UNITED STATES DEPARTMENT OF THE INTERIOR
BLM, BOISE DISTRICT

EA # ID-130-2007-EA-3431 Title Page

Applicant (if any): **BLM Action**	Proposed Action: **Murphy Subregion Travel Management Plan**			EA No. **ID-130-2007-EA-3431**
State: **Idaho**	County: **Owyhee**	District: **Boise**	Field Office: **Owyhee**	Authority: **NEPA, FLPMA,**
Prepared By: **OFO ID Team**	Title:			Report Date: **4/17/09**

LANDS INVOLVED

Meridian	Township	Range	Sections	Acres
Boise	**1S, 2S, 3S, 4S, 5S, 6S**	**1E, 1W, 3W, 4W**	**Various**	**233,000**

Affected Resources	N/A or Not Present	Applicable or Present, No Impact	Discussed in EA
Air Quality			X
Areas of Critical Environmental Concern	X		
Cultural Resources			X
Environmental Justice (E.O. 12898)	X		
Farm Lands (prime or unique)	X		
Floodplains	X		
Migratory Birds			X
Native American Religious Concerns			X
Invasive, Nonnative Species			X
Wastes, Hazardous or Solid	X		
Threatened or Endangered Species			X
Social and Economic			X
Water Quality (Drinking/Ground)			X
Wetlands/Riparian Zones			X
Wild and Scenic Rivers (Eligible)	X		
Wilderness Study Areas	X		

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1.0 Introduction

One of the BLM's greatest management challenges is the provision of reasonable and varied transportation routes for access to the public lands for a wide variety of both motorized and non-motorized recreational activities while at the same time protecting natural and cultural resources from loss or degradation. Various landscapes, user interests, equipment options, weather conditions, transportation infrastructure, and resource constraints all must be considered through travel management planning.

Prominent among the travel management issues the BLM faces is the complex challenge of managing motorized activities on the public lands. The combined effect of population increases in the west, explosive growth in the use of off-highway vehicles (OHVs), and advances in technology has generated increased social conflicts and resource impacts on the public lands.

By improving OHV management through land use planning, the BLM is minimizing impacts to wildlife habitat; reducing the introduction and spread of invasive weeds; lessening conflicts among various motorized and non-motorized recreation users; and preventing damage to cultural resources resulting from the unauthorized proliferation of roads and trails on public lands. Moving toward a rational system that consists of a designated network of roads and trails through travel management planning would protect, rather than inhibit, recreational access to the public lands. In the long run, the plan would provide the management foundation to prevent unnecessary closures or restrictions stemming from preventable resource damage or user conflicts.

Travel management planning is the proactive management of public access and natural/cultural resources in compliance with travel-related regulations and according to the best land use management principles. It involves a comprehensive approach that considers various aspects of road and trail system planning and management, specifically natural resource management; road and trail design and maintenance; and recreation and non-recreation uses of roads and trails. Within this context, travel activities are evaluated as a means of access to public lands. They are also evaluated according to the effects of motorized and non-motorized travel on public lands and resources and on the people who use them.

This Travel Management Plan is specific to the Murphy Subregion, an area within the Owyhee Front Special Recreation Management Area (SRMA)[Owyhee Resource Management Plan (RMP) 1999]. This subregion includes the only area designated for mechanized and motorized competitive events in the Owyhee Field Office.

1.1 Need for and Purpose of Action

Need

As required by federal regulations, the 1999 RMP designated lands as open, limited, or closed to off–highway vehicle use. The Owyhee Front, including the Murphy Subregion, was identified as an area where OHV use would occur only on a designated road and trail system. The Owyhee Front route designation process began in 2005 in the adjacent Hemingway Butte Play Area (USDI 2006b) and subsequently in the Wilson Creek Subregion (USDI 2007b) using criteria developed through a public scoping process.

In 2004, Idaho Parks and Recreation (IDPR) conducted an outdoor recreation survey that randomly sampled more than 2,300 individuals, of which 52% participated in OHV recreation. Between 2003 and 2007 motorcycle and All Terrain Vehicle (ATV) registrations increased 62% in the state of Idaho. In southwest Idaho counties (Ada, Adams, Boise, Canyon, Elmore, Gem, Owyhee, Payette, Valley, and Washington), IDPR found recreation use increased 57%.

BLM has estimated that between 1999 and 2007, approximately 128 miles of new unauthorized routes have been created by users in the Murphy Subregion. Many existing routes and user created routes parallel and duplicate each other to common endpoints.

The increase in recreation use and proliferation of routes has affected a variety of resources including riparian areas, special status species, and watershed function.

- Riparian areas provide important habitat for a variety of wildlife species and help maintain water quality. There are 94.5 miles of OHV trails adjacent to or crossing intermittent and perennial streams, and there are 27 spring/seeps in the subregion.
- There are 12 known sage grouse leks within the subregion. OHV activity adjacent to leks, nesting, brooding, and rearing habitat has been found to impact sage grouse reproduction and survival.
- The subregion includes 14 species of special status plants some with limited distribution and isolated populations which are easily impacted by unmanaged surface disturbance.
- Approximately 18% of the subregion includes highly erosive soils where surface disturbance can lead to excessive erosion and decreased water quality.
- The subregion contains big game species and is home to the Black Mountain Wild Horse Herd, which may be impacted by habitat fragmentation through the creation of unauthorized routes.

Purpose

- Implement Owyhee RMP OHV decision Objective RECT 1 by designating roads and trails (routes) for use by motorized vehicles while protecting sensitive resource values.

- Implement the Owyhee RMP decision Objective RECT 4 by providing high quality recreation opportunities and experiences in the Owyhee Front at developed and undeveloped recreation sites by maintaining existing amenities and by providing new recreation sites as appropriate for resource protection.

- Provide for a motorized transportation system that meets the needs of the local communities that depend on and regularly utilize public lands.

- Provide for the allowance of up to six permitted competitive motorcycle events annually within the Competitive Use area on existing historically used routes. The allowance of the number of events was carried over from EA #ID-01-94024 (USDI 1994), which limited organizations to a maximum of six competitive motorized events each year.

- Implement a management program that discourages the creation of new routes and reduces the number of duplicate and redundant routes.

- Manage for recreational opportunities and experiences within wild horse herd management areas while protecting wild and free-roaming horses and their habitat.

- Confine motorized use to designated routes in environmentally sensitive locations.
  - Reduce the number of miles of routes within or immediately adjacent to riparian areas.
  - Designate routes using criteria from the Statewide Sage-grouse Strategy to provide separation between OHV use and key sage grouse habitat.
  - Designate routes to avoid or minimize OHV use in occupied special status plant habitat.
  - Designate routes to reduce and limit OHV use within areas with highly erosive soils.
  - Designate routes to reduce impacts to wild horses within their key use areas.

1.2 Summary of the Proposed Action

The Proposed Action (Map 6) would designate a system of 840 miles of roads and trails and 430 miles of roads or trails would be closed to motorized and mechanized uses and rehabilitated. Eighty five miles of existing non-maintained ATV trails would be added to the current maintained ATV trail system for a total of 185 miles. Maintained ATV trails would be managed for and limited to machines 50” or less in width, which is in accordance with the Idaho Statute definition for ATV’s. One hundred and fifty two miles of single track trail would be designated and maintained for motorized (motorcycle) or non-motorized uses (none are presently designated or maintained). Competitive uses (motorcycle or mountain bike) would be allowed on 471 miles (90%) of the previously utilized roads and trails and an additional 27 miles of designated single track and ATV routes would be added and available.

Approximately 68 miles of routes would be closed seasonally to create large contiguous tracts of nesting habitat that would be free from disturbance from March 1 through June 15. In addition to the 68 miles of seasonal closures, approximately 17 miles of routes would be closed permanently for the protection of sage grouse leks. Approximately 48 miles of routes would be closed to reduce disturbance to Golden Eagles year-long. Approximately 86 miles of routes would be closed in areas identified in the Owyhee RMP as habitat for Bighorn Sheep.

The Fossil Creek Trailhead would be enclosed by perimeter fencing to prevent any increase in trailhead size. The user created parking area at the "45" would be retained as a parking area and enclosed by perimeter fencing to prevent any increase in size. Approximately two miles of fence would be installed in order to prohibit access to the user created defacto play areas adjacent to the "45". Parking areas would be formalized at the Silver City/Old Stage Road junction and at a location approximately one mile further south on the Silver City Road. The Windy Point pipeline route would be re-opened to motorized uses as necessary repairs and pipeline hardening have been completed. Vehicle travel in Sinker Creek would be prohibited.

1.3 Location and Setting

The 233,000 acres Murphy Subregion is located south of Highway 78, generally in the area of Townships - 1, 2, 3, and 4 South and, Ranges 1, 2 and 3, West, Owyhee County, Idaho (Map 1). The subregion runs from Reynolds Creek in the north, southeast to Castle Creek. The northern boundary is largely the right-of-way for Highway 78 and the private land boundaries along this State highway. The southern boundary is the top of the Owyhee Mountain Range and those vehicle routes that run along it. The subregion encompasses the foothills of the Owyhee Front and several prominent features: Chalky Butte, Federal Butte, and the principal drainages of Rabbit Creek. The land is characterized by gentle to steep slopes. Elevations range from 2,500 feet to over 8,000 feet. The area contains 196,420 acres of BLM land, 916 acres of Bureau of Reclamation (BOR) land (administered by the BLM), 10,093 acres of State land, and 25,163 acres of private land. The major access roads cutting across the subregion include Reynolds Creek Road to the north, the centrally located Rabbit Creek Road, and the Silver City Road to the south: each are Owyhee County maintained roadways. The subregion includes the developed recreation sites of Hemingway Butte, Rabbit Creek, and Fossil Creek trailheads.

1.4 Conformance with Applicable Land Use Plan

The Proposed Action is in conformance with the Owyhee RMP issued in December, 1999. The RMP identified all public lands within the Owyhee Field Office as either "open", "limited", or "closed" to off-highway motor vehicle use. The entire 261,000 acre Owyhee Front SRMA, including the 233,000-acre Murphy Subregion, is designated as "limited to designated roads and trails," but is currently managed as "limited to existing roads and trails" until the route designation process is completed. The RMP directs BLM to;

- RECT 1: Provide for off-highway motor vehicle (OHMV) use on public lands while protecting sensitive resource values.
- RECT 2: Provide special management attention to areas of public land with identified special recreational, scenic, and cultural values where current and projected recreational demand warrants intensive management.
- RECT 4: Provide for high quality recreation opportunities and experiences at developed and undeveloped recreation sites by maintaining existing amenities and by providing new recreation sites for the public's enjoyment, with emphasis on roaded natural and semi-primitive motorized settings.
- RECT 5: Develop a trail system that provides a range of motorized and non-motorized recreation opportunities for the public's enjoyment of primitive, semi-primitive non-motorized, semi-primitive motorized, and roaded natural settings.

1.5 Relationship to Statutes, Regulations, and Other Requirements

This Travel Management Plan (TMP) is in compliance with the following:

Appendix C of BLM's H-1601-1, *Land Use Planning Handbook*, (USDI 2005). The handbook advises that:

- Comprehensive travel management planning should address all resource use aspects (such as recreational, traditional, casual, agricultural, commercial, and educational) and accompanying modes and conditions of travel on public lands, not just motorized or off-highway vehicle activities.
- For areas classified as limited, consider a full range of possibilities, including travel that would be limited to types of modes of travel, such as foot, equestrian, bicycle, motorized, etc.; limited to time or season of use; limited to certain types of vehicles (OHVs, motorcycles, all-terrain vehicles, high clearance, etc.)
- Establish a process to identify specific areas, roads, and/or trails that would be available for public use, and specify limitations placed on use.

Travel Management Plans are to include:

- Criteria to select or reject specific roads and trails in the final management network
- A map of routes for all travel modes.
- Guidelines for managing, monitoring, and maintaining the system.

Federal Land Policy and Management Act (FLPMA-PL-94-579) which states under Sec. 202 [43 U.S.C. 1712] (c) (9):

"In the development and revision of land use plans, the Secretary shall– to the extent consistent with the laws governing the administration of the public lands, coordinate the land use inventory, planning, and management activities of or for such lands with the land use planning and management programs of other Federal departments and agencies and of the States and local

governments within which the lands are located, including, but not limited to, the statewide outdoor recreation plans developed under the Act of September 3, 1964 (78 Stat. 897), as amended [16 U.S.C. 460l–4 et seq. note], and of or for Indian tribes by, among other things, considering the policies of approved State and tribal land resource management programs. In implementing this directive, the Secretary shall, to the extent he finds practical, keep apprised of State, local, and tribal land use plans; assure that consideration is given to those State, local, and tribal plans that are germane in the development of land use plans for public lands; assist in resolving, to the extent practical, inconsistencies between Federal and non-Federal Government plans, and shall provide for meaningful public involvement of State and local government officials, both elected and appointed, in the development of land use programs, land use regulations, and land use decisions for public lands, including early public notice of proposed decisions which may have a significant impact on non-Federal lands. Such officials in each State are authorized to furnish advice to the Secretary with respect to the development and revision of land use plans, land use guidelines, land use rules, and land use regulations for the public lands within such State and with respect to such other land use matters as may be referred to them by him. Land use plans of the Secretary under this section shall be consistent with State and local plans to the maximum extent he finds consistent with Federal law and the purposes of this Act."

The BLMs proposed action is consistent with the County's resolution/plan in that:

1. Planning criteria included avoidance of trespass on private lands.
2. Planning criteria included the connectivity of areas and designations of loop trails.
3. The proposed action includes 87% of the routes proposed in Alternative C.

Executive Order 11644 (1972) – The executive order (E.O.) directs federal agencies "to establish policies and procedures that will ensure the use of off-road vehicles on public lands will be controlled and directed to protect the resources of those lands, to promote the safety of all users of those lands, and to minimize the conflict among various users of those lands and to ensure the compatibility of such uses with existing conditions in populated areas, taking into account noise and other factors." The E.O. also requires Federal agencies to designate specific areas where the use of off-road vehicles may or may not be permitted, and "to monitor the effects of off-road vehicles on public lands and amend or rescind management decisions in order to further the policy of this order."

Executive Order 11989 (1977) – The order directs federal land managers to immediately close areas or trails to off-road vehicles whenever the land manager determines that "the use of the off-road vehicle will cause or is causing considerable adverse effects on the soil, vegetation, wildlife, wildlife habitats or cultural or historic resources of particular areas or trails until such adverse effects have been eliminated and that measures have been implemented to prevent further recurrence."

Executive Order 13186 (2001) – The order directs Federal land management agencies to ensure management actions conserve and protect migratory birds consistent with existing migratory bird conventions, the Migratory Bird Treaty Act (16 U.S.C. 703-711), the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d), the Fish and Wildlife Coordination Act (16 U.S.C. 661-666c), the Endangered Species Act of 1973 (16 U.S.C. 1531-1544), and the National Environmental Policy Act of 1969 (42 U.S.C. 4321-4347).

Code of Federal Regulations (CFR) - Designation of areas and trails as open, closed, or limited to motorized use is required and authorized under 43 CFR 8342 Designation of Areas and Trails. These designations would be effective upon issuance of the Record of Decision. Designation of areas as open, closed, or limited for non-motorized and other uses (mechanical, mountain bike, equestrian, and foot), or conditions of use, is authorized under 43 CFR 8364.1 Closure and restriction orders, and 43 CFR 8365.1-6 Supplementary rules. Designations under 43 CFR 8364.1 and 43 CFR 8365.1-6 require publication in the Federal Register and local media and are not effective until such publication.

Wild Horse Management

Because the Murphy Subregion lies within a portion of the Black Mountain Herd Management Area (HMA), travel management planning and recreation management must be consistent with the laws and regulations that pertain to wild horse management on public lands. The Wild and Free-Roaming Horses and Burros Act of 1971 (PL 92-195) establishes that wild horses shall be protected from capture and malicious harassment, should be managed as an integral part of the natural system, and that a thriving ecological balance is the desired end state. The law states that areas occupied by wild horses should be "devoted principally but not necessarily exclusively to their welfare in keeping with the multiple-use management concept for the public lands".

BLM's regulations for managing wild horses, found at CFR Title 43 subpart 4700, further describe the relation of wild horse management to other multiple uses and resource values. The regulations state that:

- "Wild horses and burros shall be considered comparably with other resource values in the formulation of land use plans."
- "Management activities affecting wild horses and burros shall be undertaken with the goal of maintaining free-roaming behavior."
- "Wild horses shall be managed as self-sustaining populations of healthy animals in balance with other uses and the productive capacity of the habitat."

Water Quality

Section §313 of the Clean Water Act requires that "each department, agency, or instrumentality of the Federal Government having jurisdiction over any property or facility, or engaged in any activity resulting, or which may result, in the discharge or runoff of pollutants shall be subject to, and comply with, all Federal, State, interstate, and local requirements, administrative authority,

and process and sanctions in a like manner as any non-governmental entity." The BLM is therefore required to comply with all federal, state, interstate and local requirements, administrative authority, and process and sanctions in respect to the control and abatement of water pollution. Idaho Department of Environmental Quality (IDEQ) is responsible for implementing the Clean Water Act in Idaho and has promulgated State water quality rules to meet this responsibility in IDAPA 58.01.02-Water Quality Standards and Wastewater Treatment Requirements (IDEQ 1996). Waters are designated as impaired when there is a violation of water quality criteria and are placed on the §303(d) list. Section §303(d) of the Clean Water Act requires states to develop water quality improvement plans, referred to as "total maximum daily loads" (TMDLs), for water bodies that are not meeting their beneficial uses. A TMDL is only required when a pollutant can be identified and in some way quantified. The goal of a TMDL is to set limits on pollutant levels, to correct water quality impairments, and achieve beneficial uses of water bodies through attainment of water quality standards.

Cultural Resources Laws and Executive Orders

BLM is required to consult with Native American tribes to "help assure (1) that federally recognized tribal governments and Native American individuals, whose traditional uses of public land might be affected by a proposed action, will have sufficient opportunity to contribute to the decision, and (2) that the decision maker will give tribal concerns proper consideration" (U.S. Department of the Interior, BLM Manual Handbook H-8120-1). Tribal coordination and consultation responsibilities are implemented under laws and executive orders that are specific to cultural resources which are referred to as "cultural resource authorities," and under regulations that are not specific which are termed "general authorities." Cultural resource authorities include: the National Historic Preservation Act of 1966, as amended (NHPA); the Archaeological Resources Protection Act of 1979 (ARPA); and the Native American Graves Protection and Repatriation Act of 1990, as amended (NAGPRA). General authorities include: the American Indian Religious Freedom Act of 1979 (AIRFA); the National Environmental Policy Act of 1969 (NEPA); the Federal Land Policy and Management Act of 1976 (FLPMA); and Executive Order 13007-Indian Sacred Sites. The proposed action is in compliance with the aforementioned authorities.

Southwest Idaho is the homeland of two culturally and linguistically related tribes: the Northern Shoshone and the Northern Paiute. In the latter half of the 19th century, a reservation was established at Duck Valley on the Nevada/Idaho border west of the Bruneau River. The Shoshone-Paiute Tribes residing on the Duck Valley Reservation today actively practice their culture and retain aboriginal rights and/or interests in this area. The Shoshone-Paiute Tribes claim aboriginal rights to their traditional homelands as their treaties with the United States, the Boise Valley Treaty of 1864 and the Bruneau Valley Treaty of 1866, which would have extinguished aboriginal title to the lands now federally administered, were never ratified.

Other tribes that have ties to southwest Idaho include the Bannock Tribe and the Nez Perce Tribe. Southeast Idaho is the homeland of the Northern Shoshone Tribe and the Bannock Tribe. In 1867 a reservation was established at Fort Hall in southeastern Idaho. The Fort Bridger

Treaty of 1868 applies to BLM's relationship with the Shoshone-Bannock Tribes. The northern part of the BLM's Boise District was also inhabited by the Nez Perce Tribe. The Nez Perce signed treaties in 1855, 1863 and 1868. BLM has considered off-reservation treaty-reserved fishing, hunting, gathering, and similar rights of access and resource use on the public lands it administers for all tribes affected by this action.

1.6 Scoping and Development of Issues

BLM conducted extensive scoping throughout the entire process of this environmental assessment to determine the desires, perspectives and concerns of the public and local government. In developing the Murphy Subregion TMP, the BLM met more than 20 times with a wide range of individuals, organizations and interest groups, including motorcycle, ATV, 4x4, environmental groups, private land owners, and rock collectors. The BLM also met and consulted multiple times with the Owyhee County Government, Owyhee County Recreation Task Force, Shoshone-Paiute Tribes, State Agencies, the Resource Advisory Council (RAC), and grazing permittees.

In addition, the BLM held two public meetings (in Marsing and Nampa, Idaho) to discuss key issues with the interested public. The public meetings were advertised via the internet, newspapers, and through BLM mailing lists. This dialogue helped to identify the following key management issues that need to be addressed in the Murphy Subregion TMP.

1) *Preservation of single track recreation opportunities*. Motorcycle users have noted that many of the single-track trails in the Murphy Subregion area are being widened by All-terrain Vehicle (ATV) use. They want these single track trails protected from encroachment by larger motorized vehicles.

2) *Proliferation of unauthorized routes.* Conservation groups, wild horse interests and local residents have expressed concerns about increases in the number of unauthorized trails in the area. Increases in unauthorized trails are of particular concern in the northern portion of the subregion near Scorpion Creek, just south of Highway 78 across from Noble Island, and in areas surrounding existing trailheads.

3) RS-2477 assertions. RS-2477 was a provision of Federal law that enabled local governments and individuals to establish a public highway right-of way (ROW) on federal land prior to 1976 when the provision was repealed. Because RS-2477 ROWs were created through use rather than through an application and grant process, there remains uncertainty between the federal government and RS-2477 claimants on which routes have RS-2477 ROW status. The purpose of an RS-2477 assertion is to preserve public access and use pending a future court

determination. Both Owyhee County and individual local residents have filed RS-2477 ROW assertions on a variety of routes in the Murphy Subregion. (Map 8)[a]

4) *Impacts to local residents and grazing permittees.* Local residents are concerned about increasing amounts of trespass by recreational users on private lands. They are also concerned about recreation-caused impacts to permitted public land grazing operations, including harassment and dispersal of cattle at water sources and increases in careless recreational shooting practices. They would like to see roads and trails that lead recreation users onto private lands closed or restricted, and more aggressive education efforts by BLM to make sure the public is informed of the ethics and rules of recreation use on public and private lands.

5) *Impacts to natural and cultural resources.* Local residents, wild horse protection interests, conservationists and Tribal governments are concerned about impacts to natural and cultural resources caused by increasing recreation use. The area contains several important resources values, including sage-grouse leks, golden eagles, habitat for sagebrush-obligate wildlife species, critical mule deer habitat, sensitive plant species, riparian areas, cultural sites, and areas having highly erosive soils. In addition, a portion of the subregion is part of a wild horse herd management area. Horse protection interests are concerned that rising recreational use will push horses into progressively smaller portions of the HMA over time.

6) *Attraction of more recreation pressure.* Wild horse and wildlife protection interests, local residents, and conservation groups are concerned that creation of a designated trail system, construction of trailheads, waysides, kiosks, and installation of an extensive sign system will unnecessarily promote recreation use, attract more recreation pressure, and accelerate impacts.

7) *Laissez-faire.* Groups and individuals also expressed their concern that the BLM's current hands-off approach to travel management in allowing actions to just take their natural course, would lead to further route proliferation and increased resource damage. They stated that travel management planning for the BLM in general has been long overdue.

8) *Safety Concerns.* Some groups and individuals are concerned about the increasing number of recreationists. They feel that BLM needs to provide users with a substantial amount of trails to disperse use throughout the area and without this there would be an increased risk for collisions throughout the trail system.

[a]Subsequent to a 10th Circuit Court ruling in 2005 that BLM did not have, and never has had, the authority to adjudicate RS 2477 assertions (only a Court has that authority), in May 2006 the Secretary of the Interior issued a revised policy for resolving RS 2477 ROW assertions through a process incorporating Non-binding Determinations (NBD) and/or court rulings. BLM has subsequently issued related agency guidance. The NBD or Court process is the appropriate mechanism for reviewing the validity of RS 2477 ROW assertions, not this EA. RS 2477 ROW information is presented in this EA as part of the existing management situation. Route designations are based on resource conditions and land management considerations, not any implied determination, acceptance, or rejection of current RS 2477 ROW assertions.

9) *Flexibility of the Plan.* Some groups and individuals expressed a desire that the travel system adopted as a result of this process should be flexible enough to adjust over time in response to changing conditions. They would like to see BLM have the ability to close trails or facilities that have impacts to resources that are not recognized in the original plan. They would also like to see a mechanism in the plan to add or modify routes to improve the sustainability of the trail system, improve recreational experiences, and respond to the emergence of new recreational activities and technologies.

10) *Implementation, Prioritization, and Scheduling.* Implementation of the plan would commence immediately with the signing of routes to indicate their status and appropriate uses. Additional physical closure and restoration activities would be completed. Priority would be given to closure of route(s) in proximity to sage grouse leks. Further priorities and scheduling would be developed by the BLM.

Once the draft EA was completed, the BLM made the document available on the internet, mailed it to interested publics on the current mailing lists, and initiated a 30 day public comment period. The BLM then held two more public scoping meetings located in Murphy ID and Boise ID. These meetings were advertised via the internet, newspapers, BLM mailing lists, and flyers were posted at parking areas, trailheads, and within subdivisions throughout the area. During this period the BLM received, and have responded to, numerous comments on a variety of issues regarding the Draft EA (appendix 2).

2.0 Description of the Alternatives

2.1 Alternative Development Process

The planning process began in 2001 when BLM began a comprehensive inventory of routes across the Owyhee Front, including the Murphy Subregion. The inventory was completed in 2003 and made available for public review. In 2007, BLM collected additional information based on public input and established a database of the resource and access values associated with the Murphy Subregion.

During the months of April, May, and June of 2007, the BLM met with a wide range of groups, and also held two public meetings to discuss recreation management goals for the Murphy Subregion, review the route inventory, and to discuss the key values considered most pertinent to the travel management planning process. These included, for example, sagebrush habitat, important wild horse use areas, sage grouse leks, and needs for administrative and private property access. Public input during this period helped focus and refine these materials.

2.2 Planning Criteria

The following criteria were used for route designation in the Travel Management Planning process:

- *Related Management Actions to Achieve Objectives*
  - Reduce route densities in medium to high density areas to protect soils and watershed values by closing redundant routes; closing steep, unsustainable hill climb routes; or by closing routes that offer a relatively poor-quality recreation experience.
  - Close or restrict routes in areas with a low density of existing roads and trails to avoid sensitive habitat or reduce route proliferation.
  - Limit the type of recreation use allowed on a trail segment.
  - Reroute trails to improve their environmental sustainability and quality of recreational experiences.
  - Reduce excessive stream crossings or harden stream crossings.

- *Access Criteria*
  - Retain all administrative access routes.
  - Provide for access to private property.
  - Avoid designating routes that could lead to trespass conflicts with private property.

- *Economic Criteria*
  - Avoid or mitigate potential impacts to ranch operations.

- *Resource Protection Criteria*
  - Manage to reduce impacts to wild horses.
  - Manage to reduce soil erosion, especially in sedimentary (highly erosive) soil types.
  - Manage to limit the spread of noxious weeds.
  - Manage to reduce impacts to high-value habitat areas for wildlife and special status species.
  - Manage to minimize impacts to riparian areas and §303d streams.
  - Manage to preserve cultural resources.
  - Where multiple duplicate and parallel routes go to the same destination(s), the most sustainable least impacting route would usually be designated as open and the other route closed and rehabilitated.
  - Follow the conservation measures listed for infrastructure/major roads (4.3.2.3.) and Human disturbance/OHV (4.3.5.3.) in the 2006 Idaho Sage-grouse Conservation Plan.
  - Future modifications and/or additions of new routes would avoid sage grouse leks, cultural sites, special status plant populations, and riparian areas.
  - Manage to protect breeding, nesting, and fledging habitats for sensitive migratory birds.

