

STEENS MOUNTAIN COMPREHENSIVE RECREATION PLAN

ENVIRONMENTAL ASSESSMENT
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CHAPTER I. INTRODUCTION: PURPOSE AND NEED FOR ACTION

A. Introduction

The Bureau of Land Management (BLM), Burns District, conducted an analysis of recreational facilities and activities within and adjacent to Steens Mountain Cooperative Management and Protection Area (CMPA).

1. Historical Background

The following is a chronological summary of land use planning efforts within the CMPA:

- Steens Mountain Multiple Use Resource Plan of 1965 provided management direction on 775,600 total acres including 207,300 acres of private and 22,300 acres of state-managed lands. The Steens Multiple Use Resource Plan was superseded by the Steens Mountain Recreation Area Management Plan dated February 22, 1985. This plan designated Steens Mountain as Steens Mountain Recreation Lands on July 31, 1971. Steens Mountain Recreation Lands area consisted of a total of 193,856 acres of which 40,692 acres were private and 1,031 acres were state-managed lands. The plan recognized recreation values as a primary resource of the area. Access within the area is provided by Steens Mountain Loop Road (also, known as the North or South Loop Roads). Steens Mountain Loop Road is a gravel dirt loop road exiting State Highway 205 at Frenchglen, Oregon, the northern access point. The southern access point is located ten miles south of Frenchglen off Highway 205. Steens Mountain Loop Road goes to the summit of Steens Mountain and provides good, seasonal access for recreationists. See Appendix A for Steens Mountain Recreation Area Management Plan.
- The Andrews Plan Amendment for Recreation Access Surrounding Loop Road was completed in June 1993. Construction of Steens Mountain Loop Road began in 1930 when the Civilian Conservation Corps (CCC) built a road from Frenchglen, Oregon up to Fish Lake. The onset of World War II delayed plans for the construction of the remaining portion of the road until the early 1960s. The road was completed in 1962. Steens Mountain Loop Road was dedicated as a National Back Country Byway (BCB) Type II on June 29, 1989. Type II byways are roads which by virtue of curves, road surface, and maintenance can be negotiated with a two-wheel drive vehicle without undue difficulty. These roads are usually not paved, but may have some type of surfacing. See Appendix B for Andrews Plan Amendment for Recreation Access Surrounding Loop Road management actions and the status of those actions.

- The Donner und Blitzen National Wild and Scenic River (WSR) Decision was completed in May 1993. The plan established a comprehensive set of actions to provide Donner und Blitzen River with a level of resource protection and management for a wild river environment, consistent with the National WSRs Act. The plan has seven management actions for Resource Protection, seven management actions for Recreation Development/Visitor Management, four management actions for Landownership, and four management actions for Other Management Actions/Considerations. See Appendix C for Donner und Blitzen Nation WSR Decision management actions and the status of those actions.
- The Riddle Brothers Ranch Historic District Cultural Resources Management Plan Environmental Assessment (EA) (Historic District Plan) was completed on March 8, 1995. The Historic District Plan was developed to address the immediate and long-term protection and management required to interpret, maintain and enhance the cultural resource values present. See Appendix D for Riddle Brothers Ranch Historic District Cultural Resources Management Plan management actions and the status of those actions.
- In 2000, the Steens Mountain Recreation Lands were incorporated into the Steens Mountain Cooperative Management and Protection Act of 2000 (Steens Act) (PL 106-399). Today, the CMPA consists of a total of 496,133 acres of which 67,650 acres are private and 1,070 acres are state lands.

The purpose of the CMPA is to “conserve, protect and manage the long-term ecological integrity of Steens Mountain for future and present generations” (Sec. 102). The Act was passed to provide for cooperative management of public and private lands on Steens Mountain. Congress recognized the CMPA provides exceptional cooperative management opportunities and offers outstanding natural, cultural, scenic, wilderness, and recreational resources. In addition, the Steens Act authorized five specific land exchanges, created the Steens Mountain Advisory Council (SMAC), and established a mineral withdrawal area.

Among the provisions of the Steens Act, several provisions specifically mention recreation. The Steens Act directed the BLM through the Secretary of the Interior to promote viable and sustainable recreation (Sec. 1 and 102); recognize and allow current and historic recreational use (Sec. 111); manage special recreation use permits (Sec. 115); and provide opportunities for wildlife-oriented recreation (Sec. 302). These provisions must be read within the framework of other Steens Act direction; however, the recreation provisions are provided here to illustrate specific direction to recreation.

The Steens Act required the BLM to prepare a management plan for the CMPA. The Steens Mountain CMPA Resource Management Plan (RMP)/Record of Decision (ROD) along with the Steens Mountain Wilderness and WSR Plan were completed in 2005. The ROD/RMP directed BLM to address and analyze in a Comprehensive Recreation Plan (CRP) any facilities or actions to accommodate or manage existing or anticipated recreation use (ROD-67).

The ROD/RMP designated the entire CMPA area as a Special Recreation Management Area (SRMA) encompassing 496,133 acres. The SRMA is an administrative unit where existing or proposed recreational opportunities are recognized for their unique value, importance, and/or distinctiveness, especially as compared to other areas used for recreation. The SRMAs are under intensive management and investment in facilities and supervision; within SRMAs, recreation and visitor management are recognized as the predominant land use plan (LUP) focus, within the CMPA, where specific recreational opportunities are managed and protected on a long-term basis.

The SRMA vision for the CMPA comes from scoping and a planning effort (referred to as NICHE Planning) conducted in the area in 2009 by BLM. NICHE Planning helped to identify sustainable recreation opportunities by evaluating visitor use, market data and public input. This process helped to identify key recreational settings identified below. Settings were developed by analyzing use and demographics. As a result of the NICHE Planning process, a Vision Document was completed. The Vision Document describes the recreational resources within the planning area, identifies issues and concerns, and provides recommendations which were used in developing the CRP alternatives. Members of the NICHE Planning Team included the SMAC, Oregon State Parks, United States Department of Agriculture (USDA) Forest Service, BLM, and members of the public. The results of the workshop can be seen in full in Appendix E. The vision statement from the NICHE process follows:

“Travelers witness one of the most naturally spectacular places in the lower 48 states, and sparse populations make this one of the darkest night skies in the world. Century ranches are a source of beauty and immense community pride.

The area provides spiritual connectivity within the grandeur of nature, for the weekend visitor and for locals who experience it daily. Main travel routes offer a sense of security, while off the beaten path offers expansive areas for self-discovery. Visitors come for the beauty and solitude and leave with a new sense of stewardship for this special place.

Its interdependence with the surrounding areas helps make Steens Mountain CMPA so special. It is the model for collaborative management of public and private lands. Innovative and creative solutions to complex

issues are modeled here. Sustainability for the CMPA includes: Social understanding of each other's perspectives, economic stability through agriculture and geo-tourism, and environmental resiliency.

Broad scale contextual Settings, Special Places, Activities: Steens Mountain CMPA is a composition of a boundary-less settings integrating private land, the counties and Malheur Wildlife Refuge. Each setting has attributes it best offers.

Ranches – These picture-postcard beautiful ranches, many over a century old and in the family for generations, are a key part of CMPA cooperative management. They are the major economic engine for the region. This buckaroo (or Native American) country is rich with Basque history, and cattle drives continue to this today. It is home to cattle, wild horses and great fishing.

East Slope (Face) – This rugged windy escarpment can be difficult to traverse. Big horn sheep and mule deer forage among the cliffs. Hunting occurs here.

The East Rim – This windy, steep ridge offers spectacular views for young and old alike. Like the rest of the mountain, it's botanically unique and home to bighorn sheep and multitudes of birds and hawks. Viewing, hiking, horse riding and interpretation happen here.

Finger Canyons (Gorges) – The geology of this area is steep, with alpine vegetation, lakes and streams. A trail system provides access for hikers and horse riders.

Highland Loop – This area includes the major recreation loop road to vistas and campgrounds. It is home to red band trout, bighorn sheep and the South Steens herd of wild horses called the Hollywood Herd.”

2. Description of Planning Area

The BLM Burns District Office manages 3,275,694 acres of public land located primarily in Harney County, in southeastern Oregon. The Burns District is divided into two Resource Areas (RA): Andrews RA and Three Rivers RA. The CMPA area lies primarily in the Andrews RA; however, 53,346 acres are within the Three Rivers RA (see Map 1: General Location Map).

The area to be addressed in the CRP involves the entire area recognized by Congress as being within the CMPA and contiguous portions of public land that may provide access to the CMPA. The BLM-administered lands within the CMPA encompass 428,213 acres; there are also 66,850 acres of private and 1,070 acres of State of Oregon lands for a total of 496,133 acres.

Within the CMPA area there are multiple Special Management Designations and Special Area Designations. The Special Management Designations are: Loop

Road designated as a National BCB in 1989; the Oregon High Desert Trail, designated as part of the National Recreation Trails System in September 1992, Riddle Brothers National Historic District designated in 1992; and seven Areas of Critical Environmental Concern (ACEC)/Resource Natural Areas (RNA) (Kiger Mustang, East Kiger Plateau, Little Blitzen, Little Wildhorse Lake, Rooster Comb, South Fork Willow Creek, Big Alvord Creek, and Fir Groves RNAs).

Special Area Designations within the CMPA are: 105.4 miles of WSR; six Wilderness Study Areas (WSA) (High Steens, Lower Stonehouse, Stonehouse, Bridge Creek, Blitzen River and South Fork Donner und Blitzen WSAs), Lands with Wilderness Characteristics (LWC) (High Steens, Bridge Creek, and Lower Stonehouse LWCs) and four Herd Management Areas (HMAs) (South Steens, Kiger, Riddle Mountain and a portion of Sheepshead-Heath Lake HMAs), Steens Mountain Wilderness Area encompassing approximately 170,157 acres (including a 97,229-acre No Livestock Grazing Area), the Wildlands Juniper Management Area (WJMA), and the Redband Trout Reserve.

B. Purpose of and Need for Action

During the development of the CMPA RMP, the SMAC recommended to the BLM to look at all recreational issues on Steens Mountain in a comprehensive manner, rather than planning for piecemeal activities. In the spirit of this recommendation, the RMP/ROD included management direction to address and analyze staging, “Any facilities or actions to accommodate or manage existing or anticipated recreational use will be addressed and analyzed in a CRP that will be prepared after the RMP is completed. Facilities that may be addressed include Mann Lake Recreation Site, South Steens Loop Road trailhead facility and connector trails, Lily Lake, North Steens Loop Road toilet, winter use staging area, cross-country ski trail system (when there is a demonstrated public interest), a possible Fir Grove Trail, other trails outside of Steens Mountain Wilderness (when there is demonstrated public interest), and vehicle pull-outs along Steens Mountain BCB. Actions addressed may include motorized and non-motorized winter recreation, dispersed camping, non-motorized boating on the main stem of Donner und Blitzen River, Blitzen Crossing use management, and permits to visit the CMPA. Decisions on other potential projects and actions may be considered as part of the CRP” (RMP 67).

The CRP EA addresses the recreational related-issues raised during the public scoping process for the CMPA RMP and provides a mix of developed and undeveloped recreation opportunities while conserving and protecting long-term ecological integrity.

There are a broad array of recreational opportunities in the CMPA and there is a need to develop comprehensive management practices for existing and anticipated recreational activities and associated facilities that: promote public health and safety, protect natural and social resources, reduce resource damage caused by recreational activities and reduce recreational user conflicts.

Through this CRP EA, BLM will assess current and expected recreational activities and associated facilities that may be desired including: campgrounds, trails, interpretive sites,

access points and other facilities that may be needed to assist both intensively used sites, as well as, dispersed recreation activities. The CRP decision may add to the non-motorized trail system and could close non-motorized or motorized routes designated under the Steens Mountain Travel Management Plan (TMP), if changes are found to be in the public interest due to information generated during the CRP process. Any route closures or additions would amend the TMP. All recent route analysis forms completed since the TMP are available on the BLM Burns District Web site www.blm.gov/or/districts/burns/index.php.

In addition, this document will update the TMP terminology from “Maintenance Level” to “Maintenance Intensity” as used in the 9113 Roads Manual to ensure consistency of implementation. This is discussed further in the document and in Appendix F.

1. Goals and Objectives

Goals and objectives of this CRP reflect what is stated in the CMPA RMP (2005) and are as follows:

a. Recreation

Goal - *To provide developed and undeveloped recreation opportunities, while protecting resources, to manage the increasing demand for resource-dependent recreation activities (ROD/RMP-66).*

- **Objective 1:** Establish and manage recreation areas where the presence of high quality natural resources and the current or potential demand warrants intensive management practices to protect areas for their scientific, educational, or recreational values while accommodating anticipated increases in use for recreation activities in specific areas.
- **Objective 2:** Manage recreation facilities to protect natural resources and to meet user needs.
- **Objective 3:** Manage the portion of the CMPA, outside of the intensive use areas and developed recreation sites, for dispersed recreation.
- **Objective 4:** Manage visitor use in the CMPA to protect natural resources and provide a variety of recreation opportunities in a manner that minimizes conflict between users.
- **Objective 5:** Provide informational and educational opportunities to public land visitors.
- **Objective 6:** Manage commercial, competitive, educational, and organized group recreation activities.
- **Objective 7:** Manage BCBs to protect the recognized values.
- **Objective 8:** Manage the Oregon High Desert National Recreation Trail to protect the recognized values and setting.

b. Off-Highway Vehicles (OHV)

Goal – Manage motorized (OHV) and mechanized (nonmotorized) vehicle use to protect resource values, promote public safety, provide OHV and mechanized vehicle use opportunities where appropriate and allowable, and minimize conflicts among various users.

- **Objective:** Manage OHV and mechanized vehicle use in conformance with OHV designations (RMP-64).

c. Wilderness

Goal 1 – Maintain or improve wilderness values and special features of Steens Mountain Wilderness under a principle of nondegradation and in a manner that will leave these values unimpaired for future use and enjoyment as wilderness, while providing opportunities for public use, enjoyment, and understanding.

- **Objective:** Manage public visitation in the wilderness to provide outstanding opportunities for solitude, primitive and unconfined recreation, naturalness, and other features including ecological, geological, scientific, educational, scenic and historic (RMP-73).

Goal 2 – Manage the wilderness in such a manner that the landscape is essentially unaffected by human manipulation and influences, while allowing natural processes to dominate.

- **Objective:** Accomplish necessary projects and activities occurring in wilderness with the minimum tool or requirement needed to achieve a desired result. The chosen tool, equipment, or structure is the one that least degrades wilderness values temporarily or permanently.

Goal 3 – Manage nonconforming uses of the Steens Mountain Wilderness, allowed under the Wilderness Act and the Steens Act, to have the minimum effect on wilderness values.

- **Objective 1:** Manage livestock grazing in wilderness under the stipulations of the Congressional Grazing Guidelines (HR 101-405 Appendix A).
- **Objective 2:** Provide for the level and type of commercial services necessary to enable the public to use, access, enjoy and understand the recreational and other values of wilderness, emphasizing opportunities for primitive and unconfined types of recreation, inspiration, and solitude.

- **Objective 3:** Allow for a level of reasonable access for the use and enjoyment of private inholding while protecting the wilderness values.
- **Objective 4:** Manage to prevent and exclude motor vehicle and mechanical transport intrusions into the wilderness; either on closed roads or off of roads, except where authorized by permitted use or during emergencies.

d. Wild and Scenic Rivers

Goal 1 - Manage the existing and newly-designated WSRs in conformance with the WSRs Act and the Wilderness Act.

- **Objective:** Protect and enhance the Outstandingly Remarkable Values (ORVs) of the designated WSRs.

Goal 2 – Determine the suitability of eligible WSRs. Manage those rivers found to be suitable in conformance with BLM Manual 6400 (WSRs – Policy and Program Direction for Identification, Evaluation, and Management) for protective management of eligible and suitable WSRs.

- **Objective:** Protect and enhance the ORVs of rivers determined to be administratively suitable for potential inclusion into the National WSRs System by Congress.

e. Wilderness Study Area

Goal - Manage WSAs so as not to impair their suitability for preservation as wilderness.

- **Objective:** Manage existing WSAs so as not to impair their suitability for preservation as wilderness.

Parcels with Wilderness Characteristics: Goal – Manage parcels with wilderness characteristics to protect those characteristics.

- **Objective:** Manage parcels with wilderness characteristics to protect those characteristics.

2. Decision to be Made

The outcome of this analysis will be a decision by the Andrews/Steens and Three Rivers RA Field Managers to produce a CRP defining recreational management activities on BLM-administered lands while conserving and protecting long-term ecological integrity. This document will implement RMP goals and objectives for

recreation within the CMPA and identify recreational management activities while attempting to resolve issues identified during public scoping.

C. Conformance with Land Use Plan

The Proposed Action and alternatives are in conformance with the CMPA RMP, dated August 2005, even though they are not specifically provided for, because they are clearly consistent with the LUP decisions as stated above under Purpose and Need, CMPA RMP Goals and Objectives in A.1.

D. Consistency with Laws, Regulations and Policies

- *Wilderness and Wild and Scenic Rivers Plan, Appendix P, CMPA RMP, (August 2005) 6330 – Management of Wilderness Study Areas (July 2012)*
- *Wilderness Act of 1964*
- 6340 – Management of Wilderness (2012)
- 6400 – Wild and Scenic Rivers (July 2012)
- *Steens Mountain Transportation Plan (TP), Appendix M, CMPA RMP/ROD, (August 2005)*
- *Steens Mountain TMP, (November 2007)*
- *Steens Mountain Cooperative Management and Protection Act of 2000, (16 USC 460nnn note.)*
- *Greater Sage-grouse and Sagebrush-Steppe Ecosystems Management Guidelines (2001)*
- *Greater Sage-grouse Conservation Assessment and Strategy for Oregon (Hagen 2011)*
- *BLM National Sage-grouse Habitat Conservation Strategy (2004)*
- *National Environmental Policy Act (42 U.S.C. 4321-4347, 1970)*
- *Federal Land Policy and Management Act (43 U.S.C. 1701, 1976)*
- 2007 Vegetation Treatments Using Herbicides on BLM lands in 17 Western States ROD).2010 Vegetation Treatments Using Herbicides on BLM Lands in Oregon Record of Decision (ROD).
- *Burns District-Noxious Weed Management Plan (EA-OR-020-98-05)*
- *Oregon Statewide Comprehensive Outdoor Recreation Plan (SCORP), 2008-2011*
- *Riddle Brothers Historic District Cultural Resources Management Plan EA OR-020-5-019, January 1995.*
- *Code of Federal Regulations (CFR): Rights-of-Way (43 CFR 2800)*
- *BLM Acquisition Handbook, (H-2100)*

CHAPTER II. IDENTIFICATION OF ISSUES AND ISSUES CONSIDERED BUT NOT ANALYZED FURTHER

Please see Table 2 in Chapter III for a complete list of issues/resources identified.

A. Issues Identified During External Scoping

An issue is defined as a matter of controversy, dispute, or general concern over resource management activities, the environment, or land issues. Listed below are issues identified through the scoping process and addressed within the EA.

On December 4, 2007 the formal scoping portion of the Steens Mountain CRP was initiated. Over the course of a year, 376 letters were mailed out. As of January 2009, 64 individuals provided 132 separate comments. In addition, the NICHE Process as described in the Introduction was completed which provided a recreational vision of the area. Issues initially identified during the scoping and NICHE Process included:

1. Steens Mountain BCB and other roads/ways: Loop Road is designated as a BCB. This is the main motorized route used by visitors to Steens Mountain. Several vehicle pull-outs and parking areas are provided with limited interpretive information. Public comments supported access as it currently exists; however, several suggestions advocated for improvements to Kiger and East Rim Overlooks to provide accessible¹ trails from the parking area to the overlooks and rehabilitate the user-created trails. Other roads and ways were identified for possible closure or reduction in maintenance.
2. Winter Recreation: Limited winter recreation use occurs in the CMPA under a permit system which allows permit holders access beyond the closed North Loop Road gate at Page Springs. Cross-country skiing, snowshoeing and limited snowmobiling are currently allowed. All of the public comments supported some type of access. The majority of the comments did not support snowmobile access.
3. Special Recreation Permits (SRP): A wide variety of activities within the CMPA are currently managed under the SRP system. The Steens Act recognizes that certain SRPs may be continued in the wilderness area of the CMPA to the extent consistent with the Wilderness Act. The CRP does not seek to change the currently permitted uses evaluated under a Needs Assessment for SRPs in wilderness. Currently, many commercial and organized group permitted uses are provided outside of the wilderness area, and only limited commercial SRPs are provided in the wilderness area. A majority of the public comments supported the existing level of management.

¹ The term "accessible" means in compliance with the Federal Accessibility Guidelines in place at the time the facility or feature was designed, constructed, altered, or leased.

4. Information, Signing, and Interpretation: Currently, there is a wide variety of directional and interpretive signing in the CMPA. Information and education opportunities could be provided to improve visitor experiences. The majority of public input was for development of better or more interpretive signage in appropriate areas, as well as interpretive brochures.
5. Developed Recreation Sites: Recreation sites are distinctively defined areas where facilities are provided for concentrated public use (e.g. campgrounds, picnic areas, trailheads, and overlooks).

The CMPA has five developed campgrounds. They include Page Springs, Fish Lake, Jackman Park, South Steens Family, and South Steens Equestrian campgrounds. Scoping results indicate support for the current developed sites and suggest improvements could be made to these existing sites. One suggested improvement was that Mann Lake dispersed recreation site should be upgraded from semi-developed to a developed campground. Other suggestions included adding sites to the existing campgrounds and improving signage and interpretive information.

There is one equestrian campground off South Loop Road within the CMPA. Requests have been made for BLM to provide more equestrian facilities on North Loop Road and on the east side of the CMPA. Loop trails should be incorporated into the trail system and such trails should be equestrian friendly.

6. Dispersed Recreation Sites: The BLM has two identified non-fee dispersed recreation sites, Mann Lake and Lily Lake within the CMPA. The quality and quantity of dispersed recreation opportunities is based on motorized/mechanized access. Access has been addressed by the Transportation Plan (TP) and TMP but BLM will consider this information from a recreational viewpoint in the CRP to determine if, based on new information or recreational considerations, the route system should be changed in any manner. Non-motorized dispersed recreation is not limited as the BLM-managed portions of the CMPA are open to cross-country travel for hikers and equestrian use.
7. Overlooks and Other Points of Interest

Riddle Brothers Ranch: The Ranch is a *National Register* Historic District located approximately two miles north from South Loop Road. The site is managed under a Cultural RMP and a WSR Management Plan. Public comments indicate signage and brochures about the ranch and other historic sites should be developed and a predictable access schedule for public access be made available.

8. Trails and Trailheads: Currently sixteen trails are being managed within Steens Mountain Wilderness. Trailheads exist at Page Springs Campground (2), Nye Cabin, Wild Horse Overlook, Big Indian, South Steens Campground, Little Blitzen Trailhead, Mud/Ankle Creek Trailhead, and Pike Creek Trailhead. Responses ranged from supporting existing trails, additional trail construction,

and better trail maintenance. The alternatives consider creating new non-motorized trails, closing trails, and closing individual motorized routes for exclusive non-motorized use. If trails cross private lands, legal recorded access easements must be obtained from private landowners.

Fir Grove Trail: Fir Grove ACEC offers an opportunity for the visiting public to experience a unique Grand Fir forest community, the only one of its kind in the CMPA. A public access easement to the newly designated area exists, but no constructed trail is in place. Results from public scoping were in favor of a trail being developed including interpretive materials.

9. Wild and Scenic Rivers: Over 100 miles of stream are designated as wild, under the management authority of the WSRs Act. Limited floating occurs due to access and flow limitations.
10. Recreational Demand: The BLM needs to look at present and future recreational demands throughout the planning area. There is a high dependence on public lands for recreational opportunities by both local and non-local visitors. The important role recreational activities have on regional socioeconomic conditions needs to be considered.

B. Issues Considered but Not Analyzed in Detail

1. Grazing: The issue of compatibility of grazing and recreation was identified. Overall, the comments indicated grazing was compatible, only if it was carefully monitored. Changing grazing management (reducing, eliminating, or changing livestock use) is outside the scope of this analysis. Any grazing-related resource concerns identified during the Rangeland Health Standards and Guidelines would be analyzed under an Allotment Management Plan/EA.
2. Identification of OHV Areas: Since the Steens Act closed the CMPA to off-road travel, designation of any OHV areas is prohibited. However, the CMPA RMP did make OHV route designations as open, closed or limited. In addition, the TP and subsequent TMP provide direction on the current route system, the various route categories, and road Maintenance Levels. The TMP designated 555 miles of base routes (only 518 miles are shown on maps and available for public use). The TMP identified 8 miles of routes as ATV trails; the ATV routes are not recommended for use by full-sized vehicles; however, full-size vehicles are not prohibited.
3. Land Use Decisions: RMP land use decisions, such as desired outcomes (goals and objectives), allowable uses, and actions to achieve outcomes, will not change as land use decisions are outside the scope of this analysis and would require an RMP amendment. Therefore, land use decisions will remain the same as described in the CMPA RMP such as boundary changes or creation of special designation areas such as ACEC.

C. Alternatives Including the Proposed Action

1. *Alternative A – No Action: Maintain Existing Recreational Facilities and Activities*

The “No Action Alternative” would maintain the current recreational management of the area as guided by the CMPA RMP/ROD, Steens Mountain Wilderness and WSRs Plan, TP, and the TMP.

Recreational and road maintenance activities would continue as needed, in the manner they are currently occurring consistent with the TP and TMP. Specifics for existing recreational facilities would remain consistent with the CMPA RMP/ROD and are detailed below. Refer to the map No Action Alternative Map A.

a. Steens Mountain Back Country Byway and Transportation

The entire Steens Mountain Loop Road would be kept open as part of the Bureau’s BCB system. As described in the RMP/ROD and TMP, most of Steens Mountain Loop Road is classified Maintenance Level 5 (Appendix F for Definition of Road Level and Road Intensity) with the exception of the Rooster Comb area which is a Level 3. Access roads from Steens Mountain Loop Road to campgrounds, overlooks, and interpretive sites would be maintained to provide for safe and convenient movement of passenger vehicles.

The use of OHVs and mountain bikes would be limited to designated roads and ways. Road maintenance would continue as described in the CMPA RMP/ROD and TP, August 2005, and the TMP, EA-OR-05-027-021, November 2007 (See Appendix F for a definition of maintenance intensities).

b. Winter Recreation

Winter recreation, such as over-the-snow machines and skiing, is allowed within Steens Mountain Wilderness. Recreationist(s) submit a completed Winter Recreation application form for motorized access through the first gate on North Loop Road. Over-the-snow machines (i.e. snowmobiles, snow tracks, and jeeps) would be allowed to drive on North Loop Road to Kiger Gorge Parking Area. If authorized, up to 4 permits could be issued on a first-come/first-served basis, and not to exceed 30 permits per month from December to February and 60 permits per month from March to May. Maximum group size would remain at 12.

A Winter Recreation Permit is not needed for non-motorized winter recreation (e.g. skiing) within the CMPA.

c. Special Recreation Permits

The SRPs are authorizations allowing for recreational uses of public lands and related waters. They are issued as a means to control visitor use, protect recreational and natural resources, and provide for the health and safety of visitors. Organized Groups and Special Area permits are usually issued in high use areas or where recreational use requires special BLM management. Commercial SRPs are also issued as a mechanism to provide a fair return to the United States for the commercial recreational use of public lands

The SRP would be required for activities including, but not limited to, scientific study, education activities, and commercial uses affecting other visitors, or having an impact on the area's resource values. The Burns District Office requires an SRP for groups greater than 12 people or including more than 18 recreational livestock (i.e. horses, mules, and pack animals). There is currently no limitation on the number of commercial or organized group SRPs issued for CMPA. The existing limit of five hunting and guiding SRPs would continue (as determined in the Needs Assessment, August 2011).

d. Information, Signing, and Interpretation

The BLM would continue to maintain and update information in existing kiosks, brochures and signs. The agency would place signs, as needed, for public safety and information.

e. Developed Campgrounds (Fee Campgrounds)

- *Page Springs Campground* is located in W.M., T. 32 S., R. 32.5 S., sec. 17, NW¼. The campground would be maintained as it exists with 31 camp sites, including 1 group site, accessible camping, vault toilets, camping pads. Potable water and grey water disposal would remain available at Page Springs Campground.
- *Fish Lake Campground* is located on Oregon State Lands in W.M., T. 32.5 S., R. 33 E., sec. 20, S½; sec. 29, N½NE¼, NW¼; and T. 33 S., R. 32.75 E., sec. 01, SE¼. The campground would be maintained as it exists with 23 camp sites, a picnic area, boat launch vault toilets, camping pads, potable water and grey water disposal. The horse corral would be repaired and maintained in its current location.
- *Jackman Park* is located in W.M., T. 32.5 S., R. 33 E., sec. 33, S½NE¼. The campground would be maintained as it currently exists with 6 camp sites, vault toilets, camping pads, and potable water.

- *South Steens Family Campground* is located in W.M., T. 34 S., R. 32.75 E. sec. 4, SW $\frac{1}{4}$ NE $\frac{1}{4}$. The campground would be maintained as it exists with 21 camp sites vault toilets, camping pads, and potable water would remain available.
- *South Steens Equestrian Campground*, located in W.M., T. 34 S., R. 32.75 E., sec. 4, SW $\frac{1}{4}$ NE $\frac{1}{4}$, would be maintained as it currently exists with 15 camp sites, horse corrals, hitching posts, vault toilets, camping pads, and potable water.

f. Dispersed Campgrounds (Non-Fee Sites)

- *Mann Lake* is located in W.M., T. 32 S., R. 35 E., sec. 07, lots 1-5 inclusive; T. 32 S., R. 34 E., sec. 12, SE $\frac{1}{4}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$. The campground would be maintained as it exists with two vault toilets.
- *Pate Lake Cooperative Site* is located on private lands in W.M., T. 32.5 S., R. 33 E., sec. 21, S $\frac{1}{2}$ SW $\frac{1}{4}$; sec. 28, N $\frac{1}{2}$ NW $\frac{1}{4}$. This campground would be maintained through a Cooperative Management Agreement (CMA) with the landowner. The BLM would provide up to five non-fee, dispersed camp sites with picnic tables and fire rings.
- *Lily Lake* is located in W.M., T. 33 S., R. 32.75 E., sec. 01, lot 2. The campground is managed as a primitive dispersed recreation site.

g. Overlooks and Other Points of Interest

- *Kiger Gorge Overlook (parking area and trails)* is located in W.M., T. 33 S., R. 33 E., sec. 01, lot 2.
- *East Rim Overlook* is located in W.M., T. 33 S., R. 34 E., sec. 19, lot 1.
- *Wildhorse Lake Overlook* is located in W.M., T. 33 S., R. 33 E., sec. 25, SW $\frac{1}{4}$ SW $\frac{1}{4}$. All overlooks would be maintained as they exist.
- *Riddle Brothers Ranch National Historic District (Riddle Brothers Ranch)* (1,120 acres) is located in W.M., T. 33 S., R. 32.75 E., sec. 30, SE $\frac{1}{4}$ SW $\frac{1}{4}$, S $\frac{1}{2}$ SE $\frac{1}{4}$; sec. 31, NE $\frac{1}{4}$, NE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$; sec. 32, S $\frac{1}{2}$; sec. 33, SW $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$.

The Riddle Brothers Ranch includes a number of historic properties in various states of preservation, as well as several more recent structures. The ranch was designated in the *National Register of Historic Places* in May 1992.

Riddle Brothers Ranch would be managed according to the Riddle Brothers Historic District Cultural RMP EA OR-020-5-019 (January 1995). The Historic District Plan was developed to address the immediate and long-term protection and management required to interpret, maintain, and enhance the cultural resource values present.

The management actions for recreation in the Riddle Brothers Historic District Cultural RMP EA were to develop two parking areas:

- An area on the south side of Little Blitzen River, across from the historic ranch house to accommodate up to six vehicles.
- An area, capable of holding several vehicles and a turnaround for buses, 3/4 of a mile up the road at the junction with the access road to the newer house, on the hill located in W.M., T.33S., R.32.75E., sec. 31.

These management actions may still occur as analyzed in the Riddle Brothers Historic District Cultural RMP EA OR-020-5-019 (January 1995). This EA does not change the previous Decision.

- *Nye Place Cabins* (2) are located in W.M., T. 33 S., R. 33 E., sec. 05, SE¹/₄SW¹/₄. One cabin is named the Nye Cabin and the other cabin is unnamed.
- *Cold Spring Cabin* is located in W.M., T. 33 S., R. 32.75 E., sec. 21.

The Nye Place and Cold Spring Cabins would be maintained in their current rustic condition and be managed as first-come/first-served.

h. Trails and Trailheads

Trails

The BLM manages 16 designated trails within the CMPA (see Alternative Map A) and have been assigned Maintenance Intensity 3. (For definitions of Maintenance Intensity levels refer to Appendix F.) The BLM would continue to manage these trails under the RMP/ROD and TMP. No new trails would be constructed. See Appendix G for the Minimum Requirement Decision Guide on Trail Maintenance.

Trailheads

The Little Blitzen Trailhead Parking Area is located in W.M., T. 33 S., R. 32.75 E., sec. 33, SE¹/₄SE¹/₄ and would be maintained as needed.

D. Actions and Design Features Common to All Alternatives

1. Monitoring

Section 111(c) of the Steens Act requires implementation of a monitoring program for public lands in the CMPA including Steens Mountain Wilderness and WSRs.

The BLM will measure the effectiveness of projects by following monitoring guidelines described in the CMPA (RMP-16), Appendix P of the RMP, and the Steens CMPA Monitoring Plan (3/17/2011). Methods of monitoring include, but are not limited to, photo points, trail and traffic counters, registration boxes, surveys, site visits, personal contacts, field observations and patrolling.

Frequency of monitoring is dependent on workforce and budget.

2. Adaptive Management

“Adaptive Management is a system of management practices based on clearly identified outcomes and monitoring to determine whether management actions are meeting desired outcomes; and, if not, facilitating management changes that will best ensure that outcomes are met or re-evaluated. Adaptive management recognizes that knowledge about natural resource systems is sometimes uncertain (43 CFR 46.30).”

Knowing uncertainties exist in managing for sustainable ecosystems, some changes in management may be authorized including:

3. Trails

Re-routing sections of a trail or converting primitive trails into designated trails may be necessary to mitigate resource damage and protect natural resources. Examples include, but are not limited to, erosion, rock slides, loss of vegetation, rills, water flow patterns, gullies and soil surface loss. These examples would be determined through field observations.

The minimum clear width of an accessible routes shall be 36 in. Ground surfaces along accessible routes shall be stable, firm, slip-resistant. Changes in level up to 1/4 in may be vertical and without edge treatment. Changes in level between 1/4 in and 1/2 in shall be beveled with a slope no greater than 1:2.

4. Developed Campgrounds

Campgrounds would be constructed in stages to meet the demand of visitor use. Construction of campgrounds would occur in the following stages: 1) the

campground would be fenced and a cattle guard installed; 2) construct campsites (with picnic tables, fire rings, livestock corral or hitching post); 3) install vault toilet; and 4) drill a well.

Monitoring of campground use would occur through, but not limited to, traffic counters, visitor register forms, and BLM observations.

5. Road Maintenance Definition Comparison Summary

Road “Maintenance Levels” and “Maintenance Intensities” are described in Appendix F. Maintenance Levels outline the degree of maintenance to be performed based on the primary purposes and uses for the route. Maintenance Intensities provide operational guidance on the amount, appropriate intensity, frequency, and type of maintenance activities to keep the route in acceptable condition. Maintenance Intensities do not describe route geometry, route types, types of use or other physical or managerial characteristics of the route.

Appendix M of the CMPA RMP/ROD and the subsequent TMP refer to Maintenance Levels. However, the BLM has adopted a consistent organizational-wide standard as a whole is using that incorporates updated terminology for in the 9113 Roads Manual and in the Bureau Facility Asset Maintenance System (FAMS) database for the BLM roads inventory. The updated terminology used in FAMS is referred to as road “Maintenance Intensity”. In an Opinion and Order, dated September 28, 2012, for case 3:09-cv-00369-PK states, “BLM explains that the agency endeavored at a national level to phase out the “Maintenance Level” terminology employed in the TMP in favor of the “Maintenance Intensity” terminology used in the 9113 Roads Manual in order to ensure consistency of implementation. Thus, BLM contends that Maintenance Intensity 1 as defined in the 9113 Roads Manual does not exceed Maintenance Level 2 as defined in the TMP and that Maintenance Intensity 3 in the 9113 Roads Manual does not exceed Maintenance Level 3 as defined in the TMP.” Honorable Paul Papak, United States Magistrate Judge, stated, “I agree with BLM on this point.”

As part of the CRP, the CRP would adopt the use of route maintenance intensities and would analyze any difference in effects due to utilization of intensities rather than levels.

E. Design Features Common to Alternatives B, C and D

1. Developed Campgrounds

Developed campground sites would include a parking pad, living area and tent pad (14 feet by 16 feet). The parking pad would be configured to either allow for pull through or back-in parking for a trailer. Parking pads would be an aggregate surface up to 28 feet wide and 78 feet long at no more than a 2 percent grade.

The living area (a defined space for campers), would be approximately 550 square feet and include a picnic table, fire ring and grill. Accessible facilities would include items such as accessible tables, fire rings, and trails meeting grade requirements.

The work would be completed with heavy equipment (e.g. dozer, road grader, and backhoe) depending on site conditions.

2. Equestrian Camp Sites

Equestrian camp sites would be developed as described above under Developed Campgrounds; however, the site would also include wood or metal corrals approximately 12 feet by 12 feet.

The work would be completed with heavy equipment (e.g. dozer, road grader, and backhoe) depending on site conditions.

3. Camp Host Sites

Camp Host Sites would be developed as described above under Developed Campgrounds; however, the sites would also include potable water and a 1,500-gallon holding tank on a level pad.

The work would be completed with heavy equipment (e.g. dozer, road grader, and backhoe) depending on site conditions.

4. Dispersed Campgrounds (Non-Fee Sites)

Any designated non-fee campground access roads would be assigned Maintenance Intensity 2. Access roads through private lands would be determined through easements.

5. Trail Design Features

Trail construction would follow guidelines described in USDA Trail Construction and Maintenance Notebook (e.g. trail width, trail foundation, trail corridor, trails in wet areas, stream crossings and any other additional trail elements) and would be consistent with the Wilderness and WSRs Plan.

Universally accessible trails would follow the guidelines described in Americans with Disabilities Act (ADA) for Buildings and Facilities as adopted by the U.S. Department of Justice (e.g. minimum tread width would be 36 inches wide).

6. Vault Toilets

Vault toilet would be, but not limited to:

- Vault toilet would meet Standards
- 750-gallon underground waste vault with an odor-free ventilation system, not requiring water, sewer or electric,
- 18-inch toilet riser with seat/lid, stainless steel grab bars,
- 12-inch diameter vent pipe, 24-inch diameter cleanout for pump access,
- 12-inch diameter vent pipe screen to keep out wildlife and debris,
- Set on a concrete foundation and slab approximately 15 feet by 15 feet,
- Exterior would be designed to blend in with the landscape and may use, but would not be limited to, cedar siding, faux precast concrete or stucco, and a powder-coated steel door with pull handle and deadbolt, and would be installed using heavy equipment such as a backhoe and crane.

Oregon Department of Environmental Quality (ODEQ) would perform a site investigation for each toilet to ensure compliance with current ODEQ vault toilet sighting standards. Location would require a test pit (5 feet by 4 feet by 2 feet) to be excavated at the proposed location by the BLM Operations Crew for ODEQ to inspect.

7. Fencing

a. Four Strand Barbed-wire Fence would be, but not limited to:

- The posts are installed approximately 22 feet apart.
- Four strands of 12-1/2 gauge wire are attached to the posts at heights (measured from the ground) of 16, 22, 30, and 42 inches.
- The lowest wire will be smooth, and remaining wires will be barbed.
- Typical site clearing for fence construction requires removal of brush and heavy vegetation for 8 feet on either side of the fence.

b. Buck and Pole Fence would be, but not limited to:

- Wooden poles are attached to vertical, wooden "bucks" to create a self-supported fence with no ground penetration.
- Bucks consist of two heavy wooden posts (5-8 inches in diameter) fastened together and stabilized by a third wooden member (usually 3-4 inches in diameter) to form a triangular "A-frame" structure.
- The buck typically does not exceed 4 feet, 0 inches in width and 5 feet, 6 inches in height. Three or four poles may be attached to one side of the buck, with a single pole attached to the opposite side.

8. Other Design Features

- Vehicles and equipment would be cleaned prior to entry to the site for project work to aid against spread of noxious weeds. BLM would inventory and monitor any project sites for noxious weeds. Any new weeds found would be treated using the most appropriate methods as analyzed in the Burns District Weed EA or subsequent weed treatment decision.
- Proposed project sites would be surveyed for cultural resources prior to implementation. Cultural resource sites would be avoided or effects mitigated in consultation with the Oregon State Historic Preservation Office (SHPO).
- Proposed improvement sites would be surveyed for Threatened and Endangered and Special Status plant species prior to implementation, and sites would be avoided.
- New facilities would be constructed at least 2 miles from leks to minimize disturbance during the breeding season.
- All proposed wire fences, constructed within 1 ¼ miles of a lek or known seasonal use area (e.g. spring exclosures), would include plastic reflective clips on the wire to reduce mortality from sage-grouse hitting the fence.
- No project construction or maintenance would occur April 1 through June 15 during sage-grouse nesting.
- An agreement (such as an easement, memorandum of understanding, CMA) would be obtained for any parking area, trail or camp site developed on private lands.
- Disturbed sites would be seeded with BLM approved seed mix.

F. Alternative B – Modification of Existing Facilities

Alternative B includes all portions of Alternative A including all Action and Design Features described above and modification of existing facilities and activities of recreational management as guided by the CMPA RMP, Steens Mountain Wilderness and WSRs Plan, TP, and the TMP. Refer to maps Alternative B, Alternative B (Map 1), Alternative B (Map 2), and Alternative B (Map 3).

1. Steens Mountain Back Country Byway and Transportation

- a. Sign Gate #5: A sign, indicating whether the gate was open or closed, would be placed approximately 100 yards prior to Gate #5 on South Loop Road, located in W.M., T. 33 S., R. 32 E., sec. 22, SW¼SE¼. The turnaround would be expanded up to 50 feet on public domain land with heavy equipment such as a road grader.

b. Roads/Ways - Closures

During the CRP planning process and in response to a complaint filed by the Oregon Natural Desert Association in summer 2011 to U.S. District Court regarding the TMP, the BLM reviewed 139 road segments totaling 108.22 miles. The review was documented on Route Analysis Forms and included a map of the road segment along with a National Agriculture Imagery Program (NAIP) map. The BLM then made a proposal to District Court regarding the level of maintenance to be performed on each road. On August 25, 2011, District Court Judge Paul Papak adopted BLM's proposal in full. Some of the roads reviewed during this process are analyzed in this alternative.

Close 11.8 miles of routes (roads/ways) to all motorized access. In addition, change Maintenance Intensity of 0.6 mile of an existing route to Maintenance Intensity 1.

Road maintenance would continue as described in the CMPA RMP/ROD and TP (August 2005) and the TMP, EA-OR-05-027-021 (November 28, 2007); however, terminology would be amended to reflect road maintenance intensities. Any changes to the transportation system would amend the TP and TMP. Any valid existing right would not be impacted by road closures. Refer to the legend on Map B. The green lines correspond to the roads/ways identified for closure. These roads/ways would be rehabilitated using heavy equipment (dozer, road grader, and/or disking) to rip the road, seed, and block. The most appropriate, least ground disturbing method would be used, as determined by on-site conditions.

- i. See Alternative B (Map 1) for the following proposed road closures:

<u>Legal Description</u>	<u>Mile (nearest tenth)</u>
W.M., T.29S., R.36 E., sec. 16;	
T.29S., R.36E., sec. 19.	0.6 (This is a Historical Route)
T.30S., R34E., sec. 13; sec. 28.	
T.30S., R.35E., sec. 18; sec. 31.	
T.30.5., R.25E., sec. 25; sec. 36.	
T.30.5S., R.34E., sec. 25;	

sec. 26;
sec. 35.

miles 4.5

- ii. See Alternative B (Map 2) for the following proposed road closures:

Legal Description Mileage (nearest tenth)

W.M., T.30S., R.32E.,	sec. 11.
² T.30S., R.32E.,	sec. 25 E ½ & SWNE
T.30S., R.33E.,	sec. 32.
T.31S., R.32.75E.,	sec. 2.
T.31S., R.32.75E.,	sec. 1; sec. 2.
T.31S., R.32.75E.,	sec. 11.
T.31S., R.33E.,	sec. 34.
T.33S., R.32E.,	sec. 1;
T.33S., R.32.5E.,	sec. 6; sec. 7.

miles 6.1

- iii. See Alternative B (Map 3) for the following proposed road closures:

Legal Description Mileage (nearest tenth)

W.M., T.37S., R.33E.,	sec. 17; Sec. 18.
T.37S., R.33E.,	sec. 20; sec. 29; sec. 30.

Miles 2.36

Total Miles 12.4

² These two routes were designated as Historical Routes from the Steens Mountain TMP EA OR-05-027-021; these routes are being re-analyzed due to internal scoping comments.

- iv. One road is identified for inclusion into the transportation system and would be designated with Maintenance Intensity 1. Refer to Map Alternative B (Map 2).

<u>Legal Description</u>	<u>Mileage (nearest tenth)</u>
W.M., T.29S., R.32E., sec. 33	0.6

- 2. Winter Recreation: Same As Alternative A
- 3. Special Recreation Permits: Same As Alternative A
- 4. Information, Signing, and Interpretation: Same As Alternative A
- 5. Developed Campgrounds (Fee Campgrounds)

In addition to current management as described under Alternative A and Actions and Design Features:

- a. *Page Springs Campground:* An outdoor interpretive seating area would be developed to accommodate up to 20 people for the purpose of interpretive programs. The seating area would be constructed with heavy equipment such as backhoe and dump truck using material to reflect the rustic atmosphere of the campground.

Over time, cottonwood trees would be replaced, with less hazardous trees and or shrubs, as recommended by BLM Burns District Office Botanist. The vegetation would be planted by hand, or with a backhoe based on vegetation size.

- b. *Fish Lake Campground:* Two camp sites would be upgraded with accessible facilities which include picnic tables, fire rings and compacted paths leading to restrooms. Camp sites #21-#23 would be designated as tent camping only. The host site would be improved by installing a camping pad, potable water and sanitation tanks below ground using heavy equipment such as a backhoe.
- c. *Jackman Park Campground:* Encourage tent camping due to the configuration and size of the campground. This would be accomplished through educational brochures and signs.
- d. *South Steens Family Campground:* Upgrade two camp sites for accessible facilities including picnic tables, fire rings and compacted paths leading to restrooms. The camp host site would be upgraded to include a camping pad, potable water and a buried sanitation tank using a backhoe or similar type of equipment. The day use parking area would be enlarged by approximately 20 feet by 75 feet using heavy equipment such as a dozer.

