

STEENS MOUNTAIN  
PACKERS  
SPECIAL RECREATION  
PERMIT

ENVIRONMENTAL ASSESSMENT

OR-020-03-038

OR020-RP-00-07

Bureau of Land Management  
Burns District Office  
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## CHAPTER I. INTRODUCTION: PURPOSE OF AND NEED FOR ACTION

### A. Introduction

Steens Mountain Packers (SMP), operated by John and Cindy Witzel, has held Districtwide commercial Special Recreation Permits (SRPs) for a variety of recreation activities in the Burns District since 1986. The permitted activities are listed in the proposed action. Most of the use occurs in the Steens Mountain Wilderness and Steens Mountain Cooperative Management and Protection Area (CMPA). SMP also has an SRP issued by the Vale District Bureau of Land Management (BLM).

### B. Purpose of and Need for Action

The proposed action would allow specialized recreation activities to continue under permit. Evaluation of the effects associated with this SRP (OR020-RP-00-07) would allow the BLM to comply with Section 115 of the Steens Mountain Cooperative Management and Protection Act (Steens Act) of 2000 and the Wilderness Act of 1964 and to better manage the SRP through impact avoidance, permittee/BLM coordination, and monitoring.

Completion of this Environmental Assessment (EA), the Finding of No Significant Impact, and the Decision Record would allow SMP to continue operations through July 2005. The Andrews/Steens Resource Management Plan (RMP) is scheduled for completion in October 2004. At that time, a new EA would be prepared in conformance with the RMP Records of Decision and a new SRP would be issued.

### C. Pertinent Sections of the Steens Act and the Wilderness Act

The Steens Act created the CMPA and designated the Steens Mountain Wilderness. The following Steens Act sections relate directly to the proposed action and alternative.

#### SECTION 1. SHORT TITLE; PURPOSES; TABLE OF CONTENTS

(b) PURPOSES.--The purposes of this [Steens] Act are the following:

- (1) To maintain, the cultural, economic, ecological, and social health of the Steens Mountain Area . . .
- (2) To designate the Steens Mountain Wilderness.
- (5) To provide for and expand cooperative management activities between public and private landowners in the vicinity of the Wilderness Area and surrounding lands.
- (10) To maintain and enhance cooperative and innovative management practices between the public and private land managers in the Cooperative Management and Protection Area.
- (11) To promote viable and sustainable . . . recreation operations on private and public lands.
- (13) To authorize only such uses on Federal lands in the Cooperative Management and Protection Area that are consistent with the purposes of this Act

#### SEC. 102. PURPOSE AND OBJECTIVES OF COOPERATIVE MANAGEMENT AND PROTECTION AREA.

(a) PURPOSE.-- . . . to conserve, protect, and managed the long-term ecological integrity of Steens Mountain for future and present generations.

(b) OBJECTIVES.--To further the purpose specified in subsection (a), and consistent with such purpose, . . .

(2) to promote . . . , recreation, . . . , and other uses that are sustainable;

(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; . . .

#### SEC. 111. MANAGEMENT AUTHORITIES AND PURPOSES

(a) IN GENERAL -- The Secretary shall manage all Federal lands included in the Cooperative Management and Protection Area pursuant to the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.) and other applicable provisions of law including this Act, in a manner that:

(1) ensures the conservation, protection, and improved management of the ecological, social and economic environment of the Cooperative Management and Protection Area, including the geological, biological, wildlife, riparian, and scenic resources, North American Indian tribal and cultural and archaeological resources sites, and additional cultural and historic sites; and

(2) recognizes and allow current and historic recreational use.

#### SEC. 115. SPECIAL USE PERMITS

The Secretary may renew a special recreational use permit applicable to lands included in the Wilderness Area to the extent that the Secretary determines that the permit is consistent with the Wilderness Act (16 U.S.C. 1131 et seq.). If renewal is not consistent with the Wilderness Act, the Secretary shall seek other opportunities for the permit holder through modification of the permit to realize historic permit use to the extent that the use is consistent with the Wilderness Act and this Act, as determined by the Secretary.

#### SEC. 204. TREATMENT OF WILDERNESS STUDY AREAS.

(a) STATUS UNAFFECTED. Except as provided in Section 502, any wilderness study area, or portion of a wilderness study area, within the boundaries of the Cooperative Management and Protection Area, but not included in the Wilderness Area, shall remain a wilderness study area notwithstanding the enactment of this Act.

(b) MANAGEMENT. The wilderness study areas referred to in subsection (a) shall continue to be managed under Section 603(c) of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1782(c)) in a manner so as not to impair the suitability of the areas for preservation as wilderness.

One section of the Wilderness Act of 1964 also relates directly to the proposed action and alternative.

#### SECTION 4. USE OF WILDERNESS AREAS

(b) . . 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. . . .

(c) Except as specifically provided in this Act, . . . , there shall be no commercial enterprise . . . within any wilderness area . . .

