BLM

Oregon Badlands Wilderness

Prineville District Office

Draft

Wilderness Management Plan and Environmental Assessment

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Draft Oregon Badlands Wilderness Management Plan

Scope of the Wilderness Management Plan

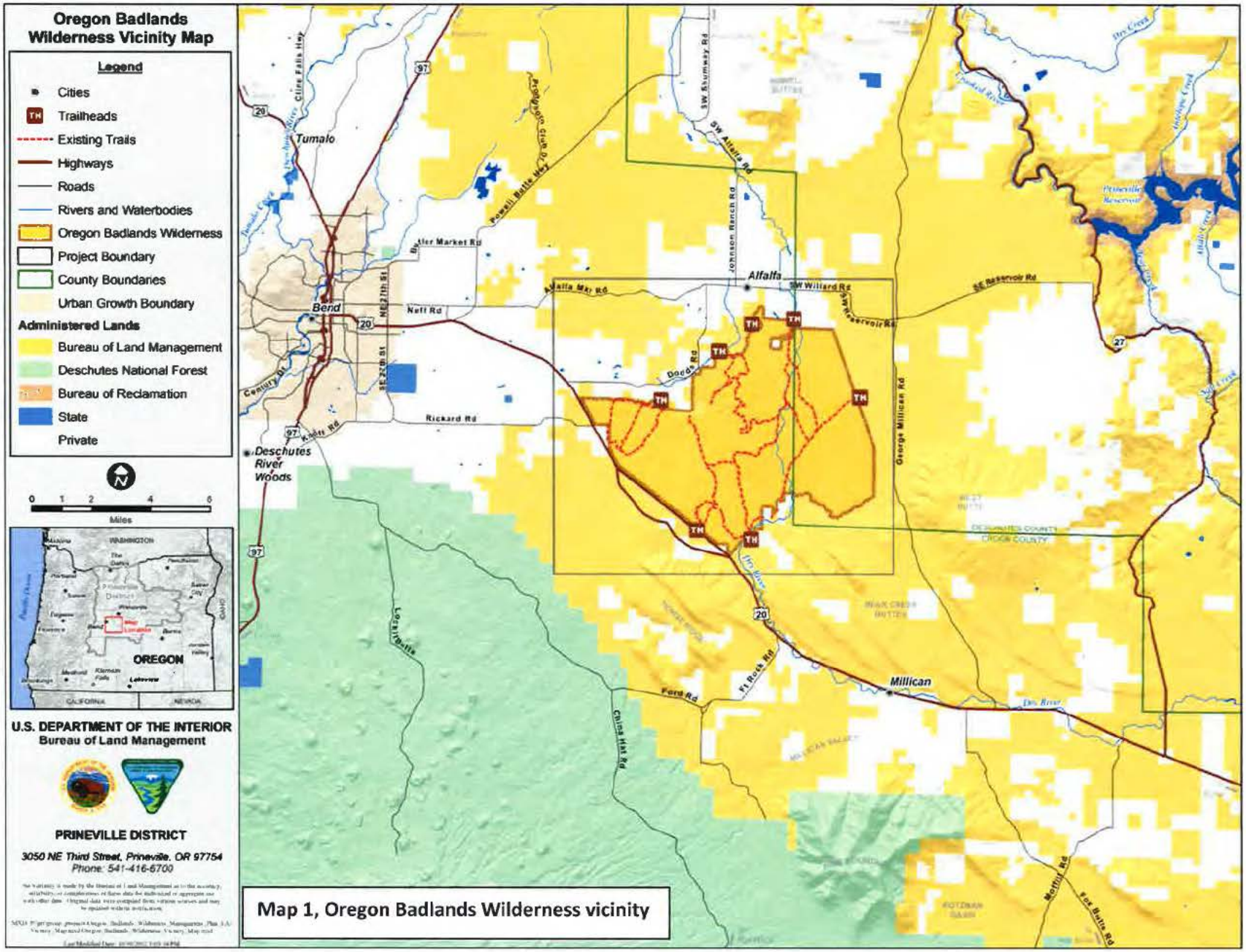
This plan provides the primary guidance for the Oregon Badlands Wilderness (OBW), a unit of the National Landscape Conservation System managed by the Bureau of Land Management (BLM). The plan also addresses actions outside the wilderness area, including wilderness access, trailheads, and interpretive and educational information provided to the public. This wilderness management plan is an implementation-level plan that provides a set of decisions outlining management of 29,301 acres of public land within the OBW. The plan 1) identifies the conditions and opportunities that will be managed within the wilderness; 2) creates specific guidance for managing the resources and activities existing in the wilderness; and, 3) preserves the area's wilderness characteristics cumulatively identified as untrammeled quality, outstanding opportunities for solitude or a primitive form of recreation, undeveloped character, and naturalness and primeval character.

The first part of the wilderness plan is a comprehensive description of the wilderness situation and proposed management. The second part is an environmental assessment (EA), which fully describes and analyzes the proposed wilderness management plan and three other alternative management options.

The plan is consistent with the following laws, regulation, and policy:

- The Omnibus Public Lands Management Act of 2009, Public Law No. 111-11, Section 1701 (March 30, 2009) (Appendix A).
- Wilderness Act of 1964.
- Code of Federal Regulations 43 Parts 6300 (Management of Designated Wilderness Areas).
- BLM Manual 6340 (Management of Designated Wilderness Areas).
- BLM Manual 8561 (Wilderness Management Plans).
- Upper Deschutes Record of Decision and Resource Management Plan USDI 2005).

Figure 1. Upended "pahoehoe" lava.



Map 1, Oregon Badlands Wilderness vicinity

Introduction

The United States Congress established the National Wilderness Preservation System to assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States. Wilderness designation is intended to preserve and protect certain lands in their natural state. Only Congress, with Presidential approval, may designate areas as Wilderness. The Wilderness Act of 1964 defines wilderness characteristics, the uses of wilderness, and the activities prohibited within wilderness.

Wilderness areas provide a contrast to lands where human activities dominate the landscape. Wilderness areas are managed for the use and enjoyment of the American people in a manner that would leave them unimpaired for future use and enjoyment, for their protection, for the preservation of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as wilderness.

Wilderness management is based on protecting wilderness character, which encompasses a combination of elements as described by four principle qualities defined in the Wilderness Act of 1964. The combination of these qualities distinguishes wilderness from all other lands. These four qualities are of equal importance and are defined as:

- Untrammeled – wilderness is unhindered and free from modern human control or manipulation.
- Outstanding opportunities for solitude or a primitive and unconfined type of recreation – wilderness provides opportunities for people to experience solitude or primitive and unconfined recreation, including the values of inspiration and physical and mental challenge.
- Undeveloped – wilderness is substantially lacking permanent developments or modern human occupation.
- Natural – wilderness ecological systems, being affected primarily by the forces of nature, retain their primeval character and influence substantially free from the effects of modern human civilization.

Additionally, a fifth principle of supplemental values optionally highlights complementary features of scientific, educational, scenic or historic values.

National Wilderness Management Goals

1. To provide for the long-term protection and preservation of the area's wilderness character under a principle of non-degradation. The area's natural condition, opportunities for solitude, opportunities for primitive and unconfined types of recreation, and any ecological, geological, or other features of scientific, educational, scenic, or historical value present would be managed so that they would remain unimpaired.
2. To manage the wilderness for the use and enjoyment of visitors in a manner that would leave the areas unimpaired for future use and enjoyment as wilderness. The wilderness resource would be dominant in all management decisions where a choice must be

made between preservation of wilderness character and visitor use.

3. To manage the wilderness using the minimum tool, equipment, or structure necessary to successfully, safely, and economically accomplish the objective. The chosen tool, equipment, or structure should be the one that least degrades wilderness values temporarily or permanently. Management would seek to preserve spontaneity of use and as much freedom from regulation as possible.
4. To manage accepted uses permitted by the Wilderness Act and subsequent laws in a manner that maintains wilderness character.

Natural and Cultural Context

Geology

The OBW comprises 29,301 acres of remarkable landforms and geologic features, bordered by the Dry River and remains of the Horse Ridge volcano. The rugged Badlands terrain derives from 80,000 year-old basaltic lava flows, which erupted as a hot fluid from the vicinity of the Newberry volcano and spread north and east across a gentle gradient. This formed what geologists term a "shield" volcano.

Badlands lava flows became chaotic piles and ridges through an accretion process. The fast-moving outer edges of the flow began to slow, cool and thicken into a hard crust, which in turn were followed by more hot liquid piling up as it cooled and thickened. These features included both smooth, ropy (pahoehoe) lava, and more blocky a'a' lava, and the build-up repeated as long as molten material continued to flow (See Figure 1.Upended "pahoehoe" lava).

In some areas, the vertical relief is immense; Badlands Rock is 100 feet tall. Other features include the Castle and Flat-Iron plateaus, which are surrounded by rocky "moats." Depressions between the outcrops are filled with sand-size particles from erosion of the lava and some of the 7,000 year-old Mt. Mazama explosive ash.

Climatology

The OBW is located in the arid high-plateau region of central Oregon (see Map 1). Its location within the "rain shadow" on the east side of the Cascade Mountains results in a mild climate, with relatively warm summers and cool winters. Based on long-term climate data recorded at the Bend Municipal Airport, the highest monthly average temperatures, about 83 degrees Fahrenheit, occur during July and August. The lowest monthly average temperatures, approximately 23 to 25 degrees Fahrenheit, occur during December and January. Average total annual precipitation is nine inches, occurring primarily as snow during the November to March period. Occasional summer thunderstorms also deliver small amounts of rain to this area.

Due to the relatively arid local climate and low annual precipitation in central Oregon, rugged topography, and porous volcanic soils, there are very few distinct hydrologic features within the OBW. The area contains several features with evidence of occasional naturally occurring surface water during current seasonal wet periods, or during periods of surface flows in the distant past.

Cultural Environment

The OBW is a dry, rugged, and rocky place dotted with small pockets of geographic diversity. People have likely passed through it and used it for at least 14,000 years. While passing through, Native Americans

were drawn to geographically diverse areas within the wilderness that they could use for water collection, tool manufacture, camping, religious practices, and possibly limited hunting and gathering. They would have been unable to live or stay there for any great length of time, given the area's arid environment and lack of perennial water. It is also unlikely to have been a major focal point for Native Americans during ancient, colder and wetter periods.

Fur trade companies first entered central Oregon in the early 1800s; however, no well-known fur trading outposts or expeditions travelled through what is now the OBW, likely a result of the harsh, barren, and arid terrain. More specifically, a majority of the terrain is uneven and punctuated by sporadic rock formations not conducive to travel. Emigrants en route to the Willamette Valley passed through the northeast corner of what is now the OBW in 1845 on the "Old Immigrant Road" as seen on Government Land Office (GLO) maps created in the 1870s.

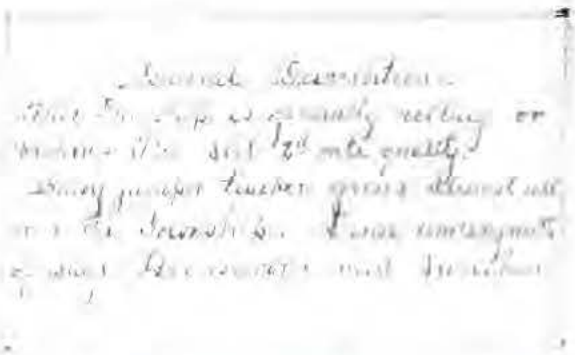


Figure 2. Description from the 1870 cadastral survey.

Stock use and grazing began in the OBW during the late 1800s and continues today. Early stock raisers left behind small amounts of refuse, created roads, and built corrals.

Irrigation development began in 1905 just northwest of the OBW, but failed within the OBW itself. Refuse left behind by canal builders can be found in some parts of the OBW.

Homesteads initiated in the OBW from the 1910s to the 1920s also failed; however, people successfully settled the irrigated lands outside the OBW. At times these people also deposited their refuse within the OBW. Historically irrigated lands are still in use today.

Beginning in 1943 during World War II and ending in 1946, the military used portions of the OBW as a gunnery, bombing range, and maneuver area. Modern visitors use the OBW for hunting and recreation.

Hydrology

The most prominent surface hydrologic feature within the eastern portion of the OBW is the Dry River, which extends in a northerly direction through the area. A defined stream channel occurs within a relatively deep canyon in the southeastern portion of the OBW, but "disappears" and "reappears" several times over a distance of approximately eight miles between the Badlands Rock trailhead and the Dry River trailhead in the northeastern part of the OBW.

The course of this ancient river can now be traced through Dry River Canyon, which "flows" through the OBW north to the Crooked River. The drainage area of the Dry River also extends eastward to Hampton Butte and southward to the east flank of Newberry Volcano and the north flank of Pine Mountain. Dry River Canyon, up to 300 feet deep, exposes layers of lava and cinders from ancient volcanoes of nearby Horse Ridge and Bear Creek Buttes.

Within the western portion of the OBW, a relatively minor natural surface hydrologic feature exists. There is subtle evidence of an ephemeral stream channel through which water may occasionally flow, primarily during high rainfall or snow melt events, in a northerly direction for approximately two miles to an area west of the Larry Chitwood trailhead. The drainage area for this stream extends southward to Horse Ridge, which flanks the southern edge of the OBW (See Map 1. Oregon Badlands Wilderness vicinity).

Figure 3. A pothole formed by the ancient Dry River.

Vegetation

Western juniper is the dominant vegetation in the OBW. Almost all of the area is within a juniper forest consisting of old, mature trees. The juniper composition is considered normal by the Natural Resources Conservation Service for the ecological sites found in the OBW. Although that percent may vary from location to location, the old growth juniper in the OBW is naturally open and grassy with a scattering of big sagebrush.

Understory species include big sagebrush, gray and green rabbitbrush, bitterbrush, squirreltail, bunch grass, Idaho fescue, cheatgrass and many forbs.

