

# SNOWMOBILE AND BERRINGTON TRAIL ACCESS ANALYSIS

ENVIRONMENTAL ASSESSMENT  
OR-05-027-085

Bureau of Land Management  
Burns District Office  
28910 Hwy 20 West  
Hines, Oregon 97738

April 1, 2005

## TABLE OF CONTENTS

Chapter I: Introduction: Purpose of and Need for Action.....	1
A.    Location of Project.....	1
B.    Major Issues .....	1
C.    Background.....	2
D.    Purpose and Need for Action.....	4
E.    Conformance with Legislation and Land Use Plans.....	4
Chapter II: Alternatives.....	6
A.    Weekly Use Alternative.....	6
B.    No Snowmobile or Berrington Trail All-Terrain Vehicle Use (No Action).....	7
C.    Ankle Creek Route Only Alternative.....	7
D.    Berrington Trail and Ankle Creek Route Alternative.....	8
E.    Berrington Trail, Spring, Summer, Fall Use Alternative.....	8
Chapter III: Description of the Affected Environment .....	9
A.    Critical Elements.....	9
1.    Water Quality.....	9
2.    Wetlands and Riparian Zones .....	9
3.    Wild and Scenic Rivers.....	9
4.    Wilderness.....	10
a.    Naturalness.....	10
b.    Solitude .....	10
c.    Primitive and Unconfined Recreation.....	10
d.    Supplemental Wilderness Values .....	11
5.    Noxious Weeds .....	11
6.    Migratory Birds.....	11
7.    Special Status Fauna .....	11
B.    Noncritical Elements.....	12
1.    Recreation .....	12
2.    Visual Resources.....	12
3.    Vegetation.....	13
4.    Wildlife .....	13
5.    Soils.....	14
6.    Social and Economic Values .....	14

Chapter IV: Environmental Consequences.....	15
A.    Critical Elements.....	15
1.    Water Quality.....	15
2.    Wetlands and Riparian Zones .....	16
3.    Wild and Scenic Rivers.....	17
4.    Wilderness.....	19
5.    Noxious Weeds .....	23
6.    Migratory Birds.....	24
7.    Special Status Fauna .....	26
B.    Noncritical Elements.....	27
1.    Recreation .....	27
2.    Visual Resources.....	29
3.    Vegetation.....	30
4.    Wildlife .....	31
5.    Soils.....	32
6.    Social and Economic Values .....	33
C.    Cumulative Effects.....	36
Chapter V: Possible Mitigating Measures .....	37
Chapter VI: Monitoring .....	37
Chapter VII: Consultation and Coordination.....	38
A.    List of Preparers.....	37

SNOWMOBILE AND BERRINGTON TRAIL  
ACCESS ANALYSIS

ENVIRONMENTAL ASSESSMENT  
OR-05-027-085

CHAPTER I: INTRODUCTION: PURPOSE OF AND NEED FOR ACTION

A. Location of Project

The 170,085-acre Steens Mountain Wilderness Area lies about 60.00 miles south of Burns, Oregon. There are about 40 private land parcels (inholdings) scattered throughout the wilderness. This Environmental Assessment (EA) analyzes winter access to the Stroemple and Fishermen inholdings and Berrington Trail access to the Stroemple inholdings. The Stroemple and Fisherman private inholdings are located in the vicinity of Ankle Creek. Refer to the attached maps for a depiction of the Wilderness Area, the Berrington Trail, and the inholdings.

B. Major Issues

Section 112(e) of the Steens Mountain Cooperative Management and Protection Act (Steens Act) of 2000 (Public Law 106-399) states that “[t]he Secretary shall provide reasonable access to nonfederally owned lands or interests in land within the boundaries of the Cooperative Management and Protection Area and the Wilderness Area to provide the owner of the land or interest the reasonable use thereof.”

Section 102 (b) of the Steens Act states that "...the Secretary shall manage the Cooperative Management and Protection Area for the benefit of present and future generations; (1) to maintain and enhance cooperative and innovative management projects, programs and agreements between tribal, public, and private interests in the Cooperative Management and Protection Area;”

Section 202 of the Steens Act states “the Secretary shall administer the Wilderness Area in accordance with this title and the Wilderness Act (16 U.S.C. 1131 et seq.).”

Wilderness areas are subject to stringent management constraints to protect wilderness characteristics as described in their enabling legislation and implementing regulations. In providing reasonable access to private land in wilderness, Bureau of Land Management (BLM) must harmonize two competing interests. @See e.g. *Johnson v. United States*, Civ. No.00-217-BLG-RWA (D. Mont. April 2, 2002), Slip. Op. at13 (stating A[o]n the one hand, the Secretary is required to preserve wilderness areas by prohibiting road construction and motorized vehicles. On the other hand, the Secretary must provide adequate access to inholdings held by private owners.@)

Both Mr. Stroemple and the leaseholders of the Fisherman inholdings want to use snowmobiles to access their inholdings during winter months. The Stroemple parcels are approved for a Lot of Record Dwelling which allows the owner to construct a home on each of the properties. Additionally, Mr. Stroemple is requesting motorized access along the Berrington Trail.

C. Background

On October 30, 2000, the Steens Act was signed into law, designating the Steens Mountain Cooperative Management and Protection Area (CMPA), and certain public land within the CMPA as wilderness. Access to non-Federally owned land is subject to the provisions of the Steens Act, the Wilderness Act, the Federal Land Policy and Management Act, and Federal regulations. Section 112(e) of the Steens Act states that “[t]he Secretary shall provide reasonable access to nonfederally owned lands or interests in land within the boundaries of the Cooperative Management and Protection Area and the Wilderness Area to provide the owner of the land or interest the reasonable use thereof.” Sec 5. (a) of the Wilderness Act states that “In any case where State-owned or privately owned land is completely surrounded by...wilderness, such state or private owner shall be given such rights as may be necessary to assure adequate access to such State-owned or privately owned land...”

For purposes of this analysis, the term “reasonable access” will be used to connote reasonable access under the Steens Act and adequate access under the Wilderness Act.

A previous Ankle Creek Inholder Access EA (OR-027-02-011) and associated Decision Record analyzed seasonal access to the Stroemple and Fisherman parcels on the Ankle Creek Route during the established May-October period of access. The decision to authorize motorized access into the Ankle Creek Basin by way of the Ankle Creek Route (EA OR-027-02-011, currently under stay and appeal to the Interior Board of Land Appeals) is unchanged by this analysis, and would not be affected by this decision.

This new EA is necessary to analyze reasonable winter access along the Ankle Creek Route to the Fisherman and Stroemple properties for the property owners and leaseholder and for additional motorized access to the Stroemple inholdings using snowmobiles and All-Terrain Vehicles (ATVs) on the Berrington Trail. Mr. Stroemple desires motorized access using the Berrington Trail because it would greatly reduce travel time necessary to access his properties compared to using only the Ankle Creek Route.

Of the four inholdings being analyzed in this EA, two are owned by Central Oregon Land, LLC (George Stroemple), and two by Annette Fisherman. The Fisherman properties are currently under a 5-year lease to John and Cindy Witzel, doing business as Steens Mountain Packers, Inc. (SMP); the lease expires March 30, 2006. The purchase of the properties by Mr. Stroemple and the lease to SMP both occurred after wilderness designation, i.e., post October 2000.

In the past, the four inholdings have been accessed with motorized vehicles across public land by way of the Ankle Creek Road. Access has been seasonal, generally May through October, due to snow or wet road conditions during winter and early spring.

An estimated five vehicles per week, of which three trips are estimated to be by landowners and lessees, used some portion of the Ankle Creek Road prior to the wilderness designation. Vehicular use increased each September and October during big game hunting seasons, when approximately seven to nine hunting camps were located in proximity to the Stroemple and Fisherman properties. The Stroemple inholdings were also accessed across Roaring Springs Ranch private land, however, this access was never formally approved by the ranch. Ownership of the particular parcels and the location of the Ankle Creek Route are shown on Map 1.

In the 1960s a bulldozer was used to construct a route from Wildhorse Valley up the east facing escarpment of South Steens for trailing livestock to and from higher elevations. The route was originally adequate for use by full size motor vehicles, usually pickup trucks, until the early 1980s when rock slides drastically inhibited or possibly prevented motorized vehicle use. Landowners continued using the trail with horses to access private land and manage livestock. Local ranchers and previous landowners are aware of at least two attempts during the 1990s when other ranchers attempted to negotiate the trail with ATVs and failed. At the time of wilderness designation (2000) there was no known motor vehicle use of the Berrington Trail. A BLM reconnaissance hike of the trail on May 6, 2004, revealed that portions of the route across BLM-administered land were inaccessible to motor vehicles. This was the situation until July 2004, when hand tools were used to remove rocks, trees, and other vegetation for access using 4-wheel ATVs. This route is referred to as the Berrington Trail and shown on the attached maps.

Purposes of the Steens Act include at Section 1. (b)(4) "To provide for the acquisition of private lands through exchange for inclusion in the Wilderness Area and the Cooperative Management and Protection Area", and (6) "To authorize the purchase of land and development and nondevelopment rights." The BLM is attempting to acquire the inholdings through purchase or exchange but has been unsuccessful to date. Currently, there is no appropriation for the purchase of these inholdings, however, the properties remain a priority for acquisition in order to consolidate public ownership within the wilderness. Any authorization granting motorized access to either or both parties would become null and void at such time as the properties are acquired either by the BLM or by another private entity that does not want motorized access. Activities occurring or which have occurred on the Fisherman inholdings include camping, hunting, commercial outfitting, livestock grazing, and day-use recreation/visitation. The Fisherman properties were accessed with snowmobiles once over the past 10 years. At the time of wilderness designation there was no known regular access to this area using snowmobiles. Past activities for the Stroemple parcels were primarily livestock grazing and current uses are primarily hunting and day-use recreation/visitation. Snowmobiles have not been used to access the Stroemple inholdings for at least the past 20 years.