(d)(6) Commercial services may be performed within the wilderness areas . . . to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas.

D. Land Use Plan Conformance Statement

While the Andrews Management Framework Plan (MFP) is silent concerning the proposed action and alternative, it is a stated objective of the MFP to "provide a variety of recreation opportunities. . . ." (p. 7). The Three Rivers Resource Management Plan (RMP) is also silent for the proposed action and alternative. However, one Recreation objective includes the specification to "provide for unstructured outdoor recreation activities with the necessary . . . services." Issuance of a permit would be in compliance with all State, local, and tribal government laws, regulations, and land use plans.

CHAPTER II. ALTERNATIVES INCLUDING THE PROPOSED ACTION

A. Proposed Action

SMP proposes to continue to conduct a variety of activities throughout the year in the Burns District (Map 1), as described in the December 2001 amendment to their February 2000 Operating Plan. Use would be primarily in the Steens Mountain Wilderness and CMPA (Map 2). They would pack out all garbage and human waste from campsites. All washing would be done at least 50 feet from water. All camps would include tents/yrurts, cots, tables and chairs, coolers, cooking and eating equipment, a propane stove, and portable sanitation facilities. Fire pans would be used for all campfires and Dutch oven cooking. Detailed descriptions of how specific activities would be done can be found in the amended operations plan in the BLM case file. Motorized and mechanized transportation proposed to be used, in conformance with the Steens Act, include mountain bikes, All Terrain Vehicles (ATVs), passenger vehicles, 4-wheel drive vehicles, snowmobiles, personnel carriers, and tracked vehicles. Rafts and inflatable kayaks would be used for river trips. Map 1 shows the proposed campsites for all activities. In general, hiking, mountain biking, tours, trail rides, and horse packing trips would be conducted on existing roads, ways, and trails. Floating/rafting would be on the Blitzen River. All base for all activities would be SMP's private land on Lake Creek. All activities include education and interpretation of the land, its, resources, its uses, and its management.

SMP's activities would include the following:

Drop Camps	Big Game Hunting
Custom Packing	Bird Hunting
Day Fishing Trips	Day Mountain Biking Trips
Overnight Fishing Trips	Overnight Mountain Biking Trips
Overnight Raft Trips	Snowmobiling Trips
Day Float Trips	Snowshoeing Trips
Day Hiking Trips	Scenic Tours
Overnight Hiking Trips	Overnight Backcountry/Nordic Trips
Day Trail Rides	Day Backcountry Nordic Trips
Horse Pack Trips	

Appropriate stipulations would be carried forward from the current special stipulations (Appendix 1) and additional special stipulations would be developed to address concerns raised during preparation of this EA. It is not expected that SMP's use would increase noticeably during the next 2 years. Intensive and regular monitoring of the SRP would identify any emerging problems or issues.

B. No Action Alternative

SMP would continue to operate under the 2000 Operating Plan, as amended by implementation of the Steens Act. Helicopter and snow machine use in the Steens Mountain Wilderness would not be allowed. SMP's currently permitted activities include the following:

Day Hiking Trips	Overnight Float Trips
Overnight Hiking Trips (Backpacking or Horse-supported)	Day Raft Trips
Mountain Biking Trips	Big Game, Bird, and Varmint Hunting
Scenic and Interpretive Tours	Drop Camps
Day Fishing Trips	Cross-Country Skiing Trips
Overnight Fishing Trips	Alpine Skiing Trips
Day Trail Rides	Snowmobiling Trips
Horse Pack Trips	Snowshoeing Trips

The special stipulations attached to SMP's current permit (Appendix 1) would remain in effect. SMP's permitted use for 1997 through 2001 averaged 16 trips and 140 client days per year.

C. Alternative Considered but Not Analyzed

Cancellation of this SRP is not analyzed because, as provided by Section 115 of the Steens Act, the purpose and need of this EA is to analyze options for SRP renewal which provide for historic use to the extent it is consistent with the Wilderness Act. Given the mandate in Section 115 to seek opportunities for SRP holders to realize historic permit use, as well as the purposes and objectives of the Steens Act stated in Chapter 1(C) of this EA, this alternative would not meet the purposes of the Act.

### CHAPTER III. AFFECTED ENVIRONMENT

A. Critical Elements

The following critical elements of the human environment are not known to be present or would not knowingly be affected by the proposed action or alternative:

Adverse Energy Impacts  
 Air Quality  
 American Indian Religious Concerns  
 Environmental Justice  
 Farm Lands (prime or unique)  
 Floodplains  
 Paleontology  
 Wastes (hazardous or solid)  
 Water Quality (drinking/ground)

The following critical elements of the human environment are present or may be affected by the proposed action or alternative:

1. Areas of Critical Environmental Concern

There are 21 Areas of Critical Environmental Concern (ACECs) in the Burns District. Resource values associated with those ACECs most likely to be affected are listed below.