- *Recreation and Transportation Criteria*
  - Provide a basic transportation network.
  - The competitive use area designated in the Owyhee RMP would be incorporated and individual routes designated for use.
  - Where appropriate and/or necessary for public safety, routes may be designated for specific types of use (e.g. Motorcycle, ATV, Jeep)
  - Enhance recreation opportunities for motorized uses. Where appropriate, provide for connectivity and identify loop trails and opportunities to build new sustainable, high-quality trails.
  - Eliminate or formalize user created parking areas as trailheads. Management emphasis would be on encouraging users to utilize existing trailheads (Hemingway, Rabbit, Fossil)

2.3 Management Common to All alternatives

2.3.1 Management Actions

- Travel by foot or horse would be unrestricted on BLM land throughout the subregion.
- Non-motorized mechanized users (mountain bikes & similar or successor devices) would be limited to the designated roads and trails (limiting these users requires a subsequent Supplemental Rule).
- Cultural sites, including those eligible for listing on the National Register of Historic Places would be avoided through route adjustment or closure.
- Routes authorized by FLPMA (title 5) ROW, Federal Highway Act (FHA) (Title 23) ROW, or other written authorizations would be managed under these authorizations and included in the transportation system.
- Where court rulings validate RS-2477 assertions, the TMP route designations would be modified to incorporate these findings.
- Where competitive use events require use of private and State lands, permittee would be required to obtain permission from land owners before the event is authorized.
- Maintained ATV trails would be managed for and limited to machines 50" or less in width, which is in accordance with the Idaho Statute definition for ATV's. Idaho Statute Definition - "All-terrain vehicle" or "ATV" means any recreation vehicle with three or more tires, weighing under 900 pounds, 50 inches or less in width, having a wheelbase of 61 inches or less, traveling on low-pressure tires of 10 psi or less, has handlebar steering and a seat designed to be straddled by the operator."
- All designated single track and ATV trails would be available for competitive motorcycle events.
- Competitive speed based ATV events would not be permitted on maintained ATV routes.
- Non-speed events including poker runs, fundraisers, etc. (ATVs, 2 & 4WD vehicles) would be authorized on a case by case basis.
- Close and rehabilitate hill climbs, closed routes, and unauthorized routes.
- Designate Chalky Butte, Kane Springs, and Black Mountain parking areas that were identified as temporary in Hemingway Butte Play Area Mitigation Project EA, as permanent parking areas.
- The Fossil Creek Trailhead would have exterior fencing (1/4 mile) installed to define the limits of the trailhead and parking area. Exit stiles appropriate for vehicles, ATVs and/or motorcycles, would be installed in the fence to match the use of designated routes leaving the trailhead.
- Where vehicle controls and road/trail closures are required within the HMA, rock barriers or visible fencing (i.e. post & pole or fencing panels) shall be used.
- Provide for continuation of the current level (6 permitted events annually) of competitive motorcycle events within the Competitive Use area.
- Motorized competitive events would not be authorized at or near occupied leks from March 1 to June 15 which is in compliance with and exceeds the conservation measures

listed in the 2006 Idaho Sage-grouse Conservation Plan. These dates are based on sage grouse breeding periods and were developed in conjunction with the Idaho Department of Fish and Game.

- Ø Human disturbance resulting from construction and maintenance activities within 0.6 miles of occupied leks would be avoided from March 1 to June 15. These conservation measures were developed in conjunction with the Idaho Department of Fish and Game and comply with and exceed the measures listed in section 4.3.2.3. of the 2006 Idaho Sage-grouse Conservation Plan. The closure period was extended beyond the date identified in the Idaho Sage Grouse Conservation Plan, recommended March 1 through May 31, to June 15 for further protection of sage grouse during critical nesting and brood rearing periods.
- Ø All trail segments slated for rehabilitation/closure would be ripped in total, or in part, using the ripper teeth on the Sweco Trail Dozer or a bulldozer. Once an affected trail segment is closed and/or rehabilitated, the following actions would be taken:
  - § The points of entry into the segment(s) would be posted as "CLOSED" to OHV use.
  - § A barrier made of closely positioned boulders (24 inches plus), posts, or rangeland steel post/wire fencing would be installed to prevent entry into the rehab segment(s).
  - § Once routes have been completely rehabilitated signing and barriers can be removed
- Ø There would be an increase in law enforcement presence/patrols throughout the subregion.
- Ø Pedestrian-wide wire gates would be installed at ATV cattleguards and at locations where existing cattleguards are removed.
- Ø Routes would be marked indicating appropriate uses, kiosks would be installed at parking areas, and maps would be published and distributed at trailheads, parking areas, and BLM offices.

2.3.2 Adaptive Management

In developing this Travel Management Plan, BLM used the best information available, including scientific research, agency monitoring reports, public information received from trail users, local residents, and Owyhee County Government. However, the agency's knowledge may change as local environmental conditions change, as new management techniques are learned, and as advances in science and technology are better understood. In the future, some of the management decisions reached in this document are likely to prove inadequate or may need revision or modification as a result of new information or changes in legal status.

To respond to needed changes in management, this transportation plan would use an adaptive management approach to modify management actions to incorporate new information gained over time.

To illustrate how BLM would apply the adaptive management strategy, this plan would use data collected in periodic monitoring efforts by BLM and information and observations provided to the BLM from the public, permittees, and Owyhee County officials. The BLM would assess the level of user conflicts on trails, including potential safety problems on specific trail segments and make changes in management as needed after consulting with trail users and local officials. Such changes may include, but are not limited to signing, construction of new trails, closures of existing trails, designation of routes as administrative access only, reallocation of uses on a particular route or portion of a route, increased Law Enforcement patrols, adjustment of grazing practices, or public notices. Grazing permittees and the recreating public would be encouraged to contact the BLM when such problems arise so that work on solutions could begin as soon as practicable.

Using the adaptive management approach, any additions or deletions to the route network in the future would be guided by the planning criteria identified above.

Due to the thousands of miles of roads and trails in the Murphy Subregion, the numerous and intertwined types of use (2WD, 4WD, ATV, motorcycle), the use of many routes by multiple types of vehicles, and instances where route inventories may have erred in classifying a route (i.e. 4WD vs. ATV, ATV vs. single track), it is inevitable that the BLM has missed some trail segments that allow for continuous single type travel (i.e. a motorcycle only section in the middle of an otherwise ATV route). It is also possible that some sections of currently used trails were not mapped. As these situations are discovered during the implementation process, the routes would be evaluated based on the planning criteria, and management actions implemented as appropriate. It is also likely that new routes and trails would be proposed or desired to provide for better management and to meet management objectives.

An annual review of the transportation system by BLM officials would be conducted for the first five years following implementation and once every two years thereafter in order to consider route changes and additions. Substantial changes in management such as significant increases or decreases to the proposed designated 840 miles of routes, or the construction of new facilities would require separate NEPA analysis, but the general rationale and context for such future changes are clearly expressed in this plan, so that future actions would remain in conformance with the intent of the plan. Where resource issues or conditions require immediate action to protect natural values or to halt environmental degradation, immediate actions would be implemented. These types of actions would require appropriate NEPA review and would likely be tiered to this EA.

2.3.3 Monitoring

Monitoring that would occur as part of the Transportation Plan for the Murphy Subregion has three purposes:

- Tracking the implementation of actions adopted in the Travel Management Plan. (Are they occurring as planned?)

- Determining if management actions are effective. (Are we achieving plan objectives?)

- Identifying where we should continue, and where we may need to change (Are our original objectives still valid, or do they need to change?)

The monitoring plan utilizes two scales of monitoring:

Long term monitoring: Are resource conditions and user experiences in the Murphy Subregion improving, staying the same, or declining over time?

Project level monitoring: How well have specific management actions been implemented on the ground? Are they effective (e.g. does the signing program adequately serve the public's need for information, and are the signs effective in keeping people on designated trails? Are trails adequately maintained to accommodate the levels of use they are receiving?).

The following table provides direction for elements to monitor and provides suggestions for monitoring methods and frequency. Monitoring methods may change or improve over time. Our goal is to find the simplest, least costly methods to systematically obtain the information needed to evaluate the effectiveness of the plan and make needed changes.

Table 2-1. Monitoring elements, purpose, methodology, and frequency for recreation use, route assessment, and resources within the Murphy Subregion.

Monitoring Element	Purpose of Monitoring	Suggested Methodology	Suggested Frequency
Recreation Use	Determine recreation use levels, detect trends in use over time.	Traffic counters and direct observation during spring, fall and winter weekends at staging areas and on routes.	3 weekends each season (winter, spring, fall).
Recreation User Satisfaction	Assess level of satisfaction with recreation opportunity.	Visitor contacts, surveys, etc.	Once every three years.
Project Assessment	Assess effectiveness of signs, barriers, closures, and route designations in meeting their intended objectives. Monitor trail conflicts between users.	Document route proliferation, use of closed routes, and observance of restrictions during annual route condition assessment. Monitor user conflicts throughout the year.	Ongoing throughout project implementation. Once implementation is complete, yearly, using a combination of BLM and volunteer labor.
Route Condition Assessment	Assess condition of designated routes, rehabilitated routes, and proliferation of new routes to determine needs for maintenance, repairs, etc.	On the ground examination of routes to detect washouts, drainage problems, effectiveness of closures, development of new routes etc.	Yearly, using a combination of BLM and volunteer labor.
Wild Horses	Assess health of wild horse populations and potential impacts from recreational use.	On the ground examination of vegetation characteristics, wild horse movements, physical environment, and population characteristics (USDI 1999b, Appendix MONT-1, pg 79).	Periodically throughout the year.

Greater Sage-grouse	Determine if sage-grouse are being disturbed by OHV use at leks and document trends for lek attendance.	Complete counts of leks within TMP in March and/or April to observe OHV activity. Also monitor tracks of OHV to determine amount of use at lek sites.	Yearly, completed by BLM personnel, IDFG biologist, or volunteers.
Golden Eagle Nest Territories	Determine where golden eagles are nesting within territories and monitor response of eagles to OHV use.	Observe eagle reaction to OHV use, especially during high use periods such as weekends.	Yearly, completed by BLM personnel, IDFG biologist, or volunteers.
Crucial Winter Wildlife Habitat	Determine if winter use levels by OHVs are impacting big game species.	Monitor levels of use through observation and monitoring OHV tracks on routes leading into crucial winter habitat for big game species.	Every third year by visiting the area two to three times during a monitoring year by BLM personnel.
Special Status Plant Populations	Assess the conditions and document any changes to plant populations.	Approved BLM monitoring methods.	Every three to five years populations would be monitored in the spring.
Stream Sedimentation	Determine if excess sediment is entering stream from OHV crossing.	49 point grid system (as presented by Overton et al., 1997).	Every three to five years by BLM personnel.
Weeds	Assess and document weed conditions on open, closed, and rehabilitated routes.	Approved BLM monitoring methods.	Yearly, using BLM and volunteer labor and in coordination cooperating agencies.

2.3.4 Maintenance

Maintenance that would occur as part of the Murphy Subregion Travel Management Plan would:

- Improve the quality of OHV experiences by reducing or eliminating moguls and gully erosion found along select trail segments.

- Reduce the potential for trail widening or braiding as a result of recreation trail users reacting to poor trail conditions; thus reducing impacts to vegetation and soils.

- Reduce the potential for soil erosion on and within the vicinity of select trail segments.

- Reduce the potential for new trail development as a result of unacceptable trailbed conditions along existing trail segments; thus benefiting a number of natural resources: soils vegetation, wildlife, and wild horses.

- Reduce the visual impact of OHV trails and other OHV activities in sensitive travel corridors.

- Improve the utility of OHV trail segments for other recreation activities, such as mountain biking, hiking, and horseback riding.

Unimproved, constructed, or non-constructed two and four wheel drive routes throughout the subregion would receive maintenance as needed. Maintenance work would be limited to short segments of routes to eliminate washouts, rills, gullies, and wheel entrenchments, and to repair/replace cattleguards. Culverts are generally absent, but could be installed if necessary. Trailside facilities (signs and markers, etc.) would be installed, repaired, or replaced.

ATV trail maintenance would consist of the regular or periodic use of a SWECO Trail Dozer (or equivalent) and/or Trail Drags/Rakes to remove developing moguls. Maintenance would also include the repair/replacement of cattleguards and trailside facilities.

Maintenance on designated single-track trails intended for use by motorcycles, which may also be used by equestrians and mountain bikers would maintain a trail width of 36” or less. Maintenance would consist of work on short segments of trailbed to remove impassable washouts or gullies using hand tools or small mechanized equipment. Maintenance would also include the repair/replacement of cattleguards and trailside facilities.

2.3.4.1 SWECO Trail Dozer

The SWECO Trail Dozer would be used as the primary piece of mechanized equipment to undertake initial corrective maintenance of affected trail segments. The SWECO Trail Dozer

produces a trail cut of 4 - 5 feet in width depending upon the blade angle setting. It can also be equipped with rear ripper teeth with a functional depth of 12 inches. This equipment would be used to:

1. Flatten the out slope (lateral slope) of trails.

2. Remove moguls from trails and sand washes.

3. Widen ATV trailbeds to an operational width of 50 inches to 5 feet (60 inches).

4. Remove gullies and establish water bars and drainage ditches where appropriate.

5. Reduce approach slopes into sand washes and other water course crossings.

6. Rip/recondition trail segments for closure or to reform the trail segment into a narrower trailbed.

7. Reroute select OHV trail segments to avoid/mitigate resource conflicts.

2.3.4.2 Mini-Trackhoes

Mini-trackhoes, which have blade widths of 50 inches and a small (12-inch) excavation bucket, would be used on a limited basis for corrective maintenance pertaining to such actions as:

1. Remove gullies and establish water bars and drainage ditches where appropriate.

2. Reduce approach slopes into sand washes and other water course crossings.

3. Rip/recondition "closed" trail segments.

4. Rip/recondition trail segments for closure or to reform the trail segment into a narrower trailbed.

5. Reroute select OHV trail segments to avoid/mitigate resource conflicts.

2.3.4.3 ATV Drag Sled and Trail Rake Units

Drag sled and trail rake units consist of a high powered, low gear ratio ATV coupled to a drag-from-behind grooming sled or rake with height adjustable blades/rake teeth. Drag sleds are less than three feet in width (including wheel width); trail rake wheel width is about 44 inches. There would also be a tine harrow (chain harrow) that could be dragged behind the grooming sled for fine finish work which is 50 inches wide.

ATV drag sled and trail rake units would be used to:

1. Remove moguls from trails and select sand washes.

2. Maintain trailbeds to an operational width of at least 50 inches

2.3.4.4 Heavy Equipment

Heavy equipment, including road graders, bulldozers and backhoes would be used on roads, 4WD trails and sand washes only. The roads would be maintained in accordance with national and Boise District road maintenance standards. On the 4WD trails and sand washes, heavy equipment would be used to:

1. Remove gullies and establish water bars and drainage ditches where appropriate.

2. Reduce approach slopes into sand washes and other water course crossings.

3. Rip/recondition trail segments for closure or to reform the trail segment into a narrower trailbed.

4. Remove moguls from sand washes.

2.3.4.5 Trail Rehabilitation/Closures

Equipment Operation - All trail segments slated for rehabilitation/closure would be ripped in total, or in part, using the ripper teeth on the SWECO Trail Dozer or a bulldozer. The bulldozers use would be limited to only roads, 4WD trails and sand washes. Ripping of routes would be done to create furrows and visual cues that the route is closed to vehicular use.

Furrows are intended to 1) provide a seed bed for new vegetation, and 2) to discourage re-use of the area for OHV travel. Based upon past rehabilitation efforts in the Boise District, the success of rehabilitation efforts are minimal without furrowing. Barriers and signing alone would not work.

Postings and Barriers - Once an affected trail segment is closed and/or rehabilitated, the following actions would be taken:

1. The points of entry into the segment(s) would be posted as "CLOSED" to OHV use.

2. A barrier made of closely positioned boulders (24 inches plus), posts, or rangeland steel post/ wire fencing would be installed to prevent entry into the rehabilitated segment(s).

Trail Width Conversions - All trail segments slated for width reduction would be treated similar to rehabilitations and closures.

Seedings and Plantings - All furrowed areas along closed or narrowed trail segments would be seeded to desired plant species as specified by Field Office vegetation specialists. In limited cases, plantings of seedlings could also occur. Since all trail work would occur during prime moisture periods, vegetation restoration efforts would occur at the time of furrowing to reduce weed competition.

2.4 Alternatives Considered But Not Analyzed in Detail

2.4.1 No Action

The No Action Alternative would not be in conformance with the Owyhee RMP and the BLM planning regulations which require the designation of specific routes of travel. The No Action alternative would continue existing travel management designations and motorized and non-motorized use patterns in the Murphy Subregion. According to the 1999 Owyhee RMP, motorized travel would remain "limited to existing routes until designated routes are established."

2.4.2 Enlarge the Hemingway Butte (Open) Play Area and/or create additional open play areas

Enlarging the existing open play area or creating new open play areas would not be consistent with the Owyhee RMP and such action would require an RMP amendment. The Purpose and Need for this EA does not include expansion of or creation of new open areas thus this alternative would not be consistent with the Purpose and Need.

2.5 Description of Proposed Action and Alternatives

2.5.1 Alternative A – Current Situation in Accordance with the 1999 Owyhee RMP Designate Existing Routes

Alternative A (Map 3) would continue existing use patterns in the Murphy Subregion by designating all existing inventoried motorized routes.

Table 2-2. Alternative A – Miles of Route Designations by Type

	2wd	4wd	ATV	Single Track	**Total Routes**
Designated	353	252	292	373	**1,270**
Closed	0	0	0	0	**0**
Total					**1,270**

Public Access - Public access would be facilitated by the designation of existing trailheads and parking areas. Trailheads would be facilities with restrooms, parking, perimeter fencing and informational kiosks. Parking areas would be limited to defined parking areas with limited trail information and no developed facilities. Existing trailheads at the Rabbit Creek and Fossil Butte access points would remain. The existing "45" access point would be retained as a parking area and exterior fencing would be installed to define the limits of the parking area. Exit stiles appropriate for vehicles, ATVs, and/or motorcycles would be installed in the exterior fence to match the use of designated routes leaving the trailhead. (The Hemingway Butte Play Area also functions as a trailhead but is outside of the Murphy Subregion planning area).

Parking areas would be designated along the Reynolds Creek Road at Chalky Butte, Kane Springs and along the Rabbit Creek Road at the Black Mountain Road junction. The three parking areas along Reynolds Creek and Rabbit Creek roads were created in 2007 as temporary parking areas as part of the Hemingway Butte Play Area mitigation project (USDI 2006 ID-130-2006-EA-3065). Based on the travel routes incorporated in this alternative, these parking areas provide needed access to the designated trail system and upgrading them to permanent status would be appropriate. User created parking areas along roadsides would continue to exist along Highway 78, BLM, and County roads.

ATV and single track trail management – The existing 100 miles of maintained ATV routes would be unchanged. Additional routes designated for ATV use due to their inventoried condition as ATV use routes would not be included in the maintained system. No single track trails are currently maintained and none would be maintained under this alternative.

Access closures – No access closures would be implemented under this alternative.

Seasonal Closures – No seasonal closures would be implemented under this alternative.

Private land access – Routes that lead onto private property would remain open under this alternative.

Windy Point pipeline – The route followed by the Windy Point pipeline would continue to be closed to motorized vehicles as specified in the Hemingway Butte Play Area Mitigation Project (USDI 2006b). This closure was intended to protect the pipeline and eliminate impacts from OHV use. In order to implement this closure and prevent access onto the pipeline, approximately 13 miles of fence and several gates and cattleguards would be required as the pipeline route is crossed by numerous other roads and trails.

Competitive use (motorcycle) – The existing competitive use area as designated in the Owyhee RMP would remain unchanged. All of the previously used 525 miles of competitive routes would be designated for continued competitive use by motorcycles. Where competitive use events require use of private and state lands, permittees would be required to obtain permission from land owners before the event could be authorized. A maximum of six competitive events would be permitted annually.

2.5.2 Alternative B

This alternative is based on the inventoried roads and trails in existence at the time of inventory in 2001-2003, with the addition of trails authorized for competitive (single track) use within the designated (RMP) Competitive Use Area, and trails (single track and ATV) designed to provide loop routes and better connectivity. A total of 834 miles of routes would be designated for use and 436 would be closed (Table 2-3). Map 4 shows the routes and trails designated under this alternative. Routes not designated on Map 4 would be closed to motorized and mechanized vehicle use. Fencing or rock barriers may be required to prevent use of closed roads or trails.

Table 2-3. Alternative B – Miles of Route Designations by Type

	2wd	4wd	ATV	Single Track	**Total Routes**
Designated	285	222	173	154	**834**
Closed	33	53	154	196	**436**
Total					**1,270**

Public Access - Public access would be facilitated by the designation of trailheads and parking areas. Existing trailheads at the Rabbit Creek and Fossil Butte access points would remain. [The Hemingway Butte Play Area also functions as a trailhead but is outside of the Murphy Subregion planning area]. Parking areas would be designated along the Reynolds Creek Road at Chalky Butte, Kane Springs; along the Rabbit Creek Road at the Black Mountain Road junction; along the Silver City Road at the junction with the Silver City Stage Road; and at an existing user created parking area one mile south of the junction. The three parking areas along Reynolds Creek and Rabbit Creek roads were created in 2006 as temporary parking areas as part of the Hemingway Butte Play Area mitigation project (USDI 2006). Based on the travel routes

incorporated in this alternative, these parking areas provide needed access to the designated trail system and upgrading them to permanent status would be appropriate. Parking along roadsides would be discouraged and may be prohibited by Owyhee County on County roads.

ATV and single track trail management – Seventy three miles of ATV trails would be added to the existing maintained trail system (100 miles) and maintained as needed in the future. These trails presently exist but are not currently part of the maintained system. ATV trails would be managed for use by OHVs no more than 50" wide and motorcycles. Single track trails would be managed for motorcycle (and mountain bike) use only.

Connectivity – This alternative is designed to provide connections between the trailheads and parking areas to allow both point to point and loop rides. At present, routes between the Rabbit Creek and Fossil Creek trailheads cross private lands and/or utilize the Highway 78 Right-of-way. As BLM cannot designate routes on private lands or within the highway ROW, this alternative does not create uninterrupted trail connections between these trailheads. BLM would work with private landowners and Idaho Department of Transportation (IDOT) in the future to develop agreements or acquire easements that would allow these connector routes to be designated.

Access closures - The current access points at the "45" on Highway 78 north of Murphy and across from Noble Island on Highway 78 would be closed to all access. Both of these access points provide access to an area that is experiencing considerable resource damage due to unregulated off-trail OHV use. This area exhibits substantial bare ground, soil loss and vegetation damage. The numerous user created routes in this area have created a defacto open play area. This is not consistent with the Owyhee RMP (1999). The Rabbit Creek Trailhead located approximately three miles south of the "45" already provides access to this area by way of designated maintained ATV trails.

In order to provide access for four wheel drive vehicles and rock crawling enthusiasts whose access would be cut off with the closure of the "45", existing route H230 in conjunction with the existing 4WD Kane Springs road (off the Kane Springs parking area) would be designated and managed for 4WD vehicle use. This would require the removal of an ATV cattleguard located on H230, which would be replaced with a full size cattleguard.

Seasonal closures – Approximately 12 miles of routes within and leading to sage grouse lek locations would be closed seasonally from March 1 to May 31 (Map 4) to minimize disturbance to sage grouse during the breeding season. Signage and/or gates would be installed as needed to notify users and prevent access.

Private lands access – In order to limit or prevent inadvertent trespass onto private lands as a result of designated routes dead ending at private land boundaries, most routes that would create this situation have not been designated as part of the transportation system and would be closed. County and private access roads and rights-of-way leading to private lands would not be affected by this action. The ATV cattleguard in T 3S. R 2W, Section 3 would be removed and the access point fenced in order to limit the possibility of trespass onto private lands in Sections 4 & 5. The 4WD/ATV route immediately adjacent to the west side of these private lands would be closed.

The existing maintained ATV route, R300, located west of the private lands would continue to provide north-south public access from the Rabbit Creek Road to the Silver City Stage Road.

Windy Point pipeline – The route followed by the Windy Point pipeline would be re-opened to motorized use. The route of the Windy Point pipeline from the Windy Point well to the Hemingway Butte area was closed to motorized vehicles in the Hemingway Butte Play Area Mitigation Project (USDI 2006b). This closure was intended to protect the pipeline and eliminate impacts from OHV use. Since that action the pipeline has received extensive maintenance, valves and air gaps have been protected by re-routing trail sections and armoring valve boxes, pipe sections have been covered with additional soil and exposed pipe has been fixed and reburied. The remaining exposed pipe is steel and not subject to breakage by OHVs.

Upon further review and planning for implementation of the previous closure decision, it became apparent that closure of the pipeline route was both infeasible and extremely costly to prevent access. The pipeline route follows the Reynolds Creek Road and in many places is only a few feet from the road. At any of these locations, a vehicle can simply pull onto the pipeline route. Restricting this access would require the construction of 13 miles of fences with multiple crossings, cattleguards and gates. These issues were not considered in the previous decision.

Competitive use (motorcycle) – The existing competitive use area as designated in the Owyhee RMP would remain unchanged. Four hundred and seventy-four miles of the previously used 525 miles of competitive routes would be designated for continued competitive use by motorcycles. West of the Reynolds Creek Road, competitive use routes would be limited to those exiting from the Hemingway Butte Open Use Area and immediately crossing the Reynolds Creek Road to the east. Due to riparian and water quality resource concerns, the Sinker Creek drainage would be closed to competitive use with the exception of crossing points on existing routes. Where competitive use events require use of private and state lands, the permittee would be required to obtain permission from land owners before the event could be authorized.

2.5.3 Alternative C

This alternative was developed by the Owyhee County Recreation Task Force and then adopted in Resolution 08-02 (Appendix 1) by the County Commissioners on February 25, 2008.

Alternative C depicts the roads and trails originally included in the Travel Management Plan developed by the Owyhee County Recreation Task Force as the County Resolution and map were interpreted by the BLM. Map 5 shows the routes and trails that would be designated under this alternative. Routes not designated on Map 5 would be closed to motorized and mechanized vehicle use. Fencing or rock barriers may be required to prevent use of closed roads or trails.

Table 2-4. Alternative C – Miles of Route Designations by Type

	2wd	4wd	ATV	Single Track	**Total Routes**
Designated	55	126	120	147	**448**
Closed	212	148	200	262	**822**
Total					**1,270**

Public Access - Public access would be facilitated by the designation of trailhead and parking areas. Existing trailheads at the Rabbit Creek and Fossil Butte access points would remain, and the existing "45" access point would be upgraded to a Trailhead. (The Hemingway Butte Play Area also functions as a trailhead but is outside of the Murphy Subregion planning area.) Parking areas would be designated along the Reynolds Creek Road at Chalky Butte, Kane Springs; along the Rabbit Creek Road at the Black Mountain Road junction; along the Silver City Road at the junction with the Silver City Stage Road; and at an existing user created parking area one mile south of the junction. Based on the travel routes incorporated in this alternative, these parking areas provide needed access to the designated trail system and upgrading them to permanent status would be appropriate. Parking along roadsides would be discouraged and may be prohibited by Owyhee County on County roads.

ATV and single track trail management – Forty-five miles of existing maintained ATV trails would be converted to single track trails through designation and physical narrowing of the route. Fifty five miles of the designated 120 miles of trail would be managed for ATV use only.

Connectivity – Connections between trailheads and parking areas allows both point to point and loop rides. At present, routes between the Rabbit Creek and Fossil Creek trailheads cross private lands and/or utilize the Highway 78 Right-of-way. As BLM cannot designate routes on private lands or within the highway ROW, this alternative does not create uninterrupted trail connections between these trailheads. BLM would work with private landowners and IDOT in the future to develop agreements or acquire easements that would allow these connector routes to be designated.

Access closures - The current access point across from Noble Island on Highway 78 would be closed to all access. This access point provides access to an area that is experiencing considerable resource damage due to unregulated off-trail OHV use. This area exhibits substantial bare ground, soil loss and vegetation damage. The numerous user created routes in this area have created a defacto open play area. This is not consistent with the Owyhee RMP (1999). The Rabbit Creek Trailhead located approximately three miles south of the "45" already provides access to this area by way of designated maintained ATV trails.

Seasonal closures – County Resolution 08-02 states "The BLM should, in coordination with State Parks and Recreation, Idaho Fish and Game, and the County, develop and establish a process through which seasonal closure of trails, or portions of trails, can be effectively put in place for grazing, wildlife and public safety concerns."

Private lands access – In order to limit or prevent inadvertent trespass onto private lands as a result of designated routes dead ending at private land boundaries, most routes and trails that would create this situation have not been designated as part of the transportation system and would be closed. Certain routes are proposed for relocation to eliminate the section(s) that cross private lands. County and private access roads and rights-of-way leading to private lands are not affected by this action. The ATV cattleguard in T 3S, R 2W, Section 3 would be removed and the access point fenced in order to limit the possibility of trespass onto private lands in Sections 4 & 5. The 4WD/ATV route immediately adjacent to the west side of these private lands would be closed. The existing maintained ATV route, R300, located west of the private lands would continue to provide north-south public access from the Rabbit Creek Road to the Silver City Stage Road.

Windy Point pipeline – The route followed by the Windy Point pipeline would continue to be closed to motorized vehicles as specified in the Hemingway Butte Play Area Mitigation Project (USDI 2006b). This closure was intended to protect the pipeline and eliminate impacts from OHV use. In order to implement this closure, approximately 13 miles of fence and numerous gates and cattleguards would be required as the pipeline route is crossed by numerous other trails and roads open to vehicular use in several areas parallels the Reynolds Creek Road.