Fire History

Although many fire scars are sometimes visible on the oldest of the junipers, a reduced fire interval due to changes in climate, livestock grazing, and fire protection policies has allowed juniper to increase in some locations to well above the expected density. Fires in the OBW are usually caused by lightning strikes during summer storms. The fires are typically single-tree juniper, with very little surface fuel involved. Fire statistics show that from 1980 – 2009, fire size for 120 reported fires ranged from 1/10th of an acre to 600 acres, with 95 percent of the wildfires burning only a single tree. This pattern is typical for late seral, old-growth western juniper trees and stands protected by sand and rock. The potential for fire spread is very low during most summers. Occasionally, weather and fuel conditions align that allow a fire to spread through limited surface fuels and by spotting from tree to tree; however, typically such fires lasts only a single burning period before self-extinguishing.

Figure 4. A self-extinguished, lightning-struck western juniper tree.

Although there are a low number of human-caused fires, there is the possibility that these fires may spread and damage resource and other values. Appropriate responses have been taken to protect life and property

when necessary, while retaining the natural character of the area.

Livestock grazing

Portions of three livestock grazing allotments fall within the OBW: Millican (1,713 acres in three pastures), Rambo (8,588 acres in two pastures) and Zell Pond (765 acres in one pasture). Livestock grazing is an allowable use in wilderness areas, and the Act that designated the OBW recognized this use would continue in these allotments. The BLM permits livestock grazing according to the grazing regulations (Taylor Grazing Act, Federal Land Policy Management Act, and 43 CFR Part 4100). Grazing in the Millican allotment is further guided by the BLM's Leslie Ranch Coordinated Resource Management Plan (Leslie Ranches Allotment Management Plan – decision 9/15/1992). Each allotment is grazed for several weeks per year, usually in the spring or summer, rotating use between pastures so grasses are rested from grazing during the critical growing period every other year or two.

The permittees maintain fences and water troughs in these allotments. In the Millican and Rambo allotments, the permittees haul water to troughs in each pasture. The water trucks typically carry over 2,000 gallons of water per load and travel on primitive routes. Water for the Zell Pond allotment is provided on adjacent private land. The BLM authorizes the permittees to occasionally operate motor vehicles in the OBW for administrative uses only, including water hauling and fence repair.

The remaining 18,235 acres (62 percent of the OBW) were vacant allotments (not assigned to a permittee) at the time of wilderness designation. While livestock grazing is generally allowed in wilderness areas, the Act that designated the OBW specifically called for these vacant allotments to become unavailable for future livestock grazing.

Recreation

At fifteen miles from Bend, Oregon, the OBW is a year-round destination located just beyond the urban fringe. Most wilderness visitors access the area from the Badlands Rock and Flatiron Rock Trailheads on the U.S. Highway 20 corridor, which forms the southern boundary of the area. Hikers, equestrians, big-game and upland bird hunters, nature viewers, birders and other traditional visitors to the Badlands use former two-track routes to access interior locations. Some of these former vehicle routes were converted to designated non-motorized trails prior to Wilderness designation. Its remote fantastical lava formations and massive ancient juniper trees draw photographers and explorers for off-trail challenge. Some rock climbing occurs in interior locations, but access is difficult. Trail runners and dog walkers represent some of the newest user groups.

Some recreational activities such as competitive events, target shooting, and paintballing have already been prohibited in the OBW. In the last decade, geocaching and letter boxing have been year-round pursuits. However, a recent change in national BLM policy in 2012 prohibited the placement of physical caches in Wilderness.

A group size limit of 20 people is also in place (2005 BLM Record of Decision; Upper Deschutes Resource Management Plan/Environmental Impact Statement, pg. 109). While Special Recreation Permits are allowed in the OBW, none have been issued to date.

Travel, Transportation and Access

Currently 116 miles of mapped linear routes exist in the OBW in various states. These include unauthorized routes and the two-track primitive routes that were created to support a variety of land uses.

The current 46-mile mile designated trail system includes the Larry Chitwood Trail in the northern portion of the OBW, and trails in the southern portion that extends from the Flatiron and Badlands Rock trailheads. Four additional trailheads off of adjacent county and BLM roads and outside the OBW provide access from the northern and northwestern boundaries.

Seasonal non-motorized cross-country use associated with big game hunt seasons occurs inside and outside the OBW, along the US Highway 20 corridor and the eastern Bonneville Power Administration Right-of-Way (ROW). One improved ROW road (cherry stemmed out of the OBW) connects County Line road with a forty-acre private inholding. The northern 0.6 miles of this road also serves as a portion of the Dry River trail and is excluded from the OBW.

Neighbors generally access the OBW for non-motorized purposes from parcels adjacent to Dodds Road year-round. Recreational stock use originates via these same points, or by trailering to the Reynolds Pond, Dry River and Badlands Rock trailheads.

The majority of recreation access originates from two developed trailheads along US Highway 20 on the southern boundary of the OBW. The consequence of this unequal distribution of use is that visitors are far more likely to experience trail encounters and less solitude on the Flatiron Rock, Homestead, and Badlands Rock trails, compared to other trails.

Due to repeated vandalism and illegal off-road driving in the OBW and Central Oregon Irrigation District (COID) canals, access to the Tumulus trailhead was gated in 2010. In the future, COID may pipe their canals along part of the OBW boundary that currently serve as an obstacle to motor vehicle trespass in the OBW.

Wilderness Character

The Wilderness Act of 1964 directs wilderness managers to steward wilderness to protect "wilderness character."

Untrammeled

Section 2(c) of the Wilderness Act defines wilderness as "an area where the earth and its community of life are untrammeled by man" which is "affected primarily by the forces of nature." Thus, a trammel in a wilderness context can be thought of as actions caused by people that hinder natural processes such as suppressing wildfires or conducting restoration activities.

The OBW is largely untrammeled, but some evidence of past trammeling is evident to the careful observer. Large stumps in some locations suggest past settlement and the presence of younger western juniper hint at years of fire suppression.

Figure 5. Evidence of fire suppression.

Naturalness

Although the OBW has had human influences and disturbance, most portions

of it appear to be in a natural condition and primarily affected by the forces of nature. This is due in part to a dense canopy of juniper trees that hides much of the disturbance. In recent years, several miles of fence have been removed. Most former routes that are not part of the designated trail system are reverting to a natural appearance and are becoming less apparent, primarily due to the sandy, rocky terrain and infrequent use.

The overall character is primeval with numerous basalt outcroppings clustered predominately within the central regions of the OBW. Highly scenic vistas of the Cascade Mountain range, Smith Rocks, West Butte and Horse Ridge are all available from elevated basalt pressure ridges within the OBW.

Solitude

The OBW has outstanding opportunities for solitude due to its geologic features, dense juniper and shape. The rugged terrain within the OBW provides topographic screening and significantly enhances opportunities for solitude. The topography includes numerous basalt pressure ridges, small sandy basins, and solitary basalt outcroppings.

The basalt pressure ridges were formed by the compressive force of slowly moving lava, with many shapes and formations. Although they are relatively low in height, they act as a natural barrier that forces visitors to choose between several different routes.

The sheltered, sandy basalt-rimmed basins throughout this area are also excellent places where visitors can experience solitude in abundance. The sandy basins, along with juniper, can make it difficult for visitors to determine their location.

The OBW area encompasses a dense forest of juniper trees that create a very secluded environment. Visitors can experience solitude within a few minutes of leaving the trailheads. Outstanding opportunities for solitude are also enhanced by observing and hearing different species of wildlife in the area. These sounds contribute to the sense that this area is dominated by the forces of nature.

US Highway 20 forms part of the western-southern boundary of the OBW and is relatively well- traveled, but the topographic features and dense juniper canopy inside the wilderness effectively screen visitors from most highway vehicle noise.

Overflights by relatively low flying small aircraft primarily from the Bend Airport occur on occasion and limit the feeling of solitude. However, this noise is temporary and low elevation overflights do not occur regularly over the OBW.

Figure 6. Hikers enjoy an off-trail venture.

Primitive and Unconfined Recreation

The area serves as refuge from civilization for inhabitants of nearby communities and regional cities. Outstanding opportunities for several different types of primitive recreation are available, including hiking, hunting, camping, nature study,

photography, sightseeing, and horseback riding.

Cross-country hiking opportunities are challenging because the topography and juniper trees make it difficult to identify landmarks for direction. It's also difficult for hikers to accurately determine their location due to the size and topography within this area. This is especially true when low clouds or freezing fog are present.

Special Features

The Dry River is a dry, prehistoric river channel that winds through the OBW. Erosion from this massive water drainage has created interesting features in the southeast portion of the OBW, such as carved and smoothed boulders and small narrow cuts through basalt ridges.

There are also countless pressure ridges formed by the compressive force of slowly moving lava with many shapes and formations. These pressure ridges are mainly within the center of the OBW

Erosion from this massive water drainage has created interesting features in the southeast portion of the OBW, such as carved and smoothed boulders and small narrow cuts through basalt ridges.

Cryptogams (mosses, lichens, etc.) grow on the basalt formations throughout the area and are a special attraction for some visitors.

Figure 7. Monkey flower *(Mimulus cusickii)*.

Wildlife

Habitat for wildlife is relatively uniform throughout the OBW. The entire area is juniper woodlands with open patches dominated by big sagebrush on pumice soil with basalt outcrops. Differences in habitat are related to the density of rock features, fire history, and livestock grazing.

The basalt formations and old-growth western juniper trees are dominant features of the OBW and provide habitat for numerous species such as bobcats, golden eagles, cavity-nesting bird species, and small mammals. Crucial mule deer winter range covers the southern portions of the OBW. Elk and pronghorn also use this area.

Northern flickers, ash-throated flycatchers, and bushy-tailed wood rats nest in the cavities of junipers. Chipping sparrows and gray flycatchers nest in the big sagebrush. Ord's kangaroo rats and American badgers burrow in the pumice soils.

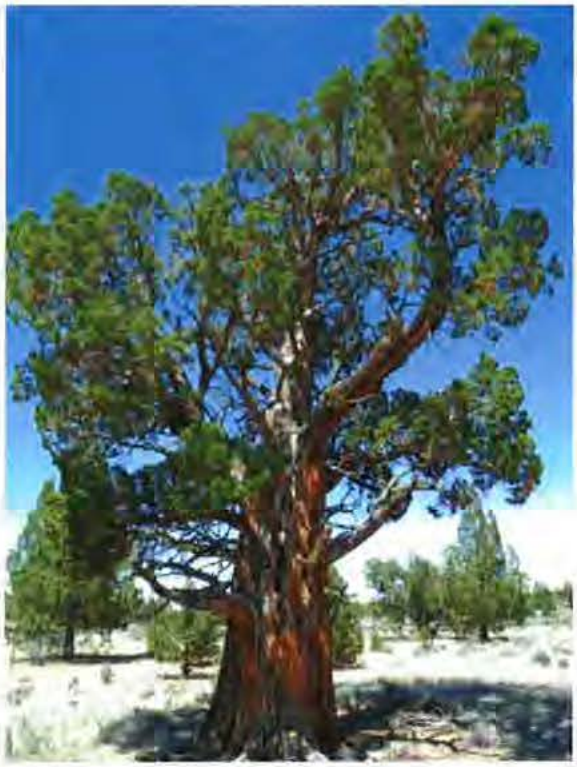


Figure 8. Western juniper with old growth characteristics.

Rock outcrops offer more security for dens or nests. Some species, such as the rock wren, are adapted to live in and around such outcrops, while coyotes and cougars are more likely to find secure dens. Bats may roost on rock outcrops but travel to other areas to feed.

Issues

Issues to be addressed in the wilderness plan were identified through a public scoping meeting, written letters from the public, data and information provided by BLM resource staff, and input provided by other agencies. A public scoping meeting was held at the Bend Recreation and Park District headquarters on March 1, 2012. A scoping letter inviting comments was posted on the Prineville BLM website. Issues were considered in developing a range of alternatives.

1. Opportunities for solitude and primitive, unconfined recreation:

- *To what degree would implementation of access controls and trail design affect the solitude of visitors?*
- *How would limiting some recreation activities, such as the use of water soluble chalk for rock climbing or requiring dog leashes at trailheads affect visitors' ability to enjoy unconfined recreation?*
- *How would the location and development of trailheads and parking areas affect visitor's ability to enjoy unconfined recreation?*

2. Undeveloped and natural appearance of the OBW:

- *How would restoration of non-historic surface disturbances, including former vehicle routes, affect the natural appearance of the OBW?*
- *How would removal of unnecessary and non-historic facilities and trash affect the OBW's undeveloped nature?*
- *How would access to and configuration and maintenance of existing authorized livestock grazing fences and troughs within the OBW affect the OBW's undeveloped nature?*
- *How would the amount and type of signage affect the OBW's undeveloped appearance while preserving visitors' ability to orient themselves correctly?*

3. Naturalness, primeval character and influence of the OBW:

- *How would fire management (both natural and human-caused fires) affect naturalness and the primeval character of the wilderness?*

Wilderness Management Objectives

The following objectives address management of the OBW under the Wilderness Management Objectives identified in BLM Manual 6340 – Management of BLM Wilderness; the objectives are not listed in order of priority.

a) Provide outstanding opportunities for primitive recreation for hiking and horseback riding with minimal supporting actions. In areas of greater frequency of visitation, provide trails to help manage impacts.

b) Maintain existing opportunities for solitude by managing visitor use patterns if monitoring indicates a need.

c) Provide for the use and enjoyment of the OBW in such a way that protects natural conditions and uses through minimal regulation of visitor activities.

d) Provide for vehicle access to private land adjacent to the OBW, while also deterring vehicles from entering the OBW.

e) Maintain or enhance the natural appearance of the OBW by removing unnecessary facilities and minimizing or restoring human caused surface disturbances.

f) Preserve and restore the natural character and influence of the OBW, allow fire as a natural ecological process to create disturbance followed by natural succession in the OBW where fire is a natural component within the ecosystem. Prevent fire where fire is not a natural component within the ecosystem or where human life or property is threatened.

Figure 9. Mule deer skull with moss.

Wilderness Management Actions

The following site specific actions will be implemented in the OBW. These actions are designed to meet the wilderness management objectives and respond to those wilderness specific issues that were identified through scoping. All actions are supplemental to and consistent with wilderness laws, regulations, and policies (see Scope of Wilderness Management Plan section, above).