ACEC	Resource Value(s)
Steens Mountain	High scenic values on Steens Mountain, including the Steens escarpment, vista of East Rim, and glacial cirques and valleys
Alvord Peak	Special Status bighorn sheep and habitat
Little Blitzen Research Natural Area (RNA)	Mid-to-high elevation vernal pond, stream system in subalpine zone, aspen grove, snow deflation and snow cover communities, late-lying snowbeds, fescue grassland, Special Status plants
South Fork Willow Creek RNA	Downslope snow accumulation areas, upper cirque plant communities, stream system originating in a glacial cirque, Special Status plants
Little Wildhorse Lake RNA	Pristine, mid- to high-elevation lake
Rooster Comb RNA	Mountain mahogany/bluebunch wheatgrass and black cottonwood riparian plant communities
East Kiger Plateau RNA	Excellent condition, high elevation fescue grassland; Special Status plants
Kiger Mustang	Unique characteristics of wild horses
Diamond Craters Outstanding Natural Area	Geologic features

The management plan for the Little Blitzen RNA specifies no camping in the area. The Rooster Comb RNA Management Plan states that "camping should be prohibited" and that "packing . . . should be restricted to trails with no grazing or overnighing." Recreation use is generally not a concern in ACECs and was not found to be a concern at the time the management plans for the other RNAs were written (late 1980s to early 1990s). However, recreation use has increased in some RNAs and management plans for these areas may need to be updated.

## 2. Cultural Resources

Prehistoric archaeological sites in the Burns District range in complexity from surface lithic scatters to significant, buried, stratified, long-term encampments. These sites are often situated in locations that appeal to modern campers and, similarly, to commercial guide services. Historic sites are also located in appealing camp areas.

## 3. Migratory Birds

More than 70 species of migratory birds are known to pass through or breed and nest in the Burns District. Some species documented in surveys include sage thrasher, Brewer's sparrow, chipping sparrow, American robin, dusky flycatcher, gray flycatcher, loggerhead shrike, western meadowlark, red-winged blackbird, Brewer's blackbird, mourning dove, as well as many species of migratory shorebirds, waterfowl, raptors, and other songbirds.

## 4. Noxious Weeds

There are numerous infestations of noxious weeds in the Burns District, including Steens Mountain, where activities are proposed. However, most are very small. More information on exact types and locations is available at the Burns District Office.

## 5. Threatened, Endangered, and Special Status Species

There are 87 Special Status plant species in the Burns District. A complete list is available at the Burns District Office. One threatened or endangered plant species is found in the Burns District - the Malheur wirelettuce is found south of the Narrows.

Special Status animal species in the Burns District include Columbia spotted frog (Federal candidate), Greater sage-grouse, California bighorn sheep, sage sparrow, Northern goshawk, desert horned lizard, northern sagebrush lizard, spotted bat, Townsend's big-eared bat, and Preble's shrew. The Columbia spotted frog is associated with slower moving streams, backwaters, and beaver ponds in the Steens and northern portions of the Burns District.

Special Status fish species include Borax Lake chub (Federal endangered), Lahontan cutthroat trout (Federal threatened), bull trout (Federal threatened), Malheur mottled sculpin, Catlow tui chub, Great Basin redband trout, and Alvord chub. Sport fisheries are managed by ODFW and regulated through angling restrictions. The Steens Act states ". . . the Secretary (Interior) shall manage recreational activities in the Redband Trout Reserve in a manner that conserves the unique population of redband trout native to the Donner und Blitzen River" and "In administering the Redband Trout Reserve, the Secretary shall consult with the advisory council and cooperate with the Oregon Department of Fish and Wildlife."

6. Wetlands and Riparian Zones

Wetlands and riparian zones are water-dependent ecosystems bordering rivers, streams, lakes, ponds, springs, and seeps throughout the Burns District. These areas act to dissipate stream energy and wave action, reduce streambank or shoreline erosion, filter sediments, and may provide temporary storage and later release of water. Riparian plant communities are generally more diverse than the surrounding upland plant communities and support a greater variety of aquatic and terrestrial species. Riparian areas surrounding springs and seeps are especially important in high desert ecosystems. Typical riparian vegetation includes willow, alder, sedges, rushes, and aspen.

7. Wild and Scenic Rivers

The Donner und Blitzen Wild and Scenic River (WSR) was designated as "Wild" in 1984. Segments of the WSR include Fish Creek, Little Blitzen River, Big Indian Creek, Little Indian Creek, South Fork Donner und Blitzen, and the Donner und Blitzen. Outstandingly Remarkable Values (ORVs) associated with this WSR are scenic, geologic, recreational, fisheries habitat, wildlife, vegetation, and cultural (historic). In 2000 Congress added Mud, Ankle, and South Fork Ankle Creeks to the Donner und Blitzen WSR through the Steens Act. Kiger, Wildhorse, and Little Wildhorse Creeks were also designated as "Wild" rivers. ORVs for Kiger Creek are scenic, fisheries habitat, and wildlife. ORVs for Wildhorse and Little Wildhorse Creeks are scenic, recreational, wildlife, and vegetation.

