

**UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

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Shoshone Field Office
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Rotarun Trail Network

Shoshone Field Office	EA Number: ID230-2006-EA-1402
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INTRODUCTION

Background: In 1998 the BLM Shoshone Field Office received requests expressing a desire for single-track trails in close proximity to the City of Hailey, Idaho. These requests came from a Hailey based mountain bike shop, local residents, and Big Wood Backcountry Trails, a local trail advocacy group. Two letters were also received from State Representative Wendy Jaquet regarding the desire for trail opportunities on BLM land in the Hailey area. In 1999 the BLM consulted with the Idaho Department of Fish and Game (IDFG) regarding a trail network in close proximity to Hailey. Idaho Department of Fish and Game suggested that trails west of Hailey would least impact wildlife. However, they stated that it would be desirable for the BLM to evaluate trails in this area in terms of cumulative impacts regarding wildlife and their habitat. This prompted a road and trail inventory that began in 2000 and was complete in 2004. The inventory was done cooperatively with BLM staff and the Blaine County Recreation District and shows existing roads and trails from Hailey to Richardson Summit and the United States Forest Service (USFS) boundary to Highway 20.

The results of the inventory indicated that there are several miles of roads, primarily two-track roads constructed primarily for mining and ranching operations. Some single-track trails also exist and were primarily constructed for the Sun Valley Grand Prix motorcycle race (1982-1991). Remnants of the single-track portions of the motorcycle race can be found in the Red Elephant and Bullion drainages. Other single track trails inventoried consisted of user-created trails primarily used for mountain biking and motorcycle trail riding.

There is a demand for scenic, short-loop, single-track trails in close proximity to Hailey. The BLM has been made aware of this demand through meeting with the Big Wood Backcountry Trails (BWBT) group and talking to local mountain bike shop owners, the Blaine County Recreation District Survey, the USFS Ketchum District Ranger and Wood River Valley community members. There are approximately 370 miles of system trails on the Sawtooth National Forest, Ketchum Ranger District and no designated trails on BLM land between Greenhorn Gulch and HWY 20.

Following are excerpts from a 2006 study conducted jointly by Shimano, Arizona State University, Northern Arizona University and the BLM, "Planning and Managing Environmentally Friendly Mountain Bike Trails". Overall conclusions state: The basic objective of wildland recreation management is to protect the integrity of the resource base while allowing, as appropriate, for wildland recreation access, such as mountain biking. Field results of this study indicate that mountain biking is a sustainable trail activity given the following assumptions:

1. No special resources, such as threatened or endangered species are present on the site and the site has no special designation (such as wilderness);
2. The managing agency has provided a properly designed and constructed trail, route or activity base for users; and
3. The ecological impacts related to the activity are inventoried, controlled with use standards and monitored for change on a regular basis.

It also states, Without question, the most significant ecological impact that mountain bikers can leave on a site is the random development of spurious, unauthorized trails. If this impact is discontinued and the previously mentioned ecological impacts are managed and mitigated, we are well on our way to providing sustainable mountain bike trails.

Type of Action: Trail designation, construction, and revegetation of unnecessary routes.

Purpose and Need for Proposed Action: The purpose is to address unauthorized, user-created trails. The need for the Proposed Action is to address the demand for single-track trail opportunities for recreational use in close proximity to Hailey, Idaho.

This Environmental Assessment analyzes the proposed action and alternatives to address if or how they would impact resources within the proposed project area.

Location of Proposed Action: The beginning of the proposed trail is located at Rotarun/Wood River Recreation area 3.5 miles west of Hailey. The general location of the proposed action is located between Democrat Gulch and Red Elephant Gulch. The legal description is: T. 2 N, R.17 E, Sec. 13, 14, 22, 21, 23, 24, 25, 26, 27, 28, 34, & 35. Refer to Appendix 1 Map 1.

Conformance With Applicable Land Use Plan: All of the Public Lands mentioned in the Proposed Action and alternatives are located in the Big Wood Analysis Unit of the Sun Valley Management Framework Plan (MFP), 1981. It states that *“This unit will be managed to protect the watershed resources, wildlife habitat, open space, and scenic values. However, continued livestock grazing, timber harvesting, recreational activities and mineral development will be encouraged as long as the proposed uses do not significantly reduce the other values.”* It also states, *“Continue to recognize present uses of the Wood River Recreation Area. This area provides for intensive ORV use and reduces pressure on other areas within the unit. This provides an area for many types of ORV events, reducing the need on adjoining public lands.”*

Also in the MFP under Off-Road Vehicles (ORV’s) it states: *Designate public lands as “open areas and trails” subject to adjustment for special needs identified in the future. Closures of small areas to eliminate resource damage may be implemented either by permanent or temporary designations.*

The Sun Valley MFP Watershed Decision #2 states: *Minimize stream sedimentation by stabilizing deteriorating streambanks. Improve to at least fair condition riparian areas, and reduce sediment from high source areas such as mine tailings, poorly located or designed roads, areas of active channeling, etc.*

The Sun Valley MFP Wildlife Decision #2 states: *Manage major deer migration routes to minimize impedance to big game. Facilities such as fences, right-of-way facilities and buildings will be constructed in such a way to have minimal effect. Bureau fencing specifications will be used which are designed to minimize impacts on big game habitat. Particular emphasis will be placed on maintaining the migration route between Stanton Crossing and Hot Springs Landing.*

Relationship to Statutes, Regulations or Other Plans: The August 2002 Blaine County Recreation District 10-Year Recreation Facilities Plan identifies desired facility location for non-motorized trails is highest in the Hailey/Bellevue/Gannett area. It also identifies a Croy Canyon Trail System as a possible project. Incorporated into the Facilities Plan was a Recreation Needs Survey that identified non-motorized trails as one of the most important recreation needs in the Hailey/Bellevue/Gannett Area and motorized trails were ranked as very unimportant.

In the Blaine County Code, August 22, 2006, Section 10; Natural Resources Blaine County desires: To protect and enhance existing natural resources in Blaine County, preserve and protect the scenic and aesthetic values of Blaine County, protect the public health and general welfare, and to minimize property loss and public expenditure from flooding, avalanche, pollution, and natural hazards and support projects that protect or enhance the natural resources of the county. In section 14; It is the intent of the recreation section of the Blaine County Comprehensive Plan to: protect and enhance the health and lifestyles of residents and visitors, support the goals of the Natural Resource, Historic and Aesthetic sections of the Comprehensive Plan, protect the environmental and scenic qualities in Blaine County, preserve and enhance the recreational opportunities now available and provide a plan to serve the recreation, parks and open space needs for residents and visitors over the next twenty (20) years.

In the Idaho Statewide Comprehensive Outdoor Recreation and Tourism Plan 2003-2007 a goal is to, *Work with communities to develop additional trails near population centers.* The overall findings stated that, *mountain bike use has significantly increased. The 1987 Pacific Northwest Outdoor Recreation Survey found that 8.9% of Idaho households participated in mountain biking. The 2002 Idaho Outdoor Recreation Survey found that 14.1% of respondents participated in mountain biking.*

PROPOSED ACTION AND ALTERNATIVES

Description of Proposed Action - Alternative I: Construct and designate six loop trails (Appendix 1, Map 1). The trail network would total 18.8 miles consisting of 14.9 miles of constructed single-track trail, 3.1 miles of adopted single-track trail and .8 miles of existing two-track road. The .8 miles of existing two-track would be designated as part of the trail system. Loops One through Four would be non-motorized with the exception of the trail that connects the Wood River Recreation Area and Bullion Gulch. This trail and Loop Five would be open to motorized and non-motorized. Signs would be placed along the trail to indicate the designated trail, allowable uses (motorized or non-motorized) and whether the trail was closed. The trail network would be closed to all users when the trail tread is wet and muddy. Muddy would be defined as, soil sticking to and being transported by tires, shoes or hooves or when ruts result from mountain bikes or motorcycles. The majority of use would come from local Wood River Valley residents with most use occurring in the spring and fall. However, due to the population growth in the Wood River Valley, especially the City of Hailey, use of the trail would take place throughout the summer.

The single-track sections of the trail have been designed to contour hillsides at an average grade of less than 10%, the grade never exceeds 15%. International Mountain Biking Association (IMBA) design standards recommend the average trail grade of 10% or less is most sustainable.

Constructed single-track trail would be a full bench design with a tread width of 18-24 inches, outsloped at 3-5% and have constant rolling grade dips and knicks, see Appendix 2, Figures 1, 2 and 3. This design assists with shedding of water from the trail tread. These trail construction standards allow water to sheet flow perpendicular across the trail tread reducing the chance of soil erosion. There are also no switchbacks in the planned trail network.

The proposed trail crosses two fences that are used to keep cattle within the Croy Creek Allotment. There is a small cattle-guard at one fence crossing; a similar cattle-guard would be installed at the second fence crossing.

The desired trail experience is to provide challenge and sense of achievement through natural surfaces and tread width. Signs at the trailhead/kiosk will indicate this challenge and experiences that users should expect to encounter on the trail network. Therefore, trail management objectives do not include designing to American Disability Act (ADA) standards.

In addition to constructing trails the proposed action adopts a trail on BLM land, locally known as the Lambs Gulch trail. This trail connects Lambs Gulch existing user-constructed single-track trail to Democrat Gulch. Along with BLM, the single-track trail and two-track road passes through private and State owned lands. Access to this trail is on the Democrat Gulch road claimed by Blaine County. The trail is four miles long and consists of 1.1 miles of private (two-track and single-track), .6 miles of State (single-track) and 2.3 miles of BLM (two-track and single-track). This trail would also be designated non-motorized. See Map 1. Prior to designating trails on private and State lands easements and/or maintenance agreements would have to be obtained. Construction could occur on private lands with landowner consent; however, Federal money could not be obligated for construction or maintenance without proper easements.

Construction Standard Procedures:

- Trails would be primarily located on hillsides with sideslopes that range from 5-50%.
- Perennial and intermittent streams of concern (Democrat, Bullion, Wilson and any incised stream where trail construction and rock armoring would compromise bank stabilization) would be crossed with a bridge to keep users out of the stream. Bridges would cross perpendicular to the stream and grade reversals have been designed on both sides of stream crossings to prevent water and sediment from flowing down the trail and into the streams. Bridges will be constructed above the normal high water mark of the channel.
- Trail construction equipment would be transported around perennial streams.
- Trail construction equipment would be washed prior to use to remove unwanted seeds and reduce the chance of weed spread in construction corridors.
- The trail corridor would be monitored for noxious weed spread and would be treated using Integrated Pest Management techniques appropriate for the taxa and site conditions. These techniques would be implemented by trained personnel.

Identified roads and trails would be rehabilitated on BLM land within the rehabilitation zone, see Appendix 1, Map 2. The rehabilitation zone has been identified so unauthorized trails are not constructed to extend or connect the designated trail network to other existing roads or trails. The

identified user-created trails within the rehabilitation zone total approximately 3.88 miles of trail and 2.78 mile of two-track road. The single-track trails to be rehabilitated are labeled on Map 2 as: A, B, and C, two-track roads are labeled as: D, E, F, and G.

Road and trail rehabilitation would include breaking up the old compacted soil in the trail tread, scarifying the soil so that new plants can establish themselves, construction of water bars and check dams, placement of rocks to prohibit access, partial recontouring, and reseeding with native plants. Seeding would be done in the fall using a broadcast method of grasses native to the watershed. A trail construction machine would be utilized to break up the compacted soil. Sagebrush and other native materials removed during trail construction would be used to disguise existing roads and trails identified for rehabilitation. Roads and trails that are rehabilitated would also be signed, encouraging users to stay on the new trail network. Any “new” user established route within the rehabilitation zone would be immediately rehabilitated.

The implementation sequence would be:

1. Adopt the Lambs Gulch trail.
2. Construct Loop One and Five.
3. Rehabilitate all roads and trails identified on Map 2. Road and trail rehabilitation on private land would require land owner permission.
4. Construct Loops Two, Three, and Four.
5. Maintenance and noxious weed control would be implemented throughout the project and post construction.

A kiosk would be installed at the Wood River Recreation Area parking area, approximately 200 feet north of the Croy Creek road. This kiosk would be located on BLM land at the current informal parking area. The purpose of the kiosk is to educate users about personal, community, environmental and economic outcomes that can be obtained from this single-track trail experience. Use restrictions (motorized and non-motorized), trail etiquette (see appendix 3), when to expect to encounter livestock operations and other trail use rules also would be posted at the kiosk. The kiosk would be installed during the construction of Loop One.

The BLM would be responsible for trail maintenance. Portions of the trail would be maintained by BLM fire crews and through adopt-a-trail agreements with Big Wood Backcountry Trails, local businesses.

Description of Alternative II: Construct and designate trails as described in Alternative I (Appendix 1, Map 3). However, only portions of Loops Two Three and Four would be designated non-motorized, all other loops and trail segments would be open for motorcycle use.

Description of Alternative III- No Action: Proposed trails identified in the previous alternatives would not be constructed nor rehabilitated. The Lambs Gulch trail would be monitored for natural resource concerns. Through monitoring if the trail or users are causing or likely to cause significant, undue damage to disturbance of the soil, wildlife, wildlife habitat or vegetative resources the entire Gulch would be closed through an emergency closure published in the Federal Register Notice.

Alternative Comparison Chart

	Alternative I	Alternative II	Alternative III- No Action
Total miles (on BLM, State and County road)	18.8	18.8	0
Miles of single-track	18	18	0
Miles of two-track	.8	.8	0
Loop opportunity	Yes - 6	Yes - 6	No
Non-motorized Loop Opportunity	Yes - 4	No	No
Miles of single-track to rehab	3.88	3.88	0
Miles of two-track to rehab	2.78	2.78	0
Rehab zone	Yes	Yes	No

Alternatives Considered but not Analyzed in Detail:

It was suggested by BLM staff and community members of the Wood River Valley that the BLM incorporate existing roads and/or trails into the proposed network. Most of the existing roads and trails in the project area are too steep to be used by the average mountain biker. Due to the steepness of the existing roads and trails in the area they are difficult to maintain and are eroding. Alternative road and trail locations exist close to Hailey but all require extensive easements or validation of existing roads. Most of the roads within the area were constructed for mining or ranching purposes and are not claimed by the county, state or BLM. The Cooperative Conservation Recreation and Travel Plan will identify easements necessary that could be incorporated into future trail developments.

AFFECTED ENVIRONMENT

General setting: The project area is located 3.5 miles west of Hailey, Idaho. The elevation varies between 5470 and 6400 feet and receives approximately 16 inches of precipitation annually. Slopes in the project area range from 0 to 50 percent.