Competitive use (motorcycle) – The existing competitive use area as designated in the Owyhee RMP would remain unchanged. No specific trails would be designated for competitive use. In accordance with the County's Resolution, competitive uses could be authorized by BLM on a case-by-case basis on trails not otherwise open to use. West of the Reynolds Creek Road competitive use would be limited to those trails exiting from the Hemingway Butte Open Use Area and immediately crossing the Reynolds Creek Road to the east. Due to riparian and water quality resource concerns, the Sinker Creek drainage would be closed to competitive use with the exception of crossing points on existing routes. Where competitive use events require use of private and state lands, the permittee would be required to obtain permission from land owners before the event is authorized.

In order to implement competitive motorcycle events on authorized trails while not allowing the general public day-to-day use on these same trails, all locations where single track motorcycle

trails leave 2WD roads, 4WD roads or ATV trails, would require signage and a type of closure device (i.e. gate) that would restrict day-to-day access while allowing it to be opened on days of authorized events. There are currently so many of these locations, that approximately 116 miles of fencing and 467 gates would be required with closure notice signing at each location.

2.5.4 Alternative D – Proposed Action

This alternative was developed to incorporate information the BLM received through public comments subsequent to the Draft EA. This alternative also represents cooperative planning and consultation between the Owyhee County Commissioners, the Owyhee County Recreation Task Force, and the BLM. In a series of meetings, these separate entities, while maybe not able to reach total concurrence, were able to reach a general consensus with Alternative D represents.

Alternative D is based on the inventoried roads and trails in existence at the time of inventory in 2001-2003, with the addition of trails authorized for competitive (single track) use within the designated (RMP) Competitive Use Area, and trails (single track and ATV) designed to provide loop routes and provide better connectivity. Map 6 shows the routes and trails designated under this alternative. Routes not designated on Map 6 would be closed to motorized and mechanized vehicle use. Fencing or rock barriers may be required to prevent use of closed roads or trails.

Table 2-3. Alternative D – Miles of Route Designations by Type

	2wd	4wd	ATV	Single Track	**Total Routes**
Designated	273	230	185	152	**840**
Closed	36	53	150	191	**430**
Total					**1,270**

Public Access - Public access would be facilitated by the designation of trailheads and parking areas. Existing trailheads at the Rabbit Creek and Fossil Butte access points would remain. (The Hemingway Butte Play Area also functions as a trailhead but is outside of the Murphy Subregion planning area.) Parking areas would be designated along the Reynolds Creek Road at Chalky Butte, Kane Springs; along the Rabbit Creek Road at the Black Mountain Road junction; along the Silver City Road at the junction with the Silver City Stage Road; and at an existing user created parking area one mile south of the junction. The three parking areas along Reynolds Creek and Rabbit Creek roads were created in 2006 as temporary parking areas as part of the Hemingway Butte Play Area Mitigation Project (USDI 2006b). Based on the travel routes incorporated in this alternative, these parking areas provide needed access to the designated trail system and upgrading them to permanent status would be appropriate. Parking along roadsides would be discouraged and may be prohibited by Owyhee County on County maintained roads.

The parking area approximately one mile south of the Silver City/Stage Road junction would be used primarily by recreationists but may also be used by mining companies as a transfer location where short haul trucks would transfer their loads to long haul bulk carriers. A mining company

has proposed to improve this site from its existing condition by blading the parking area to an approved grade and applying a gravel surface to accommodate large trucks and recreational vehicles.

The existing "45" access point on Highway 78 three miles north of Murphy would be retained as a parking area and exterior fencing would be installed to define the limits of the parking area. Exit stiles appropriate for 4x4s, ATVs and/or motorcycles would be installed in the exterior fence to match the use of designated routes leaving the trailhead. Approximately two miles of fencing would be installed in order to prohibit access to the user created defacto open use play areas. The play areas are not consistent with the Owyhee RMP, which only allows for the 192 acre play area located at Hemingway Butte. From the "45", the fence would run directly west from the parking area and then to the north through T 1S, R 2W, Sec 32 & 33 and T 2S, R 2W, Sec. 4.

ATV and single track trail management – Eighty-five miles of existing non-maintained ATV trails would be added to the existing maintained trail system and maintained as needed in the future. These trails presently exist but are not currently part of the maintained system. ATV trails would be managed for use by OHVs no more than 50" wide and motorcycles. Single track trails would be managed for motorcycle (and mountain bike) use only.

Connectivity – This alternative is designed to provide connections between the Trailheads and parking areas to allow both point to point and loop rides. At present, routes between the Rabbit Creek and Fossil Creek trailheads cross private lands and/or utilize the Highway 78 right-of-way. As BLM cannot designate routes on private lands or within the highway ROW, this alternative does not create uninterrupted trail connections between these trailheads. BLM would work with private landowners and Idaho Department of Transportation (IDOT) in the future to develop agreements or acquire easements that would allow these connector routes to be designated.

Access closures - The current access points across from Noble Island on Highway 78 would be closed to all access. Approximately 1.75 miles of fencing would be installed along Highway 78 south of Noble Island (T 1S, R 2W, Sec. 28, 29 & 34) to eliminate user created parking along the Highway and to prohibit access to the defacto play areas being created. These user created parking areas provide access to an area that is experiencing considerable resource damage due to unregulated off-trail OHV use. This area exhibits the unauthorized creation of trails, soil loss and vegetative damage. The numerous user created routes in this area have created a defacto open play area. This is not consistent with the Owyhee RMP (1999).

Approximately 48 miles of routes would be closed to reduce disturbance to Golden Eagles year-long. Approximately 86 miles of routes would be closed in areas identified in the Owyhee RMP as habitat for Bighorn Sheep.

Due to riparian and water quality resource concerns, the Sinker Creek drainage would be closed to motorized use with the exception of crossing points on designated routes.

Seasonal closures – Action under this alternative incorporates a great deal of modification over current condition that is designed to benefit sage-grouse. Approximately 68 miles of routes

would be closed seasonally to create large contiguous tracts of nesting habitat that would be free from disturbance from March 1 through June 15. In addition to the 68 miles of seasonal closures, approximately 17 miles of routes would be closed permanently for the protection of sage grouse leks. Map 6 shows the closures and the large areas of protected nesting habitat, which total approximately 42,000 acres. The seasonal closures lie mainly to the south of leks but include a buffer of 0.6 miles to the north of leks, comprised mostly of salt desert shrub communities. This type of buffer is detailed in the Conservation Plan for Greater Sage-grouse in Idaho (2006) and would be sufficient to limit and mitigate road traffic approaching leks. Signage and gates would be installed as needed to inform users and prevent access to routes.

Temporary Closures - In accordance with Executive Order 11989 (1977), temporary closures prohibiting motorized use could be implemented throughout the subregion based on adverse environmental conditions (ex. wet spring) in order to prevent damage to soil resources and road surfaces.

Private lands access – In order to limit or prevent inadvertent trespass onto private lands as a result of designated routes dead ending at private land boundaries, most routes that would create this situation have not been designated as part of the transportation system and would be closed. County and private access roads and rights-of-way leading to private lands would not affected by this action. The ATV cattleguard in T 3S, R 2W, Section 3 would be removed and the access point fenced in order to limit the possibility of trespass onto private lands in Sections 4 & 5. The 4WD/ATV route immediately adjacent to the west side of these private lands would be closed. The existing maintained ATV route, R300, located west of the private lands would continue to provide north-south public access from the Rabbit Creek Road to the Silver City Stage Road.

Windy Point pipeline – The route followed by the Windy Point pipeline would be re-opened to motorized use. The route of the Windy Point pipeline from the Windy Point well to the Hemingway Butte area was closed to motorized vehicles in the Hemingway Butte Play Area Mitigation Project (USDI 2006). This closure was intended to protect the pipeline and eliminate impacts from OHV use. Since that action, the pipeline has received extensive maintenance, valves and air gaps have been protected by re-routing trail sections and armoring valve boxes, pipe sections have been covered with additional soil and exposed pipe fixed and reburied. The remaining exposed pipe is steel and not subject to breakage by OHVs.

Upon further review and planning for implementation of the previous closure decision, it became apparent that closure of the pipeline route was infeasible due to its length and multiple access points and would be extremely costly. The pipeline route follows the Reynolds Creek Road and in many places is only a few feet from the road. At any of these locations, a vehicle can simply pull onto the pipeline route. Restricting this access would require the construction of 13 miles of fences with multiple crossings, cattleguards and gates. These issues were not considered in the previous decision.

Competitive use (motorcycle) – The existing competitive use area as designated in the Owyhee RMP would remain unchanged. Four hundred and seventy one miles of the previously used 525 miles of competitive routes would be designated for continued competitive use by motorcycles. West of the Reynolds Creek Road, competitive use routes would be limited to those exiting from

the Hemingway Butte Open Use Area and immediately crossing the Reynolds Creek Road to the east. Due to riparian and water quality resource concerns, the Sinker Creek drainage would be closed to competitive use with the exception of crossing points on designated routes. Where competitive use events require use of private and State lands, the permittee would be required to obtain permission from land owners before the event could be authorized.

Signing and information - Routes throughout the subregion would be marked indicating appropriate uses, kiosks would be installed at parking areas, and maps would be published and distributed at trailheads, parking areas, and BLM offices.

Additionally, all spur roads (not otherwise restricted) ending on BLM land would be signed to indicate they are dead end routes; all routes that dead end at a private land boundary would be signed to indicate that they are not through routes; and all routes that physically continue onto private lands would be signed to indicate that there are private lands ahead and permission to cross would be required. Where it is appropriate, signs and boulders, fencing, or other barriers would be installed at the end of a spur route to prevent further expansion.

2.6 Comparison of Alternatives

Table 2-5. Murphy Subregion - Route Designations by Alternative

Route Classification	Route Designation	Alternatives			
		(A) Current Situation	(B)	(C)	(D) Proposed Action
2wd	Designated	353	285	55	273
	Closed	0	33	212	36
4wd	Designated	252	222	126	230
	Closed	0	53	148	53
ATV	Designated	292	173	120	185
	Closed	0	154	200	150
Single Track	Designated	373	154	147	152
	Closed	0	196	262	191
Total Designations Proposed		**1,270**	**834**	**448**	**840**
Total Routes proposed for closure		**0**	**436**	**822**	**430**

*Note – Routes mileages under each classification vary within the alternatives due to designations, closures, and the reclassification of routes in order to create connectivity within the alternative. Reclassification of routes was also made after more information was gained through the public scoping process.

3.0 Affected Environment and Environmental Consequences

This chapter describes the affected environment (resources that are affected by the alternatives), and the environmental consequences which describe the anticipated effects on the resources if the alternatives are implemented. The general effects of each alternative on resource categories are addressed. Direct effects are caused by an action and occur at the same time and place. Indirect effects are caused by an action and occur later in time or farther removed in distance. Cumulative effects are defined as the effect on the environment which results from the incremental effect of an action when added to other past, present, and reasonable foreseeable future actions regardless of what agency or person undertakes such other actions.

The proposed plan would implement the Owyhee RMP OHV decision Objective RECT 1 by designated roads and trails (routes) for use by motorized vehicles within the 233,000 Murphy Subregion of the Owyhee Front. This area is located south of Highway 78, generally in the area of T 1, 2, 3 and 4 S, R 1, 2 and 3 W (Map 1), Owyhee County, Idaho. The subregion runs from Reynolds Creek southeastward to Castle creek. The northern boundary is largely the right-of-way for highway 78 and the private land boundaries along this Highway. The southern boundary is the top of the Owyhee Mountain Range.

For purposes of analysis, it is assumed that where trail closures occur and where access is restricted, these actions would considerably reduce OHV use in these areas. It is also assumed that current motorized and non-motorized travel and recreation uses would occur on designated routes but levels of use would increase over time in a manner consistent with observable trends.

3.1 Air Quality

3.1.1 Affected Environment – Air Quality

Air quality in a given area is described by the concentration of various pollutants in the atmosphere. National Ambient Air Quality Standards (NAAQS) are established by the U.S. Environmental Protection Agency (EPA) for criteria pollutants including ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, lead, and particulate matter. These standards are generally expected to be met under the existing conditions in the area. Air quality in the area around Murphy is considered good due to the rural setting. Consequently, ambient pollutant concentrations have rarely been monitored. The nearest monitoring stations are located in Boise where particulate matter (PM10) and CO are of concern. The Idaho Division of Environmental Quality (DEQ) has the primary responsibility to carry out the requirements of the Federal Clean Air Act (CAA) in Idaho. The primary mechanism for implementation is known as the State Implementation Plan (SIP), which EPA requires each state to prepare.

The CAA also establishes a national goal of preventing any further degradation or impairment of visibility within federally designated attainment areas. Attainment areas are classified as Class I, II, or III and are subject to the Prevention of Significant Deterioration (PSD) program. Class I areas include national wilderness areas (larger than 5,000 acres) and national parks (larger than 6,000 acres). Class III status is assigned to attainment areas to allow maximum industrial growth

while maintaining compliance with NAAQS. All other attainment areas, such as the Murphy Subregion, are designated Class II.

In 1994, the EPA made the determination that OHV emissions (from diesel and gasoline engines) are significant contributors to ozone and carbon monoxide. They also determined that these engines make a substantial contribution to particulate matter and smoke emissions that may reasonably be anticipated to endanger public health and welfare.

Condition and Trend
Air quality parameters are below the federal and State standards due to a lack of emission sources throughout much of the area based on its rural setting. The major emission sources in the area are seasonal burning of farm fields. Livestock operations are sources of particulate matter and, in the case of large feed lot type operations, a major source of ammonia (http://www.deq.state.id.us/about/division.cfm).

Climate and Meteorology
Climate is the composite of annually prevailing weather conditions of a particular region throughout the year, averaged over a series of years. Climate is both a driving force and a limiting factor for biological, ecological, and hydrological processes, as well as for resource management activities. Variations in climate in the planning area are mostly influenced by elevation and latitude.

Condition and Trends
The region's climate is characterized by relatively cold wet winters and warm dry summers. Located some 400 miles from the Pacific Ocean, the area is influenced by prevailing westerly maritime winds via the Columbia and Snake River valleys and continental air masses Although these air masses are modified considerably by the time they reach this region, their influence is especially noticeable during the winter months, when most of the areas precipitation occurs. Snowfall is light in the lower elevations, often accompanied by rapid melting. In the higher elevations, snow accumulation covers the ground for most of the winter. Because the influence of these maritime air masses does not frequently extend this far inland during the summers, the summer climate is more characteristic of an inland continental climate. Summer months tend to be dry, sunny, and warm. Average annual precipitation, recorded at Murphy, Idaho, is 7.8 inches; Reynolds, Idaho is 10.7 inches; and Silver City, Idaho is 21.6 inches. Annual average mean temperature at Reynolds is 47.9°F and at Silver City is 45.6 °F (http://www.wrcc.dri.edu). January is typically the coldest month while July is the hottest month.

3.1.2 Environmental Consequences – Air Quality

3.1.2.1 Alternative A – Designate Existing Routes

There would be a direct negative impact to air quality from the exhaust and dust generated by the OHV use in the area. Due to the dispersed nature of the use, effects on air quality would be minimal and would not cause human health issues.

3.1.2.2 Alternative B

Assuming that the amount of actual use would be similar to Alternative A, even though the trail system configuration would be different, impacts to air quality would be the same as Alternative A.

3.1.2.3 Alternative C

Assuming that the amount of actual use would be similar to Alternative A, even though the trail system configuration would be different, impacts to air quality would be the same as Alternative A.

3.1.2.4 Alternative D – Proposed Action

Assuming that the amount of actual use would be similar to Alternative A, even though the trail system configuration would be different, impacts to air quality would be the same as Alternative A.

3.2 Soils/Watershed

3.2.1 Affected Environment – Soils/Watershed

The soils in the planning area are extremely diverse. This diversity is a result of the variability in parent materials, slope, aspect, elevation, climate, and vegetative communities. Soils in the planning area can be classified into three major geomorphologic units based on geology and source of parent materials. Each unit is briefly described below.

Soils formed in sedimentary materials – These soils occur on low elevation level to very steep, dissected sedimentary terraces and bottomlands. These soils formed in alluvium, residuum, loess and lacustrine deposits derived from sedimentary and mixed volcanic materials. They are moderately deep to very deep, and well drained to excessively drained. The alluvial, residual and loess soils typically have surface textures ranging from loamy sand to loam. The lacustrine soils are typically heavier with textures ranging from fine silty to silty mixed. All of these soils have an aridic or aridic to xeric soil moisture regime and a mesic soil temperature regime (they are warm and dry). The erosion potential from wind and/or water is low to high depending on surface texture and slope. Isolated areas of saline soils and very fine grained soils associated with playa lakes are located within this soil unit. These soils also include areas formed in materials derived predominantly from re-worked volcanic ash.

Soils formed in granitic materials – These soils occur on upper elevation undulating to steep granitic foothills and mountains. These soils formed in residuum, colluvium, and alluvium derived mainly from intermediate intrusive rock. They are shallow to moderately deep and well drained to somewhat excessively drained. Surface textures range from sandy loam to very gravelly loam and have various amounts of rock fragments. These soils have a xeric soil

moisture regime and a mesic or frigid soil temperature regime. The erosion potential is moderate to very high depending on surface texture and slope.

Soils formed in rhyolite and basalt – These soils occur on nearly level to moderately steep structural benches, foothills and tablelands. Generally, soils in the steeper areas formed in residuum and slope alluvium derived from welded rhyolitic tuffs and the soils on the tablelands formed in alluvium and residuum derived from basalt and welded rhyolitic tuff. Volcanic ash deposits are included throughout this geomorphic unit. These soils are shallow to moderately deep and well drained. Surface textures range from loam to clay loam and can include various amounts of rock fragments. These soils have a xeric or xeric to aridic soil moisture regime and a mesic to frigid soil temperature regime (they are dry and warm to cold). The erosion potential from wind and/or water is low to high depending on surface texture and slope. Where the soils are formed in ash, the erosion potential can be considerably higher.

Soils information for the planning area was obtained from the National Resource Conservation Service soil surveys for Owyhee County (USDA, 2003).

Important components of many of the soils within the Murphy Subregion are biological soil crusts (BSC). These organisms play a particularly important role in the lower elevation sedimentary derived soils where they protect the interspatial areas from various forms of erosion. Occupying the interspatial area between plants, crusts play a vital role in soil stability, soil moisture retention, and site fertility by fixing atmospheric nitrogen and contributing organic matter. Crusts also limit germination and establishment of exotic species, including invasive annual grasses. Crust cover is often inversely related to the amount of bare ground, suggesting that a decline in crust cover produces an increase in bare ground, rather than an increase in vascular plants with the exception of invasive annuals. The USDA National Range and Pasture Handbook, identifies biologic soil crusts as a measurable and critical indicator of rangeland health. The development and existence of BSCs are sensitive to soil disturbance, such as from livestock and OHVs, and therefore serve as an early indicator of ecological site decline. A decrease in soils covered with BSCs increases the risk of erosion.

Areas in a degraded ecological condition are subject to increased erosional processes and impaired watershed health. As vegetative cover is depleted and species composition is altered, the productivity of the site is being reduced through erosion and lack of biological diversity (Blackburn et al., 1986). Mechanical disturbance to the soil surface results in compaction and structural breakdown, which affects watershed health. Trampling by livestock, wild horses, OHV's and other recreational use, and road /trail building are major factors leading to erosion.

Accelerated erosion results when connected areas of bare soil are exposed to forces of rain, surface wind, and also tire shear. Overland erosion from water occurs in the form of sheet run off and forms rills and gullies. In the project area, human related influences of accelerated erosion are livestock grazing (both current and historic) and OHV use. Unmanaged OHV use in the project area has resulted in extensive system of trails and severe disturbance of hill slopes, effects of which has resulted in severe forms of erosion, including rills and gullies.

3.2.2 Environmental Consequences – Soils/Watershed

3.2.2.1 Alternative A – Designate Existing Routes

Impacts under this alternative would be greatest with continued soil erosion and subsequent loss of site productivity and sediment delivery to drainage systems. Mechanical disturbance from OHV activities results in destruction of soil aggregates, compaction, vegetative loss, accelerated erosion, formation of channels, and sloughing of washes (U.S. Geological Survey, Open-File Report 2007). Based on years of field observation and erosion and soil textural data in the Soil Survey of Owyhee County these impacts would be greatest in the areas dominated by the sedimentary derived soils and least in the volcanic (rhyolite and basalt) derived soils. The sedimentary areas have the most erosive and fragile soils. These soils are sloping and, in many areas, lacking in the structural vegetation to preclude recreationist from cross country travel.

The planned maintenance of routes would be beneficial in preventing accelerated soil erosion and reducing sediment delivery. Trail maintenance reduces the amount of ruts that can form and provides better drainage from the trails. In many instances (depending on soil type) it aids in hardening the trail surface thereby reducing the potential for erosion from tire shear.

3.2.2.2 Alternative B

The types of impacts to the soil resource would be similar to those described under Alternative A. Under this alternative, closure of 436 miles of the existing motorized routes would prevent further degradation in these areas and greatly reduce the existing impacts to the soil resource (soil structure destruction, soil compaction, vegetative damage, increased runoff and subsequent erosion) on an area wide basis. Where areas are closed there would not only be no use of the existing trails that would be put to rest, but the associated off trail use that often occurs would also be greatly reduced providing a long term benefit to the soils and vegetation in these areas.

The 12 miles of seasonal closures, which occur in the spring when soils have the potential to be saturated, and OHV use has the greatest potential to cause soil structural damage as well as compaction, would have a long-term positive impact in these areas. Access route closure to the "45" area experiencing substantial soil disturbance due to unregulated off-trail OHV use could, over the long term, aid in reducing this damage in this area. By eliminating access, and thereby restricting use, the impacts associated with unregulated use (soil structural destruction and compaction, vegetative damage, increased runoff and subsequent erosion) would be greatly reduced.

Planned maintenance of routes would be beneficial in preventing accelerated soil erosion and reducing sediment delivery as described above.

3.2.2.3 Alternative C

For purposes of analysis it will be assumed that where trail closures occur and where access is restricted these actions would substantially reduce OHV use in these areas.

Impacts to the soil resource would be the least under this alternative due to the extent of route closures planned (822 miles). Closure of 822 miles of the existing system of motorized routes would prevent further degradation (as described above) in these areas and greatly reduce the existing impacts to the soil resource on an area wide basis over the long-term. Competitive use, which has a direct negative impact to the soils along the route, is more restricted under this alternative and, therefore, could be more beneficial to the soil resource.

Access route closure to the area experiencing substantial soil disturbance due to unregulated off-trail OHV use could, over the long term, aid in reducing this damage in this area. By eliminating access, and thereby restricting use, the impacts associated with unregulated use (soil structural destruction and compaction, vegetative damage, increased runoff and subsequent erosion) would be greatly reduced.

Planned maintenance of routes would be beneficial to the soil resource as described above.

3.2.2.4 Alternative D – Proposed Action

For purposes of analysis, it will be assumed that where trail closures occur and where access is restricted, these actions would substantially reduce OHV use in these areas.

The types of impacts to the soil resource would be similar to those described under Alternative A. Under this alternative, closure of 430 miles of the existing motorized routes would prevent further degradation in these areas and greatly reduce the existing impacts to the soil resource (soil structural destruction, soil compaction, vegetative damage, increased runoff and subsequent erosion) on an area wide basis. Where areas are closed, there would not only be no use of the existing trails that would be put to rest, but the associated off trail use that often occurs would also be greatly reduced providing a long term benefit to the soils and vegetation in these areas.

The 68 miles of seasonal closures under this alternative, which occur in the spring when soils have the potential to be saturated, and OHV use has the greatest potential to cause soil structural damage as well as compaction, would have a long-term positive impact in these areas. The construction of approximately four miles of fence to prevent access to and the expansion of unauthorized play areas adjacent to the “45” and area South of Noble Island would prevent further damage and vegetation loss. By eliminating access, designating trails, and thereby restricting use, the impacts associated with unregulated use (soil structural destruction and compaction, vegetative damage, increased runoff and subsequent erosion) would be greatly reduced.

Planned maintenance of routes would be beneficial in preventing accelerated soil erosion and reducing sediment delivery as described above.

When temporary closures are utilized due to adverse environmental conditions, these would result in a positive short, and potentially long, term benefit to the soil resource. These benefits would be particularly positive in the case of closures due to unseasonably wet soil conditions or where wildland fire has destroyed the shrub component opening areas up for more unauthorized

use. Benefits would result from the prevention of physical destruction to the soil surface and the creation of ruts and new trails.

3.3 Vegetation

3.3.1 Affected Environment – Vegetation

Upland Vegetation
The diverse landforms and soils of the project area result in a variety of vegetation. The low elevation areas which were formed from lacustrine processes are characterized by concentrations of saline, which limits the type of vegetation that can inhabit these soils. These salt desert plant communities are adapted to survive saline conditions, and are typically dominated by spiny hopsage (*Grayia spinosa*), shadscale (*Atriplex confertifolia*), bud sagebrush (*Picrothamnus desertorum*), and in extreme conditions, greasewood (*Sarcobatus vermiculatus*). Wyoming big sagebrush (*Artemisia tridentata* ssp *wyomingensis*), tolerates some salinity and occurs throughout the area. The dominant herbaceous component of salt-desert shrub plant communities include; native perennial bunchgrasses such as Indian ricegrass (*Achnatherum hymenoides*), needlegrass (*A. therberianum*), bottlebrush squirreltail (*Elymus elymoides*), and Sandberg bluegrass (*Poa secunda*). Currently, these perennial grasses are largely absent along and near trails, but are scattered across the project area where habitat is relatively undisturbed. Cheatgrass (*Bromus tectorum*), an invasive exotic annual grass is common throughout the project area in the shrub understory and is the dominant species in some areas, especially in disturbed areas and adjacent to existing trails.

The mid and upper elevation portion of the project area along the Owyhee Front (where soils are deeper and more precipitation occurs) are vegetated with mountain big sagebrush (*A. tridentata* ssp *vaseyana*), Wyoming big sagebrush, bluebunch wheatgrass (*Pseudoroegnaria spicata*), and Idaho fescue (*Festuca idahoensis*). Areas with shallow soils or with restricted drainage, are vegetated with low sagebrush (*A. arbuscula*), and bluebunch wheatgrass and Idaho fescue. In poor condition, these areas contain few bunchgrasses, and more shrubs. At the uppermost elevations or northern aspect slopes, Western juniper (*Juniperus occidentalis*) occurs intermingled with Douglas fir (*Pseudotsuga menziesii*).

Seventeen livestock grazing allotments occur within the project area (Table 3.4 – pg 84). Rangeland Health Assessments for Whitehorse/Antelope, Brown's Creek, Garrett FFR, and West Castle allotments were completed in 2006 (USDI-BLM 2006); however, Evaluation/Determinations have not been completed to date. The assessments did not identify OHV use as contributing to resource issues. Rangeland Health Evaluation/Determinations for the remainder of these allotments were completed between 2003 and 2007. Evaluation/Determinations for Murphy FFR and Alder Creek FFR allotments concluded that standards for upland plant communities were being met. Evaluation/Determinations for Boone Peak, Quicksilver FFR, Stahle FFR, Red Mountain, Fossil Butte, Silver City, Joyce FFR, Hart Creek, and Hardtrigger allotments concluded that Standards for upland plant communities were not being met, however OHV use was not identified as a causal factor. Determinations for East Reynolds Creek, and Rabbit Creek/Peters Gulch allotments concluded that the standard for native plant communities was not being met, and OHV use was identified as a causal factor.

East Reynolds Creek
Pasture 1 is not meeting Standard 4 (Native Plant Communities), while pastures 2 and 3 are making progress towards meeting the standard and pasture 4, 5, 6, and 7 are meeting the standard. Soil loss and disturbance has occurred in pasture 1 from unauthorized OHV use that commonly occurs in this area.

Rabbit Creek/Peter's Gulch
Pastures 5 and 7 are making significant progress toward meeting Standard 4 (Native Plant Communities) and pasture 8 is meeting the standard. Pastures 1, 2, 3, 4, and 6 are not meeting Standard 4, however, only pastures 2 and 3 have OHV use occurring. OHV use is common in these two pastures and is resulting in soil compaction and loss.

Threatened, Endangered, and BLM Special Status Plant Species
No federally listed plant species are known to occur within the project area, although the U.S. Fish and Wildlife Service (USFWS) considers all of Idaho to be within the potential range of Ute ladies'-tresses (*Spiranthes diluvialis*), a federally threatened orchid species. This species occurs in spring, seep, and riparian habitats. Due to the difficulty in narrowly defining potential habitat for this species, USFWS has chosen to apply a loose definition and requires Section 7 consultation only in three counties of southeast Idaho or in areas where the plant is actually found (USFWS 2002). Surveys specifically for this species are recommended prior to authorizing federal actions in southwest Idaho, but not required.