Air Quality Management

The Clean Air Act Amendments of 1977 designated wilderness areas existing at that time to be Class I Areas. Areas designated wilderness after 1977 are classified as Class II, unless they are additions to existing Class I areas. The OBW is within a larger area that is classified as Class II, which allows moderate degradation associated with moderate, well-controlled industrial and population growth.

According to the Clean Air Act, air quality reclassification is the prerogative of the states. BLM manages designated wilderness areas as Class II unless they are reclassified by the state. BLM actions such as prescribed fire would be consistent with this Class II classification. The Smoke Management Guide for Prescribed and Wildland Fire (Hardy et al., 2001) provides smoke management and emission reduction techniques for federal land managers to use when completing project specific NEPA. These guidelines are summarized on page 43 of the 2005 BLM Record of Decision; Upper Deschutes Resource Management Plan/Environmental Impact Statement.

Figure 10. Hiking the Flatiron Rock trail.

Cultural Resources

Historic refuse dump sites at trailheads will be inventoried and assessed for eligibility for inclusion into the National Register of Historic Places (NRHP). If these sites are determined ineligible for inclusion into the NRHP, they will be removed along with other refuse less than 50 years old.

If these sites are determined eligible for inclusion into the NRHP, then they will not be removed.

Cultural resource inventory will occur prior to any ground disturbing activities within the OBW or its adjacent project areas as regulated by Section 106 (16 U.S.C. 470f) of the National Historic Preservation Act.

Figure 11. Debris on the Larry Chitwood Trail.

Based on the BLM/State Historic Preservation Office standards and protocols:

- Cultural inventory needs will be assessed prior to implementing ground disturbing projects and after projects are completed,
- Unevaluated cultural resources and cultural resources eligible or listed on the NRHP will be avoided by ground disturbance or have the effects of the ground disturbance mitigated prior to or during project implementation.
- If any new cultural or paleontological resources are observed during project implementation, then the project will stop and the BLM Prineville District Archaeologist will be contacted. The project will resume upon completion of an assessment.

Interpretation and Education

Wilderness education is perhaps the most important tool for ensuring the protection of wilderness resources and character. Visitors are often unaware of the significance of Congressional wilderness designation, the associated values and the wilderness regulations that are designed to protect wilderness resources and visitors experiences.

The general goals of interpretation and education within the OBW will be to:

- Foster knowledge and understanding of wilderness values.
- Influence behavioral changes that promote the preservation of wilderness quality and demonstrate attitudes and behaviors appropriate to wilderness protection.
- Instill and strengthen a wilderness ethic that results in informed decision making and recreation behavior.
- Carry wilderness values to those who do not experience wilderness through visitation.
- Increase awareness of wilderness history, philosophy, values of wilderness, and role of wilderness in ecosystem management.
- Recognize the unique characteristics of wilderness that distinguish it from more traditional and environmental education efforts (historical perspective and cultural legacy, spiritual and emotional renewal, challenge and risk and preservation of natural systems).

- Encourage the public to experience wilderness on its own terms, practice minimum impact recreation, and exercise self-restraint in pursuing access to it.

- Collaborate with stakeholders, other agencies, and publics in fostering wilderness awareness through the development and continuation of partnerships.

- Encourage volunteerism, including youth through partnerships

Figure 12. At-risk youth volunteers removing tires.

Interpretive and education information will be provided by the BLM in accordance with the following guidelines:

- Interpretive and education information will address wilderness character, wilderness ethics, Leave-No-Trace methods, wilderness-appropriate recreation, and visitor expectations of a wilderness experience.

- Interpretation will provide accurate, accessible, and meaningful wilderness information via web pages, site bulletins, agency offices and through the training of internal personnel and external partners with wilderness responsibilities. Other interpretive opportunities will continue to be pursued off-site through local educational institutions and organizations.

- Modest kiosk-based media (outside the OBW boundary) may be used at trailheads and where resource protection, visitor safety, and the visitor experience will be enhanced through interpretation of OBW resource values. Interpretive trails will not be established or promoted. In keeping with wilderness character, site-based interpretation via signs will not be used inside the OBW boundary. However, in rare instances a small sign may be erected at a site to foster protection of the resource by explaining regulations or reasons for a site closure or rehabilitation. Any sign will be small, minor to the setting, and installed only if less intrusive methods fail to protect the resource at risk.

Fire Management

Wildfire management, for either natural or human-caused wildfires, is directed by the UDRMP/ROD. The policy is to provide an appropriate management response on all wildland fires, with emphasis on firefighter and public safety. When assigning priorities, decisions will be based on relative values to be protected commensurate with fire management costs (pg. 60, 2005 BLM Record of Decision; Upper Deschutes Resource Management Plan/Environmental Impact Statement).

Fuels objectives will be pursued within the framework of the objective for the special

management designation (pg. 64. 2005 BLM Record of Decision; Upper Deschutes Resource Management Plan/Environmental Impact Statement).

Additional guidance will be from the Interagency Strategy for the Implementation of Federal Wildland Fire Management Policy (FWFMP 2009) and the Central Oregon Fire Management Service Fire Management Plan (COFMS 2012).

Collectively, these plans and policies direct an appropriate management response (AMR) action, which allows for a range of strategic and tactical options.

Figure 13. Typical wildfire with limited surface fuel.

To the extent possible, all natural and human-caused fires in the OBW will:

- Be managed with firefighter and public safety as the first priority.
- Be managed using minimum impact suppression techniques (MIST) wherever possible while providing for the safety of firefighters and the public and meeting fire management objectives.
- Be managed without the use of heavy equipment to suppress fire. Exceptions may be made to protect public and firefighter safety. To the extent possible, use natural and human-created barriers (e.g. primitive vehicle routes) as available for control lines (pg.61, UDRMP/ROD).
- Be managed without equipment that will ordinarily be prohibited by Section 4(c) of the Wilderness Act. If the fire is over 1/10 acre in size, a qualified resource advisor with knowledge and experience in wilderness stewardship will be assigned to the firefighting team to assist in the protection of wilderness character.

The management response to a wildfire within the OBW may vary from monitoring to suppression, according to objectives. The management response to a fire can change due to variations in weather, topography, fuels, and resources available.

Recreation

The OBW provides outstanding opportunities for a diversity of primitive and unconfined types of recreational experiences. The OBW affords visitors ample opportunity for self-challenge and discovery through navigation over sandy swales and seemingly countless rocky tumuli.

Due to the proximity of this area to Bend, Redmond, Sisters and Prineville, the OBW receives frequent, heavy visitation.

Protection of the OBW as well as visitor safety and enjoyment will be enhanced by the implementation of this plan. The following guidance is specific to the OBW:

Stock animals

Recreational pack or saddle stock (e.g. horses, llamas, or goats) use is allowed cross-country but users are encouraged to use the designated system of trails identified on Map 8 to reduce surface disturbance and establishment of new trails.

Figure 14. Equestrians on the Badlands Rock Trail.

Dogs

To reduce conflicts with equestrians and other users in areas of more concentrated use, dogs must be leashed (6-foot maximum length) within 500 feet of any trailhead and visitors are required to pack dog waste out of trailheads.

Rock Climbing

Technical rock climbing, climbing with the use of rope to ascend or descend rock, is allowed; however:

- No new fixed anchors or fixed anchor routes will be established.
- Existing fixed anchors will be removed as discovered.
- Placement of temporary anchors (those left less than 24 hours) will be permitted.
- Temporary placement of anchors must not cause undue damage to the rock.
- Rock alterations by chipping, chiseling, sculpting, drilling, defacing, dry tooling, trundling, or gluing/epoxying of holds (hand and foot) are not permitted.
- Brushing away or removing vegetation of any type to clear a climbing route is prohibited.
- Because colored chalk can permanently stain rock and may impact the wilderness experience, only water-soluble, white, or colored chalk that matches the natural color of the rock could be used for technical rock climbing; no chalk will be permitted for use in non-technical rock climbing (climbing or walking over rocks without the use of ropes or fixed anchors).
- Caching of climbing gear will not be allowed for greater than 24 hours.

Special Recreation Permits

Special Recreation Permits (SRPs) are authorizations by BLM that allow 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.

SRPs are required: a) when recreational use on public land is for business or financial gain, b) for organized commercial and non-commercial groups of 12 individuals or more (20 individuals is the maximum group size for the OBW), and c) for any organized or structured use, event, or activity on public land in which two or more

contestants compete and either register, or there is a predetermined course or area designated. Organized groups less than 12 may need an SRP depending on the activity, and all organized groups travelling off designated routes need an SRP (H-2930-1 Recreation Permit Administration). See Upper Deschutes Resource Management Plan 2005, for additional guidance regarding group size limits.

- SRPs will be authorized only for wilderness-dependent activities and educational studies. Adaptive activities for those with physical limitations may also be considered for a SRP.

- According to BLM Special Recreation Permit Regulations in BLM Manual 6340, Section 1.6(c)(4), commercial enterprises are prohibited in wilderness areas, except for valid existing rights and as otherwise provided for in Section 4(d) of the Wilderness Act. Section 4(d)(6) allows those commercial *services* necessary for activities that are proper for realizing the recreational or other wilderness purposes of the areas. Commercial services are allowed to the extent necessary for realizing these wilderness purposes and are needed to enhance the wilderness experience; not detract from it.

- Commercial services may be performed within the wilderness to the extent necessary for activities that are proper for realizing the recreational or other wilderness purposes of the area. For example, an overnight pack trip to a distant valley to experience wilderness solitude may be dependent on a wilderness setting and therefore would likely satisfy the statutory requirement that the service is proper for realizing the wilderness purposes of the area.

- SRPs may be denied based on potential impacts to wilderness resources, wilderness character, a prohibited activity in wilderness, public health and safety, the applicant's past performance; non-wilderness-dependent activity, or the inability of the managing office to manage or monitor the proposed use. (See Appendix A for details).

- In response to excessive resource damage, the number of SRPs authorized for outfitter-guides may be reduced or may not be issued.

- SRP permittees and their employees or agents who conduct permitted activities in the OBW are required to have at least one person certified as a Leave-No-Trace Trainer, by the National Outdoor Leadership School (NOLS) to instruct clients on specific wilderness ethics and low impact techniques when visiting the OBW area.

Campfires

When there are no seasonal or temporary restrictions posted online, and/or at trailheads, campfires are allowed using dead and downed wood only (no wood cutting allowed), using Leave-No-Trace practices; but, visitors are encouraged to use only camp stoves.

Travel, Transportation and Access

Specific travel, transportation, and access points are identified on Map 5.

The following actions will occur to retain natural character, distribute visitor use, increase solitude by reducing trail encounters, and enhance a primitive recreation experience:

Figure15. Basalt alcove with skylight.

- Up to 62 miles of vehicle routes and linear disturbances within the OBW and 14.7 miles adjoining the OBW will be restored to native vegetation. Short segments of duplicate trail will be removed from the trail system and restored.

- A combination of trailhead removal, relocation and expansion at other locations will occur. No improvements other than site hardening will occur on the Badlands Rock and Flatiron Trailheads, accessed off of U.S. Highway 20.

- Portions of the Sand and High Desert Trails totaling 5.3 miles will be removed from the designated trail system. Portions of both trails will be retained as water hauling routes for the livestock grazing permittee, in accordance with the Wilderness Act of 1964 and with the Omnibus Public Land Management Act of 2009.

- Four former vehicle routes within the OBW totaling 7.5 miles will be converted to designated non-motorized trails, connecting Larry Chitwood, Flatiron Rock, Tumulus, and Black Lava trails.

- Outside and adjacent to the OBW, portions of three former vehicle routes that lead into the OBW, totaling 3.7 miles will be converted to non-motorized trails to prevent motorized incursions.

- A 0.9 mile length of the Larry Chitwood trail will be relocated to a parallel former road away from private property; the old road will be restored and removed from the designated trail system, because this trail will be duplicated and unnecessary (See Map 8).

- A 0.9-mile segment of the Dry River trail will be re-routed to avoid the graveled ROW within the OBW that accesses a 40-acre inholding to avoid conflicts between hikers and authorized motorized users accessing the inholding.

- At trailheads where stock trailer parking is allowed, accommodations would be made for drive-through trailer parking, providing the

trailhead is large enough for drive – through parking.

- Trailheads would be designed to either prevent or make difficult access for motorcycles and All-terrain vehicles.

- Trailheads, except Badlands Rock trailhead, will be hardened and/or relocated. All trailheads are, and will remain, outside the OBW. Larry Chitwood trailhead will be moved from its present location near private property and Obernolte Road to construct parking for vehicles with trailers. As funds allow, parking for 10 sedan-sized vehicles and six trailers as well as turn-around space will be constructed. Dry River trailhead will be modified to accommodate six trailer parking spaces and room for turnaround parking for up to 10 sedan-sized vehicles. Reynolds Pond trailhead footprint will be defined and hardened with parking for 12 vehicles and up to six trailers. Flatiron Rock trailhead will be hardened using the existing footprint. High Desert trailhead will not be developed. Tumulus trailhead will be moved 0.8 miles away from the OBW to an existing access point on Dodds Road at milepost six and will be developed with parking for six vehicles.

- Dispersed camping will only be allowed at Reynolds Pond trailhead because this is the only trailhead large enough to accommodate both trailhead activity and camping. Stock trailers are allowed at all trailheads except Flatiron Rock trailhead.

- A vehicle-resistant barrier comprised of natural features, fence, and rock boulders and /or steel railing will be installed south of and adjacent to the Reynolds Pond road (6598-0-00) from approximately the County transfer station to the Reynolds Pond trailhead in order to prevent motorized use into the OBW.

- In the event that the COID canal is piped, a fence will be constructed to prevent motor vehicle trespass wherever legal motorized access is adjacent to the pipe.

- 5.3 miles of existing trail will be removed from the designated trail system.

- The Omnibus Public Land Management Act of 2009 excluded 5.9 miles of the Dry River trail from the OBW. This 5.9 mile, 25-foot wide corridor is to be managed as potential wilderness, until an authorized non-conforming use (specifically authorized to a named individual for dog sled training under Public Law 111-11, Title 1, Subtitle I) of the trail ceases. At that time, BLM will issue a Federal Register notice and the corridor will be designated as wilderness and incorporated into the OBW.