Encourage day use visitors to use South Steens Family parking area to access Little Blitzen Trail through additional signage. Over time, the Little Blitzen parking area would no longer be needed.

- e. *South Steens Equestrian Campground:* Create a day-use parking area at the front of the campground, eliminating two camping sites. New horse corrals (approximately 12 feet by 12 feet) would be placed in all existing sites. A 50-foot round pen would be added within the campground area. The pen area would be covered with up to 6 inches of sand.

Day use visitors would be encouraged to use South Steens Equestrian Parking Area to access Little Blitzen Trail through additional signage. Over time the Little Blitzen parking area would no longer be needed.

6. Dispersed Campgrounds (Non-Fee Sites)

- a. *Mann Lake:* Develop five camp sites with picnic tables and fire rings.

7. Overlooks and Other Points of Interest

- a. *Kiger Gorge Overlook and East Rim Overlook:* Trails from the parking areas to the overlook areas would be upgraded to an accessible path (see design features). The work would be completed with heavy equipment such as a backhoe.

The parking areas would be enlarged by approximately 20 feet by 75 feet (less than an acre to accommodate up to 8 more vehicles). Aggregate would be spread on the parking area. All work would be completed with heavy equipment (such as a dozer or road grader).

- b. *Riddle Brothers Historic District Ranch:* Increase public motorized access from four to five days during the summer months (Wednesday through Sunday). Install three picnic tables and rest benches.

8. Trails and Trailheads (Map B)

- a. *Kiger Gorge Trail:* Discontinue maintenance on Kiger Gorge Trail (one-mile), however the trail would continue to be shown on the BLM Burns District maps. The location of the trail is in W.M., T. 33 S., R. 33 E., sec. 01.
- b. *Nye and Wet Blanket Trails:* Reconstruct portions of Nye (1-mile long) and Wet blanket Trails (1 ½ miles long). This would reduce soil erosion, slope percent, and safety concerns. The Nye trail begins in W.M., T. 33 S., R. 33 E., sec. 05, SE¼SW¼. The Wet Blanket Trail begins in W.M., T. 33 S., R. 33 E., sec. 2, SW¼SW¼. See Map B for entire trail location.

G. Alternative C – Partial Development

Alternative C includes all portions of Alternative B including all Action and Design Features described above and development of new facilities and new recreational management as guided by the CMPA RMP, Steens Mountain Wilderness and WSRs Plan, TP, and the TMP. This alternative does not, however, include any road/way motorized closures. See Maps Alternative C, and Alternative C (Map 1).

1. Steens Mountain Back Country Byway and Transportation

Gate #5: Relocate Gate #5 near Black Canyon on South Loop Road 100 to 300 yards west of its present location, located at W.M., T.33S., R.32E., sec. 22., and expand the road 50 feet to allow for vehicles to turnaround. Where necessary, the gate would be surrounded by boulders to prevent cars from going around the gate. The work would be completed with heavy equipment (such as a road grader or dozer).

2. Winter Recreation Permits

Increase winter recreation permits from four to eight on a first-come/first-served basis. The BLM would continue to seek cooperation from local private landowners to further develop the winter recreation program, specifically off North Loop Road near Fish Lake area.

3. Special Recreation Permits – Same as Alternative A.

4. Information, Signing, and Interpretation

Develop and install a kiosk in Fields, Oregon next to Fields Station store. An easement would be required. An easement would be negotiated with the private landowner, secured and finalized prior to the expenditure of any Federal funds for improvements on private property. The kiosk would display a map of the area and provide additional interpretation and describe recreational opportunities.

5. Developed Campgrounds (Fee Campgrounds)

- a. *Fish Lake Campground:* Remove the horse corral located in W.M., T.32.5S., R.33E., sec. 29, across North Loop Road from Fish Lake Campground with heavy equipment such as a backhoe.
- b. *Jackman Park Campground:* Tent camping only (No camp trailers would be allowed within the campground).
- c. *Mann Lake Recreation Site:* Develop Mann Lake Recreation Site into a fee site. Develop up to ten camp sites with one site designated for the campground host. Each site would have a picnic table and fire ring. Two campsites would have accessible picnic tables and fire rings. A well

would be drilled for potable water. Trees would be planted to provide shade for the camp sites.

- d. *(New) North Steens Equestrian Campground:* Develop a new equestrian campground, North Steens Equestrian Campground, on Moon Hill Road in W.M., T.32S., R.33E., sec. 31, S½ . At this site, a parking area would be developed to accommodate pick-ups with horse trailers (approximately 5 acres). A fence would be placed around the perimeter of the parking area, with a cattleguard at the road entrance and a panel gate, to prevent livestock from accessing the area. Heavy equipment would be used to create the parking area and road.

Adaptive Management: Overtime, BLM may construct a developed campground (fee campground) in stages to meet the demand of visitor use. This would be determined through monitoring of traffic counters, trail registrations, and amount of human debris. The BLM would construct the campground in the following stages: 1) five campsites with picnic tables, fire rings, livestock corral or hitching post would be developed, 2) a vault toilet and 50-foot round pen would be installed; and 3) a well would be drilled for potable water and recreational stock. Monitoring of visitor use would be through traffic counters, visitor register forms, and BLM observations.

6. Dispersed Camping (Non-fee Sites)

- a. *(New) Home Creek Recreation Site:* Develop a new dispersed recreational site named Home Creek Recreation Site (approximately 5 acres). Boulders or signs would be placed to confine vehicles to the area. Visitors would be allowed to camp overnight at the site. The recreational site would be located in W.M., T.35S., R.32E., sec. 10, NE¼ on the west side of Steens Mountain. Access is through private land; therefore, an easement would be required from the landowner. Approximately 1½ miles of private and public road may be improved to Maintenance Intensity 3 by using aggregate gravel and installing a cattleguard. Improvement of the road would be accomplished by using heavy equipment (road grader, dump truck).

7. Overlooks and Other Points of Interest

- a. *North Loop Road Toilet:* Install a vault toilet next to Fish Lake Campground off of North Loop Road located in W.M., T.32.5S., R.33E., sec. 20, SE¼ , on Oregon Department of State lands.

8. Trails and Trailheads

- a. *(New) Three Mile Creek Trailhead:* Develop a new trailhead parking area (less than an acre) providing access to Three Mile Creek and other portions of Steens Mountain Wilderness. The parking area would be located in W.M., T.35S., R.32E., sections 25 and 26. Approximately

1/8-mile of fence would need to be redesigned to allow for the parking area. The fence would be built to BLM fence specifications.

- b. *Pike Creek Trail Extension 1*: Designate a 1/2-mile, old mining, two-track road as part of Pike Creek trail. This trail would connect Dry Creek Trail to Pike Creek Trail. The trail extension is located in W.M., T.34S., R.34E., sections 14 and 18.; W.M., T.34S., R.33E., section 13.
- c. *Levi Brinkley Memorial Trail*: Designate a closed, two-track road, parallel to Little Blitzen River as the Levi Brinkley³ Memorial Trail (approximately 1¼ miles long). The trail is located in W.M., T.33S., R.32.75E., sections 30 and 33.; W.M., T.33S., R.32.5E., section 36. A memorial plaque (2 feet by 2 feet) would be placed at the start of the trail.
- d. *Cold Spring Parking Area*: Construct a parking area (less than an acre) at the junction of Steens Mountain Loop Road and Cold Spring Road. The parking area would be developed within the 30-foot radial buffer from Cold Spring Road and the 100-foot radial buffer from Steens Mountain Loop Road. The parking area would be located at W.M., T.33S., R.33E., sec. 3, NE¼. Overnight camping would not be allowed.
- e. *(New) Kueny Canyon Recreation Site*: Develop a new dispersed recreational site named Kueny Canyon Recreation Site (less than an acre). This site would be located on private lands located in W.M., T.33S., R.32E., sec. 30, SE¼. A public easement is required from the landowner prior to any improvements. Also, an approach permit would be acquired from the Oregon Department of Transportation to develop an access point off Highway 205. The work would be accomplished by heavy machinery (such as a dozer or road grader). No campsites would be developed; however, overnight camping would be allowed.

H. Alternative D – Proposed Action: Full Development

Alternative D includes all features of Alternative C and full development of facilities and activities of recreation management as guided by the CMPA RMP/ROD, Steens Mountain Wilderness and WSRs Plan, TP, and the TMP. This alternative does not include any road/way motorized closures. See Map Alternative D and Actions and Design Features. Refer to maps Alternative D, and Alternative D (Map 1).

³ Levi Brinkley was born and raised in Harney County with his three other brothers. After working as a firefighter at Malheur National Forest Service in Burns, Oregon he went to work for the Prineville Hotshots. He and thirteen others were killed on July 6, 1994, on Storm King Mountain (South Canyon Fire) in Glenwood Springs, Colorado.

1. Steens Mountain Back Country Byway and Transportation
 - a. *Gate #5*: Relocate Gate #5 approximately 2 miles to the west in W.M., T.33S., R.32E., sec. 21, NW¼ on South Loop Road, west of the junction of Burnt Car Road. Boulders would be placed to prevent cars from going around the gate.
 - b. *(New) West Side Spring Gate*: Install a new gate in W.M., T.35S., R.34E., sec. 8, NE¼, to prevent unauthorized vehicles into wilderness.
 - c. *(New) Kiger Ridge Road Gate*: Install a new gate next to the cattleguard located in T.33S., R.33E., Section 2, NW¼. The gate would allow BLM to manage motorized access in conjunction with seasonal road closures. Monitoring of Kiger Ridge Road would assist in determining when this gate would be opened seasonally.

2. Winter Recreation

Winter Recreation would be managed as described under Alternative C including the winter recreational areas as described below.

- a. *(New) Roaring Springs Ranch (RSR) Motorized Winter Recreation Access*: Provide a new area for snowmobilers on RSR private lands. Snowmobilers would off-load on South Loop Road, at the snow line and proceed down Lauserica Road to RSR private lands. Snowmobilers would submit an application. If authorized, a permit would be issued.

Snow poles would be placed to identify the location of Lauserica Road and RSR to identify play area on private lands. The BLM and RSR would enter into a CMA to allow snowmobilers access to private lands for recreation.

The BLM would authorize up to four permits/keys to access South Loop Road on a first-come/first-served basis for motorized winter recreation. The number of permits would be limited to 30 per month between December and February and 60 per month between March and May.

- b. *South Loop Road Winter Recreation*: South Loop Road Winter Recreation proposal would provide additional winter recreation opportunities by allowing over-the-snow machines (i.e. snowmobiles, snow tracks, and jeeps) access to South Steens Campground via South Loop Road. Over-the-snow motorized vehicles would be restricted to use of South Loop Road only. Recreationists would submit an application. If authorized, permits would be issued on a first-come/first-served basis for both non-motorized and motorized winter recreation not to exceed issuance of four permits/keys at any given time. The number of permits would be limited to 30 per month between December and February and 60 per month between March and May.

3. Special Recreation Permits: Same as Alternative A.
4. Information, Signing, and Interpretation

This alternative includes all actions described under Alternative C in addition to:

- a. *(New) South Loop Kiosk:* A kiosk on South Loop Road, located at W.M., T.33S., R.32E., sec. 7, SE¹/₄, would be installed displaying a map and providing additional interpretation and recreational opportunities.

5. Developed Campgrounds (Fee Campgrounds)

This alternative includes all actions described under Alternative C. In addition, it would include:

- a. *(New) Penland Wilderness Recreation Site:* Develop a new recreation site named Penland Wilderness Recreation Site, located in WM. T.35S., R.33E., sec 15. At this site, a parking area would be developed to accommodate pick-ups with horse trailers (approximately 5 acres). A road approximately ½ mile long, from Penland Road to the parking area, would be constructed. This road would be approximately 12 feet wide to accommodate ingress and egress of vehicles pulling trailers, would be surfaced with aggregate material, and maintained to Maintenance Intensity 3. A fence would be placed around the perimeter of the parking area, with a cattleguard at the road entrance and a panel gate, to prevent livestock from accessing the area. Heavy equipment would be used to create the parking area and road.

Adaptive Management: Over time, BLM may construct a developed campground (fee campground) in stages to meet the demand of visitor use. This would be determined through monitoring of traffic counters, trail registrations, and amount of human debris. The BLM would construct the campground in the following stages: 1) five campsites with picnic tables, fire rings, livestock corral or hitching post would be developed, 2) a vault toilet and 50-foot round pen would be installed; and 3) a well would be drilled for potable water and recreational stock. Monitoring of visitor use would be through traffic counters, visitor register forms, and BLM observations.

- b. *(New) Pike Creek Recreation Site:* A parking area would be developed to accommodate up to four pick-ups with horse trailers surfaced with aggregate material (approximately 5 acres). A road approximately 1/8 mile long, to the parking area, would be constructed to a Maintenance Intensity 3. A fence would be placed around the perimeter of the parking area.

Adaptive Management: The BLM may construct a campground in stages to meet the demand of visitor use (monitoring would be through traffic counters, trail registrations, and amount of human debris). The BLM would construct the

campground in the following stages: 1) develop five campsites with picnic tables, fire rings, livestock corral or hitching post, 2) install a vault toilet, 3) construct a 50-foot round pen, and 4) drill a well for potable water and recreational stock.

6. Dispersed Campgrounds (Non-fee Sites)

Developed Campgrounds under this alternative would be the same as described under Alternative C.

7. Overlooks and Other Points of Interest

This alternative includes all actions described under Alternative C in addition to:

- a. *(Re-install) Cold Spring Development:* The SMAC along with Back Country Horsemen have recommended this spring development be re-installed for the purpose of fostering historical recreational use.

Cold Spring Development is located in W.M., T.33S., R.32.75E., sec. 21 next to Cold Spring Cabin. The headbox, located in wilderness, would be replaced and the water allowed to flow down the natural drainage ditch across Cold Spring Road into an existing overflow pond within the Cold Spring Road buffer. The overflow pond, which is outside Steens Mountain Wilderness, would be enlarged. See Appendix H for the Minimum Requirement Decision Guide on maintenance of the headbox.

Prior to the Steens Act, Cold Spring Development was a functioning man-made spring development located on private lands. The BLM acquired the private lands through a land acquisition in 1986. This spring had a headbox with a pipeline running to a trough and was developed to provide water for livestock grazing and domestic water for Cold Spring Cabin.

Cold Spring Development was in existence when the area was designated as a WSA prior to its designation as wilderness. During the WSA inventory, it was determined the project did not take away from the naturalness characteristic of wilderness.

In 2004, BLM removed the spring development except for the headbox. Since then, recreationists such as Back Country Horsemen, High Desert 4-Wheelers, and individual hunters and hikers have expressed the need for reestablishment of this spring development.

- b. *(New) WJMA Toilet:* Install a vault toilet at the WJMA parking area, located in W.M., T.32S., R.32.75E., sec. 29.
- c. *(New) South Steens Loop Road Entrance Toilet:* A vault toilet would be installed near the vicinity of Highway 205, along South Steens Loop Road located at W.M., T.33S., R.32E., sec. 8.

- d. *(New) Turkey Foot Toilet:* A vault toilet would be installed at the intersection of North Loop Road, East Rim View Point Road and Steens Summit Road, in W.M., T.33S., R.33E., sec. 24, NE. This location was chosen because of human waste being left at the overlooks and surrounding areas.
- e. *(New) Riddle Brothers Pipeline Extension and Pump House:* The Riddle Brothers Pipeline Extension would provide potable water at Riddle Brothers Historic Ranch for the volunteer camp host(s) at the Caretaker Cabin and to provide water for irrigating the lawns at Riddle Brothers Historic Ranch. The pipeline would extend from Riddle Brothers Well, near Clemens Place, and follow Cold Spring Road for approximately 4,750 feet. Pipeline deemed safe for delivering potable water would be buried up to 3 feet deep with installation of 3 frost-free hydrants. The pipeline would be in W.M., T.33S., R.32.75E., sec. 31. See Appendix I for Section 7(a) of the Wild and Scenic Rivers Act on Riddle Brothers Pipeline Extension and Pump House.

An 8-foot by 8-foot pump house would be constructed of a wood frame building with a concrete slab foundation in W.M., T.33S., R.32.75E., sec. 31.

8. Trails and Trailheads

This alternative includes all actions described under Alternative C in addition to:

- a. *(New) Pike Creek Trail Extension 2 (Maintenance Intensity 3 Trail):* Two connector trails would be constructed, each approximately $\frac{3}{4}$ -mile long. The trails would connect the proposed Pike Creek Parking Area to Pike Creek and Dry Creek Trails. The proposed trails would be located in W.M., T.34S., R.34E., sec. 29 and 32.
- b. *(New) Indian Mud Loop Trail (Maintenance Level 1):* A two-mile long trail would be constructed to create a loop trail beginning and ending at South Steens Campground. The trail would follow Big Indian Creek Trail for about one mile, then cross country to a closed two-track road to Mud/Ankle Creek Trail back to South Steens Campground. The construction of the new trail portion would be located in W.M., T.34S., R.32.75E., sec. 2, 9 and 10.
- c. *(New) Fred Riddle Trail (Maintenance Intensity 1):* The Fred Riddle Trail would be a loop trail approximately 12.75 miles long. The trail would be located in W.M., T.34S., R.32.75E., Sec 4, T.33., R.32.75E., Section 22-24, 26-28, 32 and 33, T.33S., R.33E., Sections 6 and 8. Starting at one of the South Steens Campgrounds, the trail would follow Little Blitzen Trail, to the High Desert Trail, to a closed two-track road, to Cold Spring Road, from Cold Spring Road to Nye Trail, from Nye Trail back down Little Blitzen Trail, and then finally back to the campground.

- d. *(New) Three Mile Creek Trail (Maintenance Intensity 3)*: The Three Mile Creek Trail would be approximately 2 to 2 ½ miles long located in T.35S., R.32E., Section 24, 25, and 26. The trail starts out at the proposed Three Mile Recreation Site, from Alternative C, to an existing back country camping site screened from Highway 205. A public easement or a CMA would be required from the landowner prior to any improvements being made.
- e. *(New) Kueny/Black Canyon Trails (Maintenance Intensity 1)*: The Kueny/Black Canyon Trails would be approximately seven miles long starting at the Kueny Canyon Recreation Site. From the proposed Kueny Recreation Site, a recreationist would be able to hike up Kueny Canyon or Black Canyon. The trails would both be located in T.33S., R.32E., Section 21, 27, 28, 29 and 30.
- f. *(New) Huffman Trail (Maintenance Intensity 1)*: The Huffman Trail would be approximately 23.5 miles long, located in W.M., T.35S., R.32., sec. 13, 14, 23, 24, 25, and 26; W.M., T.35S., R.32.5E., sec. 2-11 and 15-18; W.M., T.35S., R.32.75E., sec. 1, 5, 7 and 8; W.M., T.34S., R.32.75E., sec. 14, 22, 23, 27, 28, 33, and 36.

The Huffman Trail goes from Three Mile Creek Parking Area to South Steens Campground. Starting from the proposed Three Mile Parking Area follow Three Mile Creek to an old CCC Road to the top of Catlow Rim. From Catlow Rim the trail goes cross-country to the head waters of Home Creek, crossing private lands, over to Lauserica Road. From Lauserica Road drop down to the upper portions of Donner Und Blitzen River and tie into Mud/Ankle Creek Trail to South Steens Campground. A CMA or an easement would be required from the private landowner for this trail.

I. Alternative E – Limited Development and Dispersed Recreation

During the CRP planning process and in response to a complaint filed by the Oregon Natural Desert Association in summer 2011 to U.S. District court regarding the TMP, the BLM reviewed 139 road segments totaling 108.22 miles. The review was documented on Route Analysis Forms and included a map of the road segment along with a NAIP map. The BLM then made a proposal to District Court regarding the level of maintenance to be performed on each road. On August 25, 2011, District Court Judge Paul Papak adopted BLM's proposal in full. Some of the roads reviewed during this process are analyzed in this alternative.

Alternative E includes the proposed cross-country Oregon Desert Trail which primarily follows the existing Desert Trail across the CMPA. The only difference is a section of route within the Blitzen River WSA (T.32S., R.32E., sec. 12 and T.32S., R.32.5E, sec 18) which traverses cross country from West River Road to Malheur National Wildlife Refuge (NWR).

This alternative was derived from public comments related to the TMP and CRP. Refer to maps Alternative E, Alternative E (Map 1), Alternative E (Map 2), Alternative E (Map 3), and Alternative E (Map 4).

- It describes a non-motorized system incorporating closure of roads and ways and converting them to trails.
- All trails within WSAs would be closed to motorized and mechanized public use (e.g. mountain bikes).
- Trails in ecologically sensitive areas would be subject to seasonal closure or permanent closure, if deemed necessary, to protect those resources.
- Maintenance of routes would only occur if necessary to prevent resource degradation.

Proposed road closures would be closed to motorized public access but would remain open to administrative, permittee, landowner, and contractor access as necessary for these particular uses.

The closing of certain proposed routes would subsequently cause additional non-proposed routes to be closed as a consequence. On Alternative E Map these are identified in the legend as “Indirect Road Closure”.

Approximate number of miles of direct road closures:	95.1 miles
Approximate number of miles of direct way closures:	39.7 miles
Approximate number of miles of indirect road closures:	23.0 miles
Approximate number of miles of indirect way closures:	<u>6.0</u> miles

Total number of proposed roads/ways to be closed: 134.8 miles.

Roads converted to trails would be open to administrative motorized use by BLM personnel, contractor, permittees, and private landowner. The proposed closed roads would only be maintained for resource concerns on a case-by-case basis as described under Alternative A.

The roads were categorized into geographic locations on Map E. The following roads/ways proposed for closure can be seen in Alternative E:

Map 1:

<u>Name</u>	<u>Legal Description</u>	<u>(Nearest Tenth) Mileage</u>
<i>Mahon Reservoir, Quail Creek Road</i>	W.M., T. 29 S., R. 36 E.,	sec. 16.
<i>Mary's Lake Road</i>	W.M., T. 29 S., R. 36 E.,	sec. 17.
<i>Smyth Ranch Road</i>	W.M., T. 30.5 S., R. 34 E.,	sec. 26; sec. 35; sec. 36.
	W.M., T. 30 S., R. 35 E.,	sec. 29; sec. 32.
	W.M., T. 31 S., R. 35 E.,	sec. 05; sec. 06; sec. 07.
	W.M., T. 31 S., R. 34 E.,	sec. 01; sec. 12.
<i>Coyote Creek Road</i>	W.M., T. 30., R. 35 E.,	sec. 05; Sec. 06; Sec. 07; sec. 08; sec. 09; sec. 17; sec. 18; sec. 20; sec. 29.

The following roads have no common name associated with them.

<u>Legal Description</u>	<u>(Nearest Tenth) Mileage</u>
W.M., T. 29 S., R. 36 E.,	sec. 15; sec. 16; sec. 17; sec. 20; sec. 21; sec. 28.
W.M., T. 30 S., R. 35 E.,	sec. 05; sec. 06; sec. 07; sec. 08; sec. 09; sec. 17;

	sec. 18; sec. 20; sec. 29; sec. 33; sec. 34.
W.M., T. 30.5 S., R. 34 E.,	sec. 25; sec. 26; sec. 36;
W.M., T. 31S., R. 34 E.,	sec. 01. sec. 12; sec. 13.
W.M., T. 31 S., R. 35 E.,	sec. 04; sec. 05.

The following roads/ways are being proposed for closure. To see the roads in better detail see Alternative E,

Map 2:

<u>Name</u>	<u>Legal Description</u>	<u>(Nearest Tenth) Mileage</u>
<i>Knox Spring Road</i>	W.M., T. 31 S., R. 32.5 E., sec. 22; sec. 25; sec. 26; sec. 27; W.M., T. 31 S., R. 32.75 E., sec. 30.	3.9
<i>Witzel Spring Road</i>	W.M., T. 31 S., R. 32.7 5E., sec 20; sec. 21; sec. 28; sec. 30; sec. 31; sec. 32; sec. 33.	
<i>Dust Bowl Willow Spring Road</i>	W.M., T. 31 S., R. 32.75 E., sec. 23; sec. 24.	1.1
<i>Kern Res Road</i>	W.M., T. 31 S., R. 32.75 E., sec. 08; sec. 09; sec. 10; sec. 14;	

		sec. 15; sec. 24.	4.4
<i>Kiger Ridge Road</i>	W.M., T. 32.5 S., R. 33 E.,	sec. 23; sec. 26; sec. 35.	
	W.M., T. 33S., R. 33 E.,	sec. 01; Sec. 02.	
	W.M., T. 32 S., R. 33 E.,	sec. 27; sec. 34.	
<i>East Fish Creek Road</i>	W.M., T. 32 S., R. 32.5 E.,	sec. 09; sec. 15; sec. 16; sec. 21; sec. 22; sec. 26; sec. 27; sec. 28.	4.8
<i>Dry Creek Road</i>	W.M., T. 32 S., R. 32 E.,	sec. 28; sec. 29.	
<i>Solomon Canyon Road</i>	W.M., T. 32S., R. 32 E.,	sec. 32; sec. 33.	
<i>East Refuge Road</i>	W.M., T. 32 S., R. 32.5 E.,	sec. 02; sec. 03; sec. 04.	

The following roads have no common name associated with them.

<u>Legal Description</u>	<u>Mileage (nearest tenth)</u>
W.M., T. 32 S., R. 32.5 E.,	sec. 01; sec. 02; sec. 11; sec. 12.
W.M., T. 32 S., R. 32.75 E.,	sec. 07.
W.M., T. 31 S., R. 32.5 E.,	sec. 35.
W.M., T. 30 S., R. 32 E.,	sec. 35. sec. 36.

W.M., T. 31 S., R. 32.75 E., sec. 02;
sec. 03;
sec. 04;
sec. 05;
sec. 08;
sec. 10;
sec. 15;
sec. 20;
sec. 21;
sec. 22;
sec. 23;
sec. 25;
sec. 26;
sec. 27;
sec. 28;
sec. 33;
sec. 34.

W.M., T. 32 S., R. 32.75 E., sec. 02;
sec. 03;
sec. 11;
sec. 14;
sec. 15;
sec. 23;
sec. 26;
sec. 35;
sec. 36

W.M., T. 33S., R., 32.75 E., sec. 01.

W.M., T. 32 S., R. 32 E., sec. 26;
sec. 27;
sec. 28;
sec. 33;
sec. 35;
sec. 36.

W.M., T. 32 S., R. 32.5 E., sec 31.

W.M., T. 33 S., R. 32 E., sec. 01;
sec. 02;
sec. 03;
sec. 04.
sec. 09;

sec. 10;
 sec. 16;
 sec. 21.

The following roads/ways are being proposed for closure. To see the roads in better detail see Alternative E,

Map 3:

		(Nearest Tenth)
<u>Name</u>	<u>Legal Description</u>	<u>Mileage</u>
<i>Cold Spring Road</i>	W.M., T. 33 S., R. 32.75 E.,	sec. 17; sec. 18; sec. 19; sec. 20; sec. 21; sec. 22; sec. 23; sec. 24; sec. 29; sec. 30; sec. 31; sec. 32.
	W.M., T. 33 S., R. 33 E.,	sec. 05.
<i>Riddle Brothers Ranch Road</i>	W.M., T. 33 S., R. 32.75 E.,	sec. 31; sec. 32.
	W.M., T. 34 S., R. 32.75 E.,	sec. 04; sec. 05.
		2.3
<i>Three Springs Road</i>	W.M., T. 34 S., R. 32.5 E.,	sec. 12; sec. 13; sec. 25;
	W.M., T. 34 S., R. 32.75 E.,	sec. 07; sec. 18; sec. 19; sec. 30; sec. 31.
	W.M., T. 35 S., R. 32.5 E.,	sec. 01; sec. 02; sec. 11.

Tombstone –

Burnt Car Road W.M., T. 33S., R. 32.5E., sec 20.

The following roads have no common name associated with them.

Legal Description Mileage (nearest tenth)

W.M., T. 33 S., R. 32.75 E., sec. 30;
sec. 31.

W.M., T. 33 S., R. 32.5 E., sec. 20;
sec. 21;
sec. 28;
sec. 33;
sec. 34.

W.M., T. 34 S., R. 32.5 E., sec. 02
sec. 03;
sec. 04;
sec. 09;
sec. 19;
sec. 20;
sec. 21;
sec. 28;
sec. 29;
sec. 31;
sec. 33.

W.M., T. 34 S., R. 32.75 E., sec. 05;
Sec. 06;
Sec. 31.

W.M., T. 33 S., R. 32.5 E., sec. 20;
sec. 21;
sec. 28;
sec. 33;
sec. 34.

W.M., T. 35 S., R. 32.75 E., sec. 05
sec. 06
sec. 07

The following roads/ways are being proposed for closure. To view them in detail see Alternative E,\

Map 4:

Name	Legal Description	(Nearest Tenth) Mileage
<i>Weston Basin Road</i>	W.M., T. 34 S., R. 34 E., sec. 30.	1.0
<i>Indian Creek Road</i>	W.M., T. 34 S., R. 33 E., sec. 24. W.M., T. 34 S., R. 34 E., sec. 30 sec. 31	
<i>Carlson Creek Road</i>	W.M., T. 36 S., R. 32.75 E., sec. 12.	0.4

The following roads have no common name associated with them.

Legal Description	(Nearest Tenth) Mileage
W.M., T. 34 S., R. 34 E., sec. 20.	
W.M., T. 34 S., R. 34 E., sec. 19; sec. 20; sec. 30.	
W.M., T. 34 S., R. 33 E., sec. 24 sec. 25; sec. 26.	1.2

J. Alternative Considered but not Analyzed in Detail

The following components were considered during alternative development, but not analyzed in detail as described below. The components in and of themselves would not constitute an alternative for this CRP.

1. *Cottonwood Loop Trail:* This proposed loop trail would have connected Little Blitzen Trail to High Desert Trail. It would have followed closed roads south of Fish Creek and Donner und Blitzen and joined Wet Blanket Trail. After an on-the-ground review, water was not available during hot, dry summer months for hikers or recreational stock animals. In addition, the route did not lead to an outstanding point of interest.
2. *Desert Meadows Loop Trail:* A historical two-track road, approximately four miles long, which loops through Riddle Brothers Ranch Historic District, would have been designated as the Desert Meadows Loop Trail. The trail would be located in W.M., T.33S., R.32.5E., sec. 25, 26, 28 and 29.; W.M., T.33S., R.32.75E., sec. 19 and 30. After an on-the-ground review, water was not available during hot, dry summer months for hikers or recreational stock animals to drink. Mainly, the route does not lead to any outstanding points of interest. Even though

the historical two-track road would not be designated as a trail, it can still be used by hikers or equestrian riders.

3. *Kiger Gorge Overlook, East Rim Overlook, and Cold Spring Vault Toilet:* The proposal was to install vault toilets at Kiger Gorge Overlook, East Rim Overlook and Cold Spring Road. There are other strategically proposed locations for vault toilets within the CRP EA alternatives.
4. *Equestrian Trailhead Parking:* This proposal would have developed an equestrian trailhead parking area near Page Springs Campground for an access point into Steens Mountain Wilderness. Due to limited BLM-managed lands in the area and the size requirements of an equestrian trailhead parking area, no suitable area was found.
5. *Turn-around spots on the Steens Mountain Loop Road:* This proposal would have added turn-around spots on Steens Mountain Loop Road for vehicles. There are approximately 34 spots along Steens Mountain Loop Road that allow for vehicles to turn around. The number of spots was determined to be sufficient.
6. *Grove Creek Springs Development:* Scoping comments suggested BLM redevelop the Grove Creek Springs Development located in W.M., T.32.5S., R.33E., sec. 32, within Steens Mountain Wilderness. The BLM has an existing water right on Grove Creek Springs, that was developed in 1981 with a headbox, pipe and trough for the primary benefit of wildlife in the proposed Little Blitzen Gorge WSA. The associated riparian area was protected by a BLM four-wire fence.

In 2004, BLM completely removed the spring development. Recent field observations at Grove Creek Springs have shown water is no longer flowing from this spring. Because of the lack of water flow and the fact the spring development was in wilderness, Grove Creek Springs reconstruction is no longer a viable water source.

Table 1: Comparison of Alternatives Relative to Specific Subjects.

Subject	Alt A No Action	Alt B – Expanding Existing Facilities	Alt C – Limited	Alt D - Proposed Action (Full Development)	Alt E – Limited Development and Dispersed Recreation
1. Steens MTN BCB and other Roads and OHV Issues	Roads would be managed as described in the RMP and TMP.	<p>Same As Alternative A, plus,</p> <p>Prior to Gate #5 a sign to inform visitors if the gate is closed or open.</p> <p>Roads - Total miles of roads/ways to be closed is 23.4 miles. And 0.6 miles of an existing route would be designated as a road.</p>	<p>Same as Alternative A plus,</p> <p>Gate #5 would be relocated 300 yards west of its present location and expand the road an extra 50 feet wide to provide for parking.</p> <p>Roads/Ways would be the same as Alternative A.</p>	<p>Same as Alternative A plus,</p> <p>Gate #5 would be relocated west of the Burnt Car Road. Boulders would be placed to prevent cars from going around the gate.</p> <p><i>New Gate</i> A new gate would be installed in W.M., T.35S., R.34E., section 8.</p> <p>Kiger Ridge Road Gate would be installed across Kiger Ridge Road.</p> <p>Other Roads would be the same as Alternative A.</p>	<p>The total number routes (roads/ways) to be closed are 129.4 miles.</p> <p>direct road closures 93.2 miles</p> <p>direct way closures 36.2 miles</p> <p>indirect road closures 39.1 miles</p> <p>indirect way closures 7.4 miles</p>
2. Winter Recreation	Over-the-snow machines would be allowed to drive on the North Loop Road to the Kiger Gorge Parking Area. Non-motorized Recreationalists do not need to obtain a permit.	Same as Alt A.	Same as Alternative A except, BLM would increase the maximum permits allowed to eight on a first-come, first-serve basis.	Same as Alternative C plus, RSR and BLM would enter into a coop-agreement to allow over-the-snow machines access to private lands via the Lauserica Road. Allow for motorized and non-motorized winter recreation on the South	Same as Alternative A

Subject	Alt A No Action	Alt B – Expanding Existing Facilities	Alt C – Limited	Alt D - Proposed Action (Full Development)	Alt E – Limited Development and Dispersed Recreation
				Loop Road to the South Steens Campgrounds.	
3. SRPs	SRPs are authorizations which allow for recreational uses of the public lands and related waters. There is a limit of five hunting and guiding permits as per the Needs Assessment, August 2011.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A
4. Information and Signing	Continue to maintain and update information in existing kiosks and brochures. Signs would be place as needed for public safety and information.	Same as Alternative A plus, Interpretive programs would be presented at Page Springs Campground and Riddle Brothers Ranch.	Same as Alternative B plus, Install a kiosk in Fields, Oregon.	Same as Alternative C plus, Install a kiosk on the South Loop Road..	Same as Alternative A
5. Developed Campgrounds (Fee Campgrounds)	Continue to maintain existing campgrounds as they currently exist while providing for health and safety of the public.	Same as Alternative A plus: <i>Page Springs Campground</i> - An outdoor interpretive seating area would be developed. Existing cottonwood trees would be replaced. <i>Fish Lake Campground</i> - Two camp sites would have accessible facilities. And camp sites #21 – #23 designated as tent camping only. The host site would be improved.	Same as Alternative B plus: <i>Fish Lake</i> - the horse corral would be removed. <i>Jackman Park</i> - would be designated for tent camping only. <i>Mann Lake</i> - would be developed into a fee site. <i>North Steens Equestrian</i> - A new equestrian campground would be constructed.	Same as Alternative C	Same as Alternative A

Subject	Alt A No Action	Alt B – Expanding Existing Facilities	Alt C – Limited	Alt D - Proposed Action (Full Development)	Alt E – Limited Development and Dispersed Recreation
		<p><i>Jackman Park</i> - Tent camping would be encouraged.</p> <p><i>South Steens Family</i> - Two camp sites would have accessible facilities. The camp host site would be improved. The existing day use parking area would be enlarged.</p> <p><i>South Steens Equestrian</i> - A day use parking area would be created. A 50 foot round pen would be added.</p>			
6. Dispersed Recreation Sites (Non Fee Campgrounds)	Continue to maintain dispersed recreation sites as they currently exists while providing for health and safety of the public.	Same as Alternative A plus, <i>Mann Lake Recreation Site</i> - up to five camp sites would be developed with picnic tables, and fire rings.	Same as Alternative B plus, <i>Home Creek Recreation Site</i> - Develop up to five camping sites and one vault toilet. One and a half miles of road would be improved along with installing a cattleguard. <i>Kueny Canyon Recreation Site</i> - develop a parking area on private lands. <i>Three Mile Creek Recreation Site</i> - Develop a parking area.	Alternative C plus: <i>Penland Wilderness Rec Site</i> - develop a parking area. <i>Pike Creek Rec Site</i> - develop a parking area.	Same as Alternative A
7. Overlooks and Other	The overlooks and other points of interests would be	Same as Alternative A plus:	Same as Alternative B plus,	Same as Alternative C plus:	Same as Alternative A

Subject	Alt A No Action	Alt B – Expanding Existing Facilities	Alt C – Limited	Alt D - Proposed Action (Full Development)	Alt E – Limited Development and Dispersed Recreation
Points of Interests	maintained as they are currently exists.	<p><i>Kiger Gorge Overlook and East Rim Overlook</i> - The existing access paths upgraded to an accessible path. The parking areas would be enlarged.</p> <p><i>Riddle Brothers Historic District Ranch</i> - Public motorized access would be increased to five days (Wednesday thru Sunday).</p>	<p><i>North Loop Road Toilet</i> - Install a vault toilet next to Fish Lake.</p> <p><i>Cold Spring Parking Area</i> – Develop a parking area.</p>	<p><i>Cold Spring</i> - Reconstruct spring development.</p> <p><i>WJMA Toilet</i> – Install a vault toilet in the parking area of the WJMA.</p> <p><i>South Steens Loop Road Entrance Toilet</i> - A vault toilet installed near Highway 205.</p> <p><i>Turkey Foot Toilet</i> - A vault toilet would be installed.</p> <p><i>Riddle Brothers Pipeline Extension and Pump House</i> – Lay pipeline, from the existing well to provide potable water at Riddle Brothers Ranch. Also, a pump house would be constructed.</p>	
8. Trails and Trailheads	<p>Continue to maintain the designated trails within the Steens CMPA at Maintenance Level 3. Except the High Desert Trail.</p> <p><i>Little Blitzen Trailhead Parking Area</i> - The parking would be maintained to provide public parking.</p>	<p>Same as Alternative A, plus,</p> <p><i>Kiger Gorge Trail</i> – Reduce Kiger Gorge Trail maintenance to a level 1.</p> <p><i>Nye Trail and Wet Blanket Trail</i>- Reconstruct portions of the trails.</p>	<p>Same as Alternative B plus,</p> <p><i>Pike Creek Trail Ext 1</i> - Designate an old mining two-track into a trail that is one mile long.</p> <p><i>Levi Brinkley Memorial Trail</i>- Designate a closed two track road that runs along the Little Blitzen River to be called the Levi</p>	<p>Same as Alternative C, plus,</p> <p><i>Pike Creek Trail Ext 2</i> - Two connector trails would be constructed, each 3/4 mile long.</p> <p><i>Indian Mud Loop Trail</i> - A connector trail 2 miles long would be constructed creating a loop trail.</p>	

Subject	Alt A No Action	Alt B – Expanding Existing Facilities	Alt C – Limited	Alt D - Proposed Action (Full Development)	Alt E – Limited Development and Dispersed Recreation
			Brinkley Memorial Trail (4.5 miles)	<p><i>Fred Riddle Trail</i> – designating 12.75 miles long trail.</p> <p><i>Three Mile Creek Trail</i> – Construct 1 ½ to 2 miles of trail.</p> <p><i>Kueny/Black Canyon Trails</i>- Designating 7 miles.</p> <p><i>Huffman Trail</i> (Maintenance, Level 1) – Designating 23.5 miles of trail.</p>	

CHAPTER III. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

An Interdisciplinary Team (IDT) has reviewed and identified issues and resources affected by the alternatives. The following table summarizes the results of that review. Affected resources/issues are in bold.

Table 2: Resources/Issues Table

Resources/Issues	Status	If Not Affected, why? If Affected, Reference Applicable EA Section
Areas of Critical Environmental Concern (ACECs)	Affected	See Chapter III.A.16.
Air Quality (Clean Air Act)	Not Affected	ODEQ is responsible for air quality permit requirements at facilities and for operations in Oregon. The ODEQ does not require air quality permits for existing operations within the project area. The dust produced from any construction and vehicle use would be intermittent and not measurable.
American Indian Traditional Practices	Affected	See Chapter III.A.1.
Cultural Heritage	Not Affected	See project design features Chapter II.D. All proposed ground disturbing activities in any of the project alternatives would be subject to prior cultural resource survey. Project direct or indirect effects to sites found in those surveys under any of the alternatives would be mitigated through various means such as project re-design and avoidance, scientific evaluation, surface collecting and/or excavation in consultation with the Oregon SHPO.
Environmental Justice (Executive Order 12898)	Not Present	The Proposed Action and alternatives would not have disproportionately high and adverse human health or environmental effects on populations and low-income populations as such populations do not exist within the project area.
Farmlands (prime or unique)	Not Present	Prime or unique farmlands do not exist in this area.
Fisheries	Not Affected	The modifications described under the alternatives (road closures, parking modifications, etc.) could increase the erodibility of some surfaces leading to increased sediment deposition into streams, but the effects are expected to be short term (1-2 years) and not measurable.
Flood Plains (Executive Order 13112)	Not Present	There is no occupancy or modification of flood plains and no risk of flood loss under the proposed action or alternatives.
Grazing Management and Rangelands	Affected	See Chapter III.A.4.
Hazardous or Solid Waste	Not Present	Concerns have not been disclosed.
Lands and Realty	Affected	See Chapter III.A.5.
Migratory Bird Treaty Act (Executive Order 13186)	Not Affected	Designating trails that are already existing on the land scape and closing roads will not have an effect to Migratory Birds or their habitat. Any slight expansion of existing facilities and the continued use of dispersed camping would already be within the normal use patterns for Migratory Birds.
Noxious Weeds (Executive Order 13112)	Not Affected	By following standard operating and standard design features in Chapter II.E the goals of Executive Order 13112 would be met.
Paleontology	Not Present	Paleontological resources do not occur in the project area.
Recreation and Visual Resources	Affected	Recreation - See Chapter III.A.7. Visual Resources - See Chapter III.A.8.

Resources/Issues		Status	If Not Affected, why? If Affected, Reference Applicable EA Section
Riparian Zones, Wetlands, and <u>Water Quality (Executive Order 11990)</u>		Not Affected	Riparian Zones - Consequences of the proposed actions would have similar effects to the No Action. Water Quality (Executive Order 11990) - Construction activities and soil disturbance could increase the entry of sediment into streams, however the effects are expected to be localized to construction areas and short term (less than 1 year).
Social and Economic Values		Affected	See Chapter III.A.10.
Soils and Biological Soil Crusts		Affected	See Chapter III.A.11.
SSS Habitat	Wildlife	Affected	See Chapter III.A.12.
	Plants	Not Affected	See project design features Chapter II.D. There are no SSS species or designated critical habitat present in, or surrounding, any of the areas designated for disturbance.
	Fish	Affected	See Chapter III.A.13.
T/E Species or Habitat	Wildlife	Not Present	There are no T&E species or habitat present in the CRP project area.
	Plants	Not Present	See project design features Chapter II.D. Project direct or indirect effects to sites found in those surveys under any of the alternatives would be mitigated through various means such as project re-design and avoidance, scientific evaluation.
	Fish	Affected	See Chapter III.A.14.
Upland Vegetation		Affected	See Chapter III.A.15.
Wild Horses		Affected	Only Alternative E would have effects to wild horse management. Details of these effects are included in the Transportation Section See Chapter III.A.15.e.
Wild and Scenic Rivers (WSRs) / Wilderness		Affected	Wild and Scenic Rivers - See Chapter III.A.17. Wilderness - See Chapter III.A.18.
Wilderness Study Areas (WSAs)		Affected	See Chapter III.A.19.
Lands with Wilderness Characteristics		Affected	See Chapter III.A.20.
Wildlife		Affected	See Chapter III.A.21.
Transportation		Affected	See Chapter III.A.22.

A. Identified Resources/Issues

1. American Indian Traditional Practices

Affected Environment: American Indian Traditional Practices

It is clear American Indians visited the project area in ancient times and, in some cases, camped in villages during the spring, summer and fall. Prehistoric sites range from the simple scatter of waste flakes produced by ancient flint knappers to complex village sites with house features. Some sites such as rock cairns, arrangements of multiple rock cairns and cleared stone circles are more ritual or spiritual in nature. Because Indian people do not separate everyday economic activities from spiritual activities, all of the prehistoric sites in the project area had some element of being sacred when they were used millennia ago. Many of the resources found on the Steens such as year around water, edible roots, grasses and berries, and fish and game animals (especially at the high elevations during summer) naturally drew ancient Americans to the project area, as a part of their seasonal hunting, fishing and gathering activities, that sustained them for thousands of years. Modern use of the project area is not obvious; however, certain tribal families are known to have re-settled in the Diamond area after the dissolution of the Malheur Indian Reservation and dispersal to Yakama and other reservations. The Steens were visited at that time (early 20th century) for resource procurement activities. Steens Mountain is generally considered a sacred place by the Burns Paiute Tribe; however, no specific sacred geographic locations within the mountain are known by BLM personnel or managers. In recent comments to the North Steens Transmission Line Right-of-Way (ROW) Environmental Impact Statement (EIS), the Burns Paiute Tribe declared the mountain a sacred place but did not elaborate about specific locations where sacred activities take place. It is widely understood that such locations are not divulged.