Critical Elements of the Human Environment

Critical elements of the human environment identified in Table 1 are requirements specified in treaty, statute, regulation, or executive order and must be considered in all environmental assessments. Other important elements of the human environment, identified in Table 2, are not necessarily critical elements, but are nonetheless important to consider in assessing all impacts of the proposal. Elements which are present and are likely to be affected are discussed under the “Affected Resources/Values” section.

Table 1- Critical Elements of the Human Environment

CRITICAL ELEMENTS OF THE HUMAN ENVIRONMENT	
Resource components identified by an “X” on the following table of Critical and Other Important Elements of the Human environment are <i>not</i> affected by the proposed action or alternatives and will receive no further consideration. Elements which are present and are likely to be affected are discussed below.	
<input checked="" type="checkbox"/> Air Quality	<input type="checkbox"/> Threatened/Endangered Plants; Sensitive Plants
<input checked="" type="checkbox"/> Areas of Critical Environmental Concern	<input checked="" type="checkbox"/> Threatened/Endangered Fish; Sensitive Fish
<input checked="" type="checkbox"/> Cultural Resources	<input type="checkbox"/> Threatened/Endangered Animals; Sensitive Animals
<input checked="" type="checkbox"/> Environmental Justice (EO 12989) (minority and low-income populations)	<input checked="" type="checkbox"/> Wastes, Hazardous or Solid
<input checked="" type="checkbox"/> Farm Lands (prime or unique)	<input checked="" type="checkbox"/> Water Quality – Surface & Ground
<input checked="" type="checkbox"/> Floodplains	<input type="checkbox"/> Wetlands/Riparian Zones (including uplands)
<input type="checkbox"/> Invasive, Non-native Species	<input checked="" type="checkbox"/> Wilderness
<input checked="" type="checkbox"/> Migratory Birds	<input checked="" type="checkbox"/> Wild & Scenic Rivers
<input checked="" type="checkbox"/> Native American Religious Concerns	<input checked="" type="checkbox"/> Tribal Treaty Rights

Table 2 – Other Important Elements of the Human Environment

OTHER IMPORTANT ELEMENTS OF THE HUMAN ENVIRONMENT	
The elements of the environment listed below are not included on the “critical elements” list, but are important to consider in assessing all impacts of the proposal(s). All the following elements have been analyzed. However, elements denoted by an “X” are <i>not affected</i> by the proposed action or alternatives and will receive no further consideration.	
<input checked="" type="checkbox"/> Paleontological Resources	<input checked="" type="checkbox"/> Fisheries
<input checked="" type="checkbox"/> Indian Trust Resources	<input checked="" type="checkbox"/> Forest Resources
<input type="checkbox"/> Availability of Access/Need to Reserve Access	<input type="checkbox"/> Soils
<input type="checkbox"/> Wildlife	<input checked="" type="checkbox"/> Wild Horse and Burro Designated Herd Management Areas
<input type="checkbox"/> Recreation Use, Existing and Potential	<input type="checkbox"/> Visual Resources
<input type="checkbox"/> Existing and Potential Land Uses	<input type="checkbox"/> Economic & Social Values
<input type="checkbox"/> Vegetation types, communities; vegetative permits and sales; Rangeland resources	<input checked="" type="checkbox"/> Mineral Resources

Critical and important elements that are checked as “not affected” were considered during the environmental analysis process but were identified as such because they are not present within the project area being analyzed. There will be no quantifiable dust or other air quality impacts associated with the proposed action or alternatives. There are no areas of critical environmental concern in the project area. A cultural resource inventory has been conducted along all proposed routes for construction and restoration. No cultural resources were identified, therefore there would be no impact to any eligible cultural resources. Neither the proposed action nor any of the alternatives are expected to create disproportionately high and adverse human health impact or environmental effect on minority or low-income populations within the area. There are no farmlands, prime or unique within the project area. There is no nearly flat plane that is subjected to flooding by the intermittent or perennial streams in the project area. There are no constructed objects that would inhibit migratory birds from migrating through the project area. There are no Native American Religious Concerns within the project area. There are no threatened/endangered fish or animals in the project area. During the layout and design of the proposed routes no wastes were located, hazardous or solid. There are no 303(d) listed streams in the area that would be affected by the project. No designated wilderness or wilderness study areas are located within the project area. There are no wild and scenic rivers located within the project area. There is no tribal treaty rights associated with the subject parcel. The reasons stated above eliminate these issues from further detailed discussion in this EA.

Affected Resources/Values:

Soils

Soils in the area formed in residuum and alluvium derived dominantly from mixed igneous rock (basalt, andesite, granite). These soils occur on side slopes, ridges, and hill tops. They are generally moderately deep to deep and well drained. Surface textures are mostly gravelly loams with subsoils ranging from gravelly loam to gravelly clay loams. The hazard of erosion by water for these soils is moderate to severe and slope is a critical factor in the soils susceptibility to these forces. Slopes range from 2 to over 50 percent. The dominant soil series in the area are the Elkcreek, Gaib, Molyneux, Povey, Vitale, and Milligan. Annual precipitation received averages 12 to 16 inches, most being infiltrated into the soils due to the high infiltration rate provided by the soil surface. Little water is yielded as overland flow except during high intensity events. Surface gravels and existing vegetation (including litter) are the main soil stabilizing agents working on the sites. Soils information was gathered from the Blaine County Area Soil Survey (NRCS, 1991). Detailed soil information can be found at <http://soils.usda.gov/survey> and follow prompts.

As indicated the soils in the project area are dominantly loams with varying amounts of coarse fragments both on the surface and in the soil profile. In summary the existing soil types are characteristically erosive however they also have high infiltration rates and drain well under normal conditions. Therefore, trail design criteria, is an important consideration when constructing trails in these soil types and on this terrain. Loam is the ideal soil for trail building purposes as it drains well, holds together well, and is easy to work with (Webber, 2004).

There is a trail that exists on private property known as Carbonate Mountain, approximately one mile east of Democrat Gulch. The trail has an average grade of 12-18% with a 3-5% outslope and grade reversals. The soil type that the trail exists on is classified as Vitale-Milligan complex, 30-60 percent slopes. It has been identified to have a very severe hazard of water erosion. The trail was constructed at least five years ago and is showing no sign of erosion. Historical roads and trails that exist within the project area that are classified as fall-line, straight up and down hillsides or drainages, are showing signs of erosion.

Vegetation

Vegetation in the proposed project area is dominated by sagebrush steppe vegetation with inclusions of mountain shrub, aspen (*Populus tremuloides*), and riparian plant communities. Mountain big sagebrush (*Artemisia tridentata* ssp. *vaseyana*) dominates the area with antelope bitterbrush (*Purshia tridentata*) as a frequent co-dominant. Other common shrubs include mountain snowberry (*Symphoricarpos oreophilus*), chokecherry (*Prunus virginiana*) and buckbrush (*Ceanothus velutinus*). Understory vegetation typically includes bluebunch wheatgrass (*Pseudoroegneria spicatum*) and other native grasses and forbs. Idaho fescue (*Festuca idahoensis*) regularly occurs on north- and east-aspects and at higher elevations. However, little to no vegetation is present at the informal Wood River Recreation Area parking area.

Mountain shrub and aspen communities typically occur as small patches in areas where snow accumulates and persists, often on north and east facing slopes. Riparian communities dominated

by willows (*Salix* spp.), alder (*Alnus* sp.), and other riparian shrubs occur as narrow bands of vegetation along perennial and ephemeral streams and around springs in the area. Seeps/springs support wetland graminoid vegetation including rushes (*Juncus* spp.) and sedges (*Carex* spp.).

Invasive-Non-Native Species

A variety of non-native invasive species including cheatgrass (*Bromus tectorum*), knapweed (*Centaurea* spp.), Canada thistle (*Cirsium arvense*), and others occur in the project area. Cheatgrass occurs on some south facing slopes. Knapweed and Canada thistle are primarily found in or adjacent to riparian areas. Knapweed exists along Democrat and Bullion roads and the existing single-track trail in Wilson Gulch.

Special Status Plants

There are no known threatened, endangered, or BLM Sensitive plant populations in the proposed project area. However, known populations of bugleg goldenweed (*Haplopappus insecticurius*), a BLM Sensitive species, occur within a mile of the area and potential habitat for this species exists within the project area at the edges of ephemerally wet meadows, seeps, and riparian zones. Bugleg goldenweed is endemic to the Camas Prairie, Macon Flat, and the lower foothills of the Soldier, Pioneer, Boulder, and Smoky Mountains. It is currently rated within Idaho as a Type 3 sensitive species and is globally rare but not imperiled within its range. Bugleg goldenweed is tolerant of shallow, but not deep soil surface disturbance and is a poor competitor against exotic species and sod-forming grasses.

Riparian Zones

There are fourteen intermittent and perennial streams in the project area that support woody riparian plant communities as described above. In addition, the two track road in the west fork of Lambs Gulch passes directly through a spring complex. These springs support herbaceous riparian communities. In the spring and summer four wheel drive vehicles drive on the road which runs directly through the springs and riparian vegetation. The ruts caused by motorized and non-motorized vehicles channel water down the road.

Wildlife, including Special Status Species

The U.S. Fish and Wildlife Service's Biannual Resource Area Species List #2006-SL-0914 lists federally listed Threatened or Endangered Species known or suspected to occur in the resource area. The listed plant or animal species which potentially may occur in the proposed project area include the following: bald eagle (*Haliaeetus leucocephalus*); gray wolf (*Canis lupus*); and Canada lynx (*Lynx canadensis*). The BLM lists some additional animals as BLM Sensitive Species in Idaho. The BLM Sensitive Species which may occur in the allotment are discussed below and summarized in table 3.

The presence of Bald Eagle or Gray Wolf in the general project area would most likely occur during the winter. Bald Eagles may make incidental use of the project area while wintering in the Big Wood River watershed. A pair of wolves was killed in the Willow Creek drainage in the winter of 2001. These two wolves were shot about nine air-miles west of the proposed project. A lynx was reported to have been observed in the general vicinity of Bellevue, Idaho in January 1984. The closest this proposal occurs from the reported observation location is about six air miles. In Idaho, Lynx are thought to primarily occur in the higher elevation cold forest habitats. The proposed project does not contain forest habitat.

Greater Sage-grouse are found primarily in habitats dominated by sagebrush (*Artemisia spp.*), particularly big sagebrush (*Artemisia tridentata spp.*). The public land in the project area is classified as Key Sage-Grouse Habitat. Key habitat is described as an area of generally intact sagebrush steppe habitat currently or recently occupied by sage-grouse. Adjacent public and private lands that occur south of the proposed project contain sage-grouse habitat that is currently classified as Restoration 1 habitat. Restoration 1 habitat supports an understory condition that is acceptable for sage-grouse in terms of plant species composition but currently lacks adequate big sagebrush cover. Records at the Shoshone Field Office show there are no known currently active Sage-grouse leks in the general vicinity of the project area. There is one historical lek within the proposed project area and two historical leks within two miles of the trail network. The lek within the network and the lek within 0.7 miles of the project have not been occupied since 1977. The remaining lek which is approximately 1.8 miles away has not been occupied since 1987. A total of 12 leks occur within seven miles of the trail network. Five of the leks have been occupied within the last five years, and seven of these leks have been occupied during the last 20 years. The shrub/steppe habitat which occurs within the trail network likely provides Sage-grouse nesting and brood rearing habitat and possibly winter habitat. The sagebrush habitat which grows adjacent to riparian zones likely provides escape cover and foraging habitat for Sage-grouse during the late brood rearing period. Sage-grouse have been observed within the proposed trail network area during the late spring, summer and fall periods. The wind-swept tops of ridges may provide suitable winter habitat conditions for wintering Sage-grouse.

Prairie Falcons are fairly common, year-round residents of dry, open country in south-central Idaho and the species is known to occur in the general vicinity of the project area. The species typically nests on cliffs in sites that are inaccessible to mammalian predators. The species also rarely may nest in trees or on transmission line towers in the abandoned nests of other large birds, including Common Raven and Black-billed Magpie. Given the above, it is possible that the prairie falcon could breed within or near the project site and that the species could fly over or forage within the project area on a year-round basis.

There are three sensitive passerine bird species (Loggerhead Shrike, Sage Sparrow, and Brewer's Sparrow) with potential to occur in the project area. Loggerhead Shrikes are year-round residents in Idaho and could occur in the project area throughout the year. Sage and Brewer's Sparrows are summer residents and probable breeders in the general vicinity of the project area. These species often occupy more arid shrub steppe environments than those in the project area. However, they could potentially occur in the project area during the spring, summer and fall seasons. Calliope Hummingbirds are summer residents of central Idaho. These birds typically occur in montane environments (along meadows, canyons and streams), in open montane forests, and in willow and alder thickets. The species could potentially occur within the project area during spring, summer and fall seasons.

Townsend's big-eared bat (*Corynorhinus townsendii*), and the fringed myotis (*Myotis thysanodes*) are bat species that are most often associated with caves and mines in low- to mid-elevation environments in Idaho. Fringed myotis occur primarily in western and northern Idaho and are unlikely to regularly occur in the project area. Several Townsend's big-eared bat maternity roosts and hibernacula are known to occur within approximately 40 miles of the project area and there are trapping records of the species from within approximately 5 miles of

the project area. Therefore, the species may occasionally use the general area during the spring, summer, and fall seasons for dispersed foraging activities.

Wolverines (*Gulo gulo*) are wide-ranging mustellids that typically occupy mid- to high-elevation coniferous forests. Wolverine populations in Idaho are centered in the Selkirk Mountains, Lochsa and Kelly Creek drainages, and the Smoky Mountain complex of the Sawtooth Mountains. There are two recorded observations of wolverines from within the project area and numerous recorded observations from within fifty miles of the project area. Although the species is unlikely to regularly occur within the project area, given the above, it seems likely that a wolverine could occur within the project area while foraging or dispersing from a natal territory.

Pygmy Rabbit (*Brachylagus idahoensis*) is a sagebrush obligate inhabiting areas characterized by dense, tall stands of big sagebrush growing on deep, friable soils that allow the rabbits to dig rather extensive burrow systems. The species is considered rare in Idaho. However, recent surveys for presence of pygmy rabbits have augmented statewide distribution data and documented relatively abundant populations in localized areas. The nearest known Pygmy Rabbit population is located approximately 15 miles south of the project area, in a lower elevation and more arid area. Vegetation in the project area has some similarities to areas where the species occurs. However, there are no Pygmy Rabbit records within close proximity of the project area and none have been detected during work in the area and, thus, it seems unlikely that the species regularly occurs in the project area.