D. Purpose and Need for Action

As with the previous Ankle Creek Inholder Access EA, the purpose is to provide reasonable access for two private parties to their private inholdings within the boundaries of the Steens Mountain Wilderness in accordance with applicable law. The two inholders have expressed a desire for snowmobile access to each of their inholdings and Mr. Stroemple has requested motorized and nonmotorized use of the Berrington Trail to access the Stroemple inholdings because it would greatly reduce his travel time to access his properties when full-size motor vehicular access is not needed. This EA analyzes if snowmobiles should be included as a mode of transport to access the Stroemple and Fishermen inholdings and if the Berrington Trail should be included as a motorized or nonmotorized route to access the Stroemple inholdings.

Reasonable access, for purposes of this analysis, is that access required by law as determined by the authorizing officer, and is determined for each inholding and can be motorized or nonmotorized depending on each particular circumstance. Land Use Permits issued under Code of Federal Regulations (43 CFR) 2920 or Cooperative Management Agreements entered into under the Steens Act will be used to outline the terms and conditions of each access authorization.

E. Conformance with Legislation and Land Use Plans

The alternatives in this EA are being analyzed for their environmental impacts to assist in determining conformance with the provisions of the Wilderness Act of 1964, BLM Manual 8560 (Management of Designated Wilderness Areas (1983)), the Steens Act, and applicable regulations found at 43 CFR 6300. Section 202 of the Steens Act states “the Secretary shall administer the Wilderness Area in accordance with this title and the Wilderness Act (16 U.S.C. 1131 et seq.)” In the case of an inholding, the Wilderness Act states in part “such State or private owner shall be given such rights as may be necessary to assure adequate access to such State-owned or privately owned land by such State or private owner and their successors in interest...” Section 4 (b) of the Wilderness Act provides in part that ... “each agency administering any area designated as wilderness shall be responsible for preserving the wilderness character of the area and shall so administer such area for such other purposes for which it may have been established as also to preserve its wilderness character.” The purposes for establishing the CMPA and the Steens Mountain Wilderness Area are articulated clearly in the Steens Act itself. The purposes identified in Section 1 (b) of the Steens Act are:

- (1) To maintain the cultural, economic, ecological, and social health of the Steens Mountain Area in Harney County, Oregon.
- (2) To designate the Steens Mountain Wilderness Area.
- (3) To designate the Steens Mountain CMPA.
- (4) To provide for the acquisition of private land through exchange for inclusion in the Wilderness Area and the CMPA.
- (5) To provide for and expand cooperative management activities between public and private landowners in the vicinity of the Wilderness Area and surrounding land.

- (6) To authorize the purchase of land and development and nondevelopment rights.
- (7) To designate additional components of the National Wild and Scenic Rivers (WSR) System.
- (8) To establish a reserve for redband trout and a Wildlands Juniper Management Area.
- (9) To establish a citizens' management advisory council for the CMPA.
- (10) To maintain and enhance cooperative and innovative management practices between the public and private land managers in the CMPA.
- (11) To promote viable and sustainable grazing and recreation operations on private and public lands.
- (12) To conserve, protect, and manage for healthy watersheds and the long-term ecological integrity of Steens Mountain.
- (13) To authorize only such uses on Federal land in the CMPA that are consistent with the purposes of this Act.

Section 102 (b) further states that "...the Secretary shall manage the Cooperative Management and Protection Area for the benefit of present and future generations;

- (1) to maintain and enhance cooperative and innovative management projects, programs and agreements between tribal, public, and private interests in the Cooperative Management and Protection Area;
- (2) to promote grazing, recreation, historic, and other uses that are sustainable;
- (3) to conserve, protect and to ensure traditional access to cultural, gathering, religious, and archaeological sites by the Burns Paiute Tribe on Federal lands and to promote cooperation with private landowners;
- (4) to ensure the conservation, protection, and improved management of the ecological, social, and economic environment of the Cooperative Management and Protection Area, including geological, biological, wildlife, riparian, and scenic resources; and
- (5) to promote and foster cooperation, communication, and understanding and to reduce conflict between Steens Mountain users and interests."

The BLM is therefore charged with managing the Steens Wilderness in a manner that preserves wilderness character while promoting cooperation and reducing conflict with Steens Mountain users and interests through innovative management practices.

Section 112(e) of the Steens Act states that "[t]he Secretary shall provide reasonable access to nonfederally owned lands or interests in land within the boundaries of the Cooperative Management and Protection Area and the Wilderness Area to provide the owner of the land or interest the reasonable use thereof."

In providing that the Secretary must administer the Steens Mountain Wilderness Area in accordance with the Wilderness Act, Congress has mandated that the Secretary provide inholder access in an area that is to be managed in a protective manner to preserve wilderness character, recognizing that as a general rule, the Wilderness Act prohibits motorized equipment and mechanical transport in wilderness areas. 16 U.S.C. ' 1133(c).

This prohibition is tied to the policy of the Wilderness Act to assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States and its possessions, leaving no lands designated for preservation and protection in their natural condition. @ 16 U.S.C. § 1131(a).

The alternatives discussed in this EA present no conflicts with State, local or Tribal laws, regulations and land use plans.

## CHAPTER II: ALTERNATIVES

Elements common to all alternatives: In accordance with the Andrews Management Framework Plan, as amended, the Proposed Resource Management Plan, and Federal Regulations, access provided under any alternative may occur only when damage to access routes, including the Steens South Loop Road, would not result. Furthermore, snowmobile access may only occur when adequate snow is present to keep snowmobiles from disturbing the soil. If snowmobile access is allowed, the landowners and lessee will have the responsibility of marking the routes in a manner acceptable to the BLM. Section 112 (b) of the Steens Act prohibits off-road travel by motorized or mechanized vehicles within the CMPA, therefore, all approved motorized or mechanized travel would be limited to authorized routes. In order to keep vehicles to the existing routes during the winter, and to avoid cross-country travel while accessing the inholdings, it would be necessary to flag or snow pole the routes to provide a clear indication of the routes to be followed. Colored flags and snow poles would be used at intervals along the routes.

Using the Ankle Creek Route for accessing the inholdings with vehicles other than snowmobiles is provided under a separate Decision Record (OR-027-02-011). The route standards set forth in that Decision Record (OR-027-02-011) are not changed by this EA. Also, there are no specific numeric restrictions on the number of nonmotorized and nonmechanized trips to the inholdings under Decision Record OR-027-02-011.

Any authorization of ATV use on the Berrington Trail will not entirely replace motorized access to the Stroemple inholdings by way of the Ankle Creek Route, since there will be periodic transport needs beyond the capabilities of ATVs that can negotiate the Berrington Trail.

### A. Weekly Use Alternative (20.00 miles of motorized routes within the wilderness)

#### Fisherman Inholdings

This alternative would allow for one combined round trip per week use of snowmobiles along the Ankle Creek Route to access the inholdings. The landowner, lessees, guests or agents, in one party, could snowmobile to the Fisherman properties located in Section 36, T. 34 S., R. 32¾ E; and in Section 16, T. 34 S., R. 33 E. The Ankle Creek Route and the Stroemple and Fisherman properties are shown on Map 1.

## Stroemple Inholdings

This alternative would allow for one combined round trip per week use of snowmobiles along the Berrington Trail and/or Ankle Creek Route and weekly spring, summer, fall access using ATVs along the Berrington Trail. The current standard of the trail, as improved, would be maintained. The landowner, guests or agents, in one party, could snowmobile to the Stroemple property located in Sections 8 and 9, T. 34 S., R. 33 E.; and to the inholding in Sections 1 and 2, T. 35 S., R. 32¾ E. With permission, Mr. Stroemple could access his inholdings across the Fisherman property in Section 36 as needed. Access to the southern inholding would be from the Ankle Creek Route and through an existing gate located in close proximity to the southeast corner of Section 1.

### B. No Snowmobile or Berrington Trail All-Terrain Vehicle Use (No Action)

#### Fisherman Inholdings

Under this alternative, access to the inholdings using snowmobiles would not be authorized. All winter access through the wilderness would be by nonmotorized and nonmechanized means.

#### Stroemple Inholdings

Under this alternative, access to the inholdings using snowmobiles and the use of motor vehicles (ATVs) on the Berrington Trail would not be authorized. All winter and Berrington Trail access through the wilderness would be by nonmotorized and nonmechanized means. The Berrington Trail would be rehabilitated to restore the condition existing at the time of wilderness designation, which was compromised by unauthorized route reconstruction activities during 2004. Rocks would be returned to the cleared portions of the trail and unnatural birms would be removed. Cut tree limbs noticeable from the trail would be hauled away. Vegetation along the trail would be allowed to recover naturally. All work would be conducted using hand tools.

### C. Ankle Creek Route Only Alternative (17.00 miles of motorized routes within the wilderness)

#### Fisherman and Stroemple Inholdings

Under this alternative, the number of snowmobile trips and number of snowmobiles to access the inholdings by way of the Ankle Creek Route would be unlimited. The Berrington Trail would not be authorized for motorized use, but would be maintained as a single track for hiking and pack stock access. Rocks would be returned to portions of the trail and unnatural birms would be removed. Cut tree limbs noticeable from the trail would be hauled away. All work would be conducted using hand tools.

- D. Berrington Trail and Ankle Creek Route Alternative (20.00 miles of motorized routes within the wilderness)

Fisherman Inholdings

Under this alternative, the number of snowmobile trips and number of snowmobiles to access the inholdings by way of the Ankle Creek Route would be unlimited.

Stroemple Inholdings

This alternative does not limit the number of winter access snowmobile trips or the number of snowmobiles using the Berrington Trail and/or the Ankle Creek Route and does not limit the number of spring, summer, and fall access trips along the Berrington Trail using ATVs. The current standard of the trail, as improved, would be maintained. With permission, Mr. Stroemple could access his inholdings across the Fisherman property in Section 36 as needed. Access to the southern inholding would be from the Ankle Creek Route and through an existing gate located in close proximity to the southeast corner of Section 1.

- E. Berrington Trail Spring, Summer, Fall Use Alternative

Fisherman Inholdings

Use of snowmobiles for accessing the Fisherman inholdings would not be allowed.

Stroemple Inholdings

This alternative does not limit the number of spring, summer, and fall ATV access trips on the Berrington Trail. The current standard of the trail, as improved, would be maintained. Use of snowmobiles for accessing the Stroemple inholdings would not be allowed.

Alternatives considered but not analyzed:

An alternative considering cross-country snowmobile travel to the inholdings was considered but not fully analyzed due to direct conflicts with Section 112 (b) of the Steens Act which limits the use of motorized or mechanized travel to designated roads and trails.