Environmental Consequences: American Indian Traditional Practices

Effects Common to All Alternatives: American Indian Traditional Practices

It is not possible at this time to determine effects of each alternative or all alternatives to American Indian Traditional Practices in the project area because no specific traditional practice locations are known. One can only speculate about effects. All alternatives describe management actions to recreation sites, facilities, trails and vehicle use in the project area. None of these actions, under any alternative, are known to be in direct conflict with traditional cultural practices at this time. By way of example, construction of a gravel pit in the 1980s in another part of the District caused Burns Paiute root gatherers to abandon the area even though the roots were still plentiful in the gravel quarry location. The area was abandoned because the intrusion of the gravel pit produced sights and sounds not in harmony with the former

landforms and the sacred nature of the harvesting activity. To put it another way, the harvesting activity is not strictly utilitarian but connected to the spiritual realm in tribal culture. Any obvious alteration of a land form or new development that detracts from previous experiences or draws non-Indians into the area for other purposes during root gathering is an effect to a traditional practice. Until current traditional practice locations are known and effects on these locations quantified, assessing the effects of each alternative and cumulative effects are merely speculation.

a. *Alternative A – Maintaining Existing Facilities (No Action):
American Indian Traditional Practices*

Effects have not been divulged to Burns District cultural or management personnel over the last 18 years. The Burns Paiute Tribe has had a representative on the SMAC since 2001. Recreational effects on traditional practices have not been mentioned in that forum.

b. *Alternative B – Expanding Existing Facilities: American Indian
Traditional Practices*

Alternative B is not expected to affect traditional practices to a greater degree than Alternative A because possible traditional practice areas in the vicinity of existing recreation facilities may have already been abandoned or altered. Expanding existing recreational facilities would not increase their geographic foot print to a measureable degree.

c. *Alternative C – Limited Development: American Indian Traditional
Practices*

New developments in new geographic locations are expected to cause traditional uses in the vicinity of those locations to be abandoned. Alternative C is expected to have a greater effect on traditional practices than Alternatives A and B, respectively.

d. *Alternative D – Full Development (Proposed Action): American
Indian Traditional Practices*

Full development of recreation facilities in the project area is expected to have the greatest effect of any of the alternatives on traditional cultural practices if these practices occur at or nearby new facility locations.

e. *Alternative E – Limited Development and Dispersed Recreation:
American Indian Traditional Practices*

On its face, Alternative E appears to have the least effect on traditional practices than the other alternatives. However, limiting developed recreational areas and attempting to spread recreational use over a wider area than before, may have a greater effect on traditional practices than Alternatives A, B, C and D. If former use areas have been abandoned because of intrusive recreational developments, it stands to reason that traditional practices were moved to areas with little or no modern intrusion. Increasing dispersed recreation increases the chance that these replacement use areas would be affected by new recreational use.

Reducing the number and miles of open roads under this alternative could affect traditional economic and sacred practices by eliminating access to use areas.

2. Grazing Management

Affected Environment: Grazing Management

Within the CMPA, there are 20 allotments with 15 permittees, for a total of 39,711 AUMS. The following table displays the allotment name and permitted AUMs.

<u>Allotment Name</u>	<u>Permitted AUMs</u>
Serrano Point	500
Happy Valley	2,107
Frazier Field	1,906
Carlson Creek	688
Kueny Ranch FFR	36
Burnt Flat	3,863
Jenkins B Flat FFR	280
Riddle Mountain	3,095
Alvord	7,355
Stonehouse	1,772
Hammond	473
Hardie Summer	408
Mud Creek	590
Roaring Springs FFR	374
South Steens	9,577
Chimney	2,015
Krumbo Mountain	1,059
Ruby Springs	1,026
Lavoy Tables	1,653

Environmental Consequences: Grazing Management

Effects Common to All Alternatives: Grazing Management

The Cumulative Effects Analysis Area (CEAA) for livestock grazing management are those allotments in and around the CMPA. Past and present actions, such as those described in *Affected Environment Grazing Management*, have influenced the existing environment within the CEAA. Reasonably Foreseeable Future Action (RFFA)s in the CEAA that may contribute to cumulative effects to livestock grazing include: hunting and other recreational pursuits, ongoing maintenance of existing range improvements, wild horse utilization, periodic wild horse gathers to maintain horse numbers within the appropriate management level (AML), wildlife use, fire rehabilitation actions, ongoing noxious weed treatments, the North Steens Ecosystem Restoration Project, the North Steens Transmission Line ROW, and the Echanis Wind Development Project.

There will be cumulative effects to livestock grazing from the North Steens Ecosystem Restoration Project during times of operation. There would be effects to livestock grazing from the North Steens Transmission Line ROW and the Echanis Wind Development Project during construction.

a. *Alternative A – Maintaining Existing Facilities (No Action): Grazing Management*

Under Alternative A there would be no proposed actions and grazing management would not be effected.

b. *Alternative B – Expanding Existing Facilities: Grazing Management*

There would be no changes to grazing systems or AUMs from the implementation of Alternative B including proposed road closures.

c. *Alternative C – Limited Development: Grazing Management*

There would be no changes to grazing systems or AUMs from the implementation of Alternative C.

d. *Alternative D – Full Development (Proposed Action): Grazing Management*

There would be no changes to grazing systems or AUMs from the implementation of Alternative D.

e. *Alternative E – Limited Development and Dispersed Recreation:
Grazing Management*

Initially, there would be no affect to grazing management under Alternative E. However, as roads deteriorate over time and become impassable, the loss of two/four-wheel drive motorized access would cause permittees to spend more time conducting maintenance of range improvements, which include riparian pasture fences, pasture fence boundaries, reservoirs, and wildlife guzzlers. The permittee would be economically impacted by additional time requirements and in some cases by the need to hire packers for salt distribution and fence maintenance. Salt distribution may become economically prohibitive and salt deprivation would affect the animal's ability to convert forage to body weight, reduce milk production, and therefore, reduced calf weights at weaning. Magnesium deficiency is also a concern with limited access to salt which could result in grass tetany and death.

The reservoir and wildlife guzzler maintenance is critical for livestock distribution across pastures and available water sources for wildlife. Roads closed to maintenance would result in a loss of access with the equipment (e.g. dozer) needed to maintain these range improvements. Reservoirs are critical for livestock distribution in this area. There are many areas within the CMPA where water is a limited resource which makes water sources vital to livestock, wild horse, and wildlife use. The wildlife guzzlers also are fundamental in providing water for wildlife in remote arid areas.

Fences play a vital role in livestock and wild horse management. Routine maintenance of fences would be difficult to accomplish under this alternative. Materials such as barbed wire, steel posts and wire stretchers would necessitate use of more than one pack animal and could take several days to complete. There could be an economic impact to the permittee since the rider would also need skills to pack heavy bulky loads making packing dangerous. It is critical that fences are maintained on an annual basis to meet riparian management goals, objectives, and standards and guidelines. If fences are not effectively maintained, then livestock would over use riparian areas leading to a detriment to riparian and stream health.

3. Lands and Realty

Affected Environment: Lands and Realty

The CMPA has numerous roads within the road system that cross public and private lands without regard to ownership. The roads are expected to number

somewhere between 30 and 60, however this number is somewhat subjective in regards to whether some of the forks of the road are a different road, or a segment of a road. Percentages (less than 25 percent) of the roads have access easements or CMAs from the private landowners. Private lands are generally not well marked within the CMPA, so as a general rule, it is hard for public land users to determine if they are on private or public parcels.

The following roads have valid existing easements associated with them, or lead to valid existing easements.

- The no name road highlighted in red on Alternative E, Map 2 leads to a private parcel in W.M., T. 33 S., R. 32 E., section 10, where the federal government has a valid existing easement.
- The no name roads highlighted in red on Alternative E, Map 3, crosses private land in W.M., T. 33 S., R. 32.5 E., section 21, that have valid existing easements across them.
- The no name road highlighted in red on Alternative E, Map 4 crosses private land in sections W.M., T. 34 S., R. 34 E., 21 and 20, that have a valid existing easement across them.

Easements that were acquired by the federal government represent a value to the federal government and were many times secured due to fire, emergency, public access or some other internal need for access across that parcel. If the road in question is closed, the easement may need to be released back to the private landowner.

Cold Spring Road and East Fish Creek Road, though they do not have valid ROWs on them, have been “cherry stemmed” out of the Wilderness by Congress when they designated the Steens Act in 2000. It is reasonable to assume Congress deemed it necessary for these roads to remain in use in spite of the Wilderness designation.

Environmental Consequences: Lands and Realty

Effects Common to All Alternatives: Lands and Realty

The BLM would seek to secure agreements with private landowners for increased access to Steens Mountain Wilderness for recreational purposes. These agreements may be an easement, a memorandum of understanding, or a CMA. Easements may be secured using monetary consideration, consideration in kind, or reciprocal ROW/easement, and the method used, would depend entirely on what is acceptable during negotiations between the private landowner and the BLM.

The current road system within the CMPA has over 30 sections that cross both private and public lands. Access easements and reciprocal

ROW/easements would be sought and secured whenever there is a willing landowner.

The BLM has identified certain areas to be targets for easement negotiation to increase public access. These “areas” are not defined geographically, but rather cover the entire CMPA. Since many of the areas identified for needed access are common to one private landowner, the “areas” are defined by the owner and would be sought in that manner if it is agreeable to the parties involved.

a. *Alternative A – Maintaining Existing Facilities (No Action): Lands and Realty*

The no action alternative involves no changes to the existing road and trail systems within the CMPA.

b. *Alternative B – Expanding Existing Facilities: Lands and Realty*

The road closures highlighted in red on Map 2, Alternative B do provide access to private lands. However, there is also access to these same private lands from the north along a road that is not proposed for road closure. As a result, private land access would not be affected.

c. *Alternative C – Limited Development: Lands and Realty*

Home Creek Recreation Site, Three Mile Creek and Kueny Canyon Recreation Site would require access through private lands. Either a traditional easement or a reciprocal ROW/easement would be secured through the private landowner prior to any improvements being made on private or public land.

d. *Alternative D – Full Development (Proposed Action): Lands and Realty*

This alternative would require the same easements for Home Creek, Three Mile Creek and Kueny Canyon Recreation Sites. In addition, Three Mile Creek Trail and Huffman Trail would also require access through private lands. A public access easement or CMA would be secured through the private landowners prior to the trails being promoted and/or developed.

The easements discussed above would increase public access throughout the CMPA. They will provide key access points to the public along a section of Steens Mountain, the east side that currently has little to no public access points.

e. *Alternative E – Limited Development and Dispersed Recreation:
Lands and Realty*

Many of the roads proposed for closure in Alternative E provide access to private inholdings in the CMPA. Though these roads may not have a valid ROW at this time, BLM still has a requirement through the Wilderness Act to ensure adequate or reasonable access to private and state-owned lands. Therefore, while BLM may determine to close the road, should a landowner need access to their private or state owned parcel, BLM would be required to consider their request for access.

4. Recreation

Affected Environment: Recreation

Visitors come to the CMPA generally from July to November, with the highest use on holiday weekends and during hunting season. Visitors enjoy a multitude of recreational opportunities including sightseeing, camping, fishing, hiking, nature study, hunting, picnicking, bicycling, photography, rock hounding, snowmobiling, cross-country skiing, and OHV use. The popularity of the CMPA is due to extensive panoramas, scenic vistas, spectacular glaciated gorges, wildlife viewing, high mountain lakes, and numerous other features valued by outdoor enthusiasts.

According to a Recreational Area Study performed for BLM by Oregon State University in 1988, the most important recreational activity was driving Steens Mountain Loop Road for pleasure. Access provided by the Steens Mountain Loop Road is the key element in all recreational activities on Steens Mountain. The road provides access for all people including the old, young, and people with disabilities to enjoy the recreational opportunities offered by Steens Mountain.

During winter months, Steens Mountain Loop Road is closed to general vehicle traffic via gates. Winter visitors can drive through the Page Springs gate to the snow line on North Loop Road by obtaining a permit and key from the Burns District BLM Office. Recreationists receive winter recreational information, permit application, permit conditions, winter recreational program map, winter survival tips, and Leave No Trace winter use principles.

The primary winter activities are photography, cross-country skiing, snowshoeing, and limited snowmobiling (over-the-snow machines). Over-the-snow machines are allowed only along North Loop Road from snow line to Kiger Gorge Overlook. The narrow ridge with cliffs of East Rim and Little Blitzen Gorge on either side presents too great a hazard for over-the-

snow traffic, especially under conditions of low clouds, high winds, and falling snow. Over-the-snow machine use to Dingle Creek or along Cold Spring Road to Nye Cabin is allowed only when the group is accompanied by either a member in good standing of the High Desert Snow Drifters Snowmobile Club or a Burns District Special Recreation Permittee. Four winter recreation permits are allowed at one time with one of the four being for an over-the-snow machine group. Winter recreation may be curtailed for the following conditions: 1. North Loop Road damaged by vehicle traffic, or 2. severe winter conditions stressing wintering mule deer.

Camping occurs throughout the CMPA and is mainly primitive, dispersed and in various locations. There are two recognized non-fee camping sites: Mann Lake Recreation Site and Lily Lake Recreation Site. Camping at Mann Lake is allowed in two areas near the shore. The recreation site has vault toilets and a boat ramp. Mann Lake is located approximately 22 miles south of Highway 78 on East Steens Road. The lake is stocked with hatchery Lahontan cutthroat trout. Boats with 12 horsepower motors or less are permitted. Lily Lake Recreation Site is located 1 mile west of Fish Lake Campground. The recreation site has no facilities at this time.

There are five fee campgrounds in the CMPA: Page Springs, Fish Lake, Jackman Park, and South Steens Family and Equestrian Campgrounds. These campgrounds include such amenities as picnic tables, potable water, fire rings, and vault toilets. In addition, there are facilities for a boat ramp and fishing platform at Fish Lake.

Page Springs campground is located four miles east of Frenchglen on North Loop Road. The campground is adjacent to Donner und Blitzen River at 4,200 feet. A day use area is also located here. Fish Lake campground is located 17 miles east of Frenchglen on North Loop Road. It is located in an aspen grove at 7,400 feet. This campground is located on Oregon State land, but is operated and managed by the BLM through a permanent easement from the Oregon Department of Fish and Wildlife (ODFW). The ODFW stock the lake with trout. No motor boats are permitted. Jackman Park Campground is a campground located in an aspen grove three miles from Fish Lake at 7,800 feet. South Steens Family and Equestrian campgrounds are located 18 miles east of Highway 205 on South Loop Road. The campgrounds were built in 1996 in a juniper grove at 5,300 feet. The equestrian campground has hitching rails and corrals for horses

Trails in the CMPA are generally open from June through late October. There are 16 hiking trails in the CMPA. The High Desert Trail is a component of the National Recreation Trails system. This trail begins at Denio Canyon near the Nevada border south of Fields, Oregon and is 240 miles long. The High Desert Trail uses a corridor concept with no clearly defined or maintained path to follow. Hikers choose their own route with the help of a printed guide and strategically placed cairns. Portions of the trail

are open year-round. The corridor is cooperatively managed with the Desert Trail Association.

- **Little Blitzen Trail:** Little Blitzen Trail is approximately nine miles long. It begins east of South Steens Campground, descends to Little Blitzen River, and heads up Little Blitzen Gorge. The trail parallels the river and passes through groves of cottonwood trees and open meadows before terminating at the head of the canyon. One spur trail (Nye Trail) exits the canyon; Nye Trail is a constructed but primitive trail. The trailhead parking area is along South Loop Road. In order to reach the trail, visitors must walk from the parking area 0.25 mile east on the South Loop Road.
- **Nye Trail:** This primitive, narrow, and steep one-mile trail switchbacks 1,000 feet down the north wall of Little Blitzen Gorge to its junction with Little Blitzen Trail. The Nye Trail is located near the mid-point of the gorge. The top of the trail begins approximately 100 yards west of Nye Cabin. No formal trailhead exists, although parking is allowed within 30 feet of Cold Spring Road centerline, adjacent to the beginning of the trail.
- **Big Indian Trail:** Big Indian Trail is approximately nine miles long and begins at South Steens Campground. The portion of the trail to the first creek crossing is located on a closed two-track road. After crossing Big Indian Creek, the trail turns north and then east as it follows the creek for nine miles to the head of the canyon. Along the way, the trail passes through numerous meadows and cottonwood groves and by a waterfall near the canyon head. There is a trailhead parking area within South Steens Family Campground and a vault toilet is nearby.
- **Wildhorse Lake Trail:** This one-mile trail begins on a short section of closed dirt road that previously led to the old Wildhorse Lake Overlook. The trail then drops down the north wall of the cirque at the head of Wildhorse Lake Basin and leads to the north shore of the lake through a sensitive alpine environment. The trail is exceedingly steep with several drop-offs. The trailhead provides limited parking at a wide-bladed area at the end of Wildhorse Lake Overlook Road. No facilities are located at this trailhead.
- **Steens Summit Trail:** This short 0.4-mile trail is gated and follows a road that is closed to vehicle access by the general public. The trail reaches the 9,733-foot high summit of Steens Mountain and offers outstanding views of the surrounding countryside. The road accesses communication facilities operated under permit from the State of Oregon. Approximately half of the route is located within Steens

Mountain Wilderness with the remainder on Oregon State lands. Visitors park at the Wildhorse Lake Overlook area. No facilities are located at this trailhead.

- **Pike Creek Trail:** This two-mile trail is located on the eastern slope of Steens Mountain and generally runs along the north side of Pike Creek and heads west up the canyon. Beginning on privately-owned land, the trail passes through a portion of High Steens WSA before entering Steens Mountain Wilderness. The trailhead is an area at the end of a dirt road with very limited parking. No facilities are present at this parking area located on privately-owned land.
- **Mud/Ankle Creek Trail:** This 7.4-mile trail follows an unmaintained two-track dirt road that is open to motor vehicle traffic for the first mile. At that point, a parking area is available as the road is closed to vehicle travel by the general public. However, motor vehicle access is available to landowners and lessees who are permitted to access private land inholdings in the Ankle Creek area. This route provides access to Mud Creek and Ankle Creek within Ankle Creek Basin, an area located south of Little Indian Gorge and west of Wildhorse Canyon. Visitors may park within 30 feet of the road centerline for the first mile of Newton Cabin Road, and are encouraged to park within existing disturbed parking spurs. For the first mile, visitors may also park at South Steens Campground and walk or ride horseback 0.25 mile west on South Loop Road to reach Newton Cabin Road.
- **Blitzen River Trail:** This four-mile trail begins at the trailhead at the south end of Page Springs Campground to the confluence of Donner und Blitzen River and Fish Creek. The trail offers outstanding opportunities for access to the river. The trailhead has a bulletin board and trail registration box. Camping, toilets facilities and potable water are available at Page Springs Campground.
- **Wilderness Trail:** Developed as a nature trail, this one-mile trail begins at Page Springs Campground. The trailhead is a bladed dirt area providing limited parking.

At time of development of the Steens Mountain Wilderness/WSRs Plan BLM recognized ten system trails within the wilderness. While other historic trails may exist within the wilderness, such trails are not currently recognized as part of the existing Steens Mountain Wilderness trail system.

SRPs are required for specific recreational uses of public lands and related waters. They are issued as a means to manage visitor use,

protect natural and cultural resources, and provide a mechanism to accommodate commercial recreational uses. The types of permits that can be issued are listed below:

1) Commercial - Recreational use of public lands and related water for business or financial gain. Examples are scenic tours, outfitters and guides, trail rides, cattle drives, photography associated with recreational activity, and use by scientific, educational, and therapeutic or nonprofit organizations when certain criteria are met.

2) Competitive - Any organized, sanctioned, or structured use, event, or activity on public lands in which two or more contestants compete and either 1. participants, register, enter or complete an application for the event, or 2. a predetermined course or area is designated. Examples are OHV races, horse endurance rides, or mountain bike races.

3) Organized group - Permits for noncommercial and noncompetitive group activities and recreational events. Examples include a scout campout, a family reunion, or a school group activity.

4) Commercial Day Use - It is a one-day permit available for commercial activities such as vehicle tours. Commercial Day Use permit stipulations are developed on a case-by-case basis.

5) Special Area - Officially designated by statute or Secretarial order. Examples include camping in long-term visitor areas in California and Arizona or floating many BLM managed rivers. An August 17, 2001 *Federal Register* notice designated the CMPA as having special areas for which permits are required for organized groups.

6) Vending - Temporary, short-term, nonexclusive, revocable authorizations to sell goods or services on public land in conjunction with a recreational activity. Examples are T-shirt sales in conjunction with an OHV race, a hot dog stand at a motocross event, firewood sales in a BLM campground, and shuttle services.

There were 139 SRPs issued between 2009 and 2013 which included 60 commercial, 22 organized groups, and 59 Winter Recreation Permits. The average number of SRPs issued is 27.8 per year.

Adjacent areas of interest managed by other agencies include the Malheur NWR and the Sheldon-Hart Mountain NWR. Although the majority of visitors to the CMPA are from Oregon, an increasing number are from out of state and abroad. Recent publications and broadcasts featuring BLM attractions have increased visitation to the area.

Environmental Consequences: Recreation

Effects Common to All Alternatives: Recreation

The CEAA for recreation is the CMPA and adjacent areas. Past and present actions, such as those described in *Affected Environment Recreation*, have influenced the existing environment within the CEAA. The RFFAs in the CEAA that may contribute to cumulative effects to recreation include hunting and other recreational pursuits, ongoing maintenance of existing range improvements, wild horse utilization, periodic wild horse gathers to maintain horse numbers within the AML, wildlife use, fire rehabilitation actions, ongoing noxious weed treatments, the North Steens Ecosystem Restoration Project, North Steens Transmission Line ROW, and Echanis Wind Development Project.

There would be no changes to recreational resources, from the North Steens Transmission Line ROW and the Echanis Wind Development Projects, because the principal recreational use of these lands is for dispersed recreation.

Under the North Steens Ecosystem Restoration Project recreational opportunities offered within the project area would remain the same. There would be some displacement effects during times the treatments are happening.

The Steens Act allows for construction of new nonmotorized trails, and these may be authorized based on need. Nonmotorized/nonmechanized cross-country travel is not prohibited within the CMPA, and visitors may travel where they wish.

The SRPs would continue to be issued on a case-by-case basis. The SRP program would be managed to protect sensitive resources. The number of new commercial, competitive, and organized group SRPs would not be affected.

The existing BLM recreational sites represent time and money (investment) and constitute BLM's existing operations. Regardless of future development, a minimum level of service (related to operating, maintenance and facility repair or replacement) must be maintained to allow the existing recreational sites to continue functioning at safe and acceptable standards set by the Bureau and State health agencies.

a. *Alternative A – Maintaining Existing Facilities (No Action):
Recreation*

The goal in this alternative is to maintain the existing facilities and not construct new ones.

- i. Steens Mountain Back Country Byway and Transportation – Motorized recreational access including OHVs would not be affected in the CMPA. The general public would be able to drive the entire Steens Mountain Loop Road and open motorized routes to visit all overlooks. Access to Big Indian and Little Blitzen trailheads would not be restricted. Commercial SRP holders would not be affected. Closing the core of the CMPA to motorized access during the winter would continue through gate closures.
- ii. Winter Recreation – Current winter recreational opportunities would not be affected. Cooperative management for over-the-snow machine opportunities would not be explored.
- iii. Information/Signing/Interpretation – Signing is necessary for safety, providing direction and information, and is essential for implementing an interpretive program. However, emphasis would be toward limiting the number of signs.
- iv. Developed Campgrounds (Fee Campgrounds) – There would be no affect to developed campgrounds.
- v. Dispersed Campgrounds (Non-Fee Sites) – Harney County intends to pave the entire East Steens Road, Should paving occur, this could result in increased use at Mann Lake. This change could displace current users who prefer the primitive setting.

Maintaining Lily Lake as a dispersed recreation site would allow the existing uses to continue.
- vi. Overlooks and Other Points of Interest – Overlooks and other points of interest encompass resource values that promote recreational, educational, and scientific information.
- vii. Trails and Trailheads –The 16 existing trails would continue to be maintained for the health and safety of the public.

b. *Alternative B – Expanding Existing Facilities: Recreation*

- i. Steens Mountain Back Country Byway and Transportation – Effects would be the similar to Alternative A, except a sign would be erected before Gate #5 on South Loop Road to inform visitors the status of Gate #5.

For discussion on effects to OHV use, see comments under the Transportation issue.

- ii. Winter Recreation – Effects would be the same as Alternative A.
- iii. Information/Signing/Interpretation – Effects would be the same as Alternative A.
- iv. Developed Campgrounds – Including the effects as described in Alternative A, an outdoor interpretive seating area using material to reflect the rustic atmosphere and accommodating up to 20 people would be constructed. The area would be approximately 0.1 of an acre and open during the summer camping season. The BLM would provide interpretive information to recreationists as another avenue for information and entertainment.

Page Springs Campground was inspected by the Blue Mountains Pest Management Service Center in September 2008. The report stated every cottonwood tree had numerous galls on the branches. These galls are caused by eriophyid bud mites, and over time, the hazard of branches falling increases. The report recommended replacing the existing cottonwood trees with ash or other mix of hardwood trees. Replacing existing cottonwood trees with younger healthier trees and shrubs would enhance the safety to recreationists. Proposed accessible facilities provide recreational availability for all visitors.

Tent camping would be encouraged at Jackman Park Campground by educating the public through brochures and signs.

Fish Lake, South Steens Campground and any other developed campground, where a camp host is necessary, providing amenities (e.g. sanitation tanks, potable water, and camping pad) would aid in maintaining camp hosts at these campgrounds. The benefits of having camp hosts include: greeting campers, answering questions and orienteering recreationist to the CMPA, and setting an example to others by

keeping the host site clean and neat. In addition, the hosts would be accessible to campers for comments and complaints, explanation of rules and regulations, campground maintenance including clean campsites after guests check out, replenishing restroom supplies, and assisting in keeping the restrooms clean. Camp hosts could also conduct compliance checks by ensuring campground fees are paid, contacting BLM and law enforcement personnel during emergencies, and assisting with any other projects and assignments based on campground needs and hosts' skills and interests.

South Steens Family Campground parking area would be enlarged to provide safe and accessible parking, and eliminate the hazard of collision with motorized vehicles caused by visitors walking ¼ mile to access Little Blitzen Trail. In addition, constructing a new parking area at South Steens Equestrian Campground would provide for safe parking and access to the new Little Blitzen Trailhead.

Horse corrals would be placed in sites, where none currently exist, allowing equestrian campers to keep their stock in these corrals instead of a stock trailer. A 50-foot round pen would allow the riders to take the “edge off” the horses before riding on the trails, possibly allowing for increased safety to riders.

- v. Non-Fee Campgrounds – Effects would be similar to Alternative A, however, the addition of picnic tables and fire rings to Mann Lake Recreation Site would provide campers with more amenities.
- vi. Overlooks and Other Points of Interest – The existing access paths to Kiger Gorge and East Rim Overlook parking areas would be upgraded to accessible path (see design features). This would encourage all visitors to use the accessible trails, thus helping to eliminate user created trails.

The BLM specialists have witnessed more than six vehicles parking at the two overlook areas at one time. The area currently only accommodates three vehicles. Enlarging the parking areas at the overlooks would accommodate more vehicles providing recreationists additional opportunities to see the spectacular views.

Increasing public motorized access from four to five days during the summer months (Wednesday through Sunday) at Riddle Brothers Historic District Ranch (Riddle Brothers

Ranch) would provide more opportunities for recreationists to see the Ranch.

- vii. Trails and Trailheads – Effects would be similar to Alternative A; however, rerouting Nye and Wet Blanket Trails due to their steepness would reduce maintenance and provide safer trails. The percent grade is over 30 percent at many places along these trails. The guideline is to keep the percent slope of the trails to 10 percent or less.

c. *Alternative C – Limited Development: Recreation*

- i. Steens Mountain Back Country Byway and Transportation - Effects would be similar to Alternative A; however, relocating Gate #5 300 yards up the road would allow visitors to see the open/close status of the gate prior to reaching the gate.
- ii. Winter Recreation – Effects would be similar to Alternative A; however, BLM Burns District would seek cooperative agreements with local private landowners to provide access to desirable locations for snowmobiling. Currently, snowmobiling activities are limited in the area. Snowmobiling on private lands would provide an additional area for this type of activity.
- iii. Information/Signing/Interpretation – Effects would be similar to Alternative A; however, the addition of a kiosk (four feet by four feet) at Fields, Oregon, would provide valuable information to visitors concerning spatial orientation, wildlife interaction, backcountry preparedness, and hazard identification.
- iv. Developed Campgrounds (Fee Campgrounds) – Effects would be similar to Alternative B; however, the following would have additional effects. Removal of the horse corral across from Fish Lake Campground would have no affect on recreation, due to lack of use.

Converting Mann Lake Recreation Site into a fee site would benefit campers who desire more amenities. Conversely, effects would be undesirable for campers who still want a primitive camp setting.

The proposed North Steens Equestrian Campground would provide equestrian camping opportunities off North Loop Road.

- v. Dispersed Campgrounds (Non-Fee Sites) – Effects would be similar to Alternative B, except under Alternative C; Home Creek Recreation Site would be developed increasing recreational access along the west side of the CMPA. Home Creek and Three Mile Creek would provide access to Steens Mountain Wilderness and the proposed Huffman Trail.
- vi. Overlooks and Other Points of Interest – Effects would be similar to Alternative B; however, the following would have additional effects. Installation of a vault toilet next to Fish Lake Campground would help with sanitary conditions along Steens Mountain Loop Road.
- vii. Trails and Trailheads – Designating Pike Creek Trail extension and the Levi Brinkley Memorial Trail ensure the existing trails receive routine and continued maintenance. All other effects to trails would be the same as described under Alternative B.

Construction of a parking area at the junction of North Loop Road and Cold Spring Road would provide equestrian and hiking recreationists a parking area off North Loop Road that would not interfere with other campgrounds.

Construction of Kueny and Three Mile Creek parking areas along Highway 205 would provide equestrian and hiking recreationists a parking area that would not interfere with other campgrounds.

- d. *Alternative D – Full Development (Proposed Action): Recreation*
 - i. Steens Mountain Back Country Byway and Transportation - Effects would be the same as under Alternative A, with the following additions: installation of West Side Spring Gate would deter unauthorized vehicles, and Kiger Ridge Road Gate would assist BLM in managing motorized access along Kiger Ridge Road.

For discussion on effects to OHV's see description Transportation.
 - ii. Winter Recreation – Effects would be similar to Alternative C; however, allowing winter recreation on RSR via Lauserica Road would allow additional over-the-snow machines a supplementary area to ride.

Also, allowing motorized access along South Loop Road to South Steens Family and Equestrian Campgrounds would provide 15 miles of scenic winter recreational opportunities. Recreationists could use the campgrounds as a staging area to conduct further winter recreational activities such as cross-country skiing and snow-shoeing.

- iii. Information/Signing/Interpretation – Effects would be similar to Alternative C; however, the addition of a kiosk along South Loop Road would increase public awareness of BLM’s multiple-use management mission through interpretation of spatial orientation, wildlife interaction, backcountry preparedness, and hazard identification.
- iv. Developed Campgrounds (Fee Sites) – The effects would be similar to Alternative C; however, the following would have additional effects: development of Penland Wilderness and Pike Creek Recreation Sites would provide additional camping sites (i.e. potable water, fire rings, and picnic tables) for visitors on the east side of Steens Mountain Wilderness, development of Penland Wilderness Recreation Site would provide access to Wildhorse Canyon and the central portion of east Steens Mountain, and development of Pike Creek Campground would provide access to Pike and Dry Creek Trails. These trails connect to provide a 17-mile loop trail for hikers and equestrian folks. Loop trails are more desirable than one-way trails.
- v. Dispersed Campgrounds (Non-Fee Sites) – Effects are similar to Alternative C.
- vi. Overlooks and Other Points of Interest
 - a. *Cold Spring Development*: Redevelopment of Cold Spring to a functioning condition would provide equestrian riders with water for recreational stock. It would also provide non-equestrian folks with another water source. Based on historical knowledge from the recreating public, Cold Spring development provided water for equestrian riders and their stock in the past.
 - b. Throughout the summer, the BLM has had to pick up trash (toilet paper and other unsanitary items) along Steens Mountain Loop Road. Therefore, installing vault toilets at the WJMA area, South Loop Road entrance and Turkey Foot (W.M., T. 33 S., R. 33 E.,

sec. 24) would mitigate unsanitary conditions along Steens Mountain Loop Road.

- c. *Riddle Brothers Pipeline Extension and Pump House:* The Riddle Brothers Pipeline Extension and pump house would provide potable water for the volunteer camp hosts eliminating the need to haul potable water, provide fire protection to the historic Riddle Brothers Ranch, and keep the lawns green around the main structures furthering aiding in fire protection.

- vii. Trails and Trailheads - Providing 49 miles of new trails (Pike Creek Trail Extension 2, Indian Mud Loop, Fred Riddle, Kueny/Black Canyon, and Huffman Trails) for recreationists would create additional hiking and equestrian riding opportunities within the CMPA.

The Maintenance Intensity 1 trails (Indian Mud Loop, Fred Riddle, Kueny/Black Canyon, and Huffman Trails) would only have maintenance conducted as needed. These trails could be used by recreationists seeking less developed trails for orienteering. Pike Creek Trail Extension 2 would be a Maintenance Intensity 3.

- e. *Alternative E – Limited Development and Dispersed Recreation: Recreation*

- i. Steens Mountain Back Country Byway and Transportation – Motorized and mechanized recreational access would be curtailed within the CMPA. Closing roads and converting them to nondesignated trails would increase the number of trails for hikers or equestrian folks thereby increasing solitude.

The general public would not be able to drive these routes. The routes would be limited to motorized administrative use. The direct and indirect closing of 175.9 miles of routes would displace dispersed motorized camping. Campers would be forced to camp within sight of each other reducing solitude for this type of activity. For discussion on effects to OHVs see description under the Transportation issue.

- ii. Winter Recreation – Motorized and nonmotorized winter recreation would not be affected.
- iii. Special Recreation Permits – Effects would be the same as Alternative A.

- iv. Information/Signing/Interpretation – Additional signage would occur to close roads.
- v. Developed Campgrounds (Fee Campgrounds) – Closing routes is not expected to increase camping at developed campgrounds as dispersed campers prefer solitude.
- vi. Dispersed Campgrounds (Non-Fee Site) – Closing routes is expected to increase camping at Mann Lake and Lily Lake campgrounds.
- vii. Overlooks and Other Points of Interest – Effects would be the same as Alternative A.
- viii. Trails and Trailheads – Non-motorized recreations (e.g. hikers) would enjoy the opportunities of an increase of 175.9 miles of trails within the CPMA. These routes would not be maintained and revegetation over time would close these trails making hiking more challenging. See the Transportation Section for a discussion on the effects to motorized recreationists (e.g. OHV).

5. Visual Resource Management (VRM)

Affected Environment: Visual Resource Management

Within the CMPA there are 291,020 acres designated as VRM Class I, 76,325 acres designated as Class II, 60,033 acres designated as Class III, and 778 acres designated as Class IV. The VRM map can be found in the Andrews Management Unit and Steens Mountain CMPA RMP Appendices Map 3. The following is a description of the VRM classes from the BLM Manual Handbook 8410-1 (Pages 6-7).

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.

Class II Objective is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

Class III Objective is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be

moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

Class IV Objective is to provide for management activities which require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements.

Environmental Consequences: Visual Resources

Effects Common to All Alternatives: Visual Resources

The CEAA for Visual Resources is within and adjacent to the CMPA. Past and present actions, such as those described in *Affected Environment*, have influenced the existing environment within the CEAA. The RFFAs in the CEAA that may contribute to cumulative effects to visual resources include: existing range improvements, periodic wild horse gathers to maintain horse numbers within the AML, fire rehabilitation actions, and ongoing noxious weed treatments, the North Steens Ecosystem Restoration Project and the North Steens Transmission Line ROW and Echanis Wind Development Project.

a. *Alternative A – Maintaining Existing Facilities (No Action): Visual Resources*

Under the No Action Alternative there are no new actions. Maintenance of projects would occur within the existing disturbance; therefore, there would be no effects to the visual character and overall VRM Class.

b. *Alternative B – Expanding Existing Facilities: Visual Resources*

There are no proposed projects outside of existing facilities; therefore, there would be no effects to the visual character and overall VRM class.

c. *Alternative C – Limited Development: Visual Resources*

The following proposed projects are within VRM Class I: Non-Fee Sites, overlooks and other points of interest, and trails.

Proposed non-fee sites are Kueny Canyon, Home Creek, and Three Mile Creek Recreational Sites located on the west side of the CMPA

off Highway 205. Currently there is limited access on the west side of the CMPA. Only the Three Mile Creek site would be seen by passing vehicles. Development of these non-fee sites would not preserve the existing character of the landscape. However, the VRM Class I classification does not preclude “very limited management activity”. Each site would be less than two acres; therefore, the level of change to the characteristic landscape would be low and would not attract attention.

Installation of the North Loop vault toilet and constructing the Cold Spring Parking Area would be seen from North Loop Road. These proposed actions would not preserve the existing character of the landscape. However, the VRM Class I classification does not preclude “very limited management activity”. Each site would be less than one acre; therefore, the level of change to the characteristic landscape would be low and would not attract attention. These developments are within the 100-foot Steens Mountain Loop Road buffer.

The proposed Pike Creek and Levi Brinkley Trails are existing trails located on closed roads. The designation of these trails would still meet the VRM Class I objective and, as former roads revert to single-track trails, visual character would be improved.

The proposed developed campgrounds are within VRM Class II. Improving Mann Lake Recreation Site and developing North Steens Equestrian Campground would be visible; however, the level of change to the characteristic landscape is low (under two acres) and would not attract attention. The proposed developments would use colors and material to repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

d. *Alternative D – Full Development (Proposed Action): Visual Resources*

The proposed action of developing campgrounds and installing vault toilets would have the same effect as described in Alternative C.

The proposed Pike Creek Recreation Site #2 is along East Steens Road and Turkey Foot Vault Toilet and adjacent to Steens Mountain Loop Road. Both sites would be in VRM Class I and can be seen from their respective roads. These proposed actions do not preserve the existing character of the landscape; however, the objective does not preclude “very limited management activity.” Each site would be

less than one acre; therefore, the level of change to the characteristic landscape would not attract attention.

Riddle Brothers Pipeline Extension and Pump House are within the Riddle Brothers Historic District, VRM Class 1. The pump house would be constructed next to the administrative building and would have no measurable affect to VRM. The pipeline extension initially changes the characteristic landscape and would attract attention to the casual observer. Overtime however, the buried pipeline would blend into the landscape.

The proposed Pike Creek Trail Extension #1, Fred Riddle Trail, Three Mile Creek Trail, Kueny/Black Canyon Trails, and Huffman Trail, are existing trails located on closed roads or are proposed routes visitors are already following. The designation of these trails would still meet the VRM Class I objective.

The Pike Creek Trail Extension #2 and Indian Mud Loop Trail require construction. Trails are a change to the characteristic landscape that would be low and would not attract attention. A properly constructed trail is only visible to visitors using it.

The proposed Pike Creek Recreation Site #1 development is along East Steens Road and WJMA Vault Toilet is along North Loop Road. Both can be seen from their respective roads and are in VRM Class III. The proposed developments would use colors and material to repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

e. *Alternative E – Limited Development and Dispersed Recreation:
Visual Resources*

The VRM levels would improve over time as roads convert to hiking/equestrian trails, giving the area a more natural appearance.

6. Social and Economic Values

Affected Environment: Social and Economic Values

The CRP is an analysis of recreational facilities and activities, roads, and trails within the CMPA. Economically, the CRP would affect the communities of Burns, Hines, Crane, Diamond, Frenchglen, and Fields, Oregon which have businesses dependent on the revenue from outside recreationists.

The implications of resource management decisions based on the CRP to the social and economic values are of interest to the residents, business owners,

ranchers, and recreational users of the area. These people have made their interests known through organized group meetings.

The primary area of consideration is Harney County, Oregon, located in a sweeping valley in the northern portion of the Great Basin. The county seat is Burns, Oregon and the area encompasses over 5,000 people, and provides a town feel and attributes. Located in the Oregon “high-desert” setting, it offers recreational opportunities including driving for pleasure, backpacking, sightseeing, Nordic skiing, fishing, hunting, hiking, camping, picnicking, hot springs use, geological sightseeing, historic buildings, high altitude running, bird watching (over 300 species of birds migrate through the county), star gazing (lowest levels of ambient light in the nation), photography, horseback riding, rock hounding, the scenic beauty of the Malheur and Ochoco National Forests, wildlife in the Malheur and Hart Mountain Refuges, and the breathtaking views and wide open landscape of the Steens Mountain located within the CMPA. Steens Mountain summits at over 9,820 feet and is the only mountain in Oregon where visitors can reach the summit via automobile. Harney County has public domain lands, National Forests, Refuges, lakes, streams, mountain ranges, high desert habitat, Wilderness, and the CMPA. Recreation contributes to the appeal of the area and its economy.

Historically, Harney County has devoted its economic base to farming, ranching, timber, and wood products manufacturing. Some of these industries (timber and wood products) currently provide less contribution to the county’s current economic activity than they once did; however, they are still important for community identity and local politics. The largest employers are farming/ranching, manufacturing, hospital, government, and schools.

Livestock raising and associated feed production industries are contributors to the economy of Harney County. The highest individual agricultural sales revenue in the county is derived from cattle production, which is inextricably linked to the commodity value of public rangelands. The cattle industry provided \$54,553,000 in sales to Harney County in 2011 compared to \$57,442,000 in 2012 [Oregon State University (OSU), Extension Service, 01/24/2014].

Those engaged in ranching and forage production are an important part of the history, culture, and economy of Harney County, and make up a strong component of the fabric of the local societies. Livestock grazing operations on public and private lands can have a stabilizing influence on local employment and quality of life (social, health, economic and environmental conditions). "Quality of life" is very individual when determining what is valued in a lifestyle and what features make up that lifestyle. Lifestyle features can be determined by historical activities of the area, career opportunities, and the general cultural features of the geographical area.

Quality of life issues are subjective and can be modified over time with exposure to other ways of living.

Recreation is a component of most lifestyles in the area, and includes driving for pleasure, backpacking, sightseeing, Nordic skiing, fishing, hunting, hiking, camping, picnicking, hot springs, geological sightseeing, historic buildings, high altitude running, bird watching (over 300 species of birds migrate through the county), star gazing (lowest levels of ambient light in the nation), photography, horseback riding, and rock hounding for the overall quality of life for residents. In addition to local recreational use, the undeveloped, open spaces in the county are themselves a tourist attraction and contribute a "sense of place" for many. The attachment people feel to a setting, typically through repeated experiences, provides them with this sense of place. Attachments can be spiritual, cultural, aesthetic, economic, social, or recreational.

Although much of the recreation use on BLM-administered lands is dispersed, and far from counting devices such as trail registers, fee stations, or vehicle traffic counters, approximations of the number of visitors to BLM-administered lands can be obtained from the BLM Recreation Management Information System (RMIS) database, in which BLM recreation specialists provide estimated total visits and visitor days to various sites within their RA's boundaries. The number of visits in the CMPA starting October 1, 2010 - September 30, 2011 was 239,740 visitors in the BLM RMIS.

Trails are for all, and allow visitors to go back to their roots. Trails help humans make sense of a world increasingly dominated by pavement. They put us in touch with our natural surroundings, sooth our psyches, challenge our bodies and allow us to practice traditional skills. Human psychology also plays a role. A useful trail must be easy to find, easy to travel, and convenient to use. Trails exist simply because they are an easier way of getting someplace. Many trails, such as wilderness trails, motorized routes, or climbing routes are deliberately challenging with a relative degree of risk. Tourism also contributes revenue to local businesses. The Steens Mountain area is central to Harney County tourism. A 2007 study found local economic effects associated with recreational visits to Malheur NWR totaled approximately 4.4 million dollars during 2006 (Carver and Caudill 2007). Hunting and other types of dispersed outdoor recreational experiences contribute to the local economy on a seasonal basis. Fee hunting and recreation alone contributed \$100,000 to Harney County in 2011 (2001 Oregon County and State Agricultural Estimates Special Report 790-11, April 2012 Oregon State University).

Environmental Consequences: Social and Economic Values

The CEAA for social and economic values is Harney County, Oregon. Past and present actions, such as those described in the affected environment above, have influenced the existing environment within the CEAA. The RFFAs in the CEAA that may contribute to cumulative effects to social and economic values include hunting and other recreational pursuits, ongoing maintenance of existing range improvements, wild horse utilization, periodic wild horse gathers to maintain horse numbers within the AML, wildlife use, fire rehabilitation actions, ongoing noxious weed treatments, the North Steens Ecosystem Restoration Project, North Steens Transmission Line ROW, and Echanis Wind Development Project.

Effects Common to All Action Alternatives:

As stated in the North Steens Transmission Line Final EIS Section 3.11 Social and Economic Values; the potential effects of the Echanis Wind Development Project upon the social and economic condition in the Project Area would include changes in employment, income, revenue and fiscal health, and property values. Table 3.11-13 summarizes the total employment effects for the Echanis Wind Development Project. The total employment effect during the nine months of construction of the Echanis Wind Development Project was estimated to be 145 jobs.

There would be competing needs for services under social and economic values in Harney County from the North Steens Transmission Line ROW and the Echanis Wind Development Projects, because Harney County has limited supplies and facilities to accommodate large construction projects. The affects are expected to decrease availability for supplies and accommodations during heavy construction periods but the affects would be temporary, nine months to one year. A reduction in accommodation could increase the number of people that would use dispersed and developed camp sites in the CMPA.

The North Steens Ecosystem Restoration Project Final EIS Chapter 4 Section 4.2.5.6, Social and Economic Values, indicates that juniper treatments would increase rangeland health, thus increasing forage production for both wildlife and livestock, and possibly increasing economic opportunities and fostering more desirable recreational opportunities with attendant economic benefits to the local economy.

More desirable recreational opportunities from the North Steens Ecosystem Restoration Project paired with additional developed recreational facilities from the CRP is expected to increase the local economy.

Under the ongoing maintenance of existing range improvements, wild horse utilization, periodic wild horse gathers to maintain horse numbers within the AML, wildlife use, fire rehabilitation actions, and ongoing noxious weed treatments, there would be no measureable affect to social and economic values in Harney County.

In the alternatives discussion below, the costs associated with each CRP proposed project is relative to the amount of construction verses re-construction of facilities and personnel time required to complete the project and is summarized with project work required and associated costs. For a complete description of the CRP proposed project requirements refer to Chapter 2 Alternatives above.

a. *Alternative A – Maintaining Existing Facilities (No Action): Social and Economic Values*

Public lands in and around Harney County would continue to contribute social amenities such as open space, scenic quality, and recreational opportunities (such as driving for pleasure, backpacking, sightseeing, Nordic skiing, fishing, hunting, hiking, camping, picnicking, hot springs, geological sightseeing, historic buildings, high altitude running, bird watching [over 300 species of birds migrate through the county], star gazing [lowest levels of ambient light in the nation], photography, horseback riding, rock hounding, and access to National Forests and Refuges). These amenities enhance local communities and tourism in Harney County.

Effects to a visitor's experience or opportunities are not expected by implementing the No Action Alternative.