The Common Garter Snake (*Thamnophis sirtalis*) and the Western Toad (*Bufo boreas*) are sensitive species that typically occur in or adjacent to aquatic and riparian environments. Both species are known to occur in the general vicinity of the project area and could occur within the project area.

Wildlife species which are commonly associated with a native shrub steppe habitat in foothill and mountainous terrain in the resource area are present in the project area. A brief listing of the more common wildlife species which are known or likely to be found during a portion of the year include Elk (*Cervus elaphus nelsoni*), Mule Deer (*Odocoileus hemionus*), Pronghorn (*Antilocapra americana*), Coyote (*Canis latrans*), American Badger (*Taxidea taxus*), Mountain Cottontail (*Sylvilagus nuttallii*), Black-tailed Jackrabbit (*Lepus californicus*), Blue Grouse, and Red-tailed Hawk in addition to numerous kinds of small mammals and song birds. A more complete listing of possible animal species likely to occur in habitats found in the area is referenced in the Sun Valley Grazing EIS (1981).

Elk could occur within the project area on a year-round basis, but the species is most likely to occur in the area during spring and fall migration. Mule Deer occur in the general vicinity of the project area on a year-round basis. However, the project area primarily provides transitional range in the spring and fall months during seasonal migrations between winter and summer ranges. Pronghorn use of the project area is sporadic and occurs during spring, summer, and fall months. All three of these big game species may use the project area for fawning/calving during spring/summer months.

Table 3-Federally Listed and BLM Sensitive Animal Species that may occur in the project area		
Common Name	Scientific Name	General Habitat Use
Type 1-Threatened (T), Endangered (E), or Proposed (P)		
Bald Eagle (T)	<i>Haliaeetus leucocephalus</i>	Forest, Sagebrush, Riparian
Grey Wolf	<i>Canis lupus</i>	Forest, Sagebrush, Riparian
Canada Lynx	<i>Lynx canadensis</i>	Forest
Type 2-Rangewide/Globally Imperiled Species		
Greater Sage-grouse	<i>Centrocercus urophasianus</i>	Sagebrush, Riparian
Pygmy Rabbit	<i>Brachylagus idahoensis</i>	Sagebrush
Boreal Toad	<i>Bufo boreas boreas</i>	Riparian
Northern Leopard Frog	<i>Rana pipiens</i>	Riparian
Type 3-Regional/State Imperiled Species		
Townsend's Big-eared Bat	<i>Plecotus townsendii</i>	Sagebrush, Grassland, Cave
Fringed Myotis	<i>Myotis thysanodes</i>	Sagebrush, Grassland, Cave
Fisher	<i>Martes pennanti</i>	Forest, Riparian
Wolverine	<i>Gulo gulo luscus</i>	Forest, Riparian
Prairie Falcon	<i>Falco mexicanus</i>	Sagebrush, Grassland
Peregrine Falcon	<i>Falco peregrinus anatum</i>	
Northern Goshawk	<i>Accipiter gentilis</i>	Forest, Grassland, Sagebrush, Riparian
Ferruginous Hawk	<i>Buteo regalis</i>	Forest, Grassland, Sagebrush, Riparian
Mountain Quail	<i>Oreotyx pictus</i>	Forest, Grassland, Sagebrush, Riparian
Flammulated Owl	<i>Otus flammeolus</i>	Forest, Grassland, Sagebrush, Riparian
Lewis's Woodpecker	<i>Melanerpes lewis</i>	
Willow Flycatcher	<i>Empidonx trailii</i>	Forest, Riparian
Grasshopper Sparrow	<i>Ammodramus savannarum</i>	Grassland, Sagebrush
Loggerhead Shrike	<i>Lanias ludovicianus</i>	Sagebrush
Brewer's Sparrow	<i>Spizella breweri</i>	Sagebrush
Sage Sparrow	<i>Amphispiza belli</i>	Sagebrush

Table 3-Federally Listed and BLM Sensitive Animal Species that may occur in the project area		
Common Garter Snake	<i>Sonora semiannulata</i>	Forest, Riparian
Western Toad	<i>Bufo boreas</i>	Forest, Riparian
Type 4-Idaho Peripheral Species		
California Myotis	<i>Myotis californicus</i>	Sagebrush, Grassland, Cave
White-faced Ibis	<i>Plegadis chihi</i>	Grassland, Riparian
Virginia's Warbler	<i>Vermivora virginiae</i>	Forest, Grassland, Sagebrush, Riparian
Black-throated Sparrow	<i>Amphispiza bilineata</i>	Grassland, Sagebrush, Riparian
<p>Type 1-Threatened, Endangered, and Proposed Species -These species are listed by the Fish and Wildlife Service or National Marine Fisheries Service as threatened or endangered, or they are proposed for listing under the Endangered Species Act.</p> <p>Type 2- Range-wide/Globally Imperiled Species -These are species designated as FWS candidate or are ranked by the Natural Heritage program network as globally rare to critically imperiled.</p> <p>Type 3-Regional/State Imperiled Species -These are species that are in danger of becoming extirpated from Idaho in the foreseeable future if factors contributing to their decline, or habitat degradation or loss, continue.</p> <p>Type 4-Peripheral Species -These are species that are in danger of becoming extirpated from Idaho and (a) may be local endemics with currently low threat levels or (b) peripheral, rare species in Idaho.</p>		

Existing and Potential Land Uses

Livestock Grazing Management

The proposed trail network is located within the Bullion Gulch, Rota Run, Croy Creek and Deer Creek Allotments. Rota Run Allotment contains approximately 680 acres of public land while Bullion Gulch and Deer Creek have public land intermingled with private and/or state land. Bullion Gulch contains approximately 1,450 acres of public land and 540 acres of private land; Deer Creek contains approximately 3,580 acres of public land and 4,065 acres of state and private land. All of these allotments are scheduled for a Fundamentals of Rangeland Health field review. An environmental analysis will subsequently be done based on the findings of field review and other available information for the renewal of grazing permits. Depending upon the findings of these assessments, the authorized officer may take appropriate action to achieve conformance with the standards. If the allotment(s) are meeting rangeland health standards, it is likely that current management would continue.

The current permittees for the Bullion Gulch and Rota Run Allotments are Denis C. and Laurie K. Kowitz. The permit is for sheep and both allotments will be undergoing a range health assessment and environmental analysis for renewal of the term grazing permit within the next five years. Sheep bands in the spring amount to approximately 800-900 sheep and 1800-2000 in the fall. See Table 3. Sheep herders often have guard dogs to help protect sheep from predators. Guard dogs are usually Great Pyrenees or Akbash breeds.

Deer Creek Ranch, Inc., holds the permit for cattle on the Deer Creek Allotment and the allotment is currently undergoing a rangeland health assessment and environmental analysis for renewal of its term grazing permit. Actual use records from 1990 to present show that cattle use on Deer Creek has commenced as early as May and as late as September; however, the permittee has taken non-use in the allotment since 2000.

Faulkner Land and Livestock & Diamond A hold the permit for cattle in the Croy Creek Allotment. There are four pastures within the Croy Creek Allotment. The Croy Creek pasture of the Croy Creek allotment is part of a four year rest-rotation, the pasture is rested one year in four. Year one cattle are in the pasture from mid June to August, year two August and September, year three September and October and year four rest. Four hundred to five hundred cattle graze the pasture however, only approximately 100 head of cattle graze the in same basin as Loop Five. There is a water trough located in the north east corner of the Croy Creek Allotment. Sheep graze the Croy Creek Allotment every year in the spring and fall.

Table 3 Current Grazing Permit Authorization

Allotment/ Current Permittee	Kind of Livestock	Grazing Beginning -End	Total Active AUMs*	Number of Sheep Bands	Typical Length of Stay in project area (days)
Bullion Gulch/ Denis C. & Laurie K. Kowitz	Sheep	5/15 to 11/10	256	2 Spring 1 Fall	10-14 Spring 10-14 Fall
Rota Run/ Denis C. & Laurie K. Kowitz	Sheep	5/15 to 10/30	23	2 Spring 1 Fall	1-2 Spring 1-2 Fall
Croy creek/ Faulkner Land and Livestock & Diamond A	Sheep & Cattle	5/15 to 11/10	371-Sheep 961- Cattle	2-4 Spring 3-5 Fall	4-5 Spring 4-5 Fall
Deer Creek/Deer Creek Ranch	Cattle	5/15 to 10/31	299		

*AUMs = Animal Unit Months, the equivalent of forage consumed by one cow and one calf for one month.

Mineral Resources

Two existing addits are located approximately 1/3 mile north of the Democrat Gulch road, labeled F, Map 2. They are caved in with small tailings piles and a small amount of wood scattered on the ground.

Availability of Access

Roads and trails that exist in the area have primarily been constructed for mining, livestock operations and motorized recreational use.

Legal access exists to the Wood River Recreation Area and surrounding BLM lands within the project area. A non-motorized easement, held by Blaine County, exists on the west end of Sage Springs Subdivision. The easement was specifically established for open space and access to public lands. There is a parcel of land within the subdivision adjacent to the easement that is platted for parking. This easement currently has a user-created trail accessing BLM land.

The existing single-track trail that accesses the Lambs Gulch trail to the north and Wilson Gulch to the south has no legal access from the Democrat road. The two-track road crossing private land accessing Lambs Gulch is undesignated. Currently access has not been denied to the Lambs Gulch Loop however, all users are trespassing across private property to access the loop. Also the two-track road that accesses BLM between Bullion and Red Elephant gulches provides no legal access. Currently motorized access on the existing two-track road is being denied by the private property owner. Democrat, Bullion and Red Elephant roads are designated County roads.

The BLM currently has several public access easements within the Bullion Gulch and Red Elephant Areas. For the most part, these easements are located northwesterly from the identified trail loops. However, the portion of Loop One that is located in the north half of the SW quarter, identified as a two track, follows a segment of the access easements. This road is also claimed by Blaine County. See Map 1.

Recreation Use, Existing and Potential

There is a long history of Off Highway Vehicle use in this area. The Wood River Recreation Area was identified in the 1992 Blaine County Recreation, Parks and Open Space Master Plan as an area that was currently being used by Off Road Vehicles (ORV) and could be expanded into a motocross area. The Wood River Recreation Area is also identified by the BLM as a Special Recreation Management Area (SRMA). SRMA's proactively produce recreation opportunities ensuring specific activities, experiences and benefits are realized. Targeted activities within the SRMA include motorcycle riding, mountain biking and riding ATV's. Experiences associated with those activities include skill development, enjoying risk taking activities, and being with friends and family. BLM land outside SRMA's are managed as Extensive Recreation Management Areas (ERMA). Within ERMA's BLM recreation management actions are limited to only those of a custodial nature allowing for recreational activities to take place while reacting to visitor health and safety conflicts, use and user conflicts and resource protection. Activities that occur within the project area adjacent to the Wood River Recreation Area SRMA include: motorcycle riding, mountain biking, riding ATV's, dog walking, horseback riding, hiking, trail running and big game hunting. The SRMA was identified in the 1981 Sun Valley MFP which was prior to the popularity of mountain biking and trail running. Currently there is little user conflicts within the SRMA or ERMA however, there is some demand to separate motorized/non-motorized users. The proposed action is a direct result of community demand to use Public Lands to participate in recreation activities and realize specific recreation experiences that currently are not available at the Wood River Recreation SRMA.

These activities and experiences were derived from a Wood River Valley Lands Benefits Study that was conducted in 2006 and can be found at: http://www.co.blaine.id.us/blm_study.htm. This study was done cooperatively between the Blaine County Commissioners, BLM, and Arizona State University. Some of the implications and recommendations derived from this study include: *Irrespective of type of recreation use, being close to nature emerged as one of the most frequently reported experiences resulting from recreation in the Wood River Valley lands. Managing to ensure that opportunities for getting close to nature are enhanced should be a priority. Management attention focusing on maintaining the distinctive character of the setting and preserving the viewsapes and scenery are important components to consider.*

The Natural Resource Settings matrix, Appendix 4, is a conceptual framework that characterizes recreation physical, social and administrative settings. The framework is used for planning, management and research and helps to clarify relationships between recreational settings, activities, experiences and the ensuing outcomes. Changing or maintaining the physical, social and administrative characteristics of the recreation setting makes different recreation opportunities available.

The project area has an existing “middle and front-country” physical setting which is characterized as being within ½ mile of existing motorized roads and trails. The Wood River Recreation Area has an existing “front country” physical setting and much of the remaining project area would be considered “middle-country”.

Other recommendations from the Wood River Lands Benefit study include:

- Most groups agreed that the overall lack of overt BLM management presence is a positive aspect of the resource setting in that there is not an overabundance of signs and regulatory information.
- There is an overall sense of conflict between motorized use and non-motorized use, where non-motorized users feel that motorized users are destroying the resource and causing noise pollution near towns and motorized users feel that more and more of their land base for recreation is being taken away.
- Targeted Experiences and Opportunities identified by mountain bikers and motorcycle riders were very similar and include: being close to nature, enjoying the scenery and being with friends and family. Beneficial Outcomes include: improved physical fitness, heightened sense of satisfaction with our community, increased desirability as a place to live or retire and increased awareness and protection of landscapes.

Sun Valley Road and Dirt Camp currently operates a mountain bike school and races in the maze of trails existing within the Wood River Recreation Area. Classes are offered from June through July and private lessons into October. Four to five races are held each summer with up to 60 participants per race. The camp teaches students trail etiquette, technical riding skills and bike maintenance. Adjacent to the BLM land on county property is a developed BMX track that is in the process of expanding into a mountain bike skill development area.

The majority of use in the project area occurs in the spring (April-June) and fall (September-November). This is because the majority of trails on the Sawtooth National Forest are covered

in snow or wet and muddy until June or some years, July. The majority of users in the project area are primarily residents of the Wood River Valley.

The original Lambs Gulch Loop was user-constructed in the early 1990's then extended and rerouted during the fall of 2005. The reroute is a single-track trail that allows users to avoid a spring complex. This loop is becoming one of the most popular non-motorized trail opportunities close to Hailey. In the spring, summer and fall it receives approximately 3,000 visitors. The original two-track road that goes through the springs still exists but is rarely used by mountain bikers.

The area within and adjacent to the project area has an Off-Highway Vehicle (OHV) classification as "Open". The Open classification is defined as, an area where all types of vehicle use is permitted. Travel designations for this area will be addressed through a Cooperative Conservation Recreation and Travel Plan that is being done jointly between Blaine County and the BLM.

Visual Resources

The project area falls within Visual Resource Management, VRM, Inventory Class III. The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominate natural features of the characteristic landscape.