## CHAPTER III: DESCRIPTION OF THE AFFECTED ENVIRONMENT

### A. Critical Elements

The following critical elements of the human environment are either not known to be present or are not expected to be impacted by the alternatives: Areas of Critical Environmental Concern, Air Quality, Cultural Heritage, Prime or Unique Farmlands, Flood Plains, Environmental Justice, Hazardous Materials, American Indian Religious Concerns, Special Status Plants, Paleontology, and Adverse Energy Impact.

The following critical elements are present and may be affected by all or some of the alternatives: Water Quality, Wetlands and Riparian Zones, WSRs, Wilderness, Noxious Weeds, Migratory Birds, and Special Status Fauna.

#### 1. Water Quality

The normal runoff pattern on Steens Mountain is characterized by high spring flow with low flows during the remainder of the year. The waters of the Donner and Blitzen River system have been placed on the 303(d) list for water quality concerns by the Oregon Department of Environmental Quality for exceeding temperature standards for coldwater fish (redband trout).

#### 2. Wetlands and Riparian Zones

Riparian and wetland resources have been identified throughout the subject area. The perennial streams present in the Ankle Creek and Berrington Trail vicinities include Indian, Mud, and Ankle Creeks within and adjacent to the Ankle Creek Basin which feed the larger Donner and Blitzen River; and Willow Creek, crossed by the Berrington Trail. The streams and associated riparian areas on public land have been inventoried; these reaches were found to be either in a state of Proper Functioning Condition or functioning at-risk with an upward trend. Common riparian species include aspen, willow, alder, redosier dogwood, chokecherry, sedges, rushes, and grasses.

#### 3. Wild and Scenic Rivers

Ankle Creek, Mud Creek, Indian Creek, and the South Fork Donner and Blitzen River are the affected segments of the Donner and Blitzen WSR. All segments of the WSR are designated as "Wild." The Outstandingly Remarkable Values (ORVs) identified for the Donner and Blitzen River and its tributaries include Scenic, Geologic, Recreational, Fisheries, Wildlife, Vegetation, and Cultural (Historic). The ORVs are described in the 1993 Donner and Blitzen National WSR Management Plan.

4. Wilderness

a. Naturalness:

The portions of the wilderness that could be affected are in outstanding natural condition. Some unnatural features exist throughout, including corral remnants, fences, troughs, juniper cuts, and abandoned jeep roads. Except for the Berrington Trail, the affected portion of the wilderness is also closed to livestock grazing permits.

The Ankle Creek Route is basically a primitive two-track suitable for high clearance vehicles traveling at slow speeds (see Appendix A photographs). Many years prior to the passage of the Steens Act, portions of the route were maintained to a higher standard with heavy equipment.

Conversations with local landowners indicate the Berrington Trail was built in the 1960's for trailing cattle and had not been passable by motor vehicles for many years, until improved without authorization in July 2004. A May 2004 BLM inspection of the Berrington Trail confirmed that portions of the trail were no longer suitable for any type of motorized vehicular use. Most of the trail is located on land that the BLM acquired in 1991, after the wilderness inventory process. The upper portion of the trail was public land at the time of the 1980 wilderness inventory and was not identified as a motorized route in the BLM Wilderness Study Area inventory of the area.

b. Solitude:

Opportunities for solitude and natural quiet are enhanced by the area's remoteness along with a varied and rugged topography. Shallow drainages, vegetative screening provided mainly by juniper trees, and the vast landscape contribute to a visitor's sense of seclusion. The present condition during the winter is one of nearly complete solitude.

The isolated area is usually devoid of the sights and sounds of human activity with the exception of occasional overflights of aircraft and from backcountry visitors. Wilderness visitors are rare during the winter months to this portion of the Steens Wilderness given the relative inaccessibility of the access routes into the area.

c. Primitive and Unconfined Recreation:

Opportunities for primitive and unconfined recreation are outstanding throughout and include day hiking, backpacking, horseback riding, hunting, fishing, photography, and nature study.

d. Supplemental Wilderness Values:

Special features enhancing the area's wilderness values include geology, vegetation, wildlife, and scenic qualities.

5. Noxious Weeds

Noxious weeds, such as spotted knapweed, Canada thistle, and bull thistle have been observed in the vicinity of the inholdings. Presently, these weed populations are small and isolated with several new locations discovered on the Ankle Creek Route in 2004. Puncture vine, medusahead, and bull thistle have small populations in or near Wildhorse Valley.

6. Migratory Birds

Approximately 70 species of migratory birds have been identified in the vicinity of the inholdings and the Ankle Creek Route. Although none are listed as Threatened or Endangered under the Endangered Species Act, several are BLM Special Status Species. These species include sage sparrow, olive-sided flycatcher, willow flycatcher, black-throated sparrow, loggerhead shrike, and black rosy finch. Other common migratory birds in the area include the American robin, northern flicker, sage thrasher, Brewer's sparrow, vesper sparrow, rock wren, green-tailed towhee, and dusky flycatcher. The American robin is the only species likely to use the Ankle Creek area at the same time snowmobiles are in the area. Nesting season for migratory birds in this area would be from about April 15 to July 15 each year.

7. Special Status Fauna

Redband trout and Malheur mottled sculpin inhabit Indian Creek, Mud Creek, Ankle Creek, and the Donner und Blitzen River. An Oregon Department of Fish and Wildlife (ODFW) aquatic habitat survey was completed on the public land portions of Ankle and Mud Creeks in the summer of 2002. Results indicate that the streams overall are currently lacking in streamside vegetation to provide adequate shade to the stream channel, which may result in higher water temperatures and larger fluctuations in daily temperature than if more shade was present. Mud Creek and the upper part of Ankle Creek have moderate to high amounts of eroding streambank (23 to 43 percent of reach), which in part is contributing to sediment in the stream channel. The streams also have a high width-to-depth ratio (i.e., they are wide and shallow), and have lower pool frequency and overall pool area than is desired for high quality fish habitat. Trend monitoring for this area shows improving stream conditions which is expected to continue into the foreseeable future.

Bighorn sheep inhabit the east rim of the Steens in the vicinity of the Berrington Trail. Bighorns occupy the highest parts of the rim during summer and fall months with use shifting lower on the east face of the Steens as snow increases.

Greater sage-grouse are known to use the area around the Stroemple and Fisherman inholdings for nesting, brood rearing, and late fall to early winter habitat. Nesting occurs from April through June each year. There are no known leks in the area of the proposed action.

B. Noncritical Elements

The following noncritical elements may be affected by one or more of the alternatives: recreation, visual resources, vegetation, wildlife, soils, and social and economic values.

1. Recreation

Recreation activities in this portion of the wilderness include hunting, hiking, primitive camping, backpacking, and horseback riding. Typically, snow and locked gates limit access into this area in the late fall, winter, and spring. Most use occurs from mid-May to early November, with the majority of fall use being hunting by foot or horse. Prior to wilderness designation, public access along the Ankle Creek Route included use by motor vehicles. Foot and horse traffic is currently light but is expected to increase.

Motorized winter recreation has not been allowed along or from the South Steens Loop Road (the main access road into the Ankle Creek Basin vicinity) since early 1980's. Snowmobiling is currently allowed along the Steens North Loop Road and a few of the other routes that connect to the North Loop Road. The North Loop Road snowmobile area is higher in elevation than the Ankle Creek area and, therefore, snow conditions are more conducive to winter recreation activities.

2. Visual Resources

The Steens Mountain Wilderness is classified as Visual Resource Management (VRM) Class I. The VRM Class I objective is to preserve the existing character of the landscape. This class provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention.

Most of the Ankle Creek Route was a well-defined two-track road at the time of wilderness designation. The elimination of public motorized use since June 2001, has allowed portions of the route to revegetate making it less conspicuous in places. The gate system on the Steens Loop Road along with winter road conditions has prevented public access into the Ankle Creek area for more than 20 years. Private landowner access into the area has been rare over the same time period, therefore, the Ankle Creek Route has essentially been devoid of winter motorized use for many years. The Berrington Trail, prior to its unauthorized improvement, was overgrown and difficult to traverse. Disturbances associated with the trail's improvement, including the 2004 unauthorized removal of rocks and cutting of branches and trees, are site-specific and visible only to those using the trail.

### 3. Vegetation

The area adjacent to the Ankle Creek Road contains several large plant communities. The most extensive community is the mountain big sagebrush/perennial bunchgrass community. Other communities along the road include low sagebrush/bunchgrass and quaking aspen/bunchgrass. Some of the key plant species in those communities include Idaho fescue, Thurber's needlegrass, basin wildrye, mountain brome, Sandberg's bluegrass, squirreltail, tailcup lupine, Hood's phlox, hairy paintbrush, Nelson's needlegrass, green rabbitbrush, and snowberry.

The area along the Berrington Trail is a plant community dominated by western juniper, mountain big sagebrush, and Wyoming big sagebrush. Other associated plant species include Sandberg's bluegrass, bluebunch wheatgrass, and bitterbrush. The meadows and springs contain various sedges and rushes. The upper portion of Berrington Trail contains a large brushfield consisting primarily of snowberry or similar brush species.

### 4. Wildlife

Wildlife common to the area include mule deer, elk, pronghorn antelope, badger, coyote, mountain lion, jackrabbit, cottontail rabbit, pocket gopher, vole, other small mammals, golden eagle, red-tailed hawk, kestrel, turkey vulture, Cooper's hawk, mourning dove, many other migratory birds, amphibians, and reptiles. The area serves as summer habitat for deer and elk with some elk wintering in the vicinity of the Donner und Blitzen River during mild winters. The badger, coyote, mountain lion, jackrabbit, and cottontail rabbit are the species most likely to be active in the area while snowmobiles are in use.

## 5. Soils

Baconcamp-Clamp-Rock Outcrop and Ninemile-Westbutte-Carryback are the two general soil types found along the Ankle Creek Route. The Baconcamp-Clamp complex characteristics are 5 to 80 percent slopes; moderate to shallow depth; and is well drained. The Ninemile-Westbutte-Carryback has the following characteristics: 0 to 70 percent slopes; moderately deep to shallow; and is well drained. Topographic variation and the resulting variation in slope has allowed for some localized significant loss of fine materials over the years during high volume runoff events; this is evident along specific portions of the Ankle Creek access route in particular.