Figure 16. Trail junction sign.

Signs

Wooden directional signs will continue to be installed and maintained at key junctions. Small wooden signs may be used at impacted sites, such as former trail junctions to advise visitors to avoid trampling new seedings and other restoration activities. Signs will be installed for short-term periods and will be removed upon successful site restoration.

The OBW boundary will continue to be marked with signage appropriate to the location, vegetation and terrain.

Science and Research

Conducting basic and specific inventory, monitoring, and research are important to wilderness management and preservation. By allowing research activities in the OBW, the BLM will be able to have access to the best available science to continue to protect wilderness resources. The BLM wilderness regulations allow scientific information gathering in the following manner:

- Similar research opportunities must not be reasonably available elsewhere;
- The activity must be compatible with wilderness preservation, BLM Manual 6340, and this plan;
- The activity must be authorized by BLM before initiation;
- Disturbed areas must be reclaimed; and,
- BLM may require a bond be posted.

Possible research activities span the spectrum from benign to causing great concern in terms of impacts to wilderness character. Science and research proposals will be carefully reviewed by the BLM. The proposals will be approved, approved with stipulations, or denied. From a wilderness perspective, there are two general classes of concerns from possible research activities. The first class will be activities that are prohibited in wilderness by Section 4(c) of the Wilderness Act, except if these activities can be shown as "necessary to meet minimum requirements for administration of the area for the purpose of this Act," which is to preserve wilderness character.

Any research proposals involving the use of motor vehicles, motorized equipment, mechanical transport, installations, structures, landing of aircraft, and temporary roads will be reviewed for consistency with BLM Manual 6340 – Management of BLM Wilderness, Section 14. Research proposals will include a "minimum requirements analysis" using the interagency Minimum Requirements Decision Guide, as part of the research permit request if use of one or more of these activities is part of the request. Research proposals that are not consistent with the BLM Wilderness Management Manual will not be approved.

The second class of concerns is research activities that degrade wilderness character, even though they are not prohibited by Section 4(c) of the Wilderness Act. Proposals will be analyzed for overall impacts to wilderness character and will be mitigated, if feasible, or denied.

Livestock grazing

The Rambo Allotment, generally located east of the Dry River trail, is currently divided by a 3.1 mile east-west fence that splits the allotment into north and south pastures. These pastures will be reconfigured so that the fence division currently within the OBW will be removed, with the new fence falling on the OBW boundary. As a result, one pasture will be located entirely within the OBW.

Fencing

Approximately 6.1 miles of new fence will be constructed along, but immediately outside, the eastern boundary of the OBW; and 3.1 miles of fence will be relocated to the outer edge of the southeastern, western, and northwestern boundaries of the OBW. These fences will:

- Identify the boundary to public lands visitors.
- Protect the wilderness from motor vehicle trespass.
- Serve as allotment or pasture boundaries. Fence posts will be native juniper posts resembling those currently located within the wilderness or solid color metal t-posts. Fence posts on the boundary of the OBW will be standard metal solid color t-posts.

Restoration

There are unauthorized motorized vehicle routes, former vehicle routes, and degraded sites in the OBW that are in various states of disturbance. These impacts range from almost imperceptible differences from adjacent undisturbed areas to areas largely denuded of vegetation. In some locations, some vegetation may occur along the center hump of a route. Some weedy species are associated with these linear disturbances, but cheatgrass is the primary invader.

Soils in the routes are compacted and subject to increased wind erosion. These routes will be rehabilitated, using one or more of the following methods: no action, decompaction, scarifying, recontouring, vertical mulching, erosion control, and vegetative restoration with native species and seed mixes. These routes will be monitored for future unauthorized motorized traffic and may require additional rehabilitation. Artificial barriers, such as juniper railing or dead juniper may be placed outside of the OBW boundaries for protection of rehabilitation actions.

Figure 17. Volunteer removing relic livestock fence.

Work will be completed by BLM staff, partners, and contractors, with the assistance of volunteer hand crews.

All actions in wilderness will be conducted in accordance with a Minimum Tool Analysis, which identifies first whether an action within the wilderness is necessary and, if so, how to complete a task with the least amount of effects to wilderness character. Actions will include:

- Decompaction: Working the top few inches of the entire disturbed surface to relieve soil compaction. This action will be completed with the use of non-motorized hand tools (spades, spading forks, McLeod rakes, Pulaskis, shovels, horse-drawn implements, etc.).

- Scarifying/Pitting: Loosening and texturizing the impacted, disturbed surface in random locations to better capture water, organic debris and wind-blown seeds, thereby stimulating natural revegetation.

- Recontouring: Reconfiguring or shaping the route to blend it with the adjacent, relatively undisturbed desert. This will involve the creation of small hummocks and banks, where appropriate, to mimic the surrounding landscape. Berms will be pulled in and the soil distributed across the disturbed surface. Vehicle tracks in sandy areas will be raked. This will lessen visual contrasts and provide a surface for natural revegetation.

- Vertical Mulching: Dead and down vegetation is "planted" to obscure the visible portions of the disturbance. Additional dead vegetation, rock material and other organic matter may be distributed over the worked surface to decrease visual contrasts, create sheltered sites to aid in natural revegetation and add organic debris. Dead and down vegetation and other materials will be gathered from areas near to the disturbances by hand.

- Erosion Control: Placing sterile, weed-free straw bales or creating light terracing/berms to reduce erosion and create barriers to vehicles on steep slopes. The straw bales break down over time and provide additional organic debris to the reclamation site. Bales will be brought in by hand or horseback to the worksite.

- Vegetative Restoration: This will involve planting, transplanting

and/or seeding to help stabilize soil, speed overall vegetative recovery and camouflage evidence of disturbances. All seed will be native seed, locally collected when possible, scattered on reclaimed surfaces to accelerate natural revegetation. This action will be completed by non-motorized hand tools.

Weed treatments

- BLM Wilderness Management Manual 6340 states on page. 1-46 that, "...Manipulation of vegetation through prescribed fire, chemical application, mechanical treatment, or introduced biological agents, is normally not permitted. Exceptions may include emergencies, actions taken to recover a federally listed threatened or endangered species, control of non-native species, and restoration actions where natural processes alone cannot recover the area from past human intervention. All management activities must be designed to strive towards natural vegetative composition and processes that reflect what would likely have developed with minimal human influence..." The use of the Minimum Requirements Decision Guide is also required to determine if any restoration action is warranted and also determine the most appropriate method to minimize impacts to wilderness qualities.

- Management guidance for controlling noxious weeds is also contained in the UDRMP/ROD. This guidance states that BLM will maintain noxious weed-free plant communities or restore plant communities with noxious weed infestations through the use of broad-scale integrated weed management strategies. When planning for vegetation management and other ground disturbing activities, BLM will consider opportunities to manage undesirable non-native or invasive species.

Wildlife

All new or rebuilt fences will meet the current standard for wildlife passage. This specification can be found in Appendix B of this EA.

The two current wildlife guzzlers and remnants will be removed from the OBW and their locations restored.

Figure 18. Landscape view from the interior of the OBW.

Visual Resource Management

Visual Resource Inventory (VRI) classes were identified and considered in land use planning to establish Visual Resource Management (VRM) classes as per BLM Manual H-8410-1 (Visual Resource Inventory). Visual resource management classes are categories assigned to public lands as:

1) An inventory tool that portrays the relative value of the visual resources for

land use planning and project impact analysis, and as

2) A management tool that portrays the visual management objectives.

The objective for Class I "is to preserve the existing character of the landscape. This class provides for natural ecological changes. The level of change to the characteristic landscape should be very low and must not attract attention." VRM Class I is assigned to those areas where a management decision has been previously made to maintain a natural landscape. It is BLM policy to manage WSAs and Wilderness Areas under VRM Class I designations established through Resource Management Plans. The Upper Deschutes ROD/RMP identified the Badlands Wilderness Study Area (WSA) to be managed as VRM Class I. The OBW, which incorporates the former WSA, will also be managed as VRM Class I.

Monitoring

The previous sections of this plan identify management objectives and actions. The monitoring plan tracks the outcome of those activities on the five qualities of wilderness character: untrammeled, natural, undeveloped, solitude or primitive and unconfined recreation, and unique/supplemental characteristics.

Effects of intentional, unintentional, and unauthorized activities will all be captured under the monitoring system. The monitoring program will provide a greater understanding of the overall and specific condition of the wilderness by allowing for quantitative and qualitative assessments.

Documented trend changes in any of the wilderness qualities, whether caused by natural events, or authorized or

Figure 19. Close-up of ground-dwelling bee hive.

unauthorized anthropogenic activities, will alert wilderness managers of the need to initiate corrective actions, or adapt management practices to new situations. Monitoring will also provide wilderness managers with more complete information, which will improve the evaluation of future proposed activities. The monitoring will not be used to compare this wilderness with other wilderness areas in the National Wilderness Preservation System, but to track the conditions and changes within the OBW itself.

A single action designed to affect the quality of wilderness character is actually likely to affect naturalness. A single activity may improve naturalness, while reducing the untrammeled condition of the OBW. For example, an activity such as weed control, which is intended to restore natural conditions over the long-term, may diminish the untrammeled condition of the OBW in the short-term.

For monitoring purposes, these two separate outcomes, the effectiveness on improving "natural" and the side effect of diminishing "untrammeled," will be monitored separately.

Figure 20. Rye grass with cheat grass in background.

At the same time, separate activities may have a cumulative effect on wilderness character. For example, a trail might be designated to control visitor impacts on vegetation. In the same vicinity, a fence may be constructed around a spring to protect it from damage by horses. Though the two activities are unrelated, both activities have an effect on the "undeveloped" quality of wilderness character. Monitoring the effects of single activities to multiple qualities of wilderness character will improve understanding of cumulative effects.

Monitoring will occur as funding, staffing, and volunteer capabilities allow with mandated baseline monitoring as a priority. The monitoring plan for the OBW follows the frameworks outlined in Measuring Attributes of Wilderness Character, BLM Implementation Guide Version 1.5 (USDI 2012), and Keeping it Wild: An Interagency Strategy to Monitor Trends in Wilderness Character across the National Wilderness Preservation System (USDA 2008). Table 2 of the OBW Management contains details of the monitoring plan, including which metrics will be measured for assessment of each of the five wilderness characteristics, how databases will be managed, and how information will be disseminated.

All field reports, photographs, and monitoring data will be maintained in the wilderness files at BLM's Prineville District Office.

Any substantive changes in monitoring protocols issued in subsequent versions of the BLM Implementation Guide will be incorporated into future monitoring of the OBW.

Figure 21. Mounted volunteer with pack horse.

Plan Evaluation

The need for plan revision will be reviewed every 10 years, as funding and staffing capabilities are available. With available funding, this plan will be revised when the management actions prescribed no longer meet the wilderness management objectives, or when a change in the existing situation warrants revised management. When this plan is revised, it will be accomplished with public participation and NEPA analysis. Minor revisions such as typographic or cartographic errors will be made by inserting an errata sheet.

Appendix A

BLM Manual 6340, Section 1.6(c)(4). Commercial Enterprises and Services and (6) Education and Interpretation

4. Commercial Enterprises and Services

a. General principles. Commercial enterprises are prohibited in wilderness areas, except for valid existing rights and as otherwise provided for in Section 4(d) of the Wilderness Act. Section 4(d)(6) allows those commercial *services* necessary for activities that are proper for realizing the recreational or other wilderness purposes of the areas. Commercial services are allowed to the extent necessary for realizing these wilderness purposes. Allowable commercial services may include those provided by packers, outfitters, and guides, and may also include commercial filming (see sub-section b, below) or restoration stewardship contracts (see 1.6.C.15.f.vi of this manual). Determining the "extent necessary" is based on the following guidance:

   i. The BLM should determine through analysis if one or more of the public purposes of wilderness would go unrealized if there was no commercial use. If a given purpose can be adequately realized in a given place and time without commercial services then the commercial service is not necessary.

   ii. Commercial services may serve visitors who lack the necessary physical or cognitive ability or specialized knowledge, skills, or equipment to engage in wilderness recreation. To be allowable a commercial service must be necessary to realize wilderness purposes rather than only to provide a desired activity in a wilderness setting.

   iii. Commercial services may be necessary to address specific resource concerns, provide support for research or other projects, or provide wilderness education or interpretation.

   iv. In all instances, commercial services may be performed within the wilderness to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the area. For example, an overnight pack trip to a distant valley to experience wilderness solitude may be dependent on a wilderness setting and therefore would likely satisfy the statutory requirement that the service is proper for realizing the wilderness purposes of the area. v. Commercial services can be allowed only where their authorization will not impair wilderness character as a whole. Where commercial services are likely to impair wilderness character as a whole, reduction in commercial service use or non-commercial use (or both) may be necessary. Reductions will be based on levels of demand, need, equity, and availability of similar experiences in the vicinity of the wilderness.

6. Education and Interpretation

a. Background. In order to preserve the wilderness experience, the BLM will use education and interpretation as a means to manage visitor use of wilderness. The BLM will use locations outside of wilderness to provide visitors with information about area conditions, wilderness stewardship, and the inherent risks of recreating in remote areas in order to minimize search and rescue operations and the need for rules governing primitive and unconfined recreation.

   Wilderness managers are encouraged to make maps available in brochures or on visitor websites, and to use these opportunities to share wilderness stewardship messages to accomplish other management goals.

   As noted in section 1.6.A.3.iv, while education is a public purpose of wilderness, this does not require the BLM to provide interpretive and educational information within wilderness areas or to advertise all recreational opportunities available if such advertising could impair preservation of wilderness character.

b. Interpretive and educational signs and displays. With the exception of boundary signs and signs necessary to protect visitor safety or sensitive wilderness resources, all interpretive and educational displays and signs must be located outside of wilderness areas. More information on signs in wilderness can be found under section 1.6.C.13.c.iii.

c. Education and interpretation in Wilderness. On-the-ground education and interpretive programs within wilderness areas are permissible where they promote a better understanding and appreciation of the wilderness resource and do not impair wilderness character or the experience of visitors not participating in the program.

d. Youth education and interpretation. When practicable, the BLM will provide, and encourage partners to provide, youth-directed education and interpretation designed to enhance understanding, appreciation, and stewardship of wilderness. There should be a specific focus on the importance of providing opportunities for youth to experience wilderness first hand.