The landform in the project area would be classified as foothills and valley bottoms with some steep canyons. Within the project area is the Wood River Recreation Area consisting of a maze of roads and trails. The remainder of the project area is similar to surrounding landforms consisting of occasional roads that traverse valley bottoms, foothills and canyons. Vegetation would be considered little or no variety in contrast with the exception of some contrast in valley bottoms. There is some subtle color variation but generally mute tones. Water is present in the spring but not noticeable from the Croy Creek road.

Economic and Social Values

The current population of Hailey is 7,500 and is experiencing a yearly growth rate of 3.5-6%. Hailey had a 70% growth rate during the 1980's and a 75% growth rate in the 1990's. The population estimates within Blaine County on July 1, 2004 was 21,103 which is a 10% increase between 2001 and 2004.

From 2001-2005 Blaine County motorbike registrations increased 37.8% while South Central Idaho motorbike registration increased 23.1%. Blaine County's general population increased 7.1% during this same time period. These figures show that motorbike registration is outpacing population growth (percentage wise). There are four ATV/motorcycle retail outlets in the Wood River Valley and eleven mountain bike retail outlets.

ENVIRONMENTAL IMPACTS

Impacts of the Proposed Action - Alternative I:

Soils: Direct and indirect impacts to soils include soil compaction, displacement, erosion, and subsequent loss of productivity. During construction vegetation and soil would be removed for full bench trail construction. This includes removing the organic matter rich surface soil layer. Once the trail tread is defined underlying soils would be compacted. This compaction would occur during initial construction and secondarily through recreational use. It should be expected that “soil compaction within the tread to steadily rise while compaction of trailside soils to remain constant. Soil impacts occur predominately during the first year of use with minor changes thereafter” (Bjorkman 1996). “Compacted soils are denser and less permeable to water, which increases water runoff. However, compacted soils also resist erosion and soil displacement and provide durable treads that support traffic. From this perspective, soil compaction is considered beneficial, and it is an unavoidable form of trail impact” (Marion 2007).

Soil impacts should not vary greatly based on types of use, motorcycle vs. mountain bike because of trail grade and design. Since the trail grade would average 10% and have constant grade reversals motorized and non-motorized users speed would remain low resulting in reduced torque required to ride the trail. “Mountain bikers generate the greatest torque, with potential tread abrasion due to slippage, during uphill travel. However, the torque possible from muscle power is far less than that from a motorcycle, so wheel slippage and abrasion occur only on wet or loose surfaces. Tread impact associated with downhill travel is generally minimal due to the lack of torque and lower ground pressures. Exceptions include when riders brake hard enough to cause skidding, which displaces soil downslope, or bank at higher speeds around turns, which displaces soil to the outside of the turn. Impacts in flatter terrain are also generally minimal, except when soils are wet or uncompacted and rutting occurs” (Cressford 1995).

After the trail is constructed “trail users can push soil laterally, causing displacement and development of ruts, berms, or cupped treads. Soil displacement is particularly evident when soils are damp or loose and when users are moving at higher rates of speed, turning, braking or other movements that create more lateral force. Soil can also be caught in hooves, footwear or tire treads, flicked to the side or carried some distance and dropped. Regardless of the mechanism, soil is generally displaced from the tread center to the sides, elevating inslopes or berms and compounding drainage problems” (Marion 2007).

“Soil erosion is an indirect and largely avoidable impact of trails and trail use. To avoid erosion, sustainable trails are generally constructed with a slightly crowned (flat terrain) or outsloped (sloping terrain) tread. However, subsequent use compacts and/or displaces soils over time to create a cupped or insloped tread surface that intercepts and carries water. The concentrated runoff picks up and carries soil particles downhill, eroding the tread surface. Loose, uncompacted soil particles are most prone to soil erosion. Erosion potential is closely related to trail grade because water becomes substantially more erosive with increasing slope” (Marion 2007). “Erosion rates on trails with 0-6 percent and 7-15 percent grades were similar, while erosion on

trails with grades greater than 16 percent were significantly higher. And there were significantly greater erosion on fall line trails (alignment angles of 0-22 degrees) than those with alignments closer to the contour” (Marion 2006).

“Water and the sediment it carries will continue down the trail until a natural or constructed feature diverts it off the tread. Such features include a natural or constructed reversal in grade, an outsloped tread, rocks or tree roots, or constructed drainage dip or water bar. Once the water slows, it drops its sediment load, filling in tread drainage features and causing them to fail if not periodically maintained. Properly designed drainage features are designed to divert water from the trail at a speed sufficient to carry the sediment load well below the tread, where vegetation and organic litter can filter out sediments. A well designed trail should have little to no cumulative soil loss” (Marion 2007).

Therefore based on the Carbonate trail system that is constructed on similar soil types and design criteria described in the Proposed Action soil erosion would be reduced to negligible levels. Also since there are no switchbacks in the planned trail network users will not be tempted to shortcut the trail. Shortcutting trails often leads to soil erosion and vegetation damage. Any large scale precipitation event (depending on the climatic mechanisms) could dramatically increase the degree of runoff and subsequent erosion from the trail system.

Construction standards, bridges and grade reversals, designed for intermittent and perennial stream crossings could reduce direct and repeated impacts by bicycles, motorized vehicles, and other users. Some downstream sedimentation would be expected during trail and bridge construction and is likely to continue due to use and maintenance at crossings lacking bridges.

Rehabilitating the road in the west fork of Lambs Gulch, identified as “F” on Map 2, would discourage motorized vehicle traffic in this drainage and through the spring complex. Reduced use of this road by adopting the Lambs Gulch single-track trail that bypasses the springs would reduce rutting and sedimentation in the vicinity of the spring complex.

Discouraging use of trails when soils are wet could reduce impacts associated with soil displacement, channeling, and erosion associated with users riding around wet areas, resulting in increased trail width and soil compaction.

Vegetation including Special Status Plants: Direct and unavoidable impacts to vegetation would be removal of 7.24 acres of vegetation over the 14.9 miles of newly constructed trail corridor, resulting in fragmentation of intact vegetation stands. This estimate was obtained by multiplying the number of miles of new single-track trail by the average width of constructed disturbance, four feet. This disturbance area would decrease over time as vegetation is established on the backslope and outslope portions of the trail, resulting in a trail tread of 18-24 inches, “once on the trail, mountain bikers tend to have few impacts beyond the foot print of the trail itself” (Foti, 2006).

Trailside trampling within trail corridors also favors the replacement of fragile native plants with those more resistant to trampling traffic. In the project area, this vegetation is comprised of weedy species. While these plants may provide some durable groundcover that reduces soil loss

by wind and water runoff and root systems that stabilize soils against displacement by heavy traffic, these weedy taxa introduced in the trail corridor can spread to adjacent areas.

Full rehabilitation of existing roads and trails may take two or more growing seasons for plants to become established, depending on climatic conditions and level of subsequent disturbance. Once full rehabilitation is established 4.32 acres of existing roads and trails would consist of native plant materials. This estimate was obtained by combining the areas of existing single-track trails and two track roads that would be abandoned and rehabilitated under the Alternative. The area of single track rehabilitation was calculated by the average width of existing trail, two feet and area of two-track rehabilitation was calculated by multiplying the number of miles of two-track road by the average width of the roads to be abandoned, ten feet. Therefore the proposed project would result in a greater level of disturbed vegetation in the project area compared to the current situation during the first few years of the project, until rehabilitation is fully successful.

Indirect impacts to vegetation adjacent to and in the general area of the trails could result from regular use and maintenance including an increased risk of noxious and invasive weed encroachment and spread. Additional impacts include an increased risk of fire from cigarettes or motorized vehicles.

The expected increase in human use of the Rotarun trail systems associated with the proposed project could increase the chance for human caused wildfire in the area. However, the parking area has little to no vegetation, thereby reducing the chance of human caused wildfires starting in an area where users often congregate and socialize. Regular use and maintenance of the trail network would provide narrow breaks in the vegetation that could be used to help control wildfires.

A clearance for special status plants clearance was done in July 2007. It was determined that this project will not adversely impact any special status plant species or their habitat.

Riparian Areas: Construction standards, bridges and grade reversals, designed for intermittent and perennial stream crossings would reduce direct and repeated impacts on riparian vegetation by bicycles, motorized vehicles, and other users. Some vegetation would be removed by trail construction and bridge placement.

Rehabilitating the road in the west fork of Lambs Gulch, identified as "F" on Map 2, would discourage motorized vehicle traffic in this drainage and through the spring complex. Reduced use of this road by adopting the Lambs Gulch single-track trail that bypasses the springs would reduce impacts to the springs and associated riparian vegetation. Discontinuation of this use would allow for recovery of riparian vegetation associated with the springs.

Invasive-Non-Native Species

Trail construction activities and soil preparation for rehabilitation of targeted roads and trails would increase the chance for noxious and invasive weed spread due to soil disturbance and potential seed transport. The trail network would also provide a disturbed corridor that could facilitate weed establishment and seed transport. To avoid this, the trail system would require

regular monitoring for detection of noxious and invasive weeds and appropriate treatment through an integrated weed management plan.

Wildlife: As identified above, the proposed action would result in a slight increase of sagebrush habitat over existing conditions. Although some minor, short-term displacement of wildlife may occur as construction work is conducted, restoring identified routes through ripping and reseeded should benefit wildlife by improving foraging, nesting, and escape cover conditions. However, constructing 14.9 miles of trail and rehabilitating 6.66 miles of two-track road and trail increases the amount of linear features within the project area by 8.24 miles therefore increasing habitat fragmentation. Much of the fragmentation, 5.1 miles of trail, would occur within one mile of the Sage Springs subdivision and within the Wood River Recreation Area.

After initial trail construction “while most forms of trail impact are limited to a narrow trail corridor, disturbance of wildlife can extend considerably further into natural landscapes” (Kasworm & Monley, 1990; Tyser & Worley, 1992). “Different animals respond differently to the presence of trail users. Most wildlife species readily adapt or become “habituated” to consistent and non-threatening recreation activities. Those animals that do not become habituated display avoidance or displacement behaviors. Avoidance behavior is generally an innate response that is magnified by visitor behaviors perceived as threatening, such as loud sounds, off-trail travel, travel in the direction of wildlife and sudden movements” (Marion 2007).

According to a mountain biking and hiking study done at Antelope Island State Park in Utah “observations revealed that 70 percent of animals, Mule Deer and Antelope, located within 330 feet of a trail were likely to flee when a trail user passed, and that wildlife exhibited statistically similar responses to mountain biking and hiking. Wildlife reacted more strongly to off-trail recreationists, suggesting that visitors should stay on trails to reduce wildlife disturbance” (Taylor and Knight 2003).

“The most common interactions reported in literature reviewed, between nonmotorized trails and focal wildlife species were displacement and avoidance, which altered habitat use, and disturbance at a specific site. Also the interactions of the focal species and motorized or nonmotorized trails were quite similar” (William, 2003). “Mule Deer also show little measurable response between off-road treatments such as ATV’s, mountain biking, horseback or hikers” (Wisdom, 2004). “Therefore differing impacts to wildlife species and Mule Deer based on motorized or non-motorized designations is inconclusive. However, no matter what recreational activity, the most common reported interactions included displacement and avoidance where animals were reported as altering their use of habitats in response to roads or road networks” (William, 2003).

Therefore, it should be anticipated that Mule Deer habits would be influenced by trail users. However, since trail and trail use currently exists in Lambs Gulch, Wilson Gulch, Wood River Recreation Area, Democrat and Bullion roads, mule deer displacement beyond existing conditions is not expected. Some mule deer displacement relating to the northwest leg of Loop One and Loop Five should be expected.

Linear trails between 18-24 inches would not introduce new edges to the vegetation, changes in vegetation types. Therefore bird species like the Sage and Brewer's Sparrow that are affected by changes in vegetation borders would not be directly or indirectly affected.

Rehabilitating 1.4 acres of the ridgeline trail will likely improve winter Sage-grouse habitat conditions. As noted above, rehabilitating the road in the west fork of Lambs Gulch discourages motorized vehicle traffic through the spring complex. This should improve herbaceous riparian vegetation conditions around the springs and improve habitat conditions for a variety of wildlife that use such vegetation including Sage-grouse.

The trail system was designed to contour slopes and cross all drainages and riparian areas in a perpendicular fashion. This reduces potential impacts to aquatic resources and riparian vegetation that provide crucial foraging, nesting and brood rearing habitat for a variety of wildlife species. Providing educational materials and information regarding proper actions to take when wildlife are encountered would also help reduce impacts on wildlife.

A full clearance Special Status Animal Species Assessment was done in May 2007. It was determined that this project will not adversely impact any special status animal species or their habitat.

Livestock Grazing:

Most sheep bands are trailed through the allotments spending between one and five days in each allotment bedding down at night and in the afternoons. When sheep bed down they prefer relatively flat terrain. Since the majority of the trail network is on hill sides the chances of a trail user encountering a bedded down band of sheep is minimal. However sheep will cross the trails while being trailed through individual allotments. If a recreational trail user encounters sheep during this time conflict may occur. This could come in the form of startling the sheep causing stress and splitting the band into multiple units. However, when recreationists encounter sheep bands they often times encounter guard dogs as well. Guard dogs naturally try to protect the sheep and intimidate, chase or scare people or other animals that they perceive as threats. Sheep/recreationists encounters should be minimal since sheep bands are only in the area for approximately twenty one days in the spring and twenty five days in the fall and the season of use for the trails should be approximately 210 days/year.

When a hoofed animal like a horse or sheep cross roads or trails they tend to break up the hard pack tread surface of trails. The impact is intensified when a band of between 800-2,000 sheep cross a trail surface. Historical sheep trailing patterns would trail sheep perpendicular across portions of trail in the spring and fall resulting in impacted sections of trail tread that are less cohesive. This less cohesive soil then requires moisture to help reconsolidate the soil to a more hard pack condition. The trail tread could be impacted for several weeks depending on weather patterns that track through the region. Less cohesive soils, especially when intermittent from a compacted trail tread, changes the users experience and increases the technical skills required to enjoy the trail experience.

When cattle are in the Croy Creek Allotment they may also damage the trail tread. Cattle tend to contour hillsides therefore they may have a tendency to use the trail while grazing the allotment.

Impacts would vary based on season of year/soil moisture. If the cattle were in the allotment when soil moisture content was high they would leave more pronounced hoof imprints, due to their weight, than if the soil moisture content was low and more hard pan. Therefore, if imprints were made by cattle it would cause the trail to become rough, disrupting the continuity of a smooth trail tread and resulting in more technical riding experience for the average mountain biker.