Economically, maintaining existing facilities would provide for the current/stable economic revenue from recreationalists.

There would be no additional construction costs associated with this alternative.

b. *Alternative B – Expanding Existing Facilities: Social and Economic Values*

Effects would be similar to Alternative A for social values; however, the improvement to recreational facilities and access to areas could stimulate an increase in recreational tourism by bringing an economic boost to local communities from the purchase of food, gas, motels, and other amenities.

- i. Steens Mountain Loop Road
Installing a sign at gate #5 (Black Canyon) on South Loop Road would cost approximately \$1,000.
- ii. Page Springs Campground/Interpretive programs
Costs associated with this development of an amphitheater is approximately \$15,000, \$2,500 for replacing trees and \$5,000 or less annually for an interpreter. Total Costs are approximately \$22,500.
- iii. Fish Lake Campground Upgrade
Costs associated with upgrading two camp sites with accessible facilities and camp host amenities, potable water and sanitation tanks are approximately \$22,000.
- iv. South Steens Family Campground Upgrade
Costs associated with upgrading two camp sites with accessible facilities and enlarging the existing day-use parking area are approximately \$17,000.
- v. South Steens Equestrian Campground Upgrade
Costs associated with developing a day-use parking area and six new horse corrals with a 50-foot round pen are approximately \$35,000.
- vi. Mann Lake Recreation Site
Designing and developing five camp sites with tables and fire rings would cost approximately \$10,000.
- vii. Kiger Gorge and East Rim Overlooks
Existing access paths, from the parking areas to the overlooks, would be upgraded to meet accessibility standards. Approximate costs would be \$10,000. Parking areas would be enlarged for a cost of approximately \$34,000.
- viii. Riddle Brothers Historic District Upgrade
Installation of three picnic tables and rest benches would cost approximately \$3,000.
- ix. Kiger Gorge Trail
Trail maintenance would no longer be scheduled for this trail; therefore, no costs would be associated with this action.

x. Nye Trail

Costs associated with reconstruction of Nye Trail using Northwest Youth Corp for two weeks would be approximately \$18,000.

xi. Wet Blanket Trail

Costs would be the same as the Nye Trail for reconstruction.

xii. Road Closures

Costs associated with signing and closing approximately 12.93 miles of routes are estimated to be between \$5,000 and \$10,000. If rehabilitation is needed, additional costs would be incurred; however, the exact amount would be speculative.

c. *Alternative C – Limited Development: Social and Economic Values*

Effects would be similar to Alternatives A and B for social values; however, the improvement to recreational facilities, limited development of additional recreational facilities, and better access offers an expected rise in the number of tourists to the area. An increased number of tourists would be an economic boost to local communities from the purchase of food, gas, motels, and other amenities.

In addition, recreational improvement projects could also bring about increased work for local contractors, further improving the local economy and supporting a well-established, local, rural-oriented social fabric.

The following costs would be in addition to what is proposed under Alternative B:

i. Relocation of Gate #5 on South Loop Road

Costs associated with relocating Gate #5 and expanding the road to facilitate parking of up to three vehicles is estimated to be \$5,000.

ii. Development of a kiosk at Fields, OR

Costs include construction and display materials and are estimated at \$15,000

- iii. Removal of Horse corral at Fish Lake
Costs associated with dismantling the corral and rehabilitating the site using the Oregon Youth Conservation Corps (OYCC) would be approximately \$2,500.
- iv. Mann Lake Recreation Site
Developing Mann Lake Recreation site into a fee campground including ten developed campsites with potable water, picnic tables and fire rings would cost approximately \$75,000.
- v. North Steens Equestrian Campground
Costs associated with developing a new equestrian campground with help from Back Country Horseman is estimated to be \$100,000.
- vi. Home Creek Recreation Site
Developing five campsites along with improvement of the road would cost approximately \$50,000.
- vii. Kueny Canyon Recreation Site
Costs associated with developing a parking area are \$15,000.
- viii. Three Mile Creek Recreation Site
Costs associated with developing a parking area along with modifying the existing fence with help from OYCC is estimated to be \$10,000.
- ix. North Loop Road Toilet
Costs for site preparation and installation of a toilet along North Loop Road adjacent to Fish Lake campground are approximately \$4,000.
- x. Cold Spring parking area
Costs associated with developing a parking area are \$10,000.
- xi. Levi Brinkley Memorial Trail
Funds associated with the designation of the Levi Brinkley Memorial Trail would be used to conduct maintenance (ie. brushing of the trail) in order to create a continuous trail. Funds would also be used for a memorial plaque. Costs are estimated at \$1,000.

d. *Alternative D – Full Development (Proposed Action): Social and Economic Values*

Effects would be similar to Alternatives A, B and C for social values; however, improvement to recreational facilities, full development of additional recreational facilities, and better access provides for an expected rise in the number of tourists to the area. An increased number of tourists would be an economic boost to local communities from the purchase of food, gas, motels, and other amenities.

In addition, as the number of recreational improvement projects increases, it would be expected that it would bring about increased work for local contractors, further improving the local economy and supporting a well-established, local, rural-oriented social fabric.

The following costs would be in addition to what is proposed in Alternatives B and C:

i. Relocation of Gate #5 to west of the junction with Burnt Car Road.

Costs associated with relocation of Gate #5 and boulder placement are \$6,000.

ii. West Side Spring Gate

Costs associated with the installation of a new gate on a closed road off East Steens Road are estimated to be \$4,000.

iii. South Loop Winter Recreation

Additional sites off South Loop road would be developed for winter recreation. Costs including labor and snow poles are estimated at \$1,500.

iv. Installation of a Kiosk on the South Loop Road

Installing a kiosk displaying a map and providing interpretive information, (similar to the kiosk at Page Springs) would cost approximately \$7,000.

v. Penland Wilderness Recreation Site

An equestrian campground would be developed in stages. The first stage would be to construct a parking area and road to the area. If visitor use turns out to be high, as expected, then over time the site would be developed into a campground with camping pads, picnic tables, fire rings and potable water along

with a protection fence. Estimated costs for this development in its entirety would be \$100,000.

vi. Pike Creek Recreation Site

Costs are the same as the Penland development.

vii. Cold Spring Re-development

Costs to redevelop Cold Spring would be dependent upon whether work was done by hand or by machine. Costs by hand are estimated to be \$15,000; machine costs would be \$5,000.

viii. WJMA Toilet

Costs for site preparation and installation of a toilet at the WJMA parking area are approximately \$4,000.

ix. South Loop Road Entrance Toilet

Costs for site preparation and installation of a toilet at the entrance of South Loop Road are approximately \$4,000.

x. Turkey Foot Toilet

Installation of a vault toilet at the junction of East Rim viewpoint and Steens Mountain Loop Road would be done to ensure it blends with the natural surroundings. As such, the costs are estimated to be higher at \$10,000.

xi. Riddle Brothers Pipeline Extension and Pump House

Costs associated with constructing a pump house and installing 1.25 miles of pipeline to provide potable water to Riddle Brothers Ranch would be approximately \$40,000.

xii. Pike Creek Trail Extension

Construction of two connector trails from the proposed Pike Creek Recreation Site to Pike Creek Trail would cost approximately \$18,000.

xiii. Indian Mud Loop Trail

Costs associated with the placement of rock cairns would be \$500.

xiv. Fred Riddle Trail

Designating 12.75 miles of closed road to the Little Blitzen Trail, making it a loop trail opportunity would cost approximately \$18,000 by using the Northwest Youth Corps for two weeks.

xv. Three Mile Creek Trail

Designating 2.5 miles of existing route and performing trail maintenance by the Northwest Youth Corps for two weeks would cost approximately \$18,000.

xvi. Kueny/Black Canyon Trail

Seven miles of trail through Kueny and Black Canyons would require survey work costing approximately \$1,500.

xvii. Huffman Trail

Huffman trail would require survey work costing approximately \$3,000.

e. *Alternative E – Limited Development and Dispersed Recreation:
Social and Economic Values*

According to a Recreational Area Study performed for BLM by Oregon State University in 1988, the most important recreational activity was driving the Steens Mountain Loop Road within the CMPA for pleasure. Access provided by the Steens Mountain Loop Road is the key element in all recreational activities on Steens Mountain. The road provides access for all people including the old, young, and people with disabilities to enjoy the recreational opportunities offered by Steens Mountain.

The decrease in access to roads within the CMPA reduces recreational activity of tourist and pleasure driving for the local residents which is a recreational experience. If recreational activities are reduced, the revenue from those activities is expected to decrease.

Camping occurring throughout the CMPA is mainly primitive, dispersed and in various locations. The decrease in access to these dispersed locations is expected to change the types of recreation available for the public. If the public can no longer access dispersed camping areas commonly used to find solitude, they would be required to stay in the developed campgrounds. If dispersed camping opportunities are reduced, the revenue from those activities is expected to decrease.

Costs to implement this Alternative would be a minimum of one summer seasonal employee to place road closure signs and use of BLM maintenance staff to physically close roads.

Total costs associated with this Alternative are \$100,000 – \$150,000

Table 3: Cost Summary by Alternative

Action	Alternative "B"	Alternative "C"	Alternative "D"	Alternative "E"
Steens Mountain Loop Road gate/sign	\$1,000	\$5,000	\$6,000	
Page Springs Amphitheater/Programs	\$22,500	\$22,500	\$22,500	
Fish Lake Upgrade	\$22,000	\$22,000	\$22,000	
South Steens Family Upgrade	\$17,000	\$17,000	\$17,000	
South Steens Equestrian Upgrade	\$35,000	\$35,000	\$35,000	
Mann Lake	\$10,000	\$75,000	\$75,000	
Kiger Gorge and East Rim	\$34,000	\$34,000	\$34,000	
Riddle Bros. Upgrade	\$3,000	\$3,000	\$3,000	
Kiger Gorge Trail	\$0	\$0	\$0	
Nye Trail	\$18,000	\$18,000	\$18,000	
Wet Blanket Trail	\$18,000	\$18,000	\$18,000	
Road Closures Alt B	\$10,000	\$0	\$0	
Development of a Kiosk at Fields		\$15,000	\$15,000	
Removal of the Horse Corral at Fish Lake		\$2,500	\$2,500	
North Steens Equestrian		\$100,000	\$100,000	
Kueny Canyon		\$15,000	\$15,000	
Three Mile Creek		\$10,000	\$10,000	
North Loop Road Toilet		\$4,000	\$4,000	
Cold Spring		\$10,000	\$10,000	

Action	Alternative "B"	Alternative "C"	Alternative "D"	Alternative "E"
Parking Area				
Levi Brinkley Trail		\$1,000	\$1,000	
West Side Spring Gate			\$4,000	
South Loop Winter Recreation			\$1,500	
Kiosk on South Loop			\$7,000	
Penland Recreation Site			\$100,000	
Pike Creek Rec. Site			\$100,000	
Cold Spring			\$15,000	
WJMA Toilet			\$4,000	
South Loop Entrance Toilet			\$4,000	
Turkey Foot Toilet			\$10,000	
Riddle Bros. Pipeline			\$40,000	
Pike Creek Trail Extension			\$18,000	
Indian Mud Loop Trail			\$500	
Fred Riddle Trail			\$18,000	
Three Mile Creek Trail			\$18,000	
Kueny/Black Canyon Trail			\$1,500	
Huffman Trail			\$3000	
Alt E Road Closures				\$100,000
TOTALS	\$190,500	\$407,000	\$751,000	\$100,000

7. Soils and Biological Soil Crusts (BSCs)

Affected Environment: Soils/Biological Crusts

The primary soil associations within the CMPA include Ninemile-Westbutte-Carryback and Baconcamp-Clamp-Rock outcrop. Ninemile-Westbutte-Carryback soils are well drained, shallow and moderately deep soils that formed in residuum and colluvium and tend towards gravelly to very cobbly loams or stony to cobbly clays with areas of silty clay loam. They are found on plateaus, hills, and mountains that receive 12 to 16 inches of precipitation. Slopes range from 0-65 percent leading to a moderate hazard of water erosion. The associated native vegetation communities are mountain big sagebrush (*Artemisia tridentata vaseyana*) and low sagebrush (*Artemisia arbuscula*) with needlegrass species (*Achnatherum* ssp) and Idaho fescue (*Festuca idahoensis*).

The Baconcamp-Clamp-Rock outcrop association includes very cobbly loam to loamy textures and consists of very shallow to moderately deep, well drained soils and have a moderate to high water erosion potential and low to moderate wind erosion potential. Soils are located on mountains, hills, and canyons with slopes of 3 to 80 percent. Associated native vegetation communities include mountain big sagebrush and low sagebrush with Idaho fescue and needlegrass species.

The soil associations include: Raz-Brace-Anawalt and Spangenburg-Enko-Catlow. The Raz-Brace-Anawalt association includes cobbly or stony loams that evolved on hills and tablelands. These soils are shallow to moderately deep, generally well drained, and have a low potential for wind erosion and low to moderate potential for water erosion. These soils of cold plateaus and uplands support native vegetative communities dominated by Wyoming big sagebrush, low sagebrush, needlegrass species and bluebunch wheatgrass.

The Spangenburg-Enko-Catlow series consists of very deep, well drained and moderately well drained soils that formed in lacustrine sediments and deposits and alluvium derived from volcanic rocks and is generally found on lake terraces and alluvial fans and swales. Textures range from silty clay loam to very stony loams and can be found on slopes of 0-30 percent at elevations of 4,200 to 5,500 feet. There is a high potential for wind erosion. Dominant vegetation for this soil series includes: Basin big sagebrush (*Artemisia tridentata tridentata*), Wyoming big sagebrush (*Artemisia tridentata wyomingensis*), beardless wildrye (*Leymus triticoides*), bluebunch wheatgrass (*Pseudoroegneria spicata*), Thurber needlegrass (*Achnatherum thurberianum*), basin wildrye (*Leymus cinereus*), Indian ricegrass (*Achnatherum hymenoides*) and needleandthread (*Hesperostipa comata*).

Identification of BSC at the species level is often not practical for fieldwork. The use of some basic morphological groups simplifies the situation.

Morphological groups are also useful because they are representative of the ecological function of the organisms (pg. 6, TR-1730-2). Using a classification scheme proposed in 1994, we can divide microbiota such as BSC into three groups based on their physical location in relation to the soil: hypermorphitic (above ground), perimorphitic (at ground) and cryptomorphitic (below ground).

The morphological groups are:

1. Cyanobacteria - Perimorphitic/cryptomorphitic.
2. Algae - Perimorphitic/cryptomorphitic.
3. Micro-fungi - Cryptomorphitic/perimorphitic.
4. Short moss (under 10mm) - Hypermorphitic.
5. Tall moss (over 10mm) - Hypermorphitic.
6. Liverwort - Hypermorphitic
7. Crustose lichen - Perimorphitic.
8. Gelatinous lichen - Perimorphitic.
9. Squamulose lichen - Perimorphitic.
10. Foliose lichen - Perimorphitic.
11. Fruticose lichen - Perimorphitic.

Morphological groups 4, 5, 7, 8 and 9 are expected to be the dominant groups represented in the project area. Depending on precipitation amounts and microsites, groups 6, 10 and 11 may also be well represented where the site specific conditions required for their growth exist. Morphological groups 1, 2 and 3 are difficult to discern in the field as they require specialized tools which are not easily useable in the field. Soil surface microtopography and aggregate stability are important contributions from BSC as they increase the residence time of moisture and reduce erosional processes. The influence of BSC on infiltration rates and hydraulic conductivity varies greatly; generally speaking infiltration rates increase in pinnacled crusts and decrease in flat crust microtopography. The northern Great Basin has a rolling BSC microtopography and the infiltration rates are probably intermediate compared to flat or pinnacled crustal systems. Factors influencing distribution of BSCs (TR-1730-2) include, but are not limited to: elevation, soils and topography, percent rock cover, timing of precipitation, and disturbance.

Possible disturbances that have occurred to soils and BSC within the CMPA, but are not limited to, include: effects from livestock grazing, wild horse use, wildfire, vehicles and recreation activities such as hiking and biking. The specific contribution of these activities to current BSC condition and cover is not discernible from other historic disturbances.

The CEAA for soils and BSC is the CMPA boundary. Past, present and future disturbances that have occurred or may occur to soils and BSC include, but are not limited to: effects from livestock grazing, wild horse use, wildfire,

vehicles and recreation activities such as hiking and biking. The specific contribution of these activities to current BSC condition and cover is not discernible from other historic disturbances.

Environmental Consequences: Soils/Biological Crusts

a. *Alternative A – Maintaining Existing Facilities (No Action)*

Under the No Action Alternative, there would be no new impacts to soils or BSC. Impacts that have already occurred include complete removal of crusts in areas of heavy use, such as camping areas and hiking trails and the introduction of invasive species, in particular annual grasses, which occupy the same niche (interspaces) as BSC. With the continued current use, BSC would not reestablish in these areas.

Effects common to all Action Alternatives:

Closure and rehabilitation of roads would promote natural ecologic functions along routes previously compacted by vehicle use. With the establishment of desirable vegetation, interspaces would allow BSC to establish and/or expand. These roads would still be available for non-motorized travel and trails may develop with regular use leading to areas of renewed compaction which would prevent BSC from developing and/or expanding.

Upgrading existing camp sites to accessible facilities would increase the amount of soil compaction and remove existing BSC. Paths would be increased in size to four feet with soil being compacted for ease of mobility. The compaction and continued use would remove BSC from these areas.

Host camp sites would be upgraded by developing/installing a camp pad which would compact soils and remove BSC. Overlaying the compacted soil at the pad site with gravel would help prevent soil erosion from occurring on the site. The area around the new water faucet would become compacted and soil crusts removed due to heavy use on a regular basis. The area where the sanitation tank would be installed would be heavily disturbed; however, if the area is rehabilitated per project design features, effects would be unnoticeable in less than five years as effects from the regrowth of vegetation and annual freeze/thaw cycles would return the area to a more natural state.

Disturbed areas outside the upgraded and/or developed camp sites used as project staging areas or access areas would require rehabilitation per project design features. Impacts would be unnoticeable in less than five years.

Development of new day use parking areas would compact soils and remove BSC over the entire area; however, the overall benefit of providing designated parking would off-set the impacts. Impacts to soils and BSC would be confined to the parking area alleviating unauthorized parking along

roadsides and in roadside vegetation. Undesirable soil compaction and removal of BSC currently occur along roadsides because of unauthorized visitor parking.

Development of designated camping sites in currently dispersed camping areas would compact soils and remove BSC from the entire camp site. By designating camp sites, impacts to soils and BSC would be localized and would assist in preventing widespread compaction and BSC loss currently being experienced in the dispersed camping area.

Upgrading paths to accessible standards would increase the amount of soil compaction and loss of BSC; however, by increasing the width of the path to four feet, instances of travel off the path would be decreased. Regular maintenance would need to occur in order to prevent excessive erosion to the path.

Enlarging parking areas would compact soils and remove BSC; however, by increasing the size of the parking area, there would be a decrease in unauthorized parking in vegetation on the sides of roads thereby protecting the areas surrounding the point of interest. Soils would remain intact and BSC would not be disturbed outside the designated parking areas.

Where trail maintenance is discontinued, soils would continue to be compacted if the trail continues to be used for recreation. Vegetation may reestablish within the trail if not used. If this occurs, it would provide a mechanism to break up the soil. As the soil breaks up it would be more susceptible to the effects of freeze/thaw cycles further uncompacting the soil particles and allowing more vegetation to reestablish. If vegetation is allowed to reestablish and the soils become uncompact, BSC may have an opportunity to recolonize the trail. Depending on use, effects of discontinued maintenance may be visible in two to five years. If recreational use continues at current levels, there may be no change in the current condition of the trail.

Where trail maintenance is used to prevent or correct effects of soil erosion, there would be short term (less than five years; professional opinion) impacts to soils and BSC in areas directly adjacent to the trail used to stage proposed maintenance or work areas. The short term impacts are outweighed by the prevention of continued soil erosion in those areas along trails where this is currently occurring and in areas where the potential for erosion in the future is high. By maintaining a trail and preventing erosional (water and wind) issues, future soil and BSC loss would be prevented.

b. *Alternative B – Expanding Existing Facilities*

1. Page Springs Outdoor Interpretive Seating Area: The development and construction of an outdoor interpretive seating area at Page Springs Campground would create an area approximately 40 feet by 40 feet of permanent soil compaction

and BSC loss. Soils and BSC would be disturbed short term (less than five years) where heavy equipment would be used to access the site. After the work is complete, rehabilitation per project design features would occur to expedite the recovery of the staging and work areas. The reestablishment of vegetation would prevent soil and BSC loss.

There would be impacts to soils or BSC when vegetation is replaced using non-mechanical methods. With the use of backhoes or other heavy equipment, the work areas would be rehabilitated and reseeded as necessary to prevent soil and BSC loss.

2. South Steens Horse Corrals: Soils and BSC would be permanently impacted with construction of new horse corrals. This would occur with both the 12 feet by 12 feet corrals as well as the 50-foot round pen. An area outside the corrals (both 12 feet by 12 feet and 50-foot round corrals), up to 20 feet from the corral fencing, would likely incur soil compaction and permanent loss of BSC as well.
3. Riddle Brothers Ranch Picnic tables would have no effect on soils or BSC if they are placed in the same area as the current picnic tables where soils are already compacted. A sod lawn is present and BSCs do not exist .

c. *Alternative C – Limited Development*

1. Relocating the Black Canyon gate would permanently remove BSC and compact soils where the road is expanded in order to accommodate a turnaround area. Soils and BSC would be disturbed by the use of heavy equipment to place boulders at the side of the gate; however, rehabilitating the disturbance per project design features would reduce the impacts of the disturbance within in five years based on professional observation of vegetation regrowth and annual freeze/thaw cycles.
2. There would be no impacts to soils or BSC with increases in winter recreation permits.
3. Impacts to soils and BSC would occur with installation of an informational kiosk in Fields and would not be measurable.
4. Developed campgrounds:
 - a. Fish Lake: Soils and BSC would be disturbed with the removal of the horse corral located across North Loop

Road; however, rehabilitating the disturbance by raking the track or tire marks and seeding with an approved seed mix would make the impacts short term, 1-2 growing seasons.

- b. No new impacts would occur at the Jackman Park Campground.
- c. Mann Lake Recreation Site: With the development of ten campsites, a total of five acres of soils would be compacted and the same number of acres of BSC would be removed permanently from the site.
- d. North Steens Equestrian Campground: Approximately 5 acres of soils would be compacted due to the development of the campground and the same number of acres of BSC would be permanently removed from the site. The disturbance to soils and BSC should remain within the confines of the developed campground with the construction of a fence around the perimeter. The replacement of the 8-foot cattleguard with a 16-foot cattleguard would prevent excessive and unnecessary off-road travel by allowing 2 vehicles to utilize the cattleguard simultaneously.

5. Non-Fee Sites

- a. Home Creek Recreation Site: Approximately five acres of soils would be compacted and an equal number of acres of BSC permanently removed from the site. Improving the access road would not have measurable impacts to soils and BSC.
- b. Kueny Canyon Recreation Site and Three Mile Creek Recreation Site: Less than one acre of soil would be compacted and the same amount of BSC would be permanently removed.

6. Overlooks and Other Points of Interest

- a. North Loop Road Toilet: Approximately less than $\frac{1}{10}$ -acre of soil would be compacted and the same number of acres of BSC would be permanently removed with the installation of a vault toilet and accompanying pull-off area.
- b. Cold Spring Parking Area: Less than one acre of soil would be compacted and the same number of acres of

BSC would be permanently removed with the development of a parking area.

7. Trails and Trailheads

- a. Trails: No new impacts to soils or BSC would occur with the designation of the Pike Creek Trail Extension 1 and Levi Brinkley Memorial Trail.

d. *Alternative D: Proposed Action: Full Development:*

Impacts would be similar in Alternative D as with the combination of Alternatives B and C with the addition of the following actions:

1. Riddle Brothers Pipeline Extension and Pump House. The pipeline would be buried within the roadbed of Cold Spring Road limiting impacts to soils and not effecting BSC. Where the pipeline does not follow the road, the disturbed soils would be reseeded with an approve seed mix resulting with impacts becoming less evident after 1-2 growing seasons.
2. Trails and Trailheads
 - a. Pike Creek Trail Extension 2: Approximately 1.5 miles of new trail would be developed. Soils along the new routes would be compacted and BSC would be permanently removed from the sites.
 - b. Indian Mud Loop Trail: Designating this existing route would have no new impacts to soils or BSC.
 - c. Fred Riddle Trail: Approximately 12.75 miles of new trail would be developed. Soils along the new routes would be compacted and BSC would be permanently removed from the sites.
 - d. Three Mile Creek Trail: Approximately 2-2.5 miles of new trail would be developed. Soils along the new routes would be compacted and BSC would be permanently removed from the sites.
 - e. Kueny/Black Canyon Trails: Approximately 7 miles of new trail would be developed. Soils along the new routes would be compacted and BSC would be permanently removed from the sites.
 - f. Huffman Trail: Approximately 23.5 miles of new trail would be developed. Soils along the new routes would

be compacted and BSC would be permanently removed from the sites.

e. *Alternative E: Limited Development and Dispersed Recreation*

Approximately 134.8 miles of currently open roads would be closed to motorized vehicle use with the exception of administration use. Impacts to soils and BSCs would be limited to any maintenance required to protect the resources and the compaction of soils and loss of BSC along trail/administration routes. Any ground disturbing maintenance requires rehabilitation as per project design features. Trails and trail maintenance are discussed above under Affects Common to All Action Alternatives.

8. BLM Special Status Species Habitat

Affected Environment: SSS Habitat

Special Status wildlife species occurring within the CMPA include the Greater Sage-Grouse and two species of bats, the fringed myotis and Townsend's big-eared bat. Greater Sage-Grouse use the CMPA yearlong and have 28 leks within the CMPA.

Table 4: Greater Sage-Grouse Habitat by Type

Greater Sage Grouse (<i>Centrocercus urophasianus</i>) Habitat	Acres	Percent
Preliminary Priority Habitat (PPH)	226,947	48%
Preliminary General Habitat (PGH)	243,965	52%
Total	470,912	100%

Approximately 48 percent of the CMPA is designated PPH and 52 percent is PGH (ODFW 2011). Nest sites were located in the CMPA during a radio telemetry study from 1997 to 2000. Approximately 65 percent of nests were within 2 miles of a lek and 83 percent were within 3 miles of a lek. About 44 percent (215,927 acres) of the CMPA is within three miles of a lek site. Nest sites were determined to be located mostly in big sagebrush/mountain shrub vegetation types with about $\frac{1}{3}$ of nests occurring in low sagebrush sites (Crawford et al., 2000). Since most sage-grouse hens nest during late March to early April, new growth on perennial grasses is minimal and previous years' (residual) grass growth provides cover for nesting. Nest success for sage-grouse is higher when sagebrush canopy cover is high and residual tall grass cover (> 7 inches) is present at the nest site (Gregg et al. 1994, DeLong et al. 1995). Residual grass cover provides horizontal screening at the nest site, which blocks the view from predators. Brood rearing also occurs in the area, but with few meadow areas, sage-grouse hens with broods may move to higher elevations or south to Home Creek. During the summer months, sage-grouse seek water, usually associated with wet meadows and succulent

vegetation (Call and Maser 1985). If the year has been unusually dry, sage-grouse may use any water source available, including reservoirs, but do not use livestock watering troughs as readily since access to the water is more difficult (Call and Maser 1985, Hanf et al. 1994). Partially buried water troughs or those set with the top near ground level may be accessed more easily by sage-grouse (Call and Maser 1985, Hanf et al. 1994). Sage-grouse winter in lower elevations, depending on snow depth during winter.

The "Greater Sage-Grouse Conservation Assessment and Strategy for Oregon" (Strategy) (Hagen 2011) has an action item to "[p]romote vegetation that supports nesting, brood-rearing, and winter habitats including maintenance or recovery of shrub and herbaceous (native grasses and forbs) cover. Retain residual cover adequate to conceal sage-grouse nests and broods from predation, and plant communities that provide a diversity of plant and insect food sources." The Strategy recognizes that appropriate recreation use can be compatible with sage-grouse habitat needs and has the following conservation guidelines for recreation from page 116:

Viewing:

- 1) *Protect existing leks and provide secure sage-grouse breeding habitat with minimal disturbance and harassment through seasonal closures of roads and areas,*
- 2) *Provide sage-grouse habitats secure from direct human disturbance during the winter and breeding seasons (when birds are concentrated and susceptible to harassment).*
- 3) *If alternative measures have not been successful in reducing disturbances initiate seasonal or area closures as necessary to protect sage-grouse habitats.*
- 4) *Assist with developing public viewing areas of sage-grouse leks with oversight from ODFW and land management agencies to minimize disturbance.*

Developed or Improved Recreation Sites:

- 1) *Facilities (i.e., kiosks, toilets, signs, etc.) should be constructed at least 3.2 km (2 mi) from leks to minimize disturbance during the breeding season.*
- 2) *Facilities (kiosks, toilets, signs, etc.) should be constructed to minimize disturbance in known/occupied sage-grouse nesting and early brood-rearing habitat. Avoid construction of facilities that provide avian predator perches unless they include mitigating features such as perch guards.*

These excerpts are not inclusive of all guidelines in the Strategy, but are the most pertinent to this document.

Instruction Memorandum (IM) 2012-043 Greater Sage-Grouse Interim Management Policies and Procedures has the following to say about recreation sites, “Use conservation measures to avoid impacts to Greater Sage-Grouse at existing recreation sites. Consider closing recreational sites either seasonally or permanently and restricting traffic to avoid or minimize effects of habitat alterations or other physical disturbance’s to Greater Sage-Grouse (e.g., breeding, brood-rearing, migration patterns, or winter survival).”

This IM includes the following conservation guidelines for travel management:

Evaluate authorizations and use and implement seasonal road/primitive road/trail restrictions if continued use would result in habitat alterations or other physical disturbances that impair life history functions of the Greater Sage-Grouse, such as breeding, brood-rearing, migration patterns, or winter survival, as appropriate.

Place a high priority on closing and reclaiming unauthorized motor vehicle routes.

Limit and enforce motorized vehicle use to existing or designated roads, primitive roads, and trails and seasons of use to prevent habitat loss or other physical disturbances that impair life history functions of Greater Sage-Grouse, such as breeding, brood-rearing, migration patterns, or winter survival.

These excerpts are not inclusive of all Interim Conservation Policies and Procedures in IM 2012-043, but are the most pertinent to this document.

Bats are a migratory species with arrival in the CMPA during May to June. Most species may migrate south in the fall but a few winter hibernacula are known to exist in the area. Bats roost in caves or rock crevices and in loose bark of cottonwood or older juniper trees. Bats forage for insects anywhere they can find sufficient concentrations and use still water pools in streams, springs, reservoirs, and water troughs for watering. Bats may travel several miles from day roost sites for foraging and watering. Usually they roost during the night for a period of time, then forage before returning to their day roost.

Environmental Consequences: SSS Habitat

Effects Common to All Alternatives: SSS Habitat

The CEAA for SSS Habitat are within and adjacent to the CMPA to encompass regular movements of special status wildlife that may be using the area. The total acreage of the CEAA would be approximately 496,135 acres. According to Johnson et al., the presence of existing secondary roads has not been found to be a negative influence on lek trends.

Past and present actions and events, such as those described in Affected Environment, have also influenced the existing environment within the CEAA. The RFFAs in the CEAA that may contribute to cumulative effects to SSS and habitat include management activities associated with livestock grazing, wild horse gathers, hunting and other recreational pursuits, and cutting and prescribed burning treatments to reduce hazardous fuels and restore habitat. Several thousand acres of treatments are proposed in the CEAA, but funding, weather conditions, and other factors will affect timing of implementation. Completion of proposed juniper treatments combined with treatments in the CEAA would improve habitat quality for sage-grouse, and decrease the risk of a community altering wildfire that would remove habitat.

Other actions, mainly implementation of the North Steens Ecosystem Restoration Project and Echanis Wind Development Project, would have an effect on sage-grouse habitat by removing encroaching juniper from what was believed to be suitable nesting and brood-rearing habitat prior to juniper encroachment. Removal of juniper is expected to increase the amount of forage available for livestock, wild horses, and certain wildlife species. This leaves more residual nesting cover in the long-term for sage-grouse. Cutting, piling and burning of juniper within two miles of lek sites would retain much of the shrub cover and increase nesting habitat near leks. Removing juniper may also increase the amount of water available in seasonally wet areas that will improve sage-grouse brood-rearing habitat. Echanis Wind Development Project has already described sage-grouse effects and has project design elements to decrease these effects; these effects will be incorporated by reference from the Echanis Wind Development Project EIS.

Disturbance from construction of the different projects would not be measurable and temporary (during construction activities) effects on wildlife SSS. Effects would be only during the actual construction and would be expected to be not measurable impact on SSS use of the habitat. Since not all projects would be constructed or completed at the same time, effects would be spread out over several years, and disturbance would be localized. Improvement construction work would occur after sage-grouse nesting season (April 1 to June 15). Once individual projects are completed, SSS would be expected to use the areas again. Maintenance of wild horse populations to within the AML range would lessen late-season effects of grazing by wild horses on residual grass cover for sage-grouse nesting habitat.

a. *Alternative A – Maintaining Existing Facilities (No Action): SSS and Habitat Wildlife*

In this alternative, wildlife SSS would have the same resources available as are currently present in the CMPA. Portions of the CMPA away from existing recreational uses would have non-used areas, which would be expected to provide more suitable nesting sites for sage-grouse due to more residual grass cover. This provides horizontal screening at nest sites, which is believed to reduce predation.

b. *Alternative B – Expanding Existing Facilities: SSS and Habitat Wildlife*

Effects to SSS for this alternative would be the same as those for Alternative A, as there would only be new construction of recreational facilities within the existing foot print, all expansions in and around existing facilities are not of a size that would exceed the typical use around those areas already experienced. Sage-grouse would have already adapted use patterns and/or seasonal patterns around these existing facilities. Improvement and expansion of existing facilities would not be expected to have any effect outside of the already established areas, nor is it expected to increase use to the point where there would be increased fatalities due to road use (currently the greatest amount of trips anywhere in the CMPA is the North Loop Road with 0.92 trips per hour during the busy season of use). This shows that the most heavily used is less than one trip per hour; all other roads in our district would have less use than this, and would not have an effect on sage grouse use of the area. The associated closure of 10.9 miles of roads and ways are expected to balance out any additional use that might occur as a result of the expansion/upgrade of existing facilities.

Bat habitat may be affected by the removal of old cottonwood trees, but to what extent is unknown as no bat surveys have been completed to date.

c. *Alternative C – Limited Development: SSS and Habitat Wildlife*

This alternative would include all of the expansions/upgrades outlined in Alternative B, without any of the road closures; and the addition of 1.5 miles of road improvement and the construction of three new parking areas (Kueny Canyon less than 1 acre, Three Mile Creek less than 1 acre, and Cold Spring less than 1 acre).

Overall, one acre of this new road development would occur in PPH and less than two acres in PGH. The Strategy, states that roads be

restricted to greater than two miles from leks during the breeding season. None of these acres would occur within two miles of a sage-grouse lek. Due to the low number of acres and the location (not near any leks), these parking areas would not have a measurable effect on sage-grouse, nesting habitat, or brood rearing habitat, nor provide any impasses to any known connectivity.

d. *Alternative D – Full Development (Proposed Action): SSS and Habitat Wildlife*

This alternative would include all of the expansions/upgrades and new construction described in Alternatives B and C, without any road closures with the addition of the following:

1. Construction of three additional parking areas (Carlson Creek less than 1 acre, Penland Wilderness 5 acres, and Pike Creek 5 acres).
2. Creation of 51 miles and maintenance of 21 miles of trails, and construction of .63 miles of new road to access the parking lots.
3. Expansion of a pipeline (4,750 feet) from an existing well and pipeline to provide potable water at Riddle Brothers Historic Ranch. The pipeline would be constructed in an existing road prism. There would also be the construction of a pump house. This entire expansion is in an existing disturbed area and would not cause new disturbance other than the construction period.

Overall, no acres are in PPH and less than 12 acres are in PGH. The Strategy states that developed or improved recreation sites be constructed at least two miles from leks to minimize disturbance during the breeding season. None of these acres would occur within two miles of a sage-grouse lek. Any additional recreational activities (e.g. snowshoeing, snowmobiles, hiking, cross-country skiing) by visitors is expected to be conducted on existing routes due to the ease of travel. According to Johnson et al., the presence of existing secondary roads has not been found to be a negative influence on lek trends.

The construction of pump house and expansion of the pipeline would occur in already disturbed habitat of the Riddle Brothers Historic Ranch area along the Cold Spring Road. Perch deterrent guards would be installed to prevent predator perching.

Due to the low number of acres and the location (not near any leks), these parking areas and expansions would not have a measurable

effect on sage-grouse, nesting habitat, or brood rearing habitat, nor provide any impasses to connectivity as currently known.

e. *Alternative E – Limited Development and Dispersed Recreation: SSS and Habitat Wildlife*

This alternative would not provide any of the expansions and constructions listed in any of the alternatives. There would be 175.9 miles of roads and ways closed, either directly or indirectly, in this alternative. There would be a reduced chance of mortality caused by vehicle strikes to sage-grouse as the busiest road has less than one trip per hour (0.92 trip per hour). Over time the closed roads would naturally become overgrown with native vegetative material and could provide usable habitat for sage-grouse. Some of these roads are used to access and maintain several water sources; closure status may eventually preclude the upkeep necessary for these water sources and result in the loss of drinking water. This would decrease the amount and diversity of food that would be available for sage-grouse use. According to Johnson et al., the presence of existing secondary roads has not been found to be a negative influence on lek trends.

9. Upland Vegetation

Affected Environment: Upland Vegetation

In 1990, the Burns District Ecological Site Inventory was completed, and included both a soil and vegetation inventory. The vegetation inventory looked at current (at the time) vegetative cover and range condition interpretations. The table below list representative Ecological Sites, but is not all inclusive.

Table 5: Ecological Site, Site Name and Dominate Vegetation

Ecological Site	Site Name	Dominate Vegetation
23XY200OR	Ponded Clay	ARCAB/PONE/LETR
23XY212OR	Loamy 10-12 PZ	ARTRW/ACTH/PSSP6
23XY216OR	Claypan 12-16 PZ	ARARA/FEID/PSSP6
23XY217OR	Juniper Tableland 12-16 PZ	JUOC/ARARA/FEID/PSSP6
23XY220OR	Clayey 10-12 PZ	ARTRW/PSSP6
23XY302OR	South Slopes 12-16 PZ	ARTRV/PSSP6
23XY310OR	North Slopes 12-16 PZ	ARTRV/FEID
23XY501OR	Shallow Loam 16-25 PZ	ARTRV/FEID
23XY503OR	Open Slopes 25-35 PZ	CAREX/ACNA
23XY507OR	Claypan 16-25 PZ	ARAR/FEID/DAUN
24XY016OR	Shallow Loam 8-10 PZ	ARTRW/ACTH/PSSP6

Historically, the area of Steens Mountain was heavily grazed both by cattle and sheep. Discussions with local longtime residents tell of Steens Mountain appearing white during the height of the summer due to the number of sheep grazing on the mountain. Today, grazing has been excluded from many areas of Steens Mountain with the enactment of the Steens Act in 2000. In the upper elevations of the mountain, where grazing has been excluded, vegetation is in excellent condition with very little indication grazing ever occurred. At lower elevations, grazing has continued in designated areas. Vegetation trends in these areas are discussed in the grazing section of this document. At lower elevations, below 6,000 feet, cheatgrass and juniper encroachment have become problematic.

Introduction of cheatgrass into the Great Basin and Upper Columbia River Basin has upset the ecological balance. Ecological processes such as energy flow, nutrient and hydrologic cycles, and structure and dynamics, result in fauna and flora having been adversely affected. In addition to the ecological implications associated with cheatgrass invasion, the impacts to land uses in the area are also significant (Pellant 1996). Cheatgrass was found by Knapp (1996) to dominate approximately $\frac{1}{5}$ of the sagebrush-bunchgrass habitat. Secondary succession following disturbance is often caused by damage and destruction from lagomorphs and rodent grazing (Knapp 1996), resulting in reduced competition for cheatgrass.

The biotic communities most at risk to the impacts of the “cheatgrass-wildfire cycle” are the Wyoming big sagebrush and more mesic salt desert shrub plant communities (Peters and Bunting 1994; Pellant 1990). Not only is cheatgrass adapting to new environments, it is now being invaded by other noxious weeds (Pellant 1996). In the western United States, big sagebrush (*Artemisia tridentata*) steppe communities dominate approximately 60 million hectares (148 million acres) and comprise the largest vegetation type (Wambolt and

Hoffman 2001). However, due to the invasion of exotic plants, fire has become a driving force in the ecology and management of sagebrush steppe communities. The high variability in cover and density of shrubs indicates the complexity of factors influencing recruitment and establishment of sagebrush from both natural populations and from artificial seeding (Lysne and Pellant 2004). If current sagebrush restoration efforts do not result in a more consistent establishment and persistence of this important shrub, areas of sagebrush-steppe may be lost, and rehabilitation may no longer be a viable option (West 2000).

Western juniper occurs in a band between 4,500 and 7,000 feet on Steens Mountain, over 90 percent of which is comprised of trees established after the 1860s (Miller et al. 2008). Over half the area of the present juniper forests in eastern Oregon became established between 1850 and 1900 (Gedney et al. 1999). Once established, juniper forests increased in density, with the greatest increase occurring between 1879 and 1918 (Gedney et al. 1999). This rapid increase in juniper stand establishment occurred during a period of favorable climatic conditions, and reduced fire frequency and intensity (Gedney et al. 1999). Larger trees are sometimes killed by fire, but many survive; survival is often dependent on fire intensity. The crowns of larger juniper trees often limit grass and other vegetative growth beneath them, thereby, reducing the fuel necessary to carry fire into the tree, fireproofing the crown and stem (Agee 1993).

In the absence of pre-settlement fire return intervals, western juniper has functioned as an invasive species over much of Steens Mountain and the CMPA, generally increasing in frequency to the greatest degree on north slopes and at higher elevations (Johnson and Miller 2006), encroaching into more productive mountain big sagebrush and low sagebrush plant communities. Expansion juniper intercepts precipitation and utilizes soil moisture, well beyond its own crown area, that would otherwise be available to competing native vegetation (Bates et al. 2000). Juniper has assumed control of ecological site processes (soil hydrologic cycle and nutrient transfer through the soil profile) within the allotment. Loss of shrubs, grasses, and forbs has occurred in some areas, and could lead to loss of soil surface stability over the next few decades.

Up to 10 percent of juniper stands are comprised of older trees (over 100 years) inhabiting rocky ridges or shallow soil areas where fires are not expected to burn. Tree age may exceed 1,000 years in these stands, and at these sites the rocky surface controls soil infiltration and maintains soil surface stability.

Trend associated with grazing activities can be located in the Grazing section.

Environmental Consequences

a. *Alternative A – Maintaining Existing Facilities (No Action)*

Under the No Action Alternative, there would be no new impacts to upland vegetation.

Effects common to all Action Alternatives:

The CEAA for upland vegetation is the CMPA and adjacent areas.

Closure and rehabilitation of roads would promote a return to natural ecological functions along the routes previously compacted by vehicle use.

Upgrading existing camp sites to accessible facilities would not impact vegetation; however, increasing paths to four feet would remove additional vegetation. The loss of vegetation is less than one acre.

Upgrading host camp sites would have no impacts to vegetation as the areas surrounding the host campsites, as well as regular campsites, are generally devoid of desirable vegetation due to heavy use. The area where the sanitation tank would be installed would initially remove vegetation; however, if the area is rehabilitated and reseeded after the installation, effects would be unnoticeable within 1-2 growing seasons.

Disturbed areas outside the upgraded and/or developed camp sites used as project staging areas or access areas would be rehabilitated and reseeded. Impacts would be unnoticeable within 1-2 growing seasons.

Development of new day-use parking areas would remove vegetation over the entire area or in any portion thereof not originally used as a parking area; however, the overall benefit of providing designated parking would off-set the impacts by providing ample parking and removing the need to park in roadside vegetation.

Development of designated camping sites in dispersed campgrounds would remove vegetation from the use areas of the camp site. By designating camp sites, vegetation loss would be localized to specific areas and would assist in preventing widespread loss from widespread disperse camping.

Upgrading paths to accessible standards would increase the amount of vegetation loss; however, by increasing the width of the path to four feet, instances of travel off the path would be decreased.

Enlarging parking areas would remove vegetation from the expanded area; however, by increasing the size of the parking area, there would be a decrease

in unauthorized parking on the side of the roads and in vegetation thereby protecting the areas surrounding the point of interest.

Where trail maintenance is discontinued, vegetation may reestablish within the trail. Depending on use, effects of discontinued maintenance may be visible in 2-5 years. If recreational use continues at current levels, no change is expected to occur to the current condition of the trail.

Where trail maintenance is used to prevent or correct the effects of soil erosion, there would be short term (1-2 growing seasons) impacts to vegetation directly adjacent to the trail in areas used to stage the proposed maintenance or use as a work area. The short term impacts are outweighed by the prevention of continued soil erosion in those areas along trails where this is currently occurring and in areas where the potential for erosion in the future is high. Soil erosion removes soil, vegetation and BSC not just in the area susceptible to erosion, but also in the areas above and below the erosion site. By maintaining a trail in order to fix current erosion issues, future vegetation loss would be prevented.

b. *Alternative B – Expanding Existing Facilities*

1. Page Springs Outdoor Interpretive Seating Area: The development and construction of an outdoor interpretive seating area at Page Springs Campground would remove approximately 50 feet by 50 feet of vegetation. Vegetation would be disturbed short term (1-2 growing seasons) where heavy equipment would be used to access the site. After the work is complete, rehabilitation, to include seeding with an appropriate seed mix, would occur to expedite the recovery of the staging and work areas. The reestablishment of vegetation would prevent soil and BSC loss.

There would be no measurable impacts to surrounding vegetation when using non-mechanical methods. With the use of backhoes or other heavy equipment, the work areas would need to be rehabilitated and reseeded as necessary to prevent impacts to vegetation such as removal or crushing.