The Berrington Trail passes through two general soils series, Tumtum-Cobly Loam and Pernty-Rock Outcrop Complex. Tumtum-Cobly loam occurs on 4 to 15 percent slopes in alluvial fans, fan terraces, and old lake terraces. It is well drained and very shallow. The Pernty-Rock Outcrop Complex occurs on 30 to 70 percent slopes, has a gravelly silt texture, and is shallow and well drained. The loss of fines is similar to Ankle Creek in nature, although recent modification of the route may have introduced an increase in the fine soils represented in specific portions of the trail.

## 6. Social and Economic Values

Access to one's private property is important to landowners. Equally important is one's concept of wilderness and the opportunity to experience nature in a natural setting. Reasonable access tries to accommodate private landowner needs while minimizing impacts to wilderness and other natural values.

One attribute of determining property value is degree of access. In some situations as access becomes restrictive, property values decrease. In other situations, private inholdings within wilderness actually increase in value.

In general, access to private land within wilderness is more restrictive than access to private land in nondesignated areas. Prior to the Steens Wilderness designation, access to these inholdings was managed under casual use which essentially allowed unrestricted access to the properties by the landowners during the season when the routes were open and as long as damage to the public land did not result. The Berrington Trail has not been used to access the inholdings with motorized vehicles for approximately 25 years due to its naturally reclaimed condition. It is unlikely that snowmobiles have ever been used to access the inholdings via the Berrington Trail. Casual use access is not a long-term option across designated wilderness.

Mr. Stroemple's base ranch is in Wildhorse Valley about 1.00-mile from the bottom of the Berrington Trail. If motorized use of Berrington Trail is allowed, Mr. Stroemple could access his inholdings with a 4-wheel ATV in about 45 minutes using this 10.70-mile (distance across wilderness) access route. If Mr. Stroemple is required to use the Ankle Creek Route for accessing his inholdings, access with motorized vehicles would take about 2½ hours of which 9.90 miles of routes would be across wilderness.

## CHAPTER IV: ENVIRONMENTAL IMPACTS

### Analysis Assumptions:

The landowners have not specified the number of snowmobiles that may be traveling together, therefore, eight snowmobiles are estimated for analysis purposes. For Alternatives C and D, BLM assumes that snowmobiles would be used to access the Fisherman inholdings twice weekly from the north using the Ankle Creek Route and that the Stroemple inholdings would be accessed with snowmobiles twice weekly from the south via the Berrington Trail and Ankle Creek Route. For Alternatives D and E, BLM assumes that ATVs would be using the Berrington Trail during spring, summer, and fall on a daily basis.

### A. Critical Elements

#### 1. Water Quality

##### Alternative A

It is anticipated that the use of snowmobiles will cause limited to no effects on water quality. Stream crossings and adjacent riparian areas are anticipated to be frozen and snow covered and, therefore, sediment disturbance or increased stream turbidity is not expected to occur.

ATV use on the Berrington Trail would include two additional stream crossings (Willow Creek), and increased use of two existing stream crossings on Ankle Creek (Ankle Creek Route). Disturbance associated with these crossings is anticipated to result in limited effects to water quality in the form of turbidity. This effect is anticipated to be localized to the area immediately downstream of the crossings, and for a limited duration at the time of use. In general, reduced stream shading associated with reduced riparian canopy from the existence of these narrow stream crossings would not likely have any measurable effect on stream temperature (see discussion of Wetland and Riparian Zones).

##### Alternative B

The prohibition of snowmobile use and of ATV use of Berrington Trail would result in no adverse effects on water quality.

### Alternative C

It is anticipated that the use of snowmobiles will cause limited to no effects on water quality. Stream crossings and adjacent riparian areas are anticipated to be frozen and snow covered and, therefore, sediment disturbance or increased stream turbidity is not expected to occur.

### Alternative D

Snowmobile impacts are the same as those described under Alternative C.

ATV impacts along the Berrington Trail would be the same as Alternative A except for greater frequency (daily *versus* weekly use). Increased frequency of ATV use would raise the occurrence of temporary turbidity, however, the increased frequency is not expected to have any sizeable effects on water quality.

### Alternative E

ATV impacts along the Berrington Trail would be the same as Alternative A except for greater frequency (daily *versus* weekly use). Increased frequency of ATV use would raise the occurrence of temporary turbidity, however, the increased frequency is not expected to have large effects on water quality.

## 2. Wetlands and Riparian Zones

### All Alternatives

Due to the limited extent of ATVs crossing riparian areas (four locations), there would be no anticipated effects to the general status and function of riparian/wetland communities. The total area of disturbance to riparian areas from ATV crossings on the identified routes is estimated at 480 square feet [riparian width (15 feet) X road width (8 feet) X number of stream crossings (4)]. This is further estimated as 0.04 percent of the total riparian area associated with the mainstem stream reaches of Ankle Creek (including South Fork) and Willow Creek (Berrington Trail route) based on a rough estimate of total stream length (11.25 miles) multiplied by the predicted riparian width (15 feet). This estimate does not include tributary stream riparian areas.

It is anticipated that the use of snowmobiles will cause limited to no effects on wetlands and riparian zones as stream crossings and adjacent riparian areas are anticipated to be frozen and snow covered and, therefore, vegetation and bank disturbance is not expected to occur.

#### Alternative A

Weekly crossings of Willow Creek with ATVs would result in the compressing of riparian vegetation from ATV tires and the loss of some of the affected vegetation. Weekly ATV crossings of Ankle Creek at the two locations would inhibit the potential recovery of riparian vegetation at the existing crossings.

#### Alternative B

The prohibition of snowmobile use and of ATV use of the Berrington Trail would result in no adverse effects to wetlands and riparian areas.

#### Alternative C

Since ATVs are not authorized under this alternative, there are no adverse effects to wetlands and riparian areas.

#### Alternatives D and E

Riparian vegetation at each crossing would be compressed by ATV tires and recovery of vegetation at the Ankle Creek crossings would be inhibited. Daily ATV crossings at Willow Creek would result in the elimination of riparian vegetation within the tracks where the vehicles repeatedly cross the creek. Motor vehicle crossings at Indian Creek and Mud Creek may be reduced slightly since access to the Stroemple inholdings is expected to be primarily from the south. A slight increase in riparian vegetation at Indian Creek and Mud Creek crossings may result.

### 3. Wild and Scenic Rivers

The Geologic and Cultural (Historic) ORVs would not be affected by any of the alternatives. Refer to Special Status Fauna for effects to Fisheries. Refer to Section IV B. below for the impact discussions on Visual (scenic), Vegetation, and Wildlife ORVs. Impacts to the Recreation ORV are as follows:

#### Alternative A

Recreation - The quality of the recreation experience associated with the WSR at the Indian Creek crossing, along Mud Creek where the route parallels and crosses the creeks, and where the routes cross Ankle Creek could be affected by the sights and sounds of motor vehicles in the wild river corridors. Spring, summer, and fall access using the Berrington Trail would likely increase Ankle Creek ATV crossings moderately and decrease motorized crossings of Indian and Mud Creeks slightly. Winter visitation to this portion of the Steens is extremely infrequent, therefore, encounters between snowmobiles and the public are expected to be rare.

## Alternative B

WSR ORVs would not be affected by this alternative.

## Alternative C

Recreation - Recreation visitors in close proximity to the Indian Creek, Mud Creek, and Ankle Creek crossings could experience a higher frequency of snowmobile use than Alternative A. The quality of the recreation experience associated with the WSR at all the crossings would be affected by the sights and sounds of motor vehicles in the wild river corridors. Winter visitation to this portion of the Steens is extremely infrequent, therefore, encounters between snowmobiles and the public are expected to be rare although potentially higher than Alternative A due to the increased frequency of snowmobile use.

## Alternative D

Recreation - The quality of the recreation experience associated with the WSR at the Indian Creek crossing, along Mud Creek where the route parallels and crosses the creeks, and where the routes cross Ankle Creek could be affected by the sights and sounds of motor vehicles in the wild river corridors. Ankle Creek crossing with ATVs on private and public lands would likely increase due to the convenience of accessing the inholdings via the Berrington Trail. Spring, summer, and fall access using the Berrington Trail would increase Ankle Creek ATV crossings moderately and decrease motorized crossings of Indian and Mud Creeks slightly. Similar to Alternative C, winter visitation to this portion of the Steens is extremely infrequent, therefore, encounters between snowmobiles and the public on either route are expected to be rare, although potentially higher than Alternative A due to increased frequency of snowmobile use.

## Alternative E

The quality of the recreation experience associated with the WSR at all the crossings would be affected by the sights and sounds of motor vehicles in the wild river corridors. Ankle Creek crossing with ATVs on private and public lands would likely increase due to the convenience of accessing the inholdings via the Berrington Trail. Spring, summer, and fall access using the Berrington Trail would increase Ankle Creek ATV crossings moderately and decrease motorized crossings of Indian and Mud Creeks slightly.

#### 4. Wilderness

Impacts common to Alternatives A, C, and D:

The untrammelled and natural character of this portion of the Steens Wilderness containing the Ankle Creek Route would be lost during periods of snowmobile use as the sight, sounds, and tracks of the vehicles would constitute evidence of modern human control and disturbance of a seemingly pristine winter environment. Even if the snowmobile access was unobserved by other wilderness travelers on skis or snowshoes, the potential for future travelers to encounter the snow machine trail would leave an impression that the winter wilderness condition was no longer untrammelled. For some, even the knowledge of the initiation of periodic winter snowmobile use where it had never before occurred would affect their impression of the untrammelled condition of the Steens Wilderness (often referred to as “existence value”). The impact would remain until a subsequent snowfall of sufficient depth obliterated the track. Frequency of snowmobile travel among the alternatives and of winter storms would affect the length of time the impact would remain.

In order to keep snowmobiles on the existing routes and to prevent cross-country travel to the inholdings (which is prohibited by the Steens Act), it would be necessary to flag or snow pole the routes to provide a clear indication of the route location. Colored flags and snow poles would be used at intervals along the route. These flags would create an additional visual impact that would affect the natural character by creating visual intrusions and color contrast. The area impacted would be the portion of the Steens Wilderness that is within sight of the poles and flagging in proximity to the 17.00-mile Ankle Creek Route and the 3.00-mile Berrington Trail.