Although no threatened or endangered plants are known to occur within the project area at this time; numerous populations of thirteen species of special status plants occur across the project area (see Table 3-1). Soil inclusions, within common plant communities, where special status plants occur satisfy specific edaphic requirements of these species. These soils are variable and include sandy, ashy, chalky, gravelly, cinder, lakebed sediment and loams. Areas where these species tend to persist are sparsely vegetated and are often highly erodible, fragile soils and as such are especially attractive to recreational OHV users. During the 2007 botanical survey of the project area, tire tracks were routinely observed throughout potential habitat and populated habitat.

Special status plants are sensitive species considered by the BLM to be rare in terms of global and/or state distribution. Each special status plant is ranked according to its rangewide and state rarity based on the Natural Heritage Program (ID F&G Conservation Data Center), and assigned a 'type' number by the BLM.

In 2006 and 2007, known populations of special status species within the project area were monitored and existing trail routes were surveyed for special status plants. Several of the special status plant species in the project area complete their life cycle in one year, when conditions are conducive to completing their life cycle. Spring moisture during the surveys was very low, and in general, few annual plants were observed. Previously undocumented populations (or sub-populations) and habitat of special status plant species were identified during the botanical survey conducted spring through fall, 2007.

Several areas of potential white-margined wax plant (*Glyptopleura marginata*) and white false tickhead (*Eatonella nivea*) habitats were observed, but no plants. A novel population of Malheur yellow phacelia (*Phacelia lutea* var. *calva*) was discovered, as well as habitat conducive to *P. lutea* var. *calva* and smooth mentzelia (*Mentzelia mollis*); again, no plants were present.

Six sites were observed with ATV and/or motorcycle tire tracks throughout the populations or habitat. One desert pincushion site is between two trails, and next to a livestock salt-block. Otherwise, very little OHV-related related disturbance to special status plants or habitat was observed.

Table 3-1. Known Special Status Plant Species in the Project Area and rankings:

Scientific Name	Common Name	General Habitat Type	Populations	BLM Rank
Astragalus mulfordiae	Mulford's milkvetch	South-facing sandy slopes and ridges with needle-and-thread grass, Indian ricegrass, and bitterbrush (650-850m)	4	Type 2
Astragalus purshii var. ophiogenes	Snake River milkvetch	Loosely aggregated, moving sand and gravelly sand deposits on bluffs, talus, dunes, and volcanic ash among salt-desert shrub communities (700-1075m)	4	Type 4
Blepheridachne kingii	King's desertgrass	Gravelly soils with greasewood, shadscale, bud sagebrush, and Indian ricegrass (1070-1830m)	2	Type 3
Chaenactis stevioides	Desert pincushion	Open, sandy sites in salt desert shrub communities (to 1200m)	3	Type 4
Dimeresia howelli	Doublet	Dry parts of mountains on rocky, cinder or gravelly soils (1100-2900m)	1	Type 3
Eatonella nivea	White eatonella	Sandy or volcanic soils often with sagebrush (763-1900m)	8	Type 4
Eriogonum shokleyi var. *packardiae*	Packard's (cowpie) buckwheat	Gravelly benches on lakebed sediments in shadscale and mixed desert shrub communities (760-1300m)	2	Type 3
Glyptopleura marginata	White-margined wax plant	Sandy-gravelly or loose ash soils in salt desert shrub communities (800-1200m)	13	Type 4
Nemacladus rigidus	Rigid threadbush	Sandy or cindery soils in the desert shrub zone (800-1200m)	5	Type 4
Penstemon janishiae	Janish's penstemon	Clay soil derived from volcanic ash or lakebed sediment in sagebrush (800-1300m)	3	Type 3
Pediocactus simpsonii var. *robustior*	Simpson's hedgehog cactus	Rocky or sandy benches and canyon rims in low sagebrush and bud sagebrush communities (900-1800m)	1	Type 4
Phacelia lutea var. *calva*	Malheur yellow phacelia	Volcanic ash soils in Wyoming sagebrush or salt desert shrub zones (900-1600m)	1*	Type 3
Phacelia minutissima	Least phacelia	Moist understory of false hellebore, aspen and tall forb communities in meadows, especially snow bank areas (1800-2100m)	2	Type 3
Psathyrotes annua	Turtleback	Sandy, well drained soils in salt desert shrub communities (730-1200m)	1	Type 2

* New population

Description/explanation of BLM Special Status Plant rankings

Type 1: Threatened, Endangered, Proposed, and Candidate species. These species are listed as Threatened or Endangered by the U. S. Fish and Wildlife Service (USFWS), or they are Proposed or Candidates for listing under the Endangered Species Act.

Type 2: Rangewide/Globally Imperiled Species - High Endangerment. These species have a high likelihood of being listed in the foreseeable future due to global rarity and significant endangerment factors.

Type 3: Rangewide/Globally Imperiled Species - Moderate Endangerment. These species are globally rare with moderate endangerment factors. Global rarity and inherent risks associated with rarity make these species imperiled.

Type 4: Species of Concern. These species are generally rare in Idaho with small populations or localized distribution with currently low threat levels. Due to small populations and habitat area, certain future land uses in close proximity could significantly jeopardize these species.

Type 5: Watch List. Watch list species are not considered BLM sensitive species and sensitive species policy guidance does not apply. These species may be added to the sensitive species list depending on new information concerning threats and species biology or statewide trends.

Noxious Weeds and Invasive Plants
Two plant species identified by the State of Idaho as noxious weeds are known to occur within the project boundary; whitetop (*Cardaria draba*) and tamarisk (*Tamarix parviflora*). These weeds are present mainly in and around ephemeral and perennial washes. The known occurrences of these, and any other noxious weeds, are reported to the BLM Boise District weed specialists who treat and monitor the infestations.

Several invasive plant species are present within and adjacent to the project area. These species include cheatgrass (*Bromus tectorum*), medusahead wildrye (*Taeniatherum caput-medusa*), halogeton (*Halogeton glomeratus*), tumble mustard (*Sisymbrium altissimum*), Russian thistle (*Salsola kali*), and bur buttercup (*Ranunculus testiculatus*). In dry, low-elevation areas, these weedy plant species are especially abundant because they are capable of capitalizing on bare ground and available moisture.

3.3.2 Environmental Consequences – Vegetation

3.3.2.1 Alternative A - Designate Existing Routes

Upland Vegetation and Noxious and Invasive Plants
This alternative would continue to have an adverse effect on the native plant communities in the area, because the higher levels of motorized use and the more extensive route network that would occur under this alternative would result in more exposed, disturbed ground than under the other alternatives, especially if levels of use increase over time in the expected manner consistent with observable trends.

In undisturbed areas, native plant communities are typically dominated by perennial species, invasive species are few, and annual production and reproduction are vigorous, with age class

structures appropriate for grass and shrub species. Canopy cover is adequate for soil protection and promotes moisture retention, infiltration and erosion protection.

In disturbed areas, specifically from OHV activities, direct impacts to vegetation include reduced vegetative cover and reduced growth rates which increase potential for non-native and pioneering species to become established further altering the composition of the plant communities (Ouren et. al 2007). The impervious nature of compacted soils along routes and paved road surfaces would increase runoff and generate greater moisture availability immediately along OHV routes (Ouren et. al 2007). In theory, this would promote increased vegetative cover due to the increase in soil moisture available for plant growth than what would be found in areas further away from OHV routes. However, species that would benefit from this increased moisture would be pioneer types that can withstand the recurring disturbance.

The bare ground created from OHV routes and trails increases the rate of evaporation of available moisture, increases the risk of wind and water erosion, and creates conditions that favor the establishment of invasive plant species. Networks of trails fragment intact habitat and create edge habitats which generate conditions that promote the encroachment of non-native and invasive plant species directly adjacent to trails. Over the long term, as invasive and non-native species populations increase in size, they would continue to encroach into the native vegetation out-competing native species. Other indirect effects include increased amounts of airborne pollutants and dust raised by OHV traffic.

Fugitive dust from OHV traffic negatively affects vegetation in the vicinity of roads and trails. A blanket of dust on plant foliage inhibits plant growth rates, reducing plant size and survivorship (Ouren et al. 2007). The small particles in dust, block stomata on plant leaves which leads to cell destruction and reduces the ability of the plant to perform critical processes including; photosynthesis, respiration and transpiration (Spellerberg and Morrison, 1998). The weakened native vegetation provides an increased opportunity for exotic and invasive species to increase and out-compete native vegetation for soil nutrients and soil moisture.

Soil compaction is the direct effect of compressive action on moist soils. Common actions that cause compaction to occur include; OHV use, livestock, wildlife, human trampling and even raindrops (Liddle 1991, 1997). In the case of OHVs, compaction occurs at shallow depths restricting root growth into deeper levels of soil moisture thus limiting growth in plants (Ouren et al. 2007). Shallow soil moisture favors annual plant growth, as annual plant roots are shallow and thus able to capitalize on available moisture. Therefore, soil compaction increases the potential for invasive, non-native annuals and other early successional plants to establish rapidly in OHV routes, whereas native perennials may require up to 5 years to become established (Adams et al. 1982; Prose et al. 1987; Lovich and Bainbridge 1999).

Over the long term, populations of existing plants, native and invasive, would decrease as soil is exposed due to the extensive number of trails. Subsequently, the long term effects of exposed soil would result in ground moisture rates decreasing, accelerated erosion, and any viable seed reserves in the soil would be lost.

Special Status Plants
The designation of all current roads and trails would not provide sufficient protection to ensure the continued existence of the current populations of special status plants within the project area. Habitat fragmentation and degradation would continue in those areas where current trails are having negative impacts on special status plants or unoccupied habitat. The continued use of the "45" access point, would eventually lead to the extirpation of the Mulfords milkvetch population. Historic Mulfords populations to the southeast of the "45" have already become extirpated from OHV activity and further losses of this species would result in the elevation the status to a candidate species.

Germinating seeds and seedlings are sensitive to OHV use and can be killed by direct contact with tires or buried by soil compaction and/or soil erosion (Bury 1977, CEQ 1979). Indirect impacts on young plants include a decrease in soil moisture, soil infiltration rates and thermal structure of soils: these are all OHV related deficiencies that can disrupt seed germination and seedling growth of native vegetation and special status plant species (Davidson and Fox 1974).

3.3.2.2 Alternative B

Upland Vegetation, Noxious Weeds and Invasive Plants
Actions proposed under this alternative would alleviate some of the negative impacts to plant communities. The negative impacts to vegetation described in Alternative A would be reduced commensurate with the amount of designated access points and routes. However, the formal designation of trails authorized for competitive (single track) use within the designated (RMP) Competitive Use Area, and trails (single track and ATV) designed to provide loop routes and better connectivity would potentially increase the number of users traveling through plant communities and potential habitat. The fragmentation of native plant communities would be reduced and those areas with soils that are susceptible to disturbance and erosion would be protected.

The designation and/or closure of trails for specific uses would have a beneficial effect on the native plant communities by limiting impacts from uses in areas susceptible to erosion and physical disturbance. Limiting the mileage of designated routes both motorized and non-motorized and managing to prevent the creation of new routes would limit the spread of noxious weeds and invasive plants where motorized or non-motorized vehicles are a method of dispersal. The access closure at the "45" on Highway 78 would protect the plant communities from further degradation, fragmentation and reduce the potential for increased invasive species.

Threatened, Endangered, and BLM Special Status Plant Species
The plethora of special status plant occurrences and overabundance of trails throughout the northern portion of the project area make total protection unfeasible to implement and enforce. However, both seasonal and permanent closures of trails would benefit special status plant populations in the vicinity. The closures would help to protect the populations from further disturbance and make potential habitat more hospitable. The designation of certain trails for specific uses (ATV, four wheel drive, etc) would allow more control over the type of disturbance that occurs and protect habitat for special status plant populations. Limiting the mileage of designated routes both motorized and non-motorized and managing to prevent the creation of

new routes would limit the spread of noxious weeds and invasive weeds where motorized or non-motorized vehicles are a method of dispersal.

The additional designated parking areas would alleviate scattered parking that poses additional risks to special status species and creates additional fragmentation. The upgrade of the three parking areas along the Reynolds Creek and Rabbit Creek Roads that were created as temporary parking areas in 2006 would also alleviate scattered parking and may reduce the amount of people who use parking areas with limited facilities.

Restricting access at the "45" on Highway 78, would limit further habitat loss and degradation for the Mulfords milkvetch populations.

3.3.2.3 Alternative C

Upland Vegetation, Noxious Weeds and Invasive Plants
Actions proposed under this alternative would alleviate some of the negative impacts to plant communities. The negative impacts to vegetation described in Alternative A would be reduced commensurate with the amount of designated access points and routes. Designation of roads and trails for specific uses would reduce the impact of motorized vehicles. Fragmentation of native plant communities would be minimized. The closure and designation of trails for specific uses would benefit the native plant communities by limiting uses in areas susceptible to erosion and physical disturbance. Limiting mileage of designated routes both motorized and non-motorized, and managing to prevent the creation of new routes would limit the spread of noxious weeds and invasive plants where motorized or non-motorized vehicles are the/a method of dispersal.

Trailheads designated at the existing Rabbit Creek and Fossil Butte access points would reduce disturbance from random parking areas being created. The addition of parking areas being designated along the Reynolds Creek Road at Chalky Butte, Kane Springs; along the Rabbit Creek Road and the Black Mountain Road junction; along the Silver City Road at the junction with the Silver City State Road; and at an existing user created parking area one mile south of the junction would alleviate scattered parking that poses additional risks to the special status species and creates additional fragmentation. The upgrade of the three parking areas along the Reynolds Creek and Rabbit Creek Roads that were created as temporary parking areas in 2006 to permanent status would also alleviate scattered parking and may reduce the amount of people who use the parking areas with limited facilities.

Threatened, Endangered, and BLM Special Status Plant Species
The populations of special status plants would benefit from the closure of adjacent trails and would help to protect the populations from further disturbance. Designating certain trails for specific uses would allow more control over the type of disturbance that occurs, and protect the habitat for these special status plant populations.

3.3.2.4 Alternative D – Proposed Action

Upland Vegetation, Noxious Weeds and Invasive Plants
Actions proposed under this alternative would alleviate some of the negative impacts to plant communities described under Alternative A. The level of impacts would be commensurate with the amount of designated access points and routes. The designation of additional parking areas would reduce the scattered parking that occurs alongside main roads and leads to dispersed trail use. The increase of seasonal closures under this alternative and the closure of duplicate routes, would result in less damage to wetted soils when they area most prone to compaction, this in turn would provide a more conducive habitat for perennial plants.

Temporary closures throughout the subregion prohibiting motorized use to prevent resource damage during adverse environmental conditions (ex. wet spring), would benefit the plant communities by protecting areas from activities when soils are saturated and prone to displacement. These closures would reduce the creation of new routes around puddles, and expansion of low spots in existing roads and trails.

Threatened, Endangered, and BLM Special Status Plant Species
The plethora of special status plant occurrences and overabundance of trails throughout the northern portion of the project area make total protection unfeasible to implement and enforce. However, the increase in seasonal closures under this alternative would have a positive impact on special status plant populations by limiting use during the active growth period. The seasonal closures would provide added protection while the plants are growing and setting seed, and lessen the potential for soil compaction and still retain the routes for use later in the year. The closure of duplicate routes adjacent to special status plant populations would lessen impacts to the plants, through decreased disturbance to the plants and soil.

3.4 Riparian Areas/Water Quality

3.4.1 Affected Environment – Riparian Areas/Water Quality

Riparian- The Murphy Subregion is contained within the Mid-Snake/Succor Hydrologic Unit. Reynolds Creek, Middle Snake River-Rabbit Creek, Middle Snake River-Swan Falls, and Castle Creek watersheds (hydrologic unit code (HUC) 10) make up the Murphy Subregion. The majority of streams are classified as intermittent, with few perennial streams containing intermittent reaches (Map 9). The general fluvial geomorphology of many of the streams along the front range of the Owyhee Mountains is low sinuosity, high gradient V-shaped channels. When the streams flow into the lower gradient plains, they typically increase in sinuosity and become chisel-shaped channels. Under deteriorating conditions, width to depth ratios increase, eroded banks become evident, and streams can become severely entrenched.

A long narrow section along the north western edge of the Murphy Subregion is within the eastern side of the Reynolds Creek watershed. Perennial streams on public land include the Peters Gulch headwaters (approximately 1.0 mile) and Dryden Creek (approximately 1.2 miles), both of which are tributaries of Reynolds Creek. Dryden and Sheep Creeks were assessed as functional at-risk with

static to upward apparent trends. Riparian shrub communities are generally expanding, with shrub recruitment occurring along most reaches.

The central portion of the Murphy Subregion is within the Middle Snake River-Rabbit Creek and Middle Snake River-Sinker Creek watersheds. A 3.5 mile section of Rabbit Creek is the only stream segment that has perennial flow in Middle Snake River-Rabbit Creek watershed. The remaining streams are intermittent and ephemeral. The flood plain is composed of fine soils and the channels are generally easily erodible. Where late-seral herbaceous riparian species (sedges and rushes) exist, they are in low numbers and are not reproducing and expanding as well as the shrub communities. The paucity of an herbaceous layer is most notable along the middle reaches of Rabbit Creek. Riparian areas vegetated with shrub communities are generally dominated by willow and/or alder communities.

The primary drainage in the Middle Snake River-Sinker Creek watershed is Sinker Creek, a perennial fourth order, low to moderately sinuous stream that originates in the Silver City Range of the Owyhee Mountains. Sinker Creek flows in a northeasterly direction and all water is diverted for agriculture approximately 1.0 mile before entering into the Snake River. Sinker Creek within the Murphy Subregion is approximately 7.6 miles and is entirely on state and private property. There is approximately 5.8 miles of South Sinker Creek and 6.4 miles of North Sinker Creek on BLM land that flow into Sinker Creek. Primary tributaries of South Sinker Creek are Oro Fino Gulch (1.7 miles) and Pedracini Fork (1 mile). Gerdie Creek is also a tributary to South Sinker Creek, but only a 1.9 mile reach near the headwaters is perennial. North Sinker Creek perennial tributaries on BLM land are Scotch Bob (3.7 miles), Stobie Gulch (1.3 miles), and Horse Creek (2.5 miles). Two perennial creeks, Cosmopolitan Creek (1.3 miles) and Gray Eagle Creek (0.9 miles) both flow into Horse Creek. Riparian communities (where they exist) generally include various willows, cottonwood, and a diversity of other shrubs along with herbaceous communities of various rushes, sedges and grasses. Stream segment functionality, if deficient, is typically due to stream channel morphology being out of balance with the landscape setting, and/or the plant community composition and structure was not adequate to dissipate energy during high flow events.

The southern portion of Murphy Subregion is within Castle Creek watershed. The primary drainage is Castle Creek, a fourth order perennial stream that generally flows in a northeasterly direction from Toy Mountain pass into the Snake River. Approximately 13.7 miles of Castle Creek is within the Murphy Subregion, but only the upper 4.5 miles is on BLM land. There are no perennial tributaries of Castle Creek within Murphy Subregion. However, there are tributaries with perennial reaches including Bates Creek, Picket Creek, and Hart Creek (2.0, 5.1, and 4.4 miles, respectively, on public lands) that all flow into Catharine Creek on private property. Approximately 10 miles of Browns Creek is on public land and is entirely intermittent tributary of Castle Creek. Castle Creek has a dominant riparian overstory of various willows (yellow and coyote willow), woods rose, and other facultative-wetland species that somewhat limit the herbaceous understory. Riparian vegetation is controlling erosion, stabilizing streambanks, and shading water areas. The noxious weed whitetop and Canada thistle was observed on Castle Creek. Pickett and Hart Creeks are predominately rock armored and dominated by woody riparian shrubs. Browns Creek is predominantly vegetated with an Arroyo Willow/Bench community that supports diverse composition and age-class of riparian

vegetation. However cover of these species is not adequate to stabilize streambanks during periodic high flow events.

There are a total of fifty-four known seeps and spring throughout the Murphy Subregion (Map 9). A majority of the lentic sites are impacted by livestock and wild horses. To date, there have been no lentic assessments identifying OHV impacts to springs or seeps in the project area.

Water Quality- Surface water quality varies throughout the Murphy Subregion, and is dependent on geology, soils, land uses and water discharge. The streams can be characterized as low volume rangeland type streams that have a combination of high ambient temperatures, geography, poor shading, low flow volume, flow alteration, and naturally warm springs, which often lead to exceedances of the water temperature standard (IDEQ 2003). The majority of the streams in the Murphy Subregion have not been assessed by the Idaho Department of Environmental Quality (IDEQ); however, all streams have general beneficial use designations for secondary contact recreation, wildlife habitat, and aesthetics (Map 10) (IDEQ 2002). Of the assessed streams, most are on the §303(d) list for excess sediment and temperature and for flow alterations. Table 3-2 identifies stream reaches, designated uses, and §303(d) listed pollutant. The Mid Snake River/Succor Creek Subbasin Assessment and TMDL (2003) identified that even with maximum potential shade, some of the streams in the watershed cannot meet the cold water temperature standard, and were evaluated to determine the best achievable temperature based on the maximum potential shade (IDEQ 2003). IDEQ identified instream channel erosion as being the primary source of sediment loading in Castle Creek, Sinker Creek, and Succor Creek. Additionally, IDEQ identified that current land management practices contribute to unstable banks and this resultant instability leads to sediment delivery to the stream channel (IDEQ 2003).

Table 3-2. Water quality designated uses and associated pollutant.

Stream Reach	**Designated Uses**[1]	**§303(d) Listed Pollutant**
Browns Creek	General Use	Temperature; Sediment
Castle Creek*	CW; SS; PCR	Temperature; Sediment; Flow Alteration
Pickett Creek	General use	Temperature; Sediment; Flow Alteration
Rabbit Creek	General Use	Sediment
Sinker Creek*	CW; SS; PCR	Temperature; Sediment; Flow Alteration

[1] CW- Cold Water Aquatic Life; SS-Saminoid Spawning; PCR-Primary Contact Recreation
[2] * Identifies streams and pollutants for which TMDLs were developed

IDEQ has proposed de-listing temperature and sediment TMDL in Browns Creek and Pickett Creek, and the sediment TMDL in Rabbit Creek.

3.4.1.1 Alternative A – Designate Existing Routes

Riparian- Direct and indirect impacts to riparian vegetation and stream channels would increase as projected increases in OHV use continues in the Murphy Subregion. Approximately 94.5 miles of streams (perennial and intermittent) have OHV trails adjacent (</= 5 meters) to, cross, or are directly within channels and are presented in Table 3-3. Impacts from these trails include physical disturbance of riparian vegetation at stream crossings, increased suspended sediment loads and channel widening from vehicle crossings. Additionally, increased sediment loads contribute to destabilizing of stream channels and scouring of riparian vegetation during high stream flows (Furniss et al. 2000 and Rosgen 1996).

Table 3-3. Stream reaches Perennial and 303(d) listed stream reaches containing OHV crossings/trails.

Stream Name	Flow Type	IDEQ Assessment	OHV Type
Alder Creek	Perennial	Not Supporting	4WD
Bates Creek	Intermittent	Not Assessed	2WD
Briar Creek	Intermittent	Not Assessed	ATV, 2WD, MC, 4WD
Browns Creek*	Intermittent	Not Supporting	2WD, 4WD
Buckaroo Creek*	Intermittent	Not Supporting	2WD, 4WD
Castle Creek	Perennial	Not Supporting	4WD
Cat Creek*	Intermittent	Not Supporting	2WD, 4WD
Diamond Creek	Intermittent	Not Assessed	ATV, 2WD, MC, 4WD
Dryden Creek	Perennial	Full Support	4WD
East Fork Reynolds Creek	Perennial	Full Support	4WD
East Fork Sinker Creek	Perennial	Not Assessed	4WD
Fossil Creek	Intermittent	Not Assessed	ATV, 2WD, MC, 4WD
Hart Creek	Perennial/ Intermittent	Not Assessed	ATV, 2WD, MC, 4WD
Horse Ranch Creek	Perennial	Not Assessed	ATV
Little Hart Creek	Intermittent	Not Assessed	4WD, MC
Moores Creek	Intermittent	Not Assessed	ATV, 2WD, MC, 4WD
North Fork Sinker Creek	Perennial	Not Assessed	4WD

Pickett Creek*	Perennial/ Intermittent	Not Supporting	2WD, MC, 4WD
Presby Creek	Intermittent	Not Supporting	2WD, MC, 4WD
Rabbit Creek	Perennial/ Intermittent	Not Assessed	ATV, 2WD, MC, 4WD
Scotch Bob Creek	Perennial/ Intermittent	Not Assessed	2WD
Sheep Creek	Perennial	Full Support	4WD
Sinker Creek	Perennial/ Intermittent	Full Support	2WD, ATV
South Fork Rabbit Creek	Intermittent	Not Assessed	ATV, MC, 4WD
Tiddie Creek	Intermittent	Not Assessed	4WD
Alder Creek	Perennial	Not Supporting	4WD
Bates Creek	Intermittent	Not Assessed	2WD
Briar Creek	Intermittent	Not Assessed	ATV, 2WD, MC, 4WD

[1]*303(d) listed streams

Additionally, a network of hydrologically connected OHV trails would increase the drainage densities of small watersheds, increasing runoff and stream flow during high flow events (thunderstorms/snow melt), and consequently increase erosion and introduce more sediment into the stream system (Furniss et al. 2000). The areas of concern concentrated in the north and along the eastern edge of the Murphy Subregion.

Direct and indirect impacts to lentic areas would increase with increasing OHV use and would impact 22 lentic areas due to their close proximity to trails. Impacts include physical disturbance (wheel cut and ruts) to spring and seeps leading to dewatering and loss of overall lentic area. Indirect impacts include fine sediment accumulation in the lentic areas from nearby OHV use. The accumulated sediment within the lentic area would eventually degrade and "silt-out" the wetland and reduce overall water holding capacity (Ouren et al. 2007).

Water quality- Impacts to water quality are expected to increase as projected OHV use increases within the project area. The primary impact would be increases in suspended sediment loads from vehicle crossing streams, and soil erosion and its delivery to streams from roads and routes, particularly during thunderstorms (Furniss et al. 2000). Increases in fine sediment impair the growth and survival of aquatic life, including aquatic insects and fish. The streams with the highest sedimentation potential are presented in Table 3-3. Many of the OHV trails in the northern and eastern project area form hydrologically connected network systems that would increase drainage densities of small watersheds, increasing runoff and stream flow during high

flow events (thunderstorms/snow melt), and consequently increase erosion and introduce more sediment into the stream system (Furniss et al. 2000). The overall result of increased sedimentation into stream systems would be continued failure to meet IDEQ water quality standards for listed stream and potential impairment of new streams.

3.4.1.2 Alternative B

Riparian- Direct and indirect impacts to riparian vegetation and stream channels would increase with the projected increase in OHV use in the Murphy Subregion. Approximately 59.6 miles of streams (perennial and intermittent) would have OHV trails adjacent (</= 16 feet) to, cross, or are directly within channels. All impacted streams are presented in Table 3-3 except for the East Fork Sinker, North Fork Sinker, and Sinker Creeks. To protect water resources, trails from said streams would be removed. Trail impacts from the remainder of the streams would be the same as Alternative A (physical disturbance of riparian vegetation at stream crossings, increased suspended sediment loads and channel widening from vehicle crossings), however there would be less potential sediment entering the stream systems with the fewer crossings/trails adjacent to channels (94.5 miles of trail in Alternative A compared to 59.6 miles in Alternative B).

A network of hydrologically connected OHV trails would continue to exist in the north and along the eastern edge of the subregion. However, due to the removal of approximately 430 miles of roads, the connectivity of these areas would decrease, resulting in a potential overall decrease in sediment entering the aquatic system. Most of the direct and indirect impacts associated with sedimentation would be mitigated through adaptive management.

Lentic impacts would increase with the projected increase in OHV use. Approximately 18 lentic areas would be impacted due to their close proximity to trails. Indirect and direct impacts would be similar to Alternative A. If resource degradation occurs, adaptive management would be applied to remedy site specific situations.

Water quality- Impacts to water quality are expected to increase as projected OHV use increases within the project area. As with Alternative A, the primary impact would be increases in suspended sediment loads from vehicle crossing streams, and soil erosion and its delivery to streams from roads and routes, particularly during thunderstorms (Furniss et al. 2000). All impacted streams are presented in Table 3-3 except for the East Fork Sinker, North Fork Sinker, and Sinker Creeks. To protect water resources, trails from said streams were removed. This would lead to less sediment entering Sinker Creek, progressing towards full attainment of its beneficial use and eventual removal off of the IDEQ 303(d) list.