Recreationists using the trail system may unintentionally push the cattle around the allotment. However, since this portion of the trail network, Loop Five, traverses fairly gentle topography the chance of pushing cattle up or down drainages or into riparian areas are low.

The western most portion of Loop Five comes to within .08 miles of an existing water trough in the Croy Allotment. The existing two-track road comes to within 0.1 miles of the existing water trough therefore because of similar distances use patterns are not anticipated to impact livestock operations.

Mineral Resources: Rehabilitating the road that passes by the mine, labeled F on Map 2, will discourage motorized access to the drainage and since the mine is abandoned rehabilitating the two-track road will not affect mining operations.

Availability of Access: For recreational users to access the Lambs Gulch trail or Wilson Gulch via Democrat Gulch they would be trespassing on private property. Therefore the private property owner has the right to stop people from accessing these trails. If this were the case the Lambs Gulch Trail would not be usable and users would not be able to access the trails in Wilson Gulch via the Democrat Gulch road. A non-motorized easement would be necessary prior to constructing or adopting these sections of trail.

Recreation: The proposed trail network would increase single-track opportunities that are in demand for residents of the Wood River Valley and Hailey by providing 18.8 miles of trail. These trails would also provide trail opportunities earlier in the spring and later in the fall when the Forest Service trail network is not usable due to wet soils and snow. The trail network would allow the BLM to provide opportunities and experiences derived from the Wood River Valley Lands Benefits Study for motorcyclists, mountain bikers, hikers and equestrian users to be close to nature and enjoy the scenery, while participating in their specific activity. This alternative also provides four loop trails for non-motorized users which directly addresses the desire for some segregated use between motorized and non-motorized groups.

The single-track sections of the trail are designed at an average grade of less than 10%. This grade is suitable for the average mountain biker and provides easy to moderate hiking. The trails could also be used by hunters traveling by foot or horseback however the trails would not provide opportunities for off-highway vehicles including ATV's.

Even though the land surrounding the designated non-motorized trails would retain the "Open" Off-Highway Vehicle category it would provide trail users some Backcountry Administrative setting. Administrative Backcountry setting is identified as, mountain bikes and perhaps other mechanized use, but all is non-motorized, see Natural Resource Settings matrix, Appendix 4.

This is because it is infrequent for a motorcycle, ATV or truck to travel where there is no evidence of a road or trail.

Hunters and recreationists that drive for pleasure may be displaced when roads identified for rehabilitation are decommissioned. However, all roads, with the exception of Lambs Gulch, identified for rehabilitation are dead end roads; therefore, access and travel to other roads and drainages would not be compromised.

Visual: The existing character of the landscape would be retained since most of the trail network would not be visible from the Croy Creek drainage. However, one portion of trail that would be visible from the Croy Creek road is in the vicinity of the Wood River Recreation Area. A trail contouring the landscape through this area would not dominate the view because of the existing roads and trails associated with the Wood River Recreation Area. The southwestern portion of Loop Two would be visible from the Sage Springs Subdivision. The landforms in this section of trail are foothills consisting of several drainages within view of the subdivision the trail would repeat the line and form of the existing landscape. This section of trail would be designed to incorporate topography resulting in partial views of the trail system from the subdivision. Therefore the linear feature of trail would not dominate the view of the casual observer.

Proposed trail construction standards include full bench trail design. This incorporates a backslope into the trail design, Appendix 2 Figure 1. The backslope may be visible until vegetation is established. This will take between two and five growing seasons decreasing visual impacts over time.

Economic and Social Values: Social benefits increase due to legal access to trail opportunities available to community residents and visitors. The trail network would allow individual or group recreation experience and would provide trail opportunities for the intermediate mountain bike rider, hiker, trail runner, equestrian or motorcycle rider. The trail network would directly impact surrounding homeowners by providing them the opportunity to access a trail network close to their residence. Other impacts would be increased traffic along the county road. Traffic would consist of pedestrian traffic, primarily mountain bikers, along the county road and vehicles used to access the trailhead at the Wood River Recreation Area and Sage Springs Subdivision.

Since all trails behind the Sage Springs subdivision would be designated non-motorized this would eliminate noise emitted from motorized users to the four residents within the subdivision.

The trail network would indirectly affect the local economy by increasing revenue for the eleven local mountain bike shops, four motorcycle shops and several outdoor retail outlets. Economic benefits include: positive contributions to local-regional economic stability, increased local job opportunities, and increased desirability as a place to live or retire. These economic benefits were derived from individuals that participated in the Wood River Valley Lands Benefits Study.

Private land continues to be developed for home sites in the Croy Creek drainage and the population of Hailey continues to grow along with the Wood River Valley. This growth in population increases pressure on public lands managers to provide recreation opportunities.

Developing recreation opportunities allows for more direct management to balance resource protection with increased development and recreational demand.

Alternative II Impacts: Only impacts that differ from the Preferred Alternative will be discussed.

Availability of Access: For recreational users to access the Lambs Gulch trail or Wilson Gulch via Democrat Gulch they would be trespassing on private property. Therefore the private property owner has the right to stop people from accessing these trails. If this were the case the Lambs Gulch Trail would not be usable and users would not be able to access the trails in Wilson Gulch via the Democrat Gulch road. A motorized easement would be necessary prior to constructing or adopting these sections of trail.

Recreation: The proposed trail network would increase single-track opportunities that are in demand for residents of the Wood River Valley and Hailey by providing 18.8 miles of trail. These trails would also provide trail opportunities earlier in the spring and later in the fall when the Forest Service trail network is not usable due to increased moisture and snow. The trail network would allow the BLM to provide opportunities and experiences derived from the Wood River Valley Lands Benefits Study for motorcyclists, mountain bikers, hikers and equestrian users to be close to nature and enjoy the scenery, while participating in their specific activity. The single-track sections of the trail are designed at an average grade of less than 10%. This grade is suitable for the average mountain biker and provides easy to moderate hiking. The trails could also be used by big game hunters traveling by foot or horseback however the trails would not provide opportunities for off-highway vehicles including ATV's.

Providing three segments of trails for non-motorized use partially addresses the demand for non-motorized trails. It only partially addresses the demand because there would not be any non-motorized loops but there would be a non-motorized access to the trail network through Sage Springs subdivision. This would allow non-motorized users to access the trail network and not have to commingle with motorized users at the Wood River Recreation Area.

Hunters and recreationists that drive for pleasure may be displaced when roads identified for rehabilitation are decommissioned. However all roads identified for rehabilitation are dead end roads therefore access to other roads and drainages would not be compromised.

All Alternatives including the No-Action retains the Middle and Front-Country Physical and Administrative Settings identified in the Affected Environment.

Economic and Social Values: Only the most direct route from Democrat Gulch to the Wood River Recreation Area within Wilson Gulch would be open to motorized use. This directly reduces the amount of time motorized users are in the area emitting noise that can be heard by four homeowners within the subdivision.

Impacts of Alternative III – No Action:

Soils: Soils would not be impacted since the trail network would not be built. However, existing roads and trails that were identified for rehabilitation would continue to erode at an accelerated rate based on their fall-line layout.

Vegetation: Vegetation would not be impacted since the trail network would not be built. However impacts would still occur in conjunction with existing roads and improperly-constructed user-created trails. Roads and trails identified as B, F and G on Map 2 would continue to exist in drainage bottoms. Specifically the road in the west fork of Lambs Gulch would continue to be used by motorized and non-motorized users impacting the existing spring complex. This would result in continued degraded condition of the riparian vegetation associated with the springs.

Wildlife: Wildlife would continue to be displaced and avoid areas where motorized and nonmotorized recreationists impact their habitat. Without an established trailhead area and kiosk there would not be on-site information regarding proper etiquette when encountering wildlife.

Roads and trails would not be rehabilitated. Therefore the condition and amount of native vegetation available to wildlife would remain as it is currently. Additionally roads and trails identified as B, F and G on Map 2 would continue to exist in drainage bottoms. Specifically, the road in the west fork of Lambs Gulch would continue to be used by motorized and non-motorized users impacting the existing spring complex. This would degrade the herbaceous riparian vegetation conditions around the springs and decrease habitat conditions for a variety of wildlife that use such vegetation including Sage-grouse. Rehabilitating 1.4 acres of the ridgeline trail, D, would not occur therefore not improving winter Sage-grouse habitat conditions.

Livestock Grazing: Impacts to livestock would be similar to the action alternatives because motorized and non-motorized recreation currently takes place on existing roads and trails within the allotments. However, since Loop Five would also not be constructed, recreationists would not affect livestock operations in the vicinity of the existing water trough in the Croy Creek Allotment.

Availability of Access: Not providing an established trail network may increase the amount of trespassing on private land. This is currently happening where user created trails cross private property to access BLM or State land. It would also now allow the BLM to proactively work with private landowners identifying appropriate locations to cross private property.

Recreation: This alternative does not allow the BLM to provide single-track trail opportunities nor experiences and beneficial outcomes identified through the Wood River Valley Benefits Study. Increasing user created trails on public and private land may increase tension regarding access and impacts on the private/public land interface.

Visual Resources: Since no new trails would be constructed, visual changes to the landscape would not occur. However, if user created trails continue to be constructed and are not designed

to incorporate topography the linear features of a trail may dominate the view of the casual observer and be difficult and expensive to rehabilitate to their native state.

Economic and Social Values: Not constructing the trail network may indirectly affect the local economy by not increasing revenue for the eleven local mountain bike shops, four motorcycle shops and several outdoor retail outlets. These economic benefits include: positive contributions to local-regional economic stability, increased local job opportunities, and increased desirability as a place to live or retire. These economic benefits were derived from individuals that participated in the Wood River Valley Lands Benefits Study.

Motorcycles would continue to use the existing route between Democrat Gulch and the Wood River Recreation Area. Therefore homeowners in the Sage Spring subdivision would continue to be exposed to noise emitted from motorcycles.

Private land would continue to be developed in the Croy Creek drainage and the population of Hailey would continue to grow along with the Wood River Valley. This growth in population would continue to increase pressure on public lands managers to provide recreation opportunities. If user-created trails continue to be established, they may have direct impact on housing developments and existing homeowners.

Cumulative Impacts

The effects analyzed in the cumulative effects section apply to all alternatives, including the No-Action Alternative. “Cumulative impacts” are those impacts resulting from the incremental impact of an action when added to other past, present, or reasonably foreseeable actions. These impacts can result from individually minor but collectively important actions taking place over a period of time. When considering cumulative impacts, two major issues were considered. The first was defining the geographic area of potential impacts. This can and usually does vary for each resource considered. The second issue is determining what past, present, and future actions are relevant to the analysis.

The following is a list of past, present and reasonable foreseeable projects within the Croy Creek drainage.

Past projects:

Animal Shelter of Wood River Valley

- Opened in 1982 on five acres of land located at the mouth of Vorberg Gulch, approximately two miles west of Hailey on the north side of the Croy Canyon road.

Construction of Rotarun ski area approximately two miles west of Hailey

- Hailey’s local ski hill consisting of a poma lift and rope tow was constructed in 1959.

BMX Track

- A BMX track was constructed in the mid 1990’s on approximately one acre of land adjacent to the Wood River Recreation Area. The track is a gated facility and used by club members periodically throughout the summer months.

Subdivision developments within Croy Creek drainage

- There are approximately 140 platted lots, this includes the recently approved Croy Creek Ranch subdivision. Lots in the Croy creek drainage range from 5-40 acres. Lots began to be developed in the mid 1980's and early 1990's.

Present and reasonably foreseeable projects:

Subdivision Developments within the Croy Creek drainage include:

- Proposal has been submitted to the Blaine County Planning and Zoning for 15 lots approximately one mile from Hailey, south of the Croy Creek road and west of the existing animal shelter. Currently the area is zoned for five acre lots.

Blaine County Cooperative Conservation Recreation and Travel Plan

- Within the Wood River Valley identify Special Recreation Management Areas and designate roads and trails.
- The Blaine County Commissioners will make a formal proposal to the BLM Shoshone Field Office in the spring of 2007. This proposal will then be addressed by the BLM through the appropriate NEPA analysis.
- The planning effort overlaps BLM, State, County and private lands.
- Motorized connect ability on single-track trails from Loop Five to the Wolfstone/Camp Creek saddle. This would allow users to access the Sawtooth National Forest trail network from the Wood River Recreation Area.
- Development of a motorized/mechanized skill development area and trailhead at the Wood River Recreation Area. This includes rehabilitation of unsustainable and unnecessary routes.

USFS Sawtooth National Forest Travel Plan

- Designate roads and trails on Forest Service land identified as "G" areas on the Ketchum and Fairfield District maps. Some of the roads and trails identified overlap onto BLM land. However none of these roads or trails being analyzed by the USFS exists in the project area.
- The Sawtooth National Forest is currently conducting the NEPA analysis.

BLM Livestock Permit Renewals for the following allotments within the Croy Creek drainage:

- Deer Creek Allotment, Croy Creek, Bullion Gulch, and Rotarun.
- The decision will determine the renewal of grazing permits based on scheduled Fundamentals of Rangeland Health field review. Depending upon the findings of these assessments, the authorized officer may take appropriate action to achieve conformance with the standards. If the allotment(s) are meeting rangeland health standards, it is likely that current management would continue.

Rinker Land Exchange

- The exchange proposal was approved by the BLM Washington Office in November 2006. The estimated time to complete a land tenure adjustment proposal is 3-5 years.

- The primary purposes for acquisition of the non-Federal lands are to consolidate Federal land holdings, create more effective and manageable boundaries, protect wildlife habitat and migration routes from development and fragmentation, acquire riparian habitat, and obtain legal public access to adjacent public lands within the Rock Creek, Timber Gulch, and Greenhorn Gulch areas.

The non-Federal lands contain prime habitat for Sage-grouse, including active leks. A major deer migration route would also be acquired, as well as, wildlife habitat, especially wintering habitat. Lands adjacent to springs (water right claims), withdrawn under PWR 107, would also be acquired. Under PWR 107, BLM withdrew the springs, and where possible, a quarter-mile buffer around each spring. This exchange will allow the BLM to provide a quarter-mile-plus buffer around several of these springs. Public access also plays an important role in this exchange since most of the main access routes to adjacent public lands cross the private property owned by Mr. Rinker. The non-Federal lands also contain a portion of the Goodales Cutoff, an offshoot of the Oregon Trail.

The proposed exchange would result in the disposal of Federal land and mineral interests that are difficult to manage because of the intermingled non-Federal lands owned by Mr. Rinker. These parcels would be transferred into private ownership and become part of the Blaine County tax base. A main priority of the proposal is to create more effective property boundaries between the public and privately owned land in all the affected areas, which will serve to enhance management effectiveness.