The naturalness, opportunities for solitude and primitive and unconfined recreation, and special values of the Ankle Creek area would also be affected by the presence of colored route markers both before and after the winter season, including the fall hunting seasons. These routes need to be dry enough for vehicle traffic in order to place and remove the markers. Commercially available GPS receivers are not accurate enough to ensure snowmobiles do not stray from the authorized route. It is estimated that the route markers would need to be installed at least a month before the Black Canyon gate and the South Loop Road are closed for the winter. The route markers would remain in place at least a similar length of time after the Black Canyon gate and South Loop Road are opened in the late spring.

At present there are low levels of winter visitation by wilderness travelers participating in primitive recreation activities, *e.g.*, cross-country skiing, snowshoeing, snow camping, photography, *etc.*, and the initiation of snowmobile travel into the Ankle Creek inholdings would likely result in relatively few encounters between the primitive recreationists and those riding snowmobiles.

However, such encounters would create a negative experience on the opportunities for solitude and for the primitive recreation experience the wilderness travelers are seeking. The sights and sounds of snowmobiles within the Steens Wilderness would create a considerable disruption to the wilderness experience including the loss of solitude. The Ankle Creek area's vast open landscape would allow snowmobiles to be visible and to be heard from distances of one-half mile or more, depending on the type of snowmobile, the type of exhaust system and the speed at which it is traveling.

“Sound levels for snowmobiles have been reduced 94% since inception. Pre-1969 snowmobiles at full throttle emitted sound levels as high as 102 decibels (A) from a distance of 50 feet. Snowmobiles produced since February 1, 1975 and certified by the Snowmobile Safety and Certification Committee's independent testing company emit no more than 78 dB(A) from a distance of 50 feet while traveling at full throttle. Machines produced after June 30, 1976 emit no more than 73 dB(A) at 50 feet while traveling at 15 MPH ...”. (Snowmobile Fact Book, June 2000, as quoted in Snowmobile Special Use Permit and Blackpine Basin Hut EA, U.S. Forest Service, April, 2002). For comparison purposes, normal conversation at one meter produces approximately 60 dB(A) and a vacuum cleaner produces approximately 80 dB(A) to the operator.

While noise levels would vary, noise from snowmobiles would cause some interruption to the natural quiet and sounds of the wilderness environment.

In addition, the sight of the machines and possible visible exhaust and odor would combine to reduce the visitor's wilderness experience by affecting the natural winter landscape, aircscape, and soundscape in this portion of the Steens Wilderness. It is reasonably foreseeable that primitive recreation use of this portion of the Steens Wilderness will increase in future years, in which case encounters between wilderness visitors and snowmobiles could increase and the resulting effects to wilderness characteristics of solitude and primitive recreation would increase.

Snowmobile use of the Ankle Creek Route may have some effect on vegetation that presently grows between the two tracks of the dirt route, but mainly through direct damage to exposed vegetation. The effect would vary from no effect from occasional travel to possible noticeable direct damage to vegetation from clipping or crushing the tops of vegetation by frequent travel during periods of minimal snowfall when the tops of vegetation are exposed between the two tracks on the roadbed, or on vegetation adjacent to the roadbed. It is unlikely that damage to vegetation would occur from the phenomenon of snow compression, from even frequent snowmobile use.

Snowmelt containing snowmobile emissions and subsequent absorption into the soil and plants can occur, but any impacts to vegetation are not expected to be noticeable.

The effects that temporary sights and sounds from motorized vehicle operation could have on an individual wilderness visitors' perception of naturalness, solitude opportunities, and primitive recreation experiences will vary with the sensitivity of the person to such circumstances. It is assumed that most visitors to this wilderness do not expect to directly encounter or hear motorized vehicles. Some visitors would be quite bothered while others would be less affected. The natural conditions of quiet a visitor expects to encounter in wilderness would be diminished for some visitors when vehicles negotiate the routes. These effects would be limited to the local areas surrounding the routes. Other wilderness users would not mind the sights and sounds of motorized activity and would experience no loss in their wilderness experience.

#### Alternative A

In addition to the snowmobile impact discussion above, the wilderness values of naturalness and opportunities for solitude and primitive and unconfined recreation would be impaired or diminished by encounters with ATVs along the 3.00-mile Berrington Trail, by the sights, sounds, and other evidence of motorized vehicles within the wilderness. Use of the Berrington Trail would add 3.00 miles of motorized route to the wilderness. The southern access route to the Stroemple inholdings, which includes the Berrington Trail, crosses 10.80 miles of wilderness and the northern route 9.90 miles of wilderness. Access via the northern route is provided under a separate Decision Record (OR-027-02-011). Natural revegetation of the trail would be inhibited by occasional ATV traffic. Evidence of tire tracks and crushed vegetation along the trail would have a negative effect on most visitors' perception of naturalness. It is anticipated that Berrington Trail ATV use would replace most of the Stroemple access from the north. Since the northern portion of the Ankle Creek Route receives more visitor use, it is also anticipated that visitor encounters with ATVs would drop slightly as compared to the current situation.

#### Alternative B

There would be no adverse impacts to wilderness values of naturalness or solitude from ATVs or snowmobiles using the Berrington Trail. Direct rehabilitation of the trail would return it to a similar condition resembling the characteristics of the trail at the time of wilderness designation. It is assumed that saddle and pack stock would be used to transport people, equipment, and materials in place of ATVs and while saddle and pack stock is generally considered a compatible activity with wilderness, these packing operations may have impacts on naturalness. The natural revegetation of the trail would be slowed by repeated trampling of hooves but the anticipated degree of use would still allow natural recovery of most of the trail. Soil churning and gouging by hooves would be evident in places along the trail and horse fecal material may be considered offensive to some people.

The 17.00-mile Ankle Creek Route would remain near pristine in character under snow conditions. Wilderness visitors would not be impacted by the direct sights or sounds of snowmobiles, the unnatural appearance of flagging and snow poles marking the route, and residual snowmobile tracks would not be an issue.

#### Alternative C

The wilderness values of naturalness and opportunities for solitude and primitive and unconfined recreation would be impaired or diminished along and in proximity to the entire 17.00-mile Ankle Creek Route by the sights, sounds, and other evidence of snowmobiles within the wilderness. The occurrence of wilderness visitors encountering snowmobiles would be rare, but more likely than under Alternative A due to the increased frequency of such use. The Berrington Trail is not open to motor vehicles under this alternative and the trail would be rehabilitated and maintained as a single track trail suitable for pack animal and foot traffic. It is assumed that saddle and pack stock would be used to transport people, equipment, and materials in place of ATVs and while saddle and pack stock is generally considered a compatible activity with wilderness, these packing operations may have impacts on naturalness. The natural revegetation of the trail would be slowed by repeated trampling of hooves but the anticipated degree of use would still allow natural recovery of most of the trail. Soil churning and gouging by hooves would be evident in places along the trail and horse fecal material may be considered offensive to some people. Most wilderness visitors would experience a more natural setting than that offered under Alternatives A, D and E.

#### Alternative D

The wilderness values of naturalness and opportunities for solitude and primitive and unconfined recreation would be impaired or diminished along and in proximity to 20.00 miles of the Ankle Creek and Berrington Trail routes by the sights, sounds, and other evidence of motorized vehicles within the wilderness. Use of the Berrington Trail would add 3.00 miles of motorized route to the wilderness. Since a majority of the trips into the Stroemple inholdings are expected to be from the south, the Ankle Creek Route between the Berrington Trail junction and the Stroemple inholdings would receive more use and the Ankle Creek Route north of the inholdings less use. The north access route crosses 9.90 miles of wilderness and the south access route, which includes the Berrington Trail, crosses 10.80 miles of wilderness. Spring, summer and fall access via the northern route is provided under a separate Decision Record (OR-027-02-011). Total number of motorized trips into the wilderness is anticipated to increase relatively moderately based on the convenience of using the Berrington Trail. Natural revegetation of the Berrington Trail and the southern portion of the Ankle Creek Route would be inhibited to a greater extent than under Alternative A. Evidence of tire tracks and crushed vegetation along the trail would have a negative effect on most visitors' perception of naturalness.

The occurrence of wilderness visitors encountering motor vehicles, or the evidence of motor vehicles, would be highest under this alternative due to the increased frequency of snowmobile and ATV use.

#### Alternative E

Use of the Berrington Trail would add 3.00 miles of motorized route to the wilderness. Since a majority of the trips into the Stroemple inholdings are expected to be from the south, the Ankle Creek Route between the Berrington Trail junction and the Stroemple inholdings would receive more use and the Ankle Creek Route north of the inholdings less use. The north access route crosses 9.90 miles of wilderness and the south access route, which includes the Berrington Trail, crosses 10.80 miles of wilderness. Access via the northern route is provided under a separate Decision Record (OR-027-02-011). Total number of motorized trips into the wilderness is anticipated to increase relatively moderately based on the convenience of using the Berrington Trail. Natural revegetation of the Berrington Trail and the southern portion of the Ankle Creek Route would be inhibited to a greater extent than under Alternative A. Evidence of tire tracks and crushed vegetation along the trail would have a negative effect on most visitors' perception of naturalness. Most of the ATV use would occur along portions of the Ankle Creek Route used less frequently by the public so it is anticipated that visitor encounters with ATVs would be similar to the current situation.

### 5. Noxious Weeds

#### All Alternatives

The potential for establishment of new noxious weed infestations increases with the amount of motorized activity. The use of domestic horses not using weed-free hay or pellets also has the potential of introducing noxious weeds to the area. Existing noxious weeds may also be spread by the passage of vehicles; even hikers may inadvertently carry weed seeds in their backpacks, clothing, and footwear. Winter use by snowmobiles is not expected to worsen noxious weed problems in the area.

#### Alternative A

Weekly ATV trips along the Berrington Trail has the potential of transporting noxious weed seeds and establishing noxious weed populations along the trail and the Ankle Creek Route. Routine weed monitoring and treatment and expanding public awareness concerning noxious weed issues should prevent weed populations from becoming serious infestations.