2. South Steens Horse Corrals: Vegetation would be permanently removed with the construction of new horse corrals. This would occur with both the 12 feet by 12 feet corrals as well as the 50-foot round pen. An area outside the corrals (both 12 feet by 12 feet and 50-foot round corrals), up to 20 feet from the corral fencing, is expected to incur vegetation loss as well.
3. Riddle Brothers Ranch picnic tables would have no effect on vegetation if they are placed in the same area as the current

picnic tables where vegetation has already been removed; however, the area where the current picnic tables are located is within an area with a sod lawn and placement in this area would not affect native vegetation.

c. *Alternative C – Limited Development*

1. Relocating the Black Canyon gate would permanently remove any vegetation where the road is expanded in order to accommodate a turnaround area. Vegetation would be disturbed by the use of heavy equipment to place boulders at the side of the gate; however, rehabilitating the disturbance by raking the track or tire marks and seeding with an approved seed mix would make the impacts short term, 1-2 growing seasons.
2. There would be no impacts to vegetation with increases in winter recreation permits.
3. Impacts to vegetation would be negligible with installing an informational kiosk in Fields.
4. Developed campgrounds:
 - a. Fish Lake: Vegetation would be disturbed with the removal of the horse corral located across North Loop Road; however, rehabilitating the disturbance by raking the track or tire marks and seeding with an approved seed mix would make the impacts short term, 1-2 growing seasons.
 - b. New impacts would not occur at the Jackman Park Campground.
 - c. Mann Lake Recreation Site: With the development of ten campsites, a total of 5 acres of vegetation would be lost due to heavy use in and around the campsites.
 - d. North Steens Equestrian Campground: Approximately 5 acres of vegetation would be lost due to the development of the campground and the heavy use in and around the campsites. Vegetation loss should remain within the confines of the developed campground with the construction of a fence around the perimeter. The replacement of the 8-foot cattleguard with a 16-foot cattleguard would remove less than 0.10 acres of vegetation; however, this loss

would prevent excessive and unnecessary off-road travel by allowing two vehicles to utilize the cattleguard.

5. Non-Fee Sites

- a. Home Creek Recreation Site: Approximately 5 acres of vegetation would be removed from the site due to heavy use in and around the campsites. Improving the access road would have no measurable impacts to vegetation.
- b. Kueny Canyon Recreation Site and Three Mile Creek Recreation Site: Less than one acre of vegetation would be removed in order to develop a parking area with turnaround. This would prevent further vegetation loss by providing a designated parking area.

6. Overlooks and Other Points of Interest

- a. North Loop Road Toilet: Approximately 1/10th of an acre of vegetation would be removed with the installation of a vault toilet and accompanying pull-off area.
- b. Cold Spring Parking Area: Less than one acre of vegetation would be removed with the development of a parking area.

7. Trails and Trailheads

- a. Trails: There would be trail maintenance (ie. brushing) that would occur with the designation of the Pike Creek Trail Extension 1 and Levi Brinkley Memorial Trail.

d. *Alternative D: Proposed Action: Full Development:*

Impacts would be similar in Alternative D as with the combination of Alternatives B and C with the addition of the following actions:

Riddle Brothers Pipeline Extension and Pump House. The pipeline would be buried within the roadbed of Cold Spring Road with no impacts to vegetation. Where the pipeline does not follow the road, the disturbed areas would be reseeded with an approved seed mix resulting with impacts becoming less evident after 1-2 growing seasons.

1. Trails and Trailheads

- a. Pike Creek Trail Extension 2: Approximately 1.5 miles of new trail would be developed. Vegetation along new routes would be removed from the sites.
- b. Indian Mud Loop Trail: Designating this existing route would have no new impacts to vegetation.
- c. Fred Riddle Trail: Approximately 12.75 miles of new trail would be developed. Vegetation along the new routes would be removed from the site.
- d. Three Mile Creek Trail: Approximately 2-2.5 miles of new trail would be developed. Vegetation along the new routes would be removed from the site.
- e. Kueny/Black Canyon Trails: Approximately 7 miles of new trail would be developed. Vegetation along the new routes would be removed from the site.
- f. Huffman Trail: Approximately 23.5 miles of new trail would be developed. Vegetation along the new routes would be removed from the site.

e. *Alternative E: Limited Development and Dispersed Recreation*

Approximately 183.6 miles of currently open roads would be closed to motorized vehicle use with the exception of administrative purposes. As use decreases, vegetation would encroach on to the roadbed, eventually reducing the visual presence of the roads. Based on professional observations, the roads would not completely disappear and a “two-track” road would remain. This two-track would provide the route for non-motorized travel as well as motorized administrative use and reduce travel outside the original footprint of the road.

10. Wild and Scenic Rivers

Data for the affected environment is taken from the Andrews Management Unit/Steens Mountain CMPA Proposed RMP and Final EIS, which was prepared by the Burns BLM District Office, dated August 2004.

Affected Environment: Wild and Scenic Rivers

The WSRs Act states that “certain selected rivers of the nation which, with their immediate environments, possess outstandingly remarkable scenic,

recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations.” Section 10(a) describes the basic management requirement of protecting and enhancing the values that caused the river to be included in the WSRs System. The Burns BLM manages 12 river segments in the WSRs System. Six are part of the Donner und Blitzen River drainage and were designated when Congress passed the Omnibus Oregon WSRs Act of 1988. A management plan for the Donner und Blitzen River and the 5 other river segments was completed in 1993. The Steens Act designated an additional 6 rivers. Mud Creek, Ankle Creek, and the South Fork of Ankle Creek were added to the Donner und Blitzen River System. Wildhorse Creek, Little Wildhorse Creek, and Kiger Creek were also designated. The length of the 12 designated rivers total 105 miles with the BLM managing approximately 27,324 acres of public land within the 31,346 acres in WSR corridor boundaries. The remaining 4,022 acres within the WSR corridors are state and private land. Under the Steens Act, all 12 of the rivers fall within the CMPA and all but 1,204 acres of the BLM administered lands in the WSR corridors fall within the Steens Mountain Wilderness.

Under the WSRs Act, rivers are classified by Congress as Recreational, Scenic or Wild depending on the extent of development and access along each river at the time of designation. All of the designated river segments in the CMPA were classified as Wild by Congress. River segments with a Wild classification are generally inaccessible except by trail, with watersheds and shorelines essentially primitive and waters unpolluted. Under guidance from the Steens Act, where WSR corridors overlap with the Steens Mountain Wilderness, the more restrictive management requirements apply. Several of the river segments have roads, recreation facilities, historic structures, and other infrastructure that existed at the time of designation. These facilities continue to be maintained and be replaced as necessary to provide for public health and safety and resource protection; however, the majority of the river segments are still primitive in character.

The peak use season for most of the WSRs is from June to late October. The most common recreational activities include hiking, fishing, hunting, and backpacking along the river corridors. Trails provide the main access to many of the rivers. Approximately 300 to 500 visitor use days occur annually from June to late October. Very limited visitor use data exist for Fish Creek, Mud Creek, and Ankle Creek, but use levels are lower than in the gorges of Little Blitzen River and Big Indian Creek. Page Springs Campground is open year-round and is the trailhead for visiting the north end of Donner und Blitzen River. Approximately 1,500 visitor use days occur annually from the Page Springs Campground.

The intent of the WSRs Act is to maintain the free-flowing character of designated rivers and to protect or enhance their values. Those values were termed ORVs by Congress. The ORVs are values or opportunities in a river corridor which are directly related to rivers and which are rare, unique, or exemplary from a regional or national perspective.

- a. Donner und Blitzen WSR System: The Donner und Blitzen River system includes Little Blitzen River, South Fork of Donner und Blitzen River, Big Indian Creek, Little Indian, Fish Creek, Mud Creek, Ankle Creek, and South Fork of Ankle Creek river segments. The ORVs identified for the Donner und Blitzen River system include Scenic, Geologic, Recreational, Fish, Wildlife, Vegetation, Historic and Cultural.

The Riddle Brothers Ranch is a historic ORV within Little Blitzen WSR Corridor. Also, located within the Riddle Brothers Historic Ranch District is the Mortar Riddle Archaeological site. A regionally prehistoric/historic site occupied between 400 and 1840 AD. This is a cultural ORV within Little Blitzen River Corridor.

- b. Wildhorse WSR System: The Wildhorse WSR system includes Wildhorse Creek and Little Wildhorse Creek river segments. The ORVs identified for Wildhorse and Little Wildhorse Creeks include Scenic, Recreational, Wildlife, and Botanic.
- c. Kiger WSR System: The ORVs identified for Kiger Creek include Scenic, Wildlife, Fish, and Botanic.

Environmental Consequences: Wild and Scenic Rivers

Effects Common to All Alternatives: WSR

For the purposes of this analysis, the CEAA for WSR is the CMPA area. Past and present actions, such as those described in Affected Environment WSR, have influenced the existing environment within the CEAA. The RFFAs in the CEAA that may contribute to cumulative effects to WSR; grazing, recreation, existing range improvements, fire rehabilitation actions, ongoing noxious weed treatments, and North Steens Ecosystem Restoration Project.

- a. *Alternative A – Maintain Existing Facilities (No Action): Wild and Scenic Rivers*

Burns BLM District Office would maintain the current management of the WSRs, to protect and enhance the ORVs as guided by the CMPA RMP. Maintenance of trails within WSR corridors would affect the recreational ORV by making the trails accessible.

b. *Alternative B – Expanding Existing Facilities: Wild and Scenic Rivers*

Nye and Wet Blanket trails are within Little Blitzen WSR corridor. Reconstructing and maintaining of Nye and Wet Blanket Trails would enhance recreational ORV by eliminating user-created trails and reducing the percent slope making them more usable, and preventing damage to the vegetation ORV.

No maintenance occurs on Kiger Gorge Trail at this time. Kiger Gorge Trail is steep and hazardous making this trail very difficult to maintain; therefore, not maintaining Kiger Gorge Trail would not affect the recreational ORVs.

c. *Alternative C – Limited Development: Wild and Scenic Rivers*

Effects to WSRs are similar to Alternative B; however, designating Levi Brinkley Memorial Trail affects the recreational ORVs by providing additional trail opportunities within Little Blitzen River WSR corridor.

All other developments proposed under this alternative would not be visible from any waterway, thus preserving the scenic ORV of these water systems.

d. *Alternative D – Full Development (Proposed Action): Wild and Scenic Rivers*

Effects to ORVs within the WSR corridor are similar to Alternative C; however, the the addition of the Riddle Brothers Pipeline Extension and Pump House and the two new winter recreation areas would have the following effects:

The Riddle Brothers Pipeline Extension and Pump House would occur in Little Blitzen WSR corridor. There would be no affect to the ORVs because the pipeline would be within the boundary of Riddle Brothers Road and the pump house is within the boundary of the BLM's administrative site already disturbed.

Roaring Springs Winter Recreation and South Loop Road Winter Recreation trails cross Donner und Blitzen WSR System at two locations (see map). There would be no affect to the ORVs since the proposed trails cross the rivers on existing roads.

All other developments proposed under this alternative would not be visible from any waterway preserving the scenic ORV of these water systems.

e. *Alternative E – Limited Development and Dispersed Recreation: Wild and Scenic Rivers*

Closing of roads and ways within the CMPA does not directly affect the WSR ORVs because there are no roads or ways (with one exception) within the WSR corridor, therefore the ORVs are not affected.

The one exception is a portion, approximately 0.2 mile of Cold Spring Road which passes through the Historic Riddle Brothers Ranch. Little Blitzen WSR was designated in 1988 with Cold Spring Road already in existence. In 2007, the Steens Mountain TMP gave specific route management direction to keep Cold Spring Road open. The route is currently used by Harney County High Desert Wheelers club as well as other 4-wheel enthusiasts and hunters. Therefore, closing Cold Spring Road would have an effect to the recreational ORV by limiting motorized access to the historical, cultural and scenic ORVs that visitors are currently able to access with motorized vehicles.

11. Wilderness

Wilderness Data for the affected environment is taken from the Andrews Management Unit/Steens Mountain CMPA Proposed RMP and Final EIS, which was prepared by the Burns BLM District Office, dated August 2004.

Affected Environment: Wilderness

The Steens Act of 2000 designated the 428,156-acre CMPA and one of the purposes of the Act is ". . . to conserve, protect, and manage the long-term ecological integrity of Steens Mountain for future and present generations." Within this area, cooperative and innovative management projects are encouraged and implemented by the BLM, private landowners, tribes, and other public interests. Sustainable grazing and recreational use, including fishing and hunting, would continue where consistent with the purposes of the Steens Act.

The Steens Act also established a 97,229-acre "No Livestock Grazing Area" on BLM-administered lands in the wilderness and closed approximately 104 miles of road in the wilderness to motorized vehicle use by the public. The most popular and remote areas of the wilderness are located within the No Livestock Grazing Area.

Most of the Steens Mountain Wilderness is in outstanding natural condition. Some of the most unique features are its scenic vistas, spectacular geology, and diverse habitats. There are 16 designated trails in Steens Mountain Wilderness, some of which follow closed two-track roads and are easily

hiked, while others are rough, rocky trails pioneered by sheepherders. Opportunities for outstanding solitude are enhanced by varied and rugged topography. Deep drainages, vegetative screening, and the vast landscape contribute to a visitor's sense of seclusion. Unique landscape, plant and wildlife features within the wilderness provide a scenic backdrop for outstanding opportunities for primitive and unconfined recreation activities some of which include day hiking, backpacking, horseback riding, hunting, fishing, photography, plant and wildlife viewing.

The primary visitor use season for most of the wilderness is July through early November. Most visitor use currently occurs in Little Blitzen and Big Indian Gorges, along Donner und Blitzen River upstream from Page Springs Campground, at Wildhorse Lake and Pike Creek. Information from trail, road counter data, and visitor registers from entry points accessing these areas of the wilderness estimate visitation at 4,000 to 7,000 people per year. Actual visitation is expected to be higher, given that not all access points have visitor data specific to wilderness, especially areas along the east face of Steens Mountain and the west face of the Steens Mountain.

Steens Loop Road is generally closed late November through June due to wet road conditions or high snow levels. Winter use of wilderness is low given only 8 to 25 winter recreation permits for the entire CMPA are issued each year.

The Wilderness Act directs that wilderness areas be managed to provide for their protection, the preservation of their natural conditions, and the preservation of their wilderness character. The definition of a wilderness states that "A wilderness, in contrast with those areas where man and his works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain." Factors which make up an area's wilderness character are spelled out in the Wilderness Act's definition of wilderness (Section 2(c)) and are as follows:

Untrammelled: refers to wilderness as essentially unhindered and free from modern human control or manipulation. This quality is impaired by human activities or actions that control or manipulate the components or processes of ecological systems inside wilderness.

Undeveloped: Wilderness is an area "of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation," "where man himself is a visitor who does not remain," and "with the imprint of man's work substantially unnoticeable."

Naturalness: Wilderness is "protected and managed so as to preserve its natural conditions." Ecological systems should be as free as possible from the effects of modern civilization.

Solitude: Wilderness provides opportunities for people to experience: natural sights and sounds; remote, isolated, unfrequented, or secluded places.

Primitive and Unconfined Recreation: is the opportunity for freedom, risk, and the physical and emotional challenges of self-discovery and self-reliance in a non-motorized, undeveloped area without signs of modern civilization.

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

Environmental Consequences: Wilderness

Effects Common to All Alternatives: Wilderness

For the purposes of this analysis, the CEAA for wilderness is the Steens Mountain Wilderness within the CMPA area. Past and present actions, such as those described in *Affected Environment Wilderness*, have influenced the existing environment within the CEAA. RFFAs in the CEAA that may contribute to cumulative effects to wilderness, existing range improvements, periodic wild horse gathers to maintain horse numbers within the AML, fire rehabilitation actions, and ongoing noxious weed treatments, the North Steens Ecosystem Restoration Project and the North Steens Transmission Line ROW and Echanis Wind Development Project.

There would be effects to Solitude from the North Steens Transmission Line ROW and the Echanis Wind Development Project during construction. Opportunities for solitude would be diminished on those parts of the Steens Mountain Wilderness that would have views of the project. Approximately 822 acres of wilderness would have views of the project. No project facilities would be located in wilderness (see North Steens 230KV Transmission Line Project Final EIS).

a. *Alternative A – Maintaining Existing Facilities (No Action):
Wilderness*

BLM would maintain the current management of Steens Mountain Wilderness as guided by the CMPA RMP. There would be no new proposed projects within this alternative.

Untrammelled: There would be no effect to untrammelled character.

Undeveloped: Maintaining trails is evidence of the imprint of man's work and is an effect to the undeveloped characteristic, however, the imprint is substantially unnoticeable. The trails existed prior to wilderness designation and are used by visitors to access remote areas of wilderness.

Naturalness: The wilderness ecosystem strives to return the trails back to a natural condition. Humans maintaining a trail to prevent these natural ecological processes affects the naturalness characteristic, however, not maintaining trails could result in multiple user-created trails that decrease naturalness over an area.

Outstanding opportunities for Solitude or primitive and unconfined type of recreation: Maintaining trails affects primitive types of recreation by providing visitors a way to access remote locations.

Supplemental Values: Maintaining trails would have no effect on supplemental values.

b. *Alternative B – Expanding Existing Facilities: Wilderness*

The Proposed Action of rerouting portions of Nye and Wet Blanket Trails and eliminating maintenance of Kiger Gorge Trail would have the following effects on Wilderness Characteristics:

Untrammelled: The proposal to reroute portions of the trails would have no effect to the untrammelled characteristic, because the new tread does not control, bind or manipulate the ecological processes of the wilderness. There are no other proposed projects in the wilderness.

Undeveloped: Eliminating maintenance to Kiger Gorge Trail would increase the undeveloped characteristic of wilderness by allowing the trail to degrade over time thereby making the imprint of man substantially unnoticeable.

The action of maintaining and rerouting portions of Nye and Wet Blanket Trails continue the imprint of man within wilderness. However, maintaining trail conditions to avoid ecologically sensitive, or unstable surfaces and safe conditions to the recreating public, would maintain current levels of the areas undeveloped character.

Natural: Eliminating maintenance to the Kiger Gorge Trail would increase the naturalness characteristic of wilderness by allowing ecological processes previously altered by human influences to return to their natural condition.

The action of maintaining and rerouting Nye and Wet Blanket Trails would maintain current levels of naturalness with some improvements by protecting sensitive areas from degradation.

Outstanding opportunities for solitude or a primitive and unconfined type of Recreation: Eliminating Kiger Gorge Trail would increase

opportunities for solitude because it would be more difficult to traverse into the gorge, thereby increasing remoteness and isolation. Opportunities for primitive and unconfined types of recreation would increase due to the challenge of descending into the gorge by an unmaintained trail.

Supplemental Values: Eliminating Kiger Gorge Trail would have no measurable effect on supplemental values for the area.

The action of maintaining and rerouting Nye and Wet Blanket Trails would have no net effect on the supplemental value characteristic of the wilderness.

c. *Alternative C – Limited Development: Wilderness*

The proposed dispersed recreation sites (Home Creek and Three Mile Recreation Sites) and trails (Levi Brinkley Trail) would have the following affects to Wilderness Characteristics:

Untrammelled: The effects would be the same as described in Alternative B.

Undeveloped: Developing Home Creek and Three Mile Recreation Sites and trails would have no effect on the undeveloped wilderness characteristic as they would be outside of Steens Mountain Wilderness.

The Proposed Action to designate and maintain as a trail a closed, two-track road that runs along Little Blitzen River, naming it Levi Brinkley Memorial Trail, would increase the undeveloped wilderness characteristic of the area. The closed, two-track road would, over time, degrade to a single path or track. Human imprints would become even less noticeable.

Natural: The proposal to designate and maintain as a trail, a closed, two-track road that runs along Little Blitzen River, naming it Levi Brinkley Memorial Trail, would increase the naturalness wilderness characteristic by allowing the closed road to return to its natural condition over time as the two-track route eventually becomes a one-track trail and less noticeable.

Outstanding opportunities for solitude or a primitive and unconfined type of Recreation: The proposals would disperse visitor use and provide additional opportunities for recreationists to seek solitude or a primitive and unconfined type of recreation by providing varied access points into wilderness. These new access points would create more traffic on proposed trails.

Supplemental Values: The proposals of developing Home Creek and Three Mile Recreation Sites outside wilderness would have no effect on Steens Mountain's supplemental wilderness characteristics.

The designation of an old, two-track road as Pike Creek Trail Extension 1, and designating and maintaining as a trail a closed, two-track road that runs along Little Blitzen River, naming it Levi Brinkley Memorial Trail, would have no measurable effect on supplemental values of wilderness.

d. *Alternative D – Full Development (Proposed Action): Wilderness*

The proposals would have no effect on wilderness characteristics because they are outside wilderness: Steens Mountain BCB, other roads and OHV uses, Winter Recreation, SRPs, Information/Signing/Interpretation, Overlooks and other points of interest.

The following actions affect wilderness characteristics:

Untrammelled: The effects would be similar to Alternative B; however, resetting the head box at Cold Spring and directing the water flow along natural drainage channels with the use of a dike impairs the untrammelled characteristic of the area by manipulating the spring's ecological system. The water would be collected in a pool outside wilderness, but within the 30-foot radial buffer zone of Cold Spring Road. One purpose of the Steens Act is to promote sustainable recreation operations on public land. Developing the spring allows equestrians and other recreationists to use the spring to water their livestock without entering wilderness (see Appendix H for Minimum Requirements Decision Guide.)

Undeveloped: There are no proposals in the wilderness except Cold Spring Redevelopment and trails.

Resetting the existing head box at Cold Spring and directing the water flow along natural drainage channels would impair the undeveloped characteristic of the area. The pool along Cold Spring Road is outside of wilderness.

The proposal to construct two connector trails designated Pike Creek Extension #2 would affect the undeveloped characteristic of the area. The action is designed to decrease multiple user-created trails. The proposal to construct a section of the Indian Mud Loop Trail would affect the undeveloped character of the wilderness. The route

for the trail would diverge from Big Indian Trail to climb out of Big Indian Gorge and meander cross-country to merge with Mud/Ankle Creek Trail. The undeveloped character of wilderness would be impaired.

The proposal to designate Fred Riddle, Three Mile Creek, and Huffman Trails would have no effect on the undeveloped characteristic of wilderness. The proposed trails already exist on the ground. The proposed designation serves to guide visitors to existing recreation opportunities.

Natural: Effects would be similar to Alternative C; however, resetting the head box at Cold Spring affects the natural ecosystem of the spring. The pool for equestrians to water their livestock would be an unnatural part of the ecosystem. Although the pool is not within the wilderness boundary, it prevents trampling by recreation stock of the spring source. Moving the water source away from the spring to a pool near the road protects and enhances Cold Spring naturalness characteristic.

The proposal to construct two connector trails designated Pike Creek Extension #2 would affect the naturalness characteristic of the area. The purpose of the connector trails is to connect other trail segments into one loop type of trail. The action is a human influence on the natural conditions in the area; however, multiple paths created by visitors in their efforts to get from one trail to another create an unnatural condition. Therefore, the two connector trails provide the least impact on the area for the greatest gain in preserving wilderness character.

The proposal to designate a section of trail the Indian Mud Loop Trail would affect the naturalness character of wilderness. Trail construction necessary to climb out of Big Indian Gorge would impair the naturalness of the area. The proposed trail where it climbs up the steep side slopes out of the gorge would have the unintended effect of creating more opportunities for erosion due to the steep side-slopes.

The proposal to designate Fred Riddle, Three Mile Creek, and Huffman Trails would have no effect on the naturalness characteristic of the wilderness. The proposed trail segments already exist on the ground and are used by visitors for recreation activities. The proposed designation serves to guide visitors to existing recreation opportunities.

Outstanding opportunities for solitude or a primitive and unconfined type of Recreation: The proposal to develop Penland Wilderness Recreation Site and Pike Creek Recreation Site for recreationists with horse trailers would provide visitors with additional opportunities to

access Steens Mountain Wilderness access to find outstanding opportunities for solitude or a primitive and unconfined type of. These new access points would create more traffic on proposed trails.

The proposal of redeveloping Cold Spring would allow historic recreational horseback riding to continue in the area. The redeveloped spring would allow for recreational stock to water before going further into wilderness allowing more opportunities for solitude or primitive and unconfined recreation.

Construction of two connector trails designated Pike Creek Extension #2 would impair opportunities for solitude or a primitive and unconfined type of recreation during the actual construction of the trail segments. After construction opportunities for solitude would be increased by minimizing backtracking along the same trail segments, resulting in fewer encounters.

The proposal to designate a section of trail the Indian Mud Loop Trail would increase the opportunities for solitude or a primitive and unconfined type of recreation. Visitors to the area would have a challenging trail to remote places with fewer encounters previously caused by backtracking.

The proposal to designate Fred Riddle, Three Mile Creek and Huffman Trails would have no effect on the solitude or primitive recreation characteristic of wilderness. The proposed trail segments already exist on the ground and would be used by visitors for recreation activities. The proposed designation serves to guide visitors to these existing recreation opportunities.

Supplemental Values: The proposal to develop Penland Wilderness and Pike Creek Recreation Sites could have an affect on bighorn sheep from increased visitor presence. Bighorn sheep are a supplemental feature in Steens Mountain Wilderness.

The proposal of resetting the head box at Cold Spring and directing the water flow along natural drainage channels with the use of a dike restores the historical supplemental value

The designation of trails would have no effect on supplemental values of wilderness.

- e. *Alternative E – Limited Development and Dispersed Recreation: Wilderness*

Untrammeled: No actions are proposed that would affect the untrammeled character of wilderness.

Undeveloped: No actions, such as new structures or installations, are proposed that would affect the undeveloped character of wilderness.

Natural: No actions are proposed that would affect the naturalness character of wilderness.

Outstanding opportunities for solitude or a primitive and unconfined type of Recreation: The proposal of closing “cherry stem” roads, surrounded by wilderness but not within wilderness, would increase the outstanding opportunities for solitude in these areas of Steens Mountain Wilderness.

Supplemental Values: The Proposed Action of closing roads would have no substantive effect on the supplemental values of the wilderness.

12. Wilderness Study Area

Affected Environment: Wilderness Study Area

Six WSAs are located within the CMPA. There are currently 105,174 WSA acres in the Planning Area. Many of the acreages of WSAs were modified by the Steens Act, which designated portions as wilderness and a portion of Bridge Creek WSA became a part of the WJMA, and the rest of the remnants were left in WSA status. Table 6 reflects the current acreages below:

Table 6: Wilderness Study Areas in the Planning Area

CMPA Wilderness Study Areas	Acres
Blitzen River	31,737
Home Creek	1,165
South Fork Donner und Blitzen	27,969
High Steens	14,089
Lower Stonehouse	7,449
Stonehouse	22,765
TOTAL ACRES	105,174

Wilderness characteristics of the WSAs are summarized below from Volume I of the Oregon BLM Wilderness Study Report, 1991. The designation of Steens Mountain Wilderness modified three WSAs by designating portions of them as Steens Mountain Wilderness and these changes are reflected in the descriptions below.

Blitzen River WSA

Blitzen River WSA is approximately 31,901 acres and is in a generally natural condition. The WSA contains a variety of wildlife habitats with a diversity of animals. Unnatural features consist of 17 reservoirs, a developed spring, 14 fences totaling 23.5 miles, a corral and 34 miles of ways. It is estimated approximately 3,115 acres (9.8 percent) of the WSA is currently influenced by these unnatural features. Outside influences include several reservoirs along the west boundary, Page Springs Campground, and a power line along the northwest boundary.

Blitzen River WSA has outstanding opportunities for solitude. The area contains both topographic and vegetative screening. There are portions of the WSA, mostly near the western border, where finding seclusion would be difficult because of the area's lack of topographic or vegetative screening.

Blitzen River WSA provides outstanding opportunities for primitive recreation. Recreation activities include day hiking, backpacking, camping, horseback riding, hunting, wildlife viewing, sightseeing, and photography. Game species include mule deer, pronghorn antelope, elk, and chukars.

Special features of Blitzen River WSA are scenic quality and wildlife. Topography of the WSA offers spectacular scenery of ridges covered by juniper and sagebrush, intermixed with outcroppings of dark basalt rock. Most of this spectacular scenery is in the portion of the WSA that is now part of Steens Mountain Wilderness. Special wildlife features include two greater sage-grouse strutting grounds and mule deer winter range. Though not specifically mentioned as a special feature in the 1991 Wilderness Study Report, wild horses and especially the Kiger Mustangs are present in this WSA and are generally considered a special feature that enhances the wilderness experience of some visitors. The WSA also provides important winter range habitat for elk.

South Fork Donner und Blitzen River WSA

South Fork Donner und Blitzen River WSA is approximately 27,968 acres and is in a generally natural condition. Juniper and low sagebrush are the dominant vegetation. The WSA provides habitat for a variety of big game, upland game birds, and other wildlife species. Unnatural features currently consist of 17 reservoirs, one dugout, 28.2 miles of ways, 4 fences totaling 9.4 miles, and an old abandoned house. It is estimated approximately 2,636 acres (9.4 percent) of the WSA is currently influenced by these unnatural features. Influences to naturalness from developments outside of the WSA are consisting primarily of boundary roads and a few water developments.

Opportunities for solitude in South Fork Donner und Blitzen River WSA are outstanding. The WSA's size, numerous shallow drainages, and juniper trees enhance the opportunities for a visitor to find seclusion.

South Fork Donner und Blitzen River WSA has outstanding opportunities for primitive recreation. Day hiking, backpacking, camping, and horseback riding opportunities are available. Water and camping spots are available throughout the WSA. Game species in the WSA include mule deer, pronghorn antelope, elk, and upland game birds.

A Greater Sage-Grouse strutting area is located in South Fork Donner und Blitzen River WSA. Though not specifically mentioned as a special feature in the 1991 Wilderness Study Report, wild horses and the Kiger Mustang are present in this WSA and are generally considered a special feature that enhances the wilderness experience of some visitors. The WSA also provides important winter range habitat for elk.

Home Creek WSA

Home Creek WSA is approximately 1,165 acres and is in a generally natural condition. Most of the original WSA, 26,590 acres, was designated as part of the Steens Mountain Wilderness in 2000. The WSA does provide habitat for pronghorn antelope, chukar, and a variety of nongame species. There are 5 reservoirs and a 1-mile long way in the WSA. It is estimated approximately 162 acres (13.9 percent) of the WSA is currently influenced by these unnatural features. Influences to naturalness from developments outside the WSA are consisting primarily of boundary roads and a few water developments.

Home Creek WSA is located adjacent to Steens Mountain Wilderness and is not separated by a boundary road, but rather a motorized route identified as a way. This WSA offers outstanding opportunities for solitude and primitive and unconfined recreation in association with the adjoining Steens Mountain Wilderness. Recreational opportunities include hunting, wildlife viewing, camping, and horseback riding. Game species include mule deer, pronghorn antelope, and chukars.

The identified special features of wildlife, geology, and scenery for Home Creek WSA are now in Steens Mountain Wilderness. Though not specifically mentioned as a special feature in the 1991 Wilderness Study Report, wild horses and the Kiger Mustang are present in this WSA and are generally considered a special feature that enhances the wilderness experience of some visitors.

Lower Stonehouse WSA

Lower Stonehouse WSA is in a relatively natural condition. The eastern escarpment and the high plateau on the western side of the WSA provide an area with a high degree of naturalness. This east-facing escarpment is highly scenic and combines a variety of landforms, color, and vegetation. Habitat for a variety of big game, upland game birds, and other wildlife species occurs in the WSA. The WSA contains seven unnatural features: 3

reservoirs, 1 fence totaling 1.25 miles long, 2 ways totaling 1.75 miles and an old 780-acre crested wheatgrass seeding.

Opportunities for solitude in Lower Stonehouse WSA are outstanding. Both topography and vegetation provide screening, but the area would support only a limited number of users. Areas with solitude are in the drainages of the east-facing escarpment and a few places on the ridge top where shallow drainages and hills provide some screening. Other portions of the WSA provide insufficient topographic screening to enhance solitude. Juniper stands and a few aspen groves offer some vegetative screening. This screening enhances solitude in the WSA.

Lower Stonehouse WSA has outstanding opportunities for primitive recreation, but they are somewhat limited by the size and topography of the WSA. Hunting, day hiking, backpacking, camping, and sightseeing opportunities are available. Day hiking, backpacking, and camping are limited. Game species in the WSA include mule deer, antelope, elk, and chukars. The east rim of Steens Mountain provides spectacular views of the surrounding area including the Alvord Basin and Sheephead Mountains. The most attractive feature within the WSA is the impressive east-facing escarpment.

Scenic quality and botanical and wildlife values add to Lower Stonehouse WSA's wilderness values. The east-facing escarpment is highly scenic and combines a variety of landforms, colors, and vegetation. Biddle's lupine, a BLM SSS, occurs at the lower elevations. Greater Sage-Grouse are found at the upper elevations. Crucial mule deer winter range is found on the lower east-side slopes.

High Steens WSA

The High Steens WSA appears to be in an outstanding natural condition. The unnatural features within the study area are minimally noticeable.

The majority of the developments in the High Steens WSA occur in the southeast corner of the study area. There are 28 ways totaling 38 miles, 5 water developments, 11 fences totaling 9 miles and several locations of mining activity, which include 3 cabins. It is estimated that approximately 4 percent of the study area is influenced by these features. The most noticeable outside sights and sounds are the boundary roads and the traffic on them.

The High Steens WSA offers outstanding opportunities for solitude. Opportunities for solitude are enhanced by the varied and rugged topography. The extreme difference in elevations is the screening factor.

Opportunities for primitive recreation activities in the High Steens WSA are outstanding. The primitive recreation activities include day hiking,

backpacking, horseback riding, hunting, fishing, sightseeing and photography.

The special features of the High Steens WSA substantially enhance the areas wilderness values. Geology, vegetation, wildlife, and scenic qualities are special features of the WSA.

Stonehouse WSA

Stonehouse WSA is in a relatively natural condition. None of the unnatural features are substantially noticeable.

There are 30 unnatural features which influence approximately 12 percent of the WSA: 12 reservoirs, 13 ways totaling about 14 miles, 2 ditches totaling about 2 miles, 2 fences totaling 1 mile and 1 airplane landing strip.

The Stonehouse WSA has outstanding opportunities for solitude; however, the configuration of the WSA may constrain movement within the study area, particularly in the northern end of the WSA. Topographic screening is provided by the Steens Mountain ridgeline which bisects the WSA. The west side of the area is screened from the east side by the ridge top peaks. Shallow drainages throughout the WSA also enhance the opportunity for solitude.

The WSA provides outstanding opportunities for primitive forms of recreation. These activities include day hiking, backpacking, camping, hunting and sightseeing. However, the WSA currently receives little primitive recreation use not associated with hunting.

A special feature of the Stonehouse WSA is the escarpment's outstanding scenic quality. The escarpment is highly visible and has a variety of landform, color and vegetation. Other special features are the intermittent lakes, the crucial deer winter range and sage grouse which is a candidate for Federal Listing as threatened or endangered.

Environmental Consequences: Wilderness Study Area

Effects Common to All Alternatives: Wilderness Study Area

Past and present actions, such as those described in *Affected Environment*, have influenced the existing environment within the CEAA. RFFAs in the CEAA that may contribute to cumulative effects to WSAs include livestock grazing, fishing, hunting and other recreational pursuits, the North Steens Ecosystem Restoration Project and the North Steens Transmission Line ROW and Echanis Wind Development Project. The North Steens Ecosystem Restoration Project has several thousand acres of juniper treatments in the CEAA which would have beneficial effects to the ecological integrity within

the WSAs, but funding, weather conditions, and other factors will affect timing of implementation.

There would be effects to High Steens, Lower Stonehouse and Stonehouse WSAs from the North Steens Transmission Line ROW and the Echanis Wind Development Projects during construction because they are all located within a 5-mile radius of the project analysis area. Project features will be visible from all three WSAs. Wind Turbines will be located within a few hundred meters of Lower Stonehouse WSA, about 0.5 mile from High Steens WSA and 4 miles from Stonehouse WSA. Noise levels in Lower Stonehouse WSA will exceed ambient levels and could exceed Oregon Environmental Quality Commission (OEQC) standards from the close proximity of the wind turbines. Excessive noise at Lower Stonehouse WSA would further diminish the already limited opportunities for solitude.

a. *Alternative A – Maintaining Existing Facilities (No Action):
Wilderness Study Area*

There are no new proposed projects within the No Action Alternative. Burns BLM District Office would maintain the current management of the WSAs as guided by the CMPA RMP. There would be no effect to the wilderness characteristics of the WSAs as a result of the No Action Alternative.

b. *Alternative B – Expanding Existing Facilities: Wilderness Study Area*

The proposed expansion of facilities would not affect the naturalness characteristic since they are all outside of the WSAs. The proposed route closures would have the following affects:

Naturalness: Closing of roads and ways would increase naturalness of the WSAs. With time the roads would re-vegetate and the imprint of man's work would decrease.

Outstanding opportunities for solitude or a primitive and unconfined type of recreation: The closing of roads and ways would affect outstanding opportunities for solitude by limiting access to these areas. Non-motorized visitors who made their way into a WSA would experience fewer encounters with motorized visitors.

There would be no substantial effect to the outstanding opportunities for a primitive and unconfined type of recreation.

Supplemental values: There would be fewer encounters with wildlife because fewer visitors are able to access the area resulting in a positive affect to the supplemental values.

c. *Alternative C – Limited Development*

These proposed actions would have no effect on wilderness characteristics because they are not in WSA.

d. *Alternative D – Full Development*

The proposals would not affect the naturalness characteristic since they are all outside of the WSAs, with the exception of the proposed Huffman Trail. This trail would have an effect on wilderness Characteristics within Home Creek and South Fork Donner Und Blitzen WSA.

Naturalness: Huffman Trail would have no effect on the naturalness characteristic of the WSA because the trail already exists on the ground

Outstanding opportunities for Solitude: Huffman Trail would increase visitors' opportunities for solitude due to additional trail access dispersing recreationists and reducing encounters. The proposed trail would link Wilderness, WSAs and WSRs together on one 23.5-mile trail; therefore, the opportunities to find solitude are outstanding.

Outstanding opportunities for primitive and unconfined type of recreation: Huffman Trail would increase visitors' opportunities for a primitive and unconfined type of recreation. The proposed trail would link Wilderness, WSAs and WSRs together on one 23.5-mile trail; therefore, the opportunities for a primitive and unconfined type of recreation are expanded.

Supplemental values: Huffman Trail would have no effect on supplemental values of the WSAs.

e. *Alternative E: Limited Development and Dispersed Recreation*

The proposal to close roads and ways in the CMPA would have an indirect effect on wilderness characteristics within the WSAs. The closing of roads and ways would indirectly affect WSAs by limiting access to these areas. Visitors who did make their way into a WSA would experience fewer encounters with other visitors than they might have prior to the proposed road and way closing. Therefore, an increase in outstanding opportunities for solitude or a primitive and unconfined type of recreation is expected. Closing of roads would also be beneficial to the naturalness characteristic. Over time the

condition of the road bed would return to a more natural state as weathering occurs.

13. Lands with Wilderness Characteristics

Affected Environment: Lands with Wilderness Characteristics

The following Table 7 displays the LWCs found outside wilderness and WSAs and their acreages:

Table 7: CMPA Lands with Wilderness Characteristics

CMPA Lands with Wilderness Characteristics	Acres
Bridge Creek	1,526
High Steens	629
Lower Stonehouse	2,176
TOTAL ACRES	4,331

The BLM IDT identified three parcels within the CMPA that were acquired by purchase or land exchange, as having wilderness characteristics. The three parcels are Bridge Creek (1,526 acres), High Steens (629 acres), and Lower Stonehouse (2,176 acres).

All three parcels with wilderness characteristics are adjacent to existing WSAs. All three parcels are also within the Mineral Withdrawal Area. There are no pre-withdrawal claims or leases on any of the parcels.

Each parcel is considered to have wilderness characteristic due to its association with the adjacent WSAs: See WSA affected environment for further description.

Environmental Consequences: Lands with Wilderness Characteristics

Effects Common to All Alternatives: Lands with Wilderness Characteristics

Past and present actions, such as those described in *Affected Environment Lands with Wilderness Characteristics*, have influenced the existing environment within the CEAA. The RFFAs in the CEAA that may contribute to cumulative effects to LWCs include livestock grazing, fishing, hunting and other recreational pursuits, the North Steens Ecosystem Restoration Project and the North Steens Transmission Line ROW and Echanis Wind Development Project.

The North Steens Ecosystem Restoration Project has proposed juniper treatments in the CEAA which would have beneficial effects to the ecological

integrity within the LWCs, but funding, weather conditions, and other factors will affect timing of implementation.

There would be effects to Lower Stonehouse LWC from the North Steens Transmission Line ROW and the Echanis Wind Development Project during construction because it is located within a 5-mile radius of the project analysis area. Project features would be visible from the Lower Stonehouse LWC. Wind Turbines will be located within 200 meters of the Lower Stonehouse LWC. Noise levels would exceed ambient levels, due to close proximity of the wind turbines but would not exceed OEQC standards, which would affect solitude from the close proximity of the wind turbines.

a. *Alternative A – Maintaining Existing Facilities (No Action): Lands with Wilderness Characteristics*

There would be no effects to wilderness characteristics within the LWCs.

b. *Alternative B – Expanding Existing Facilities: Lands with Wilderness Characteristics*

There would be no effects to wilderness characteristics within the LWCs as no actions are proposed within them.

c. *Alternative C – Limited Development: Lands with Wilderness Characteristics*

There would be no effects to wilderness characteristics within the LWCs as no actions are proposed within them.

d. *Alternative D – Full Development (Proposed Action): Lands with Wilderness Characteristics*

There would be no effects to wilderness characteristics within the LWCs as no actions are proposed within them.

e. *Alternative E – Limited Development and Dispersed Recreation: Lands with Wilderness Characteristics*

There would be no effects to wilderness characteristics within the High Steens and Lower Stonehouse LWCs as no actions are proposed within them.

The proposal to close roads/ways would have an effect on wilderness characteristics within Bridge Creek LWC. The closing of roads and ways would indirectly affect the LWC by limiting access to this area. Visitors who did make their way into the LWC would experience fewer encounters with other visitors who might have, prior to the proposed road and way closing, driven to the LWC. Therefore, an increase in outstanding opportunities for solitude or a primitive and unconfined type of recreation is expected.

14. Wildlife

Affected Environment: Wildlife

Wildlife, other than migratory birds and SSS, include mule deer, elk, pronghorn antelope, badger, black-tailed jackrabbit, cottontails, magpies, ground squirrels, pocket gophers, deer mouse, cougar, bobcat, coyote, ducks, geese, swans, chukar, California quail, mountain quail, yellow-bellied marmot, wood rats, voles, chipmunks, bats, reptiles, and amphibians.

Mule deer, elk, pronghorn, and predators use the area most of the year. Deep snows may force big game animals, upland birds, and some small animals to lower elevations of the allotment. Other mammals are not as mobile and may remain underground or stay active near the ground's surface throughout winter. Wild horses present throughout the allotment may exclude other wildlife use from water sources, especially in late summer when water sources are limited. Miller (1983) found that when antelope could get to water while being no closer than three meters from a wild horse or cow, they were able to water; otherwise, they would only circle the waterhole, leave, and return later to try again.

Mule deer use bitterbrush as a fall and winter browse. There are several areas throughout the allotment with extensive stands of bitterbrush. Currently, there are only about six reliable late-season water sources near most of the bitterbrush areas. These water sources allow for later use mainly in Tombstone Pasture but usually only until the end of July. Although bitterbrush stands in the allotment appear healthy for the most part, juniper encroachment into these stands is expected to affect the continued health of these plants.

The increase in wildfires in the Great Basin has resulted in loss of important big game winter ranges in the Great Basin (Pellant 1990; Updike et al. 1990), habitat supporting North America's densest concentration of nesting raptors (Kochert and Pellant 1986), native sensitive plant species (Rosentreter 1994) and nongame bird occurrence (Dobler 1994). In addition, plant diversity is reduced at both the local and landscape levels with frequent wildfires (Whisenant 1990). Not only is cheatgrass a permanent component of many Intermountain ecosystems, including within CMPA, it is the focal point for

the disruption of many ecosystem processes and functions. Wildfire cycles are shorter and severity and extent of the area of fire impacts are greater with cheatgrass in the ecosystem. Wildlife species are affected both directly by alteration of habitat due to cheatgrass invasion and indirectly by the loss of habitat due to increased wildfires.

Environmental Consequences: Wildlife

The CEAA for wildlife is the CMPA and adjacent areas to encompass regular movements of most animals that may be using the area. The CEAA does not incorporate the entire annual use area for some animals, such as elk and mule deer, because this information is not available nor is it expected to change the analysis. Vegetation communities present are representative of those in the CEAA.

Past and present actions, such as those described in *Affected Environment*, have influenced the existing environment within the CEAA. The RFFAs in the CEAA contributing to cumulative effects to wildlife and habitat include livestock grazing, hunting and other recreational pursuits, the North Steens Ecosystem Restoration Project and the North Steens Transmission Line ROW. Several thousand acres of treatments (North Steens Ecosystem Restoration Project) are proposed in the CEAA, but funding, weather conditions, and other factors will affect timing of implementation.

There will be cumulative effects to wildlife habitat from the North Steens Ecosystem Restoration Project due to changes in habitat types from the use of mechanical removal or fire to reduce expansion juniper. Grassland habitat will increase as broadcast burn treatments are applied with reductions in sagebrush and woodland habitats. Depending on the type of treatment (cut and broadcast burn, cut and pile, etc.) some areas of sagebrush return quicker to canopy cover that support sagebrush dependent species throughout the duration of the project. Most bitterbrush stands will not be targeted for broadcast burning so sufficient bitterbrush will still be available for mule deer use in the fall and early winter months. Woodland habitat may decrease for a longer period of time, as juniper reduction is a purpose of the North Steens Ecosystem Restoration Project. There will still be woodland habitat available throughout the area, as not all junipers will be removed, and juniper trees in wilderness will not be treated unless other NEPA analysis is completed.

There will be effects to elk from the North Steens Transmission Line ROW and the Echanis Wind Development Project during construction since this action will affect elk movement in this area. Elk will probably move into other areas of the CMPA - during construction of the wind farm, powerline and roads and may avoid activity areas due to increased vehicle traffic.