Appendix B: Oregon Badlands Wilderness Monitoring Plan

Monitoring would occur as funding, staffing, and volunteer capabilities allow. The monitoring plan for the OBW follows the frameworks outlined in Measuring Attributes of Wilderness Character, BLM Implementation Guide Version 1.5 (USDI 2012), and Keeping it Wild: An Interagency Strategy to Monitor Trends in Wilderness Character across the National Wilderness Preservation System (USDA 2008). Any substantive updates to BLM's Implementation Guide will be incorporated into this monitoring for subsequent monitoring efforts.

This Appendix includes which metrics would be measured for assessment of each of the five wilderness characteristics, how databases would be managed, and how information would be disseminated. All field reports, photographs, and monitoring data would be maintained in the wilderness files at BLM's Prineville District Office.

Management objectives for the wilderness are established. Management actions are identified to monitor wilderness values and are designed to achieve those objectives. The monitoring plan tracks the outcome of those activities on five qualities of wilderness character.

Wilderness character encompasses a combination of biophysical, experiential, and symbolic elements. The combination of these qualities distinguishes wilderness from all other lands. These five qualities are of equal importance to one another and are defined as:

- Untrammeled – wilderness is unhindered and free from modern human control or manipulation.
- Outstanding opportunities for solitude or a primitive and unconfined type of recreation –wilderness provides opportunities for people to experience solitude or primitive and unconfined recreation, including the values of inspiration and physical and mental challenge.
- Undeveloped – wilderness is substantially without permanent developments or modern human occupation.
- Natural – wilderness ecological systems, being affected primarily by the forces of nature, retain their primeval character and influence substantially free from the effects of modern human civilization.
- Unique/Supplemental – wilderness may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

The overall monitoring objective for all five wilderness qualities is documenting their changes in condition and trend over time. Four similar components for each key wilderness value are identified to help determine change and trend of the five qualities of wilderness character. They are: Indicator, Measure, Data Source, and Frequency.

- The Indicator provides an overall resource value question,
- The Measure provides a specific monitoring question based on specific resource values found in the OBW,

- The Data Source provides a list of existing data sources and storage locations, and an indication of who the BLM Prineville District intends to collect future monitoring data and the data quality. These data sources could come from National, State or District data and may be stored in different databases and locations, and
- The Frequency describes anticipated monitoring data summaries reporting on different time periods, based on the Prineville BLM requirements, Washington Office standards, or both. These standards, requirements and timeframes may change over time.

Documented trend changes in any of the wilderness qualities, whether caused by natural events, or authorized or unauthorized anthropogenic activities, would alert wilderness managers of the need to initiate corrective actions, or adapt management practices to new situations.

Monitoring would also provide wilderness managers with more complete information that would improve the evaluation of future proposed activities. The monitoring would not be used to compare this wilderness with other wilderness areas in the National Wilderness Preservation System, but to track the conditions and changes within the wilderness itself.

Table 1. Oregon Badlands Wilderness Monitoring Schedule

Wilderness quality & indicator	Wilderness measure	Data sources, technique	Frequency, responsibility
Untrammeled/ Authorized actions that manipulate the biophysical environment	1.1 Number of authorized actions and persistent structures; • borrow pit and Red Pond, • former road guzzler • fence and steel tanks	Local data records and photos by resource specialists and volunteers	Annual monitoring and reporting by resource specialists and volunteers.
	1.2 Percent of natural fire starts	BLM fire records and photos by resource specialists, BLM law enforcement	Annual monitoring and reporting by BLM specialists.
	1.3 Number of unauthorized actions by agencies, organizations or individuals that manipulate vegetation, animals soil, water or fire	Local data records and photos by resource specialists, BLM law enforcement and volunteers	Annual monitoring and reporting by resource specialists and volunteers.
Natural/Plant and animal species and communities	2.1 Status of native biological communities; juniper and extent of plant communities; juniper woodland and sagebrush	BLM ESI measures; GIS data system; local data records and photos by resource specialists and volunteers	Monitoring and reporting every five years by resource specialists in conjunction with botanist. Additional support by volunteers.
	2.2 Abundance and distribution of non-indigenous species; invasive plants	BLM data system; local data entry by resource specialists and volunteers. Invasive species surveys along OBW trails, trailheads, and arterial roadways	Monitoring reporting every five years by resource specialists. Additional support by the BLM National Invasive Species Information Management System (NISMS) and volunteers.
Natural/Plant and animal species and communities	2.3 Animal Unit Months (AUMs) of livestock use/changes in AUM use	BLM livestock grazing allotment records and authorizations. Range specialist review of records.	Monitoring and reporting annually by Wilderness specialist in conjunction with Range specialist.
	2.4 Visible Air Quality/extent and magnitude of global climate change	Coordinate with BLM Oregon State office (OSO) to gather data as part of the national monitoring effort by various agencies using RAWS data stations, etc.	Review on five year intervals by OSO or Washington Office (WO).

Wilderness quality & indicator	Wilderness measure	Data sources, technique	Frequency, responsibility
	2.5 Ozone air pollution/extent and magnitude of global climate change	Coordinate with OSO to gather data as part of the national monitoring effort by various agencies using RAWS data stations, etc.	OSO and WO monitoring.
	2.6 Acid deposition/extent and magnitude of global climate change	No existing technique established and no relevant data collected in region	OSO and WO monitoring
	2.7 Departure from natural fire regimes averaged within the wilderness	BLM fire records. National Landfire modeling program	Review on five year intervals by Wilderness Specialist and district fire staff.
	2.8 Area and magnitude for pathways for introductions and movements of non-indigenous species into the OBW.	Agency data; local data entry by resource specialists, NISMS, and volunteers; other federal, or State, or County governments and private organizations.	Monitoring and reporting every five years by resource specialists in conjunction with botanist. Additional support by volunteers.
Undeveloped/Trends in Non-recreational structures, installations and developments	3.1 Index authorized or pre-designation structures and developments degree of impact; miles of fence; guzzlers; non-residential buildings; roads; culverts; other developments of rights-of way; water sources; ditches.	GIS data system, local data records and photos by resource specialists and volunteers. Grazing project records.	Monitor annually by resource specialists and volunteers. Report every five years
Undeveloped/Trends in Non-recreational structures, installations and developments	3.2 Area and existing or potential impact of inholdings; road development or access; motorized or mechanized trespass.	GIS data system; remote sensing (aerial photography; satellite imagery; county ownership records, resource specialist and volunteer records	Monitor annually by resource specialists and volunteers. Report annually.
	3.3 Type and amount of administrative use of motorized equipment; road obliteration, fence and grazing infrastructure removal, authorized water hauling.	Data collection from field recreation/wilderness staff and volunteers.	Monitor annually by resource specialists and volunteers. Report annually.
	3.4 Proportional use (type and amount of authorized use) of motorized equipment or mechanized transport in law enforcement or emergency responses; law enforcement; wildland fires and emergency support.	Data collection from BLM law enforcement and fire staff. Data collection from Deschutes and Crook County Sheriff's departments.	Monitor annually by resource specialists and volunteers. Report annually.
	3.5 Type and amount of unauthorized use of motorized equipment or mechanical transport; road development, buildings	Local data entry by resource specialists, law enforcement and volunteers.	Monitor annually. Wilderness specialist, recreation planner, law

Wilderness quality & indicator	Wilderness measure	Data sources, technique	Frequency, responsibility
	and equipment		enforcement and volunteers.
Solitude or Primitive and Unconfined Recreation/ Remoteness from sights and sounds inside the wilderness	4.1 Amount of visitor, dog and horse use: trailhead vehicle counts; traffic counts; new unauthorized visitor or horse trails; traffic counts at Reynolds Pond; number of trail users by activity, by season	Number of authorized groups, trail counters; Local observations and data entry by wilderness and other resource specialists, and volunteers.	Monitor annually by Wilderness Specialists; resource specialists and volunteers. Report every five years.
	4.2 Area of wilderness affected and severity of effect from travel routes inside the wilderness	GIS data analysis of trail system; aerial photography interpretation.	Monitor every five years by resource specialists and volunteers. Report every five years.
Solitude or Primitive and Unconfined Recreation/ Remoteness from developments and people outside the wilderness	4.3 Area of wilderness affected, and severity of effect from developments, including subdivisions near wilderness.	GIS data and analysis of existing road system; aerial photography interpretation; constructed structures observed in imagery.	Monitor every five years with GIS staff, wilderness and recreation staff and volunteers. Report every five years.
Solitude or Primitive and Unconfined Recreation/ Facilities that decrease primitive and unconfined recreation	4.4 Type and number of agency-provided recreation facilities; trail signs or markers inside the OBW; miles of primitive routes closed that increase remoteness).	GIS measurement of trails and road systems by category; field review of trail system infrastructure by Wilderness Specialist; number and locations of trail signs	Monitor every five years with GIS staff, wilderness and recreation staff and volunteers. Report every five years.
	4.5 Type and number of user-created recreation facilities; user created trail segment type; trail markers or signs; user created major trail feature; user developed campsite; user developed amenity; bolted rock climbing routes on climbable rocks in the OBW	Field review by wilderness specialist, recreation planner, and volunteers, combined with GIS analysis	Monitor every five years with GIS staff, wilderness and recreation staff and volunteers. Report every five years.
Unique/Supplemental What are the trends in cultural resources inside the OBW?	5.1 Severity of disturbances to cultural resources; two historic horse corrals; one cistern; tin can dumps; pictograph integrity within the OBW	Field review by district archeologist, wilderness specialist, and recreation planner.	Monitor every five years. Cultural Resource Specialist and wilderness specialist. Report every five years.

Oregon Badlands Wilderness Management Plan Environmental Assessment

NEPA Register # DOI-BLM-OR-P060-2011-0030-EA
U.S. Department of the Interior
Bureau of Land Management, Prineville District
3050 NE Third Street
Prineville, OR 97754

This Environmental Assessment (EA) considers the environmental consequences of a proposed action and alternatives to the proposed action to determine if there would be potentially significant impacts resulting from these actions in managing the OBW. Potentially significant effects would preclude issuance of a Finding of No Significant Impact (FONSI) and require preparation of an environmental impact statement. "Significance" is defined by the National Environmental Policy Act (NEPA) and is found in regulation 40 CFR 1508.27. If a FONSI can be signed after this EA, it may be followed by a decision record (with public appeal period) and implementation of the project. While the BLM has identified a "proposed action" alternative in the EA, the final decision on this project may include parts of several of the alternatives.

The BLM will accept written comments postmarked or received at the BLM office, no later than September 30, 2013. Send or deliver comments via postal service, Email or FAX to Molly Brown, Field Manager, Prineville District BLM, 3050 NE Third Street, Prineville, Oregon, 97754, FAX 541-416-6798, Email: BLM_OR_PR_Mail@blm.gov (attention: Badlands Wilderness Plan in the subject line). Direct questions to the project lead, Berry Phelps at 541-416-6723 or bphelps@blm.gov.

To be most helpful, comments should be as specific as possible. A substantive comment provides new information about the Proposed Action, an alternative or the analysis; identifies a different way to meet the purpose and need; points out a specific flaw in the analysis; suggests alternate methodologies and the reason(s) why they should be used; makes factual corrections; or identifies a different source of credible research which, if used in the analysis, could result in different effects.

Before including your address, phone number, e-mail address, or other personal identifying information in your comment, be aware that your entire comment – including your personal identifying information may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

In keeping with BLM policy, the Prineville District posts Environmental Assessments, Findings of No Significant Impact, and Decision Records on the district web page under Plans & Projects at http://www.blm.gov/or/districts/prineville/plans/index.php. Individuals desiring a paper copy of such documents will be provided one upon request.

Chapter 1 Introduction

Background and Location

In 2009, Congress designated 29,021 acres of the 32,200-acre Badlands Wilderness Study Area as the Oregon Badlands Wilderness (OBW) (Public Law No. 111-011, Section 1700). The OBW is located approximately 15 miles east of Bend, Oregon and is situated in portions of both Deschutes and Crook Counties. The OBW is bounded by State Highway 20 on the south and west sides, by private lands to the north and by a utility right-of-way on the east (See Map 1 in the OBW plan, which precedes this EA).

Proposed Action

The BLM has prepared the OBW EA, which addresses several issues brought forward by members of the public, as well as BLM specialists and other government agencies. The following actions are proposed (and are also described in the Draft Wilderness Management Plan):

- Emphasize the need to maintain and enhance wilderness qualities as the relatively high public use of the OBW further increases,
- High priority is placed on restoring naturalness by removing some existing trails,
- Rehabilitate up to 62 miles of former vehicle routes and any future unauthorized motorized routes for the enhancement of the wilderness quality of naturalness. (See Maps 5 & 7).
- Do not prioritize providing additional vehicle routes-to-trail opportunities for recreationists.

See Chapter 2 of this EA for more details of the Proposed Action.

Purpose and Need

The Omnibus Public Land Management Act of 2009 (PL111-11) designated the OBW, creating a need to prepare a Wilderness Management Plan as required by BLM Wilderness Management Policy (Manual 6340, Section 1.6(D)(5) and the Wilderness Management Plans Manual 8561). The Wilderness Act of 1964 and the Federal Land Policy and Management Act (FLPMA) direct BLM to manage wilderness areas to protect wilderness character, while allowing other accepted uses. The OBW plan will provide specific management guidance to:

- Preserve the long-term wilderness character by protecting and enhancing naturalness and opportunities for solitude and unconfined recreation through access, trail, and trailhead design;
- Provide direction for accepted uses while mitigating conflicts between different visitor activities; and,
- Manage the OBW in a manner that would leave the area and natural resources unimpaired for future uses.