## Alternatives B and C

The Berrington Trail would not be open to use by ATVs so the threat of spreading noxious weed seeds by ATV would not exist. Trail improvement under Alternative C may increase public and private pack animal and hiking traffic which would increase the risk of noxious weed introduction to the area. Precautions identified under Alternative A would also be in effect here so noxious weed infestations are not expected to occur.

## Alternatives D and E

The potential for spreading weeds by ATV is greater due to the increase of motorized activity. Precautions identified under Alternative A would also be in effect here so noxious weed infestations are not expected to occur.

## 6. Migratory Birds

### Alternative A

The extent of snowmobile use during nesting season would be minimal except during heavy snow winters when use might extend into the nesting season and affect shrub nesters. The effects on migratory birds would be the probable flushing of birds from the nest. The disturbance would be of short duration and should not cause nest abandonment. Most disturbances would be confined to birds nesting within approximately 10 to 15 feet either side of the routes.

The effects of ATV use during late spring through fall along the Berrington Trail would be the flushing of birds from the nest during the nesting season. The disturbance would be of short duration and only once a week so it should not cause nest abandonment. Most disturbances would occur to birds nesting within about 10 to 15 feet either side of the route.

### Alternative B

There would be no effects from this alternative on migratory birds since motorized or mechanized vehicles/equipment would not be used for accessing the private inholdings. Some birds nesting within 10 to 15 feet of the Berrington Trail would be temporarily disturbed from horseback or hiker access but this disturbance would be short in duration and would be less than that from motorized access.

### Alternative C

The effects of snowmobile use under this alternative would be similar to Alternative A but only along the Ankle Creek Route. Although use could be more under this alternative, most of the use would be before the nesting season for migratory birds and should cause only temporary disturbances close to the access routes. If the increased use does cause abandonment of nests, birds would have ample time to renest. Some birds nesting within 10 to 15 feet of the Berrington Trail would be temporarily disturbed from horseback or hiker access but this disturbance would be short in duration and would be less than that from motorized access.

### Alternative D

The effects of snowmobiles on migratory birds would be similar to those described in Alternative C, except that use of the Berrington Trail is included so the disturbance would be along 3.00 more miles of access route.

Spring, summer, and fall use of the Berrington Trail with ATVs would cause the probable flushing of birds from the nest. Most of the disturbances would be confined to birds nesting within approximately 10 to 15 feet of either side of the trail. With increased unlimited use, depending on the extent and duration, nest abandonment could occur for nesting sites close to the roads. If the abandonment occurs April through late June, renesting could occur. After this time, renesting may not occur and productivity loss is a possibility. The loss of productivity should be minimal compared to the available nesting habitat in the proposal area. Repeated flushing of birds from nest sites also increases the possibility of predation of the nesting birds as well as possible predation of the nest or nest parasitism.

### Alternative E

Spring, summer, and fall use of the Berrington Trail with ATVs would cause the probable flushing of birds from the nest. Most of the disturbances would be confined to birds nesting within approximately 10 feet of either side of the trail or the Ankle Creek Route. With increased unlimited use, depending on the extent and duration, nest abandonment could occur for nesting sites close to the routes. If the abandonment occurs April through late June, renesting could occur. After this time, renesting may not occur and productivity loss is a possibility. The loss of productivity should be minimal compared to the available nesting habitat in the proposal area. Repeated flushing of birds from nest sites also increases the possibility of predation of the nesting birds as well as possible predation of the nest or nest parasitism.

## 7. Special Status Fauna

### Alternative A

Snowmobile effects to redband trout and Malheur mottled sculpin are not expected to occur due to the snow and ice covering the streams. The potential effects of ATV use (two crossings on Ankle Creek) are associated with water quality and physical disturbance. As discussed under Water Quality, these effects would be localized and of limited duration. Vehicle crossings could disturb redband trout spawning sites if they occur within the road crossings or immediately downstream. However, this is a matter of conjecture due to the uncertainty that spawning will actually occur at the road crossing. Due to the limited scope and likelihood of these potential impacts, the action is not anticipated to effect the population of redband trout.

Bighorn sheep and sage-grouse would not likely be impacted from snowmobiles as snow depth would limit their use of the area. Bighorn sheep may be disturbed by the use of ATVs and other human activities along the Berrington Trail and may relocate to avoid the disturbance. Mortality or injury to bighorn sheep is not expected to occur. Sage-grouse may also be disturbed by use of ATVs and other human activities along the Berrington Trail and Ankle Creek Route and may relocate to avoid the disturbance. If nest sites are located near the trail, abandonment could but is not likely to occur due to the limited extent of the disturbance.

### Alternative B

There would be no adverse effects from this alternative on bighorn sheep, sage-grouse, redband trout or Malheur mottled sculpin since there would be no ATV use of Berrington Trail or winter snowmobile use.

### Alternative C

Snowmobile effects to redband trout and Malheur mottled sculpin are not expected to occur due to the snow and ice covering the streams.

Even with increased use of snowmobiles along the Ankle Creek Route, the effects to bighorn sheep and sage-grouse would be similar to Alternative A since both sheep and sage-grouse would have limited use of the area due to the depth of the snow that is needed for snowmobile access.

Bighorn sheep may relocate away from the Berrington Trail if it becomes popular for hiking and pack stock activities.

## Alternative D

Snowmobile effects to redband trout and Malheur mottled sculpin would be essentially the same as Alternative A. Sage-grouse would not likely be using the area as snow depth would be great enough that they would have moved to areas with food sources more accessible.

Bighorn sheep may be disturbed by the use of ATVs and other human activities along the Berrington Trail and may relocate to avoid the disturbances. Mortality or injury to bighorn sheep is not expected. Sage-grouse may also be disturbed by use of ATVs and other human activities along the Berrington Trail and Ankle Creek Route and may relocate to avoid the disturbances. If nest sites are located near the trail, abandonment could occur due to the increased extent of the disturbances. Depending on the timing of the disturbances in relation to the nesting season, renesting may occur. Repeated disturbances and flushing of sage-grouse would increase the possibility of predation of the birds or the nest site.

## Alternative E

Bighorn sheep may be disturbed by the use of ATVs and other human activities along the Berrington Trail and may relocate to avoid the disturbances. Mortality or injury to bighorn sheep is not expected. Sage-grouse may also be disturbed by use of ATVs and other human activities along the Berrington Trail and Ankle Creek Route and may relocate to avoid the disturbances. If nest sites are located near the trail, abandonment could occur due to the increased extent of the disturbances. Depending on the timing of the disturbances in relation to the nesting season, renesting may occur. Repeated disturbances and flushing of sage-grouse would increase the possibility of predation of the birds or the nest site.

## B. Noncritical Elements

### 1. Recreation

#### Alternative A

Recreation users of the Ankle Creek basin could see and experience up to 16 motorized vehicles per week throughout the winter. Recreation users would also see route markers from approximately October through June, including the elk rifle seasons. Weekly ATV use of Berrington Trail would be evident to most visitors hiking the trail. Motor vehicle use within the wilderness would affect the recreation experiences of many users who would not expect to see motor vehicles and route markers in a primitive recreation setting. Motorized vehicle use could cause big game animals and other wildlife to avoid the travel routes, thereby affecting hunting and wildlife viewing opportunities.

## Alternative B

Recreation users may notice increased horse and foot traffic in Ankle Creek basin but generally, the inholder access would not be distinguishable from the public or commercial recreation use. Increased horse and foot use of the Berrington Trail would attract hikers, backpackers, and other users to that portion of the wilderness. Hunting and wildlife viewing opportunities would not likely be affected.

## Alternative C

Recreation users of the area could see and experience snowmobiles more frequently than in Alternative A and would see route markers from approximately October through June, including the elk rifle seasons. This would affect the recreation experiences of many users who would not expect to see motor vehicles and route markers in a primitive recreation setting. Motorized vehicle use could cause big game animals and other wildlife to avoid the travel routes, thereby affecting hunting and wildlife viewing opportunities.

Recreation users may notice increased horse and foot traffic in Ankle Creek basin but generally, the inholder access would not be distinguishable from the public or commercial recreation use. The developed trail would increase horse and foot use of the Berrington Trail which would attract hikers, backpackers, and other users to that portion of the wilderness. Hunting and wildlife viewing opportunities would not likely be affected.

## Alternative D

Recreation users of the area would see and experience snowmobiles in numbers similar to Alternative C and would see route markers from approximately October through June, including the elk rifle seasons. ATV use of Berrington Trail would be evident to most visitors hiking the trail. This degree of motor vehicle use would affect the recreation experiences of many users who would not expect to see motor vehicles and route markers in a primitive recreation setting. Motorized vehicle use could cause big game animals and other wildlife to avoid the travel routes, thereby affecting hunting and wildlife viewing.

## Alternative E

ATV use of Berrington Trail would be evident to most visitors hiking the trail. This degree of motor vehicle use would affect the recreation experiences of many users who would not expect to see motor vehicles and route markers in a primitive recreation setting. Motorized vehicle use could cause big game animals and other wildlife to avoid the travel routes, thereby affecting hunting and wildlife viewing.

## 2. Visual Resources

### Alternative A

The Berrington Trail would be maintained as an ATV route and natural revegetation would be inhibited. Most portions of the Berrington Trail would show obvious signs of vehicular activity. The presence of route markers along the Berrington Trail and the Ankle Creek Route would result in unnatural line and color contrasts for approximately 8 months of the year. During the winter, snowmobile tracks would be an obvious departure from the natural setting.

### Alternative B

Natural revegetation of the majority of the Berrington Trail could occur; however, saddle and pack stock trails may be evident along the route. The absence of snow poles and snowmobile tracks would result in no effect to the visual quality in this portion of the wilderness.

### Alternative C

The presence of route markers along the Ankle Creek Route would result in unnatural line and color contrasts for approximately 8 months of the year. Natural revegetation of the majority of the Berrington Trail could occur; however, saddle and pack stock trails may be evident along the route. The absence of snow poles and snowmobile tracks along the Berrington Trail would result in no effect to the winter visual quality in this portion of the wilderness. During the winter, snowmobile tracks would be an obvious departure from the natural setting.

Natural revegetation of the majority of the Berrington Trail could occur; however, the hiking and pack stock trail would be evident along the route.