A network of hydrologically connected OHV trails would continue to exist in the north and along the eastern edge of the subregion. The removal of approximately 430 miles of roads would reduce connectivity of these areas, resulting in a potential overall decrease in sediment entering the aquatic system. Most of the direct and indirect impacts associated with sedimentation would be mitigated through adaptive management. Many of the 303(d) listed streams with sediment as a pollutant would be have reduced sediment loads, primarily due to fewer trails, and due to the use of adaptive management to prevent current or future water quality

degradation. Many of these streams would progress towards meeting their individual beneficial uses, and eventually be removed from IDEQ 303(d) list.

3.4.1.3 Alternative C

Riparian- Direct and indirect impacts to riparian vegetation and stream channels would be similar to the impacts described in Alternative B. Approximately 33.1 miles of streams (perennial and intermittent) have OHV trails adjacent (</= 16 feet) to, cross, or are directly within channels. All impacted streams are presented in Table 3-3 except for Alder, Buckaroo, Castle, and East Fork of Sinker Creek. Those specific routes would be closed and have little impacts on said streams. Trail impacts from the remainder of the streams include physical disturbance of riparian vegetation at stream crossings, increased suspended sediment loads and channel widening from vehicle crossings. However, there would be less potential sediment entering the stream systems with fewer crossings/trails adjacent to channels. Most of the direct and indirect impacts associated with sedimentation would be mitigated through adaptive management.

The previously mentioned network of hydrologically connected OHV trails in the north and along the eastern edge of the subregion would greatly diminish due to the removal of approximately 822 miles of trail. This would result in a potential overall decrease in sediment entering the aquatic system.

Lentic impacts would increase with increasing OHV use. Approximately 11 lentic areas would be impacted due to their close proximity to trails. Indirect and direct impacts would be similar to Alternative B, and if/when resource degradation occurs, adaptive management would be applied to remedy site specific situations.

Water quality- Impacts to water quality are expected to increase as projected OHV use increases within the project area. As with Alternative B, the primary impact would be increases in suspended sediment loads from vehicle crossing streams, and soil erosion and its delivery to streams from roads and routes, particularly during thunderstorms (Furniss et al. 1991). All impacted streams are presented in Table 3-3 except for Alder, Buckaroo, Castle, and East Fork of Sinker Creek, which all trails were removed from these areas. Closing these trails would lead to less sediment entering Alder, Buckaroo, Castle, and East Fork of Sinker Creek, progressing towards full attainment of their beneficial uses and eventual removal of Alder, Buckaroo, and Castle Creeks off of the IDEQ 303(d) list for sediment.

Many of the 303(d) listed streams with sediment as a pollutant would have reduced sediment loads, primarily due to fewer trails, and due to the use of adaptive management to prevent current or future water quality degradation. Many of these streams would progress towards meeting their individual beneficial uses, and eventually be removed from IDEQ 303(d) list.

3.4.1.4 Alternative D – Proposed Action

Riparian-Direct and indirect impacts to riparian vegetation, stream channels and lentic areas would be similar to impacts detailed in Alternative B. Differences between trail designations

and routes within riparian areas are negligible between Alternative B and Alternative D. Seasonal trail closures would decrease potential impacts in the south-central portion of the subregion during the periods of non-use.

Water Quality- Direct and indirect impacts would be similar to impacts detailed in Alternative B. Seasonal trail closures would decrease potential impacts in the south-central portion of the subregion during the periods of non-use.

3.5 Wildlife

3.5.1 Affected Environment – Wildlife

BLM Special Status Species
Several Special Status Species (SSS) exist within the TMP area. While the Murphy Travel Management Plan (TMP) area does not currently support species listed as Threatened or Endangered, two species, pygmy rabbit and greater sage-grouse, are currently under status review for possible listing under the Endangered Species Act of 1973. BLM special status species are those species federally identified as threatened, endangered, proposed or candidate species, and species identified by the State of Idaho as sensitive species. Special status species documented or suspected within the TMP area include California bighorn sheep, prairie falcon, northern goshawk, ferruginous hawk, loggerhead shrike, sage sparrow, Brewer's sparrow, Great Basin black-collared lizard, longnose snake, western ground snake, western toad, and Woodhouse's toad.

Sensitive Mammals
Pygmy Rabbit - This species is currently under review by the USFWS to determine if listing under the Endangered Species Act (ESA) of 1973 is warranted. The pygmy rabbit is a sagebrush obligate that has been found from 2,900 ft. to over 6,000 ft. in elevation in southwestern Idaho. The pygmy rabbit is the smallest rabbit in North America. This species prefers dense big sagebrush habitat, utilizing sagebrush for both food and cover. Recent research indicates that large areas of habitat may be needed to conserve pygmy rabbits to accommodate seasonal, regional, and potentially annual variation in resource availability and to maintain linkages among populations (Sanchez and Rachlow 2008). It is one of two rabbit species in North America that dig their own burrows. Because of their close association to their burrows, pygmy rabbits are usually only found where there are deep loamy or sandy loam soils. They also appear to generally avoid juniper stands. From recent surveys, it appears pygmy rabbits are sparsely distributed across southwestern Idaho and only two sites consisting of potential burrows have been documented in the TMP area. Recent research has shown that pygmy rabbits are capable of dispersing long distances and that their conservation will require large tracts of suitable habitat (Estes and Rachlow in press). Activities degrading mature, dense stands of big sage, overgrazing, and motorized recreation are detrimental to pygmy rabbit.

California Bighorn Sheep – Bighorn sheep have been documented all along the Owyhee front where suitable habitat is found. The sheep likely move between Castle Creek and Reynolds Creek and some movements may be related to human disturbance (Jake Powell, IDFG, Pers. Comm.). There are three major areas of use by bighorn within the TMP area. The total amount

of roads and trails within bighorn sheep habitat is approximately 253 miles. The sheep herd in this area is made up of approximately 50 individuals and the population appears to be static or in a downward trend. Habitat for bighorns in this area is in marginal condition.

As OHV trails and roads have expanded higher on the mountains of the Owyhee front, bighorn sheep have undoubtedly been negatively affected by their presence. The extent of the effects is not known but may be one of the factors influencing the static or downward trend in the population.

Sensitive Raptors

Prairie Falcon – This raptor is fairly common in the valley area and cliff areas within the TMP. The Murphy TMP is in close proximity to the Birds of Prey National Conservation Area and there are likely several breeding pairs of prairie falcons outside the TMP area. Nesting habitat is plentiful in the nearby cliff ledges and rock crevices along the Snake River and in Reynolds Creek Canyon. Prairie falcons likely use the TMP area for hunting when recreation use is low. Prairie falcons mainly prey upon ground squirrels and songbirds. The prairie falcon is a species considered to be imperiled by the BLM, and declines have been noted in other areas of the U.S. However, this portion of southwest Idaho has had the highest known nesting density of prairie falcons in North America and populations appear to be remaining stable (Paige and Ritter 1999). Complete loss of habitat from urbanization or reductions in habitat quality from changes in land use or from fire remain threats for the species in Idaho.

Golden Eagle – Golden eagles are protected under The Bald and Golden Eagle Acts as amended in 1990. BLM manages golden eagles under Executive Order 13186 Sec. 3, which directs federal agencies to promote the conservation of migratory bird populations. Golden eagles use the entire area for foraging and nine nesting territories are in the planning area. Within each of the territories there are various nests that pairs have constructed and which nest the eagle pairs select to use can vary from year to year. Of the nine territories, four are of great concern due to nest locations near routes and/or near areas susceptible to intrusive human activities. These nesting pairs of eagles have been monitored for several years, with some data going as far back as the 1960s. Nesting success has varied throughout the years. The area provides suitable habitat for eagles with several rocky areas for nests and a variety of prey items to feed upon. Golden eagles in the project area prey on a variety of species but most of their diet consists of jackrabbits and squirrels (Kochert 1972). The golden eagle mostly hunts within about two miles of its nest (Dunstan *et al.* 1978, p 98; and Marzluff *et al.* 1997b, pp 673-686). Golden eagles are sensitive to disturbance during the breeding season.

Ferruginous Hawk – This hawk species prefers flat or rolling landscapes in sagebrush shrublands and other arid environments and nests on rimrock, cliff ledges, on an outcrop, shrubs, haystacks, or junipers. The TMP area provides suitable habitat for foraging and nesting. This hawk species feeds mainly on jackrabbits and ground squirrels but will also take other prey items such as songbirds, grouse, ducks, snakes, lizards, and large insects. Several potential prey items are found within the TMP area, although their numbers are likely reduced in areas of moderate to high OHV use. Ferruginous hawk is a species considered imperiled by BLM. The species faces local extinctions in Idaho due to habitat loss caused by agriculture development and

urbanization, livestock grazing, reduction in prey populations either through habitat loss or poisoning to control small mammal populations, illegal shooting, and human disturbance.

Northern Goshawk – This species of hawk prefers forests edges and open woodlands in boreal and temperate forest of the northern hemisphere. The species is considered imperiled by BLM and is a State of Idaho Species of Special Concern. While goshawk has been documented in the planning area, this species is likely only there on a very limited basis as it migrates through the area. There is very little suitable habitat for goshawk in the Murphy TMP area.

Sensitive Birds

Greater Sage-grouse – Currently, greater sage-grouse is under status review for possible listing under the ESA of 1973. Generally, habitat conditions have deteriorated or been altered to some degree throughout the range of sage-grouse. This has caused local extirpations or declines in sage-grouse populations throughout their historical range. Sage-grouse in the planning area spend winter and spring at lower elevations along the transition zone between the big sagebrush community and salt desert shrub habitat. Over time, there have been forty different leks documented within the planning area. The number of active leks within TMP area boundary is now 12, with 28 leks no longer considered active, although the birds may have changed lek sites from their original location of documentation. Lek attendance, as determined by counting male birds, demonstrates fluctuations from year to year but there is a general downward trend, indicative of the population trend in this area.

Table 3-4.

Lek ID #	High Count Year/# of Birds[1]	Low Count Year/#of Birds	Most Recent Count/# of Birds
20618	2004/14	2006/8	2007/10
20643	2005/24	2006/22	2006/22
20508	2003/11	2006/0	2007/0
20505	2005/64	2007/35	2007/35
20442a	2004/7	2005/7	2005/7
20198	2005/7	2005/7	2005/7
20664	2006/23	2006/23	2006/23
20189	2006/23	2005/4	2007/15
20196	2006/27	2007/16	2007/16
20642	2005/6	2005/6	2005/6
20201	2005/9	2005/9	2005/9
20197	2005/33	2007/19	2007/19

1-Birds counted only includes males.

The leks within the planning area are generally located along the transition zone between Wyoming big sagebrush and salt desert shrub communities (Figure 3-4). The salt desert shrub community is usually sparse, low growing vegetation that provides suitable lekking habitat and the big sagebrush community to the south and southwest provides suitable nesting habitat. Data from radio collared hens indicate they are moving from these leks into the sagebrush habitat to nest. Once nesting is completed, hens move their broods further south and higher up the mountains.

The 233,000 acre TMP area contains approximately 127,776 acres of habitat classified as key sage-grouse habitat. Approximately 31,262 acres are classified as degraded habitat for sage-grouse due to annual grass invasion and/or juniper encroachment. Approximately 73,962 acres are unclassified but likely provide habitat for some aspect of sage-grouse life-history.

Loggerhead Shrike – Several loggerhead shrikes have been observed and documented within the TMP area. Some may be year-round residents while others may migrate south where prey may be more plentiful. Loggerhead shrikes prefer open country wherever there is low vegetation. They prey chiefly on insects but they adjust their diets seasonally according to the availability of prey species and will consume lizards, snakes, small mammals and birds as well. Shrikes nest and rear young within the TMP area, building nest in shrubs or trees with dense foliage (Paige and Ritter 1999). The area could support more shrikes but they likely avoid areas of moderate to high OHV use. Loggerhead shrikes are declining across the continent due to habitat loss and land use practices.

Sage Sparrow – This species of sparrow is a sagebrush obligate and exists in sagebrush shrublands dominated by big sagebrush with perennial bunchgrasses although it occasionally can be found in other shrub habitats. In the northern Great Basin, sage sparrows use low and tall sagebrush/bunchgrass, juniper/sagebrush, mountain mahogany/shrub, and aspen/sagebrush/bunchgrass communities as primary breeding and feeding habitats (Paige and Ritter 1999). They may nest within the TMP area although they likely avoid areas experiencing moderate to high levels of OHV use.

Brewer's Sparrow – Brewer's sparrow is considered a sagebrush obligate. It is widespread and highly associated with sagebrush shrublands having abundant, scattered shrubs and short grass. It can also be found in mountain mahogany, rabbitbrush, pinyon-juniper, or bunchgrass grasslands (Paige and Ritter 1999). Brewer's sparrows are more likely to occur in sites with high shrub cover and large patch size. The species has been documented near the TMP area and likely uses the TMP area for nesting and foraging to some degree.

Sensitive Reptiles

Great Basin Collared Lizard – The Great Basin collared lizard exists throughout the TMP area in lower elevation rocky canyons with sparse vegetation. They are strongly associated with rock cover. This species is considered rare in Idaho and is only found in the southwest portion of the state. Suitable habitat can be patchy and therefore some populations are likely isolated and susceptible to habitat fragmentation (Pope and Munger 2003). Little is known about their reproduction in Idaho (IDFG 1994). Most sightings of collared lizards in the TMP area occur in areas of high to moderate recreation due to the quality habitat found in those popular use areas.

Longnose Snake – This species of snake is only found in a small area of Idaho, including most of the TMP area, however, it has only been documented in a few locations. Lack of more sightings could be from the crepuscular to nocturnal habit of the species, they are few in number, or there is little suitable habitat within the Murphy TMP area. Longnose snakes use burrows for refuge from high temperatures and predators during the day. This species of snake seems to prefer upland habitat with sandy to sandy loam soils with a shrub and forb component (IDFG 1994).

Most sightings of Longnose snakes in the TMP area occur in areas of high to moderate use due to the quality habitat found in those popular use areas.

Western Ground Snake – The western ground snake is a small snake species inhabiting a limited area of southwestern Idaho, including the TMP area. The distribution of this species is similar to the longnose snake and the sparse documentation of the species could be due to the same reasons identified for the longnose snake. This snake prefers desert habitats with loose or sandy soils. This species may be mildly venomous, but are not known to bite humans. Ground snakes are secretive and nocturnal, and little is known about their reproductive status in Idaho (IDFG 1994). Most sightings of western ground snakes in the TMP area occur in areas of high to moderate use due to the quality habitat found in those popular use areas.

Sensitive Amphibians

Western Toad – This species inhabits a wide variety of habitat from desert sagebrush to mountain meadows. They are usually near some form of water and likely breed in early spring in Idaho. Western toads are generally active in twilight or during the night and take shelter during the day under logs, rocks, or in burrows of other animals, which is likely why there is little documentation of the species in the TMP. Western toads have been documented at the southern portion the TMP area.

Woodhouse's Toad – This toad species frequents a wide range of habitats including farmland, sagebrush desert, grasslands, and woodlands. It seems to prefer sandy areas and breeds in quiet water during or soon after it rains. Woodhouse's toad normally breeds between February and July but has been known to breed as late as September. This toad can be active at anytime of the day, although it is largely nocturnal. It often prepares its own daytime retreat by burrowing backward into the soil (Linder and Fichter 1977). This species has been documented in the southeast portion of the TMP area and the low number of sightings of this species is likely due to its nocturnal behavior.

Migratory Birds (other than waterfowl and shorebirds)

The TMP area likely provides suitable habitat for several migratory bird species, which were formerly referred to as neo-tropical birds. While some birds are habitat specific there is generally some overlap of use between habitat types. The common species of open grass-dominated habitats that may be found within the TMP area is vesper sparrow, meadowlark, and horned lark. Common bird species of sagebrush-dominated habitats likely to be found in the TMP area include Brewer's sparrow, loggerhead shrike, sage sparrow, green-tailed towhee, and lark sparrow. Where juniper cover increases and becomes dominant in sagebrush habitat, chipping sparrow, white-crowned sparrow, Townsend's solitaire, and western wood-peewee are usually present, although there is little juniper found within the TMP area. There is likely little mountain shrubland in the TMP area, but where bitterbrush, snowberry, bitter cherry, and snowbrush ceanothus become dense, species such as spotted towhee, western and mountain bluebird, and warbler species may be common, in addition to species from the other habitats. Riparian habitat made up of willows, dogwood, cottonwood, and mountain alder, usually host a unique group of species including yellow warbler, yellow breasted chat, western kingfisher, and fly catcher species. The riparian bird community is normally more distinct from surrounding upland communities.

Wildlife
Several species of wildlife associated with sagebrush ecosystems inhabit the TMP area. The entire TMP area is classified as deer and pronghorn antelope habitat. Approximately two thirds is classified as elk habitat. Most use by deer and elk likely takes place during winter months when snow has pushed the animals to lower elevations. Pronghorn antelope are likely present throughout the year although they are highly mobile and they likely avoid OHV activity as much as possible. There are approximately 3,600 acres of crucial antelope winter habitat in the central portion of the TMP area. Most winter use of the routes within the antelope crucial winter habitat comes from hunters and not OHV riders. Other species likely to inhabit the area include mountain lion, bobcat, badger, coyote, black-tailed jack rabbit, cottontail rabbit, gopher snake, western rattlesnakes, and several bird and small mammal species. Upland game species found within the area include California quail, gray partridge, chukar partridge and perhaps a few pheasant. Several hawk species use the area for foraging and/or nesting at times or in areas of light OHV use. Overall, numbers and diversity of wildlife is likely reduced from OHV use.

Habitat for wildlife within the TMP area is made up of salt desert shrub, a transition zone from salt desert shrub to sagebrush steppe, sagebrush steppe, and some juniper and Douglas fir in the higher elevations. Cheatgrass is present throughout the TMP area. The area is quite open with the main form of cover for larger animals being topographic. Topographic cover is abundant due to the many ravines, rocky outcrops, and drainages.

Several riparian areas provide quality habitat, water, and cover for the majority of wildlife species in the area, although some streams and riparian areas are in a degraded condition from grazing and recreation (see Riparian Areas/Water Quality Section 3.4). Currently there are 95 miles of routes within 10 meters of all riparian areas.

3.5.2 Environmental Consequences – Wildlife

Impacts Common to All Alternatives
Several of the effects to wildlife would be similar for all the alternatives. The important differences between alternatives for wildlife are the miles of roads and trails (routes) within the TMP area, miles of routes within riparian areas, and proposed route closures and seasonal closures for wildlife. These closures create patches of contiguous habitat without routes and provide refuge areas for wildlife to complete necessary life history events, such as sage-grouse lekking or nesting, and they provide refuge from the noise and disturbance associated with motorized recreation.

There are no known positive effects when it comes to wildlife and motorized recreation. Several studies have been completed to assess the effects of OHV use on wildlife and wildlife habitat. Most of the effects fall into one of three categories including habitat fragmentation, disturbance, and habitat degradation. There is little documentation of direct mortality to wildlife from OHVs, although physical impairment and stress does occur from hearing loss, increased metabolic rates, escape responses, reduced reproductive output, and disruptions to foraging (Berry 1980; Bury et al. 1977; and Canfield et al. 1999). OHV use can lead to habitat degradation, reduced patch size, reduced populations, interruption of life-history events, and cause disturbance from both noise

and presence (Barton and Holmes 2007; Ouren et al. 2007; Wisdom et al. 2004; Wakkinen et al. 1992; Marler et al. 1973; Luckenbach and Bury 1983; Aldridge and Brigham 2001; Brooks and Lair 2005; Brattstrom and Bondello 1983; and Havlick 2002).

The effect of noise emitted from OHVs can be considerable on animals. In particular, noise may alter animal behaviors, breeding success, the abilities of some species to detect predators, and it can stimulate aestivating animals to emerge from underground burrows at inappropriate times. Exposure to OHV noise has been shown to cause inner ear bleeding in kangaroo rats (Berry 1980b; Bury 1980). Noise and human presence can also disturb and displace wintering big game animals, leading to increased physiological stress during a time when ungulates are often already stressed from low temperatures, deep snow, or food shortages (Canfield et al. 1999). The increased stress can lead to death and reproductive loss.

Special Status Species

Sensitive Mammals

Pygmy Rabbit – Potential effects from OHV use on pygmy rabbits would include habitat fragmentation, collision mortality, collapsed burrows, disturbance, and habitat degradation. Disturbance from OHVs may lead to diminished body mass, hearing impairment reduced productivity, and/or poor survivorship. Studies of animal activity indicate cottontail rabbit tracks were 10 times more abundant in areas with no OHV use compared to areas with OHV use (Ouren et al. 2007), and similar results could be expected for pygmy rabbit. This secretive species is likely sensitive to OHV use and high levels of use likely lead to local extirpations.

California Bighorn Sheep – From the literature, bighorn sheep distributions and activities are negatively influenced by OHVs (Bear and Jones 1973), and many authors have confirmed those observations and recommended regulating OHV use and human activities where they affect sheep (Wilson 1969, 1975; Dunaway 1971a; Geist 1971b; Graham 1971, 1980; Demarchi 1975; DeForge 1976; Horejsi 1976, 1986; Elder 1977; Hicks and Elder 1979; Leslie and Douglas 1980; Skiba 1981; Hansen 1982; Stevens 1982; Stemp 1983; King 1985; Krausman and Leopold 1986a; and Harris et al. 1995a). Because of the high densities of routes in preferred bighorn habitat within the TMP, levels of disturbance are potentially high but sheep likely avoid those areas. Canfield et al. (1999) noted that where summer recreational activities approach high levels, impacts on reproductive performance of ungulate populations may be expected. Ungulates have been shown to alter their patterns of foraging and spatial use of habitat, and diminished reproductive output as a result of disturbance from ATVs (Yarmoloy et al. 1988).

Sensitive Raptors

Golden Eagle, Prairie Falcon, Ferruginous Hawk, Northern Goshawk – There are several documented effects of OHVs to raptors. Harmata et al. (1978) observed that one incubating prairie falcon would respond to the sound of a motorcycle 800 m (0.5 miles) away. Golden eagles have also been shown to be very sensitive to disturbance, especially during the incubation period (Snow 1973). General effects to these raptors likely include disruption of hunting activities from OHV noise and presence and reduced prey base. Raptors likely avoid areas where OHV use is occurring and this reduces available habitat for foraging. Harmata et al. (1978) also found that one prairie falcon would avoid its usual week-day flight areas and spend

weekends away from high OHV use. The prey base for raptors is likely reduced in the TMP area, because small mammals and birds are negatively affected by OHV use. Berry (1980) indicates that the significant reductions in small animals easily could have measurable impacts on raptor foraging success and, ultimately, on productivity. Habitat for prey species of raptors is degraded from loss and changes in vegetation and due to fragmentation by the many trails and roads in the area (Ouren et al. 2007). Alternatives proposing reduction in routes and creation of large patches of contiguous habitat would provide the greatest benefit to these species.

Sensitive Birds

Sage-grouse – The greatest effects to sage-grouse would likely result from impacts during breeding and nesting. Disturbance during breeding season may cause sage-grouse to disperse from the lek earlier in the day than normal, interrupt display behavior, cause a decline in male lek attendance, interfere or stop mating, and cause hens to disperse further from the lek for nesting (Lyon and Anderson 2003). Lyon and Anderson (2003) identified disturbed leks as those within 3.2 km or 1.98 miles of roads or gas wells. They found that hens from leks with human disturbance traveled greater distances, approximately twice as far, to establish a nest than hens from undisturbed leks. Hens from disturbed leks nested an average of 2.5 miles from the lek and hens from disturbed leks were less likely to initiate a nest than hens from undisturbed leks. Sage-grouse hens have been known to travel long distances to nest. In a study in Oregon, Hanf et al. (1994) documented sage-grouse hens travelling as far as eight miles from the closest lek to nest and 50% of the hens studied nested five miles from the nearest lek. While Hanf et al. (1994) did not distinguish between disturbed and undisturbed leks; the leks she monitored should be considered disturbed because biologists were trapping and handling sage-grouse.

Most research on sage-grouse has shown that population declines are related to reduced nesting success (Schroeder 1997; Braun 1998; Schroeder et al. 1999). Monitoring is needed and would be completed as part of any of the selected actions to determine if lekking sage-grouse are being disturbed by OHVs. If disturbance at leks is documented then changes to OHV management would be made to reduce disturbance. In addition, if winter use by OHVs in the TMP becomes common, monitoring would be needed to evaluate impacts to wintering sage-grouse but at this time winter use is minimal.

Brewer's Sparrow, Sage Sparrow, Loggerhead Shrike – These sensitive species are likely affected by OHV use in very similar ways. Overall, bird species diversity and biomass has been shown to be significantly higher in areas without OHV use when compared to areas of moderate use (Berry 1980; Weinstein 1978). Effects of OHV use on these species include disruption of breeding behavior, disruption of foraging, fragmentation of habitat, accelerated heart rates and metabolic function during disturbance events, and failed reproductive efforts (Ouren et al. 2007). OHVs travelling cross-country can lead to diminished cover and breaking of shrubs containing nests (Ouren et al. 2007). These species prefer large tracts of undeveloped sagebrush. Disruption of foraging and increased heart rates and metabolic rates can lead to reduced individual fitness. Management proposing reduction in trails, cross-country travel, and increased patch size would benefit these species.

Sensitive Reptiles

Great Basin Collared Lizard, Longnose Snake, Western Ground Snake – OHV use can effect these species by direct mortality, disturbance from noise and presence, fragmentation of habitat, impacts to metabolic functions, and reductions of prey base. Luckenbach and Bury's (1983) study of lizards found that areas without OHV use supported 1.8 times more species, 3.5 times more individuals, and 5.9 times more biomass. In addition, Bury et al. (1977) found more reptile species (1.63 times more) and greater reptile abundance (182 percent more individuals) at control sites than at OHV sites. Brooks (1999) found similar results when comparing a Research Natural Area and an area used by OHVs. Noise from OHVs has also been shown to have detrimental effects to lizard species, even causing loss of hearing (Bondello et al. 1979). The reptile species within the TMP are being negatively impacted by OHVs.

Sensitive Amphibians

Western Toad, Woodhouse's Toad – Effects of OHV use on amphibians is not well documented. Negative effects may result from disruption of breeding, effects from noise, habitat fragmentation, and direct mortality from collisions or OHV collapsing burrows with toads inside.

Migratory Birds (non-waterfowl or shorebirds)

Migratory bird species existing within the Murphy TMP area are negatively affected by OHV use. Effects are similar to those mentioned under SSS bird species above. In addition, Bury et al. (1977) found five times the number of breeding pairs and ten times the biomass on control plots versus areas with moderate OHV use. Weinstein (1978) documented similar findings. OHV noise interferes with males establishing territories and attracting a mate. Management actions reducing the effects of OHV use and increasing patch size or area without roads or trails would improve conditions for migratory birds.

Wildlife

Based on the literature, wildlife species existing within the Murphy TMP area are being negatively affected by OHV use. As a general rule, areas of OHV use have lower diversity of species and reduced densities of animals. Elk have been shown to demonstrate high levels of movement when exposed to OHVs, potentially impacting foraging time, and development and maintenance of fat reserves (Wisdom et al. 2004). In the same study, deer did not increase movements but may have stayed in dense cover for longer periods of time than normal, thus impacting foraging time. Elk are likely only present within the TMP on a limited basis during winter months when OHV use is limited. Deer are more prevalent in the TMP area, especially during winter months but at that time there is likely little conflict due to recreational OHV use. Antelope have been shown to avoid areas of recreational use with no habituation after three years (Fairbanks and Tullous 2002). If winter use were to increase, restrictions would need to be established to protect wintering elk, deer, and antelope. Other species in the area including several small mammal species, hawks, and predators such as badgers, coyotes, weasels, and skunks are also negatively affected by OHV use. For example, evaluations of a motorcycle race course indicated a 90% decline in small mammals, with effects lasting a year later (U.S. BLM 1975).

3.5.2.1 Alternative A – Designate Existing Routes

This alternative would provide the greatest amount of OHV routes, and there would only be small patches/areas of contiguous habitat without roads or trails. Therefore, there would be less area for wildlife to seek refuge from the noise and disturbance of recreationists. New unauthorized trails would likely increase in areas without maintenance, decreasing habitat quality throughout the TMP area. Miles of routes within five meters of riparian areas would remain at the current amount of 95. Many existing trails would likely not be maintained leading to continued habitat degradation.

Special Status Species

Sensitive Mammals
Pygmy Rabbit – If present, this alternative would have negative effects to pygmy rabbits because there would be no reduction in routes or levels of habitat fragmentation. Motorized recreation would continue throughout the TMP area and areas of refuge would be minimal. As OHV traffic increases over time and new routes are established, there would be less available habitat for this species.