Central Idaho Economic Development and Recreation Act (CIEDRA)

- If CIEDRA is signed into law forty acres of land located in the Township 2 N, Range 17 E, SWSE of section 26 would be transferred to Blaine County for economic and future sustainability.

Reasonably Foreseeable Action Scenario (RFAS)

This section analyzes resource management and development actions planned or projected to occur. Projections, which have been developed for analytical purposes only, are based on current conditions and trends and represent a best professional estimate for reasonably foreseeable future actions. Unforeseen changes in such factors as economics, demand, and Federal, State and local laws and policies could result in different outcomes than those projected for this analysis.

The proposed action would allow the construction and use of trails in the foothills north of Croy canyon. Use would occur in the spring, summer and fall with approximately 3,000 visitors per year. Visitor use would probably increase over time however use patterns would remain constant because of the designated trail system.

In the Blaine County Recreation District plan it identifies a possible trail in the Croy Creek drainage and in the Blaine County Code it also discusses a plan to serve the recreation, parks and open space needs for residents and visitors over the next twenty (20) years. Based on this information and the fact that the BLM is working with the Blaine County Commissioners on a

Cooperative Conservation Recreation and Travel Plan where specific areas within Croy Creek and the Wood River Valley will be identified where recreation and trails will be promoted and where they will not be promoted. Off-Highway-Vehicle Area Designations will also be addressed by identifying areas as: Open, Limited to designated roads and trails or Closed. All areas and designations will consider other demands on natural resources such as wildlife and historical uses.

It has been identified through scoping for the Recreation and Travel plan that a motorized single-track trail be constructed that would connect the Wood River Recreation Area and the Sawtooth National Forest trail system in the Deer Creek drainage. The BLM is also partnering with Big Wood Backcountry Trails and Blaine County to redesign the roads and trails within the Wood River Recreation Area. The current proposal is to design a motorized/mechanized skill development area and trailhead. This design would incorporate existing trails that are sustainable and close and/or rehabilitate roads and trails that are not sustainable.

Monitoring deer migration and Sage-grouse activity within the Croy and Rock Creek drainages will continue with Idaho Department of Fish and Game. Trail and soil conditions will also be monitored for signs of erosion. This monitoring data will influence management decisions so improvements can be made in the future to ensure that wildlife and watershed goals and objectives are being met.

“We suggest that managers use an adaptive management approach to address wildlife and recreation interactions because of the complexity and uncertainty of these issues. Monitoring that is well thought out can be used to validate the assumptions of the cumulative effects models developed in this assessment, and to gain a better understanding of the interactions between wildlife and recreation. The use of adaptive management allows managers to acknowledge uncertainties and information gaps but still move forward with project design and implementation. To implement an adaptive approach, researchers and managers will have to work closely together. But by learning as we go, through the use of monitoring for adaptive management, we will have a higher probability of accomplishing the mutual objectives of providing a highly effective wildlife habitat and offering recreation opportunities” (William, 2003).

As applications for subdivision developments are analyzed through Blaine County Planning and Zoning and approved through the Blaine County Commissioners they will be required to meet Blaine County Code Section 10. Section 10 under Wildlife states: “Mule Deer occupy high mountain terrain during the summer and migrate to lower elevations during the winter. Migration movements fall under two general classifications; those animals that winter in upper valley areas, and those which make a major migration into southern desert areas of the county. Disruption of these routes by development forces animals into less favorable wintering areas and reduces summer populations. Migration routes and wintering areas should be protected by restriction of development in such areas.”

Cumulative Impacts Analysis:

Alternative I & II

The proposed action in conjunction with past, present and reasonably foreseeable impacts would have negligible impacts on water resources, and livestock management because all impacts relating to these resources would not extend beyond the project site and past, present and reasonably foreseeable future actions identified would not impact the resources related to the trail network.

Soils & Vegetation: Past, present, and future development and uses, including residential development, recreational use and livestock grazing, in Croy Creek drainage have and would continue to result in an increasing level of fragmentation on native vegetation communities. The proposed project could contribute to this fragmentation and thus increase the vulnerability of plant communities within the drainage and the Big Wood watershed as a whole to degradation by invasive and noxious weeds. Increased human presence in the drainage prohibits some natural disturbances, such as fire, that would normally play an important role in the health and maintenance of the plant communities that occur in the area. Since this results in accumulations of fuels, increased human presence could also contribute to a greater potential for wildfires that would impact natural and human resources.

Developing a skill development area at the Wood River Recreation area would provide users a location to improve riding skills and abilities. “There is no question that riders who cannot control their bikes are more damaging to the environment than riders who are in control” (Foti 2006).

Wildlife: The area of concern ranges from the Deer Creek drainage to south of Croy Creek and into the Rock Creek drainage. By designating a trail system, the number of off-road incidences and the number of miles of roads and trails open to motorized use would be reduced. Additionally, trail and road designation within the project area, combined with similar road and trail designations throughout Blaine County would be expected to benefit most regional wildlife populations. Reduced levels of disturbance, and an increasing quality and quantity of cover and forage along rested and rehabilitated trails throughout this larger area, should increase winter survival, enhance breeding success and survival of young, and generally enhance the vigor and productivity of most wildlife populations.

Specific species to discuss are Sage-grouse and Mule Deer. The past actions identified do not appear to have a direct correlation with the reduction of Sage-grouse lek activity. There is insufficient data to make an absolute conclusion; however, from available data, the amount and frequency of Sage-grouse lek activity declined prior to much of the subdivision and recreation development in the Croy Creek drainage. The one lek within the project area and the two leks adjacent to the project area are currently listed as inactive. Sage grouse do not use agricultural fields for nesting and brood rearing, therefore if agricultural fields in the Croy Creek drainage are developed, nesting and brood rearing habitat would not be compromised. However, if development of private land does convert sage brush vegetation to housing and landscaping, this would reduce the number of acres that are available for brood rearing and nesting. Thus, it has been determined that cumulative impacts on Sage-grouse would be negligible as a result of the proposed actions or alternatives.

Past and present actions have influenced mule deer migratory routes. Subdivision development within Croy Creek drainage continues to define migration corridors through the drainage. There are three key areas that deer migrate through Croy Creek: just east of the animal shelter, just before the Bullion drainage and west of Richardson Summit in Camp creek. Existing roads and trails do not provide a physical barrier to their migration and the proposed trails also would not provide a physical barrier. Deer also tend to migrate through this area during the evening or night when use of the trails would be low or most likely not at all. Migration corridors have been and are addressed in present and future subdivision approvals through the Blaine County Planning and Zoning and Blaine County Code. This will help to ensure migration corridors are not compromised. Therefore it has been determined that cumulative impacts on mule deer would be negligible as a result of the proposed actions or alternatives.

As native vegetation is converted to home sites and landscaping there may be cumulative impacts on species that are potentially influenced by increased edge effects, such as sparrows (William, 2003). The effects of habitat fragmentation are difficult to quantify and the cumulative effects over large geographic areas of shrub steppe have not been estimated (Knick et al. 2003). However, site-specific studies have documented the effects on wildlife species; thus, monitoring should be established to determine to what degree increased edge effects have on wildlife species.

Recreation: Increased visitation could result in shifting the social setting from Middle-Country to Front-Country, Appendix 4. Social prescriptions will be established in the Cooperative Conservation Recreation and Travel Plan. If it is determined through monitoring that the social prescriptions are not being met administrative management controls could be established to ensure users are not displaced from having their recreation experience incrementally changed. The list of developments would not change the physical setting, Appendix 4. Therefore it has been determined that cumulative impacts on the identified experiences and the physical setting would be negligible.

Constructing a single-track trail from Loop Five to the Wolfstone/Camp Creek saddle would connect trail users to the existing Sawtooth National Forest trail network that consists of several hundred miles of motorized and non-motorized designated trails. This trail would address demand identified in the Wood River Lands Benefits Study allowing users to leave the Wood River Recreation Area and access the Deer Creek drainage without trespassing through private property.

Economic and Social Values: Providing the identified trail opportunities in the Hailey area reduces the amount of vehicle traffic on Highway 75 from recreationists having to travel by automobile to trail systems located in Greenhorn Gulch, Adams Gulch and Lake Creek. As the population of Hailey increases it also provides trail opportunities that can be accessed from town. Therefore children and adults would be able to access the trails without the use of an automobile.

“History teaches us that the best stewards of wildlands are those who come to value them from first hand experience and responsible use. Everyone who rides a mountain bike can make a positive difference for the future and reinforce the foundations of environmental stewardship by respecting other uses, by riding responsibly and staying on trails” (Foti, 2006). Therefore

cumulative impacts from the trail system could be beneficial to all wildlands within the Wood River Valley and beyond.

Alternative III- No Action:

Present and future development within the Croy Creek drainage would continue to happen. Therefore demand for recreation opportunities will continue to increase. Not providing opportunities for recreation will encourage residents to hike and bike cross country. Overtime this would result in user-created trail systems.

Soils and Vegetation: Based on past and present development of the Croy Creek drainage and the City of Hailey demand for recreation opportunities has increased over time. Therefore future development will continue to bring with it an increasing amount of demand for recreation opportunities and based on current trends that demand would result in unsustainable user-created trails accelerating soil erosion rates and fragmenting existing stands of vegetation.

Wildlife: Not providing a managed trail system encourages users to hike and bike cross country/off-trail incrementally resulting in user-created trails. Therefore, according to Marion (2007) this would also increase avoidance and displacement behavior by wildlife. Wildlife species that can become habituated to trail users and non-threatening recreation activities may be impacted more if the majority of human presence is not limited to established trail corridors.

Recreation: Not providing recreation opportunities does not allow the BLM to address the demand for single-track trail opportunities nor experiences and beneficial outcomes identified through the Wood River Valley Benefits Study. The segment of population that participates in trail based recreation will increase along with the population of the Wood River Valley resulting in an increasing demand and limited supply for hikers, mountain bikers and motorcycle riders. Increasing user created trails on public and private land may increase tension regarding access and impacts on the private/public land interface.

Economic and Social Values:

Not constructing the trail network may cumulatively affect the local economy by not increasing revenue for the eleven local mountain bike shops, four motorcycle shops and several outdoor retail outlets. These economic benefits include: positive contributions to local-regional economic stability, increased local job opportunities, and increased desirability as a place to live or retire. These economic benefits were derived from individuals that participated in the Wood River Valley Lands Benefits Study.

Motorcycles would continue to use all existing routes in the area impacting existing and future homeowners in the Croy Creek drainage. Impacts consist of noise emitted from motorized use.

Private land would continue to be developed in the Croy Creek drainage and the population of Hailey would continue to grow along with the Wood River Valley. This growth in population would continue to increase pressure on public lands managers to provide recreation opportunities. If user-created trails continue to be established, they may have direct impact on housing developments and existing homeowners.

Not providing the identified trail opportunities in the Hailey area may increase the amount of vehicle traffic on Highway 75 from recreationists having to travel by automobile to trail systems located in Greenhorn Gulch, Adams Gulch and Lake Creek. As the population of Hailey increases trail based recreation opportunities that can be accessed from town would remain constant. Therefore children and adults would not be able to access the trails without the use of an automobile.

CONSULTATION AND COORDINATION

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Blaine County Commissioners
Blaine County Planning and Zoning
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This Environmental Assessment was posted on the Idaho NEPA website, <http://www.blm.gov/id/st/en/info/nepa.html>. A letter was sent to interested parties notifying them that the predecisional EA could be reviewed online or they could request a hardcopy by contacting the Shoshone Field Office. The comment period would be open for thirty days.

Literature Cited

Bjorkman, A. W. (1996). Off-road Bicycle and Hiking Trail User Interactions: A Report to the Wisconsin natural Resources Board. Wisconsin, Wisconsin Natural Resources Bureau of Research.

Cressford G. R. (1995). Off-road impacts of mountain bikes: a review and discussion Off-Road Impacts of Mountain Bikes: A Review and Discussion Science & Research Series No. 92. Wellington, NZ, Department of Conservation. pp: 42-70.

Foti, P., White, D., Brodehl, G., Waskey, T., Brown, E. (2006) *Planning and Managing Environmentally Friendly Mountain Bike Trails*.

IDPR (Idaho Department of Parks and Recreation). 2005a. Idaho motorbike/ATV registration statistics 2001-2005. 1 pg. available at:
www.idahoparks.org/assets/content/docs/05ATV%20Presentation.pdf

Kasworm, W. F. and T. L. Monley (1990). Road and trail influences on grizzly bears and black bears in northwest Montana. Bears: Their Biology and Management: Proceedings of the 8th International Conference, Victoria, B.C., International Association for Bear Research and Management.

Marion, Jeff and Wimpey, Jeremy. International Mountain Biking Association (2007), *Managing Mountain Biking IMBA's Guide to providing Great Riding*.

Marion, J. L. (2006). Assessing and understanding Trail Degradation: Results from Big South Fork National River and Recreation Area. USDI, National Park Service.

Taylor, A. R. and R. L. Knight (2003). Wildlife Responses to Recreation and Associated Visitor Perceptions. Ecological Applications 13 4: 12.