### Alternative D

The Berrington Trail would be maintained as an ATV route and would become more visually evident through the crushing of vegetation and the exposure of soils. Natural revegetation of all or portions of the route would not occur. The presence of route markers along the Ankle Creek Route and the Berrington Trail would result in unnatural line and color contrasts for approximately 8 months of the year. During the winter, snowmobile tracks would be an obvious departure from the natural setting.

### Alternative E

The Berrington Trail would be maintained as an ATV route and would become more visually evident through the crushing of vegetation and the exposure of soils. Natural revegetation of all or portions of the route would not occur.

### 3. Vegetation

#### All Alternatives

Impacts to vegetation would be a key monitoring element when determining route condition.

#### Alternative A

Weekly trips using snowmobiles on the Ankle Creek Route may cause direct damage to vegetation within the roadbed that is above the snow level, however, the damage would not cause mortality to the vegetation and would be small in comparison to summer ATV travel. Weekly trips using ATVs on the Berrington Trail could inhibit vegetative growth on the trail. Woody vegetation may need to be removed from the trail periodically to keep the route open for ATV use.

#### Alternative B

Nonmotorized access on the established routes would reduce affects to vegetation resources. Saddle and pack animals may reduce vegetation along actively use trails. Actively growing woody vegetation may need to be removed from the routes periodically, to keep access open to pack animals.

#### Alternative C

Unlimited snowmobile use on the Ankle Creek Route would cause impacts to vegetation resources similar to that described under Alternative A. Nonmotorized use on the Berrington Trail would allow vegetation to reestablish except for the developed trail. Periodic maintenance may be required to keep the trail open to pack animals.

#### Alternative D

Unlimited snowmobile use on the Ankle Creek Route would cause impacts to vegetation resources similar to that described under Alternative A. Unlimited ATV use on the Berrington Trail would affect vegetation growing along the trail. Grasses, forbs, and shrubs would be crushed by the tires of ATVs. Woody vegetation may need to be removed from the trail periodically to keep the route open for ATV use.

#### Alternative E

Unlimited ATV use on the Berrington Trail would affect vegetation growing along the trail. Grasses, forbs, and shrubs would be crushed by the tires of ATVs. Woody vegetation may need to be removed from the trail periodically to keep the route open for ATV use.

#### 4. Wildlife

##### Alternative A

Wildlife close to the routes such as small fossorial animals and coyotes, would be disturbed by the snowmobile use during the winter but the disturbance would be short in duration and only once during the week timeframe. However, some larger animals may relocate to areas away from the routes. The depth of snow sufficient for snowmobile use in these areas may preclude most wildlife use in the vicinity of the snowmobile routes, so mortality or injury to any wildlife species is not expected to occur.

The effects of ATV use during late spring through fall along the Berrington Trail would be the disturbance of small animals close to the trail and larger wildlife such as mule deer and pronghorn at greater distances. The disturbance would be of short duration and only once a week so it should not cause permanent displacement of wildlife.

##### Alternative B

There would be no effects from this alternative on wildlife since motorized or mechanized vehicles/equipment would not be used for accessing the private inholdings. Some wildlife close to the Berrington Trail would be temporarily disturbed from horseback or hiker access but this disturbance would be short in duration and would be less than that from motorized access.

##### Alternative C

The effects of snowmobile use under this alternative would be similar to Alternative A but only along the Ankle Creek Route. The disturbance could occur daily under this alternative but still would only be of short duration each day. Smaller wildlife species could be disturbed by the increased use but would move from the disturbance. Larger wildlife, if still in the area, would probably relocate to areas away from the routes. Mortality or injury to any wildlife species is not expected to occur.

Some wildlife close to the Berrington Trail would be temporarily disturbed from horseback or hiker access but this disturbance would be short in duration and would be less than that from motorized access.

##### Alternative D

The effects of snowmobile use in this alternative would be similar to that described in Alternative C except that use of the Berrington Trail is included so the disturbance would be along 3.00 more miles of access route.

The effects of ATV use during late spring through fall along the Berrington Trail would be the disturbance of small animals close to the trail and larger wildlife such as mule deer and pronghorn at greater distances. The disturbance would be of short duration but could occur daily which may cause wildlife to relocate to areas farther from the routes to avoid the disturbance. It is not expected that this level of disturbance would increase the chance of injury or mortality to most wildlife species.

#### Alternative E

The effects of ATV use during late spring through fall along the Berrington Trail would be the disturbance of small animals close to the trail and larger wildlife such as mule deer and pronghorn at greater distances. The disturbance would be of short duration but could occur daily which may cause wildlife to relocate to areas farther from the routes to avoid the disturbance. It is not expected that this level of disturbance would increase the chance of injury or mortality to most wildlife species.

### 5. Soils

#### Alternative A

Weekly trips using snowmobiles on the Ankle Creek Route and Berrington Trail should not cause lasting impacts to soils because the assumption is that snowmobiles would not come in direct contact with bare ground. Additionally, snow compaction from snowmobiles at other locations on Steens Mountain has not shown noticeable impacts to soils. Soil loss from existing routes is primarily caused by wheeled vehicles traveling over wet roads and causing ruts which subsequently channels water down the roads causing soil erosion. Weekly trips using ATVs on the Berrington Trail would cause some compaction to the soil thereby inhibiting plant establishment. The utilization of the trail by ATVs during wet conditions could create ruts and cause serious erosion along the steep trail route. Erosion control measures would be put in place as necessary to minimize soil loss and provide a stable travel surface.

#### Alternative B

There would be no adverse impact to soils under this nonmotorized alternative, however, the reestablishment of vegetation along the Berrington Trail would reduce the exposure of the soil to wind and rain and retard water runoff and therefore reduce the erosion hazard.

### Alternative C

Snowmobiles will not come in contact with bare ground, therefore, unlimited snowmobile use on the Ankle Creek Route should not impact soils. Additionally, snow compaction from snowmobiles at other locations on Steens Mountain has not caused noticeable impacts to soils.

The absence of ATV use on the Berrington Trail would enhance the reestablishment of vegetation, reducing exposure of soil to wind and rain, retard water runoff and ultimately reduce the erosion hazard. Plant reestablishment would be retarded and soil erosion could occur along the developed trail during snow melt and heavy rain events. Erosion control measures would be put in place as necessary to minimize soil loss.

### Alternative D

Snowmobile impacts to soils are the same as Alternative C. Unlimited ATV use on the Berrington Trail would cause soil compaction thereby inhibiting plant establishment. The utilization of the trail by ATVs during wet conditions could create ruts and cause serious erosion along the trail route. Erosion control measures would be put in place as necessary to minimize soil loss and provide a stable travel surface.

### Alternative E

Unlimited ATV use on the Berrington Trail would cause soil compaction thereby inhibiting plant establishment. The utilization of the trail by ATVs during wet conditions could create ruts and cause serious erosion along the trail route. Erosion control measures would be put in place as necessary to minimize soil loss and provide a stable travel surface.

## 6. Social and Economic Values

### All Alternatives

Private real estate transactions may be impacted, either positively or negatively, by the fact the private land is surrounded by wilderness and that access and use of the properties may be restricted. Improved access, e.g., a BLM authorization allowing motorized access of the Berrington Trail, would probably have a positive impact on property values. On the other hand, the present owner purchased the property after wilderness designation, so the purchase price would have reflected the status of the land as surrounded by wilderness. To date, post designation land sales in the wilderness area have not resulted in a decrease in property values.

Positive impacts to the local economy would result to the extent each alternative increases visitation to the area. Current visitation to this portion of the wilderness is light.

#### Alternative A

Snowmobiles have not been a mode of transportation to the inholdings in the past, however, ownership and a lease interest in the properties has changed since wilderness designation, therefore, the desire for new and different uses exists. The landowners have not offered specific reasons for needing to access their properties during the winter other than asserting it is their right to do so. Consequently, there are no known economic impacts to restricting snowmobile use along the Ankle Creek Route to once per week.

Motorized access on the Berrington Trail would reduce access expenses in terms of time and fuel required to access the inholdings. The improved connectivity of the inholdings with the base property in Wildhorse Valley would most likely benefit Mr. Stroemple's property values as well. Restricting access to once weekly, especially during the summer and fall, could curtail desired access to the inholdings and have a negative economic impact in terms of time, fuel, and property values. The level of spring summer and fall use allowed on the Berrington Trail under this alternative is also less than the level of motorized use currently authorized for the Ankle Creek Route, resulting in different access stipulations between the Ankle Creek Route and the Berrington Trail.

#### Alternative B

The current purposes for which the private land is held are primarily summer/fall recreation use, therefore, economic impacts of no snowmobile access is expected to be minimal. The current uses of the properties also do not indicate an urgent need to access the properties during the winter. As a practical matter, snowmobile access is very much limited by natural conditions since adequate snow is not frequently low enough to allow access along Ankle Creek Road. Consequently, natural conditions may have limited prior use of snowmobiles as a means of access and, accordingly, landowners chose not to use snowmobiles due to the unreliability of the snow and the practical problems with reaching the snow line. There is only one known past trip to the Fisherman inholdings using snowmobiles by Roaring Springs Ranch in support of their past livestock grazing lease. Recreational snowmobile use is allowed on other portions of Steens Mountain along the North Steens Loop Road where better snow conditions exist.

Mr. Stroemple's property values would not be enhanced under this alternative where motorized use of the Berrington Trail is not allowed. Summer and fall motorized access is provided to the Stroemple inholdings via the Ankle Creek Route under a separate BLM decision. It takes approximately 2½ hours to access the Stroemple inholdings with motorized vehicles under this alternative.

### Alternative C

There are no known economic benefits to having unlimited Ankle Creek Route snowmobile access to the inholdings. As described earlier, the properties are primarily used for summer and fall recreation pursuits, and other locations on Steens Mountain provide better opportunities for winter recreation snowmobile trips. Further, snowmobile use on public land would be for access only, not for recreational use.

Motorized ATV access on the Berrington Trail is not offered under this alternative so the social and economic impacts are the same as described under Alternative B above. Saddle and pack stock access is enhanced through development of the single track trail which may improve economic impacts to Mr. Stroemple over Alternative B.

### Alternative D

Impacts related to unlimited snowmobile access to the inholdings are the same as described under Alternative C.