8. Wilderness and Wilderness Study Areas

*Naturalness* - Naturalness refers to an area which "generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable." (BLM Manual 8560 - Management of Designated Wilderness)

The Steens Mountain Wilderness and the Burns District Wilderness Study Areas (WSAs) are in outstanding natural condition except for certain areas that contain reservoirs, fences, and other humanmade elements. These features and ways (WSAs only) are generally not noticeable except when viewed from higher terrain or in the immediate vicinity.

*Solitude* - Solitude is defined as "the state of being alone or remote from habitations; isolation. A lonely, unfrequented, or secluded place." (BLM Manual 8560 - Management of Designated Wilderness)

Outstanding opportunities for solitude are enhanced by the varied and rugged topography. Vegetative screening in some areas, especially the creek and canyon bottoms, supplements the topographic screening. In wilderness there is an expectation that encounters with other users would be infrequent.

*Primitive and Unconfined Recreation* - Primitive and unconfined recreation is defined in 43 CFR 6301.5 as nonmotorized types of outdoor recreation activities that do not require developed facilities or mechanical transport.

There are outstanding opportunities throughout the wilderness and WSAs for primitive and unconfined recreation including hiking, backpacking, camping, horseback riding, hunting, fishing, photography, and sightseeing.

*Supplemental Values* - Supplemental values are listed in the Wilderness Act as "ecological, geological, or other features of scientific, educational, scenic, or historical value."

Supplemental values of both the wilderness and WSAs are geology, scenery, vegetation, and wildlife. Historical values, including the remains of old homesteads, can be found in the wilderness and many WSAs.

## B. Noncritical Elements

Bureau specialists have determined that the following resources, although present in the project area, are not affected by the proposed action or alternative: forestry/woodlands, geologic resources, lands and realty, livestock grazing, vegetation, visual resources, and wild horses.

The following noncritical elements are present or may be affected by the proposed action or alternative:

1. Recreation

Recreation in the Burns District is concentrated in the Steens Mountain Area in the Andrews Resource Area and developed sites in the Three Rivers Resource Area. Approximately 48,000 people visited Steens Mountain in 2001. There are also dispersed recreation sites throughout the District; with developed sites at reservoirs, the east side of Steens Mountain, and the Pueblo and Trout Creek Mountains being popular locations. Many dispersed campsites are found in pine, juniper, and aspen stands. Most recreationists visit the area during the late spring, summer, and fall. The low elevation areas are used during the late spring and fall, while the higher areas are used in late summer. Fall hunting seasons attract thousands of recreationists. The Andrews Plan Amendment for Recreation Access Surrounding the Steens Mountain Loop Road currently limits the number of general public wheeled vehicles allowed up the North Loop Road to the snow line to 30 vehicles per month during December, January, and February and 60 vehicles per month during March, April, and May.

2. Socioeconomics

The primary economic activities in Harney County are ranching, farming, manufacturing, and tourism. Federal, State, county, and local governments are major contributors to the Harney County economy. A 1994 study found that tourism associated with the Malheur National Wildlife Refuge generated \$4.4 million in Harney County over a 1-year period. Unemployment in Harney County is among the highest in the State - 14.1 percent in 2001 and approximately 8 percent in May 2002.

3. Wildlife

Wildlife commonly occurring in the Burns District includes mule deer, elk, pronghorn antelope, coyotes, badgers, ravens, magpies, golden eagles, chukar partridges, California quail, weasels, raccoons, porcupines, ground squirrels, chipmunks, mice, shrews, bats, woodrats, beavers, mountain lions, bobcats, black-tailed jackrabbits, and cottontail rabbits. The Burns District provides yearlong habitat for the species listed above.

## CHAPTER IV. ENVIRONMENTAL CONSEQUENCES

### A. Critical Elements

1. Areas of Critical Environmental Concern

a. Proposed Action and No Action Alternative

ACECs would not be affected as long as all vehicle use conforms to the current OHV designations. OHV use has the potential to disrupt the life cycles of sensitive plant species and to disturb plant habitats. Camping in RNAs could be detrimental to key vegetation types and Special Status plant species.

The expansion of existing campsites from continued use could affect the unique plant communities and scenic qualities of the Steens Mountain ACEC and the Special Status plant species in the other ACECs.

Saddle and pack stock straying from existing trails and grazing in RNAs could be detrimental to key vegetation types and Special Status plant species.

2. Cultural Resources

a. Proposed Action and No Action Alternative

Ground-disturbing activities at campsites could disturb both surface and buried cultural and historic artifacts. Surface and buried artifacts could be collected and removed from sites. This would reduce the integrity of sites and reduce the information that could be gathered.

