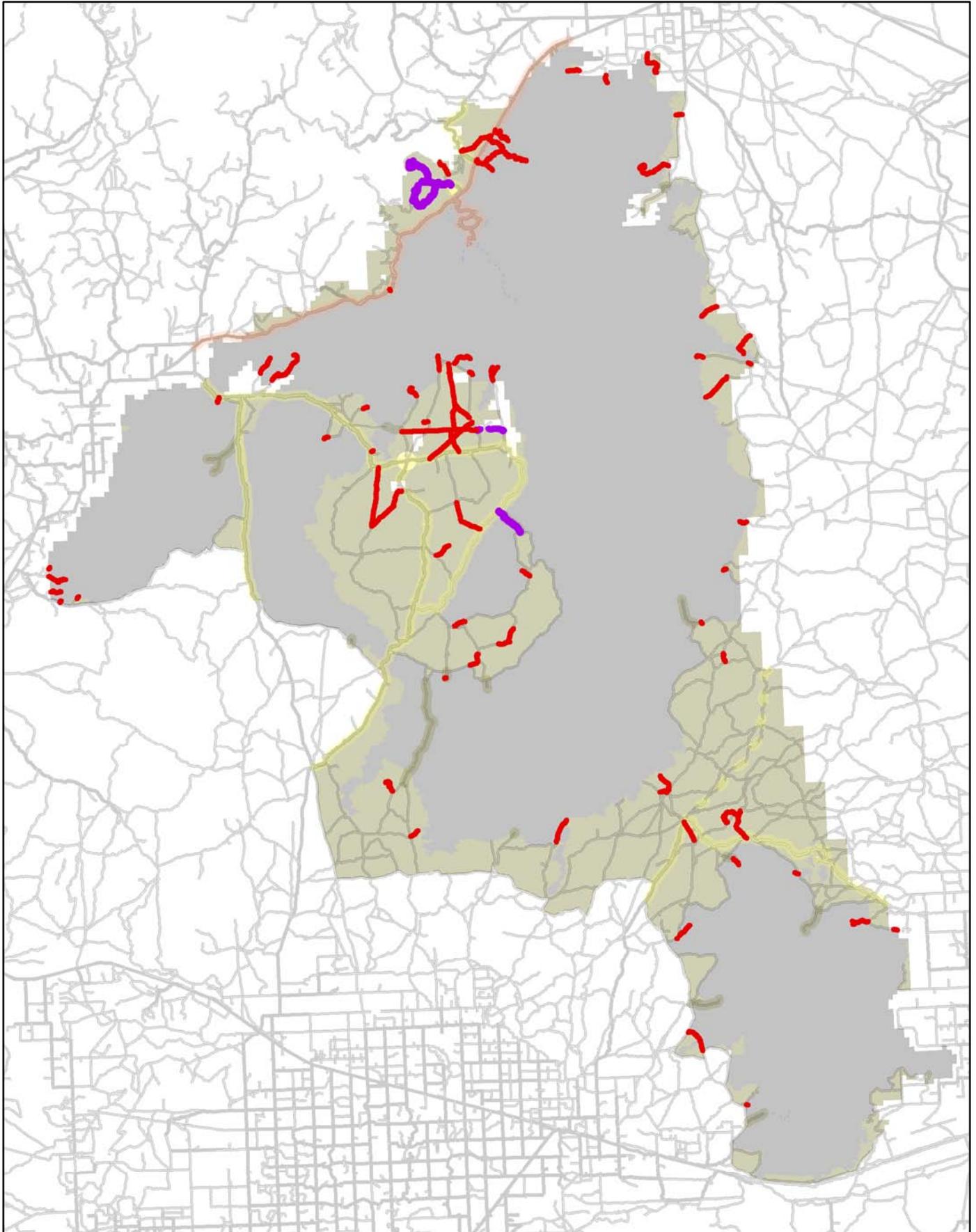


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# Closures and Administrative Use Only



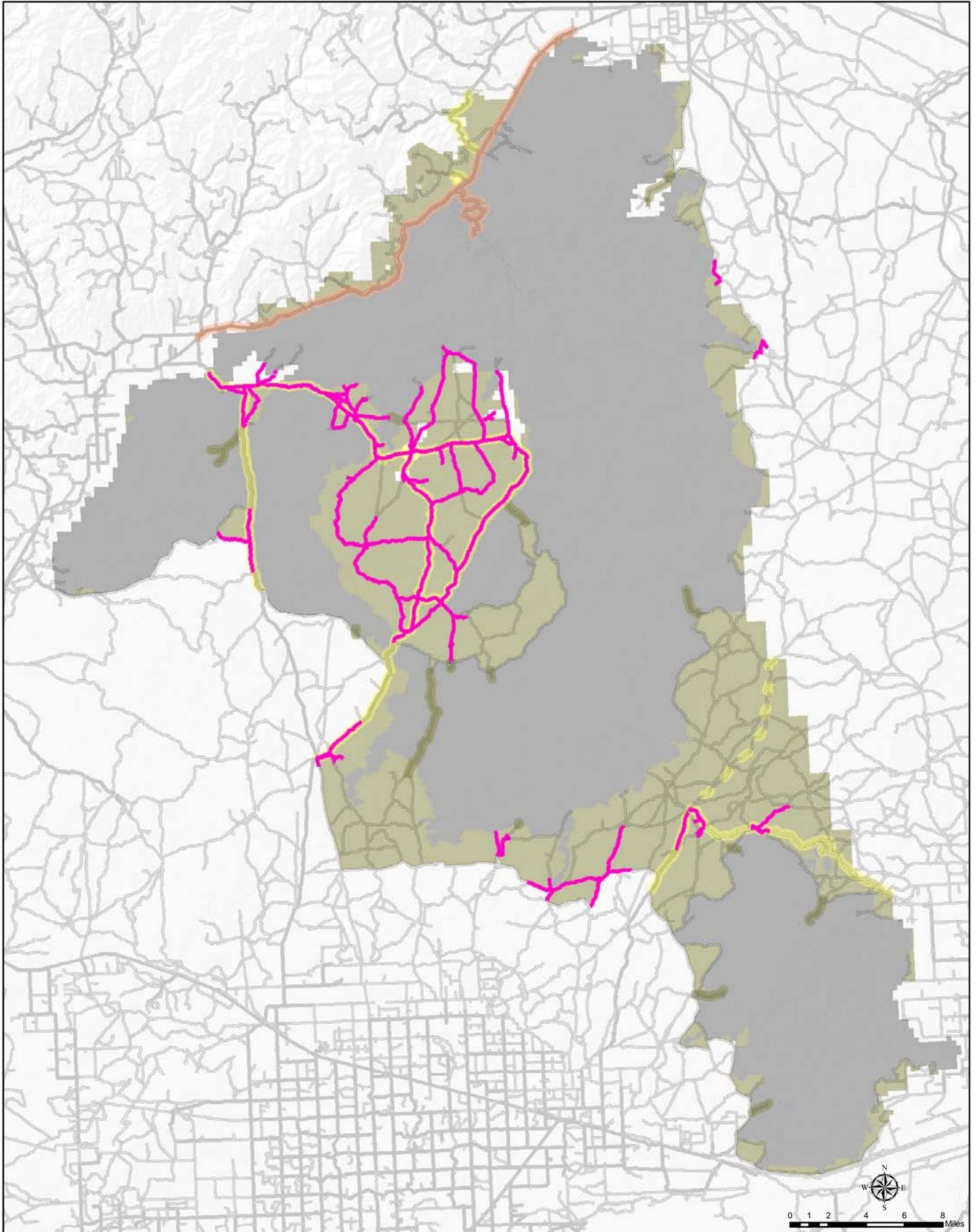
-  Parking Areas
-  Frontcountry Zone
-  Primitive Zone
-  Upgrade
-  Passage Zone
-  Pristine Zone