California Bighorn Sheep – Currently, important habitat areas for bighorn sheep have several miles of routes and all would remain with this alternative. These trails and roads would remain on the landscape causing negative effects to bighorns, and many would not be maintained leading to further degradation of habitat. This alternative would not reduce the level of negative effects to bighorn sheep and may lead to their extirpation along the Owyhee front in the foreseeable future as pressure from OHVs increases.

Sensitive Raptors
Golden Eagle, Prairie Falcon, Ferruginous Hawk, Northern Goshawk – Selection of this alternative would cause continued negative effects to these raptor species and the effects would increase with higher numbers of people using the area. There would be increased disturbance and less prey base over time. Golden eagles, prairie falcons and ferruginous hawks would have little suitable nesting habitat free from disturbance and reproduction would be negatively affected. Numbers of these raptors would remain static at best but would likely decrease within the TMP area.

Sensitive Birds
Greater Sage-grouse – This alternative would have negative effects to sage-grouse and contribute to their extirpation along the Owyhee front. This would be due to the increased usage of the area over time and due to the numerous routes existing near leks and within the nesting area. There would be no buffers for sage-grouse leks or nesting areas and OHV use near leks would likely have considerable detrimental effects. Many existing trails would not be part of the maintained trail system, negatively affecting habitat.

Brewer's Sparrow, Sage Sparrow, Loggerhead Shrike – Much of the suitable habitat for these species would remain highly fragmented and levels of disturbance with its associated effects identified above would increase over time as usage of the area intensifies.

Sensitive Reptiles
Great Basin Collared Lizard, Longnose Snake, Western Ground Snake – Alternative A would not improve conditions for reptiles. Habitat would remain highly fragmented as all the existing trails would remain in the OHV area. Use would likely increase on all the trails affecting more area and a greater number of individuals throughout the area. Interruptions to foraging and breeding as well as effects of noise would likely cause decreased populations over time.

Sensitive Amphibians
Western Toad, Woodhouse's Toad – This alternative would have detrimental effects to these species. Habitat would remain fragmented and riparian area trails would not be reduced. There would be increased OHV use over time and increased disturbance. Habitat quality and toad populations would be expected to decrease over time with selection of Alternative A.

Migratory Birds (non-waterfowl or shorebirds)
Alternative A would not improve current conditions and would provide the few benefits to birds. Effects to breeding, nesting, and successful fledging would occur. By retaining all existing trails, bird habitat would remain fragmented and levels of disturbance would increase over time. Areas of refuge would be minimal with this alternative.

Wildlife
This alternative would not reduce the footprint of disturbance and with the projected increase of use; the area may become unsuitable for many species. All wildlife would continue to be negatively affected throughout the OHV area and there would be no reduction in miles of roads and trails. Most if not all of the negative effects identified for the species above would also apply to the general wildlife species in the area. Highly mobile animals such as deer, coyotes, and elk would only use the area during periods of low OHV use. Winter use would cause additional physiological stress to animals during a time of year that is usually difficult to survive due to extreme cold, little available food, and/or deep snow. Other wildlife species such as small mammals would likely decrease over time as levels of disturbance increase.

3.5.2.2 Alternative B

This alternative reduces the amount of trails and routes currently present within the TMP area. This would lead to improved conditions over the current condition and the proposed maintenance of the routes would reduce habitat degradation that is currently occurring. There are proposed seasonal closures to buffer sage-grouse leks but they are likely too small to provide significant benefit to the species. There are also proposed closures that would benefit bighorn sheep as well.

Special Status Species

Sensitive Mammals
Pygmy Rabbit – Alternative B would improve conditions for pygmy rabbits by reducing the number of routes and habitat fragmentation, but suitable habitat for this secretive species would still be restricted because of the levels of noise and intense use that occurs in parts of the TMP. Negative effects to pygmy rabbits would be less than Alternative A.

California Bighorn Sheep – Conditions for bighorn sheep would improve by reducing the number of roads and trails (Map 12). With Alternative B there would be 103 miles of routes permanently closed within bighorn sheep habitat and eight miles of seasonal closure. While the seasonal closure is for sage-grouse there would be benefits to sheep. With the reduction in routes, there would be larger patches of contiguous habitat for bighorn, but there would likely still be moderate levels of disturbance to the sheep.

Sensitive Raptors

Golden Eagles, Prairie Falcon, Ferruginous Hawk, Northern Goshawk – Alternative B would provide some benefits to sensitive raptors as there would be less roads and trails, and larger areas of contiguous habitat for hawks to exist in. However, as mentioned above, raptors can be very sensitive to disturbance and loud noises. Areas of high OHV use would still have detrimental effects and raptors would likely avoid those areas. Golden eagle nests near established routes with high levels of OHV use would likely be disturbed and reproduction would be impacted.

Sensitive Birds

Greater Sage-grouse – Alternative B would improve conditions for sage-grouse by establishing seasonal closures 0.6 miles around leks except where major thoroughfares make it unfeasible due to necessary traffic (home access) and human safety. For example, one such road is the Silver City Road. The 0.6 buffer meets the conservation measures identified in the Conservation Plan for the Greater Sage-grouse in Idaho for human activities, although current literature suggests that 0.6 miles may not provide a sufficient buffer for leks (Lyon and Anderson 2003). While the seasonal closures from March 1 through May 31 would provide a buffer near leks within the TMP, they would not be large enough to buffer nesting hens. Nesting hens that are disturbed, especially continued disturbance, may abandon their nest. It is likely that reproductive efforts of sage-grouse would still be negatively impacted and the downward population trend would continue, although to a lesser extent than Alternative A.

Brewer's Sparrow, Sage Sparrow, Loggerhead Shrike – Conditions for these species would improve with implementation of Alternative B. There would be larger areas of contiguous habitat with fewer disturbances for these birds within the TMP. They would likely continue to avoid areas of moderate to heavy OHV use. Prey abundance and forage areas would increase in areas with reduced routes. Numbers of these birds and reproductive success should increase with implementation of this alternative.

Sensitive Reptiles

Great Basin Collared Lizard, Longnose Snake, Western Ground Snake – The effects of motorized recreation on these species would be reduced with Alternative B. Areas of moderate to high use would still support fewer individuals and prey items, and lead to negative effects to these species. As use increases over time, declines in reptile numbers are expected. Numbers of individuals would be expected to increase in suitable habitat where routes have been closed and areas of contiguous habitat without routes exist.

Sensitive Amphibians
Western Toad, Woodhouse's Toad – Conditions would likely improve for these sensitive amphibian species through the reduction of roads in riparian areas and less routes overall. This would reduce the threat of disturbance during breeding and would likely increase reproductive output. There would also be less habitat fragmentation, which would benefit these toads.

Migratory Birds (non-waterfowl or shorebirds)
Alternative B would improve conditions for migratory birds by reducing the amount of roads and trails. This would likely lead to more refuge areas and larger patches of habitat that would buffer birds from disturbance by OHVs. Productivity would likely increase in some areas of the TMP. Areas of moderate to high use would continue to have reduced densities and diversity of birds, and lower reproductive output.

Wildlife
Wildlife species would benefit from the reduction of routes and greater amount of area with fewer disturbances from recreational vehicles. There would still be negative effects even when use is limited in areas. Species abundance, diversity, and reproductive output would increase in areas where the closures of routes create contiguous patches of habitat.

3.5.2.3 Alternative C

Alternative C provides several benefits to wildlife. This alternative reduces total miles of roads and trails from the currently inventoried 1,270 miles to 448 designated miles, and closes 822 miles of routes. This alternative would provide the most and the largest tracts of contiguous habitat without routes, benefitting all species within the TMP. Animals would have less stress and disturbance where motorized recreation is reduced. In closing several miles of road, it greatly reduces disturbance in important areas for bighorn sheep. This alternative closes the greatest amount of roads in riparian areas, from the current 95 miles to 33 miles, and riparian areas provide critical habitat for wildlife. While there are no seasonal lek closures, this alternative does benefit sage-grouse. There would be large tracts of habitat created from route closures that would provide secure nesting and brood rearing areas. All routes would be maintained, reducing habitat degradation.

Special Status Species

Sensitive Mammals
Pygmy Rabbit – Alternative C would benefit pygmy rabbits. While only suspect burrows have been identified in the TMP area, Alternative C provides the best opportunity for establishment of new populations by protecting areas that could develop into suitable habitat from future route development. There would be large tracts of continuous habitat providing buffers from OHV noise and disturbance. In addition, the large patches of habitat without routes created with implementation of this alternative would be located in areas most likely to support pygmy rabbits, improving the chances of persistence of the species within the TMP area.

California Bighorn Sheep – The trail and road reductions identified with this alternative would be extremely important for the long-term conservation of bighorn sheep along the Owyhee front.

This alternative proposes to permanently close 203 of the 253 miles of routes within bighorn sheep habitat. The tracts of habitat without roads and trails created by this alternative would be in areas important to the bighorn herd along the front. This alternative would reduce stress associated with OHV use.

Sensitive Raptors
Golden Eagles, Prairie Falcon, Ferruginous Hawk, Northern Goshawk – This alternative would provide the greatest benefits to sensitive raptors by creating large tracts of habitat free from the noise and disturbance of motorized recreation. Prey species would also increase in areas where roads and trails have been closed. Nesting would likely increase in the areas with suitable where routes would be closed. This alternative provides the greatest chance of increasing raptor populations in the TMP and surrounding area.

Proposed closures near golden eagle nest sites would benefit the species although routes with the greatest likelihood to disturb nesting are not proposed for closure.

Sensitive Birds
Greater Sage-grouse – Sage-grouse in the TMP area would benefit from implementation of Alternative C, even though there are no seasonal lek closures proposed with this alternative. This alternative provides areas of refuge for sage-grouse and large tracts of contiguous habitat in locations most likely to be used by sage-grouse. This would allow areas of safe haven where sage-grouse could get away from the noise and disturbance of motorized recreation. Hens would likely have fewer disturbances during nesting and brood rearing, increasing reproductive output.

Brewer's Sparrow, Sage Sparrow, Loggerhead Shrike – Because these species prefer large tracts of sagebrush habitat, this alternative would benefit these birds. Occurrence and reproduction of these species would increase in the areas where effects of motorized recreation are reduced.

Sensitive Reptiles
Great Basin Collared Lizard, Longnose Snake, Western Ground Snake – Alternative C would provide the most benefit to these reptile species, although there would still be negative effects in areas of moderate to intense use. There would be less habitat fragmentation and larger patches of contiguous habitat.

Sensitive Amphibians
Alternative C would benefit these amphibian species by reducing the most miles of routes in riparian areas and creating large patches without OHV use. This would lead to fewer disturbances during breeding and likely increase numbers of toads in the area. With the significant reduction in routes, there would be less likelihood of direct mortality from collision and crushing.

Migratory Birds (non-waterfowl or shorebirds)
Migratory birds would benefit from implementation of Alternative C. The birds would benefit most from the large tracts of habitat that would be free of roads and trails. This would reduce the frequency and amount of disturbance. Reproductive success, diversity, and density of birds

would be expected to increase. Areas of moderate to intense use would continue to negatively affect migratory birds.

Wildlife
There would be several benefits to wildlife with implementation of Alternative C. These benefits would be realized by reducing routes, which would create large tracts of land providing refuge and protection from the noise and disturbance associated with motorized recreation. Areas without roads and trails would provide refuge areas to escape human disturbance. This alternative would also protect large areas suitable for winter habitat for large ungulates and reduce the incidence of human wildlife conflict that can be very detrimental to wintering wildlife. Small mammals would increase in areas without routes and benefitting raptors and other predators inhabiting the area.

3.5.2.4 Alternative D – Proposed Action

Alternative D would provide several benefits to wildlife over current management. Several miles of routes are proposed for seasonal and permanent closure specifically for bighorn sheep, sage-grouse, and golden eagles. Large contiguous areas of habitat are closed seasonally from March 1 through June 15 to protect sage-grouse leks and nesting habitat. The seasonal closures are at a time when many species are reproducing and the closures would reduce stress associated with disturbance and benefit all wildlife species in the area. All routes would be maintained, reducing habitat degradation.

Special Status Species

Sensitive Mammals
Pygmy Rabbit – While data on pygmy rabbits are lacking, they would benefit if they are present in areas where trails would be closed or with seasonal closures. Benefits would include less habitat fragmentation, reduced noise, lower levels of human presence, and fewer disturbances of daily activities such as foraging. In other areas where they may exist, that would not have closed trails or seasonal closures there would be negative effects as those described above in the section titled “Impacts Common To All Alternatives”.

California Bighorn Sheep – This species would benefit from implementation of Alternative D. There would be 86 miles of routes permanently closed and 25 miles of seasonal closure in bighorn habitat. This would reduce fragmentation and provide seasonal buffers that would benefit sheep. The seasonal closures would likely reduce stress to ewes and lambs during the lambing period. There would still be the potential for bighorns being disturbed and harassed by humans but it would be reduced over current levels.

Sensitive Raptors
Golden Eagles, Prairie Falcon, Ferruginous Hawk, Northern Goshawk – The seasonal closures proposed for sage-grouse in Alternative D would benefit raptors by creating large tracts of hunting habitat without disturbance from March 1 through June 15. The proposed reduction and management of routes would reduce fragmentation of habitat throughout the area and that would also benefit raptors. The closures would also benefit prey species for raptors. Approximately 48

miles of routes would be closed to benefit golden eagle and these closures would also benefit all raptors nesting and raising young in the area. Prey items for golden eagle would also benefit from the proposed route closures and that in return benefits eagles.

Golden eagle nesting activities would be monitored and if eagles are being disturbed by OHVs (standing, moving around on the nest, or flying away when OHVs pass by), seasonal closures would be instituted starting as soon as possible from the date of documented disturbance. The seasonal closure would continue through June. If seasonal closures are not effective, permanent closure of that specific route would be implemented.

Sensitive Birds

Greater Sage-grouse – The proposed action under alternative D incorporates a great deal of modification over current condition that is designed to benefit sage-grouse. Several miles of routes would be closed seasonally to create large contiguous tracts of nesting habitat that would be free from disturbance from March 1 through June 15. Map 6 shows the closures and the large areas of protected nesting habitat, which total approximately 42,000 acres. The proposed seasonal closures would greatly reduce the likelihood of disturbance and reduce the likelihood of nest abandonment. The closures would also promote increased sage-grouse production and population numbers, and may help stabilize the local population or lead to an upward trend as long as other conditions are favorable for production such as weather and insect production. The seasonal closures lie mainly to the south of leks but include a buffer of 0.6 miles to the north of leks, comprised mostly of salt desert shrub communities. This type of buffer is detailed in the Conservation Plan for Greater Sage-grouse in Idaho (2006) and would be sufficient to limit and mitigate road traffic approaching leks. Closing roads would be completed by gating and signing, followed by monitoring and law enforcement efforts. If signing is ineffective then gates would be installed as necessary.

There are three leks that are not adjacent to the areas of seasonal closures. Two of those leks are near large tracts of nesting habitat with no routes going through them. The nesting habitat near those leks totals just over 20,000 acres. The third lek is situated near private property and thoroughfares that make closures adjacent to this lek unfeasible but the lek is situated four miles from proposed seasonal closures, well within the documented distances that sage-grouse hens have travelled to establish a nest.

Brewer's Sparrow, Sage Sparrow, Loggerhead Shrike – These species would benefit by implementation of Alternative D. Seasonal closures would create contiguous habitat benefitting these birds by creating areas with fewer disturbances. Proposed permanent closures would reduce fragmentation throughout the TMP area. Seasonal closures would reduce impacts to these species during establishment of breeding territories and during much of the reproductive cycle. There would be less noise and interference with daily activities and less stress to birds. Once the seasonal closures are opened to OHV use, birds may leave the area, which could preclude them from completing a second reproductive effort although the areas of seasonal closure are not high use areas by OHVs. Areas of high to moderate use by OHVs would continue to see reduced levels of birds.

Sensitive Reptiles
Great Basin Collared Lizard, Longnose Snake, Western Ground Snake – Alternative D would benefit reptile species in the TMP area through the proposed seasonal and permanent route closures. There would be less habitat fragmentation and larger patches of contiguous habitat, however, areas of preferred habitat for these species occur in areas of moderate to intense OHV usage. There would still be negative effects as discussed above in the section titled "Impacts Common To All Alternatives", in areas of moderate to intense use.

Sensitive Amphibians
This alternative would provide benefits to these amphibian species by reducing miles of routes in riparian areas. This would lead to fewer disturbances during breeding and may lead to increased numbers of toads in the area. The proposed closure of routes would lead to less likelihood of direct mortality from collision and crushing.

Migratory Birds (non-waterfowl or shorebirds)
Migratory birds would benefit with implementation of Alternative D. The birds would benefit most from the large tracts of habitat that would be closed to OHVs from March 1 through June 15 and from permanent route closures. This alternative would reduce habitat fragmentation and the frequency and amount of disturbance during establishment of territories and through much of the reproductive cycle. Reproductive success, diversity, and density of birds would be expected to increase. Areas of moderate to intense use would continue to negatively affect migratory birds.

Wildlife
Alternative D would benefit wildlife species within the TMP area. These benefits would be realized by reducing use through proposed seasonal and permanent closures. These closures would create large tracts of land providing refuge and protection from the noise and disturbance associated with motorized recreation. There would also be an overall reduction in fragmentation through the TMP area making it easier and less stressful for wildlife to move throughout the area. Small mammals would increase in areas without routes, which would benefit raptors and other predators inhabiting the area.

3.6 Birds of Prey National Conservation Area

3.6.1 Affected Environment – Birds of Prey National Conservation Area

Portions of the Birds of Prey National Conservation Area (BOP NCA) are located west of Highway 78 in the Murphy Subregion (6,365 acres). These acres are divided into three areas – 1) lands south of Noble Island and west of Highway 78 in T1&2S R2W; 2) lands north of Murphy surrounding the Rabbit Creek Trailhead in T2S R2W; and 3) lands north and south of Sinker Creek west of Highway 78 in T3S R1&1W.

The lands adjacent to Highway 78 (the "45") and the Rabbit Creek Trailhead have experienced high levels of OHV usage. The Rabbit Creek Trailhead is fenced to control access points onto the maintained trail system. The trailhead contains two restrooms, information kiosks and unloading facilities. OHV use in the fenced trailhead has eliminated all vegetation.

There are no facilities located at the "45" but the user created parking area has denuded several acres. Below the parking area the lands have become a defacto play area. The hills in this location have lost a substantial amount of vegetation due to off-trail OHV use.

The lands near Sinker Creek are crossed by several roads and trails, some maintained by BLM or Owyhee County, but they maintain their vegetative integrity.

3.6.2 Environmental Consequences – Birds of Prey National Conservation Area

3.6.2.1 Alternative A – Designate Existing Routes

Delineating and fencing a formal parking area at the "45" would limit further expansion of the user created parking area. Designating specific trails on the adjacent lands would attempt to limit OHV use to the existing trails. However, the density of the existing trails creates a defacto play area situation and the prevention of the creation of new trails and enforcement would be very difficult.

This alternative would maintain the Rabbit Creek trailhead in its existing condition.

3.6.2.2 Alternative B

Closure of the "45" access point would eliminate the user created parking area and allow for eventual rehabilitation of this area. Due to the rocky nature of the site and the loss of most topsoil, this would be expected to take years to accomplish and may not even be practical. Invasion of weeds and noxious species would be a threat in this disturbed site. The closure of the "45" access point, would eliminate immediate access to the adjacent hills which would presumably result in a large decrease in unauthorized "play" use. Access through the lands west of the "45" would still be provided through trail connectivity to the Rabbit Creek and Hemingway Butte Trailheads.

This alternative would maintain the Rabbit Creek trailhead in its existing condition.

3.6.2.3 Alternative C

Delineating and fencing a formal parking area at the "45" would limit further expansion of the user created parking area. Designating specific trails on the adjacent lands would attempt to limit OHV use to the existing trails.

This alternative would maintain the Rabbit Creek trailhead in its existing condition.

3.6.2.4 Alternative D – Proposed Action

Delineating and fencing a formal parking area at the "45" would limit further expansion of the user created parking area. Designating specific trails on the adjacent lands would attempt to limit OHV use to the existing trails. The construction of 3.75 miles of fencing around the

"45"and along Highway 78 would eliminate immediate access to the user created unauthorized play areas, preventing further damage to this area.

This alternative would maintain the Rabbit Creek trailhead in its existing condition.

3.7 Fisheries

3.7.1 Affected Environment – Fisheries

Fishery habitat is limited to a few perennial or intermittent streams in the foothills of the Mountains in southern portion of the subregion. These streams include Sinker Creek (including East & West Forks), Hart Creek, Horse Ranch Creek, Pickett Creek, Scotch Bob Creek, and Castle Creek. The lower (usually eastern) reaches of these streams are primarily on private lands used for ranching and cropland. Redband trout are the most common fish in these streams. Redband trout are a BLM sensitive species and a State listed species of special concern. The perennial streams are important as year round habitat. Intermittent reaches are used as spawning habitat during high water periods and provide isolated pool habitat during low water periods.

These streams lie in the portion of the subregion that has some of the lower density routes and lower use levels. However, a well used 4WD route has developed in Sinker Creek below the Silver City Road crossing. While other streams are crossed by routes, this is the only drainage with a regularly used vehicle route in the drainage bottom for some distance (1 ½ miles). Monitoring by BLM personnel has documented sediment deposition and water quality impacts from vehicle use (Jackson & Jackson, field notes, 2008). The Owyhee RMP (1999) found that negative impacts of OHVs due to fine sediment deposition could reduce suitable aquatic species habitat causing a decrease in biodiversity. These impacts were estimated to be primarily in the Owyhee Front at the time the RMP was prepared with an expectation that these impacts would expand to other areas and other fish habitat in the next 20 years.

3.7.2 Environmental Consequences – Fisheries

3.7.2.1 Alternative A – Designate Existing Routes

Fishery habitat in Sinker Creek would continue to be impacted by vehicles using the route in the stream drainage below the Silver City Road crossing. Sediment would be added to the stream as vehicles drove through the water. As there are multiple stream crossings in this reach, stream banks would be eroded at multiple locations as vehicles entered and left the stream leading to increase soil loss and sedimentation. Increased fine sediments in the stream would; increase fish mortality through smothering, scour damage or suffocation, change fish behavior such as impeding movement and altering feeding behavior, and reduce fish reproduction and growth through the degradation of redds.

3.7.2.2 Alternative B

Closure of the 4WD vehicle route in Sinker Creek would reduce increased fine sediment deposition, bank erosion and loss of suitable habitat on 1 ½ miles of stream below the Silver City

Road crossing. This decrease in fine sediment would lead to improved fish reproduction, growth, and a decrease in mortality. Where other route closures eliminate stream crossings, benefits would occur due to reduced bank disturbance and sediment from OHV use disturbance.

3.7.2.3 Alternative C

Closure of the 4WD vehicle route in Sinker Creek would reduce increased fine sediment deposition, bank erosion and loss of suitable habitat on 1 ½ miles of stream below the Silver City Road crossing. This decrease in fine sediment would lead to improved fish reproduction, growth, and a decrease in mortality. Where other route closures eliminate stream crossings, benefits would occur due to reduced bank disturbance and sediment from OHV use disturbance.

3.7.2.4 Alternative D – Proposed Action

Closure of the 4WD vehicle route in Sinker Creek would reduce increased fine sediment deposition, bank erosion and loss of suitable habitat on 1 ½ miles of stream below the Silver City Road crossing. This decrease in fine sediment would lead to improved fish reproduction, growth, and a decrease in mortality. Where other route closures eliminate stream crossings, benefits would occur due to reduced bank disturbance and sediment from OHV use disturbance.

3.8 Wild Horses

3.8.1 Affected Environment – Wild Horses

The BLM is required to manage healthy and sustainable wild horse populations in accordance with the Wild and Free-Roaming Horses and Burros Act of 1971 (PL92-195, as amended). This Law requires the BLM to: (1) to provide protection, management and control of wild horses on public lands; (2) manage wild horses in the area where presently found (as of 1971), as an integral part of the natural system of public lands; (3) manage for a thriving natural ecological balance and as self-sustaining populations in balance with other uses and the productive capacity of their habitat; and (4) undertake management activities affecting wild horses with the goal of maintaining wild horse free-roaming behavior.

The Black Mountain Herd Management Area (HMA) is located approximately two miles east and south of Murphy, Idaho, and consists of approximately 50,823 acres with 47,385 acres of public land. This HMA lies within the boundaries of the East Reynolds Creek (0651), Hardtrigger (0516) – Pasture 1, and Rabbit Creek/Peters Gulch (0517) Allotments. The HMA has an estimated population of 30-40 wild horses (Census Flight, July 2007). The proposed project area includes 100% of the Black Mountain HMA (Map 14).

The 1999 Owyhee Final EIS (USDI 1999a, Volume 1, Chapter 3, page 26) states that herd management areas have received a considerable increase in public use (off-highway motorized vehicles, equestrian riders, hunters, etc.) since 1971 and general recreation use is projected to increase approximately 70% by 2015.

The identified project area includes Little Kane Springs, Tandem Springs, Brunzell Springs, and the headwaters of Rabbit Creek and Moore Creek. These areas are recognized as wild horse key use areas (Map 14). Key use areas refer to areas within the HMA where wild horses are most frequently observed and thought to be preferred habitat by wild horses. Generally, numerous bands of wild horses prefer and remain in the Brunzell Springs, and headwaters of Rabbit Creek and Moore Creek, as long as snow pack levels at these higher elevations do not force horses to the lower elevations near Tandem Springs, Griffith Springs, and Willow Springs. A majority of the HMA's herd prefer the Little Kane Springs area. The Little Kane Springs area is accessible yearlong, with light to moderate snow levels in extreme years. However, wild horses can be found in the lower elevations of the open flats east of Hemingway Butte to Murphy during the winter and early spring months, following the green-up of herbaceous vegetation during relatively warm-wet winters and when spring green-up occurs.

The appropriate management levels (AMLs) identified in the 1999 Owyhee RMP included a population range between 30-60 head of horses, with an AML set at 45 head of horses within the Black Mountain HMA. In July 2007, Boise District conducted a gather and removed 81 head from the Black Mountain HMA. During a post gather census flight, 13 head were observed, and shortly thereafter, 17 head of horses were returned to the HMA in order to comply with the low population range of the AML. Prior to the 2007 wild horse gather and removal, wild horses had been gathered in October of 2003 and 2001.

The identified wild horse foaling season is between March 1 and June 30 within the Black Mountain Herd Management Area (USDI 1999a). During the foaling season, it is important that recreation activities within the HMA are minimized in foaling areas (USDI 1999a). Anecdotal information exists where BLM has responded to incidents during the foaling season where equestrian riders have accidentally separated a mare from her foal, requiring BLM to retrieve the orphaned foal(s) and find adopters willing to care for the animal (Personal communications between Owyhee Field Office and Leonard/Schultsmeier/Mattise, former BLM-Owyhee Range Technicians/Wild Horse Specialists). Additional anecdotal evidence has been provided by Owyhee County Officials (Personal communication between Desmond and Richards/Brandau) that there has been one incident where a foal was separated from its mare by ATV activity and that incidents between recreational users and wild horses are rare.

3.8.2 Environmental Consequences – Wild Horses

3.8.2.1 Alternative A – Designate Existing Routes

This alternative would designate as approved routes all inventoried roads and trails. Even with recreational users limited to designated routes, with the steadily increasing use of recreational vehicles, it would be anticipated that direct and indirect impacts to wild horses would continue to increase as the population of the Treasure Valley increases and as a result the intensity of use in the Owyhee Front/Murphy Subregion. Limiting vehicular travel in the area west of the "45" to designated routes, eliminating the defacto play area, would reduce loss of habitat and to some degree human use levels. Without treatments (seeding etc…) and follow up management, it would be a long time before the plant community recovers, if ever, due to soil loss and other factors.

While wild horses occasionally use the eastern edge of the subregion (Hemingway Butte-the "45"-Rabbit Creek) in the spring during green up, they would tend to continue avoiding this area otherwise due to the levels of human activity. Fencing required to restrict access to the 6.5 mile length (13 miles total) of the Windy Point pipeline south of Hemingway Butte would introduce a impediment to horse movement.

Although winter range interactions between recreational users and wild horses are of potential concern in all herd areas, there are no data that suggest that any direct impacts to horse herds as a result of recreational use are occurring in the Murphy Subregion. This is probably because during winter months recreational use is minimal due to the cold temperatures and wet weather. It is important that humans avoid direct interaction with wild horses during the spring season months of March through June while mares are giving birth to new foals. However, there is no evidence to indicate that wild horses found in the HMA are being impacted by the current levels of recreational use.

Under This alternative, there is no evidence to indicate that wild horses in the Murphy Subregion would not continue to function as a self-sustaining population. Nor is there evidence to indicate that a thriving natural ecological balance or that the wild and free-roaming nature of the wild horses found in this area and throughout the HMA would not be achieved, as required by law.