3. Migratory Birds

a. Proposed Action and No Action Alternative

Many of the trails proposed for use are along riparian areas which migratory birds and other larger wildlife depend on for water, food, and breeding and nesting habitat. Use of these trails, camping in or near riparian areas, and fishing activities could disturb breeding and nesting migratory birds. Disturbance and the associated flushing of birds opens their nests to predation and destruction or nest parasitism by brown-headed cowbirds.

4. Noxious Weeds

a. Proposed Action and No Action Alternative

Noxious weed seeds could be brought into the Burns District through the permittee's activities. Equipment and vehicles could bring in noxious weeds from other areas of the State or neighboring states.

Saddle and pack stock could spread noxious weeds through the dispersal of undigested seeds or seeds caught in their coats or hooves. Saddle and pack stock feed could be a source of noxious weeds if it is not "weed free."

5. Threatened, Endangered, and Special Status Species

a. Proposed Action and No Action Alternative

Special Status plant species could be trampled and seed development disrupted through the use of high elevation areas around lakes (Wildhorse Lake, for example), vernal ponds, wetlands, and riparian areas.

Travel past Greater sage-grouse leks would generally not disturb the birds. However, lek visits on a continued basis (day after day) to view strutting activities could cause male sage-grouse numbers at the leks to decrease. The grouse may move to other established leks or to a new area and form a new lek. Disturbance at a lek site, which causes the birds to flushing, would increase their visibility to predators and could increase predation.

Angler wading during spawning season could cause redd trampling and egg mortality. Because river use would overlap with redband trout spawning season, rafts or inflatable kayaks could disturb redband trout redds. Any effects would be site-specific depending on flow, channel configuration, and location and amount of redband spawning habitat.

6. Wetlands and Riparian Zones

a. Proposed Action and No Action Alternative

Camping in riparian areas could affect riparian vegetation and streambanks, leading to soil compaction, increased erosion into streams, and reduction of shade over streams.

Saddle and pack stock tethered in riparian areas could affect riparian vegetation through girdling trees and trampling and eating vegetation. Saddle and pack stock also can compact soils in riparian areas and cause bank erosion.

Many existing campsites throughout the Burns District are located in riparian areas. Requiring a permitted outfitter to camp outside of riparian areas would not reduce effects to these areas, because the general public would continue to use them. There would be an increase in overall disturbance because new campsites would be created if the permittee is required to camp outside of riparian areas.

7. Wild and Scenic Rivers

a. Proposed Action and No Action Alternative

*Scenic and Geologic* ORVs - These ORVs would not be affected.

*Recreational* ORV - See discussions below for *Wilderness-Primitive and Unconfined Recreation* and Recreation.

*Fisheries Habitat* ORV - See discussion above for Threatened, Endangered, and Special Status Species.

*Wildlife* ORV - See discussions above for Migratory Birds and below for Wildlife.

*Vegetation* ORV - See discussions above for ACECs, Noxious Weeds, and Wetlands and Riparian Zones.

*Cultural (Historic Sites)* ORV - See discussion above for Cultural Resources.

8. Wilderness and Wilderness Study Areas

a. Proposed Action and No Action Alternative

*Naturalness* - The Little Blitzen and other campsites that SMP uses could continue to experience a seasonal vegetative cover losses and mineral soil increases caused by normal camping activities. Over time, social trails between tents and from the hiking trail to the river crossing could become more obvious. The barren cores of the campsites could gradually increase over time and the amounts of dead and down wood available could decrease. Campsites are also used by private groups, which could contribute to the effects discussed above.

*Solitude* - Effects to solitude would be mostly confined to trail encounters and other groups camped within sight and sound of the main campsite in Little Blitzen. Visitors encountering outfitted groups with up to 15 saddle or pack stock could be bothered depending upon an individual's perception of solitude. Most encounters would be occasional and, overall, solitude would not be affected. At Wildhorse Lake, it would be impossible to find solitude. Because of the open terrain, most visitors do not expect to experience solitude.

*Primitive and Unconfined Recreation* - Opportunities for primitive and unconfined recreation would still exist. Occasionally, other hiking groups could be displaced from popular camping areas, leading to the creation of new campsites by those groups that are unwilling to hike to an established site. Fishermen could be occasionally displaced by the fishing parties. Float and raft trips could temporarily disrupt bank fishermen.

*Supplemental Values* - Geology and historic supplemental values would not be affected. Effects to the supplemental values of vegetation and wildlife are discussed in the Threatened, Endangered, and Special Status Species and Wildlife sections.

B. Noncritical Elements

1. Recreation

a. Proposed Action and No Action Alternative

Effects to the recreation experiences of hikers, backpackers, and horseback riders both within and outside the wilderness and WSAs are described above in the Wilderness and WSA *Primitive and Unconfined Recreation* discussion. At the current low level of use for winter recreation, very few visitors would be displaced from ski or snowmobile activities.