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# Wildlife Closures

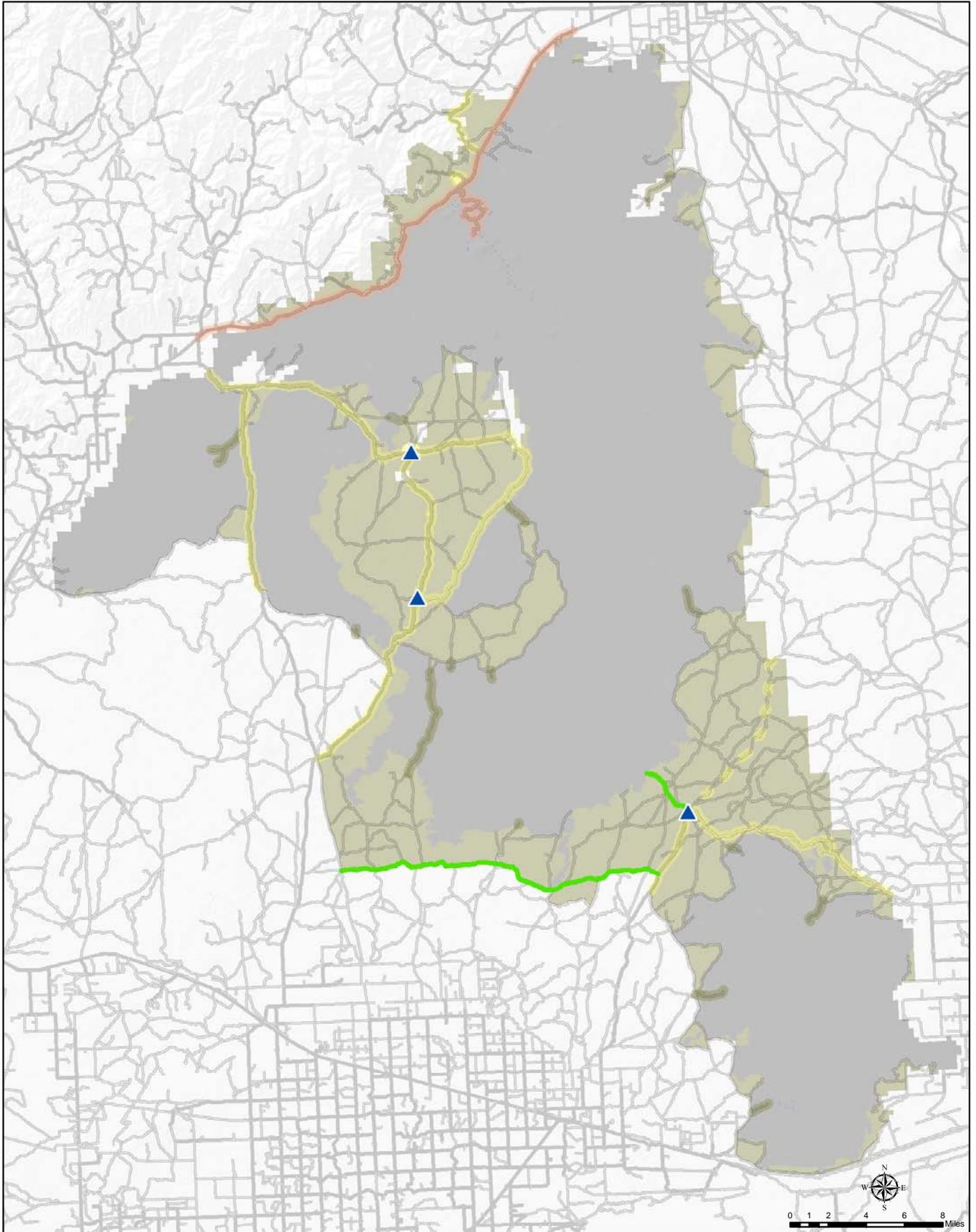


-  Sage-grouse Spring Closures
-  Frontcountry Zone
-  Primitive Zone
-  Passage Zone
-  Pristine Zone

INTERNAL USE ONLY

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# Improvements and Parking Areas



INTERNAL USE ONLY

-  Parking Areas
-  Frontcountry Zone
-  Primitive Zone
-  Passage Zone
-  Pristine Zone
-  Upgrade

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## Appendix 1

### ROAD INDEX

<b>Route Number</b>	<b>Map Index</b>		
715	C3	D3	
730	C2	D2	
732	B2		
734	C3	D3	
737	B1		
740	C3		
745	C3	C4	D4
753	D4		
760	A2		
761	A2	B2	
762	A2	B2	
763	B2		
764	B2		
765	B2		
766	B2		
767	B2		
768	B2		
769	B2		
770	B2		
771	B2		
772	B2		
773	B2		
774	B2		
775	B2	C2	
776	B2	C2	
777	B2		
778	B2		
779	B2		
780	B2		
781	B2		
782	B2		
783	B2		
784	C2		
785	C2		
786	C3		
787	C3		
788	C3	D3	
789	C3	C4	D3
790	D3		
791	C3	C4	
792	C3		
793	C3		
794	C3	D3	
795	C3	D2	D3
796	C3		
797	C3	D3	
798	C3	D3	
799	C3		
800	C3	D3	
801	C3		
802	C3	D3	

803	C3	D3	
804	D3		
805	D3		
806	D3		
807	D3		
808	D3		
809	D3		
810	D3		
811	C3	D3	
812	C3		
813	C3	D3	
814	D3		
815	D3		
816	C2	C3	
817	C2	C3	D3
818	C3	D3	
819	C3		
820	D4		
821	D4		
822	D4		
823	D4		
824	D4		
825	D4		
826	C4	D4	
828	C4		
829	C4		
830	C4		
831	C4		
832	C4		
833	C2	D2	
834	D2		
836	B1		
837	B1		
838	B1		
839	A1	B1	
840	A1	A2	
841	A2		
842	A2		
843	A2		
844	A2		
845	A2		
846	B2		
847	B2		
848	B2		
849	B2		
850	B2		
851	B2		
852	B2		
853	B2	C2	
854	B2		
855	A2		
856	A2		
857	A2		
858	A2		
859	A2		
860	C3		
861	C3		
862	D2		