Webber, Peter. International Mountain Biking Association (2004), *Trail Solutions, IMBA's Guide to Building Sweet Singletrack*

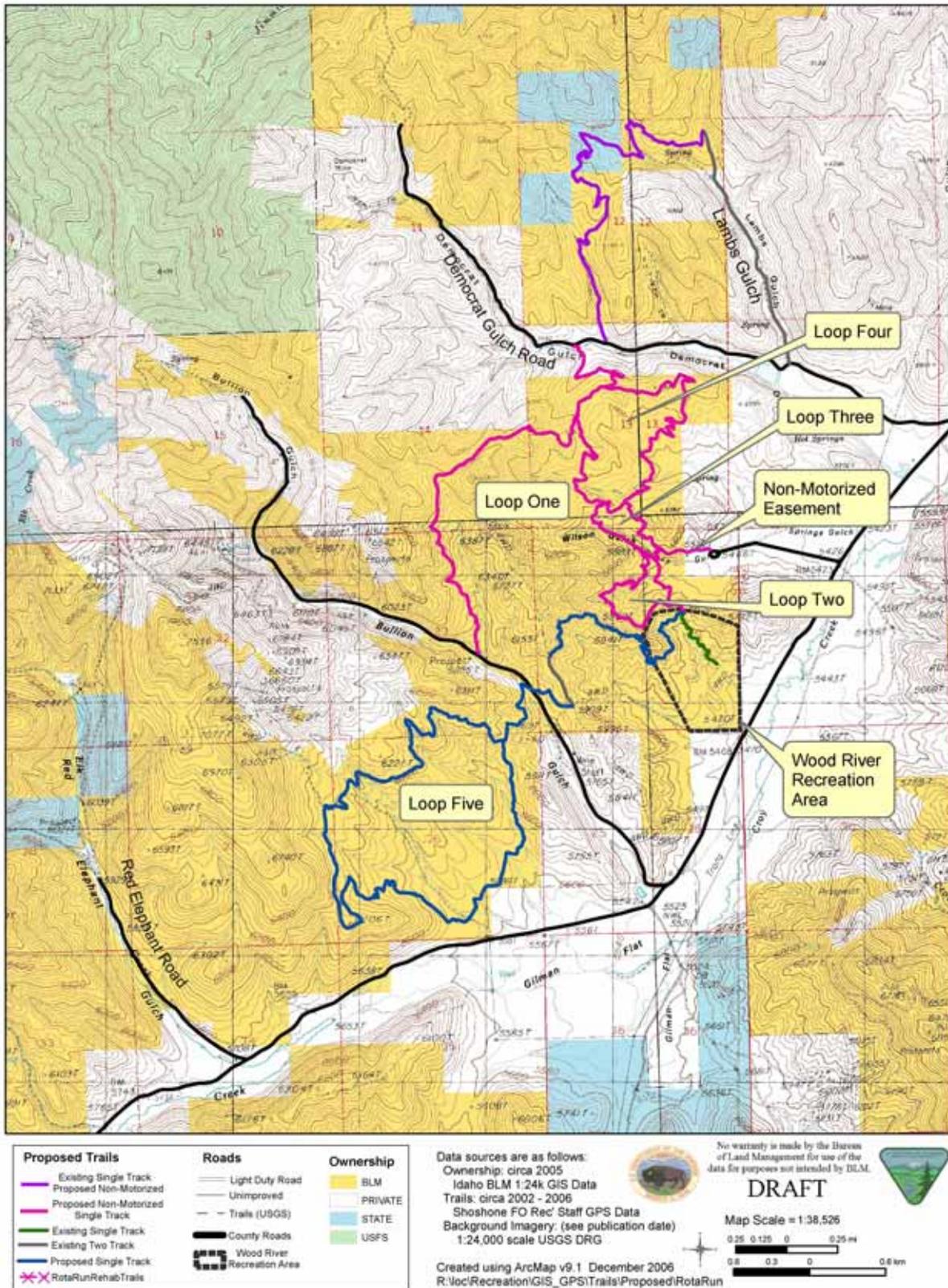
William L. Gaines, Peter H. Singleton, and Roger C. Ross. Assessing the Cumulative Effects of Linear Recreation Routes on Wildlife Habitats on the Okanogan and Wenatchee National Forests. United States Department of Agriculture, Forest Service, Pacific Northwest Research Station General, Technical Report PNW-GTR-586, November 2003

Wisdom, M. J., H. K. Preisler, N. J. Cimon, 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: in press.

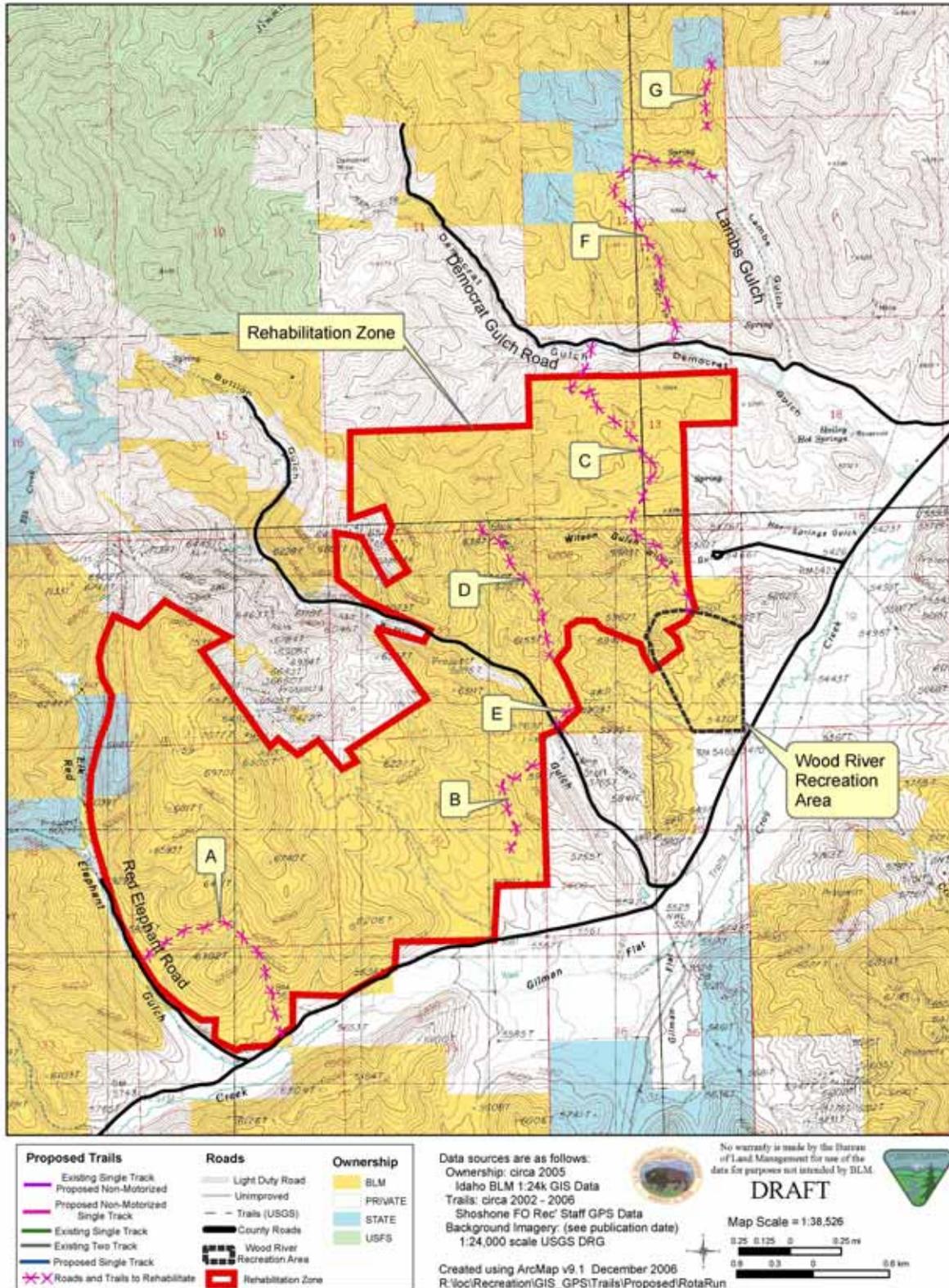
Appendix 1:

Maps

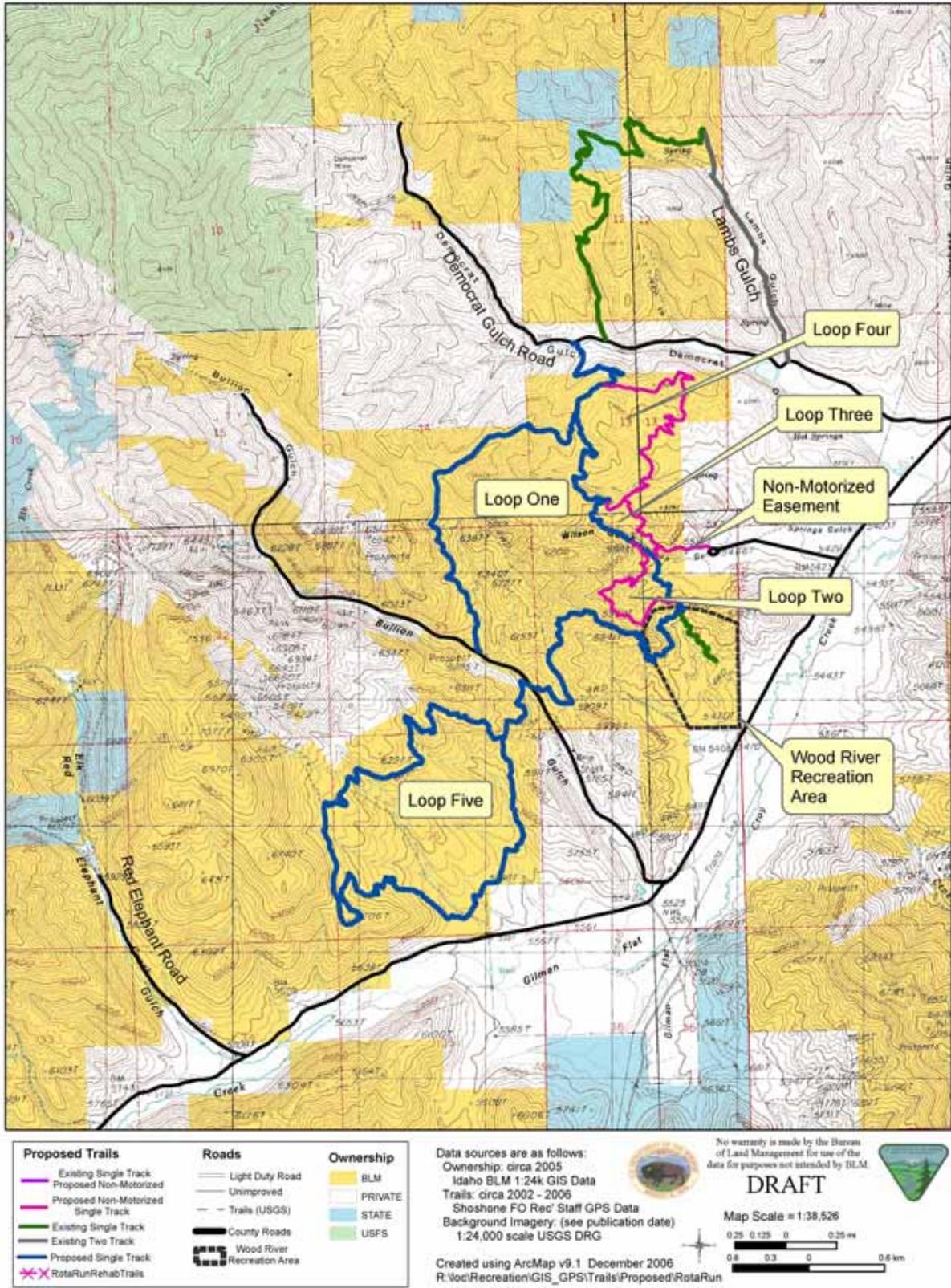
Proposed Rotarun Trail Network (Alternative 1) Map One



Proposed Rotarun Trail Network Map Two



Proposed Rotarun Trail Network (Alternative 2) Map Three



Appendix 2: Figures

Figure 1 (Used with the permission of the International Mountain Bicycling Association)

Full Bench Trail

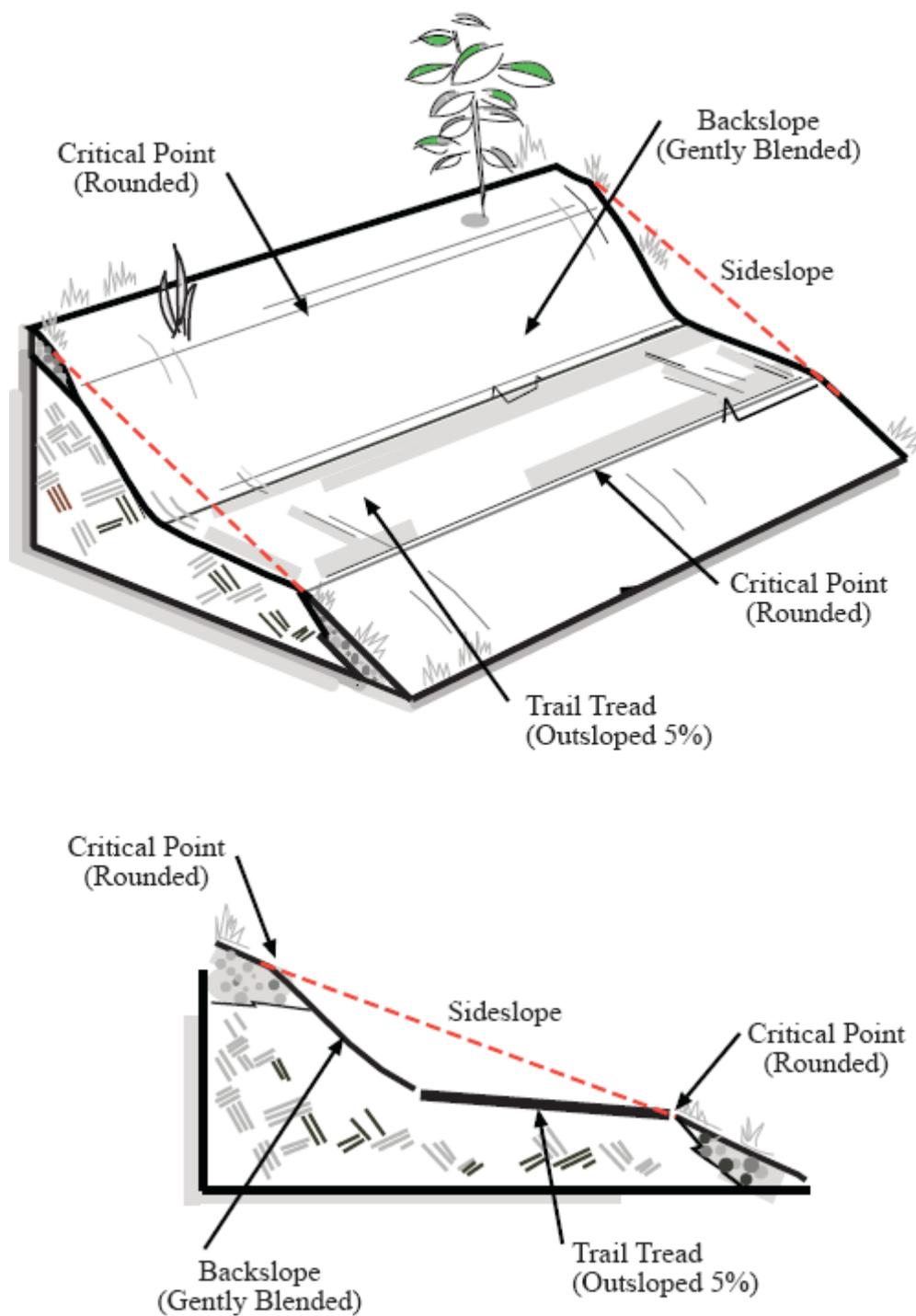


Figure 2 (Used with the permission of the International Mountain Bicycling Association)