2. Socioeconomics

a. Proposed Action and No Action Alternative

Using SMP's average past use and reported and estimated costs for the listed activities, revenue generated could total up to \$114,825. This figure was calculated using seven 1-day horse trips each with 10 people, four 5-day horse pack trips each with 10 people, four big game hunting trips each with six hunters, and one 1-day tour with 15 people. Because SMP is based in Frenchglen, Oregon, it is expected that most of this revenue would be spent in Harney County.

3. Wildlife

a. Proposed Action and No Action Alternative

Most species of wildlife would be affected by some aspect of these proposals through disruptions and displacement of wildlife, their activities, and their habitat. Of particular concern are hunting activities at isolated waterholes and guzzlers, where wildlife would be unwilling to approach the water. The degree of effect from the proposed action or no action alternative would vary with the number of trips.

CHAPTER V. CUMULATIVE EFFECTS

This cumulative effects analysis focuses on the Steens Mountain CMPA, including the Steens Mountain Wilderness, the WSAs, and the former Steens Mountain Recreation Lands. Because use in the remainder of the Burns District would be light, there should be no measurable cumulative effects in that area. The timeframe for this analysis is 1997 through 2004. The Andrews/Steens Resource Management Plan estimated completion date is the fall of 2004. It is anticipated that if changes are made to the Burns District SRP program, any changes to the SRPs would be analyzed and implemented at that time.

A. Past Recreation Use

In the past, recreation use in the Steens Mountain Area has varied considerably from year to year, but overall there has been an upward trend. Most recreation use data has been collected through the use of road counters to measure the number of vehicles traveling up either the North or South Steens Mountain Loop Road. This raw data is modified to account for vehicles entering and leaving the area and the number of people per vehicle. A formula, developed from a 1991 study, is used to calculate the number of people visiting the Steens Mountain. Reported total visitor use for the past 5 years, 1997 to 2001, has varied from a high of 52,860 in 1997 to a low of 37,308 in 1998. In 2001 visitor use was 47,947. The use numbers calculated from road counter data do not differentiate between public and permitted use. The average SRP use (1,735) for all permittees accounts for less than 4 percent of the average visitor use for the past 5 years (44,705).

Past SRP Use					
Permittee (Years Considered in Average)	Activity (No. of Trips/Sessions)	Total No. of Trips	Total Client Days on Public Land	Average No. of Trips	Average Client Days on Public Land
Broken Trails 1998-2001	Hunt - Big Game (12) Tour (11)	23	284	6	71
High Desert Outfitters 1997-2001	Fishing (10) Hunt - Big Game (8)	18	216	4	43

Past SRP Use					
Permittee (Years Considered in Average)	Activity (No. of Trips/Sessions)	Total No. of Trips	Total Client Days on Public Land	Average No. of Trips	Average Client Days on Public Land
Brett Jantze Guide Service 1999-2001	Hunt - Big Game (3)	3	16	1	5
Oregon Llamas 1997-2001	Fishing (1) Llama Trek (7)	8	286	2	57
Pro Consulting & Guide Service 1998-2001	Hunt - Big Game (4) Scout - Big Game (12)	16	64	4	16
"SPOT" Country Outfitters 1997-2001	Hunt - Big Game (11)	11	116	2	23
Steens Mountain Packers 1997-2001	Heli-fishing (3) Horse - Day (35) Horse - Pack (17) Hunt - Big Game (18) Scout - Big Game (1) Tour (5) Cross-country Ski (1)	80	699	16	140
Steens Mountain Running Camp 1997-2001	Running Camp (10) Football Camp (2)	12	6,904	2	1,380
Total		171	8,585	37	1,735

B. Present Recreation Use

The Steens Act designated the Steens Mountain CMPA and the Steens Mountain Wilderness on October 30, 2000. These designations have focused more public attention on the area, but this has not yet been reflected in increased public and permitted recreation use. The 2001 SRP use (1,700) accounts for less than 4 percent of the total 2001 visitor use (47,947).