863	C4			
864	C4			
865	D4			
866	C2			
867	A2			
868	B2			
869	B2			
870	B2			
871	B2			
872	B2			
873	B2			
874	B2			
875	B2			
876	B2	C2		
877	C3			
878	C3			
1226	B1			
3206	A2	B3		
3209	A2			
3217	B3			
3218	A2	B2	B3	
3227	A2	B2	B3	
3228	B3			
3229	B3			
3230	B3			
3231	A2			
3232	B3			
3405	B2	B3	C2	C3
3406	C2			
3407	B2	C2		
3408	B2			
3409	B2			
3410	B2			
3411	B2			
3412	C3	C4		
3413	B2	B3		
3414	B3	C3		
3415	B3	C3		
3416	B3	C2	C3	
3417	B3			
3418	B3			
3419	B3			
3420	B3			
3421	B3			
3422	B3			
3423	B3			
3424	B3			
3425	B3			
3426	B3			
3427	B3	C3		
3428	C3			
3429	B2	B3		
3430	C3			
3431	C3			
3432	C3	D3		
3433	C3			
3435	C2			
3436	B3			

3437	B2	B3
3438	B3	
3439	C3	C4
3913	D3	
3943	D4	
12115	B1	
12208	C2	D2
12209	C2	D2
12210	D2	
12211	D2	
12212	C1	
12214	C1	
12215	C1	
12216	C1	
12217	C1	
12218	C1	
12219	C1	
12220	B1	
12221	B1	
12222	B1	
12223	B1	
12224	B1	
12225	B1	
12226	B1	
12227	B1	
12228	B1	
12229	B1	
12230	B1	
12231	C1	
12232	B1	
12233	B1	
12234	B1	C1
12235	C1	
12236	B1	C1
12237	B1	
12238	C1	
12239	B1	
12240	B1	
12241	C1	
12242	D2	
12243	C1	
39102	D3	
39103	D3	
39104	D3	
39105	D3	
39106	D3	
39107	D3	
39108	D3	
39109	D3	
39110	D3	
39111	D3	
39112	D3	
39113	D4	
39114	D3	D4
39115	D4	
39116	D4	
39117	D3	
39118	D4	

## Appendix 2

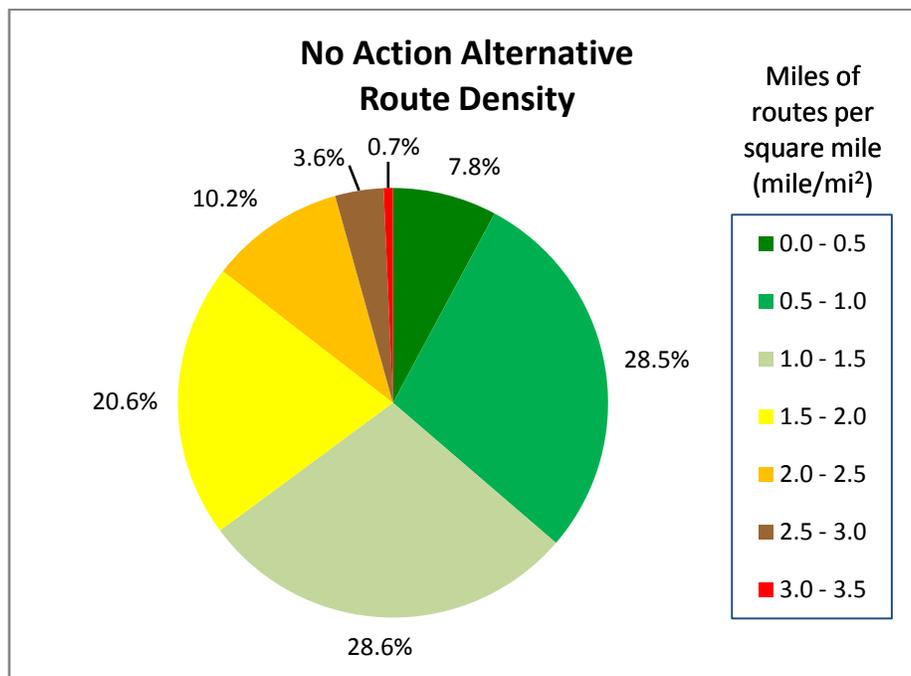
Route Density Analysis 09/24/2009

Output resolution for all route density analysis is  $\frac{1}{4}$  mi square

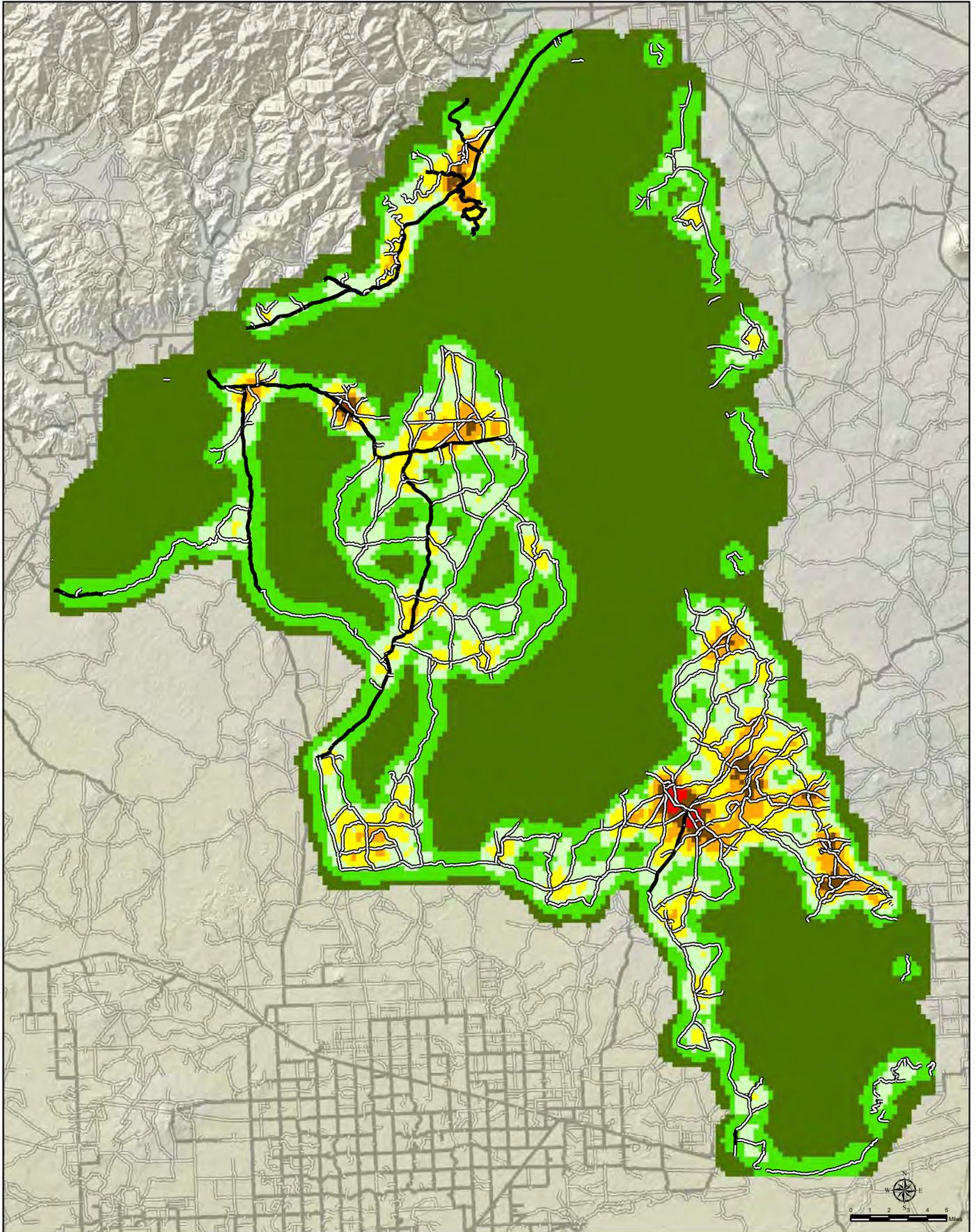
Sum of acres of lava removed for 'Exposed lava area excluded' density analyses was 258,586 acres