3.8.2.2 Alternative B

Under Alternative B, the direct, indirect, short, and long term impacts to wild horses and their habitat would be reduced. This would be due to the implementation of route designations, the closure of some trails, installation of facilities, signage and informational kiosks containing system maps and user regulations, and an expected reduction in cross-country travel.

Although winter range interactions between recreational users and wild horses are of concern in all herd areas, there is no evidence that any direct impacts to wild horses are currently occurring in the Murphy Subregion. This is largely because the peak recreational use periods (generally late March through May) and the wild horse winter range use period (generally December through February) do not overlap, though there is some limited equestrian recreational use in the winter. It is important to avoid human interactions with wild horses during the spring season months of March through June while mares are giving birth to new foals. However, there is no evidence to indicate that wild horses found in the HMA are being impacted by the current levels of recreational use. The channeling of recreation use to fewer and designated roads and trails provided by Alternative B would have beneficial effects.

Under this alternative, actions are being taken to control recreational use. Overall, these actions would preserve and protect wild horse habitat. The trail and route designations would serve to improve wild horse habitat by closing trails and roads to recreational users in areas wild horses use as foaling areas, winter range, or simply as isolated habitats to escape from recreational use. In general, this alternative would provide for the preservation of wild horse habitat for the future.

Under this alternative, all evidence available to BLM indicates that the legal requirements imposed on BLM to manage wild horses in the Murphy Subregion would continue to be met. The herd is managed as a self-sustaining population within the context of a thriving natural ecological balance, and their wild and free roaming nature throughout the HMA would continue to be preserved.

3.8.2.3 Alternative C

This alternative would have less impact on wild horses than would Alternatives A, B and D. The more extensive closure of existing trails and routes would more effectively reduce interactions between wild horses and recreational users.

Under Alternative C, the direct and indirect, and short and long term impacts to wild horses and their habitat would be reduced. This would be due to the implementation of route designations and the closure of roads and trails.

Although winter range interactions between recreational users and wild horses are of potential concern in all herd areas, there is no information that indicates that any direct impacts are currently occurring in the Murphy Subregion. This is likely because the peak recreational use periods (generally late March through May) and the wild horse winter range use period (generally December through February) do not overlap, though there is some limited equestrian recreational use in the winter.

Under this alternative, a variety of actions are being taken to control recreation use. Overall these actions would preserve and protect wild horse habitat from the potential impacts of rising recreation use. The trail and route designations would serve to improve wild horse habitat by closing some trails which have appeared since the Owyhee RMP's approval and closing some trails and roads in areas wild horses use as foaling areas, winter range, or simply as isolated habitats to escape from recreation use. In general, this alternative would provide for the preservation of wild horse habitat for the future.

There is no evidence to indicate that wild horses in the Murphy Subregion would not continue to function as a self-sustaining population. Nor is there evidence to indicate a thriving natural ecological balance or that the wild and free-roaming nature of the wild horses found in this area and throughout the HMA would not continue to be achieved, as legally required.

While wild horses occasionally use the eastern edge of the subregion (Hemingway Butte-the "45"-Rabbit Creek) in the spring during green up, they would tend to continue avoiding this area otherwise due to the levels of human activity. Fencing required to restrict access to the 6.5 mile length of the Windy Point pipeline south of Hemingway Butte would introduce an impediment to horse movement.

3.8.2.4 Alternative D – Proposed Action

Under Alternative D, the direct, indirect, short, and long term impacts to wild horses and their habitat would be reduced. This would be due to the implementation of route designations, the closure of some trails, installation of facilities, signage and informational kiosks containing system maps and user regulations, and an expected reduction in cross-country travel.

Although winter range interactions between recreational users and wild horses are of concern in all herd areas, there is no evidence that any direct impacts to wild horses are currently occurring in the Murphy Subregion. This is largely because the peak recreational use periods (generally late March through May) and the wild horse winter range use period (generally December through February) do not overlap, though there is some limited equestrian recreational use in the winter. It is important to avoid human interactions with wild horses during the spring season months of March through June while mares are giving birth to new foals. However, there is no evidence to indicate that wild horses found in the HMA are being impacted by the current levels of recreational use. The channeling of recreation use to fewer and designated roads and trails provided by Alternative D would have beneficial effects.

Under this alternative, actions are being taken to control recreational use. Overall, these actions would preserve and protect wild horse habitat. The trail and route designations would serve to improve wild horse habitat by closing trails and roads to recreational users in areas wild horses use as foaling areas, winter range, or simply as isolated habitats to escape from recreational use. In general, this alternative would provide for the preservation of wild horse habitat for the future.

While wild horses occasionally use the eastern edge of the subregion (Hemingway Butte-the "45"-Rabbit Creek) in the spring during green up, they would tend to continue avoiding this area otherwise due to the levels of human activity. New fencing (approximately two miles) to close the unauthorized play area near the "45" would exclude wild horses from using approximately 600 acres of public land. However, without management modifications, continued soil and vegetation degradation would be expected if these areas are not closed. Presently, wild horses avoid the "45" primarily because of the high degree of OHV use; and secondarily, because the area to be excluded is void of forage and water to sustain wild horse use. Therefore, implementation of this fencing project and approval to continue to use the established parking area at the "45" would minimally impact wild horse herd management in the short and long terms. No direct or indirect impacts to wild horse herd health would be expected with the implementation of the new fence and the "45" parking area primarily because wild horses already avoid this area of the herd management area.

All evidence available to BLM indicates that the legal requirements imposed on BLM to manage wild horses in the Murphy Subregion are being met. The herd is managed as a self-sustaining population within the context of a thriving natural ecological balance, and their wild and free roaming nature throughout the HMA would continue to be preserved.

3.9 Cultural Resources

3.9.1 Affected Environment – Cultural Resources

The Murphy Subregion, as identified in this document, is a landscape that has been associated with humankind for thousands of years. The land provided aboriginal peoples, including the Shoshone, Bannock, and Paiute Tribes, and later Euroamerican settlers the opportunity to construct suitable dwellings, acquire needed natural resources and maintain an adequate subsistence. Archaeological investigations of the area, though limited, have recorded over 250 various cultural sites that include camps, residences, burials, mines and refuse dumps. There are no recorded or known traditional cultural properties within the subregion.

Trails closures have been recommended to avoid damage or disturbances to sites classified as being eligible or of undetermined eligibility for inclusion in the National Register of Historic Places as a result of previous cultural resources inventories (05-O-18 OHV Trail Surveys 2005; 07-O-05 Murphy Subregion 2006 Trail Inventory). Fence construction and parking areas proposed in the Alternatives have been inventoried for cultural resources (09-O-07 Murphy TMP 2009 Projects). No sites have been recorded as a result of these inspections.

3.9.2 Environmental Consequences – Cultural Resources

3.9.2.1 Alternative A – Designate Existing Routes

Under this alternative all current inventoried trails, roads and recreational routes would receive use designations and would remain open. No route closures would occur. Existing access entries would remain available and user created parking areas would remain open.

With this alternative, cultural sites in proximity to the trails would be exposed to greater risks of looting, vandalism and unintended damage than in the past because trail closure would not be considered as a protective measure. This practice runs counter to the National Historic Preservation Act. Alternative A allows for the greatest number of miles in the trail system of the three alternatives and therefore allows for the greatest possibility of impacts to unrecorded cultural resources. If all trails remain open including those that have been recommended for closure due to cultural resource concerns, unconstrained damage could occur to cultural properties that are potentially eligible for the National Register of Historic Places.

3.9.2.2 Alternative B

This alternative designates inventoried trails for specific recreational uses but unlike Alternative A it provides for selective route and access closures. It also discourages the use of undesignated parking areas. Competitive use areas would remain the same. There would also be seasonal closures of 12 miles of trails to protect sage grouse leks.

Cultural resources would likely fare better under this alternative compared to the previous one since an option to close trails and roads that threaten sites and areas of importance is present. Closure or rerouting of trails can provide the necessary mitigation measures to protect cultural

properties and to discourage the use of sensitive areas. Mandating designated parking areas would lessen the likelihood of collateral damage to resources from the expedient off-loading of OHVs and other equipment. This proposal is more flexible and resource friendly than Alternative A and would better serve to protect and preserve these fragile public assets.

3.9.2.3 Alternative C

Alternative C is similar to Alternative B in that it requires the closure of certain roads, trails and access points within the Murphy Subregion. It differs in where those closures and accesses would be located and it proposes the fewest miles of designated usable routes of the four alternatives. Parking would be discouraged or disallowed in areas other than those specified and competitive uses would be more limited than in Alternative B. This option would afford the same ability to protect cultural properties by avoidance and restricting access as the previous alternative, however, because Alternative C has proposed almost half the designated trail miles of Alternatives B and D, and only about a third of Alternative A, it is potentially the most protective option for cultural resources.

3.9.2.4 Alternative D – Proposed Action

This alternative proposes essentially the same mix and total miles of designated and closed routes as Alternative B and shares other user conditions and prohibitions. Additionally, it would constrain parking at the "45" trailhead to a fenced area and would have 2 miles of fencing constructed to deny access to user-created "play areas." An unauthorized access area adjacent to Highway 78 near Noble Island would be closed by erecting 1.75 miles of fence. Two user-created parking areas along the Silver City Road would be authorized and contained.

Alternative D is similar to Alternative B in limiting and controlling OHV use. It improves on Alternative B by confining parking to designated locations and denying access to areas damaged by unauthorized use. It would also seasonally close 74 miles of trails to protect sage grouse leks. This proposal would likely increase the protection cultural resources could receive from the proliferation of user-created trails.

3.10 Native American Religious Concerns

The Shoshone-Paiute Tribes actively practice their culture and retain aboriginal rights and/or interests in this area. As Native American traditions and practices are tied to the elements of the natural environment, any impacts to the earth and its natural environment are of concern to the Shoshone-Paiute Tribes. There are no recorded or known traditional cultural properties within the Murphy Subregion under discussion.

3.11 Range Management

3.11.1 Affected Environment – Range Management

The Murphy Subregion area includes 17 separate grazing allotments (See Map 15). The associated grazing allotments include year-long livestock grazing use, with winter grazing occurring in the northern portion of the subregion at the lower elevations located near Highway

78; and spring and summer livestock grazing in the southern half at the mid and higher elevations headed towards the Silver City Range. Livestock water sources vary from streams, pipelines, reservoirs, and spring developments throughout each allotment. Annually, a total of 24,814 active AUMs of livestock grazing use are authorized by BLM. The following Table is a summary of permitted livestock grazing in each allotment.

Table 3-4. Permitted Use Summary by Allotment

Allotment Name & Number	Permittees	Season of Use	Active AUMs	Permitted AUMs
Boone Peak (0589)	Rohl Hipwell	06/01 – 10/31	2,094	2,876
Quicksilver FFR (0483)		03/01 – 02/28	12	12
Stahle FFR (0641)		03/01 – 02/28	35	35
Red Mountain (0588)	Rohl Hipwell	04/01 – 04/30 11/01 – 12/31	1,624	2,153
	John Edwards	10/01 – 02/28	375	1,425
Fossil Butte (0535)	Joyce Livestock Co.	10/01 – 02/28	991	991
	Nick Nettleton	10/01 – 02/28	380	380
	Miller & Kershner	10/01 – 02/28	251	3,489
Silver City (0569)	Joyce Livestock Co.	03/15 – 10/31	4,237	9,365
	Wintercamp Cattle	06/01 – 10/31	695	1,583
Murphy FFR (0486)	Joyce Livestock Co.	03/01 – 02/28	5	5
Joyce FFR (0487)		11/01 – 02/28	87	87
Hart Creek (0532)	Robert Thomas	04/01 – 0615	2,365	3,173
Alder Creek FFR (0639)		03/01 – 02/28	60	60
Whitehorse/Antelope (0541)	Scott Nicholson	03/01 – 10/31	4,345	5,805
Browns Creek (0585)		04/01 – 0615	793	1,410
Garrett FFR (0626)		03/01 – 02/28	31	31
West Castle (0648)		10/01 – 02/28	700	861
East Reynolds Creek (0651)	Chipmunk Grazing Association	04/05 – 06/30	547	877
	Jaca Livestock	04/05 – 06/30	1,147	2,263
		11/01 – 11/30	287	
Rabbit Creek/Peters Gulch (0517)	Tom Hook	05/01 – 08/08 11/01 – 02/28	2,193	4,085
Hardtrigger (0516)	Richard Brandau	04/01 – 10/31	855	1,594
	Bill Watterson	04/01 – 11/30	305	676
	Hardtrigger Cattle Co.	04/04 – 10/31	400	708
Totals	--	--	24,814	43,944

3.11.2 Environmental Consequences – Range Management

3.11.2.1 Alternative A – Designate Existing Routes

Under Alternative A, OHV use has had negative impacts on two of the 17 allotments included in the Murphy Subregion. This alternative assumes that use would continue to occur on all existing routes and that these levels would increase over time as shown by current trends. Soil compaction and loss created by OHV use causes loss of large perennial bunchgrasses and

increased possibility of invasion of annual species which can have a negative impact on livestock grazing management.

Occasionally, gates along interior and exterior fence lines are left open when gates need to be closed to control livestock grazing. In addition, gates are occasionally found closed when they are to be left open for wild horse movements or while livestock grazing permittees are making pasture moves. Local landowners have reported rising problems with recreational trail users trespassing onto their private lands from adjacent public lands in the Murphy Subregion. The predicted increase in recreation use would lead to an increase of these types of incidents and would more seriously impact livestock grazing management in the future.

3.11.2.2 Alternative B

Reducing the number of route miles by 34% in combination with the closure of trails would benefit range management through a decline in forage loss and possibly a slight increase in available forage as closed routes rehabilitate. While not expected to provide any significant change in forage availability, this would still be beneficial to range management.

Occasionally, gates along interior and exterior fence lines are left open when gates need to be closed to control livestock grazing. In addition, gates are occasionally found closed when they are to be left open for wild horse movements or while livestock grazing permittees are making pasture moves. Local landowners have reported rising problems with recreational trail users trespassing onto their private lands from adjacent public lands in the Murphy Subregion. The predicted increase in recreation use would lead to an increase of these types of incidents and would more seriously impact livestock grazing management in the future.

3.11.2.3 Alternative C

Reducing the number of route miles by 65% in combination with the closure of trails would benefit range management through a decline in forage loss and possibly a slight increase in forage availability as closed routes rehabilitate. While not expected to provide any significant change in forage availability, this would still be beneficial to range management. However, the impact to grazing permittees due to the closure of so many routes is unknown. Access to livestock and range improvements may be limited and while the alternative does allow for the designation of administrative routes, none have been identified.

Occasionally, gates along interior and exterior fence lines are left open when gates need to be closed to control livestock grazing. In addition, gates are occasionally found closed when they are to be left open for wild horse movements or while livestock grazing permittees are making pasture moves. Local landowners have reported rising problems with recreational trail users trespassing onto their private lands from adjacent public lands in the Wilson Creek Subregion. The predicted increase in recreation use would lead to an increase of these types of incidents and would more seriously impact livestock grazing management in the future.

3.11.2.4 Alternative D – Proposed Action

Reducing the number of route miles by roughly 34% in combination with the closure of trails would benefit range management through a decline in forage loss and possibly a slight increase in available forage as closed routes rehabilitate. While not expected to provide any significant change in forage availability, this would still be beneficial to range management.

Occasionally, gates along interior and exterior fence lines are left open when gates need to be closed to control livestock grazing. In addition, gates are occasionally found closed when they are to be left open for wild horse movements or while livestock grazing permittees are making pasture moves. Local landowners have reported rising problems with recreational trail users trespassing onto their private lands from adjacent public lands in the Murphy Subregion. The predicted increase in recreation use would lead to an increase of these types of incidents and would more seriously impact livestock grazing management in the future.

While livestock may occasionally forage adjacent to the water source located 1-mile southwest (trough from the Rabbit Creek Pipeline located at T.02S, R.02W, Section 5 – SESE) of the "45" during the winter use period, livestock tend to avoid areas within the region whether OHV use occurs and concentrates. New fencing (approximately two miles) to close the unauthorized play area near the "45" would exclude livestock from using approximately 600 acres of public land. However, without management modifications, continued soil and vegetation degradation would be expected if these areas are not closed to OHV use. Presently, livestock use is minimized at the "45" primarily because of the high degree of OHV use; and secondarily, because the area to be excluded is void of forage to sustain livestock use. Therefore, implementation of this fencing project and approval to continue to use the established parking area at the "45" would minimally impact livestock use in the short and long terms. No direct or indirect impacts to livestock would be expected with the implementation of the new fence and the "45" parking area primarily because livestock have become accustomed to avoiding this area of the allotment.

3.12 Recreation

3.12.1 Affected Environment - Recreation

Recreational use of the Murphy Subregion area has increased dramatically in the last 20 years. In the 1970s and 1980s, the subregion and adjacent areas of the Owyhee Front were primarily utilized by local residents for hunting, fishing, hiking, horseback riding, driving for pleasure, camping, and target shooting. The numbers of non-local recreational visitors in the 1980s were relatively low, and the existing network of roads and jeep trails had been mostly established by local ranchers to provide access to livestock grazing areas and livestock facilities such as springs, troughs, and fences.

In the early 1990s, the population of nearby Ada and Canyon counties, just north of the Snake River from the Murphy Subregion, began a period of remarkable growth. From 1990 to 2006, the two counties grew from an aggregate 1990 population of 295,851 to a population of 532,337 in 2006. Communities closest to Owyhee County grew at an astronomical rate. Kuna, Idaho grew from 1,955 to 12,647; Nampa, Idaho more than doubled from 28,365 to an estimated

76,436; and Meridian, Idaho grew from 9,596 in 1990 to 66,565 in 2006 (http://www.compassidaho.org/documents/prodserv/demo/CityPops1990_2006.xls).

As the surrounding population increased, recreational use of public lands grew at a dramatic rate. For Example, in Ada County, registrations of motorized off-highway capable motorcycles and ATVs increased 52% between 2003 and 2007. In Canyon County, registrations of these vehicles increased 73% during that period.

The combination of increasing population, wide adoption of new recreational technologies, and an extensive public lands base within easy driving distance of expanding urban populations has yielded an explosion of recreation use on the formerly little-used public lands of Owyhee County. This increase in recreational use has resulted in the formation of many miles of new, user-created trails, both motorized and non-motorized, particularly in the corridor along Highway 78 in northern Owyhee County. Along the corridor of the Owyhee Front, recreational motorized OHV use dominates.

The Owyhee Front and Murphy Subregion in particular, are recognized as a popular area in southwest Idaho for quality Off Highway Motorized Vehicle (OHMV) opportunities. The notoriety is generally due to its cool spring/fall weather conditions and dry soil conditions coupled with a diversity of terrain features. The terrain includes hundreds of miles of dry sand washes and interconnecting primitive roads and trails traversing gentle to rugged hills and ridgelines. The area is used for both casual and competitive motorized, equestrian, and mountain bike use year-round. Hunting, sightseeing, rock hounding, wild horse viewing, geocaching, nature study, and camping also occur throughout the area.

Table 3-5. Traffic Counter Data – 12/31/07 – 4/1/08

Location	# of Vehicles
Hemingway Butte Main	8,172
Hemingway Butte Overflow	3,931
Total	**12,103**

Table 3-6. Traffic Counter Data

Location (# vehicles entering)	**# of Vehicles 1/12/07 thru 5/2/07**	**# of Vehicles 5/2/07 thru 8/29/07**	**# of Vehicles 8/29/07 thru 12/31/07**	**# of Vehicles 12/31/07 thru 5/22/08**	**Total**
Rabbit Creek	2,092	2,259	1,806	2,118	**8,275**
“45”	1,452	848	907	1,251	**4,458**

The Existing Route System
The Murphy Subregion contains 1,270 miles of routes (Table 3-7, Map 2). The existing route system was identified through a comprehensive inventory conducted from 2001-2003. The route inventory synthesized information from USGS topographic maps and recent aerial photography to establish an up-to-date base map. Nearly every route on the base map was ground-verified by BLM personnel.

Motorized Routes
Approximately 1,270 miles of routes are currently utilized by motorized vehicles. The motorized routes consist of 440 miles of routes that have been asserted under RS-2477 and 830 miles of routes that are not asserted under RS-2477.

The motorized routes in the defacto "45" play area include numerous multiple, braided, user-created roads and trails that receive substantial cross-country use by ATVs and motorcycles. Most of these routes have been created in the last ten years. The OHV Play Area is not in conformance with the Owyhee Resource Management Plan OHV designations.

Non-motorized Routes
Hiking, mountain biking, and equestrian use occur throughout the entire subregion. Non-motorized recreation would continue to occur on existing routes.

Table 3-7. Classification and Mileage of Inventoried Routes

Classification	Miles
2wd	353
4wd	252
ATV	292
Single Track	373
Total	1,270

Recreation Opportunity Spectrum
BLM uses an inventory concept known as the Recreation Opportunity Spectrum (ROS) to define the type of recreation opportunities and settings available in a planning area based on the proximity of lands to road and trail travel corridors. The subregion provides a variety of opportunity settings for recreationists, including "Semi-Primitive Motorized" and "Semi-Primitive Non-Motorized", "Rural", and "Roaded-Natural".

The semi-primitive motorized and the semi-primitive non-motorized classifications are areas that are characterized by a primarily unmodified natural environment. There is evidence of other users in the area; however, management actions encourage limited contacts between users. Semi-

primitive motorized permits motorized uses within the area, and semi-primitive non-motorized does not (USDI-BLM, July 1999).

The Roaded Natural classification is an area that is characterized by a generally natural environment with only moderate evidence of the sights and sounds of man. Resource modifications and utilization practices are evident, but harmonize with the natural environment (USDI-BLM, July 1999).

The Rural classification is an area that is characterized by a substantially modified natural environment. Resource modifications and utilization practices are obvious, the sights and sounds of man are readily evident, and the concentration of users is often moderate to high (USDI-BLM, July 1999).

3.12.2 Environmental Consequences – Recreation

3.12.2.1 Alternative A – Designate Existing Routes

This alternative provides for the maximum number of miles of roads and trails for recreational OHV use. Route designations would match inventoried classifications - i.e. mapped single track routes would be designated for single track use only; ATV routes for ATVs, and single track only; etc.

The existing 100 miles of maintained ATV routes would be unchanged. Additional routes designated for ATV use, due to their inventoried condition as ATV use routes, would not be included in the maintained system. No single track trails are currently maintained and none would be maintained under this alternative. Both of these situations could lead to trail braiding where damaged or unusable sections of trail lead to widening through avoidance. Outside of the 100 miles of maintained ATV trails, trail maintenance and eliminations of moguls would not occur. Moguls often lead to the proliferation of unauthorized paralleled routes and trail braiding resulting in resource damage, soil compaction, etc.

This alternative would provide the most trail miles available for competitive events.

The two existing trailheads (Rabbit Creek and Fossil Creek) would be retained. Fencing the Fossil Creek Trailhead and the “45” parking area, would allow for the better definition of trails leaving the areas. Presently there is little indication for users of where the trails are. Designating the three temporary parking areas (Chalky Butte, Kane Springs and Black Mountain), identified in the Hemingway Butte Play Area Mitigation Project (USDI 2006) as permanent parking areas, would continue to concentrate parking and reduce random parking and the expansion/creation of user created parking areas.

Implementing the vehicle closure of the Windy Point Pipeline route by physically preventing use of the route would most likely result in the creation of a new user created trail along the pipeline fence, or along both sides of the pipeline fence. Where the pipeline parallels Reynolds Creek road it would make it more likely that OHV users would simply travel on Reynolds Creek road to get around the closure. Reynolds Creek road is a paved road which Owyhee County has

closed to ATV use. Closure of the pipeline route would also eliminate an access route used by rock crawling enthusiasts from the Reynolds Creek road.

3.12.2.2 Alternative B

This alternative provides for an integrated system of single track trails, ATV trails and two and four wheel drive roads. Improved connectivity of ATV routes (i.e. loops) and 73 added miles of maintained ATV trails would improve the quality and quantity of trails available to ATV users.

The existing 100 miles of maintained ATV trails would be increased to 175 miles increasing the mileage of maintained routes by 73%. The increased trail miles would provide additional opportunities for loops and new areas to explore. Single track trails would be maintained as needed which would improve overall quality of the system and user experience.

Competitive use (motorcycle) would continue to be allowed on 474 miles (90%) of the roads and trails previously used for motorcycle events. Twenty-one miles of single track and ATV trail, not previously used for competitive events, would be available for competitive motorcycle use. The impacts to the competitive use system and permitees would be minimal. By retaining 90% of historically used competitive trails and by allowing competitive use to occur on routes that have not been previously used, event holders would have an abundant collection of routes to choose from.

The two existing trailheads (Rabbit Creek and Fossil Creek) would be retained. Fencing the Fossil Creek Trailhead, would allow for the better definition of trails leaving the trailhead. Presently there is little indication for users of where the trails are. Designating the three temporary parking areas (Chalky Butte, Kane Springs, and Black Mountain) identified in the Hemingway Butte Play Area Mitigation Project (USDI 2006) as permanent parking areas would continue to concentrate parking and reduce random parking and the expansion/creation of user created parking areas. Designating a parking area with informational maps and kiosks at the Silver City/Old Stage road junction, a parking area on the Silver City Road (T4S R2W S 8) and an Oreana Wayside would provide improved visitor services, information and public safety.

Closure of the “45” access point would eliminate access to the designated trail system, and to the defacto play area. It would also eliminate a 4WD route used by rock crawling enthusiasts to access an area near the upper end of West Rabbit Creek northwest of the Rabbit Creek Trailhead. An alternate access route would be established from the Reynolds Creek Road side using existing route H230 in conjunction with the existing 4WD Kane Springs road (off the Kane Springs parking area. Removal of this access point would have an adverse effect on recreationists who utilize this area to gain access to the trail system. However, the impacts would be minimal due to the close proximity of the Rabbit Creek and Hemingway Butte Trailheads. Hemingway Butte trailhead also provides recreationists with a 192 acre authorized play area that was created in 2006. Restricting access to the defacto play area would reduce further unauthorized activity and limit further expansion of the area.

Closure of the existing trail in Sinker Creek below the Silver City Road crossing would eliminate the trail in the bottom of Sinker Creek and one of the two crossings of Sinker Creek located on

BLM or State lands between the Silver City Road and Highway 78. The Sinker Creek trail provides users with a scenic, challenging, enjoyable opportunity that is popular with a variety of users. Elimination of one of the two crossings would funnel users and further restrict an already limited access to the southern portion of the Murphy Subregion.

Allowing use of the existing Windy Point Pipeline trail would eliminate the likelihood of the creation of new routes paralleling it. Access along Reynolds Creek road would be retained and safer for users. Rock crawling enthusiasts would still be able to access use areas accessed by using the pipeline route.

Route designation, maintenance, and signing of routes, coupled with public education and outreach efforts would enhance the overall recreation experience, while at the same time reducing impacts to natural and cultural resources, which in turn protects, rather than inhibits, recreational access to the public lands.

3.12.2.3 Alternative C

This alternative provides the fewest number of miles of roads and trails for recreational OHV use. Currently, this is a very popular riding location that receives large amounts of use. It's an area that has been identified in the Owyhee RMP as a SRMA, and the only area designated for motorized competitive use events. Elimination of 65% of the trail system within the Murphy Subregion, combined with a growing population, and increasing OHV sales is likely to push the masses of recreationists to other areas within the Owyhee Field Office or to the neighboring Bruneau Field Office. If this occurs, additional resource damage could occur in these areas as new trails are created by users, due to the fact that much of the Owyhee and all of the Bruneau Field Offices have yet to undergo Travel Management Planning. In addition, if an adequate trail system is not provided to not only meet the current demands of recreationists but future demands as well, overcrowding and safety of the users becomes a major concern.

This alternative provides users with a system of single track trails, ATV trails and two and four wheel drive roads. Connectivity of ATV routes and 55 added miles of maintained ATV trails would improve the quality of trails available to users.

The existing 100 miles of maintained ATV trails would be increased to 155 miles increasing the mileage of maintained routes by 55%. The increased trail miles would provide additional opportunities for loops and new areas to explore. Single track trails would be maintained as needed which would improve overall quality of the system and user experience.

This alternative would provide the fewest trail miles available for competitive events. No specific trails would be designated for competitive use. This would not meet an element of the Planning Criteria. In accordance with the County's Resolution, competitive uses could be authorized by BLM on a case-by-case basis on trails not otherwise open to use. Management of a system of trails which would be authorized a maximum of six days per year for the allowable six events, and where these same trails would not be available for the general public otherwise, would be problematic if not impossible. The physical presence of these trails would be obvious as a disturbed route devoid of vegetation would attract the viewer's attention. Limiting public

access to these routes to prevent use other than authorized events would require approximately 116 miles of new fencing and 467 gates. In some areas this would be a major change to the visual aspects of the area (see Visual Resources). In herd management areas the introduction of new fencing could impact wild and free roaming horses (see Wild Horses).