2001 SRP Use			
Permittee	Activity (No. of Trips/Sessions)	Total No. of Trips	Total Client Days on Public Land
Broken Trails	Tour (5)	5	124
High Desert Outfitters	Hunt - Big Game (2)	2	12
Brett Jantze Guide Service	Hunt - Big Game (1)	1	3
Oregon Llamas	Fishing (1) Llama Trek (1)	2	70

2001 SRP Use			
Permittee	Activity (No. of Trips/Sessions)	Total No. of Trips	Total Client Days on Public Land
Pro Consulting & Guide Service	Hunt - Big Game (3) Scout - Big Game (2)	5	22
"SPOT" Country Outfitters	Hunt - Big Game (1)	1	4
Steens Mountain Packers	Horse - Day (5) Horse - Pack (1) Hunt - Big Game (1) Tour (2)	9	41
Steens Mountain Running Camp	Running Camp (10)	2	1,424
Total		27	1,700

C. Reasonably Foreseeable Future Actions

It is expected that both public and permitted recreation use in the Steens Mountain Area would continue to grow. If the growth rate of 8 percent (average increase from 1998 to 2001) is applied to the 2001 use figures, an estimated 56,000 people could visit Steens Mountain in 2004. It is anticipated that the number of SRPs for both commercial and organized groups would also grow. Many of the new permits may be for previously unpermitted activities that have been occurring for many years. The use numbers associated with these new permits are already reflected in the estimated total use figures. Average SRP use may grow faster than the 8 percent rate, which would reflect a change from unpermitted to permitted activities. This could also be reflected in a decrease in the growth rate for public use of the Steens. Overall growth for the analysis period is not expected change.

D. Cumulative Effects Analysis

There may be cumulative effects from other nonrecreation activities, but there is insufficient information to analyze them here.

The proposed action and alternative have been evaluated for potential cumulative effects to resources. It has been concluded that cumulative effects to ACECs; Cultural Resources; Migratory Birds; Noxious Weeds; Threatened, Endangered, and Special Status Species; Wetlands and Riparian Areas; Wild and Scenic Rivers; Wilderness and WSA; Recreation; Wild Horses; and Wildlife would be negligible as a result of implementing the proposed action or alternative. Socioeconomic effects could be anticipated from outfitter/guide clients returning to the area as future tourists, thus contributing to the local economy.

This conclusion is based on a number of factors. The number of trips would be small, when compared to general public activities. Camps are usually set up in existing, previously disturbed sites. Outfitter/guide clients frequently return to the area, further contributing to the Harney County economy. It is anticipated that overall use would not increase to the point that there would be cumulative effects to any resource.

## CHAPTER VI. MITIGATION MEASURES AND MONITORING

### A. Mitigation Measures

#### 1. Critical Elements

##### a. Areas of Critical Environmental Concern

Vehicle use in ACECs would conform to the current OHV designation.

Camping, grazing, and firewood collection in the Little Blitzen and Rooster Comb RNAs would not be allowed.

All saddle and pack stock would be kept on existing trails.

##### b. Cultural Resources

Traditionally used campsites would be inventoried and assessments would be made, to allow the BLM to make better judgments about the effects of this permit.

##### c. Migratory Birds

Camping would be limited to established campsites that are appropriate for group use.

Permittee would be aware of nesting activities and would avoid disturbing nesting birds from April 15 to July 15. Permittee would be notified of specific nesting areas as part of the pre-trip notification process.

Saddle and pack stock should be picketed, tethered, or allowed to graze freely as far as possible away from water sources.

##### d. Noxious Weeds

Feed brought in for the saddle and pack stock would be weed-free and/or pelletized. As sources become available, saddle and pack stock not pastured on the Steens would be fed weed-free feed for 3 or more days prior to entry to BLM land.

To ensure that noxious weed seeds are not spread from other areas, all vehicles and equipment would be cleaned prior to entry on Burns District land. If permittee camps in or travels through noxious weed-infested areas, equipment and vehicles would be cleaned on-site. Manure from trailers would not be swept out onto Burns District land.

Weed identification booklets and information would be given to the permittee. The permittee would be requested to notify the BLM of the location(s) of any noxious weeds found.

e. Threatened, Endangered, and Special Status Species

Camping would be limited to established campsites that are appropriate for group use. Saddle and pack stock would be picketed, tethered, or allowed to graze freely as far as possible away from water sources. All human waste should be packed out on vehicle-supported trips or buried at least 200 feet or as far as possible away from camps, trails, and water sources on backpack trips.

Permittee would be aware of bighorn sheep lambing activities and would avoid disturbing bighorn sheep from April 15 to May 30. Sage-grouse leks available for viewing would be limited to those accessible by good condition, graded roads. All sage-grouse viewing would follow Leave No Trace wildlife viewing guidelines. These guidelines include observing wildlife from a distance and not following or approaching them. Permittee would be notified of specific areas as part of the pre-trip notification process.

f. Wetlands and Riparian Zones

Saddle and pack stock would be picketed, tethered, or allowed to graze freely as far as possible away from water sources. All human waste should be packed out on vehicle-supported trips or buried at least 200 feet or as far as possible away from camps, trails, and water sources on backpack trips.

Down trees would not be removed from streambanks.

g. Wilderness and Wilderness Study Areas

Float/raft trips would start from Blitzen Crossing, not Riddle Ranch or the confluence of Little Blitzen and the mainstem Blitzen.

Camping would be limited to established campsites that are appropriate for group use.