The route density analysis breaks up the entire Monument into quarter mile squares and assigns density values to each based on the number of miles of routes within the surrounding square mile area. The output values for six density analyses are as follows;

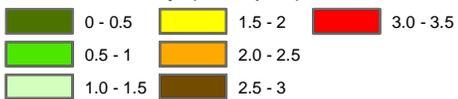
- No Action (Exposed lava area included)
  - Input 714 miles of routes, including all within and immediately adjacent to the Monument where they define the boundary. Trails and routes within the Pristine Zone that have already been closed in the MMP were removed from consideration as they will not receive any traffic.
  - Average Route Density = .5 miles / square mile



# NO ACTION ROUTE DENSITY



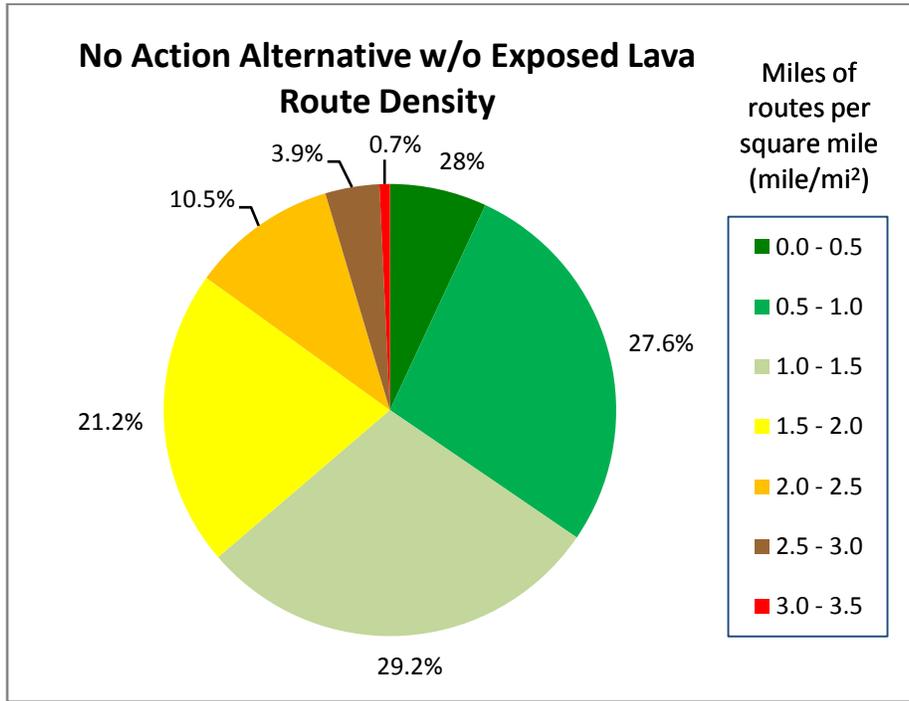
Route Density (mi/sq mi)



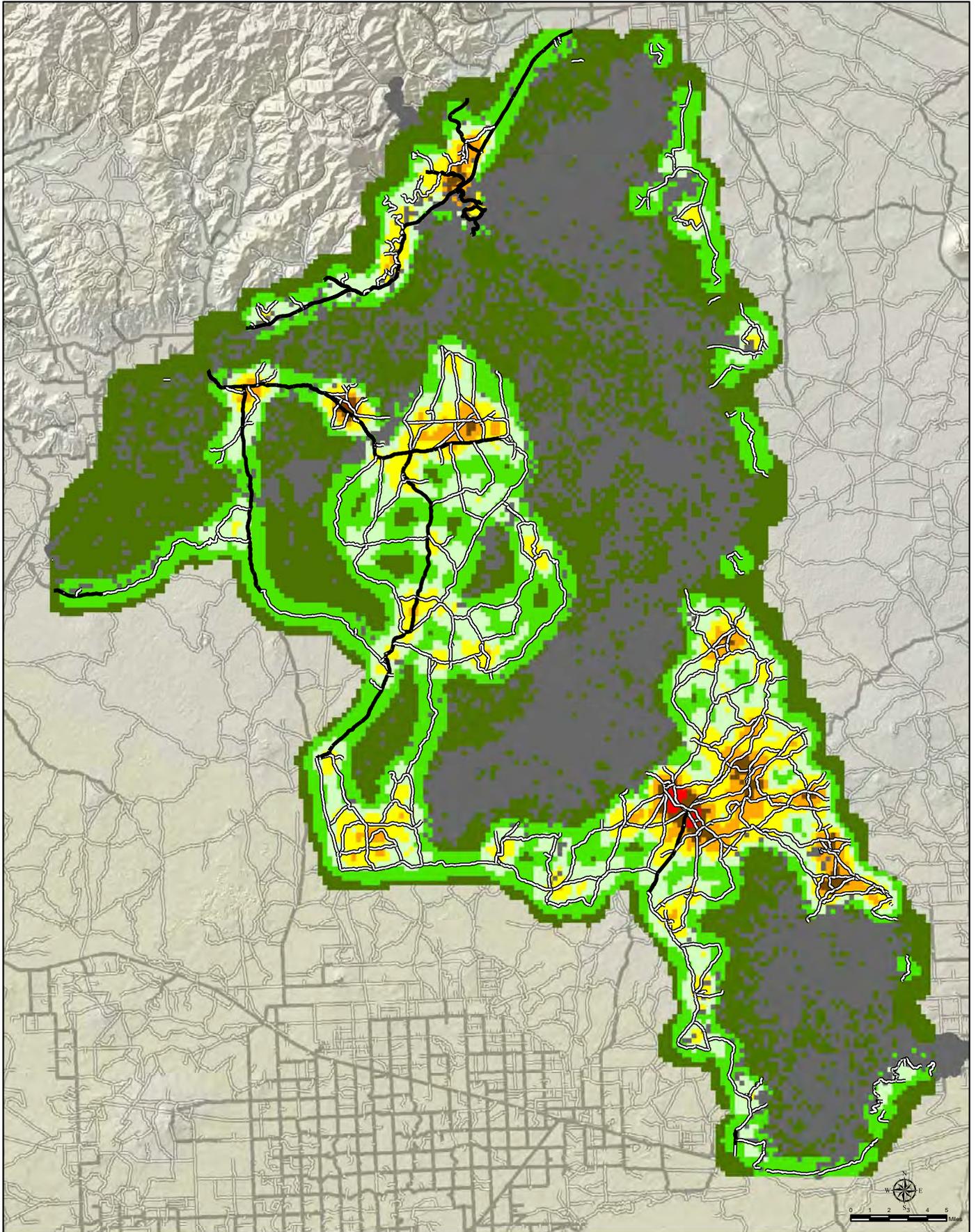
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- No Action (Exposed lava area excluded)
  - Average Route Density = .68 miles / square mile