Effects Common to All Action Alternatives: Wildlife

Wildlife in general would be affected by noise and human presence during construction of projects. This disturbance would be localized and temporary in nature, and wildlife would return to these areas after the disturbance ceased. Different species of wildlife would be affected differently by human presence, construction noise and ground disturbance. Elk would be most affected and move out of the area while the disturbance is ongoing. Mule deer and pronghorn would initially move from the disturbance, but not as far as elk and may become accustomed to the noise depending on the duration. Other smaller, less mobile animals would lose some habitat depending on the type of construction activity (parking area construction, burying pipeline, etc.).

a. *Alternative A – Maintaining Existing Facilities (No Action): Wildlife*

Wildlife would have the same resources available as are currently present in the allotment. There would be no effect to wildlife as a result of this alternative.

b. *Alternative B – Expanding Existing Facilities: Wildlife*

Effects would be the same as Alternative A, as there would be no new construction outside of already disturbed areas and wildlife have already adapted migratory and use patterns to existing recreational use and traffic.

c. *Alternative C – Limited Development*

The limited amount of new developments (less than three acres) would not cause a measureable use detriment and would have no effect on wildlife species on a population level. Any new construction or parking areas would have a localized effect to wildlife species that would be temporary in timeframe during the construction period of the new parking areas, and animal use is expected to return to normal after construction is complete.

d. *Alternative D – Full Development (Proposed Action): Wildlife*

The limited amount of new developments (less than 15 acres) would not cause a measureable use detriment and would have no effect on wildlife species on a population level. Any new construction or parking areas would have a localized effect to wildlife species that would be temporary in timeframe during the construction period of the new parking areas, and animal use is expected to return to normal after construction is complete.

e. *Alternative E – Limited Development and Dispersed Recreation: Wildlife*

Closing of roads and ways (175.9 miles) would reduce vehicle mortality to wildlife, but would not have a measureable effect as the use of existing roads is minimal (less than one trip per hour in the busiest areas). This alternative would close roads used to access and maintain several water sources that could cease to function over time and remove these sources of water from use by wildlife. In the event these routes are kept open for administrative use there would be no change from current usage by wildlife species.

15. Steens Mountain Back Country Byway and Transportation (including OHVs)

Affected Environment: Steens Mountain BCB and Transportation

The intent of a transportation system is to provide routes allowing for safe and efficient public use and is economically and environmentally sound. Maintenance will be conducted according to CMPA TP/TMP.

Since World War II, OHV transportation has become increasingly popular. Early OHVs were primarily retired military jeeps and heavy street motorcycles. Today's OHVs include a wide range of off-highway motorcycles, dual-sport motorcycles, four-wheel drive, or sport utility vehicles from the traditional jeeps to eight-passenger suburbans, snowmobiles, dune-buggies, and all-terrain vehicles. With the aging population of America, OHV use has accelerated over the past years. Industry figures state 1,500 to 2,000 ATVs are sold per day in the United States (ROD/RMP). The OHVs are separated into three Classes. Class I are ATVs or quads; Class II are 4x4 automobiles such as jeeps, pickup trucks, vans, and Sport Utility Vehicles; and Class III are motorcycles, dune buggies, and rail vehicles. Currently, OHV use in the CMPA is mostly by Class II type vehicles.

Although the majority of roads were constructed to facilitate grazing management, the road system constitutes an important component of the nation's rural road system. It provides access for resource protection and for commercial activities or public uses such as recreation, outfitting, and grazing. In addition, the system provides access for recreational activities such as hunting, fishing, skiing, bird watching, camping, hiking, rock hounding, exploring and driving or riding for pleasure and also occurs for administrative purposes such as management of livestock and wild horses, maintenance of range projects, SRP operations, and by private landowners for ingress and egress to private lands.

In accordance with 43 CFR 8342.1, all public land in the Planning Area is designated as limited or closed with regard to vehicle use. The Steens Mountain Wilderness is designated as closed to OHV and mechanized vehicle use (43 CFR 8340.0-5(h)). Areas are designated as “closed” if closure to all motorized and mechanized vehicular use is required by law or designation is necessary to protect resources, promote visitor safety, or reduce use conflicts. Therefore, motorized and mechanized OHV access was curtailed in the core of the CMPA because of the closure of the routes into Steens Mountain Wilderness and adjoining WSAs. The general public is not able to drive these routes.

The remainder of the CMPA, outside Steens Mountain Wilderness and WSAs, is designated as limited to designated roads and ways. These roads and ways, which were identified in the CMPA TP and TMP, are currently available for OHV and mechanized vehicle use. In a limited area, motorized and mechanized vehicle use is restricted at certain times, in certain areas, to designated routes, to existing routes, to certain vehicular uses, or seasonally (43 CFR 8340.0-5(g)).

Limitations to OHV and mechanized vehicle use do not apply to official use including any fire, military, emergency, or law enforcement vehicle when used for emergency purposes; any combat or combat support vehicle used for national defense purposes; and any vehicle whose use is expressly authorized under a permit, lease, license, or contract.

Access into seasonal closure areas by ranchers and private landowners may be authorized by the Field Manager for legitimate access or business purposes if weather and road conditions permit motorized vehicle travel on designated routes.

The Steens Act (2000) closed 104 route miles in the CMPA, but specifically left open Fish Creek, Cold Spring, Grove Creek, Big Alvord Creek, Indian Creek, Three Springs, and Newton Cabin routes where bounded on both sides by wilderness. The CMPA RMP TP (2005) closed 6 motorized route miles.

The BLM Burns District Office completed the Steens Mountain TMP in 2007 that took a comprehensive look at motorized transportation routes and that Decision closed another 1.23 miles of routes. The TMP made 555 miles of motorized routes available for some form of public use but 36 miles of these routes, known as “Obscure Routes”, were subsequently closed pursuant to a decision by the Interior Board of Land Appeals and upheld by the District Court of Oregon. To carry out grazing permits, authorized permittees may use Permit Routes and Historical Routes within WSAs and on other nonwilderness public lands in the CMPA to the same manner and degree as was occurring at passage of the FLPMA. Historical Routes can be used to the extent their character is not changed. Grazing permittees can use Permit

and Historical Routes in wilderness for specific activities (TMP 2007 ROD, page 11). Eight miles of routes were reclassified as ATV trails. A 0.23-mile segment of Weston Basin Road was designated as part of Dry Creek hiking and equestrian trail to protect wilderness by eliminating the opportunity for motorized incursions into wilderness (TMP 2007 DR, page 12).

In 2010, the Burnt Car EA amended the TMP. The designation of Tombstone Canyon Road and a section of road east of private land located in T. 33 S., R. 32.5 E., Section 21 were changed from a primitive road to a trail. However, these sections remain open to motorized administrative, permittee, landowner, and contractor access. The portion of Burnt Car Road from the wilderness boundary west to just past the junction between Burnt Car Road and the WSA way leading to Burnt Car Spring (T. 33 S., R. 32.5 E., Section 9), approximately 300 feet is closed to motorized access and was changed from a primitive road to a trail. Burnt Car Road is closed to motorized public access from approximately mid-November to mid-May depending on weather conditions to coincide with the lower gate closure of Steens Mountain Loop Road. During the seasonal closure, subject to prior authorization by the authorized officer, the road is open to administrative, permittee, landowner, and contractor access. The seasonal road closure of Burnt Car Road also seasonally closed Tombstone-Burnt Car Road. Public access is seasonally closed to motorized vehicles on approximately 13 miles.

Road uses include access to public lands for a variety of recreational purposes, access to private lands, grazing management, and BLM administration. Roads are maintained consistent with Maintenance Level assignments made in the CMPA RMP/ROD (2005) which included a TP (Appendix M) and Steens Mountain TMP (2007). See Appendix F of this EA for the Maintenance Intensity class summary.

Steens Mountain CMPA RMP TP states page M-4 Management direction: allow motorized access to existing dispersed campsites unless precluded by special designation or other resource concerns.

The Steens Mountain CMPA ROD 2005 and the creation of Steens Mountain Wilderness in 2000, along with adjoining WSAs have closed 40 percent of the CMPA area to motorized and mechanized vehicles with the other 60 percent of the CMPA limited to designated routes. The following Table 8 displays the OHV designation for the public land within the CMPA.

Table 8: OHV Designation Acreages in the CMPA

Designation	Acres (Public Land Acres Only)
Open	0
Limited to Designated	256,853
Closed	171,303
TOTAL	428,156*

*300,704 acres seasonally closed due to winters and gate closures.

Under the winter recreation program, over-the-snow machine use is only allowed by permit on designated routes. The primary designated route is along North Loop Road to Kiger Overlook, which is marked with snow poles each year. Those wishing to snowmobile on Cold Spring Road down to Nye Cabin or down Kiger Ridge Road must be in the company of a permitted outfitter or a member in good standing of the High Desert Snow Drifters Snowmobile club. The majority of winter use is associated with snowshoeing or cross-country skiing.

This cross-country travel prohibition (and Steens Mountain Wilderness designation) also displaced many snowmobilers to areas outside of the CMPA. At the same time, those areas that had been open were designated as “limited to designated” roads and ways, further restricting and concentrating OHV and mechanized vehicle use.

The OHV and mechanized vehicle organized events are allowed through an SRP, when consistent with protection of resource values and OHV and mechanized vehicle designations. All WSA “cherry stem” roads and ways identified in the WSA inventory are available for use. Fish Creek, Cold Spring Newton Cabin, Bone Creek, Indian Creek, and Big Alvord Creek Roads remain open. The core of the CMPA is closed seasonally (winter) by gates, encompassing 93,444 acres (80 percent) in the Steens Mountain area (usually mid-November to mid-May). This closure is to protect road surfaces and adjacent natural resources from winter and spring impacts from motorized use.

This EA further looks at the other two BLMs strategic action plans: National Mountain Bicycling Strategic Action Plan and National Scenic and Historic Trails Strategy and Work Plan. During the scoping process there were no mountain bike trail issues brought up. All mountain bikes and mechanized equipment are allowed on all motorized routes. Also, through the scoping process there were no issues concerning national scenic and historical trails; however interested publics said there should be more loops trail opportunities and these proposed trails are discussed within this EA.

Non-motorized trails remain available for hiking and equestrian uses.

Environmental Consequences: Transportation

Affects Common to All Alternatives: Transportation

Neither the CMPA RMP nor this document delineate any biking play areas; however, any mechanized equipment (i.e. mountain biking) is allowed on all motorized routes within the CMPA. There is no affect to mechanized equipment routes.

The CEAA for Transportation is within and adjacent to CMPA. Past and present actions, such as those described in *Affected Environment Transportation*, have influenced the existing environment within the CEAA. The RFFAs in the CEAA that may contribute to cumulative effects to OHV include hunting and other recreational pursuits, ongoing maintenance of existing range improvements, wild horse utilization and use areas, periodic wild horse gathers to maintain horse numbers within the AML, wildlife use, fire rehabilitation actions, and ongoing noxious weed treatments, the North Steens Ecosystem Restoration Project and the North Steens Transmission Line ROW and Echanis Wind Development Project.

The North Steens Transmission Line ROW (North Route) will require construction of 0.48 mile of new access roads on private land and 4.55 miles on BLM-administered land and required overland access on 17.58 miles of private and 7.37 miles of BLM-administered lands outside the CMPA. No portion of the access road would be located on public land within the CMPA. Approximately 17.11 miles of additional service roads would be constructed within the Echanis Wind Development Project site. Ongoing operations would generate trips each day to and from the site. The daily commute patterns of construction workers and the periodic delivery of supplies and materials would have no noticeable effect on traffic volumes on state and county roads. (North Steens 230-kV Transmission Line Final EIS, 2010, pages 3.14-7 and 3.14-13)

To implement the North Steens Ecosystem Restoration Project safe conditions will be maintained throughout the duration of the project (20 years). Several roads will be maintained consistent with assigned Maintenance Levels (now referred to maintenance intensities). Roads may be graded, graveled, rocks removed, ditches cleaned, and culverts or rock crossings installed to prevent accelerated erosion and to provide easier access for firefighting personnel and administration. Existing roads will be used as fire lines and safety zones. Roads determined to be essential for success of the North Steens Ecosystem Restoration Project, but determined to be closed in the TMP, will be improved for the duration of the Project and reclaimed upon project completion. (North Steens Ecosystem Restoration Project ROD, 2007, page 24).

No new roads are proposed for construction under any of the alternatives.

There would be cumulative effects to OHVs from the North Steens Ecosystem Restoration Project during times of operation. There would be effects to OHVs from the North Steens Transmission Line ROW and the Echanis Wind Development Project during construction.

Motorized routes provide a motorized riding experience for those seeking solitude and scenery. There are routes that exist for the person looking to explore.

There are nonmotorized routes that also provide a quality experience for those seeking solitude and scenery. Approximately 79 miles of nonmotorized routes exist for the person looking to explore.

a. *Alternative A: Maintain Existing Facilities - No Action Alternative: Transportation*

Under the No Action Alternative the TP as described in the TP/TMP and Burnt Car Road EA would not be affected. There would be no change to the non-motorized transportation portions.

b. *Alternative B: Expanding Existing Facilities: Transportation*

The proposal of closing motorized routes would only affect the motorized portion of the transportation system. The other portions of the transportation system would not be affected. It would decrease 12.97 miles of routes.

c. *Alternative C: Limited Development: Transportation*

There would be no change to the motorized portion of the transportation system; however, there would be additional hiking/equestrian trails added to the transportation system (175.9 miles of new trails).

d. *Alternative D: Full Development (Proposed Action): Transportation*

The effects would be the same as Alternative C.

e. *Alternative E - Limited Development and Dispersed Recreation: Transportation*

This alternative would create changes to the current transportation system. If implemented there would be fewer motorized and mechanized routes which in turn would provide more

hiking/equestrian designated routes within the proposed transportation system.

Environmental consequences of implementing Alternative E's proposed road closures to the general public but allowing authorized administrative access would have long-term impacts to the maintenance of range improvements (reservoirs, fences, and wildlife guzzlers) in each allotment. This action would also indirectly close access to an additional 43.6 miles of roads/ways. Administrative access would still allow maintenance of range improvements to occur. However, limitation of use and maintenance of roads would result in deterioration over time and they would eventually become impassible which would limit the maintenance of range improvements, limit ability to efficiently monitor resources and recreation, and limit access for management activities such as wild horse gathers.

If the BLM were denied administrative access through private lands, then 36.2 miles of roads would be indirectly closed to maintenance.

B. Discussion on Cumulative Effects

As the Council on Environmental Quality (CEQ), in guidance issued on June 24, 2005, points out, the "environmental analysis required under NEPA is forward-looking," and review of past actions is required only "to the extent this review informs agency decision-making regarding the proposed action." Use of information on the effects on past action may be useful in two ways according to the CEQ guidance. One is for consideration of the Proposed Action's cumulative effects, and secondly as a basis for identifying the Proposed Action's effects.

The CEQ stated in this guidance that "[g]enerally, agencies can conduct an adequate cumulative effects analysis by focusing on the current aggregate effects of past actions without delving into the historical details of individual past actions." This is because a description of the current state of the environment inherently includes the effects of past actions. The CEQ guidance specifies that the "CEQ regulations do not require the consideration of the individual effects of all past actions to determine the present effects of past actions." Our information on the current environmental condition is more comprehensive and more accurate for establishing a useful starting point for a cumulative effects analysis, than attempting to establish such a starting point by adding up the described effects of individual past actions to some environmental baseline condition in the past that, unlike current conditions, can no longer be verified by direct examination.

The second area in which the CEQ guidance states that information on past actions may be useful is in "illuminating or predicting the direct and indirect effects of a Proposed Action." The usefulness of such information is limited by the fact that it is anecdotal only, and extrapolation of data from such singular experiences is not generally accepted as a reliable predictor of effects.

However, "experience with and information about past direct and indirect effects of individual past actions" have been found useful in "illuminating or predicting the direct and indirect effects" of the Proposed Action in the following instances: the basis for predicting the effects of the Proposed Action and its alternatives is based on the general accumulated experience of the resource professionals in the agency with similar actions.

The environmental consequences discussion described all expected effects, including direct, indirect, and cumulative, on resources from enacting the proposed alternatives. Direct and indirect effects plus past actions become part of the cumulative effects analysis; therefore, use of these words may not appear. In addition, the Introduction Section of this EA, specifically the Purpose of and Need for Action, identifies past actions creating the current situation.

RFFAs, also relevant to cumulative effects, include those Federal and non-Federal activities not yet undertaken, but are expected to occur, that a Responsible Official of ordinary prudence would take such activities into account in reaching a decision. These Federal and non-Federal activities that must be taken into account in the analysis of cumulative impact include, but are not limited to, activities for which there are existing decisions, funding, or proposals identified by the bureau. These RFFAs must fall within the geographic scope and timeframe of the analysis being prepared. Recreation activities and continued paving of East Steens Road are known RFFAs along with grazing, weed treatments, water developments, juniper treatments, North Steens Ecosystem Restoration Project, and North Steens 230 –kV Transmission Line Project, this list is not totally inclusive. The cumulative effects of these actions were thoroughly addressed throughout Chapter III by resource/issue.

CHAPTER IV: CONSULTATION AND COORDINATION

A. List of Preparers

- Daryl Bingham, (former) Natural Resource Specialist (NRS) (Fisheries, Riparian Zones, Wetlands, SSS Fish, and T&E Fish) Bachelor of Science (BS) in Watershed Management, 6 years' experience.
- Caryn Burri, NRS (Soils, Biological Soil Crusts and Upland Vegetation), BS Nature Resource Management, 3 years' experience.
- Louis Clayburn NRS (Grazing Management), BS in Rangeland Science, 5 years' experience.
- Andy Daniels, Wildlife Biologist (SSS Wildlife and Wildlife), BS in Field Biology, 14 years' experience.
- Lisa Grant, Wild Horse and Burro Specialist, BS Wildland and Range Science, Natural Resource Specialist 9 years' experience, Wild Horse and Burro Specialist 1 year experience.
- Eric Haakenson, Outdoor Recreation Planner (Lead Preparer, Recreation), BS in Range, 22 years' experience.

- Tara McLain, Realty Specialist (Lands and Realty), BS Interdisciplinary Writing and Rhetoric/History; Masters of Education; Beginning Lands and Realty Training, Intermediate Lands Tenure Training, 3 years' experience.
- Holly Orr, Planning and Environmental Coordinator (Social and Economic Values), BS in Business Administration, 2 years' experience.
- Dory Osgood, (Visual Resources), 2 years' experience.
- Connie Pettyjohn, Program Analyst (Transportation), 21 years' experience.
- Lesley Richman, NRS (Noxious Weeds Coordinator), MS in Rangeland Management, 22 years' experience.
- Scott Thomas, Archaeologist (American Indian Traditional Practices, Cultural Heritage and Paleontology), BS in Zoology and MA in Anthropology, 28 years' experience.
- Joseph Toelle, Engineer (Transportation), BS in Mechanical Engineering, 5 years' experience.
- Tom Wilcox, Outdoor Recreation Planner (Wild and Scenic Rivers, Wilderness, Wilderness Study Areas, and Lands with Wilderness Characteristics), Arthur Carhart Wilderness Center Certified, 2 years' experience.

B. Persons, Groups, or Agencies Consulted

Back Country Horsemen Steens Mountain Advisory Council
 Harney County Commissioners
 Oregon Department of Fish and Wildlife
 Oregon Natural Desert Association
 Steens Mountain Land Owners Group, Inc.

C. Public Notification

Scoping Letter to Interested Parties
 Public Meetings Attended and Discussed (Back Country Horsemen)
 Steens Mountain Advisory Council
 Bureau of Land Management Web site

CHAPTER V: REFERENCES:

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2013. BLM. *Comprehensive Animal Welfare Program, Draft Gather Standard Operating Procedures*. National Wild Horse and Burro Program.

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APPENDIX A

The Steens Mountain Recreation Area Management Plan had four main issues involving 31 separate action management objectives. Appendix A displays a table showing the management actions and the status of those actions.

Steens Mountain Recreation Area Management Plan dated February 22, 1985	
ISSUE I. LEVEL OF DEGREE OF ADMINISTRATIVE CONTROL	STATUS
<i>A. Administration</i>	
1. Wilderness Study Areas	Monitoring has been conducted and is ongoing.
2. Areas of Critical Environmental Concern	Monitoring has been conducted and is ongoing.
3. Special Recreation Use Permits	Monitoring has been conducted and is ongoing.
4. High Desert Trail Route	The Desert Trail Association established the trail to provide Back Country recreation experience.
<i>B. Supervision</i>	
1. Law Enforcement/Search and Rescue/Visitor Safety	Monitoring has been conducted and is ongoing.
2. Recreational Use Monitoring	Monitoring has been conducted and is ongoing.
3. Visitor Use Allocation System	Monitoring has been conducted and is ongoing.
4. Public Information and Education Program	BLM has developed brochures and signs for recreationist for such things as campground locations and visitor awareness.
<i>C. Facility Management</i>	
1. Facilities Operation and Maintenance	BLM continues to operate and maintain existing recreation sites and facilities.
2. Present Developments:	This campground was completed in 1980s to address excess camping at Fish Lake Campground.
A. Upgrade Jackman Park Campground to provide group camping capability.	
B. Provide a water system that meets Federal State water standards for potable in a public camping area at Jackman Park.	A well was drilled in 1980s and BLM continues to test the water to meet the Federal and State water standards.
C. Provide better definition of campsites at Page Springs and Jackman Park.	Both campgrounds have defined camping sites.
D. Maintain conditions at Page Springs to provide opportunities for public to observe beaver, waterfowl, raptors and other wildlife that utilize the spring water, ponds, streams and cliffs within the area.	BLM continues to operate and maintain Page Springs Campground facilities.
E. Upgrade and maintain nature trail at Page Springs including development of interpretive signing and/or a brochure to note plant types and other natural features.	The Wilderness Trail only receives maintenance.
3. Future Developments	South Steens Family and South Steens Equestrian Campgrounds were completed in 1980s.
A. Develop another campground on the South Loop Road.	
B. Develop equestrian campgrounds on both the North and South Loop Roads.	South Steens Equestrian Campground was constructed in 1980s See Alternative D for a proposed equestrian campground off of North Loop Road.
C. Develop and manage sites at eleven locations for vehicular sightseeing opportunities:	
1. Kiger Gorge Overlook	1. Completed
2. Highway Steens Meadows Wayside	2. Completed
3. Little Blitzen Canyon Overlooks (2 sites)	3. Completed

Steens Mountain Recreation Area Management Plan dated February 22, 1985	
4. East Rim Overlook	4. Completed
5. Big Indian Canyon Overlooks (2 sites)	5. Completed
6. Wild Horse Lake Overlook	6. Completed
7. Moraine Wayside	7. Completed
8. Big Juniper Wayside	8. Completed
9. Wildhorse Herd Wayside	9. Completed
D. Develop parking areas or “pull-outs” at or near the points of observation.	There are three pull-outs for Little Blitzen Gorge: one near Roster Comb off South Loop Road, another at the head wall off North Loop Road, and one pull-out off Cold Spring Road. There is a pull-out off the North Loop Road at Highway Steens Meadows Wayside now called (Whore House Meadows) which has interpretive signs. There are two pull-outs overlooking Big Indian Gorge off South Loop Road and one off the head wall. There are two pull-outs to observe the WJMA project.
E. Provide designated overlook points where needed the surfaced walkways, walls, or fencing and informational warning signs.	This management action was not completed and is addressed in Chapter II under Alternative D.
F. Provide interpretive facilities at identified interpretive sites.	Interpretive facilities have been provided to the public at various sites. Also see Chapter II Alternatives.
G. Develop a visitor administrative site near Frenchglen.	See Chapter II Alternative D for the proposal to construct a kiosk near Frenchglen.
4. Signs Program – Provide signing for essential services including traffic management facility and recreation use management.	BLM has provided signs for safety, provide directions, and information. See Chapter II Alternative D
<i>D. Area Access</i>	
1. Upgrade the North Loop Road from Lily Lake to Wildhorse Lake Overlook to a high standard gravel road that will allow safe travel of passenger cars, including access roads into Kiger Gorge and East Rim Overlooks.	This was completed in the 1970s, 1990s and 2010–2012.
2. Keep existing roads other than the Steens Mountain Loop Road at their current low standard of construction to allow passage of high clearance vehicles.	BLM has maintained roads for firefighting, maintenance of range improvements and other administrative uses as well as access for recreationists,
3. Keep the Steens Mountain Loop Road open for vehicular travel during weather conditions when there would be no damage to the road.	The Steens Mountain Loop Road is open normally from July 1 – December 1.
4. Develop no new roads to allow motorized vehicle use in the subalpine zone, or identified riparian zones.	BLM has not constructed any new roads in the subalpine zone or identified riparian areas.
ISSUE II ENVIRONMENTAL PROTECTION	STATUS
<i>A. Multiple Resource Use</i>	
1. Motorized Vehicle Use	The Steens Mountain Loop Road is open normally from July 1 – December 1.
2. Winter Sports Use	Visitors are allowed to conduct winter recreation activities via a winter recreation permit. See Chapter II Alternative D.
3. Control Livestock Grazing in Canyons and Upper Elevations	These areas are now within the No Livestock Grazing Area.
4. Recreation Use Conflicts	BLM continues to issue SRPs on a case-by-case basis. The SRPs include stipulations to address safety, group size, and length of stay. See Chapter II Alternative D.

Steens Mountain Recreation Area Management Plan dated February 22, 1985	
5. Land and Mineral Entry	The entire CMPA is within a Congressionally designated mineral withdrawal area; therefore no exploration and development for locatable and leasable minerals can occur. There are no grandfathered claims or leases in the CMPA.
6. Regulate Existing Mining Claims	See above.
B. Wildlife Values	
1. Monitor Bighorns Sheep Populations	Oregon Department of Fish and Wildlife (ODFW) continue to monitor bighorn sheep populations.
2. Redband Trout Habitat	Monitoring has been conducted and is ongoing.
3. Maintain existing closure of deer winter range to ORV use from October through April.	As stated above visitors are managed through a winter recreation permit on the seasonally closed Steens Mountain Loop Road. This management allows for snow machines to be on North Loop Road ensuring a low level of disturbance. See Chapter II Alternative D.
C. Cultural Values	
1. Cultural Resource Protection – Protect important cultural sites and, where feasible, interpret for public information and education.	BLM continues to protect National Register eligible sites and submit archaeological inventories to the Oregon SHPO.
ISSUE III. LAND OWNERSHIP	STATUS
A. Acquisitions	
1. Land Base Adjustments Involving Private Lands A. Lost Lake B. Pate Lake-Whorehouse Meadows C. Fir Groves D. Wild Horse Canyon E. Upper Kiger Gorge F. High Desert Trail Route	Still Private Still Private Acquired in exchange 1995 Acquired in exchange 1991 Acquired in exchange 2002
2. Land Base Adjustment Involving State Lands	There were several state exchanges that were completed and BLM now has most of the state land. Fish Lake and the summit parcel are still owned by the state. The summit, where the communication site is located.
B. Easements	
1. Negotiate Scenic Easements	BLM currently has no, and is in no negotiations to acquire scenic easements within the Steens Mountain CMPA.
2. Negotiate Access Easements	BLM has acquired and actively negotiates with willing landowners whenever possible to negotiate access easements on and around Steens Mountain.
Issue IV – Management Cooperation with Other Agencies and Private Entities	Status
A. Management Agreements with Federal, State and Local Agencies and Private Individuals/Organizations	
1. Develop Management Programs	BLM continues to manage visitor and resource management with other Federal, State and local agencies.
2. Military	There is no agreement at this time.

APPENDIX B

The following table shows the management actions from the Andrews Plan Amendment for Recreation Access Surrounding the Steens Mountain Loop Road and the status of those actions.

Andrews Plan Amendment for Recreation Access Surrounding the Steens Mountain Loop Road June 1993	
Management Action	Status
1. Keep the entire Steens Mountain Loop Road open to allow the public to enjoy Steens Mountain and protect persons and property from undue damage.	BLM continues to open the Steens Mountain Loop Road during the summer season allowing the public to enjoy Steens Mountain.
2. Protect the Steens Mountain Loop Road and secondary access roads to overlooks and campgrounds from the effects of heavy vehicle traffic and severe weather.	BLM continues to conduct yearly maintenance of Steens Mountain Loop Road. Also, BLM established Maintenance Levels in the TP, Appendix M of the RMP (2005)
3. Continue the Steens Mountain Loop Road National BCB.	BLM continues to maintain Steens Mountain Loop Road National BCB.
4. Provide for protection and enjoyment of historical resources at the Riddle Brothers Ranch.	BLM continues to manage and protect the historical resources at Riddle Brothers Ranch by utilizing camp hosts at the ranch, locked gates at the entrances, and BLM patrols.
5. Protect wilderness values by reducing incursions by motorized vehicles into WSAs.	BLM continues to manage and protect the WSAs with signs and BLM patrols.
6. Provide additional campground facilities along the southern segment of the Steens Mountain Loop Road.	The South Steens Family and South Steens Equestrian Campgrounds were constructed in 1990's.
7. Improve education/information opportunities along the Steens Mountain Loop Road.	BLM has provided interpretive panels along the Steens Mountain Loop Road in several locations (e.g. WJMA, Naughty Girl Meadows, Big Indian pull-out, Little Blitzen pull-out, Kiger Gorge Overlook, East Rim Overlook, the entrance to Riddle Brothers Ranch and Wildhorse Overlook).
8. Allow limited access for motorized and nonmotorized winter sports along the north segment of the Steens Mountain Loop Road.	Visitors are allowed motorized access past the gate to conduct winter recreation activities via a winter recreation permit. See Chapter II Alternative A.
9. Provide parking for a trail head on newly acquired property near mouth of Wildhorse Canyon.	This action has not occurred. See Chapter II Alternative D.

APPENDIX C

The following table only discusses the status of the seven management actions for Recreation Development/Visitor Management:

Donner und Blitzen National Wild and Scenic River Decision on May 1993	
Management Action	Status
<i>1. Recreation Facility Developments</i>	
Maintain existing facility at Page Springs Recreation Site.	BLM continues to maintain Page Springs Campground. See Chapter II Alternative D.
Establish a day use parking/staging area at Blitzen Crossing	A small day use parking area was constructed.
<i>2. Road Maintenance</i>	
Continue to maintain the Steens Mountain Loop Road	BLM continues to open the Steens Mountain Loop Road during the summer season allowing the public to enjoy Steens Mountain.
Maintain and stabilize the low water river crossing at Big Indian Creek to stabilize the banks and prevent erosion and siltation of the river downstream from the ford.	The crossing at Big Indian Creek is within Steens Mountain Wilderness and is part of the Mud/Ankle Creek Trail. The crossing also allows motorized administrative access to private land within wilderness.
Maintain and gravel the road into the Riddle Brothers Ranch, from the southern portion of the Steens Mountain Loop Road.	Not completed.
No new motorized access would be permitted within the river corridor	There are no new roads and no new roads are proposed within any WSR corridor.
<i>3. Off-Highway Vehicle Use/Road Closures</i>	
Motorized vehicle use will occur within the Riddle Ranch National Historic District for recreation and administration.	Currently motorized public use is allowed four days a week (Thursday – Sunday). Alternative B in Chapter II proposes five days a week (Wednesday – Sunday).
Close 1 mile of road to motorized use which enters the Donner und Blitzen River corridor near Big Springs.	This road was closed through the Steens Act.
<i>4. Trails</i>	
Develop 2.25 miles of Riddle Brothers Ranch Interpretive Trail.	A Riddle Brothers Ranch Interpretive Trail has not been developed. Under Alternative An implementation of the Riddle Brothers Ranch Cultural RMP EA will continue.
Close to mountain bikes the portions of the river corridor totaling approximately 17 miles within the Little Blitzen River Gorge	The Little Blitzen River Gorge is within Little Blitzen River WSR and in Steens Mountain Wilderness where motorized and mechanized equipment are prohibited.

Donner und Blitzen National Wild and Scenic River Decision on May 1993	
<i>5. Public Outreach</i>	
Develop informational/educational messages to the public.	The BLM developed an educational Riddle Brothers Ranch brochure, installed interpretative panels at the ranch entrance and provides a camp host at Riddle Brothers Ranch.
Make information available at key access point to the river corridor – in campground, with campground hosts, and at the proposed interpretive center at Frenchglen.	See answer above. In addition, camp hosts and information panels are located at all fee sites, and kiosks are located on North Loop Road, South Loop Road and Frenchglen.
<i>6. Search and Rescue</i>	
Provide for health and safety of visiting public within the river corridor. Provide and make available information on known hazards.	See answer above.
<i>7. Law Enforcement</i>	
Provide BLM ranger coverage for the Donner und Blitzen River.	BLM has hired a summer wilderness park ranger for monitoring, public contact and compliance checks over the past nine years.

APPENDIX D

The following are the proposed actions from the Historic District Plan and the status of management actions.

Management Actions	Current Status
A. Grazing Management – Short duration grazing period (2-4 weeks) during spring/early summer season of use.	Grazing was eliminated within Riddle Brothers Ranch through passage of the Steens Act of 2000.
B. Riparian Management- Grazing management of livestock will be the same as described under the grazing management actions.	See answer above.
C. Fish and Wildlife Management – Action items will be the same as those recommended for riparian management and water quality.	See answer above.
D. Water Quality/Water Quantity – Actions described for the improvement of the riparian condition should result in improvements in water quality.	See answer above.
E. Recreation – The dirt road into the Historic District would be improved down to the ranch house and outbuildings in W.M., T. 33 S., R. 32.75 E., section 30 SWSWSE. Two parking areas would be developed.	The road up to W.M., T. 33 S., R. 32.75 E., section 32 has been improved. The remainder of the road to the historic buildings is currently under a court-ordered settlement injunction. One parking area that accommodates up to three vehicles (at the entrance to the ranch) was developed.
F. Visual Resource Management – There are no management actions planned that would be intrusive to the landscape.	This objective has been met.
G. Cultural Resources – The proposed action to address the immediate and long-term protection of cultural resource values present within the Historic District. The historic structures will be stabilized, restored and reconstructed. Interpretation of the area will enhance program visibility and public appreciation of the cultural resources.	Building restoration and stabilization activities have occurred on four of the ranch buildings. One other structure and a cold cellar await restoration while the Ben Riddle Cabin and willow corral will be completely reconstructed in the future. Interpretative panels have been installed at the main gate to the ranch.

APPENDIX E

Sustainable Recreation for Steens Mountain

Sustainable Recreation consists of the following:

Economic Vitality = economic benefits to community
Social/Political Collaboration = community understanding and support
Environmental Integrity = responsible stewardship

True sustainability is when the three components come together. All three must be considered. If you focus only on one or two, you risk damaging the third.

Without community and political understanding and support of our decisions, it is difficult, if not impossible, to implement actions that support the other two components.

To achieve sustainability utilize “Niche” planning.

What is Niche?

“A place or position particularly suitable for the person or thing in it.”

A “Recreation Niche” is the specific recreation focus of BLM that incorporates public expectations (demand) with unique social and ecological features of the land (supply).

The Steens makes a clear decision on how much of that potential niche they will offer.

Why Niche planning:

Helps to narrow the focus

We can no longer be everything to everyone.

Creates the most public value with limited resources.

Our primary sources for Niche information are:

Different types of Surveys such as: Visitor Use Analysis, National Visitor Use Monitoring information (NVUM), Census data, and National Survey on Recreation and the Environment.

Inventories

Include any additional surveys or area specific work that has been done.

Goal is to narrow focus and create the most public value with limited resources.

Determining the Recreation Niche:

Analysis of Demographics and Demands of visitors

What is market area? Is the site a “backyard” or “Back 40” of a nearby population?

What is visitor origin area?

What are the demographics of the surrounding population?

Identify what is unique about your site. What comes to mind? Where do you want the focus?

What sites represent the social, historical and ecological uniqueness of the Steens?

Rank sites based on:

Conformance to niche

Environmental sustainability

Financial sustainability

Degree of support from local communities

Niche Planning Examples

Primary activities vary by setting

Marketing phrase

Niche emphasis

Primary Activities and Opportunities

Primary Visitor

USDI Bureau of Land Management
Steens Mountain CMPA Vision – 4th DRAFT
 10/21/09 Vision Statement (for coming decade)
Connected to the Land - Open to the Night Sky

Millions of years of uplifting created the 30 mile long fault-block called Steens Mountain. Sharply rising one vertical mile above the Alvord desert, it offers spectacular views of glacially carved gorges, and expansive ranch lands and lakes. Travelers witness one of the most naturally spectacular places in the lower 48 states, and sparse populations make this one of the darkest night skies in the world. Century ranches are a source of beauty and immense community pride.

The area provides spiritual connectivity within the grandeur of nature, for the weekend visitor and for locals who experience it daily. Main travel routes offer a sense of security, while off the beaten path offers expansive areas for self-discovery. Visitors come for the beauty and solitude and leave with a new sense of stewardship for this special place.

Its interdependence with the surrounding areas help make Steens Mtn CMPA so special. It is the model for collaborative management of public and private lands. Innovative and creative solutions to complex issues are modeled here. Sustainability for the CMPA includes: Social understanding of each other’s perspectives, economic stability through agriculture and geo-tourism, and environmental resiliency.

Broadscale contextual Settings, Special Places, Activities: Steens Mountain CMPA is a composition of a boundary-less settings integrating private land, the counties and Malheur Wildlife Refuge. Each setting has attributes it best offers.

Ranches – These picture-postcard beautiful ranches, many over a century old and in the family for generations, are a key part of CMPA cooperative management. They are the major economic engine for the region. This buckaroo (or Native American) country is rich with Basque history, and cattle drives continue this to today. It is home to cattle, wild horses and great fishing.

East Slope (Face) – This rugged windy escarpment can be difficult to traverse. Big horn sheep and mule deer forage among the cliffs. Hunting occurs here.

The East Rim – This windy, steep ridge offers spectacular views for young and old alike. Like the rest of the mountain, it’s botanically unique and home to big horn sheep and multitudes of birds and hawks. Viewing, hiking, horse riding and interpretation happen here.

Alvord Desert – This vast playa is dotted with hot springs, and affords amazing vistas. Landsailing and gliding enthusiasts are drawn to the flat, windy desert.

Finger Canyons (Gorges) – The geology of this area is steep, with alpine vegetation, lakes and streams. A trail system provides access for hikers and horse riders.

Highland Loop – This area includes the major recreation loop road to vistas and campgrounds. It is home to red band trout, big horn sheep and the south Steens herd of wild horses called the Hollywood Herd.

Primary Visitors

Local	Harney County. Enjoy hunting, fishing, horse riding, OHV riding
Non-local	OR, WA, No CA, W. ID. Enjoy hunting, birdwatching, sightseeing, hiking and horse riding.

APPENDIX F

Road Maintenance Definition Comparison Summary

Appendix M of the CMPA RMP describes the Route Management Categories based on the primary purposes and uses of individual routes. Maintenance Levels outline the degree of maintenance to be performed on individual roads. The subsequent TMP also refers to maintenance levels.

For planning purposes, the BLM as a whole is using updated terminology for the Bureau's Facility Asset Management System (FAMS) database for the BLM roads inventory. The terminology used in FAMS is referred to as road "Maintenance Intensity." In an Opinion and Order, dated September 28, 2012, for case 3:09-cv-00369-PK states, "BLM explains that the agency endeavored at a national level to phase out the "Maintenance Level" terminology employed in the TMP in favor of the "Maintenance Intensity" terminology used in the 9113 Roads Manual in order to ensure consistency of implementation. Thus, BLM contends that Maintenance Intensity 1 as defined in the 9113 Roads Manual does not exceed Maintenance Level 2 as defined in the TMP and that Maintenance Intensity 3 in the 9113 Roads Manual does not exceed Maintenance Level 3 as defined in the TMP." Honorable Paul Papak, United State Magistrate Judge, stated, "I agree with BLM on this point."

Maintenance Intensity within BLM Road Manual 9113 and Maintenance Level within Steens Mountain CMPA RMP/ROD; AMU RMP/ROD; and, Steens Mountain TMP.

This supplemental statement is provided to help summarize the definitions and crosswalk from Maintenance Level to Maintenance Intensity. Converting from Maintenance Level to Maintenance Intensity was a joint effort, involving several divisions within the Bureau of Land Management to eliminate erroneous use and inconsistent interpretations of the terms used to describe the maintenance of linear features. Maintenance Level is not a design and construction standard and should not be used to describe the type of road or the physical condition of a road. Rather it was intended to state the type of activities that are appropriate to meet management objectives and should only refer to maintenance activity.

The conversion to Maintenance Intensity (MI) was first proposed in the Roads and Trails Terminology Report, April 2006 Washington Office (WO) IM-2006-173 and was subsequently incorporated into the October 21, 2011 revision of the BLM Road Manual (9113).

Maintenance Intensities provide consistent objectives and standards for the care and maintenance of recognized routes within the BLM. Recognized routes by definition include; Roads, Primitive Roads and Trails. Maintenance Intensities provide operational guidance on the appropriate intensity, frequency, and type of maintenance activities that should be undertaken to keep the route in acceptable condition and provide guidance for the minimum standards of care for the annual maintenance of a route. Maintenance Intensity does not describe route geometry, route types, types of use or other physical or managerial characteristics of the route. Maintenance Intensities provide a range of management objectives and standards of care.

Generally speaking, Maintenance Level 2 crosswalks to Maintenance Intensity 1 and Maintenance Level 3 crosswalks to Maintenance Intensity 3; although crosswalk variations are not uncommon.

The scope of activities described within Maintenance Level 2/Maintenance Intensity 1 includes; maintaining drainage, which can include grading to prevent/minimize erosion, correct drainage problems, and protect adjacent lands. Brushing can be performed if route bed drainage is being adversely affected and contributes to erosion.

The scope of activities described within Maintenance Level L3/Maintenance Intensity 3 includes; drainage structures maintained as needed, grading conducted to provide reasonable riding comfort, brushing to improve sight distance, landslide removal, annual and preventative maintenance.

The verbatim definitions provided below describe the level of road maintenance activity that is acceptable within each maintenance category (Level or Intensity) as documented in the individually referenced documents.

AMU and SMCMPA RMP/ROD Appendix M-2 Maintenance Level 1:

This level is assigned to roads where maintenance is limited to protecting adjacent land and resource values. These roads are no longer needed and are closed to traffic. The objective is to remove these roads from the transportation system. At a minimum, drainage and runoff patterns will be maintained as needed to protect adjacent land. Grading, brushing, or slide removal will not be performed unless roadbed drainage is being adversely affected or is causing erosion. Closure and traffic restriction devices will be maintained.

BLM Manual 9113 – Roads Manual Release 9-390 10/21/2011 Maintenance Intensity Level 1

Maintenance Description: Routes where minimum (low intensity) maintenance is required to protect adjacent lands and resources values. These roads may be impassable for extended periods of time.

Maintenance Objectives:

- Low (Minimal) Maintenance Intensity.
- Emphasis is given to maintaining drainage and runoff patterns as needed to protect adjacent lands. Grading, brushing, or slide removal is not performed unless route bed drainage is being adversely affected, causing erosion.
- Meet identified resource management objectives.
- Perform maintenance as necessary to protect adjacent lands and resources values.
- No preventative maintenance.
- Planned maintenance activities limited to environmental and resource protection.
- Route surface and other physical features are not maintained for regular traffic.

Maintenance Funds: Maintenance funds provided to address environmental and resource protection requirements. No maintenance funds provided to perform preventative maintenance.

AMU and SMCMPA RMP/ROD Appendix M-2

Maintenance Level 2:

This level is assigned to roads open seasonally or year-round and uses may include commercial, recreation, private property access, and administrative purposes. Typically, these roads are passable by high clearance vehicles and are maintained, as needed, depending on funding levels. Seasonal closures or other restrictions may be needed to meet resource objectives or because of snow levels or other weather conditions. At a minimum, drainage structures will be inspected within a 3-year period and maintained as needed. Grading will be conducted as necessary to correct drainage problems. Brushing will be conducted as needed and slides may be left in place provided they do not adversely affect drainage.

BLM Manual 9113 – Roads Manual Release 9-390 10/21/2011

Maintenance Intensity Level 2

Reserved for Possible Future Use

Note: Oregon eastside districts have not yet established a standardized conversion of their roads from Maintenance Level to Maintenance Intensity. It is anticipated that higher use Maintenance Level 2 roads may be assigned Maintenance Intensity 3.

AMU and SMCMPA RMP/ROD Appendix M-2

Maintenance Level 3:

This level is assigned to roads open seasonally or year-round and uses may include commercial, recreation, private property access, and administrative purposes. Typically, these roads are natural or have an aggregate surface, but may include bituminous surface roads. These roads have a defined cross section with drainage structures such as rolling dips, culverts or ditches and may normally be negotiated by passenger cars driven cautiously. User comfort and convenience are not considered a high priority. At a minimum, drainage structures will be inspected annually and maintained as needed. Grading will be conducted to provide a reasonable level of riding comfort at prudent speeds for the road conditions. Brushing will be conducted as needed to improve sight distance. Slides adversely affecting drainage will receive high priority for removal and other slides will be removed on a scheduled basis.

BLM Manual 9113 – Roads Manual Release 9-390 10/21/2011

Maintenance Intensity Level 3

Maintenance Description: Routes requiring moderate maintenance due to low volume use (for example, seasonally or year-round commercial, recreational, or administrative access). Maintenance Intensities may not provide year-round access but are intended to generally provide resources appropriate to keep the route in use for the majority of the year.

Maintenance Objectives:

- Medium (Moderate) Maintenance Intensity.

- Drainage structures will be maintained as needed. Surface maintenance will be conducted to provide a reasonable level of riding comfort at prudent speeds for the route conditions and intended use. Brushing is conducted as needed to improve sight distance when appropriate for management uses. Landslides adversely affecting drainage receive high priority for removal; otherwise, they will be removed on a scheduled basis.
- Meet identified environmental needs.
- Generally maintained for year-round traffic.
- Perform annual maintenance necessary to protect adjacent lands and resource values.
- Perform preventative maintenance as required to generally keep the route in acceptable condition.
- Planned maintenance activities should include environmental and resource protection efforts, annual route surface.
- Route surface and other physical features are maintained for regular traffic.

Maintenance Funds: Maintenance funds provided to preserve the route in the current condition perform planned preventive maintenance activities on a scheduled basis, and address environmental and resource protection requirements.

**AMU and SMCMPA RMP/ROD Appendix M-2
Maintenance Level 4:**

This level is assigned to roads open seasonally or year-round. Uses include commercial, recreation, private property access, and administrative purposes. Typically, these roads are single or double lane and have an aggregate or bituminous surface. This Maintenance Level provides access for passenger cars driven at prudent speeds. At a minimum, the entire roadway will be maintained at least annually, although a preventative maintenance program may be established. Problems will be repaired as discovered.

**BLM Manual 9113 – Roads Manual Release 9-390 10/21/2011
Maintenance Intensity Level 4**

Reserved for Possible Future Use

Note: Oregon eastside districts have not yet established a standardized conversion of their roads from Maintenance Level to Maintenance Intensity. It is anticipated that higher use Maintenance Level 4 roads may be assigned Maintenance Intensity 5.

**AMU and SMCMPA RMP/ROD Appendix M-2
Maintenance Level 5:**

This level is assigned to roads open seasonally or year-round that carry the highest traffic volume of the transportation system. Uses include commercial, recreation, private property access, and administrative purposes. Typically, these roads are single or double lane and have an aggregate or bituminous surface. This Maintenance Level provides access for passenger cars driven at prudent speeds. The entire roadway will be maintained at least annually and a preventative maintenance program will be established. Problems will be repaired as discovered.