Prior to the establishment of any new campsite in wilderness, the permittee would consult and coordinate with the BLM to minimize any effects to naturalness, solitude, primitive and unconfined recreation, and supplemental wilderness values.

All permittee activities would incorporate "Leave No Trace" practices.

Travel would be single file on defined trails or spread out where no trails exist.

All human waste should be packed out on vehicle-supported trips or buried at least 200 feet or as far as possible away from camps, trails, and water sources on backpack trips.

Cat holes would be used for solid human waste at backpack camps.

All toilet paper would be packed out.

## 2. Noncritical Elements

### a. Recreation

All human waste should be packed out on vehicle-supported trips or buried at least 200 feet or as far as possible away from camps, trails, and water sources on backpack trips.

Water from all washing (dishes and personal) activities would be scattered at least 200 feet or as far as possible away from all water sources.

All saddle and pack stock would be picketed, tethered, or allowed to graze freely as far as possible away from water sources.

Saddle and pack stock would not be tied to trees or riparian vegetation overnight. They may be tied to trees for loading, unloading, or brief stops.

Permittee would be encouraged to carry feed for their saddle and pack stock. As sources become available, hay would be weed free and purchased locally or pellets would be required. Hay, pellets or salt would be fed from containers and as far as possible away from water sources.

Prior to the establishment of any new campsite, the permittee would consult and coordinate with the BLM to minimize any effects.

b. Wildlife

Camp tents and yurts would be taken down after each use and not left for the next trip. Camps near isolated water sources (ponds, springs) would be at least one-quarter mile from the source to allow for wildlife access. Saddle and pack stock would be picketed, tethered, or allowed to graze freely as far as possible away from water sources.

Permittee would be aware of mule deer fawning and elk calving activities and would avoid disturbing them during following time periods: mule deer - May 15 to July 15, elk - May 1 to June 30. Permittee would be notified of specific areas as part of the pre-trip notification process.

Winter use would be conducted in areas where big game is not present to avoid harassment.

c. Wild Horses

All vehicles would remain on designated roads. Permittee would not attempt to drive closer to the horses. Permittee would follow Leave No Trace guidelines for wildlife viewing. These guidelines include observing wildlife from a distance and not following or approaching them.

B. Monitoring

1. Critical Elements

a. Areas of Critical Environmental Concern

RNAs would be visually monitored periodically for natural or human-caused disturbances.

Key plant species would be monitored at specific sites to determine changes in population health.

b. Cultural Resources

Traditionally used campsites would be inventoried and any effects to cultural resources would be measured.

c. Migratory Birds

Bird monitoring transects would be established according to protocol along riparian areas used by the permittee.

d. Noxious Weeds

BLM would monitor camping and parking areas for the presence of new or spreading noxious weeds.

e. Threatened, Endangered, and Special Status Species

Ongoing monitoring of known Columbia spotted frog populations would continue.

ODFW data on male sage-grouse attending leks would be used. Traffic counters would be placed on roads near leks that receive many visits to determine the effects of visitor use on number of male sage-grouse attending those leks.

f. Wilderness and Wild and Scenic Rivers

Wilderness and WSR monitoring would be based on the nondegradation mandate and the protection of ORVs. A Wilderness and WSR monitoring plan is currently under development to look at and evaluate both commercial and public use of these resources.

2. Noncritical Elements

a. Recreation

BLM would monitor all SRPs for compliance with permit stipulations.

b. Wildlife

ODFW big game count data would be used as an indicator of effects to wildlife.

## CHAPTER VII. CONSULTATION AND COORDINATION

### A. List of Preparers

Karla Bird, Andrews Field Manager  
Dean Bolstad, Wild Horse Management Specialist  
Darren Brumback, Fisheries Biologist  
Jon Collins, Natural Resource Specialist  
Gary Foulkes, Planning and Environmental Coordinator  
Terri Geisler, Geologist (HazMat)  
Rick Hall, Natural Resource Specialist (Botanist)  
Fred McDonald, Natural Resource Specialist (Recreation)  
John Neeling, Outdoor Recreation Planner (Wilderness)  
Matt Obradovich, Wildlife Biologist  
Skip Renschler, Realty Specialist  
Jon Reponen, Natural Resource Specialist (Forester)  
Lesley Richman, Natural Resource Specialist (Noxious Weeds)  
Joan Suther, Three Rivers Field Manager  
Fred Taylor, Wildlife Biologist  
Nora Taylor, Botanist/Ecologist  
Scott Thomas, Archaeologist  
Evelyn Treiman, Outdoor Recreation Planner/Lead Preparer  
Cindy Weston, Fisheries Biologist

### B. Persons, Groups, and Agencies Consulted

Steens Mountain Advisory Council  
Steens Mountain Packers, Cindy Witzel

### C. Public Notice and Availability

A notice will be placed in the Burns Times-Herald announcing the document's availability and a 30-day comment period. The document will also be available on the Burns District environmental documents Web page.