NO ACTION (NO LAVA) ROUTE DENSITY



Route Density (mi/sq mi)



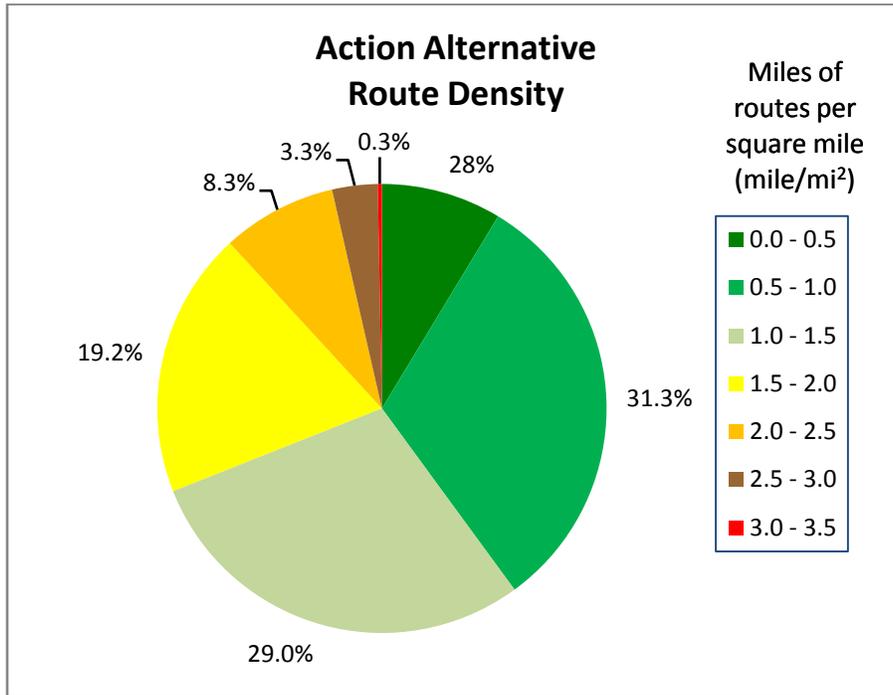
INTERNAL USE ONLY



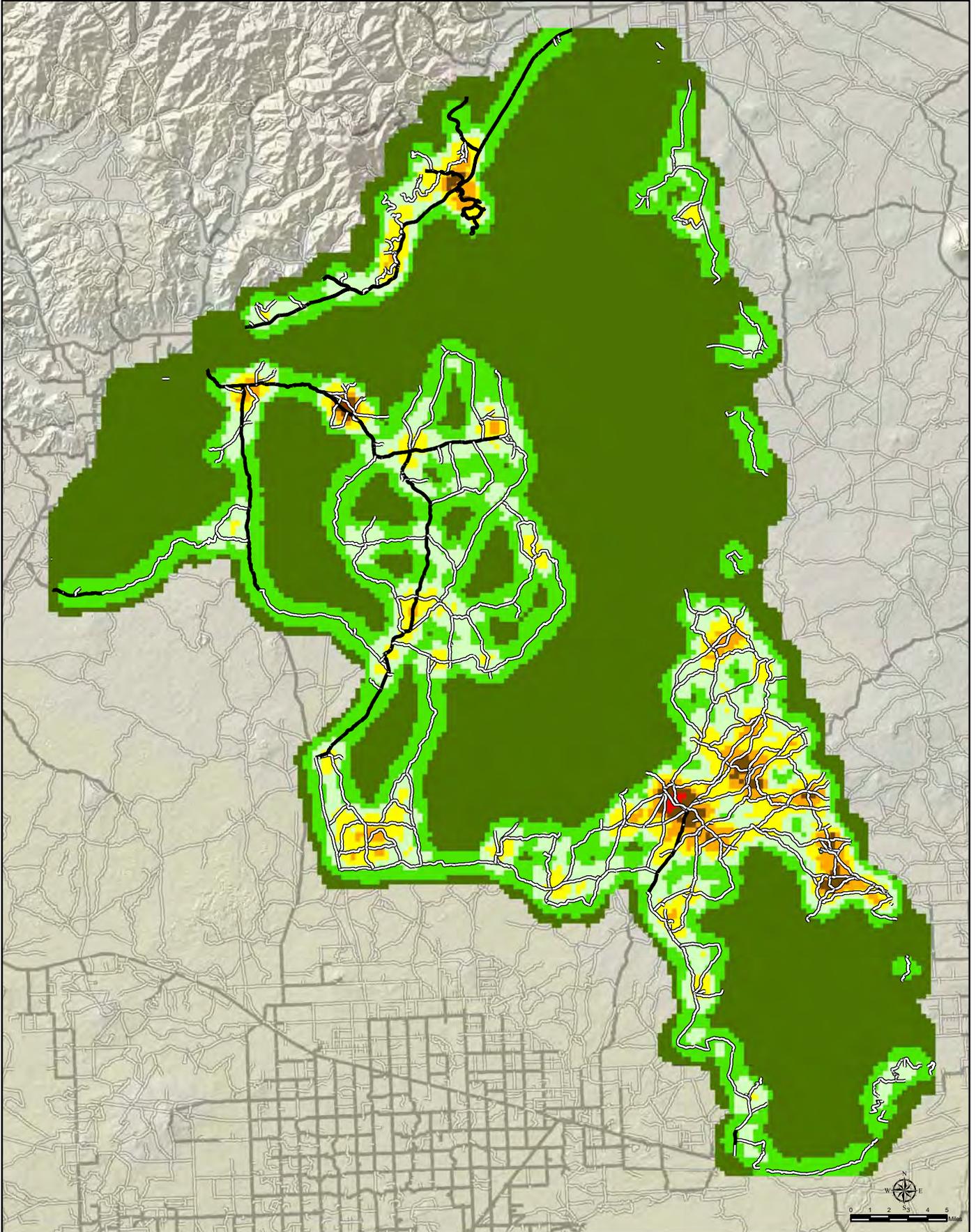
For internal BLM use only. Review and/or display copy-not for distribution. No warranty is made by the Bureau of Land Management. The accuracy, reliability, or completeness of these data for individual use or aggregate use with other data is not guaranteed.