ATV access on the Berrington Trail would reduce travel expenses in terms of less time and fuel required to access the inholdings. Motorized access to the inholdings from the south using the Berrington Trail and the Ankle Creek Route would take about 45 minutes instead of the existing 2½ hours required to access the properties from the north using only the Ankle Creek Route. The improved connectivity of the inholdings with the base property in Wildhorse Valley would most likely benefit Mr. Stroemple's property values as well.

### Alternative E

ATV access on the Berrington Trail would reduce travel expenses in terms of less time and fuel required to access the inholdings. Motorized access to the inholdings from the south using the Berrington Trail and the Ankle Creek Route would take about 45 minutes instead of the existing 2½ hours required to access the properties from the north using only the Ankle Creek Route. The improved connectivity of the inholdings with the base property in Wildhorse Valley would most likely benefit Mr. Stroemple's property values as well.

## C. Cumulative Impacts

### All Alternatives

Warm season, generally May through November, motorized access to private land parcels within the Ankle Creek Basin has been authorized through BLM decision, dated June 25, 2004 (currently stayed and under appeal to Interior Board of Land Appeals), and is an existing motorized use within the wilderness area. Livestock grazing permit holders and other holders of interest in private land are presently allowed to access their interests within the wilderness area, pending completion of NEPA analysis and decision documents to authorize access and thus implement the Steens Act provisions.

Access to other inholdings within the Steens Mountain Wilderness along the east face of Steens Mountain above the town of Andrews and within the Home Creek unit would have similar effects to wilderness naturalness and solitude. This decision could affect future motorized use authorization decisions in other portions of the Steens Mountain Wilderness Area, however, reasonable access would still be based on each individual inholding's need. Proximity to existing routes, past modes of access, and other regulatory and statutory criteria are considered when determining reasonable access.

Other activities affecting wilderness include the use of a helicopter by the ODFW to conduct wildlife census, and the use of a helicopter by BLM to conduct wild horse census and to conduct horse capture as needed. These additional motorized activities have been analyzed in the Wilderness Management Plan that is included in the current planning effort for the CMPA. These activities, along with the activities described under the alternatives in this EA, could have an additive effect on visitors' perceptions of naturalness, solitude, and primitive recreation experiences. Motorized use in this portion of the wilderness area may cause visitors to avoid the area thereby concentrating human impacts in other portions of the wilderness. Conversely, providing an enjoyable wilderness experience in the Ankle Creek area should attract visitors to this vicinity thereby reducing impacts in other portions of the wilderness.

Natural revegetation of the Ankle Creek Route and Berrington Trail would continue to be inhibited by the effects of accessing the inholdings (soil compaction, crushed vegetation) for as long as the use is authorized. Improvement of the Berrington Trail may also encourage nonmotorized use of the area by the public which would also inhibit vegetation reestablishment along the routes and have adverse effects to solitude.

Repeated displacement of wildlife, including migratory birds and Special Status species, by motor vehicle passage, would continue for as long as the use is authorized. ATV use of the Berrington Trail would cause a moderate increase of motorized use along the southern portion of the Ankle Creek Route from the Berrington Trail junction to the route leading to the Stroemple inholding in Section 9, while decreasing motorized use of the northern portion of the Ankle Creek Route slightly. Motor vehicle disturbances may result in the permanent movement of some wildlife from the areas near the access routes.

## CHAPTER V: POSSIBLE MITIGATING MEASURES

1. Provide information at major entry points to inform the public of potential or occurring motor vehicle activity.
2. Reduce snowmobile noise levels by using snowmobiles made after 1976 and restricting maximum speed to 25 mph.
3. If ATV use of Berrington Trail is not allowed, herbaceous and woody vegetation will be planted along the trail to accelerate rehabilitation.

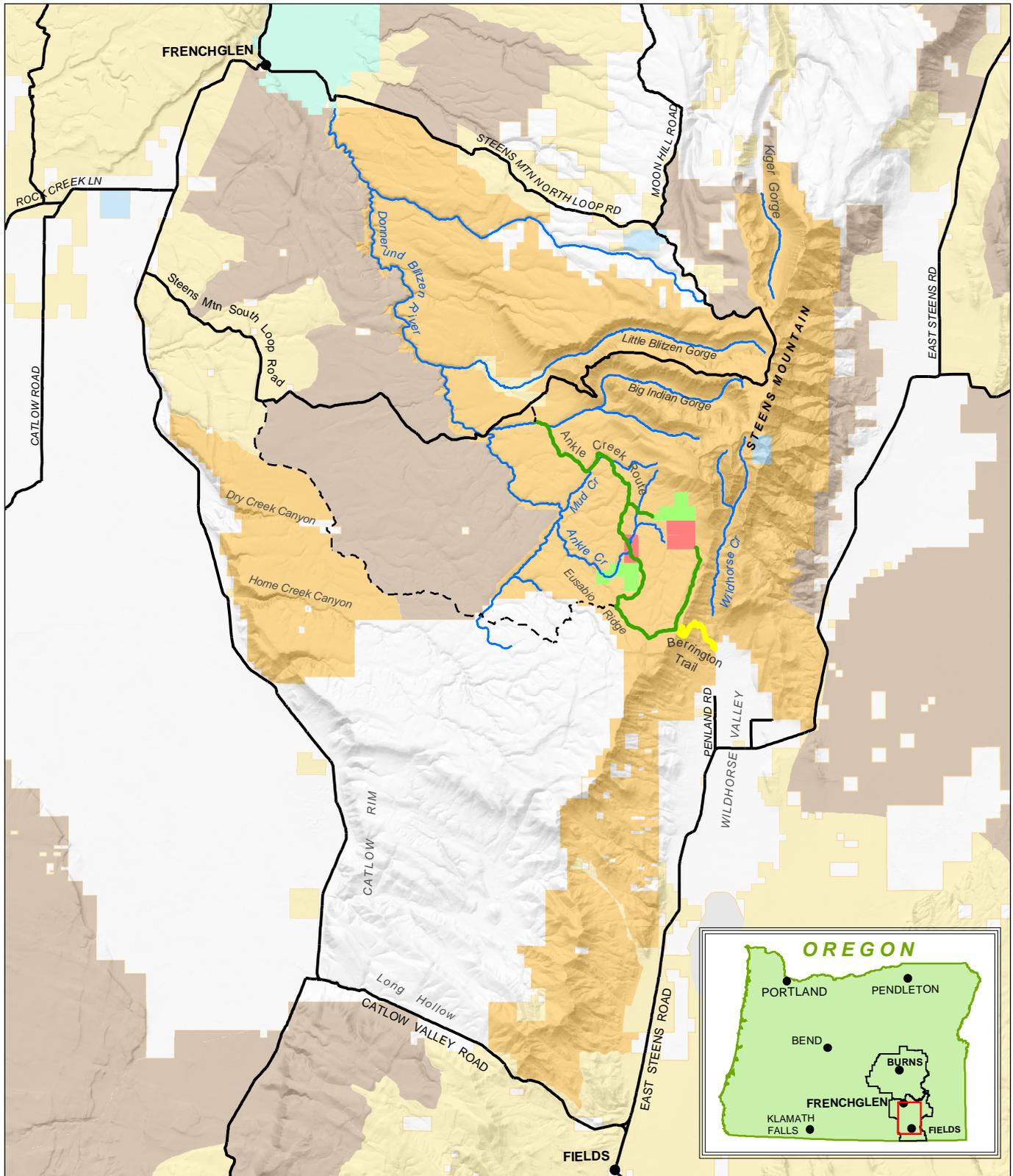
## CHAPTER VI: MONITORING

1. If ATV use of the Berrington Trail is allowed, BLM will use observations and photographs to monitor the character of the trail to ensure that the route does not become more highly developed than its current condition. Vegetation and soil disturbance outside the existing route bed would not be authorized. If the trail changes to a condition that is more highly developed, the BLM will make adjustments to vehicle access to restore it to the present condition. Maintenance necessary to maintain the landowner's reasonable access or to protect or enhance wilderness values, may be conducted by the BLM or authorized by the BLM and conducted by the landowner and may require disturbance beyond the current route width in order to prevent degradation of the route, e.g., ditching water off the route to reduce soil erosion and channeling. Refer to Appendix A for examples of monitoring photographs taken of the Berrington Trail and the Ankle Creek Route.
2. If snowmobile access is allowed, BLM will monitor use to ensure that the vehicles stay on the authorized routes. Snowmobile users would be required to notify the BLM prior to making trips so that the BLM can reasonably monitor snowmobile use.
3. BLM will be present during road maintenance activities and approve any use of mechanized equipment using an appropriate minimum decision requirements guide evaluation of possible tools.
4. If ATV use of Berrington Trail is not allowed, BLM will use periodic observations and photographs to monitor the rehabilitation of the trail.

## CHAPTER VII: CONSULTATION AND COORDINATION

### A. List of Preparers

Darren Brumback, Fisheries Biologist  
Gary Foulkes, Planning and Environmental Coordinator  
Rick Hall, Natural Resource Specialist (Botanist)  
Dave Harmon, Wilderness Specialist  
Doug Linn, Botanist (Soils)  
Jerry Magee, Planning and Environmental Coordinator  
John Neeling, Wilderness Specialist  
Matt Obradovich, Wildlife Biologist  
Lesley Richman, Weed Coordinator  
Mark Sherbourne, Natural Resource Specialist  
Evelyn Treiman, Outdoor Recreation Planner



- Legend**
- Stroemple Inholdings
  - Fisherman Inholdings
  - Major Road
  - Berrington Trail
  - Ankle Creek Route
  - Primitive Route
  - Wild and Scenic River

- Land Administration**
- Bureau of Land Management
  - Wilderness Study Area
  - Wilderness
  - State
  - U.S. Fish and Wildlife
  - Private

**General Vicinity Map**  
EA-OR-05-027-085

No warranty made by the Bureau of Land Management as to the accuracy, reliability, or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification. Ownership boundaries are accurate within plus or minus 200 feet. \\orbu09621\maps\mxd\khazen\Snow\MobilAccess\Vicinity2.mxd March 2005



U.S. DEPARTMENT OF THE INTERIOR  
Bureau of Land Management  
Burns District, Oregon  
Andrews Resource Area