Consultation and Coordination

The BLM requested input from four tribal governments – the Confederated Tribes of the Warm Springs Reservation, the Klamath Tribes, the Confederated Tribes of the Umatilla, and the Burns Paiute Tribe – by mail on February 14, 2012. Issues addressed in the OBW plan are listed below and were considered in developing a range of alternatives. No advance issues of concern or comments were noted by the Tribes. Additional input from the COID was solicited by the BLM.

Issues

Issues to be addressed in the wilderness plan were identified through a public scoping meeting, written letters from the public, data and information provided by BLM resource staff, and input provided by other agencies. A public scoping meeting was held at the Bend Recreation and Park District headquarters on March 1, 2012.

A scoping letter inviting comments was posted on the Prineville BLM website. Issues were considered in developing a range of alternatives. The issues the OBW plan is designed to resolve are listed in the Issues section of the OBW plan. These issues provide a basis for comparing environmental effects of the proposed actions to the alternatives and aid in the decision-making process.

1. Opportunities for solitude and primitive, unconfined recreation:

- *To what degree would implementation of access controls and trail design affect the solitude of visitors?*
- *How would limiting some recreation activities, such as the use of water soluble chalk for rock climbing or requiring dog leashes at trailheads affect visitors' ability to enjoy unconfined recreation?*
- *How would the location and development of trailheads and parking areas affect visitor's ability to enjoy unconfined recreation?*

2. Undeveloped and natural appearance of the OBW:

- *How would restoration of non-historic surface disturbances, including former vehicle routes, affect the natural appearance of the OBW?*
- *How would removal of unnecessary and non-historic facilities and trash affect the OBW's undeveloped nature?*
- *How would access to and configuration and maintenance of existing authorized livestock grazing fences and troughs within the OBW affect the OBW 's undeveloped nature?*
- *How would the amount and type of signage affect the OBW's undeveloped appearance while preserving visitors' ability to orient themselves correctly?*

3. Naturalness, primeval character and influence of the OBW:

- *How would fire management (both natural and human-caused fires) affect naturalness and the primeval character of the wilderness?*

Chapter 2 Alternatives

This chapter describes management actions Common to All Alternatives, a No Action Alternative (Alternative 1) that would continue existing management, and three different action alternatives. All but the No Action Alternative would meet, to varying degrees, the purpose and need described in Chapter 1. The alternatives are summarized in Table 1 below.

Management Common to All Alternatives

Based in existing law, policy or existing decisions (Upper Deschutes Resource Management Plan/ROD 2005), a number of uses and actions would continue in the area regardless of the alternative selected, including:

- Recreation: 20 people per organized group maximum (both commercial and non-commercial) (UDRMP/ROD p. 109)
- Group use authorizations may be required for all organized group activities involving 12 or more participants, and may also be required for organized groups involving less than 12 participants depending upon factors including but not limited to: proposed activity, season of use, and potential impacts. SRPs are required for organized groups of 12 or more individuals (maximum group size is 20) (UDRMP/ROD p. 109).
- All Special Recreation Permits (SRPs) are issued by BLM to authorize specific uses or activities on public lands, with specific conditions, stipulations and time periods for their authorized use.
- Permits may be issued for commercial, non-commercial and organized use. SRPs are also considered on a case-by-case basis.
- An SRP may be required for organized groups not on an inventoried route. Management of organized group use would emphasize the use of designated trails (UDRMP/ROD p. 109).
- SRPs involving commercial stock use such as horses, llamas, or goats would be limited to the designated trail system (UDRMP/ROD p. 109).
- SRPs would not be issued for competitive use events or vending (commercial enterprise) (BLM Manual 6340, Section 1.6(C)(13)((d)(3) and BLM Wilderness Management Regulations at 43 CFR 6302.20(a) and (i)).
- Commercial stock users are required to feed stock animals certified weed-free feed 24 hours prior to entering wilderness; required to use only pelletized or stock certified weed-free hay and feed while on public lands (BLM IM OR-2011-019; Federal Register, Volume 75, Number 159, August 18, 2010). Recreational stock users are also required to use only pelletized or stock certified weed free hay and feed while on public land in the OBW.
- According to BLM Special Recreation Permit Regulations in BLM Manual 6340, Section 1.6(c)(4), commercial enterprises are prohibited in wilderness areas, except for valid existing rights and as otherwise provided for in Section 4(d) of the Wilderness Act. Section 4(d)(6) allows those commercial *services* necessary for activities that are proper for realizing the recreational or other wilderness purposes of the areas.
- Commercial services may be performed within the wilderness to the extent necessary for activities that are proper for realizing the recreational or other wilderness purposes of the area.

For example, an overnight pack trip to a distant valley to experience wilderness solitude may be dependent on a wilderness setting and therefore would likely satisfy the statutory requirement that the service is proper for realizing the wilderness purposes of the area.

- SRPs may be denied based on potential impacts to wilderness resources; wilderness character; a prohibited activity in wilderness; public health and safety; the applicant's past performance; non-wilderness-dependent activity, or the inability of the managing office to manage or monitor the proposed use.
- In response to excessive resource damage, the number of SRPs authorized for outfitter-guides may be reduced or may not be issued.
- Signs identifying the OBW boundary are installed. Wilderness access points may have signs and/or kiosks for resource protection, trail and interpretive information, or visitor safety as needed (BLM Manual 6340).
- Trails within the OBW are maintained in accordance with policies and standards found in BLM Manual 9114 (Trails), BLM National Wilderness Policy, and BLM Manual 6340 (Management of Designated Wilderness Areas).
- Roads outside Wilderness: Reynolds Pond road would be generally maintained once every 2-3 years and a fence or other barrier would be placed adjacent to it (Map 5) to prevent motorized trespass. Designated interim roads totaling 7.1 miles of and 10.4 miles of unauthorized vehicle routes adjacent to the OBW would be closed to motorized vehicle access and restored.
- Dispersed "Leave-No-Trace" travel is allowed across the OBW. (BLM Manual 6340,1-42)
- Campfire rings are removed upon discovery (BLM Manual 6340, 1-22).
- Technical and non-technical rock climbing (climbing or walking over rocks without the use of ropes or fixed anchors) is allowed throughout the OBW.
- Hunting and trapping, compatible with wilderness management (i.e. without use of motorized vehicles or mechanical transport), are managed by the Oregon Department of Fish and Wildlife. (Title 43 Code of Federal Regulations, Part 24—Department of the Interior Fish and Wildlife Policy: State-Federal Relationship).
- Firearm discharge is not allowed unless legally hunting (UDRMP/ROD p. 72). Within ¼ mile of Badlands Rock, there is a seasonal closure to all firearm discharge (UDRMP/ROD p. 72).
- The sale or barter of any trapped animal or their fur or other derivative product is prohibited (BLM Manual 6340, 1-63).
- Game carriers and wheeled transports, including bicycles, are prohibited (BLM Manual 6340, 1-14).
- Target shooting and the use of paintball guns are not allowed (UDRMP/ROD p. 72).
- Hang-gliding and para-sailing/gliding are not allowed (BLM Manual 6340, 1-14).
- Placement of physical items such as long-term camping equipment, physical geocaches and letterboxes is prohibited (BLM Manual 6340, pgs. 1-43).
- Decorative stone collection and rockhounding are not allowed (BLM Manual 6340, 1-43; UDRMP/ROD p. 71).

- Livestock grazing will continue where it has been authorized by a grazing permit or grazing lease for land within a wilderness, and the use was established before Congress established the wilderness area, under Section 4(d)(4)(2) of the Act (BLM Manual 6340, 1-27-28., 8. Grazing).
- Relict, unused, non-historic, livestock grazing improvements such as fences, feeders, troughs, and stock tanks would be removed upon discovery (BLM Manual 6340, 1-40).
- Any fence construction or reconstruction would use BLM wildlife friendly fence standards (see Appendix B). To enable wildlife movement, all fences would be 4-wire and have smooth wire on the top and bottom. The bottom wire would be 16 inches from the ground. The next two wires would be barbed and have 6 inch gaps. The top wire would be 12 inches above the 3rd wire. The total fence would be 40 inches high. Road maintenance to trailheads is performed, with available funding.
- Wildfire management, for either natural or human-caused wildfires, is directed by the UDRMP/ROD. This policy is to provide an appropriate management response on all wildland fires, with emphasis on firefighter and public safety. When assigning priorities, decisions will be based on relative values to be protected commensurate with fire management costs (pg. 63). Appropriate responses would be developed following the initial report for wildland fires in the planning area and include a range of specific actions, including monitoring, confinement, initial attack and suppression/extinguishment, or wildfire management with multiple objectives.
- Fuels objectives would be consistent with special management objectives for specific areas (pg. 64). Additional guidance would be from the Interagency Strategy for the Implementation of Federal Wildland Fire Management Policy (2009) and the Central Oregon Fire Management Service Fire Management Plan (2012).
- Use of wildland fire Minimum Impact Suppression Tactics (MIST) guidelines is followed (BLM Manual 6340, 1-25).
- The Omnibus Public Land Management Act of 2009 excluded 5.9 miles of the Dry River trail from the OBW. This 5.9 mile, 25-foot wide corridor is to be managed as potential wilderness, until an authorized non-conforming use (specifically authorized to a named individual for dog sled training under Public Law 111-11, Title 1, Subtitle I) of the trail ceases. At that time, BLM will issue a Federal Register notice and the corridor will be designated as wilderness and incorporated into the OBW.
- If resource damage occurs, correction of the problem would be accomplished on a case-by-case basis.

Table 2. Comparison of Alternatives.

	Alternative 1 – No Action	Alternative 2 – Proposed Action	Alternative 3 – Human Impact Most Evident	Alternative 4 – Human Impact Least Evident
Stock animals	All stock limited to designated trails	Commercial SRP stock limited to designated trails; other stock not limited.		Same as Alternative 1
Dogs	Allowed off-leash in OBW and at trailheads (TH); owners not required to remove dog waste at TH or within the OBW.	Allowed off leash in OBW except not within 500' of TH; owners required to remove dog waste within 10 feet of trails, 500' of THs and in parking areas.	Same as Alternative 1	Not allowed off leash in OBW or at trailheads; owners required to remove dog within the OBW and all trailheads.
Rock climbing	Technical rock climbing allowed; no additional guidelines.	Technical rock climbing allowed with additional guidelines: temporary anchors are allowed, only water soluble chalk in limited colors, no new permanent anchors, no rock alteration, no caching gear more than 24 hours, and no removal of vegetation on climbing routes.		
Special Recreation Permits (SRP)	Leave-no-trace (LNT) training not required. Parking at TH is first come first served. Group size limits. (Page 109, UDRMP/ROD)	LNT training required. Parking for SRP holders at TH may be limited to reduce crowding.		
	Available for a variety of reasons	Available only for educational, wilderness-dependent or for the physically challenged		Available only for the physically challenged
Campfires	Allowed, using Leave-No-Trace practices and subject to fire restrictions.			Prohibited
Trails, trailheads and roads	0 miles re-routes	Alt. 2 and 3: 0.9 miles of the Dry River Trail re-routed away from the ROW road. 0.9 miles of Larry Chitwood trail re-routed. Tumulus trail to Black Lava, Flatiron Rock, and Larry Chitwood Trails totaling 7.5 miles constructed and designated. (Alt. 3; seven routes to trails; 17.6 miles and 3.1 miles outside OBW).		0 miles re-routes
	No new vehicle barriers	One vehicle barrier if COID canal is piped	No barriers	One vehicle barrier if COID canal is piped
	0 miles trail removal/restoration	Remove 5.3 miles and restore up to 62 miles	0 miles trail removal/restoration	Remove 13.9 miles. restore up to 62 miles.
	No changes to existing TH	Three TH hardened. One TH relocated (but not Badlands Rock),		Same as Alternatives 2

	Alternative 1 – No Action	Alternative 2 – Proposed Action	Alternative 3 – Human Impact Most Evident	Alternative 4 – Human Impact Least Evident
		One TH moved. move one TH, expand parking at one TH, and install pedestrian gate at one TH.		and 3 except no TH expanded.
	No new TH	No new TH	Construct 2 new TH	No new TH
	Camping and stock trailer parking allowed at all TH	Camping allowed only at Reynolds Pond TH; stock trailer parking allowed at all TH except Flatiron Rock	Camping allowed at all TH; stock trailer parking allowed at all TH except new one south of BLM 6521	Camping not allowed at THs; stock trailer parking allowed only at Reynolds Pond and Badlands Rock THs
	Close 0 miles roads outside OBW	Close 17.5 miles roads outside OBW	Close 0 miles roads outside OBW	Close 17.5 miles roads outside OBW. 1.5 miles of road converted to trail outside the OBW.
Signs	Install OBW boundary metal or wood signs. Install small wooden directional signs at key junctions and temporarily at some restoration sites			Remove existing interior signs and don't install interior new signs.
Livestock grazing	No fence removal or construction	Remove 3.1 miles fence in OBW; build 6.1 miles outside (on boundary of) OBW. Fence construction either wood posts or Metal t-posts. (Alt. 4 would only use wood posts inside OBW).		
Wildlife	Leave 2 existing guzzlers as is. Vinyl markers not required on new or rebuilt fences.	Move/remove both existing guzzlers. Vinyl markers not required on new or rebuilt fences.	Leave 2 existing guzzlers as is. Vinyl markers required on new or rebuilt fences.	Move/remove both existing guzzlers. Vinyl markers not required on new or rebuilt fences.
Cultural	Leave historic refuse dump sites as is.	Remove historic refuse sites that are ineligible for inclusion into NRHP.	Same as Alternative 1	Same as Alternative 2.
Fire management	Take appropriate response on all naturally-caused fires and suppress human-caused fires.	All human caused fires suppressed. Naturally caused fires may be allowed to burn, providing there is no threat to human life or property.		Same as Alternative 1.

Alternative 1, No Action, Continue Present Management

The No Action Alternative represents management that would occur without preparing a specific wilderness plan. It is presented as a baseline for comparison of management action impacts among the alternatives. If the No Action Alternative was selected, no change in the management of the OBW, post-Wilderness designation, would occur. As issues arise that are not addressed in the UDRMP/ROD, new actions would be considered on a case-by-case basis in a separate environmental analysis, per the requirements of the NEPA.