- Proposed Action (Exposed lava area included)
  - Input 669 miles of routes, including all within and immediately adjacent to the Monument where they define the boundary. Trails and closed routes were removed from consideration as they will not receive any traffic.
  - Average Route Density = .48 miles / square mile



PROPOSED ACTION ROUTE DENSITY



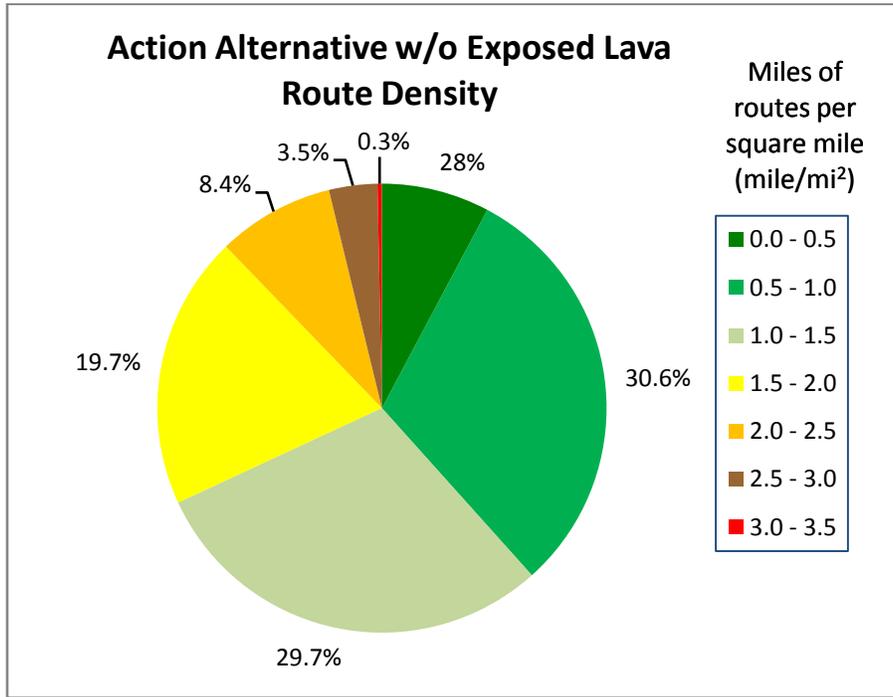
Route Density (mi/sq mi)



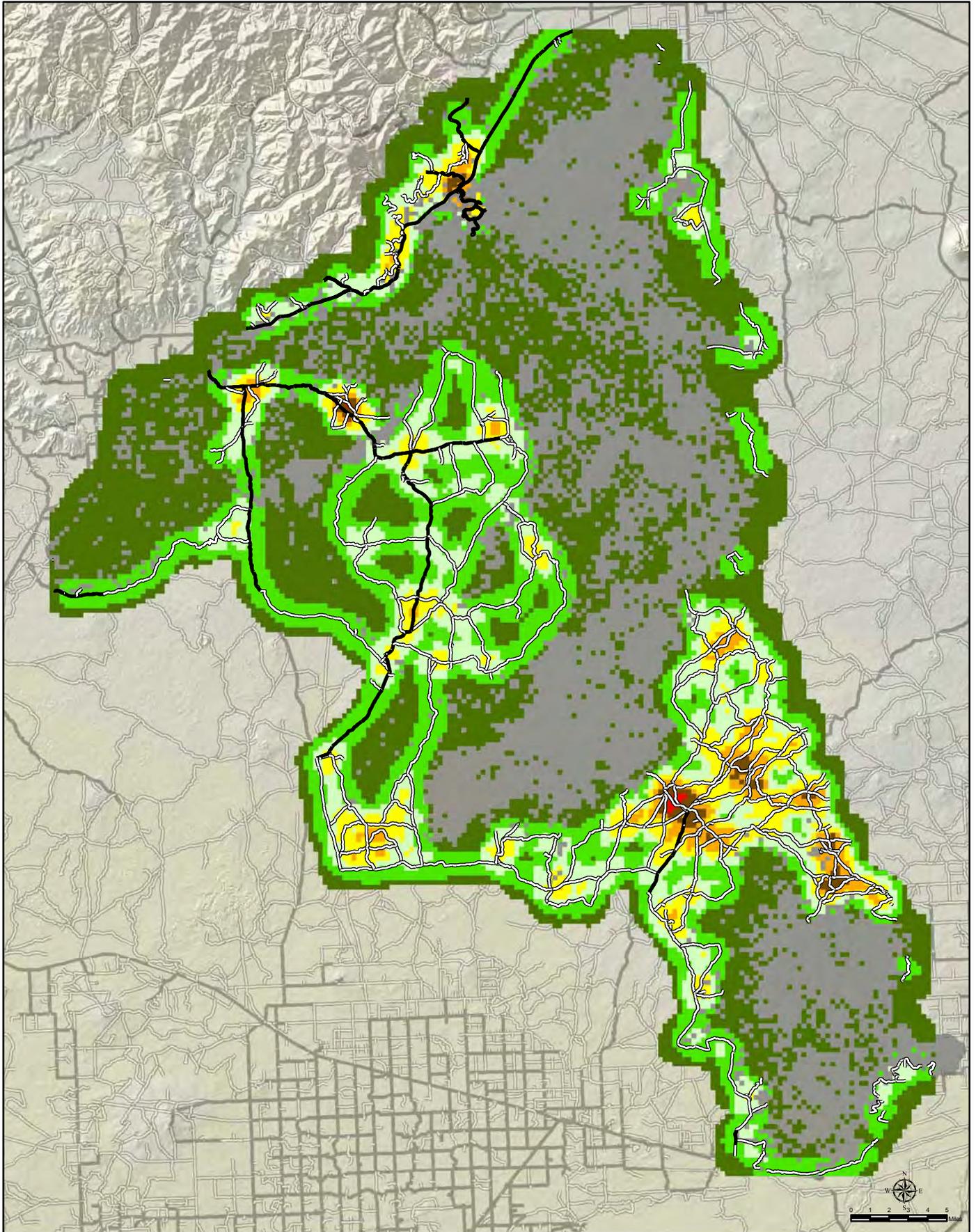
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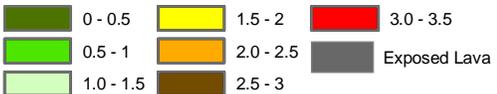
- Proposed Action (Exposed lava area excluded)
  - Average Route Density = .63 miles / square mile



PROPOSED ACTION (NO LAVA) ROUTE DENSITY



Route Density (mi/sq mi)