BLM Manual 9113 – Roads Manual Release 9-390 10/21/2011
Maintenance Intensity Level 5

Maintenance Description: Route for high (maximum) maintenance due to year-round needs, high volume of traffic, or significant use. Also may include route[s] identified through management objectives as requiring high intensities of maintenance or to be maintained open on a year-round basis.

Maintenance Objectives:

- High (Maximum) Maintenance Intensity.
- The entire route will be maintained at least annually. Problems will be repaired as discovered. These routes may be closed or have limited access due to weather conditions but are generally intended for year-round use.
- Meet identified environmental needs.
- Generally maintained for year-round traffic.
- Perform annual maintenance necessary to protect adjacent lands and resource values.
- Perform preventative maintenance as required to generally keep the route in acceptable condition.
- Planned maintenance activities should include environmental and resource protection efforts, annual route surface.
- Route surface and other physical features are maintained for regular traffic.

Maintenance Funds: Maintenance funds provided to preserve the route in the current condition perform planned preventative maintenance activities on a scheduled basis, and address environmental and resource protection requirements.

Additional general road maintenance guidance statements as provided in the documents referenced below:

Steens Mountain Wilderness and Wild and Scenic Rivers Plan, Appendix P-SMCPMPA RMP (P-73)

Road – Constructed or evolved transportation route that is normally maintained for regular use (except during periods of closure) that can be reasonably and prudently driven by motorized or mechanized vehicles.

Route – A linear ground transportation feature such as a way or road.

AMU and SMCMPA RMP Appendix B – Best Management Practices Road Design and Maintenance (B-1); (also see Appendix M –TP, Best Management Practices M-4)

(The following are specific recommended Best Management Practices pertaining to road maintenance; for full listing see reference documents.)

1. Design roads to minimize total disturbance, to conform to topography, and to minimize disruption of natural drainage patterns.

2. Base road design criteria and standards on road management objectives such as . . . safety requirements, resource objectives, and minimizing damage to the environment.
3. . . . Locate roads on well-drained soil types; avoid wet areas when possible.
6. Construct roads for surface drainage by using outslopes, crowns, grade changes, drain dips, waterbars and insloping to ditches as appropriate.
7. Sloping the road base to the outside edge for surface drainage is normally recommended for local spurs or collector roads where low-volume traffic and lower traffic speeds are anticipated. This is also recommended in situations where long intervals between maintenance will occur . . .
8. Crown and ditching is recommended for arterial and collector roads...
11. Consider improving inadequately surfaced roads that are to be left open to public traffic during wet weather with gravel . . . to minimize sediment production and maximize safety.
12. . . . Roadside brushing of vegetation should be done in a way that prevents disturbance to root systems and visual intrusions (i.e., avoid using excavators for brushing).
14. Avoid riparian/wetland areas where feasible . . .
15. Minimize the number of unimproved stream crossings. When a culvert or bridge is not feasible, locate drive-through (low water crossings) on stable rock portions of the drainage channel. Harden crossings with the addition of rock and gravel if necessary. Use angular rock if available.
18. Use drainage dips instead of culverts on roads where gradients will not present a safety issue . . .
19. Construct catchment basins, brush windrows, and culverts in a way to minimize sediment transport from road surfaces to stream channels. Install culverts in natural drainage channels . . .
21. Use culverts that pass, at a minimum, a 50-year storm event or have a minimum diameter of 24 inches for permanent streams and a minimum of 18 inches for road cross-drains.
22. Replace undersized culverts and repair or replace damaged culverts and downspouts. Provide energy dissipaters at culvert outlets or drainage dips.
24. Proper sized aggregate and riprap should be used during culvert construction. . .
30. Maintenance should be performed to conserve existing surface material, retain the original crowned or out-sloped self-draining cross section, prevent or remove rutting berms . . .

32. Grade roads only as necessary. Maintain drain dips, waterbars, road crown, in-sloping and out-sloping, as appropriate, during road maintenance.

33. Maintain roads in special areas according to special area guidance. Generally, retain roads within existing disturbed areas and sidecast material away from the special area.

AMU and SMCMPA RMP/ROD Appendix M – TP (M-1)

(Notable text pertaining to road maintenance.)

Transportation and Roads

Goal 1 – Provide travel routes to and through BLM-managed land as appropriate to meet resource objectives while providing for private and public access needs.

Management Framework

An element of a TP is the management and protection of the basic resources . . . while providing a route system that accommodates public, private, and administrative access needs. In meeting those needs, routes should be managed to minimize undue damage, maintenance costs, and provide for safe travel. Numerous Federal laws and internal regulations give the BLM the authority and guidance to develop and manage transportation systems.

AMU ROD/RMP (RMP-15) and SMCMPA ROD/RMP (RMP-15)

Operation and Maintenance Actions

Projects and maintenance of existing and newly-constructed facilities will occur; however, the level of maintenance could vary based on annual funding. Normally, routine operation and maintenance actions are categorically excluded from NEPA analysis (with the exception of actions conducted within WSAs). Such activities could include, but are not limited to, routine maintenance of existing roads, ditches, culverts, water control structures, . . . cattleguards . . . These actions are part of implementation of the RMP and should not require further analysis to implement.

AMU and SMCMPA RMP/ROD (M-3)

Management directions include the following:

- (Assign Maintenance Level 3, 4, or 5 to specifically named roads).

Assign Maintenance Level 2 to all remaining open roads within the CMPA unless otherwise prescribed under a CMA. Consider seasonal closures and road upgrades as needed to reduce damage to road surfaces, protect resources, or provide for public safety.

Appendix G
Minimum Requirements Decision Guide
Trail Maintenance



ARTHUR CARHART NATIONAL WILDERNESS TRAINING CENTER

MINIMUM REQUIREMENTS DECISION GUIDE

WORKSHEETS

Trail Maintenance – Comprehensive Recreation Plan

"... except as necessary to meet minimum requirements for the administration of the area for the purpose of this Act..."

– the Wilderness Act, 1964

Please refer to the accompanying MRDG *Instructions* for filling out this guide.
The spaces in the worksheets will expand as necessary as you enter your response.

Step 1: Determine if any administrative action is necessary.

Description: Briefly describe the situation that may prompt action.

The Steens Mountain Cooperative Management and Protection Act of 2000, ~~PL-106-399~~ (Act) provides for the cooperative management of public and private lands on Steens Mountain. The purpose of the Cooperative Management and Protection Area (CMPA) is to conserve, protect and manage the long-term ecological integrity of Steens Mountain for future and present generations." (Sec. 102). Among the many provisions of the Act, several specifically mention recreation. The Steens Act directed the Bureau of Land Management (BLM) through the Secretary to promote viable and sustainable recreation (Sec. 1 and 102); recognize and allow current and historic recreational use (Sec. 111); manage special recreation use permits (Sec. 115); and provide opportunities for wildlife-oriented recreation (Sec. 302). These provisions must be read in the context of the Act's other direction, but they are provided here to illustrate some of the direction specific to recreation. The Steens Act also mandated a comprehensive plan be prepared for long-range protection and management of Federal lands within the Steens Mountain Cooperative Management and Protection Area (CMPA) including Steens Mountain Wilderness (Sec. 111). The CMPA Resource Management Plan (RMP)/Record of

2009b

Worksheets – p.1

Decision (ROD) and Steens Mountain Wilderness and Wild and Scenic Rivers (WSR) Plan were completed in 2005. The RMP/ROD directed BLM to address and analyze in a Comprehensive Recreation Plan (CRP) any facilities or actions to accommodate or manage existing or anticipated recreation use (RMP-67).

The 2013 CRP includes 16 existing trails and 8 newly designated trails within the Steens Mountain Wilderness. Trail maintenance is currently done at a maintenance level 1 & 3, which are defined in the BLM Roads and Trails Terminology Report, pg 34, 35 as;

Maintenance Level 1

"Routes where minimum (low intensity) maintenance is required to protect adjacent lands and resource values. These roads may be impassable for extended periods of time."

Maintenance Level 3

"Routes requiring moderate maintenance due to low volume use (e.g., seasonally or year-round for commercial, recreation, or administrative access). Maintenance Intensities may not provide year-round access but are intended to generally provide resources appropriate to keep the route in use for the majority of the year."

The objective is to provide maintenance for trails within the Steens Mountain Wilderness CMPA.

The Desired Result is to clear trails of fallen or overgrown tree limbs. Clear trails of rock falls and re-route trails away from eroding stream banks or sensitive riparian areas.

To determine if administrative action is necessary, answer the questions listed in A - F on the following pages.

A. Describe Options Outside of Wilderness

Is action necessary within wilderness?

Yes: No:

Explain:

The trails are inside the Steens Mountain Wilderness which was established in part "...to promote recreation operations on private and public lands..." When a trail system exists in a wilderness the public reasonably expects that it will be open and useable, at least during the primary season of use.

Although there are trail opportunities outside wilderness, the experiences available to visitors are likely very different than the "outstanding opportunities for solitude or a primitive and unconfined type of recreation" mandated by the Wilderness Act.

B. Describe Valid Existing Rights or Special Provisions of Wilderness Legislation

Is action necessary to satisfy valid existing rights or a special provision in wilderness legislation (the Wilderness Act of 1964 or subsequent wilderness laws) that allows consideration of the Section 4(c) prohibited uses? Cite law and section.

Yes: No: Not Applicable:

Explain:

The Steens Mountain Cooperative Management and Protection Act of 2000, Title I – Steens Mountain Cooperative Management and Protection Area, Subtitle B – Management of Federal lands, Sec. 112 Roads and Travel Access, (d),(2) Trails.- *Nothing in this subsection is intended to limit the authority of the Secretary to construct or maintain trails for nonmotorized or nonmechanized use.*

C. Describe Requirements of Other Legislation

Is action necessary to meet the requirements of other laws?

Yes: No: Not Applicable:

Explain:

There is no provision of any other federal law that requires trail maintenance with or without use of motorized equipment.

D. Describe Other Guidance

Is action necessary to conform to direction contained in agency policy, unit and wilderness management plans, species recovery plans, or agreements with tribal, state and local governments or other federal agencies?

Yes: No: Not Applicable:

Explain:

Steens Mountain Wilderness and Wild and Scenic Rivers Plan Appendix P – Steens Mountain Cooperative Management and Protection Area Resource Management Plan. Page 21.

Management Objectives; To provide and manage a trail system that allows visitors to experience Steens Mountain Wilderness and WSRs while minimizing effects to wilderness resources and opportunities for solitude. Any new trail construction or maintenance of existing trails will meet wilderness trail design and safety standards for hiking and horseback riding use. Allow for nonmotorized/nonmechanized cross-country travel, but minimize the establishment of user-established trails from designated trails.

Management Direction; Identify and implement any known trail construction or maintenance projects for Steens Mountain Wilderness and WSRs. To the extent possible, minimize stream crossings and limit signs to those needed for visitor safety and resource protection within Steens Mountain Wilderness and WSRs. Portal signs will be installed to clearly define the wilderness boundary on major trails. Obliterate and restore user-established trails that cause resource damage. Seek trail development opportunities outside Steens Mountain Wilderness and WSRs to reduce effects to wilderness and WSR resources when public demand for such trails is established.

The Steens Mountain Cooperative Management and Protection Act of 2000, Subtitle B – Management of Federal lands Section 112 Roads and Travel Access;

(d) Prohibition on New Construction

(1) Prohibition, Exception – No new road or trail for motorized or mechanized vehicles may be constructed on Federal lands in the Cooperative Management and Protection Area unless the Secretary determines that the road or trail is necessary for public safety or protection of the environment. Any determination under this subsection shall be made in consultation with the advisory council and the public.

(2) Trails – Nothing in this subsection is intended to limit the authority of the Secretary to construct or maintain trails for nonmotorized or nonmechanized use.

E. Wilderness Character

Is action necessary to preserve one or more of the qualities of wilderness character including: untrammelled, undeveloped, natural, outstanding opportunities for solitude or a primitive and unconfined type of recreation, or unique components that reflect the character of this wilderness area?

Untrammelled: **Yes:** **No:** **Not Applicable:**

Explain:

Maintaining trails is a minor trammeling of wilderness because it is a human interference with natural processes in the immediate work area. However, maintaining trails prevents further trammeling of the wilderness caused by multiple user created trails in sensitive areas. Therefore the minor trammeling caused by trail maintenance leads to less trammeling over-all.

Undeveloped: **Yes:** **No:** **Not Applicable:**

Explain:

Though actions taken to maintain the trails are contrary to maintaining the undeveloped quality of wilderness, a managed trail system is typically an accepted development in wilderness, where necessary for resource protection or to provide access to opportunities for a wilderness experience.

Natural: **Yes:** **No:** **Not Applicable:**

Explain:

Maintenance of trails helps ensure naturalness because it helps confine use to the managed routes, instead of on visitor created paths around blockages. The effects of maintenance work are an adverse effect on naturalness but they are limited to the work areas which are a small portion of the entire wilderness.

Outstanding opportunities for solitude or a primitive and unconfined type of recreation:

Yes: **No:** **Not Applicable:**

Explain:

Maintaining the trails helps ensure those opportunities for solitude or primitive and unconfined recreations are available by providing an access route into wilderness.

Other unique components that reflect the character of this wilderness:

Yes: **No:** **Not Applicable:**

Explain:

None identified.

F. Describe Effects to the Public Purposes of Wilderness

Is action necessary to support one or more of the public purposes for wilderness (as stated in Section 4(b) of the Wilderness Act) of recreation, scenic, scientific, education, conservation, and historical use?

Recreation: **Yes:** **No:** **Not Applicable:**

Explain:

The action supports the public purpose of recreation by providing for access to wilderness on a maintained trail system.

Scenic: **Yes:** **No:** **Not Applicable:**

Explain:

Trails typically lead visitors to scenic vistas.

Scientific: **Yes:** **No:** **Not Applicable:**

Explain:

Trails are used to transport tools and equipment for research purposes. Transportation by mule or backpack along maintained trails to research sites is an important component of studies in the wilderness.

Education: **Yes:** **No:** **Not Applicable:**

Explain:

Conservation: **Yes:** **No:** **Not Applicable:**

Explain:

Maintenance of trails in areas prone to erosive forces is a necessary part of resource management.

Historical use: **Yes:** **No:** **Not Applicable:**

Explain:

Historically these existing trails were livestock trails and there are still equestrians that use them to follow routes their ancestors used to move livestock around the mountain.

Step 1 Decision: Is any administrative action necessary in wilderness?

Yes: **No:** **More information needed:**

Explain:

Action is justified because: the trails already exist in the wilderness; agency policy provides direction for trail maintenance; some opportunities for solitude or a primitive and unconfined type of recreation are impaired by the blocked or damaged trails; and taking action supports the public purpose of recreation.

The proposed new trails are already being used. One example is the Levi Brinkley trail, a historic two-track road which runs along the Little Blitzen river, providing outstanding opportunities for a primitive and unconfined type of recreation. In addition the outstanding opportunities for solitude are available in many places along the trail.

The wilderness character will best be preserved by taking action to maintain the trails. The trails already exist in wilderness, and if left un-maintained will continue to limit public use, especially for those who travel with recreation livestock. The choices are: maintain the trails in order to provide opportunities for solitude or a primitive and unconfined type of recreation and support the public purpose of recreation, or continue to try and preserve wilderness character with an ever increasing trail maintenance backlog and decreasing level of public support.

Prompt action is needed. While a trail maintenance backlog is not a true emergency, the maintenance backlog and the public frustration will likely increase.

If action is necessary, proceed to Step 2 to determine the minimum activity.

Step 2: Determine the minimum activity.

Please refer to the accompanying MRDG *Instructions* for an explanation of the effects criteria displayed below.

Description of Alternatives

For each alternative, describe what methods and techniques will be used, when the activity will take place, where the activity will take place, what mitigation measures are necessary, and the general effects to the wilderness resource and character.

Alternative # A – No Action

Existing trails would not be maintained, no new trails designated.

Description:

Existing trails in the wilderness would not be maintained and would be kept open by visitor use only. No new trails would be designated.

Effects:

Wilderness Character

"Untrammeled"

- Existing trails in the wilderness would over time be reclaimed by natural forces to blend into the topography, enhancing the Untrammeled character of the wilderness. However, trammeling the wilderness in maintaining a trail is minor in effect compared to the resource damage that can be avoided by proper trail maintenance.

"Undeveloped"

- Not maintaining the existing trails in the wilderness would over time erase the developed parts of the trail system making them substantially un-noticeable. While a trail system and its maintenance are a development in the wilderness, the trails serve to guide visitors thru sensitive areas which may involve delicate riparian areas, unstable rock slides or other areas, therefore the trail development enhances the undeveloped wilderness.

"Natural"

- Not maintaining the trails in the wilderness would allow natural processes to erode and degrade the existing trails enhancing their naturalness characteristic. However the lack of trail maintenance would conflict with the CMPA RMP by reducing the recreation opportunities in the wilderness by reducing access.

"Outstanding opportunities for solitude or a primitive and unconfined type of recreation"

- Opportunities for solitude or a primitive and an unconfined type of recreation are improved as a trail is re-opened.
- Opportunities for primitive and an unconfined type of recreation are adversely affected in the short term as visitors are prevented from accessing the wilderness due to the blocked trails.

Other unique components that reflect the character of this wilderness

There are no unique qualities of this wilderness that are relevant to this situation.

Heritage and Cultural Resources

There are no heritage/cultural resources in this portion of the wilderness that would be affected by any of the alternatives.

Maintaining Traditional Skills

Benefits

- The use of hand tools is consistent with the Wilderness Act (Section 4(c)).
- Traditional, non-motorized skills are maintained within the workforce.

Adverse Effects

None

Special Provisions

The Steens Mountain Cooperative Management and Protection Act of 2000, Subtitle B, Sec. 112. (d) (2) Trails – Nothing in this subsection is intended to limit the authority of the Secretary to construct or maintain trails for nonmotorized or nonmechanized use.

Economic and Time Constraints

The trail maintenance backlog is not reduced.

Additional Wilderness-specific Comparison Criteria

There are no unique characteristics or criteria specific to this wilderness that would be affected by the implementation of any alternatives.

Safety of Visitors, Personnel, and Contractors

- Typical risks to workers from use of hand tools, traveling to the work site, and camping in wilderness.

Alternative # B Maintain Existing Trails, no new trails designated.

Description:

The trail crew and volunteers would clear trails of over-growth, rock falls, repair eroded sections, reroute to prevent or mitigate resource damage and maintain trailheads using hand tools. The workforce would be youth groups, fire crews and other volunteers. All workers will be trained and certified in the use of cross-cut saws and trail hand tools by qualified instructors while accomplishing work to clear the trails.

The youth groups, fire crews and other volunteers would continue to maintain trails using cross-cut saws and other hand tools. This alternative represents no change from current practices.

Effects:

Wilderness Character

"Untrammeled"

- Maintaining trails is not a significant or widespread trammeling of the natural processes of wilderness due to the small amount of area that is actually affected.

"Undeveloped"

Benefits

- The use of non-motorized equipment (hand tools) is consistent with the preservation of wilderness character as required by the Wilderness Act (Section 2(a) and 4(b)).
- The use of non-motorized equipment (hand tools) is consistent with the purpose of wilderness found in the Wilderness Act (Section 2(a)).
- The use of non-motorized equipment (hand tools) is consistent the prohibition on use of motorized equipment found in the Wilderness Act (Section 4(c)).

Adverse Effects

- None. A managed trail system is an acceptable development in the Steens Mountain Wilderness and the use of non-motorized tools helps preserve the undeveloped quality.

"Natural"

- Naturalness is impaired by the multiple paths created by users when negotiating damaged trails. Maintaining the trails would enhance the wilderness in the same way a well-used game trail enhances a visitors appreciation of the area they hike thru by allowing them to focus more on the environment they walk thru then the trail they are trying to negotiate.

"Outstanding opportunities for solitude or a primitive and unconfined type of recreation"

Benefits

- Opportunities for solitude or a primitive and an unconfined type of recreation are improved as trails are re-opened.

Adverse Effects

- The opportunity for solitude may be diminished for some visitors due to the increased presence and number of work crews on the trails.

Other unique components that reflect the character of this wilderness

There are no unique qualities of this wilderness that are relevant to this situation.

Heritage and Cultural Resources

Historic trails used by locals would be kept open and available for use.

Maintaining Traditional SkillsBenefits

- Use of non-motorized tools and methods complies with the Minimum Requirements direction of The 1964 Wilderness Act, Section 4.(c).
- Traditional, non-motorized skills are maintained within the workforce and increased through training of other crews and volunteers.
- Visitors observing workers using traditional skills will become more aware of their wilderness heritage.
- Additional agency crews and volunteers will appreciate their wilderness heritage by acquiring and using a traditional skill.

Adverse Effects

None

Special Provisions

The Steens Mountain Cooperative Management and Protection Act of 2000, Subtitle B, Sec. 112. (d) (2) Trails – Nothing in this subsection is intended to limit the authority of the Secretary to construct or maintain trails for nonmotorized or nonmechanized use.

Economic and Time ConstraintsBenefits

- Workers using hand tools will reduce the trail maintenance backlog in an efficient manner.

Additional Wilderness-specific Comparison Criteria

There are no unique characteristics or criteria specific to this wilderness that would be affected by the implementation of any alternatives.

Safety of Visitors, Personnel, and ContractorsBenefits

- The frequency of accidents is low and the severity of injury is relatively minor for hand tools used in trail clearing work.

Adverse Effects

- There will be an increase in the number of workers exposed to hazards associated with trail clearing work.
- Typical risks to workers from use of cross cut saws and hand tools, travelling to the work site, and camping in wilderness.

Alternative # C Maintain Existing Trails, 8 new trails designated.

Description:

The trail crew and volunteers would clear trails of over-growth, rock falls, repair eroded sections, reroute to prevent or mitigate resource damage and maintain trailheads using hand tools. The workforce would be youth groups, fire crews and other volunteers. All workers will be trained and certified in the use of cross-cut saws and trail hand tools by qualified instructors while accomplishing work to clear the trails.

The youth groups, fire crews and other volunteers would continue to maintain trails using cross-cut saws and other hand tools.

8 new trails would be designated in the Steens Mountain Wilderness.

Effects:

Wilderness Character

"Untrammelled"

- Maintaining trails is not a significant or widespread trammeling of the natural processes of wilderness due to the small amount of area that is actually affected.
- Designating new trails in the Steens Mountain Wilderness serves to disperse visitor use over a larger area, thereby reducing the trammeling effect of high visitor use on other trail systems within the Steens CMPA.

"Undeveloped"

Benefits

- The use of non-motorized equipment (hand tools) is consistent with the preservation of wilderness character as required by the Wilderness Act (Section 2(a) and 4(b)).
- The use of non-motorized equipment (hand tools) is consistent with the purpose of wilderness found in the Wilderness Act (Section 2(a)).
- The use of non-motorized equipment (hand tools) is consistent with the prohibition on use of motorized equipment found in the Wilderness Act (Section 4(c)).
- Designating new trails has no more effect on the undeveloped quality of a wilderness than that of a game trail which is similar in size and appearance.

Adverse Effects

- None. A managed trail system is an acceptable development in the Steens Mountain Wilderness and the use of non-motorized tools helps preserve the undeveloped quality.

"Natural"

- Naturalness is impaired by multiple paths created by users when negotiating damaged trails. Maintaining trails would enhance the wilderness in the same way a well-used game trail enhances a visitors appreciation of the area they hike thru by allowing them to focus more on the environment they walk thru then the trail they are trying to negotiate.
- Designating new trails in the Steens CMPA would not affect the naturalness of the wilderness because the new designated trails already exist as either well used game trails or as old roads which were closed in the Steens Act of 2000.

“Outstanding opportunities for solitude or a primitive and unconfined type of recreation”

Benefits

- Opportunities for solitude or a primitive and an unconfined type of recreation are improved as trails are re-opened.
- New designated trails enhance opportunities to find solitude or a primitive and unconfined type of recreation because of the access into the wilderness they offer.

Adverse Effects

- The opportunity for solitude may be diminished for some visitors due to the increased presence and number of work crews on the trails.

Other unique components that reflect the character of this wilderness

There are no unique qualities of this wilderness that are relevant to this situation.

Heritage and Cultural Resources

Historic trails used by locals would be kept open and available for use.

Newly designated trails have been used historically by locals to move cattle on or were in the past old roads. Designating old routes as trails supports the history of the areas people.

Maintaining Traditional Skills

Benefits

- Use of non-motorized tools and methods complies with the Minimum Requirements direction of The 1964 Wilderness Act, Section 4 (c).
- Traditional, non-motorized skills are maintained within the workforce and increased through training of other crews and volunteers.
- Visitors observing workers using traditional skills will become more aware of their wilderness heritage.
- Additional agency crews and volunteers will appreciate their wilderness heritage by acquiring and using a traditional skill.

Adverse Effects

None

Special Provisions

The Steens Mountain Cooperative Management and Protection Act of 2000, Subtitle B, Sec. 112. (d) (2) Trails – Nothing in this subsection is intended to limit the authority of the Secretary to construct or maintain trails for nonmotorized or nonmechanized use.

Economic and Time Constraints

Benefits

- Workers using hand tools will reduce the trail maintenance backlog in an efficient manner.

Additional Wilderness-specific Comparison Criteria

There are no unique characteristics or criteria specific to this wilderness that would be affected by the implementation of any alternatives.

Safety of Visitors, Personnel, and Contractors

Benefits

- The frequency of accidents is low and the severity of injury is relatively minor for hand tools used in trail clearing work.

Adverse Effects

- There will be an increase in the number of workers exposed to hazards associated with trail clearing work.
- Typical risks to workers from use of cross cut saws and hand tools, travelling to the work site, and camping in wilderness.

Comparison of Alternatives

It may be useful to compare each alternative's positive and negative effects to each of the criteria in tabular form, keeping in mind the law's mandate to "preserve wilderness character."

	Alternative A No Action	Alternative B Maintain trails with hand tools, no new trails designated.	Alternative C Maintain trails with hand tools, 8 new trails designated.
Wilderness Character			
Untrammeled	+	+	+
Undeveloped	+	+	+
Natural	+	+	+
Solitude or Recreation	-	+/-	+
Wilderness Character Summary	+++/-	++++/-	++++

In the case of Wilderness Character, the alternatives are very much the same. Alternative A specifies no action which over time would return the area to its most natural state, but would not fulfill the management objectives outlined in the Steens Mountain Wilderness and Wild and Scenic Rivers Plan Appendix P – Steens Mountain Cooperative Management and Protection Area Resource Management Plan.

Alternative B which maintains the existing trails system but does not designate any new trails preserves Wilderness Character by managing the trails system to prevent damage to wilderness resources by over-use, erosive forces, over-growth or reducing multiply path creation by visitors. This alternative fulfills the management objectives of the Steens CMPA RMP.

Alternative C maintains the existing trail system and also designates eight new trails. This action both preserves Wilderness Character and fulfills the purpose of the Steens Act and the Steens CMPA RMP.

	Alternative A No Action	Alternative B Maintain trails with hand tools, no new trails designated.	Alternative C Maintain trails with hand tools, 8 new trails designated.
Maintaining Traditional Skills	+	+	+

Economics & Time	+	+	+
Other Criteria Summary	+	+	+

	Alternative A No Action	Alternative B Maintain trails with hand tools, no new trails designated.	Alternative C Maintain trails with hand tools, 8 new trails designated.
Safety	+	+	+

For this project the safest alternative is A, the no action alternative. Alternatives B & C are the same because they both accomplish the same task in the same way.

All of the possible alternatives have common mitigation and monitoring considerations:

- Visitors will be informed through office contacts, web sites, trailhead information boards, and personal contacts of which trails have been cleared.
- Trails or portions of trails will be closed to public use if visitor created paths begin to cause significant impacts, especially in riparian areas, or where listed species or archaeological sites.
- Trail crews, volunteers, fire crews, and others will use Leave No Trace practices including camping in existing sites and travelling on established routes.
- All workers who operate saws will be either fully qualified for the work they are performing or in supervised training status.
- Safety procedures, including a Job Hazard Analysis (JHA) and use of required Personal Protective Equipment (PPE), is required of all workers.

Step 2 Decision: What is the Minimum Activity?

Please refer to the accompanying MRDG *Instructions* before describing the selected alternative and describing the rationale for selection.

Selected alternative: Alternative C, Maintain Existing Trails, 8 new trails designated.

This alternative implements the minimum requirements direction in the 1964 Wilderness Act for use of non-motorized equipment while also preserving the undeveloped wilderness character and opportunities for solitude and a primitive and unconfined type of recreation, use of traditional skills, and efficient use of time and funds.

This alternative implements the purpose of the Steens Act of 2000 to promote recreation operations on private and public lands within the Steens CMPA.

This alternative implements the management objectives of the Steens Mountain Wilderness and Wild and Scenic Rivers Plan Appendix P – Steens Mountain Cooperative Management and Protection Area (CMPA) Resource Management Plan (RMP)

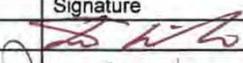
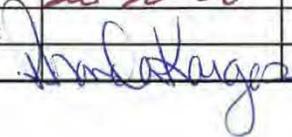
Specific/Detailed Rationale for why this is the best answer:

- To assist with growing a workforce skilled in the use of traditional tools the local fire crews will help accomplish work while being trained and certified for cross-cut saw use, a skill also needed for managing fires in wilderness.
- The increased use of traditional skills provides an opportunity for workers and visitors to enhance their awareness of their wilderness heritage.
- This alternative utilizes the tool that best reduces the risk to the workers.

Monitoring and reporting requirements:

Project implementation shall be monitored by the wilderness manager to insure that safe practices and typical wilderness trail design and standards are utilized.

Record and report any authorizations of Wilderness Act Section 4(c) uses according to agency procedures.

Approvals	Signature	Name	Position	Date
Prepared by:			Wilderness Specialist	2/27/2014
Recommended:			Andrews/Steens Resource Area Field Manager	2/27/14

Appendix H
Minimum Requirements Decision Guide
Cold Springs Development



ARTHUR CARHART NATIONAL WILDERNESS TRAINING CENTER

MINIMUM REQUIREMENTS DECISION GUIDE

WORKSHEETS

Comprehensive Recreation Plan: Cold Springs Development

"... except as necessary to meet minimum requirements for the administration of the area for the purpose of this Act..."

– the Wilderness Act, 1964

Please refer to the accompanying MRDG *Instructions* for filling out this guide.
The spaces in the worksheets will expand as necessary as you enter your response.

Step 1: Determine if any administrative action is necessary.

Description: Briefly describe the situation that may prompt action.
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The Steens Mountain Cooperative Management and Protection Act of 2000, PL 106-399 (Act) provides for the cooperative management of public and private lands on Steens Mountain. The purpose of the Cooperative Management and Protection Area (CMPA) is to conserve, protect and manage the long-term ecological integrity of Steens Mountain for future and present generations." (Sec. 102). Among the many provisions of the Act, several specifically mention recreation. The Steens Act directed the Bureau of Land Management (BLM) through the Secretary to promote viable and sustainable recreation (Sec. 1 and 102); recognize and allow current and historic recreational use (Sec. 111); manage special recreation use permits (Sec. 115); and provide opportunities for wildlife-oriented recreation (Sec. 302). These provisions must be read in the context of the Act's other direction, but they are provided here to illustrate some of the direction specific to recreation. The Steens Act also mandated a comprehensive plan be prepared for long-range protection and management of Federal lands within the Steens Mountain Cooperative Management and Protection Area (CMPA) including Steens Mountain Wilderness (Sec. 111). The CMPA Resource Management Plan (RMP)/Record of Decision (ROD) and Steens Mountain Wilderness and Wild and Scenic Rivers (WSR) Plan were completed in 2005. The RMP/ROD directed BLM to address and analyze in a Comprehensive

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Recreation Plan (CRP) any facilities or actions to accommodate or manage existing or anticipated recreation use (RMP-67).

The 2013 CRP proposes to re-develop Cold Springs within the Steens Mountain Wilderness. It is unknown when cold springs was developed because it was privately owned. The spring was historically used as a watering hole for cattle and horses prior to the Steens Act of 2000 which designated a No Grazing area within the wilderness. In 2004, the water trough and portions of the pipeline ^{was} removed. The water still flows at the spring. The spring is within the no grazing area and is currently utilized by equestrian recreationalists, wildlife and others.

In 2000, Congress designated the Steens Mountain Wilderness Area and the Steens Mountain Cooperative Management and Protection Area. Congress also established a citizens' management advisory council, (SMAC), for the Cooperative Management and Protection Area. The SMAC committee, along with the Backcountry Horsemen, has requested that Cold Springs be re-developed for the purpose of recreation. The developed spring would provide a place for recreationalists to stop and water their horses before continuing into the wilderness.

Existing Conditions: Water currently issues from the spring and flows down to cold springs road. Water pools by the side of the road where recreational livestock stop to drink. The existing pool is small and recreational livestock create resource damage while trying to water.

Desired Conditions: Runoff from the spring would be caught and channeled into an existing natural drainage using a small dike. The drainage channels the spring water to a small pool next to Cold Springs Road. Work for the water catchment would take place within the radial buffer of the road centerline. The proposed action is to enlarge the natural water basin. Align the water basin parallel to the centerline of the road. Center the water basin on the natural spring drainage channel. The overflow would continue along its natural channel. The basin would be excavated and a layer of compacted bentonite would cover the bottom and sides with an even layer. Excavated material would be replaced in the basin as a protective cover over the bentonite and compacted. The basin would be lined with native stones to prevent the edges from crumbling under horse hooves. Additional stone aggregate would be laid in the approach and departure zones of the basin.

A. Describe Options Outside of Wilderness

Is action necessary within wilderness?

Yes: No: Not Applicable:

Explain: Cold Springs is within the Steens Mountain Wilderness boundary. Therefore action within the wilderness is necessary.

B. Describe Valid Existing Rights or Special Provisions of Wilderness Legislation

Is action necessary to satisfy valid existing rights or a special provision in wilderness legislation (the Wilderness Act of 1964 or subsequent wilderness laws) that allows consideration of the Section 4(c) prohibited uses? Cite law and section.

Yes: No: Not Applicable:

Explain: The Steens Act of 2000 under which Steens Mountain Wilderness was designated has several sections related to recreation management, cultural management and wilderness:

Section 1(b) states that there are several purposes of the Act two of which provide for recreation and cultural as follows:

“To maintain the cultural, economic, ecological, and social health of the Steens Mountain area in Harney County, Oregon.”

“ To promote viable and sustainable grazing and recreation operations on private and public lands.”

Section 2(2) states the definition of Cooperative Management Agreement is an agreement to plan or implement (or both) cooperative recreation, ecological, grazing, fishery, vegetation, prescribed fire, cultural site protection, wildfire or other measures to beneficially meet public use needs and the public land and private land objectives of this act.

Section 102(b) identifies objectives related to recreation and historic management of which are as follows:

“To promote grazing, recreation, historic, and other uses that are sustainable.”

Section 111(a) 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 and other applicable provisions of law, including this Act, in the manner that:

“Recognizes and allows current and historic recreational use.”

C. Describe Requirements of Other Legislation

Is action necessary to meet the requirements of other laws?

Yes: No: Not Applicable:

Explain:

D. Describe Other Guidance

Is action necessary to conform to direction contained in agency policy, unit and wilderness management plans, species recovery plans, or agreements with tribal, state and local governments or other federal agencies?

20090 version: visit <http://www.wilderness.net/wildcog/> to ensure you have the latest version

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Yes: No: Not Applicable:

Explain:

BLM Manual 6340 – Management of BLM Wilderness Page 1-6, (v). Unique, Supplemental, or Other Features.

The Wilderness Act states that wilderness areas “may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.” Though these values are not required of any wilderness, where they are present they are part of that area’s wilderness character, and must be protected as rigorously as any of the four required qualities. They may include historical, cultural, paleontological, or other resources not necessarily considered a part of any of the other qualities. These values are identified in a number of ways: in the area’s designating legislation, through its legislative history, by the original wilderness inventory, in a wilderness management plan, or at some other time after designation.

BLM Manual 6340– Management of BLM Wilderness Page 1-9, (vi) Historical.

The public purpose of historical use is represented by historic and pre-historic sites, artifacts, structures, or cultural landscapes that may be within wilderness and by the human activities that once occurred there. This public purpose reflects the call for the protection of these Unique or Other Features in an area’s wilderness character, but it does not mandate that every structure must be preserved or restored or that every past use of wilderness must continue.

E. Wilderness Character

Is action necessary to preserve one or more of the qualities of wilderness character including: untrammeled, undeveloped, natural, outstanding opportunities for solitude or a primitive and unconfined type of recreation, or unique components that reflect the character of this wilderness area?

Untrammeled: Yes: No: Not Applicable:

Explain:

Undeveloped: Yes: No: Not Applicable:

Explain:

Natural: Yes: No: Not Applicable:

Explain:

Outstanding opportunities for solitude or a primitive and unconfined type of recreation:

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Yes: No: Not Applicable:

Explain:

Enlarging the watering hole at the spring will allow visitors traveling in groups on horseback to water their horses. Opportunities to water your recreational livestock are few and the proposed action makes possible extended range equestrian recreation opportunities.

Other unique components that reflect the character of this wilderness:

Yes: No: Not Applicable:

Explain:

The spring is a historical part of the area due to the fact that it has been used by horses and cattle long before the area became a wilderness. Cowboys would routinely stop to water their horses before making their long trip further into the wilderness. Sheep herders routinely used the spring as well prior to the wilderness designation.

F. Describe Effects to the Public Purposes of Wilderness

Is action necessary to support one or more of the public purposes for wilderness (as stated in Section 4(b) of the Wilderness Act) of recreation, scenic, scientific, education, conservation, and historical use?

Recreation: Yes: No: Not Applicable:

Explain:

Enlarging the watering hole at the spring would allow recreationalists on horseback to water their horses before they continue into the wilderness or as they return on the route to Steens Campground.

Scenic: Yes: No: Not Applicable:

Explain:

Scientific: Yes: No: Not Applicable:

Explain:

Education: Yes: No: Not Applicable:

Explain:

Conservation: Yes: No: Not Applicable:

Explain:

Historical use: Yes: No: Not Applicable:

Explain:

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Historically the spring was developed as a place that horseback riders would water and rest their horses and other livestock when traveling through the wilderness.

Step 1 Decision: Is any administrative action necessary in wilderness?

Yes: No: More information needed:

Explain:

The spring at Cold Springs is a historical watering hole for horses, cattle, wildlife and now recreationalists. Equestrians and other recreating visitors exploring the Steens Mountain Wilderness routinely stop at the springs to water their livestock or to enjoy the solitude. The need for adequate recreational livestock water and to protect the riparian area, as well as requests from the SMAC committee, and the Backcountry Horsemen has created a need for an action in the wilderness.

If action is necessary, proceed to Step 2 to determine the minimum activity.

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Step 2: Determine the minimum activity.

Please refer to the accompanying MRDG *Instructions* for an explanation of the effects criteria displayed below.

Description of Alternatives

For each alternative, describe what methods and techniques will be used, when the activity will take place, where the activity will take place, what mitigation measures are necessary, and the general effects to the wilderness resource and character.

Alternative # A - No Action, spring would not be developed.

Description:

- Cold Springs would not be developed.

Effects:

Wilderness Character

“Untrammeled”

- The existing spring in the wilderness would continue to be reclaimed by natural forces to blend in with the topography, enhancing the untrammeled character of the wilderness. Human activity would not manipulate the process of the ecological system.

“Undeveloped”

- Without developing the spring the wilderness will continue to reclaim the past signs of development. However Cold Springs will continue to have the original head box that was not removed.

“Natural”

- Not developing the springs would allow the natural process to reclaim the prior development and allow the spring to flow its natural route. The spring would continue to return to its natural condition enhancing its naturalness characteristic. Past human alterations would be allowed to degrade to their natural condition.

“Outstanding opportunities for solitude or a primitive and unconfined type of recreation”

- Opportunities for solitude or a primitive and unconfined type of recreation would remain the same if the springs were not developed.

Other unique components that reflect the character of this wilderness

- Prior to being removed the spring developments historically provided water for recreational livestock traveling into or out of the wilderness.

Heritage and Cultural Resources

- The proposed area was historically used by cowboys driving cattle throughout the Steens. There is an old cabin at Cold Springs where cowboys and recreationalist would stop and rest while their recreational stock got water from the spring. Historically this area was used routinely because of the water availability from the spring.

Maintaining Traditional Skills

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- Traditionally the spring was developed so livestock would have a reliable water source before traveling further into the area. After the development was removed the recreation decreased due to the unavailability of a dependable water source.

Special Provisions

- The Steens Act of 2000 Section 1(b) states that there are several purposes of the Act two of which provide for recreation and cultural as follows:
- "To maintain the cultural, economic, ecological, and social health of the Steens Mountain area in Harney County, Oregon."
- "To promote viable and sustainable grazing and recreation operations on private and public lands."

Economic and Time Constraints

- There would be no economic and time constraints with this proposal.

Additional Wilderness-specific Comparison Criteria

- There are no unique characteristics or criteria specific to this wilderness that would be affected by the implementation of any alternatives.

Safety of Visitors, Personnel, and Contractors

- There would be no safety concerns with this proposal.

Alternative # B Develop Spring Using Motorized Equipment

Description:

Motor Vehicle Use – At cold springs a rubber-tired backhoe would enter the wilderness and travel approximately 200 ft. on the disturbed area created from the removed pipeline. The backhoe would use this route no more than 5 times transporting material. The backhoe would be used to connect the existing head box to the pipeline and dig the trench (approx. 3ft. deep) for the pipeline. The trough would be made of a wooden material. Travel and ground disturbance by the backhoe would be limited to the area of where the old pipeline once was. Any area excavated would be contoured to original slope and surface characteristics, and would be hand-seeded or planted with native vegetation.

Wilderness Character Effects:

"Untrammelled"

- This alternative would manipulate the natural process of the spring waters in the wilderness. The waters would be controlled and directed through a pipeline to a water trough along the road. These actions are a trammeling of the wilderness. However, the water would be available in greater quantities to equestrians.

"Undeveloped"

- This alternative would create a development in the wilderness. A specific prohibition of the Wilderness Act which defines wilderness as "undeveloped". The imprint of man's work would be substantially noticeable, therefore the wilderness characteristic of being undeveloped is impaired. However, recreational opportunities for physical and mental challenge and self-discovery are important underlying benefits of wilderness, enlarging the watering facilities for equestrians provides those opportunities.

"Natural"

- Capturing and channeling spring waters in head boxes, pipelines and watering troughs is an unnatural condition in the wilderness. Human influences would alter the riparian conditions of the local ecology, Naturalness is impaired. However, the availability of an enlarged enhanced watering system for equestrians is important to recreation opportunities in this recreation area.

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- **“Outstanding opportunities for solitude or a primitive and unconfined type of recreation”**
The proposed action would allow historic recreational horseback riding to continue in the area. The developed springs would allow for recreational stock to water before going deep into the wilderness, this would allow more opportunities for solitude or primitive and unconfined recreation.
- **Other unique components that reflect the character of this wilderness**
Prior to being removed the spring developments historically provided water for live-stock before continuing deep into the wilderness.
- **Heritage and Cultural Resources**
Historic water stops for recreational stock would give visitors a place to stop and rest while their recreational stock got water. Uses of these historic areas were used to provide water before they went further into the wilderness. At cold springs there is a historic cabin where recreationalist can stop and rest.

Alternative #C Develop Springs Using Hand Tools

Runoff from the spring would be caught and channeled into an existing natural drainage using a small dike approximately 20' long 2' wide 18" high. The drainage channels spring water to a small pool next to Cold Springs Road. Work for the water catchment would take place within the radial buffer of the road centerline.

The proposed action is to enlarge the natural water basin. Align the water basin parallel to the centerline of the road. Center the water basin on the natural spring drainage channel. The overflow would continue along its natural channel. The basin would be excavated and a layer of compacted bentonite would cover the bottom and sides with an even layer. Excavated material would be replaced in the basin as a protective cover over the bentonite and compacted. The basin would be lined with native stones to prevent the edges from crumbling under horse hooves. Additional stone aggregate would be laid in the approach and departure zones of the basin. Finish dimensions of the water basin would be approximately 8' x 4' x 2'.

Hand tools used: Shovels, polaski, pick, iron bar, wheelbarrow (within the road buffer zone), sledge hammer, rake, axe, cross-cut saw

Wilderness Character Effects:

- **“Untrammelled”**
This alternative would manipulate the natural process of the spring waters in the wilderness. The waters would be controlled and directed through the existing, natural drainage to a water basin excavated within the radial buffer of the road. These actions are a trammeling of the wilderness. Human control of the waters from the springs impairs the untrammelled quality of the wilderness. However, the water was available to ranch livestock prior to the Steens Act of 2000. The existence of the watering holes with a reduced human presence provides sustainable recreation along the Cold Springs road.

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“Undeveloped”

- This alternative would create a development in the wilderness. A specific prohibition of the Wilderness Act which defines wilderness as “undeveloped”, although the imprint of man's work would be substantially unnoticeable after the area is re-vegetated. Recreational opportunities for physical and mental challenge and self-discovery are important underlying benefits of wilderness, enlarging the watering facilities for equestrians provides those opportunities.

“Natural”

- Capturing and channeling spring waters is an unnatural condition in the wilderness. Human influences would alter the riparian conditions of the local ecology, Naturalness is impaired. However, the availability of an enlarged enhanced watering system for equestrians is important to recreation opportunities in this recreation area.

“Outstanding opportunities for solitude or a primitive and unconfined type of recreation”

- The proposed action would allow historic recreational horseback riding to continue in the area. The developed springs would allow for recreational stock to water before going deep into the wilderness, this would allow more opportunities for solitude or primitive and unconfined recreation.

Other unique components that reflect the character of this wilderness

- Prior to being removed the spring development historically provided water for live-stock before continuing deep into the wilderness.

Heritage and Cultural Resources

- Historic water stops for recreational stock would give visitors a place to stop and rest while their recreational stock got water. Uses of these historic areas were to provide water before they went further into the wilderness. At cold springs there is a historic cabin where recreationalist can stop and rest.

Comparison of Alternatives

It may be useful to compare each alternative's positive and negative effects to each of the criteria in tabular form, keeping in mind the law's mandate to "preserve wilderness character."

	Alternative A	Alternative B	Alternative C
Untrammeled	+	-	+
Undeveloped	+	-	+
Natural	+	-	+
Solitude or Primitive Recreation	x	x	x
Unique components	-	+	+
WILDERNESS CHARACTER	-1, +3	-3, +1	-0, +4

	Alternative A	Alternative B	Alternative C
Heritage & Cultural Resources	-	+	+
Maintaining Traditional Skills	-	-	+
Special Provisions	-	x	+
Economics & Time	+	+	-
Additional Wilderness Criteria	x	x	x
OTHER CRITERIA SUMMARY	-3, +0	-1, +2	-1, +3

	Alternative A	Alternative B	Alternative C
SAFETY	+	-	+

Safety Criterion

Work crew members would be trained in the use of handtools such as cross-cut saws, axes and polaskis. PPE would be used at all times.