Use of Stock Animals

Equestrian use would be limited to the 46-mile mile designated trail system as identified on page 113, with reference to Map 11 of the 2005 UDRMP/ROD.

Dogs

Dogs would be allowed off-leash in the OBW and dog owners would not be required to remove dog waste.

Rock Climbing

Technical rock climbing (climbing with the use of rope to ascend or descend rock) and non-technical rock climbing would be allowed with no additional guidelines.

Special Recreation Permits

SRPs would be considered on a case-by-case basis, using existing guidance from the Upper Deschutes Resource Management Plan (2005) and BLM Recreation Permit manual H-2930-1 direction, and in accordance with federal regulations regarding permits for recreation on public lands contained in 43 CFR Part 2930.

Campfires

Campfires would be allowed utilizing Leave-No-Trace practices.

Travel, Transportation, and Access

- No changes to the existing transportation system would occur,
- No new trails would be constructed, designed, removed or re-routed and no barriers would be constructed to prevent unauthorized OHV trespass into the OBW,
- No former roads would be maintained or rehabilitated (Map 3), no roads to trails conversions would occur, and no trails would be removed or restored,
- Creation of new foot-worn paths would be discouraged; existing paths would be available for use but would not be maintained,
- No trailheads would be developed, hardened or removed. Camping and stock trailer parking would be allowed at all trailheads,
- No trailheads would be modified, moved, or removed; and,

- Foot-worn hiking paths would be available for use. Creation of new foot-worn paths would be discouraged. All foot-worn paths would not be maintained and would not be displayed on maps.

Signs

Small wooden signs may be used at some restoration sites. Signs would be installed on a case-by-case basis for short-term periods and removed upon successful site restoration. Wilderness access points may have signs and/or kiosks for resource protection, trail and interpretive information, or visitor safety as needed. In the interior of the OBW, wooden directional signs would be installed at key junctions. Signs identifying wilderness boundary would be installed.

Livestock Grazing

No changes would occur to pasture size, shape, or design (Map 2). Both Rambo North and South pastures would continue to be partially located within the OBW. No new fence construction would occur. Any replacement or maintenance of interior fence would use standard steel solid color t-posts, and/or wood posts. Existing fences would remain in place and no new fences would be constructed or pastures.

Wildlife

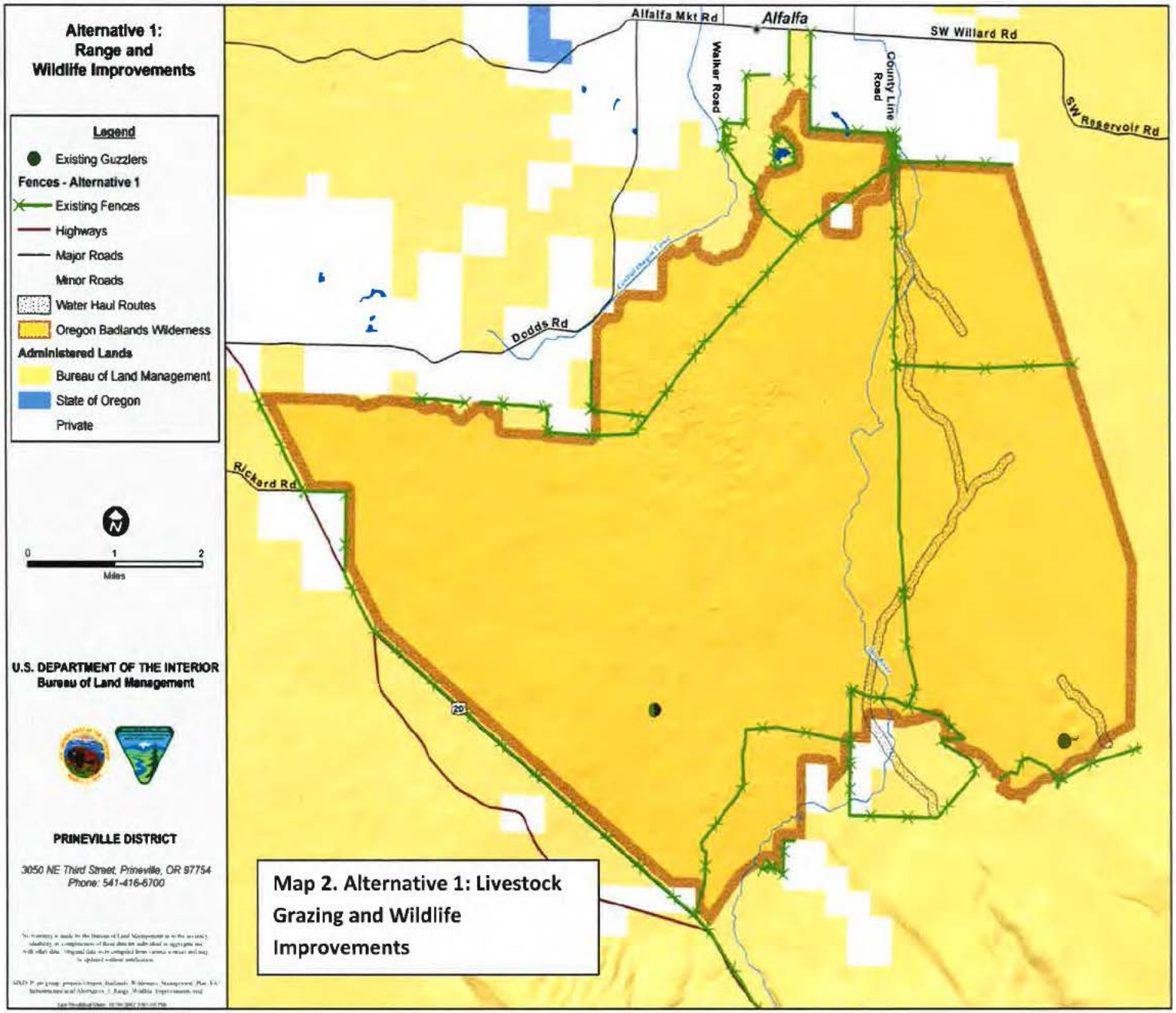
The two existing wildlife watering guzzlers and remnants would remain in place. No colored vinyl fence markers would be placed on the top two wires of rebuilt fences.

Cultural Resources

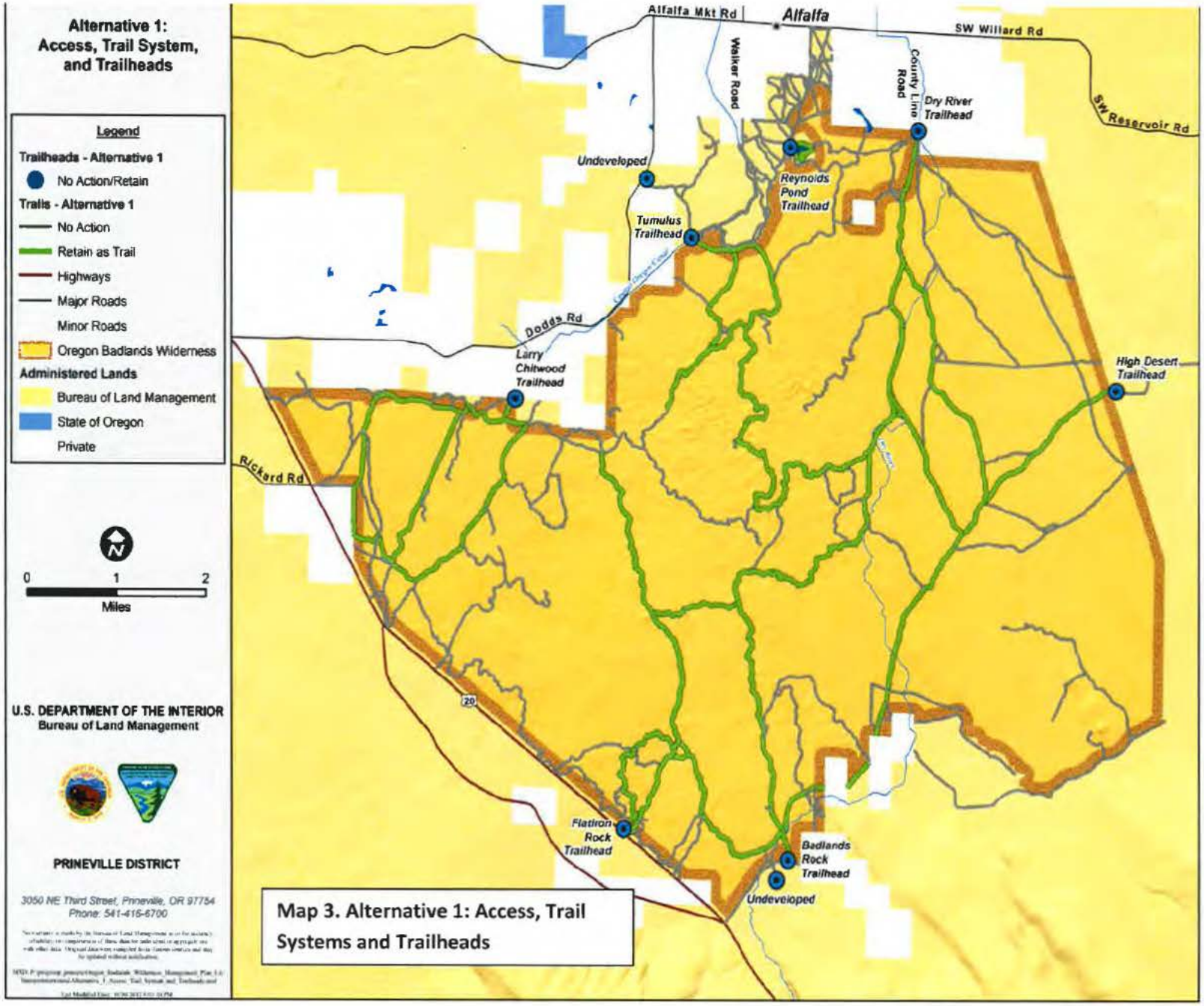
Cultural resource historic refuse dump sites at trailheads would remain in place.

Fire Management

All naturally-caused wildfires would have an appropriate management response, including consideration of wildland fire use, managing fires to meet wilderness and resource management objectives. All human-caused wildfires would be suppressed.



Map 2. Alternative 1: Livestock Grazing and Wildlife Improvements



Map 3. Alternative 1: Access, Trail Systems and Trailheads

Alternative 2, Proposed Action

The Proposed Action emphasizes the need to maintain and enhance wilderness qualities as the relatively high public use of the OBW further increases. High priority would be placed on restoring naturalness by removing some existing trails and rehabilitating up to 62 miles of existing former vehicle routes and any future unauthorized motorized routes for the enhancement of the wilderness quality of naturalness. (Maps 5 and 7). This alternative would not prioritize providing additional vehicle routes-to-trail opportunities for recreationists.

Use of Stock Animals

Commercial SRP holders with stock would be required to stay on the designated trail system. Non-commercial, non-organized group stock users would not be limited to the designated trail system, but would be encouraged to do so.

Dogs

Dogs would be allowed off-leash, but must be leashed within 500 feet of trailheads. Dog waste would be required to be removed within 10 feet of trails, within 500 feet of trailheads and from parking areas.

Rock Climbing

Technical rock climbing (climbing with the use of rope to ascend or descend rock) is allowed with the following guidelines:

- No new fixed or fixed anchor routes would be established,
- Existing fixed anchor routes would be removed as discovered,
- Placement of temporary anchors (those left less than 24 hours) would be permitted. Temporary placement of anchors must not cause undue damage to the rock,
- Rock alterations by chipping, chiseling, sculpting, drilling, defacing, dry tooling, trundling, or gluing/epoxying of holds (hand and foot) would not be permitted,
- Brushing away or removing vegetation of any type to clear a climbing route would be prohibited,
- Because colored chalk can permanently stain rock and may impact the wilderness experience, only water-soluble white chalk, or chalk that matches the basalt rock color could be used for technical rock climbing; no chalk would be permitted for use in non-technical rock climbing; and,
- Caching of climbing gear would not be allowed for greater than 24 hours.

Special Recreation Permits

In addition to permit requirements listed in the Common to All Alternatives;

- SRPs will be authorized only for wilderness-dependent activities and educational studies. Adaptive activities for those with physical limitations may also be considered for a SRP.
- SRP permittees and their employees or agents who conduct permitted activities in the OBW are required to have at least one person certified as a Leave-No-Trace Trainer, by the National Outdoor Leadership School (NOLS) to instruct clients on specific wilderness ethics and low impact techniques when visiting the OBW area.

Campfires

Campfires would be allowed utilizing Leave-No-Trace practices, but visitors would be encouraged to use only camp stoves.

Travel, Transportation, and Access

- Trail Reroutes: A 0.9 mile portion of the Dry River trail beginning at the Dry River Trailhead would be re-routed away from the Right-of-Way (ROW) road. Tumulus Trail to Black Lava, Flatiron Rock and Larry Chitwood Trails would be constructed and designated,
- Vehicle Barriers: In the event that the COID canal is piped, a barrier would be constructed to prevent motor vehicle trespass where legal motorized access is adjacent to the pipe,
- New Trails: Three miles of new single-track connector trail would be constructed and designated that would connect two separate trail systems: the Larry Chitwood and the north end of Flatiron Rock Trails (Map 6). Approximately 2.0 miles of trail outside of the OBW would be constructed or converted from existing two-track routes to connect Reynolds Pond with the Tumulus Trail (Map 6),
- Roads to Trails: Four former vehicle routes totaling 7.5 miles would be converted to trails within the OBW. If an evaluation determines a need, 5.3 miles of primitive routes would be converted from roads to trails outside of the OBW.
- Trail Removal and Restoration: The Sand and High Desert trails (5.3 miles) would be removed from the trail system. A segment of the Dry River Trail totaling 1.0 miles and short segments of duplicate trail would be removed from the OBW designated trail system. Any references to these former trail segments would be removed from BLM literature and website. Former roads within the OBW (up to 62.0 miles) would be restored if evaluation determines a restoration need (Map 7),
- Footpaths: Foot-worn hiking paths would be available for use. Creation of new foot-worn paths would be discouraged. All foot-worn paths would not be maintained and would not be displayed on maps,
- Trailheads: All trailheads (TH) would be hardened using the existing footprint and/or relocated, except for Badlands Rock. In addition, the following actions would be taken to trailheads:
    - The Larry Chitwood TH would be moved to an area away from private property, southwest of its present location that's near private property and Obernolte Road.