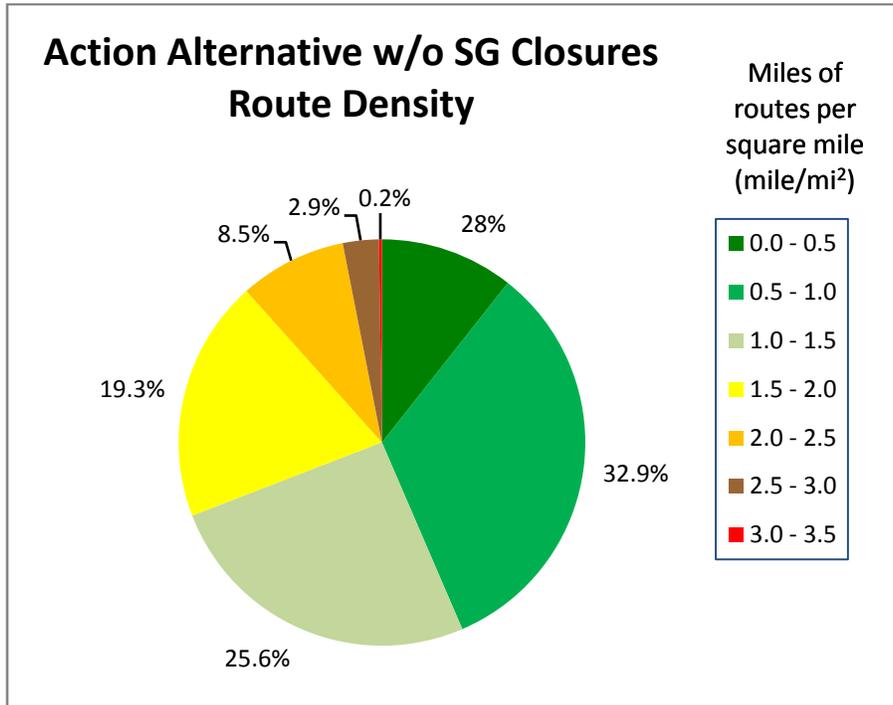


INTERNAL USE ONLY

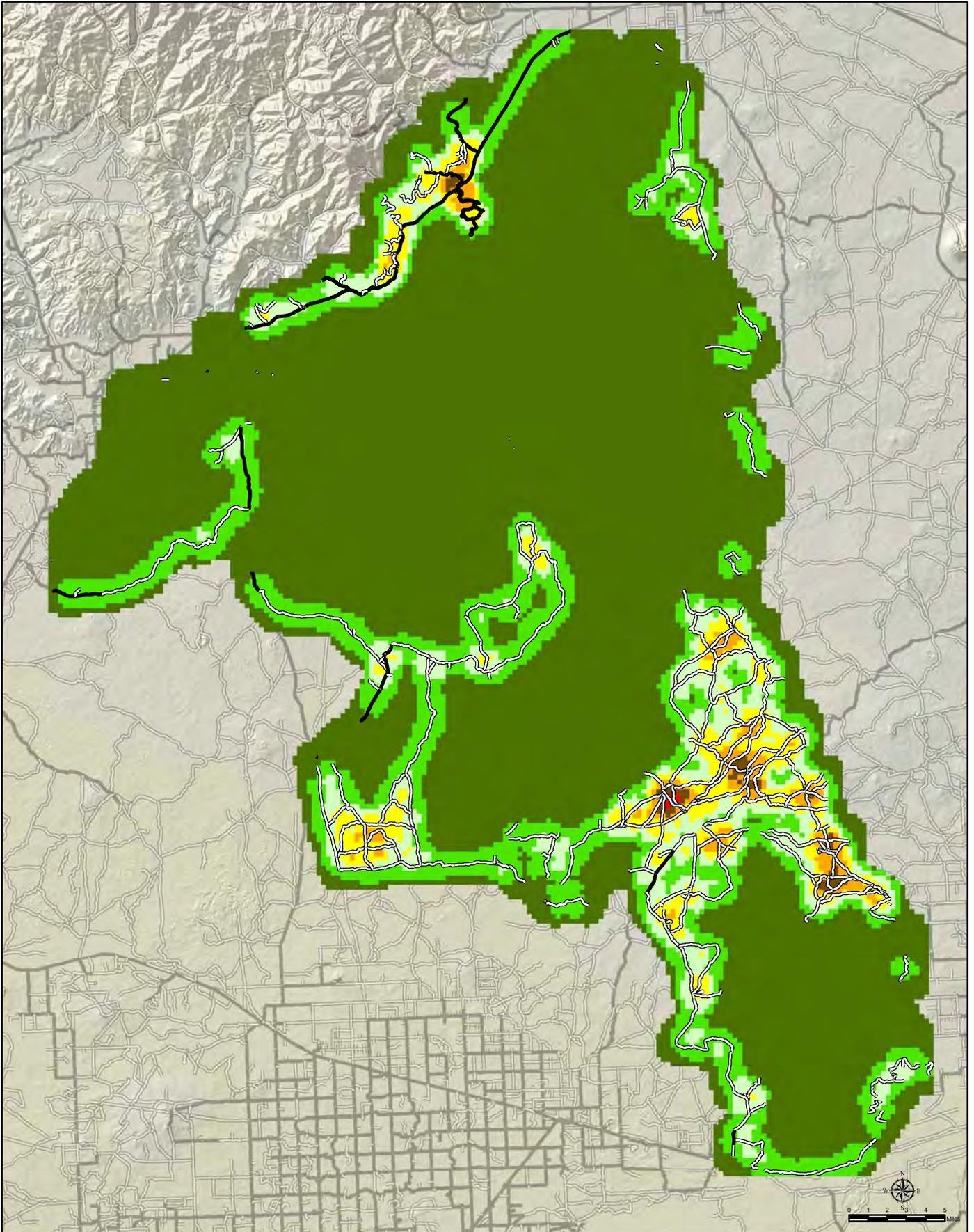
For internal BLM use only. Review and/or display copy-not for distribution. No warranty is made by the Bureau of Land Management. The accuracy, reliability, or completeness of these data for individual use or aggregate use with other data is not guaranteed.



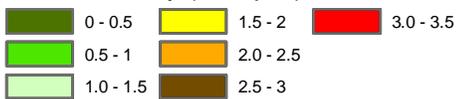
- Proposed Action During Seasonal Restrictions (Exposed lava area included)
  - Input 499 miles of routes, comprised of all within and immediately adjacent to the Monument where they define the boundary. Trails, closed routes and seasonal wildlife (sage-grouse) restrictions were removed from consideration as they will not receive any traffic.
  - Average Route Density = .36 miles / square mile



PROPOSED ACTION (NO SG CLOSURES) ROUTE DENSITY



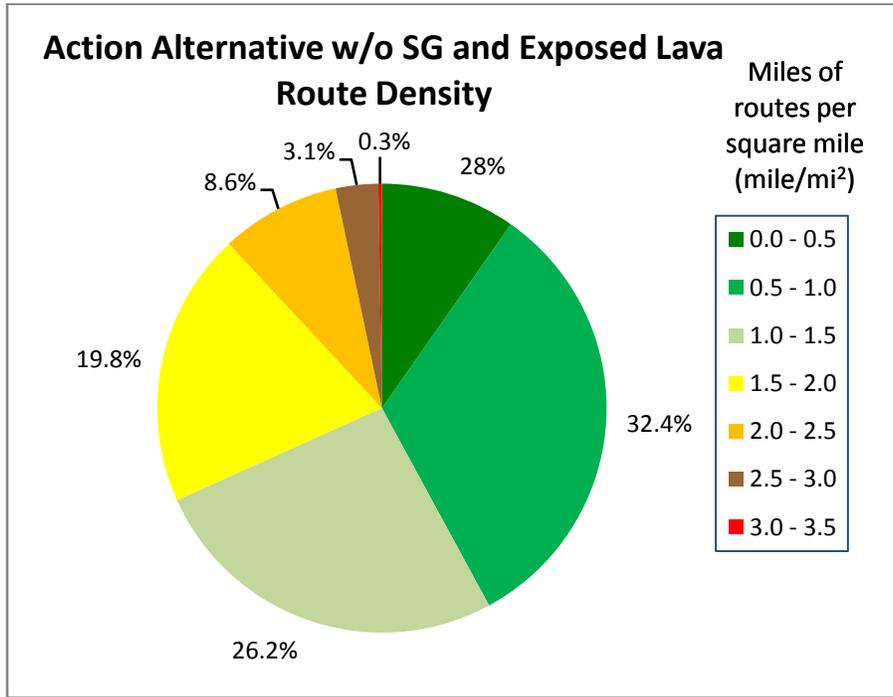
Route Density (mi/sq mi)