Documentation:

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Step 2 Decision: What is the Minimum Activity?

Please refer to the accompanying MRDG *Instructions* before describing the selected alternative and describing the rationale for selection.

Selected alternative:

Alternative C – Develop spring using hand tools.

Rationale for selecting this alternative (including documentation of safety criterion, if appropriate):

Alternative C was selected because it fulfills the need for an adequate watering hole for recreational livestock and minimizes the impact to wilderness characteristics by using hand tools and native materials. The action will restore the historical component of the Cold Springs relationship to the local ranching and recreating public. It will provide water for recreation livestock on a popular recreation route on Historic Cold Springs Road. The action minimizes the impact to the ecological conditions while maximizing use of natural drainage channels to pool the water within the cold springs road buffer where recreational livestock will have less impact on wilderness while watering. The action would also maintain traditional skills through the use of hand tools to form a dike, excavate the basin, prepare the basin bottom and armor the basin edge.

Monitoring and reporting requirements:

The watering holes will be monitored for visitor use and impact.

Check any Wilderness Act Section 4(c) uses approved in this alternative:

- mechanical transport
- motorized equipment
- motor vehicles
- motorboats
- landing of aircraft
- temporary road
- structure or installation

Record and report any authorizations of Wilderness Act Section 4(c) uses according to agency procedures.

Approvals	Signature	Name	Position	Date
Prepared by:		Tom Wilcox	Wilderness outdoor recreation planner	2/27/2014
Recommended:				
Recommended:				
Approved:			Andrews/Steens Resource Area Field Manager	2/27/14

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Appendix I
Riddle Brothers Historic Ranch Pipeline Extension
Comprehensive Recreation Plan
Section 7

EVALUATION OF PROPOSED WATER RESOURCES PROJECT

Pursuant To

Section 7(a) of the Wild and Scenic Rivers Act

For The

Riddle Brothers Historic Ranch
Pipeline Extension
Comprehensive Recreation Plan

National Donner und Blitzen Wild and Scenic River
Burns District Bureau of Land Management
Andrews Resource Area

February 15, 2013

INTRODUCTION

The Bureau of Land Management, Burns District, Andrews Resource Area is proposing to install a pipeline for potable water and water for fire protection and yard beautification from the Grey House administrative building, to the Riddle Brothers Historic Ranch house within the Little Blitzen Wild and Scenic River corridor in the Donner und Blitzen National Wild & Scenic River system corridor.

Federally assisted water resource projects in a WSR are subject to the provisions of Section 7 of the Wild and Scenic Rivers Act. The purpose of this report is to evaluate the potential effects of this proposal on the Donner und Blitzen WSR free-flow, water quality, and outstandingly remarkable values, as directed under Section 7(a) of the Wild and Scenic Rivers Act.

This report begins by providing statements of the need for this Pipeline and appurtenances and the description of the activities associated with the proposed project. It then presents an analysis of the potential effects to river conditions from implementing the proposed activity. The analysis documents the potential effects of the proposal on the channel and water quality conditions, riparian and floodplain conditions, upland and off-site conditions, hydrologic and biologic processes, free-flowing conditions, and outstandingly remarkable values (ORV) of the river. The report concludes with a determination of the effects of the proposed activities on the free-flowing condition and the outstandingly remarkable values of the Donner und Blitzen WSR.

The Little Blitzen River is managed under the provisions of the Donner und Blitzen National Wild and Scenic River system, under the Steens Mountain Cooperative Management and Protection Area Record of Decision and Resource Management Plan, August 2005.

PURPOSE AND NEED FOR THE PROPOSED ACTIVITY

The purpose of the proposed project is to provide potable water, fire protection and yard beautification at the Honey Moon Cabin and the Riddle Brothers Historic Ranch house which lies on the other side of the Little Blitzen River from the visitor parking area. The pipeline provides visitors with potable water from frost free hydrants and also provides potable water in the Honey moon cabin.

DESCRIPTION OF THE PROPOSED ACTIVITY

The proposed action is to install a pipeline from the Grey house down the centerline of the Cold Springs road to the Honey Moon Cabin, across the Little Blitzen River and terminating at the Fred Riddle Main House across the river.

The proposed pipeline and appurtenances will be an engineered design using materials certified for potable water use. The pipeline will be buried approximately three feet under the ground surface. Frost free hydrants will be installed on both sides of the river. The pipeline will also be plumbed into the Honey Moon cabin to provide potable water inside.

A single contract is planned to install the pipeline and appurtenances and construct the well house. The pipeline will be installed within the road bed and the frost free hydrants will be installed along the visitor walkways. Installation of the well house, pipeline and appurtenances may include a boom truck, backhoe, dump truck and other equipment. The equipment will need to cross the Little Blitzen River at the designated ford on the Cold Springs Road to work on the pipeline burial and installation of the hydrants. The pipeline will rise to the surface and cross the river attached to the underside of the existing footbridge. The pipeline will then go underground again till it reaches its final location where the last hydrant is installed.

All necessary state and federal permits will be procured.

All debris from the project will be removed from site.

Legal Description : T33S R32E Sec.30, SE of SW.

BLM emphasizes the need to maintain the Outstandingly Remarkable Values (ORVs) found within the Little Blitzen WSR. The ORVs for the Little Blitzen River are: scenery, geologic, recreation, fish, wildlife, vegetation, historic and cultural.

ANALYSIS OF THE EFFECTS OF THE PROPOSED ACTIVITY

The following analysis is based on technical review by Andrews Resource Area Resource Specialists staff of the Burns District Office of Little Blitzen WSR ORVs.

Scenic: Scenic values are ORVs for all nine segments in the Donner und Blitzen WSR system. Several river segments contain a diversity of landforms and vegetation capturing the attention of the viewer. The river and its tributaries pass through several vegetation zones, which are the result of climatic factors such as temperature and precipitation. Progression from the lower sagebrush/bunchgrass community to the upper subalpine zone gives depth and variety to different settings from which the observer experiences the scenery. It is one of the greatest qualities of this river system. Upper elevations offer river visitors an opportunity to view glaciated canyons and deep basalt formations of Donner und Blitzen River WSR. These viewsheds are largely untouched and are in natural condition.

Effects to Scenic values: There would be no effects to the scenic value

Geologic: Geologic features are considered ORVs and rare, unusual, or unique in this geographic region are the westward-tilted Steens fault block, exposures of feeder dikes from Steens Basalt lava flows, glacial features from Fish Lake Advance ice cap such as kettle holes and glacial erratics, and glacial features from Blitzen Advance valley glaciers such as U-shaped gorges and cirques. The 9,700-foot elevation at the eastern edge of Steens Mountain allowed formation of alpine glaciers less than one million years ago. Gorges carved by glaciers are as much as 2,000 feet deep and expose layers of Steens Basalt. Little Blitzen River, Fish, Big Indian, and Little Indian Creeks are in deeply glaciated gorges and flow westward across the Steens fault block to Donner und Blitzen River. Unglaciated river segments generally have rimrock views of Steens Basalt nearly 100 feet above river level.

Effects to Geology: There would be no effects to the geology of the area.

Recreational: Recreation is an ORV for all nine segments in the Donner und Blitzen WSR system. Existing recreation uses exceptional in quality include fishing, hunting, hiking, photography, wildlife, and scenic viewing. Many of these river segments are very natural in character and offer visitors many areas to experience solitude in a primitive setting. The river segments provide a rare two- to four-day backpack trip or horseback experience for individuals with moderate skill levels. Portions of the Oregon High Desert National Recreation Trail are within sections of the river canyons.

Effects to Recreation: One of the activities within the Steens Mountain Cooperative Management Protection Area is to visit the Riddle Brothers Ranch National Historic District. Hiking, fishing, hunting, equestrian and other activities would utilize potable water from this central area. Providing potable water to visitors at the Riddle Brothers Ranch enhances their experience.

Fish: Fisheries resources are an ORV for all nine segments in the Donner und Blitzen WSR system. Fish species in Donner und Blitzen River above Page Springs Weir include redband

trout, mountain whitefish, redband shiner, longnose dace, and Malheur mottled sculpin. The redband trout is the most common sport species found in the system. The Donner und Blitzen River system supports a wild, native redband trout population, recognized as an ORV by Congress in the Omnibus Oregon WSRs Act of 1988. Historically, Donner und Blitzen River and tributaries have provided excellent angling for native redband trout and are recognized by anglers as some of Oregon's finest wild trout streams. Redband trout and Malheur mottled sculpin are recognized by the BLM as Special Status Species.

Effects to Fish: The Project would attach a potable water pipeline to the underside of the existing footbridge. There would be no change in the footprint of the bridge, it is not expected that there would be any change in the hydrologic, riparian or floodplain conditions.

This project is not expected to pose any effect, detrimental or otherwise, to fish spawning, rearing, or migration. This reach of the Donner und Blitzen is habitat for redband trout and Malheur mottled sculpin. Whereas there would be no alterations to the streambed and there is an existing stream crossing for equipment, degradation to fish habitat is not expected to increase.

No long term water quality degradation is anticipated by the proposed work for all parameters that have resulted in Water Quality Limited (303d) listed streams. For this reach of the Donner und Blitzen, temperature is the limiting factor.

The spawning ground downstream of the work area will be unaffected by the proposed work. Any soil disturbed during the work and possible associated turbidity created from this project would be short term and not have an adverse effect on fish because the work is isolated from in-stream or within-bank flows. No permanent riparian vegetation would be adversely affected as the work area is dominated by bedrock and scour. In-stream LWD will not be affected by the work. There would be no alteration of the biological processes which are the basis of the fisheries Outstandingly Remarkable Value.

Wildlife: Wildlife resources are an ORV for all nine segments in the Donner und Blitzen WSR system. The Donner und Blitzen drainage is highly valued for its abundant wildlife. The river area and adjacent uplands are used by many wildlife species. Currently, no known American Indian cultural use of wildlife has been identified. Mule deer winter along the lower four miles of Donner und Blitzen River and the lower four miles of Fish Creek. Deer summer in upper parts of the area. The ridge between Big Indian and Little Indian Gorges provides habitat for a high number of large bucks during summer months. Rocky Mountain elk occasionally use lower elevations of drainages during the summer and winter. Pronghorn antelope frequent open terrain adjacent to the corridor in certain areas. Pikas are found in talus slopes near the head of Little Blitzen Gorge.

Raptors nest along canyon rims of Donner und Blitzen River and its tributaries. Common species are American kestrel and great horned owls. Turkey vultures and ravens also nest in these cliffs. One prairie falcon aerie has been located along Little Blitzen Gorge. Chukars and California quail are found along the river at lower elevations, while greater sage-grouse summer in upper

areas of the river in flatter terrain. Migratory birds use this corridor for nesting where willows and cottonwoods provide suitable habitat. Black rosy-finches, rare in Oregon, nest in subalpine vegetation above Little Blitzen Gorge.

Effects to wildlife: The proposed action of installing a well house, pipeline and appurtenances with the associated ground disturbance as described above would not have any effect on wildlife near the bridge area. No trees will be destroyed so there would be not any affect to nesting migratory bird habitat or raptor habitat. There could be some short term disturbance to other wildlife in the area such as mule deer, chukars and California quail due to the noise from the heavy equipment. This disturbance would be short term and would have no long term affects after the construction is finished. Wildlife would use the area as before the construction and only be disturbed by visitors to the historic site and hunters.

Vegetation: Within the Donner und Blitzen WSR system, Donner und Blitzen River, Little Blitzen River, South Fork of the Donner und Blitzen River, and Big Indian, Little Indian, and Fish Creeks have a diversity of plant communities considered an ORV. Vegetation includes riparian zones dominated by willows, western birch, mountain alder, black cottonwood, and quaking aspen, as well as other species. In addition, sedge and grass-dominated meadows, bog areas, springs, seeps, a variety of wetland communities, high elevation cirque communities, and numerous other alpine and subalpine communities are found within this system. The uplands include areas dominated by big sagebrush, western juniper, mountain mahogany, quaking aspen, and mountain snowberry with Idaho fescue, bluebunch wheatgrass, needlegrasses, and numerous other species in the understory. Many sensitive plant species have been documented within the river corridors. These include species endemic to Steens Mountain, species occurring in Oregon only on the Steens, and other species of special interest.

Effects to vegetation: There would be no impacts to the vegetation.

Historic: The Little Blitzen River is the only river segment in Donner und Blitzen WSR system with cultural resources as an ORV. The Riddle Brothers Ranch is listed on the National Register of Historic Places. This district covers 1,120 acres of public land along Little Blitzen WSR of which approximately 850 acres lie within the WSR corridor. Three complexes of structures are included in the historic district. Structures at the main complex include a house, root cellar, bunkhouse, chicken house, storage building, tack room, barn, and corrals built of willows and juniper. Another complex includes a house, root cellar, and stone storage building, while the smallest complex has a log house and split rail fences. The Walter Riddle Ranch House was destroyed by wildland fire in 1996.

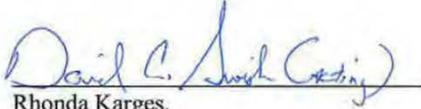
Effects to the Historic values: Installation of the new pipeline with appurtenances would not affect the Riddle Brothers National Historic District ORV. The new well house, pipeline and appurtenances at the honey moon cabin and ranch house are not contributing properties within the District. The features are designed to be as innocuous as practical. It would not affect the historic setting of the Historic District.

Cultural: The Mortar Riddle archaeological site is a regionally significant prehistoric/historic site that was occupied between 400 and 1840 AD. It is located within the Riddle Brothers Ranch National Historic District and possesses data-rich, buried deposits. It is a rare example of a summer-fall base camp that was occupied for root, seeds and fruit harvests, hunting and processing small and big game and fishing. This site meets the qualifications as an outstandingly remarkable value in the Little Blitzen River segment of the Donner und Blitzen WSR.

Effects of the Cultural values: The prehistoric cultural values within the Historic District would not be affected by the installation of the pipeline or its appurtenances. No prehistoric archaeological values are known to occur at the replacement site. However, a prehistoric site is located north of the footbridge in and around the Frederick Riddle House and small bunkhouse next door. Heavy equipment on the north side of the bridge should attempt to stay between the Cold Springs Road and the river bank to avoid surface effects to the site located there.

DETERMINATION OF THE EFFECTS OF THE PROPOSED ACTIVITY

Based on the analysis of biological and physical processes it is my determination that the proposed activity will not change the free-flowing condition of the river nor will it have any effect on the values for which the Little Blitzen River was designated as a Wild and Scenic River.



Rhonda Karges,
Field Manager
Andrews Resource Area

3-10-2014
Date



Tom Wilcox,
Outdoor Recreation Planner
Wilderness Specialist

3/10/2014
Date

Appendix J

ACRONYMS

Reader note: Please refer to the list below for acronyms that may be used in this document.

ACRONYM DEFINITION

ACEC	Area of Critical Environmental Concern
AML	Appropriate Management Level
AMP	Allotment Management Plan
AMU	Andrews Management Unit/Andrews Resource Area outside the CMPA
AUM	Animal Unit Month
BCB	Back Country Byway
BLM	Bureau of Land Management
BMPs	Best Management Practices
CAA	Clean Air Act
CEAA	Candidate Conservation Agreement with Assurances
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CMPA	Cooperative Management and Protection Area
CWA	Clean Water Act
DEQ	Oregon Department of Environmental Quality
DO	District Office
DRC	Desired Range of Conditions
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
ERMA	Extensive Recreation Management Area
ESA	Endangered Species Act
ESI	Ecological Site Inventory
FEIS	Final Environmental Impact Statement
FFR	Federal Fenced Range
FLPMA	Federal Land Policy and Management Act
GIS	Geographic Information System
HMA	Herd Management Area
ICBEMP	Interior Columbia Basin Ecosystem Management Project
ID	Interdisciplinary
Malheur NWR	Malheur National Wildlife Refuge
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MRDG	Minimum Requirement Decision Guide
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
ODFW	Oregon Department of Fish and Wildlife
OHV	Off-Highway Vehicle

ONHP	Oregon Natural Heritage Program
ORV	Outstandingly Remarkable Value
PRIA	Public Rangelands Improvement Act of 1978
RPP	Recreation and Public Purpose
RA	Resource Area
RFFA	Reasonably Forseeable Future Action
RMIS	Recreation Management Information System
RMP	Resource Management Plan
RNA	Research Natural Area
ROD	Record of Decision
ROW	Right-of-Way
RPS	Rangeland Program Summary
RTR	Redband Trout Reserve
S&Gs	Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Public Lands in Oregon and Washington
SEORMP	Southeastern Oregon Resource Management Plan
SIP	State Implementation Plan
SMAC	Steens Mountain Advisory Council
SRMA	Special Recreation Management Area
SRP	Special Recreation Permit
T&E	Threatened and Endangered
TNR	Temporary Non-Renewable
TP	Transportation Plan
TR	Technical Reference
USDI	United States Department of the Interior
USFWS	United States Fish and Wildlife Service
VRM	Visual Resource Management
WJMA	Wildlands Juniper Management Area
WSA	Wilderness Study Area
WSR	Wild and Scenic River

Appendix K

Maps

**UNITED STATES
DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Burns District Office
Steens Mountain Cooperative Management and Protection Area
Finding of No Significant Impact**

**Steens Mountain Comprehensive Recreation Plan
ENVIRONMENTAL ASSESSMENT
DOI-BLM-OR-B060-2013-0045-EA**

INTRODUCTION

The Bureau of Land Management (BLM), Burns District, conducted an analysis of recreational facilities and activities within and adjacent to Steens Mountain Cooperative Management and Protection Area (CMPA). The BLM-administered lands within the CMPA encompass 428,213 acres; there are also 66,850 acres of private and 1,070 acres of State of Oregon lands for a total of 496,133 acres.

Within the CMPA there are multiple Special Management and Special Area Designations. Special Management Designations are: Loop Road, designated as a National Back Country Byway (BCB) in 1989; the Oregon High Desert Trail, designated as part of the National Recreation Trails System in September 1992; Riddle Brothers National Historic District, designated in 1992; and seven Areas of Critical Environmental Concern (ACEC)/Resource Natural Areas (RNA) (Kiger Mustang, East Kiger Plateau, Little Blitzen, Little Wildhorse Lake, Rooster Comb, South Fork Willow Creek, Big Alvord Creek, and Fir Groves RNAs).

Special Area Designations within the CMPA are: 105.4 miles of Wild and Scenic River (WSR); 6 Wilderness Study Areas (WSA) (High Steens, Lower Stonehouse, Stonehouse, Bridge Creek, Blitzen River and South Fork Donner und Blitzen WSAs); Lands with Wilderness Characteristics (LWC) (High Steens, Bridge Creek, and Lower Stonehouse LWCs); 4 Herd Management Areas (HMAs) (South Steens, Kiger, Riddle Mountain and a portion of Sheepshead-Heath Lake HMAs); Steens Mountain Wilderness encompassing approximately 170,157 acres (including a 97,229-acre No Livestock Grazing Area); the Wildlands Juniper Management Area (WJMA); and the Redband Trout Reserve.

During the development of the CMPA Resource Management Plan (RMP), the Steens Mountain Advisory Council (SMAC) recommended to BLM to look at all recreational issues on Steens Mountain in a comprehensive manner, rather than planning for piecemeal activities. In the spirit of this recommendation, the RMP/Record of Decision (ROD) included management actions stating, "Any facilities or actions to accommodate or manage existing or anticipated recreational use will be addressed and analyzed in a Comprehensive Recreation Plan (CRP) that will be prepared after the RMP is completed. Facilities that may be addressed include Mann Lake Recreation Site, South Steens Loop Road trailhead facility and connector trails, Lily Lake, North Steens Loop Road toilet, winter use staging area, cross-country ski trail system (when there is a demonstrated public interest), a possible Fir Grove Trail, other trails outside of Steens Mountain

Wilderness (when there is demonstrated public interest), and vehicle pull-outs along Steens Mountain BCB. Actions addressed may include motorized and non-motorized winter recreation, dispersed camping, non-motorized boating on the main stem of Donner und Blitzen River, Blitzen Crossing use management, and permits to visit the CMPA. Decisions on other potential projects and actions may be considered as part of the CRP” (RMP 67).

There is a broad array of recreational opportunities in the CMPA and there is a need to develop comprehensive management practices for existing and anticipated recreational activities and associated facilities that promote public health and safety, protect natural and social resources, reduce resource damage caused by recreational activities and reduce recreational-user conflicts.

SUMMARY OF THE PROPOSED ACTION

Alternative D includes full development of facilities and activities of recreational management (including actions from Alternatives A, B and C) as guided by the CMPA RMP/ROD, Steens Mountain Wilderness and WSRs Plan, Transportation Plan, and the Travel Management Plan (TMP).

Steens Mountain Back Country Byway and Transportation

- Sign or relocate Gate #5 on South Loop Road and expand the turnaround up to 50 feet on public domain.
- Install 2 (New) gates (West Side Spring Gate and Kiger Ridge Road Gate).
- Close 12.97 miles of routes (roads/ways) to all motorized access amending the TMP.
- Change Maintenance Intensity of 0.6 mile of an existing route to Maintenance Intensity 1. See Alternative B (Map 1) in the Environmental Assessment (EA) for proposed road closures.
- Add one road into the transportation system and designate it as Maintenance Intensity 1 amending the TMP. Refer to Map Alternative B (Map 2).

Winter Recreation

- Increase winter recreational permits from four to eight on a first-come, first-served basis. The BLM would continue to seek cooperation from local private landowners to further develop the winter recreational program, specifically off North Loop Road near Fish Lake area.
- Provide a new area for snowmobilers on Roaring Springs Ranch private lands. Snowmobilers would off-load on South Loop Road, at the snow line and proceed down Lauserica Road to Roaring Springs Ranch private lands.
- South Loop Road Winter Recreation proposal would provide additional winter recreational opportunities by allowing over-the-snow machines (i.e. snowmobiles, snow tracks, and jeeps) access to South Steens Campground via South Loop Road. Over-the-snow motorized vehicles would be restricted to use of South Loop Road only.

Special Recreation Permits

- There is currently no limitation on the number of commercial or organized group SRPs issued for CMPA. The existing limit of five hunting and guiding SRPs would continue (as determined in the Needs Assessment, August 2011).

Information, Signing, and Interpretation

- Maintain and update information in existing kiosks, brochures and signs, as needed, for public safety and information.
- Develop and install a kiosk in Fields, Oregon next to the Fields Station Store and a kiosk on South Loop Road.

Developed Campgrounds (Fee Campgrounds)

- *Page Springs Campground:* An outdoor interpretive seating area to accommodate up to 20 people would be developed and cottonwood trees would be replaced, with less hazardous trees and/or shrubs.
- *Fish Lake Campground:* Two camp sites would be upgraded with accessible¹ facilities including picnic tables, fire rings and compacted paths leading to restrooms. Camp sites #21 thru #23 would be designated as tent camping only. The host site would be improved by installing a camping pad, water and sanitation tanks below ground. The horse corral located across North Loop Road from Fish Lake Campground would be removed.
- *Jackman Park Campground:* Tent camping only (No camp trailers would be allowed within the campground).
- *South Steens Family Campground:* Upgrade two camp sites to have accessible facilities including picnic tables, fire rings and compacted paths leading to restrooms. The camp host site would be upgraded to include a camping pad, water and a buried sanitation tank. The day use parking area would be enlarged by approximately 20 feet by 75 feet. Encourage day use visitors to use South Steens Family parking area to access Little Blitzen Trail through additional signage. Over time, the Little Blitzen parking area would no longer be needed.
- *South Steens Equestrian Campground:* Create a day-use parking area at the front of the campground, eliminating two camping sites. New horse corrals (approximately 12 feet by 12 feet) would be placed in all existing sites. A 50-foot round pen would be added within the campground area. Day use visitors would be encouraged to use South Steens Equestrian parking area to access Little Blitzen Trail through additional signage. Over time the Little Blitzen parking area would no longer be needed.
- *New developed campgrounds:* Mann Lake Recreation Site, North Steens Equestrian Campground, Penland Wilderness Recreation Site, and Pike Creek Recreation Site would be developed.

Dispersed Campgrounds (Non-fee Sites)

- *Mann Lake:* Five camp sites with picnic tables and fire rings would be developed.
- Develop Home Creek Recreation Site with parking areas.

¹ The term "accessible" means in compliance with the Federal Accessibility Guidelines in place at the time the facility or feature was designed, constructed, altered, or leased.

Overlooks and Other Points of Interest

- *Kiger Gorge Overlook and East Rim Overlook:* Trails from the parking areas to the overlook areas would be upgraded to an accessible path (see design features). Parking areas would be enlarged by approximately 20 feet by 75 feet.
- *Riddle Brothers Historic District Ranch:* Increase public motorized access from four to five days during the summer months (Wednesday through Sunday). Install three picnic tables and rest benches.
- Install vault toilets at *North Loop Road, South Steens Loop Road Entrance, WJMA, and Turkey Foot.*
- *(Re-install) Cold Spring Development:* The SMAC along with Back Country Horsemen have recommended this spring development be re-installed for the purpose of fostering historical recreational use.
- *(New) Riddle Brothers Historic Ranch Pipeline Extension and Pump House:* The Riddle Brothers Historic Ranch Pipeline Extension would provide potable water at Riddle Brothers Historic Ranch for the volunteer camp host(s) at the Caretaker Cabin and for irrigating the lawns at Riddle Brothers Historic Ranch. The pipeline would extend from Riddle Brothers Well, near Clemens Place, and follow Cold Spring Road for approximately 4,750 feet. An 8 foot by 8 foot wood frame pump house would be constructed.

Trails and Trailheads (Map B)

- *Kiger Gorge Trail:* Discontinue maintenance on Kiger Gorge Trail (1-mile); however the trail would continue to be shown on the BLM Burns District maps.
- *Nye and Wet Blanket Trails:* Reconstruct portions of Nye (1-mile long) and Wet blanket Trails (1½ miles long).
- *Three Mile Creek Trailhead:* Develop a new trailhead parking area (less than 1 acre) providing access to Three Mile Creek and other portions of Steens Mountain Wilderness. Approximately 1/8-mile of fence would need to be redesigned.
- *Pike Creek Trail Extension 1:* Designate a ½-mile, old mining, two-track road as part of Pike Creek trail. This trail would connect Dry Creek Trail to Pike Creek Trail.
- *Levi Brinkley Memorial Trail:* Designate a closed, two-track road, parallel to Little Blitzen River as the Levi Brinkley² Memorial Trail (approximately 1¼ miles long). A memorial plaque (2 feet by 2 feet) would be place at the start of the trail.
- *Cold Spring Parking Area:* Construct a parking area (less than one acre) at the junction of Steens Mountain Loop Road and Cold Spring Road. The parking area would be developed within the 30-foot radial buffer from Cold Spring Road and the 100-foot radial buffer from Steens Mountain Loop Road. Overnight camping would not be allowed.
- *Kueny Canyon Recreation Site:* Develop a new dispersed recreational site named Kueny Canyon Recreation Site (less than one acre). This site would be located on private lands. A public easement is required from the landowner prior to any improvements. Also, an

² Levi Brinkley was born and raised in Harney County with his three other brothers. After working as a firefighter at Malheur National Forest Service in Burns, Oregon he went to work for the Prineville Hotshots. He and thirteen others were killed on July 6, 1994, on Storm King Mountain (South Canyon Fire) in Glenwood Springs, Colorado.

approach permit would be acquired from the Oregon Department of Transportation to develop an access point off Highway 205. No campsites would be developed; however, overnight camping would be allowed.

- *Pike Creek Trail Extension 2 (Maintenance Intensity 3 Trail³):* Two connector trails would be constructed, each approximately ¾-mile long. The trails would connect the proposed Pike Creek Parking Area to Pike Creek and Dry Creek Trails.
- *Indian Mud Loop Trail (Maintenance Intensity 1⁴):* A 2-mile long trail would be constructed to create a loop trail beginning and ending at South Steens Campground. The trail would follow Big Indian Creek Trail for about 1 mile, then cross country to a closed two-track road to Mud/Ankle Creek Trail, and back to South Steens Campground.
- *Fred Riddle Trail (Maintenance Intensity 1):* The Fred Riddle Trail would be a loop trail approximately 12.75 miles long. Starting at one of the South Steens Campgrounds, the trail would follow Little Blitzen Trail, to the High Desert Trail, to a closed two-track road, to Cold Spring Road, from Cold Spring Road to Nye Trail, from Nye Trail back down Little Blitzen Trail, and then finally back to the campground.
- *Three-Mile Creek Trail and Trail Head Parking (Maintenance Intensity 3):* Develop a new trailhead parking area (less than one acre). The trail head would provide access to Three Mile Creek Trail and other portions of Steens Mountain Wilderness. A public easement or a Cooperative Management Agreement would be required from the landowner prior to any improvements being made.
- *Kueny/Black Canyon Trails (Maintenance Intensity 1):* The Kueny/Black Canyon Trails would be approximately 7 miles long starting at the Kueny Canyon Recreation Site. From the proposed Kueny Recreation Site, a recreationist would be able to hike up Kueny Canyon or Black Canyon.
- *Huffman Trail (Maintenance Intensity 1):* The Huffman Trail would be approximately 23.5 miles long. The Huffman Trail goes from Three-Mile Creek Parking Area to South Steens Campgrounds. Starting from the proposed Three-Mile Parking Area follow Three-Mile Creek to an old Civilian Conservation Corps Road to the top of Catlow Rim. From Catlow Rim the trail goes cross-country to the head waters of Home Creek, crossing private lands, over to Lauserica Road. From Lauserica Road drop down to the upper portions of Donner und Blitzen River and tie into Mud/Ankle Creek Trail to South Steens Campground.

FINDING OF NO SIGNIFICANT IMPACT

Consideration of the Council on Environmental Quality (CEQ) criteria for significance (40 CFR 1508.27), both with regard to context and intensity of impacts, is described below:

³Maintenance Intensity 3 trails - Trails are routes requiring moderate maintenance due to low volume use (e.g., seasonal or year-round for commercial, recreation, or administrative access).

⁴Maintenance Intensity 1 trails – Routes where minimum (low intensity) maintenance is required to protect adjacent lands and resource values. These trails may be impassable for extended periods of time.

Context

The Proposed Action would occur within and adjacent to the CMPA and would have local impacts on affected interests, lands, and resources similar to and within the scope of those described and considered in the CMPA/Andrews Management Unit (AMU) Proposed Resource Management Plan (PRMP)/Final Environmental Impact Statement (FEIS) (2004). There would be no substantial broad societal or regional impacts not previously considered in the PRMP/FEIS. The actions described represent anticipated program adjustments complying with the CMPA/AMU and AMU RMP/ROD (2005), and implementing recreation, lands and realty, wilderness, WSA and management programs within the scope and context of this document.

Intensity

The CEQ's ten considerations for evaluating intensity (severity of effect):

1. *Impacts that may be both beneficial and adverse.*

The EA considered potential beneficial and adverse effects. Design Features for the proposed projects were incorporated to reduce impacts. None of the effects are beyond the range of effects analyzed in the CMPA/AMU PRMP/FEIS, to which the EA is tiered.

1. American Indian Traditional Practices

All alternatives describe management actions to recreational sites, facilities, trails and vehicle use in the project area. Proposed Actions, under any alternative, are not known to be in direct conflict with traditional cultural practices at this time.

2. Recreation

- i. Steens Mountain BCB and Transportation – Motorized recreational access including Off-Highway Vehicles (OHV) would not be affected by the Proposed Action.

Placing a sign before Gate #5 or relocating Gate #5 on South Loop Road would allow visitors to see the open/close status of the gate prior to reaching the gate.

Installation of West Side Spring Gate would deter unauthorized vehicles, and Kiger Ridge Road Gate would assist BLM in managing motorized access along Kiger Ridge Road.

For discussion on effects to OHV's see description Transportation.

- ii. Winter Recreation – Current winter recreational opportunities expanding from four permits to eight permits on North Loop Road would not be affected.

An additional over-the-snow machine area to ride is Roaring Springs Ranch via Lauserica Road. Also, allowing motorized access along South Loop Road to South Steens Family and Equestrian Campgrounds would provide extra winter recreational opportunities.

- iii. Information/Signing/Interpretation – Signing is necessary for safety, providing direction and information, and is essential for implementing an interpretive program.

The addition of a kiosk (four feet by four feet) at Fields, Oregon, and along the South Loop Road would display a map and providing additional interpretation and recreational opportunities.

- iv. Developed Campgrounds (Fee Campgrounds) – At Page Springs an outdoor interpretive seating area would be constructed to enhance interpretation of the CMPA.

Providing amenities to camp hosts would aid in maintaining hosts at designated campgrounds.

Constructing a new parking area at South Steens Equestrian Campground would provide for safe parking and access to the new Little Blitzen Trailhead.

Horse corrals would be placed in camp sites, where none currently exist. A 50-foot round pen would allow the riders to “take the edge off” the horses before riding on the trails, possibly allowing for increased safety to riders.

Removal of the horse corral across from Fish Lake Campground would have no effect on recreation.

Converting Mann Lake Recreation Site into a fee site would benefit campers. Conversely, effects would be undesirable for campers who still want a primitive camp setting.

The proposed North Steens Equestrian Campground would provide equestrian camping opportunities off the North Loop Road.

Development of Penland Wilderness and Pike Creek Recreation Sites would provide additional camping sites for visitors on the east side of Steens Mountain Wilderness.

- v. Dispersed Campgrounds (Non-Fee Sites) – Maintaining Lily Lake and Mann Lake as a dispersed recreation sites would allow existing uses to continue.

Home Creek Recreation Site would be developed increasing recreational access along the west side of the CMPA.

- vi. Overlooks and Other Points of Interest – The existing access paths to Kiger Gorge and East Rim Overlook parking areas would be enlarged to accommodate more vehicles. The overlook trails would be made accessible; this would encourage all visitors to use the accessible trails, thus helping to eliminate user-created trails.

Increasing public motorized access five days during the summer months at Riddle Brothers Historic Ranch provides more opportunities. The Riddle Brothers Historic Ranch Pipeline Extension and Pump House would provide potable water for the volunteer camp hosts, and provide fire protection.

Redevelopment of Cold Spring to a functioning condition would provide equestrian riders with water for recreational stock.

Installing vault toilets at the WJMA area, South Loop Road entrance, Fish Lake Campground and Turkey would mitigate unsanitary conditions along the Steens Mountain Loop Road.

- vii. Trails and Trailheads – The 16 existing trails would continue to be maintained for the health and safety of the public. Designating new trails, rerouting and maintaining trails for recreationists would create hiking and equestrian riding opportunities.

Construction of new parking areas would provide equestrian and hiking recreationists parking areas.

3. Visual Resource Management (VRM)

The level of change to the characteristic landscape would be low and would not attract attention for projects proposed (i.e. recreational sites, vault toilets, trails and Riddle Brothers Historic Ranch Pipeline Extension and Pump House) in VRM Class I, II, and III areas. Proposed developments would use colors and material to repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

4. Social and Economic Values

Public lands in and around Harney County, Oregon would continue to contribute social amenities such as open space, scenic quality, and recreational opportunities. These amenities enhance local communities and tourism in Harney County.

Improvement to recreational facilities, full development of additional recreational facilities, and better access provides for an expected rise in the number of tourists to the area. An increased number of tourists would be an economic boost to local communities from the purchase of food, gas, motels, and other amenities.

In addition, recreational improvement projects could also bring about increased work for local contractors, further improving the local economy and supporting a well-established, local, rural-oriented social fabric.

The total cost of implementing the Proposed Action is approximately \$818,000.

5. Soils and Biological Soil Crusts (BSCs)

Closure and rehabilitation of roads would promote natural ecologic functions along routes previously compacted by vehicle use. Upgrading existing camp sites to accessible facilities would increase the amount of soil compaction and remove existing BSCs.

6. BLM Special Status Species Habitat

Effects would be only during actual construction and would not be a measurable impact on Special Status Species (SSS) use of the habitat. Improvement construction work would occur after sage-grouse nesting season (April 1 to June 15). Once individual projects are completed, SSS would be expected to use the areas again.

Improvement and expansion of existing facilities would not be expected to have any effect outside of the already established areas, nor is it expected to increase use to the point where there would be increased fatalities due to road use.

Bat habitat may be affected by the removal of old cottonwood trees, but to what extent is unknown as no bat surveys have been completed to date.

Overall, one acre of new road development would occur in Preliminary Priority Habitat (PPH) and less than two acres in Preliminary General Habitat (PGH). The Greater Sage-Grouse Conservation Assessment and Strategy For Oregon (2011), states that new roads be restricted to greater than two miles from leks during the breeding season. Due to the low number of acres and the location (not near any leks), parking areas would not have a measurable effect on sage-grouse, nesting habitat, or brood rearing habitat, nor provide any impasses to any known connectivity.

None of the proposed projects would occur within two miles of a sage-grouse lek. Any additional recreational activities (e.g. snowshoeing, snowmobiles, hiking,

cross-country skiing) by visitors is expected to be conducted on existing routes due to the ease of travel. According to Johnson et al., the presence of existing secondary roads has not been found to be a negative influence on lek trends.

7. Upland Vegetation

Closure and rehabilitation of roads would promote a return to natural ecological functions along the routes previously compacted by vehicle use.

Upgrading existing camp sites to accessible facilities would not impact vegetation; however, increasing paths to four feet would remove additional vegetation.

Upgrading host camp sites would have no impacts to vegetation as the areas surrounding the host campsites, as well as regular campsites, are generally devoid of desirable vegetation due to heavy use. The area where the sanitation tank would be installed would initially remove vegetation; however, if the area is rehabilitated and reseeded after the installation, effects would be unnoticeable within 1-2 growing seasons.

Project staging areas or access areas would be rehabilitated and reseeded. Impacts would be unnoticeable within 1-2 growing seasons.

Development of new day-use parking areas would remove vegetation over the entire area or in any portion thereof not originally used as a parking area.

Development of designated camping sites in dispersed campgrounds would remove vegetation from the use areas of the camp site.

Upgrading paths to accessible standards would increase the amount of vegetation loss; however, by increasing the width of the path to four feet, instances of travel off the path would be decreased.

Enlarging parking areas would remove vegetation from the expanded area.

Where trail maintenance is used to prevent or correct the effects of soil erosion, there would be short term (1-2 growing seasons) impacts to vegetation directly adjacent to the trail in areas used to stage the proposed maintenance or use as a work area. Soil erosion removes soil, vegetation and BSC not just in the area susceptible to erosion, but also in the areas above and below the erosion site. By maintaining a trail in order to fix current erosion issues, future vegetation loss would be prevented.

8. Wild and Scenic Rivers

Designating new trails and maintaining existing trails in the WSR corridors would enhance recreational Outstandingly Remarkable Values (ORV).

The Riddle Brothers Historic Ranch Pipeline Extension and Pump House would occur in the Little Blitzen WSR corridor. There would be no effect to the ORVs because the pipeline would be within the boundary of Riddle Brothers Road and the pump house is within the boundary of the BLM's administrative site already disturbed.

Roaring Springs Winter Recreation and South Loop Road Winter Recreation trails cross the Donner und Blitzen WSR System at two locations. There would be no effect to the ORVs since the proposed trails cross the rivers on existing bridges.

9. Wilderness

Untrammeled: The proposal to reroute portions of the trails would have no effect to the untrammeled characteristic.

Resetting the head box at Cold Spring and directing the water flow along natural drainage channels, with the use of a dike, impairs the untrammeled characteristic of the area by manipulating the spring's ecological system. Developing the spring allows equestrians and other recreationists to use the spring to water their livestock without entering wilderness.

Undeveloped: Designating new trails, maintaining and rerouting existing trails are evidence of the imprint of man's work and are an effect to the undeveloped characteristic; however, the imprint is substantially unnoticeable and serves to guide visitors to existing recreational opportunities.

Home Creek and Three-Mile Recreation Sites and trails are outside of Steens Mountain Wilderness.

Naturalness: The wilderness ecosystem strives to return the trails back to a natural condition. Humans constructing and maintaining a trail to prevent these natural ecological processes affects the naturalness characteristic, however, not maintaining trails is expected to result in multiple user-created trails that decrease naturalness over an area.

Resetting the head box at Cold Spring would be an unnatural part of the ecosystem.

Outstanding opportunities for Solitude or primitive and unconfined type of recreation: Maintaining trails affects primitive types of recreation by providing visitors a way to access remote locations.

Construction of new trails and maintaining trails would impair opportunities for solitude or a primitive and unconfined type of recreation during the actual construction of the trail segments.

The proposal to designate new trails would have no effect on the solitude or primitive recreation characteristic of wilderness.

The proposal to develop recreation sites (i.e. Penland Wilderness Recreation Site and Pike Creek Recreation Site) would provide visitors with additional opportunities to access Steens Mountain Wilderness.

The proposal of redeveloping Cold Spring would allow historic recreational horseback riding to continue in the area.

Supplemental Values: Designating new trails and maintaining existing trails would have no effect on supplemental values, however developing new recreation sites (i.e. Penland Wilderness and Pike Creek Recreation Sites) could have an effect on bighorn sheep from increased visitor presence.

The proposal of resetting the head box at Cold Spring, and directing the water flow along natural drainage channels with the use of a dike, restores the historical supplemental value.

10. Wilderness Study Area

Naturalness: Closing of roads and ways would increase naturalness of the WSAs.

Trails would have no effect on the naturalness characteristic of the WSA because the trail already exists on the ground.

Outstanding opportunities for solitude or a primitive and unconfined type of recreation: The closing of roads and ways would affect outstanding opportunities for solitude by limiting access to these areas.

Trails would increase visitors' opportunities for solitude due to additional trail access.

Outstanding opportunities for primitive and unconfined type of recreation: Trails would increase visitors' opportunities for a primitive and unconfined type of recreation.

Supplemental values: There would be fewer encounters with wildlife because fewer visitors are able to access the area.

11. Wildlife

Wildlife in general would be affected by noise and human presence during construction of projects. This disturbance would be localized and temporary in nature, and wildlife would return to these areas after the disturbance ceased. The limited amount of new developments (less than 15 acres) would not cause a

measurable use detriment and would have no effect on wildlife species on a population level.

12. Steens Mountain BCB and Transportation (including OHVs)

Motorized routes provide a motorized riding experience for those seeking solitude and scenery. There are routes that exist for the person looking to explore.

There are non-motorized routes that also provide a quality experience for those seeking solitude and scenery. Approximately 79 miles of non-motorized routes exist for the person looking to explore.

The proposal of closing 12.97 miles motorized routes would only affect the motorized portion of the transportation system. The other portions of the motorized transportation system would be maintained consistent with Maintenance Level assignments made in the CMPA RMP/ROD (2005) which included a TP (Appendix M) and Steens Mountain TMP (2007).

2. *Degree to which the Proposed Action affects public health and safety.*

Proposed Action, No Action, or any of the Alternatives would not have any measurable effect on public health and safety.

3. *Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.*

Other unique characteristics for the Project Area include Steens Mountain Wilderness, WSRs, WSAs, ACECs/RNAs, HMAs, and Riddle Brothers National Historic District.

4. *The degree to which effects on the quality of the human environment are likely to be highly controversial.*

Controversy in this context means disagreement about the nature of the effects, not expressions of opposition to the Proposed Action or preference among the alternatives. Unique or appreciable scientific controversy was not identified during scoping or during SMAC public meetings regarding the effects of the Proposed Action, No Action, or any of the Alternatives.

5. *Degree to which possible effects on the human environment are highly uncertain or involve unique or unknown risks.*

Analysis has shown there would not be any unique or unknown risks to the human environment nor were any identified in the CMPA/AMU PRMP/FEIS to which this proposal is tiered or during the public scoping period or public SMAC meetings.

6. *Degree to which the action may establish a precedent for future actions with significant impacts or represents a decision in principle about a future consideration.*

This alternative neither establishes a precedent nor represents a decision in principle about future actions. The activities described under the Proposed Action and alternatives are common activities on BLM-managed lands throughout the west. Although many of the activities occur within this unique designated area (CMPA), the effects were determined not to be significant as summarized above under #1. The EA analyzed adaptive management strategies to plan for future considerations. Full development was thoroughly analyzed for these developments and not considered significant as described in the EA.

7. *Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.*

The environmental analysis did not reveal cumulative effects beyond those already analyzed in the CMPA/AMU PRMP/FEIS which encompasses the CMPA. The EA described the current state of the environment (Affected Environment by Resource, Chapter III) which included the effects of past actions, and included analysis of reasonably foreseeable future actions (RFFA) identified in the project area.

Recreational activities and paving of East Steens Road are known RFFAs along with grazing, weed treatments, water developments, juniper treatments, North Steens Ecosystem Restoration Project, and the North Steens 230 –kV Transmission Line Project are known RFFAs and were also addressed under Chapter III of the EA; by resource, this list is not totally inclusive.

8. *Degree to which the action may adversely affect districts, sites, highways, structures or objects listed in or eligible for listing in the National Register of Historic Places.*

Other than the Riddle Brothers Ranch National Historical District, there are no features within the Project Area listed or eligible for listing in the *National Register of Historic Places*. However, as part of the Design Features identified in the attached EA, prior to implementation, a cultural resource specialist would determine if site inventory needs to be completed. Heavy equipment would not be utilized within site boundaries. *National Register* eligible or listed sites containing artifacts or features susceptible to damage or destruction would be protected during implementation through appropriate mitigation techniques. *National Register* eligible or listed cultural resource properties would be protected or effect mitigated throughout the life of the project.

9. *The degree to which the action may adversely affect an endangered or threatened species or its habitat.*

There are no known threatened or endangered species or their habitat affected by the Proposed Action, No Action, or any of the Alternatives.

10. *Whether an action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.*

The Proposed Action, No Action, or any of the Alternatives do not violate any law. The Proposed Action is in compliance with the CMPA and AMU RMPs/RODs (2005), which provide direction for the protection of the environment on public lands.

On the basis of the information contained in the EA and all other information available to me, it is my determination that:

- 1) The implementation of the Proposed Action, No Action, or any of the Alternatives will not have significant environmental impacts beyond those already addressed in the CMPA/AMU PRMP/FEIS (2004);
- 2) The Proposed Action, No Action, and the Alternatives are in conformance with the CMPA and AMU RMPs/RODs;
- 3) There would be no adverse societal or regional impacts and no adverse impacts to affected interests; and
- 4) The environmental effects, together with the proposed terms and conditions, against the tests of significance found at 40 CFR 1508.27 do not constitute a major Federal action having a significant effect on the human environment. Therefore, an EIS is not necessary and won't be prepared.

Rhonda Karges
Andrews/Steens Resource Area Field Manager

Date