Rolling Grade Dip

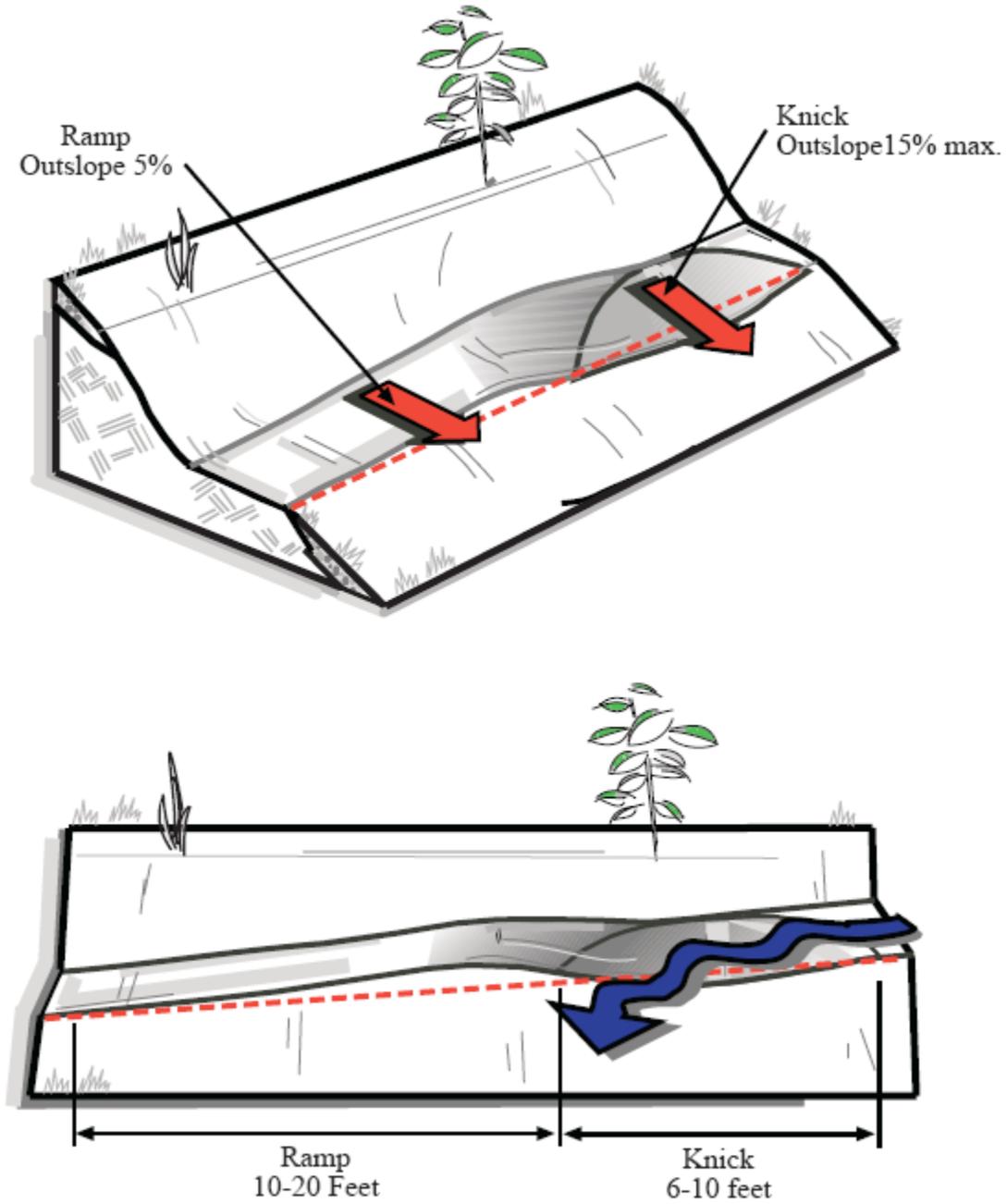
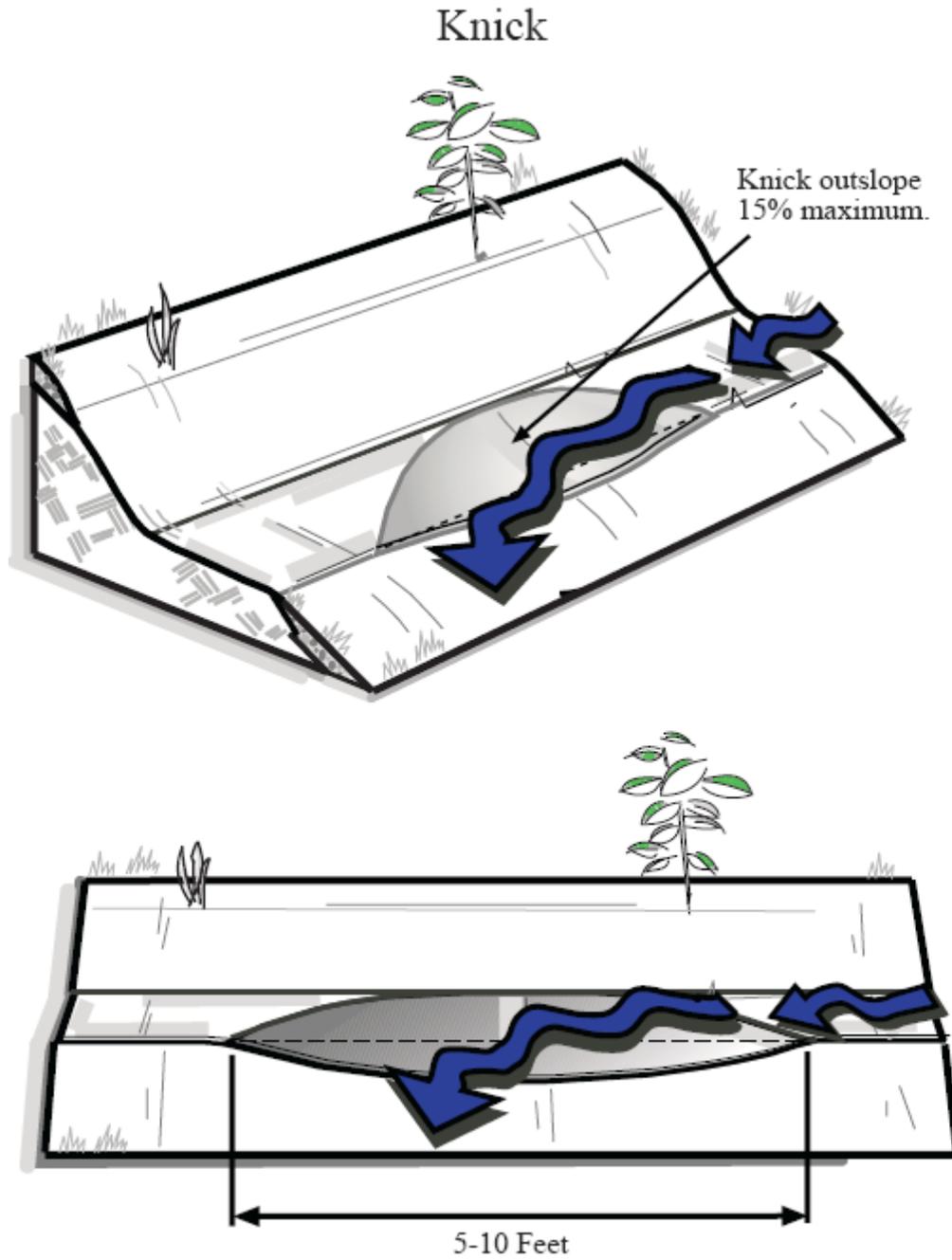


Figure 3 (Used with the permission of the International Mountain Bicycling Association)



International Mountain Bicycling Association's Rules of the Trail

[Source: <http://www.imba.com/>]

The way we ride today shapes mountain bike trail access tomorrow. Do your part to preserve and enhance our sport's access and image by observing the following rules of the trail, formulated by IMBA, the International Mountain Bicycling Association. These rules are recognized around the world as the standard code of conduct for mountain bikers. IMBA's mission is to promote mountain bicycling that is environmentally sound and socially responsible.

1. Ride On Open Trails Only.

Respect trail and road closures (ask if uncertain); avoid trespassing on private land; obtain permits or other authorization as may be required. Federal and state Wilderness areas are closed to cycling. The way you ride will influence trail management decisions and policies.

2. Leave No Trace.

Be sensitive to the dirt beneath you. Recognize different types of soils and trail construction; practice low-impact cycling.

Wet and muddy trails are more vulnerable to damage. When the trailbed is soft, consider other riding options. This also means staying on existing trails and not creating new ones. Don't cut switchbacks. Be sure to pack out at least as much as you pack in.

3. Control Your Bicycle!

Inattention for even a second can cause problems. Obey all bicycle speed regulations and recommendations.

4. Always Yield Trail.

Let your fellow trail users know you're coming. A friendly greeting or bell is considerate and works well; don't startle others. Show your respect when passing by slowing to a walking pace or even stopping. Anticipate other trail users around corners or in blind spots. Yielding means slow down, establish communication, be prepared to stop if necessary and pass safely.

5. Never Scare Animals.

All animals are startled by an unannounced approach, a sudden movement, or a loud noise. This can be dangerous for you, others, and the animals. Give animals extra room and time to adjust to you. When passing horses use special care and follow directions from the horseback riders (ask if uncertain). Running cattle and disturbing wildlife is a serious offense. Leave gates as you found them, or as marked.

6. Plan Ahead. Know your equipment, your ability, and the area in which you are riding – and prepare accordingly. Be self-sufficient at all times, keep your equipment in good repair, and carry necessary supplies for changes in weather or other conditions. A well-executed trip is a satisfaction to you and not a burden to others. Always wear a helmet and appropriate safety gear.

Keep trails open by setting a good example of environmentally sound and socially responsible off-road cycling

Appendix 4: NATURAL RESOURCE RECREATION SETTINGS MATRIX
Criteria for Classification and Prescriptions

PHYSICAL - LAND & FACILITIES: character of the natural landscape

	<i>Primitive</i>		<i>Back Country</i>	<i>Middle Country</i>	<i>Front Country</i>	<i>Rural</i>	<i>Urban</i>
	<i>Pristine</i>	<i>Transition</i>					
a. Remoteness:	More than 10 miles from any road	More than 3 miles from any road	More than ½ mile from any kind of road, but not as distant as 3 miles, and no road is in sight	On or near four-wheel drive roads, but at least ½ mile from all improved roads, though they may be in sight	On or near improved gravel roads, but at least ½ mile from highways	On or near paved primary highways, but still within a rural area	Municipal street and roads within towns or cities
b. Naturalness:	Undisturbed natural landscape		Naturally-appearing landscape having modifications not readily noticeable	Naturally-appearing landscape except for obvious primitive roads	Landscape partially modified by roads, utility lines, etc., but none overpower natural landscape features	Natural landscape substantially modified by agriculture or industrial development	Urbanized developments dominate landscape
c. Facilities:	None		Some primitive trails made of native materials such as log bridges and carved wooden signs	Maintained and marked trails, simple trailhead developments, improved signs, and very basic toilets	Improved yet modest, rustic facilities such as campsites, restrooms, trails, and interpretive signs	Modern facilities such as campgrounds, group shelters, boat launches, and occasional exhibits	Elaborate full-service facilities such as laundry, restaurants, and groceries.

SOCIAL - VISITOR USE & USERS: character of recreation-tourism use

	<i>Primitive</i>	<i>Back Country</i>	<i>Middle Country</i>	<i>Front Country</i>	<i>Rural</i>	<i>Urban</i>
d. Contacts (with other groups):	Fewer than 3 encounters/day at camp sites and fewer than 6 encounters/day on travel routes	3-6 encounters/day off travel routes (e.g., campsites) and 7-15 encounters/day on travel routes	7-14 encounters/day off travel routes (e.g., staging areas) and 15-29 encounters/day en route	15-29 encounters/day off travel routes (e.g., campgrounds) and 30 or more encounters/day in route	People seem to be generally everywhere.	Busy place with other people constantly in view.
e. Group Size (other than your own):	Fewer than or equal to 3 people per group	4-6 people per group	7-12 people per group	13-25 people per group	26-50 people per group	Greater than 50 people per group
f. Evidence of Use:	Only footprints observed. No noise or litter.	Footprints and bicycle tracks observed. Noise and litter infrequent. Slight vegetation trampling at campsites and popular areas. Fire rings seen.	Vehicle tracks observed. Occasional noise and litter. Vegetation and soils becoming worn at campsites and at high-use areas.	Vehicle tracks common. Some noise and litter. Vegetation and soils commonly worn at campsites, along travel routes and at popular areas.	Frequent noise and litter. Large but localized areas with vegetation damage and soil compaction.	Unavoidable noise, music and litter. Widespread vegetation damage and soil compaction.

ADMINISTRATIVE - ADMINISTRATION & SERVICES: How Public Land Managers, Cooperative Agencies and Local Businesses Care for the Area and Serve Visitors

	<i>Primitive</i>	<i>Back Country</i>	<i>Middle Country</i>	<i>Front Country</i>	<i>Rural</i>	<i>Urban</i>
h. Mechanized Use:	None whatsoever.	Mountain bikes and perhaps other mechanized use, but all is non-motorized	Four-wheel drives, all-terrain vehicles, dirt bikes, or snowmobiles in addition to non-motorized, mechanized use.	Two-wheel drive vehicles predominant, but also four wheel drives and non-motorized, mechanized use.	Ordinary highway auto and truck traffic is characteristic.	Wide variety of street vehicles and highway traffic is ever-present.
i. Management Controls:	No visitor controls apparent. No use limits. Enforcement presence very rare.	Signs at key access points on basic user ethics. May have back country use restrictions. Enforcement presence rare	Occasional regulatory signing. Motorized and mechanized use restrictions. Random enforcement presence.	Rules clearly posted with some seasonal or day-of-week use restrictions. Periodic enforcement presence.	Regulations prominent. Total use limited by permit, reservation, etc. Routine enforcement presence.	Continuous enforcement to redistribute use and reduce user conflicts, hazards, and resource damage.
j. Visitor Services:	None is available on-site.	Basic maps, but area personnel seldom available to provide on-site assistance	Area brochures and maps, plus area personnel occasional present to provide on-site assistance.	Information materials describe recreation areas and activities. Area personnel are periodically available.	Information described to the left, plus experience and benefit descriptions. Area personnel do on-site education.	Information described to the left, plus regularly scheduled on-site outdoor skills demonstrations and clinics.