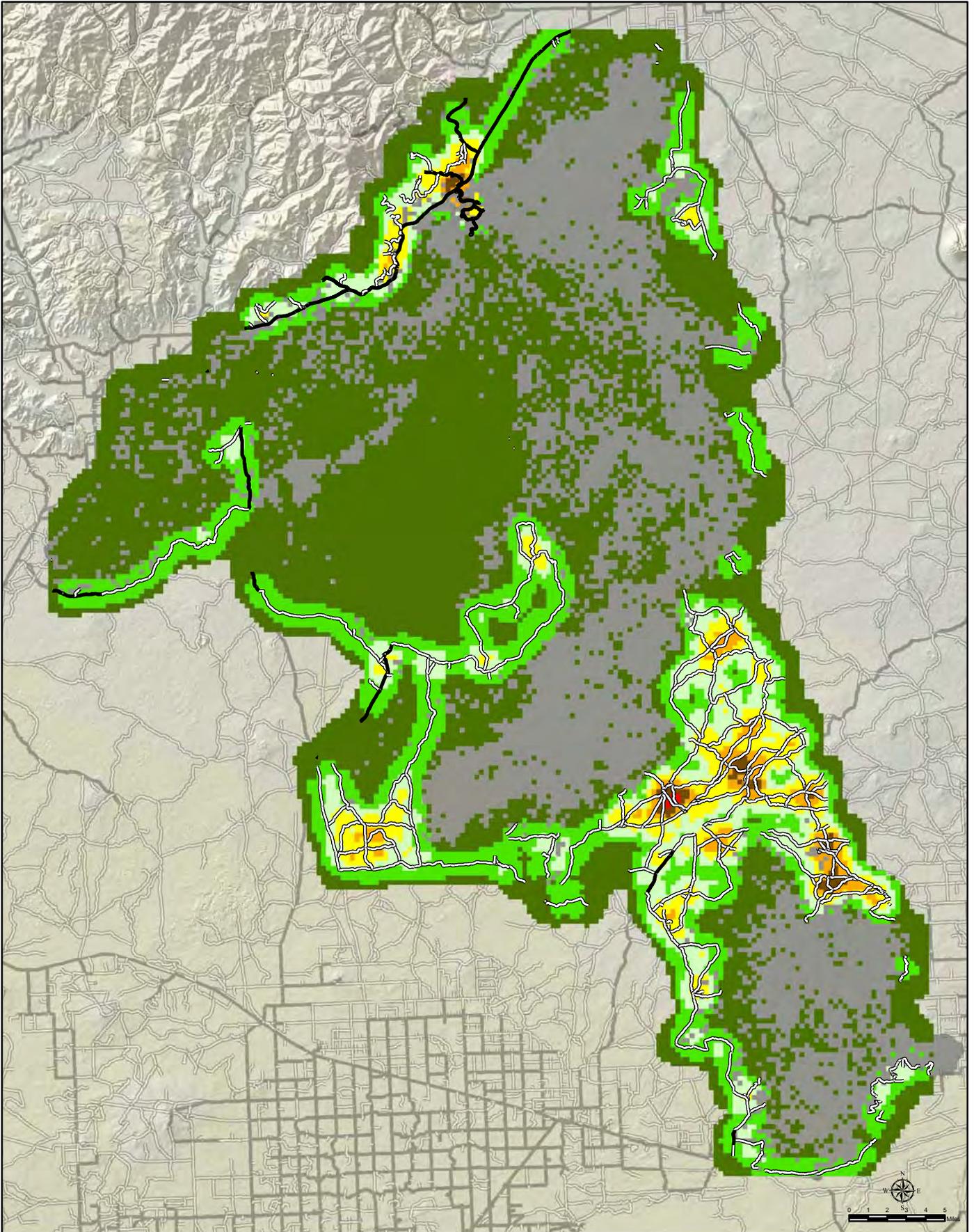
INTERNAL USE ONLY

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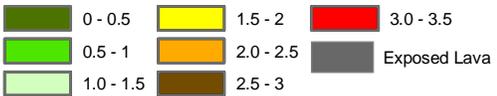
- Proposed Action During Seasonal Restrictions (Exposed lava area excluded)
  - Average Route Density = .47 miles / square mile



PROPOSED ACTION (NO SG CLOSURES OR LAVA) ROUTE DENSITY



Route Density (mi/sq mi)



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Appendix 3

<b>Route Justification for Proposed Actions</b>	<b>GIS MILES</b>
<i>Closed</i>	<b>71.2</b>
MMP Closure - Pristine Zone	26.6
761	2.2
762	1.0
771	0.7
776	0.7
800	0.5
828	0.1
845	0.3
846	0.2
847	0.3
848	0.3
849	0.1
850	0.1
851	1.1
852	0.2
853	0.6
855	0.1
856	1.1
857	0.7
858	0.1
859	0.2
861	0.1
862	0.4
863	0.8
864	0.1
865	0.1
866	0.2
3414	0.1
3430	1.3
3435	0.5
3437	0.7
12209	0.4
12212	0.2
12216	2.0
12231	0.4
12234	2.9

	12235	2.1
	12236	1.3
	12237	0.6
	12238	0.2
	12239	0.1
	39113	0.2
	39117	0.2
	39118	1.2
Routes that Lead to a Pristine Zone Closure		1.8
	828	1.4
	12216	0.4
Routes that are Redundant, Unused or Unnecessary		42.8
<b><i>Admin Use Only Total</i></b>		<b>9.9</b>
Retain access for resource management		6.4
	785	1.7
	12224	0.8
	12225	2.3
	12226	0.7
	12227	0.9
	12233	0.2
Retain access for Valid Existing Rights		3.4
	772	0.2
	775	0.8
	12224	0.9
	12226	1.6
<b><i>Upgrade</i></b>		<b>21.6</b>
Improved Access for Visitors, Resource Management, and Fire Suppression		18.3
	3217	6.3
	3228	0.1
	3414	12.0
Improved route for use as Fire Road		3.3
	792	3.3
<b><i>No Change</i></b>		<b>652.7</b>
Appropriate for current and intended access without threatening desired future conditions for natural resources within the Monument		652.7
<b>Grand Total</b>		<b>755.5</b>