The two existing trailheads (Rabbit Creek and Fossil Creek) would be retained. Fencing the Fossil Creek Trailhead would limit trailhead expansion and allow for the better definition of trails leaving the trailhead. Presently there is little indication for users of where the trails are. Designating the three temporary parking areas (Chalky Butte, Kane Springs, and Black Mountain) identified in the Hemingway Butte Play Area Mitigation Project (USDI 2006) as permanent parking areas would continue to concentrate parking and reduce random parking and the expansion/creation of user created parking areas. Designating a parking area with informational maps and kiosks at the Silver City/Old Stage road junction, a parking area on the Silver City Road (T4S R2W S 8) would provide improved visitor services, information and public safety.

The development of a new trailhead at the "45" would provide users another access point to the designated trail system and assist in spreading out the concentrations of use throughout the area. The new trailhead would provide parking, restroom facilities, and educational information to the public

Closure of the existing trail in Sinker Creek below the Silver City Road crossing would eliminate the trail in the bottom of Sinker Creek and one of the two crossings of Sinker Creek located on BLM or State lands between the Silver City Road and Highway 78. The Sinker Creek trail provides users with a scenic, challenging, enjoyable opportunity that is popular with a variety of users. Elimination of one of the two crossings would funnel users and further restrict an already limited access to the southern portion of the Murphy Subregion.

Implementing the vehicle closure of the Windy Point Pipeline route by physically preventing use of the route would most likely result in the creation of a new user created trail along the pipeline fence, or along both sides of the pipeline fence. Where the pipeline parallels Reynolds Creek road it would make it more likely that OHV users would simply travel on Reynolds Creek road to get around the closure. Reynolds Creek road is a paved road which Owyhee County has closed to ATV use.

Route designation, maintenance, and signing of routes, coupled with public education and outreach efforts would enhance the overall recreation experience, while at the same time reducing impacts to natural and cultural resources, which in turn protects, rather than inhibits, recreational access to the public lands.

3.12.2.4 Alternative D – Proposed Action

This alternative provides for an integrated system of single track trails, ATV trails and two and four wheel drive roads. Improved connectivity of ATV routes (i.e. loops) and 85 added miles of maintained ATV trails would improve the quality and quantity of trails available to ATV users.

The existing 100 miles of maintained ATV trails would be increased to 185 miles increasing the mileage of maintained routes by 85%. The increased trail miles would provide additional opportunities for loops and new areas to explore. Single track trails would be maintained as needed which would improve overall quality of the system and user experience.

Competitive use (motorcycle) would continue to be allowed on 471 miles (90%) of the roads and trails previously used for motorcycle events. Twenty-seven miles of single track and ATV trail, not previously used for competitive events, would be available for competitive motorcycle use. The impacts to the competitive use system and permittees would be minimal. By retaining 90% of historically used competitive trails and by allowing competitive use to occur on routes that have not been previously used, event holders would have an abundant collection of routes to choose from.

The 68 miles of seasonal closures from March 1 through June 15 could have some negative effects on motorized competitive events. However, these effects should be minimal given that most of the motorized competitive events within the Owyhee Field Office occur in the fall. And due to the fact that the majority of the seasonal closures are located in the southern portion of the subregion, springtime events can still occur in the northern portions where most of the trails are located.

Seasonal closures could also have some overall negative effects on the motorized community that utilizes the southern portions of the subregion during the spring months. Though there is still a network of 2wd and 4wd routes throughout this area, a number of spur routes and some interconnecting routes have been closed seasonally to motorized use. This may or may not affect recreationists depending upon the activity. These seasonal closures would probably pose more of a temporary inconvenience than anything, thus making negative impacts fairly minimal.

Temporary closures would have a negative effect on motorized recreationists throughout the area. Closures would most likely occur in the spring when resources are threatened and recreation use in this area is at its highest. Motorized recreation would be eliminated completely during this time period, forcing users to explore new areas for recreation. Non-motorized recreationists would not be prohibited from utilizing the area and the absence of motorized use during the temporary closure would be welcomed by many of these users.

The two existing trailheads (Rabbit Creek and Fossil Creek) would be retained. Fencing the Fossil Creek Trailhead, would allow for the better definition of trails leaving the trailhead. Presently there is little indication for users of where the trails are. Designating the three temporary parking areas (Chalky Butte, Kane Springs, and Black Mountain) identified in the Hemingway Butte Play Area Mitigation Project (USDI 2006) as permanent parking areas would continue to concentrate parking and reduce random parking and the expansion/creation of user created parking areas. Designating a parking area with informational maps and kiosks at the Silver City/Old Stage road junction, and at the parking area one mile south of this junction on the Silver City Road (T4S R2W S 8), would provide improved visitor services, information and public safety.

Utilizing the area approximately one mile south of the Silver City/Stage Road junction as a parking area for recreational vehicles in combination with a transfer location for mining companies would be a compatible use. Mining companies would typically operate and utilize this parking area during the weekdays when recreational use is at its lowest. Improving this site by grading and graveling the surface to accommodate large vehicles would also benefit recreationists who utilize the parking area.

Retaining the "45" as a parking area would provide users another access point to the designated trail system and assist in spreading out the concentrations of use throughout the area. Constructing 2 miles of fence adjacent to the "45", and 1.75 miles of fence along Highway 78 South of Noble Island, would restrict user access to the defacto play areas reducing further unauthorized activity and limiting expansion of these areas. The defacto play areas are very popular riding area for users, however they are inconsistent with the Owyhee RMP. The Hemingway Butte trailhead already provides recreationists with a 192 acre authorized play area.

Closure of the existing trail in Sinker Creek below the Silver City Road crossing would eliminate the trail in the bottom of Sinker Creek and one of the two crossings of Sinker Creek located on BLM or State lands between the Silver City Road and Highway 78. The Sinker Creek trail provides users with a scenic, challenging, enjoyable opportunity that is popular with a variety of users. Elimination of one of the two crossings would funnel users and further restrict an already limited access to the southern portion of the Murphy Subregion.

Allowing use of the existing Windy Point Pipeline trail would eliminate the likelihood of the creation of new routes paralleling it. Access along Reynolds Creek road would be retained and safer for users. Rock crawling enthusiasts would still be able to access use areas accessed by using the pipeline route.

Route designation, maintenance, and signing of routes, coupled with public education and outreach efforts would enhance the overall recreation experience, while at the same time reducing impacts to natural and cultural resources, which in turn protects, rather than inhibits, recreational access to the public lands.

3.13 Visual Resource Management

3.13.1 Affected Environment – Visual Resource Management

The Federal Land Policy and Management Act (FLPMA) requires that public lands be managed in a manner that would protect their scenic values. To protect visual quality, all public lands are assigned a visual resource management (VRM) classification based upon an evaluation of scenic quality, distance zones, and public sensitivity towards scenic quality.

There are four VRM classes, I, II, III and IV. VRM Class I areas are generally the areas most publicly sensitive to landscape change while Class IV areas are generally the least sensitive to manmade disturbance. VRM sensitivity ratings are often closely related to distance from public use areas. The Murphy Subregion consists of 162,509 acres of class IV, 34,934 acres of class III, and 35,146 acres around the Silver City area of class II (map 19).

VRM Class IV while sensitive to visual qualities, allows for major modifications to the existing character of the landscape that may dominate the view and be the focus of attention. However, every attempt should be made to minimize impacts with careful location and minimal disturbances (USDI-BLM, July 1999).

VRM Class III objective is to retain the existing character of the landscape and the level of change to the 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 predominant natural features or the characteristic landscape. This classification occurs where the amount of use is relatively high and scenic quality is generally good. Maintenance, construction, and reconstruction of rangeland facilities, roads, and vegetation treatment projects are permitted. In this classification emphasis is placed on construction techniques that would reduce the projects visual impacts to the natural landscape (USDI-BLM, July 1999).

The objective for VRM Class II is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape. Limited new recreation facilities (trails and small recreation sites) and limited road construction, reconstruction, and maintenance are permitted. (USDI-BLM, July 1999).

Prominent hill-climb scars are visible on slopes throughout the subregion, these scars can dominate the attention of visitors as they travel throughout the area. Other visually dominant landscape features include the Hemingway Butte trailhead and designated "Play Area" in T. 1S., R. 3W., Rabbit Creek trailhead in T. 2S., R. 2W., Fossil Creek trailhead in T. 4S., R. 1W., a dairy calf operation along on private land in T.1S., R.3W., and a large powerline that runs through a portion of the subregion in T. 1S., R 2 and 3 W, in sections 14, 19, 23, 24, 28, 29, 30. Along with the towns of Murphy, Oreana, and Reynolds, there are also a number of houses/buildings scattered throughout the subregion.

3.13.2 Environmental Consequences – Visual Resource Management

3.13.2.1 Alternative A – Designate Existing Routes

Because this alternative proposes the least amount of modifications or projects (exterior fencing of the "45" parking area and Fossil Creek trailhead), its immediate, direct, impact on visual quality would be minimal. Fencing these two areas would prevent further expansion and soil disturbance, thus improving visual quality over time. All proposed projects and maintenance actions under this alternative are considered acceptable within these VRM classifications.

The scenic quality of areas which have developed a use pattern of defacto "play area" would most likely continue to deteriorate due to the difficulty in managing areas with such a concentration of user created trails. This would be most likely to occur within the area east of

the Hemingway Butte Trailhead and the area west of the "45" access point. Closure and rehabilitation of hill climbs would be a difficult and lengthy process but would over time lead to improved scenic quality. The construction of 13 miles of fencing to prohibit access to the Windy Point pipeline may have adverse effects on visual quality in the area. The potential establishment of a new user created trail along the pipeline fence, or along both sides of the pipeline fence would create new areas of disturbance which would also adversely impact visual quality.

3.13.2.2 Alternative B

The closure of approximately 436 miles of routes within the subregion would have positive effects on overall visual quality throughout the area as rehabilitated routes began to re-vegetate and the impact of human use as evidenced by vehicle ways diminishes, particularly in the defacto play areas.

Fencing the perimeter of the Fossil Creek trailhead and designating defined parking areas at the Silver City Road at the junction with the Silver City Stage Road and at the existing user created parking area one mile south of the junction, would eliminate expansion of the current parking areas and minimize disturbance. Visual quality would improve over time as disturbed areas are re-vegetated.

Closures of the "45", Noble Island parking area, defacto play areas, and hill climbs throughout the subregion would improve visual quality over time as these disturbed areas, trails, and hill climb scars re-vegetated.

Reopening the Windy Point pipeline would have minimal impacts. This route currently exists, thus no new disturbance would occur.

Maintenance actions intended to stabilize trail erosion, trail width, and trailside vegetation would have only minor, transitory visual impacts, and would protect and enhance the long term scenic value of affected trail segments.

Overall visual quality throughout the subregion would improve over time under this alternative. All proposed projects and maintenance actions are considered acceptable within these VRM classifications.

3.13.2.3 Alternative C

The closure of approximately 822 miles of routes within the subregion would have positive effects on overall visual quality throughout the area as rehabilitated routes began to re-vegetate and the impact of human use as evidenced by vehicle ways diminishes, particularly in the defacto play areas.

Fencing the perimeter of the Fossil Creek trailhead and designating defined parking areas at the Silver City Road at the junction with the Silver City Stage Road and at the existing user created parking area one mile south of the junction, would eliminate expansion of the current parking

areas and minimize disturbance. Visual quality would improve over time as disturbed areas re-vegetated.

Designating the "45" as a trailhead may have some adverse effects on visual quality. The visual effects of converting the user created parking area into a trailhead would remain over the long term, as fencing, gravel, kiosks, and restroom facilities would be installed. However, the scale of disturbance would be minimized as the surrounding hills and open plains attract viewer attention more than the parking area. Planned facilities on site would be painted in colors that blend with the prevailing tones of the surrounding landscape. The moderate size of these facilities would have little effect on the line, forms, and textures of the surrounding landscape.

The construction of 13 miles of fencing to prohibit access to the Windy Point pipeline may have adverse effects on visual quality in the area. The potential establishment of a new user created trail along the pipeline fence, or along both sides of the pipeline fence would create new areas of disturbance which would also adversely impact visual quality.

The construction of approximately 116 miles of new fencing and 467 gates that would be needed to limit public use to competitive event routes would have an adverse affect on visual quality. The actual disturbance to vegetation, while gates and fences were installed, would be minimal as existing routes and disturbed areas would be utilized for construction. However, scenic quality within the subregion would be impacted in the long term as physical structures would be scattered throughout the entire subregion and attract the viewers attention.

Maintenance actions intended to stabilize trail erosion, trail width, and trailside vegetation would have only minor, transitory visual impacts, and would protect and enhance the long term scenic value of affected trail segments.

All proposed projects and maintenance actions under this alternative are considered acceptable within these VRM classifications.

3.13.2.4 Alternative D – Proposed Action

The closure of approximately 430 miles of routes within the subregion would have positive effects on overall visual quality throughout the area as rehabilitated routes began to re-vegetate and the impact of human use as evidenced by vehicle ways diminishes, particularly in the defacto play areas.

Fencing the perimeter of the "45" and the Fossil Creek trailhead and designating defined parking areas at the Silver City Road at the junction with the Silver City Stage Road and at the existing user created parking area one mile south of the junction, would eliminate expansion of the current parking areas and minimize disturbance. Visual quality would improve over time as disturbed areas are re-vegetated.

Restricting access to the defacto play areas adjacent to the "45", and closure of the Noble Island parking area, defacto play areas, and hill climbs throughout the subregion would improve visual quality over time as these disturbed areas, trails, and hill climb scars re-vegetate.

Reopening the Windy Point pipeline would have minimal impacts. This route currently exists, thus no new disturbance would occur.

Maintenance actions intended to stabilize trail erosion, trail width, and trailside vegetation would have only minor, transitory visual impacts, and would protect and enhance the long term scenic value of affected trail segments.

Overall, this alternative would have similar effects on visual resources to that of Alternative B. However, with 68 miles of seasonal closures as opposed to 12 miles in Alternative B and the fencing of the defacto play areas being created adjacent to the "45" and south of Noble Island visual quality throughout the subregion would improve the most over time under this alternative. All proposed projects and maintenance actions are considered acceptable within these VRM classifications.

3.14 Social and Economic Resources

3.14.1 Affected Environment – Social and Economic Resources

Idahoans are enthusiastic participants in a variety of outdoor recreation activities that require access and use of public lands. Often, this use requires purchase of expensive, specialized equipment, as well as purchase of other associated services such as gas, lodging, food, etc. As population has soared in the region, so have the number of recreation participants. For this reason, recreation is a powerful and growing contributor to the regional economy of southwest Idaho. For example, registration of OHVs (ATVs and off-road motorcycles) grew 65% in southwestern Idaho between 2002 and 2006 (IDPR 2007a).

Despite the powerful contribution that recreation makes to regional economies, according to a 2003 regional economic impact model for Owyhee County, Idaho (Darden, et al. 2003), relatively few purchases are made in Owyhee County as a direct result of OHV or other recreational activities that occur there, even though recreation use of the County by non-County residents has grown steadily.

In the view of many of the residents of Owyhee County, the discovery of their County by the urban residents of Boise, Nampa, Caldwell, Meridian, Eagle and other growing communities of the Treasure Valley as a place to recreate has not brought any tangible improvement to them, and in fact, has eroded their quality of life.

Within Owyhee County, growing levels of recreational use, particularly OHV use on the Owyhee Front, have resulted in un-reimbursed expenses in law enforcement, search and rescue, and other emergency response efforts, and the costs of these efforts are usually borne by the taxpayers of the County.

Growing OHV use and other forms of recreation have also degraded the quiet atmosphere that local rural residents and public land permittees that live and work in northern Owyhee County once enjoyed. During weekends, particularly in the spring and fall, intensive motorized

recreation use has resulted in periods of high decibel noise, vehicle-generated dust, littering, trespass on adjacent private lands, harassment and displacement of livestock, and damages to fences, troughs, and pipelines on both private and public lands. Non-motorized recreational users generate much less noise, and somewhat lower levels of dust, but can otherwise create many of the problems listed above for residents and public land permittees.

The population of southwestern Idaho is projected to double from about one-half million people at present, to about one million people in the next 20-25 years. (COMPASS 2006), and much of this growth would occur in currently undeveloped rural areas of western and southern Treasure Valley, often close to the Snake River, placing a substantial new population within a short driving distance of Owyhee County, and the Murphy Subregion.

3.14.2 Environmental Consequences – Social and Economic Resources

3.14.2.1 Alternative A – Designate Existing Routes

Designation of all existing routes as the defined transportation system would not increase the amount of route miles available; however, it is likely that over time an increase in the intensity of recreational use would increase proportionately to the on-going increase in the sales and use of recreational vehicles. Noise, dust, and increased use of public land resources would generally degrade the quality of life in the region and increase BLM and local government costs to monitor, regulate, and control the increase in visitors. Concerns related to private land trespass and routes directly adjacent to private lands impacting these lands would not be eliminated by this alternative as the routes that now create these issues would remain open for use.

A consequence of the increase in intensity of use could be the displacement of some users to other locations if the higher levels of use detracted from their experience and/or resulted in a sense of overcrowding.

3.14.2.2 Alternative B

The creation of a maintained, designated route system; a 34% reduction in the miles of routes open to motorized use; the placement of informational, regulatory, educational and directional signs; and the establishment of designated staging areas with safe, off-highway parking would result in reductions in dust, noise, vandalism, and trespass problems that are currently affecting local residents and permittees during periods of high recreation use.

However, it is likely that over time an increase in the intensity of recreational use would increase proportionately to the on-going increase in the sales and use of recreational vehicles. A consequence of the increase in intensity of use could be the displacement of some users to other locations if the higher levels of use detracted from their experience and/or resulted in a sense of overcrowding.

3.14.2.3 Alternative C

The creation of a maintained, designated route system; a 65% reduction in the miles of routes open to motorized use; the placement of informational, regulatory, educational, and directional signs; and the establishment of designated staging areas with safe, off-highway parking would result in reductions in dust, noise, vandalism, and trespass problems that are currently affecting local residents and permittees during periods of high recreation use.

However, it is likely that over time an increase in the intensity of recreational use would increase proportionately to the on-going increase in the sales and use of recreational vehicles. As this alternative provides the fewest miles of routes available, it can be anticipated that the intensity and levels of use on these miles would be the highest of any of the alternatives as the same number of users would be concentrated on the fewest miles of routes. A consequence of the increase in intensity of use could be the displacement of some users to other locations if the higher levels of use detracted from their experience and/or resulted in a sense of overcrowding.

3.14.2.4 Alternative D – Proposed Action

The creation of a maintained, designated route system; a 34% reduction in the miles of routes open to motorized use; the placement of informational, regulatory, educational and directional signs; and the establishment of designated staging areas with safe, off-highway parking would result in reductions in dust, noise, vandalism and trespass problems that are currently affecting local residents and permittees during periods of high recreation use.

However, it is likely that over time an increase in the intensity of recreational use would increase proportionately to the on-going increase in the sales and use of recreational vehicles. A consequence of the increase in intensity of use could be the displacement of some users to other locations if the higher levels of use detracted from their experience and/or resulted in a sense of overcrowding.

3.15 Cumulative Impacts

Air Quality
The air quality in this rural area is excellent. Reduced air quality is most often due to smoke from wildland fires in Nevada, California, or Oregon. Air quality impacts from OHV use is most evident in dust clouds raised as vehicles travel on dirt or gravel routes. This impact is localized and short-term, dissipating shortly after vehicles pass.

Soils
This plan covers only a small portion of a larger ecosystem that makes up the Owyhee Front, the Owyhee Uplands, and the Owyhee Mountains. Each area's soil resource is unique in its own way. OHV use, both on designated route and trail systems and that associated with illegal use, has greatly impacted the soil resource throughout the area. The projected increase in recreational OHV use which if unmanaged could create a growing long-term ecosystem wide negative impact to the soil resource and watershed health. Creation of a designated route system and the prohibition on cross-country OHV use substantially reduces the potential for impacts to soils.

Vegetation
The route designation process in the Murphy Subregion Travel Management Plant would benefit the plant communities by controlling population fragmentation and limiting disturbance in soils susceptible to erosion. These areas and habitat for special status plant species often overlap; therefore protecting soils from erosion would benefit the populations of special status plants and their endemic habitat. Route designation provides an area designated for intensive motorized recreation that helps alleviate pressure to soils and habitats that are susceptible to erosion by concentrating legal cross-country motorized use in a relatively small area of the Owyhee Front. The protection of special status plants and habitat provided by the route designation process would reduce the threats to these populations which could keep the status of these species from being elevated.

The effects of route mileage reductions in Alternatives B, C, and D would result in improved health and vigor of the plant communities by reducing the fragmentation of plant communities and the habitat for special status plants and reducing the opportunity for spread of invasive and noxious weeds by controlling cross country travel. The protection of special status plants and habitat provided by the route designation process would reduce the threats to these populations which could keep the status of these species from being elevated. Designation and enforcement of travel management plans limiting use to authorized routes, which eventually would include all of the Owyhee Front, would go a long way towards reversing the trend of new user created route establishment. Route designation also allows protection of those soils most susceptible to erosion which would benefit the populations of special status plants and the habitat that they are endemic to.

Riparian Resources/Water Quality
Cumulative effects are conducted on a subregion watershed scale. Under Aternative A, continued use of routes across the Owyhee Front, along with development of adjacent private lands, would result in cumulatively greater impacts to riparian areas.

Water quality watershed wide would diminish due to the excessive sediment, and increase overall sediment loads into the Snake River. The few streams meeting their water quality standards would degrade and streams that have not attained their beneficial uses would remain on the 303(d) list. Also, the streams that have not been assessed but are presumed to have beneficial uses could degrade due to excessive sediment.

Under Alternatives B, C and D, the route designation and transportation planning scheduled for completion for the subregion would cumulatively result in fewer impacts to riparian areas. Removal of trails would reduce stream crossings and reduce the hydroconnectivity of the trail system to the drainage systems and reduce overall sediment into the streams, improving water quality in the long-term.

Wildlife
The area considered for cumulative effects includes the area of the Owyhee Front from Highway 95 from to McBride Creek, east to Castle Creek, north to the Snake River and south to the

headwaters of the streams including Reynolds, Hart, Sinker, Pickett, McBride, and the North Fork of Castle Creeks.

Designation of routes would reduce the existing levels of disturbance and fragmentation, and increase available habitat. Management of designated routes would increase habitat quality by maintaining proper trail width and reducing erosion. Large tracts of seasonal closures would benefit wildlife throughout the area by enhancing breeding success and survival of young. This should be especially true for greater sage-grouse. Strengthening sage-grouse populations at the local level would benefit sage-grouse throughout the Owyhee and support maintaining the population through the Great Basin region. Monitoring associated with the proposed action (Alternative D) would document undesirable effects to wildlife and lead to changes in management to improve conditions for wildlife.

Past and present actions in the area have fragmented and degraded habitat for wildlife. Actions such as agriculture development and housing as well as the unplanned proliferation and expansion of routes have led to a loss of suitable habitat for wildlife along the Owyhee front. Future development may occur on private land within the analysis area, which makes better management and control of desirable routes and closure of unauthorized routes, as well as seasonal protections for wildlife extremely important for long-term viability of wildlife populations.

Future actions that have the potential to fragment and degrade wildlife habitat include the Boardman to Hemingway (BH) electrical powerline and substation installation as well as the Gateway West Project (GW) electrical powerline. The BH line comes from Boardman Oregon and runs through the northern edge of the TMP. The line runs south of Highway 78 along the private/public land boundary to the east to the Hemingway substation. The GW lines come from the east and north, the north line has limited effects in resource area due to the short distance. The southern GW enters the resource area at Castle Creek near Highway 78 and runs just to the north or south of the highway to the substation. Because both lines are near human disturbance from private land or the highway, fragmentation would be limited and human disturbance minimal except during construction. These lines avoid crucial habitat for any species in the Owyhee Resource Area. These actions in conjunction with the proposed Murphy Travel management Plan would not push any species beyond a threshold for existence.

Fisheries

Eliminating vehicle use in Sinker Creek (Alternatives B, C and D) on BLM lands below the Silver City Road would eliminate the single greatest threat to fishery habitat identified in the subregion due to motorized vehicles by eliminating increased sedimentation and bank disturbance caused by vehicles. Continuing this use would lead to increased siltation of habitat and long-term degradation of redband trout habitat.

Wild Horses

Reducing the number of roads and trails within the HMA would benefit wild horses through less habitat fragmentation and at least some greater ability to avoid human activity. Eliminating defacto play areas along with the closure and rehabilitation of roads and trails should lead to greater forage availability over time.

Range Management
Alternatives A, B, or D would not make any changes to range management activities. Alternative C could restrict access to rangelands and range improvements unless routes necessary for these purposes, which are proposed for closure, are converted to administrative access in a future plan revision.

Alternatives B, C, and D would provide some reduction in livestock-vehicle interaction through a reduction in vehicle routes.

Cultural Resources
Cultural sites within the Murphy Subregion trail system have sustained damage due to user established trails. Projected increases in trail use could further contribute to the degradation of these irreplaceable resources. Route designation and control through selective closures, limiting access, and enforcement could reduce current and future destruction to fragile cultural and historic properties.

Recreation
BLM estimates that the total mileage of routes in the four subregions of the Owyhee Front is currently 2,256 miles of roads (1,461 miles) and trails (795 miles). Since the Owyhee RMP was adopted in 1999, an estimated 221 miles of new routes have been illegally established across the Owyhee Front (188 miles of trail, and 33 miles of roads). This represents about a 9.8% rise in the number of routes in a 9+ year period, or approximately 25 miles of new routes per year. Designation and enforcement of travel management plans limiting use to authorized routes, which eventually would include all of the Owyhee Front, would go a long way towards reversing the trend of new user created route establishment. The Murphy TMP builds on the existing TMPs for Wilson Creek and Hemingway Butte.

Though available route mileage would decline under Alternatives B, C, and D the implementation of planned actions such as trail maintenance, placement of signs, and protection of the visual environment would result in enhancement of the quality of the recreation experience for all trail users. Under Alternatives B, C, and D motorized users would lose some access, but across the Owyhee Front, a wide variety of routes would still be available.

In the long term, travel management planning and the designation of roads and trails across the Owyhee Front would further enhance recreation experience and reduce impacts to natural and cultural resources and to local landowners. By closing redundant trails, closing trails that adversely impact resources, maintaining major connector routes and providing loop opportunities for OHV users, designing trail systems that avoid the most vulnerable and undisturbed areas, educating and informing the public with signage throughout the trail system, and providing higher levels of enforcement and public contact, transportation planning would reduce or mitigate impacts from higher anticipated recreation use resulting from projected population growth in the region.

Elsewhere in the region, Federal and State Agencies, as well as local governments are beginning the process of route designation in the Treasure Valley and surrounding areas. When implemented, these designations should provide regional benefits similar to those realized in the Murphy Subregion, Wilson Creek, and Hemingway Butte including reduction or mitigation of impacts from higher anticipated recreation use resulting from population growth, improvement of recreation experience, and ultimately should lead to broader public acceptance of and compliance with reasonable regulations governing recreation use.

4.0 List of Preparers

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Soils/Watershed:	Paul Seronko
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5.0 Public Participation

Beginning in May of 2007, BLM conducted extensive public outreach and scoping with a wide spectrum of affected individuals, groups, and organizations including: motorcycle, ATV, 4x4, environmental groups, and rock collectors. More than 20 separate meetings were conducted with these interests, including four public meetings. The meetings were designed to inform the public on the major issues and controversies surrounding travel management in the Murphy Subregion area, as well as explaining BLM's legal obligations to proceed with travel management planning and route designation, but were also designed to gather information from sources that knew a great deal about the area and often had a personal stake in the outcome of the process. The BLM also met and consulted multiple times with the Owyhee County Government, Owyhee County Recreation Task Force, Shoshone-Paiute Tribes, State Agencies, the Resource Advisory Council (RAC), and grazing permittees. A great deal of new and useful information was gained by BLM as a result of these meetings, and the concerns and suggestions of meeting participants are represented in this plan.

As a result of multiple meetings involving Owyhee County officials, the Owyhee County Recreation Task Force, and BLM, the product of which was Alternative D as recommended by the OCRTF to the Commissioners, on April 7, 2009 the Owyhee County Commissioners in Resolution 09-11 (Appendix 3) rescinded Resolution 08-02 (Appendix 1) and revised the Owyhee County Trail Plan.

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7.0 Appendices

Appendix 1: Owyhee County Resolution 08-02
Appendix 2: Draft EA scoping comments and responses
Appendix 3: Owyhee County Resolution 09-11

8.0 Maps

Map 1: Murphy Subregion – Location Map
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