Parking for 10 sedan-sized vehicles and six stock trailers, as well as a turn-around space, would be constructed,

- The Dry River TH would be expanded to accommodate four trailer parking spaces and room for up to eight sedan-sized vehicles,
- The Reynolds Pond TH footprint would be defined with parking for 12 vehicles and up to six stock trailers,
- The High Desert TH would not be developed,
- The Tumulus TH would be moved to an existing access point on Dodds Rd,
- The MP 6 TH would be developed with parking for six vehicles and no trailers,
- Camping would be allowed only at Reynolds Pond trailhead, and
- Stock trailers would be allowed at all trailheads except Flatiron Rock.

Signs

OBW trailheads and access points may have signs and/or kiosks for resource protection, trail and interpretive information, or visitor safety as needed. Wooden directional signs would be installed at key junctions. Small signs would be installed on a case-by-case basis for short-term periods and removed upon successful restoration.

Livestock Grazing

- Pasture Configuration: The Rambo North and South pastures would be converted to Rambo East and West pastures (Map 4). The Rambo East pasture would be located entirely within the OBW and the Rambo West pasture would be located entirely outside the OBW to minimize fence lines within the OBW and to establish an OBW boundary line.
- New Fence Construction: 6.1 miles would be constructed along the eastern OBW boundary. Approximately 3.1 miles of existing interior fence would be re-located to the southeast, western, and northwestern boundaries.
- Fencing: Fences would be replaced or repaired or (if not needed) removed. Approximately 3.1 miles of pasture fence in the Rambo Allotment would be removed, forming a north-south trending pasture.

  Fence Design: Standard solid color t-posts would be used for OBW boundary fence. Interior fence would be wood posts or solid color metal t-posts.

Wildlife

The Hobbywood guzzler would be moved to a location outside of the OBW. Guzzler remnants off of the Flatiron Rock Trail would be removed. No colored vinyl fence markers would be placed on the top wire of new or rebuilt fences.

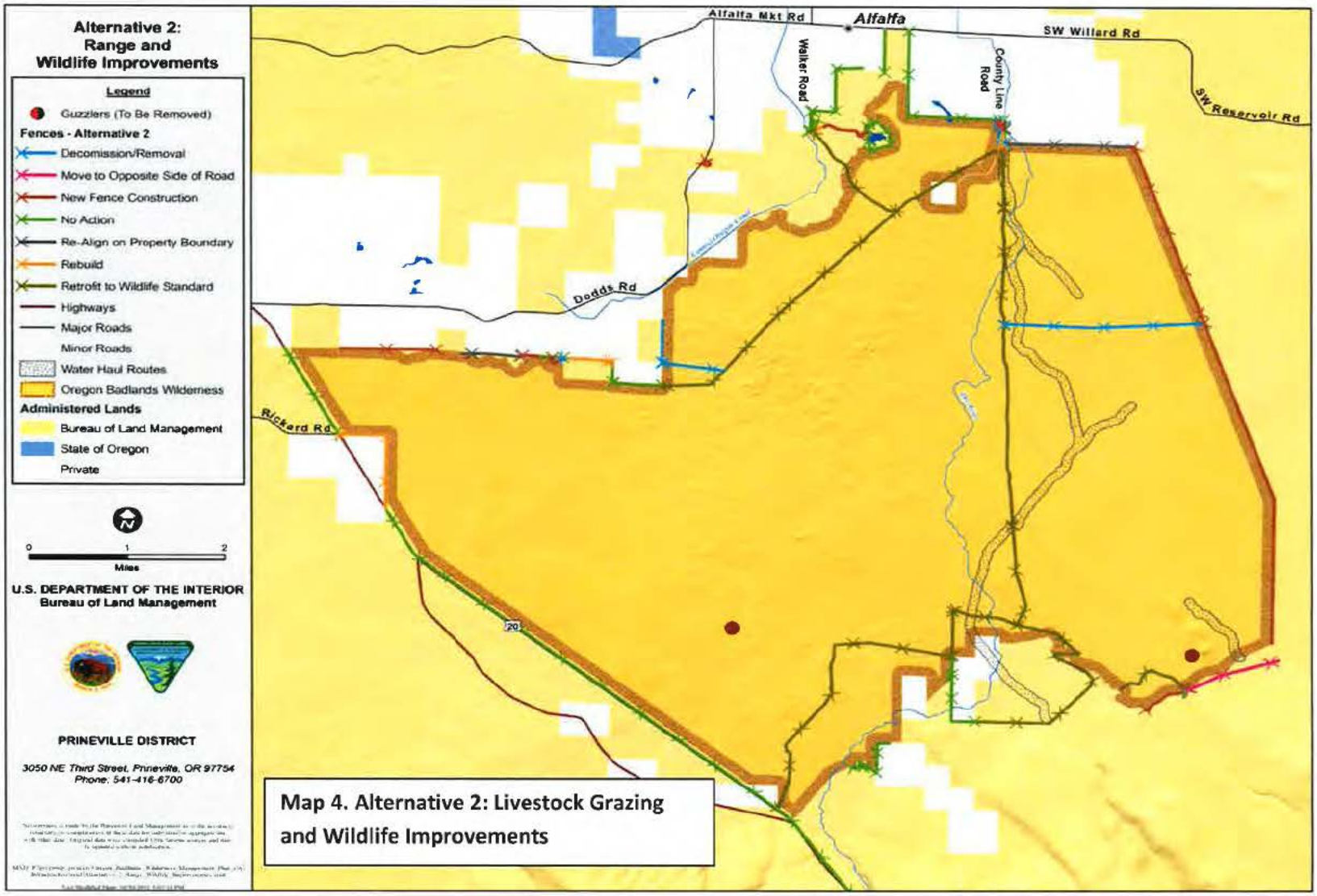
Cultural Resources

Cultural resource historic refuse dump sites at trailheads would be inventoried and evaluated for their National Register eligibility. If these sites are determined ineligible for inclusion into the National

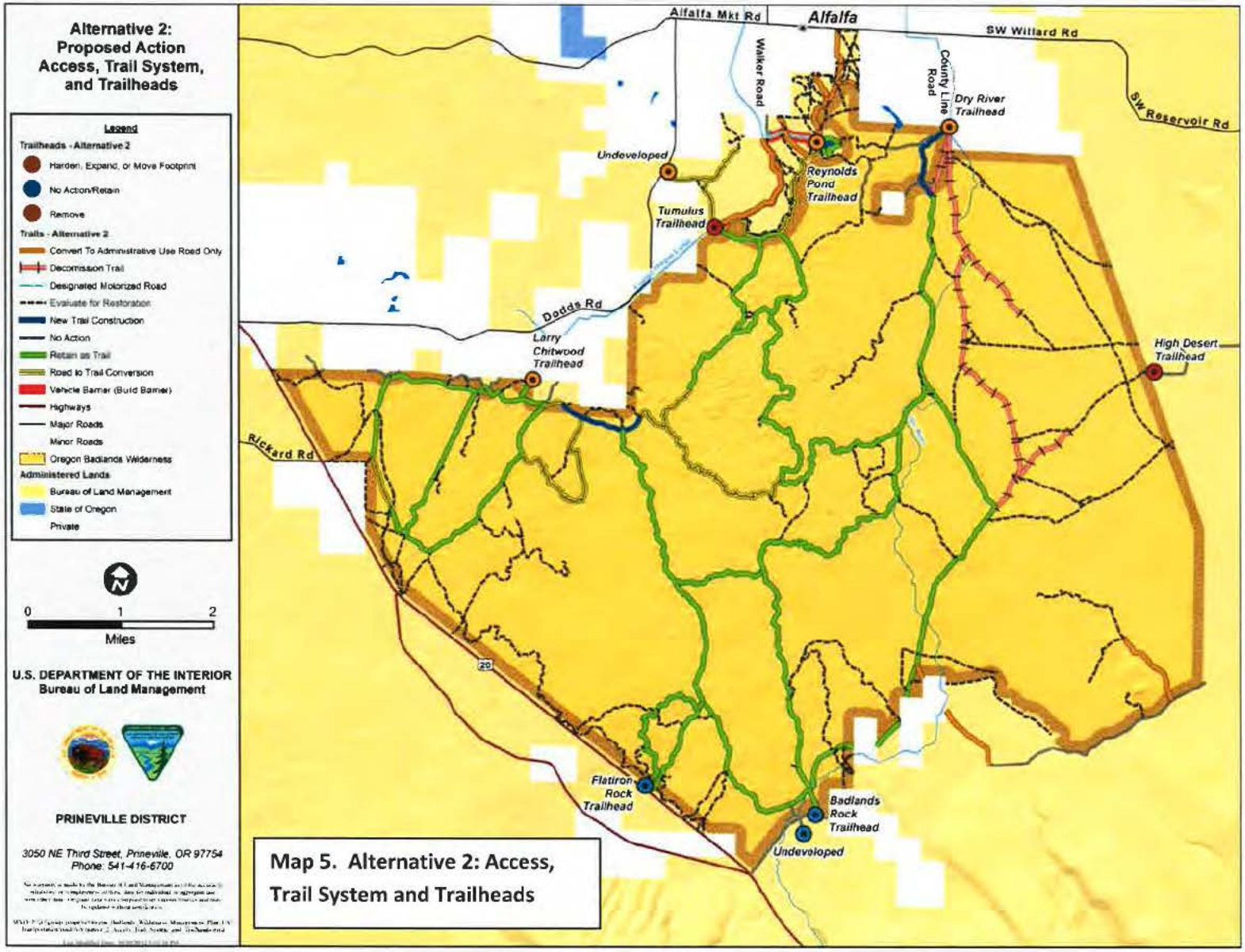
Register of Historic Places (NRHP), they would then be removed along with other refuse less than 50 years old.

Fire Management

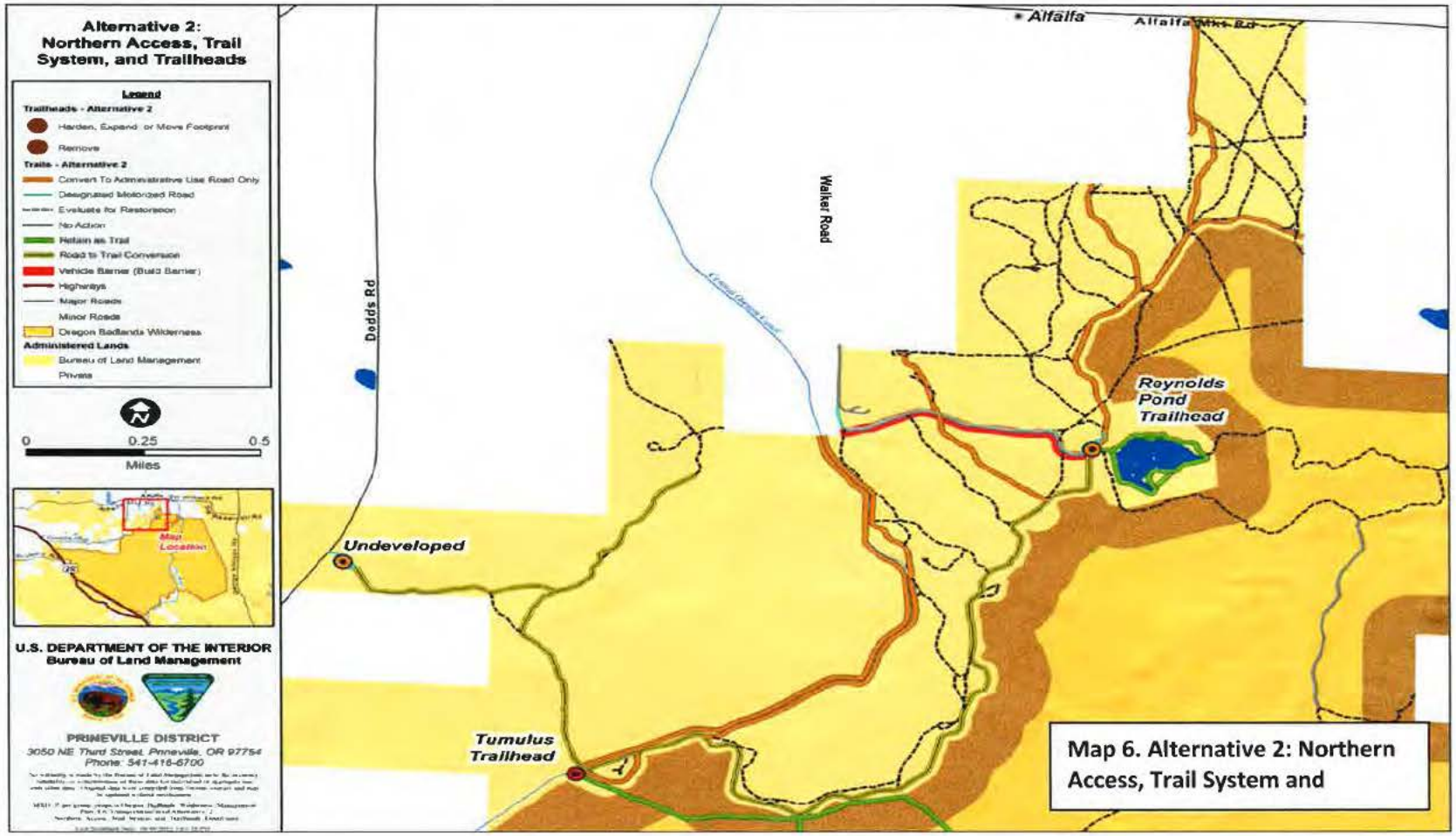
All wildfires, natural, or human caused, would have a management response. All human caused fires would be suppressed. Some naturally ignited wildfires may be allowed to continue burning in order to meet wilderness and resource management objectives, providing there is no threat to human life or property.



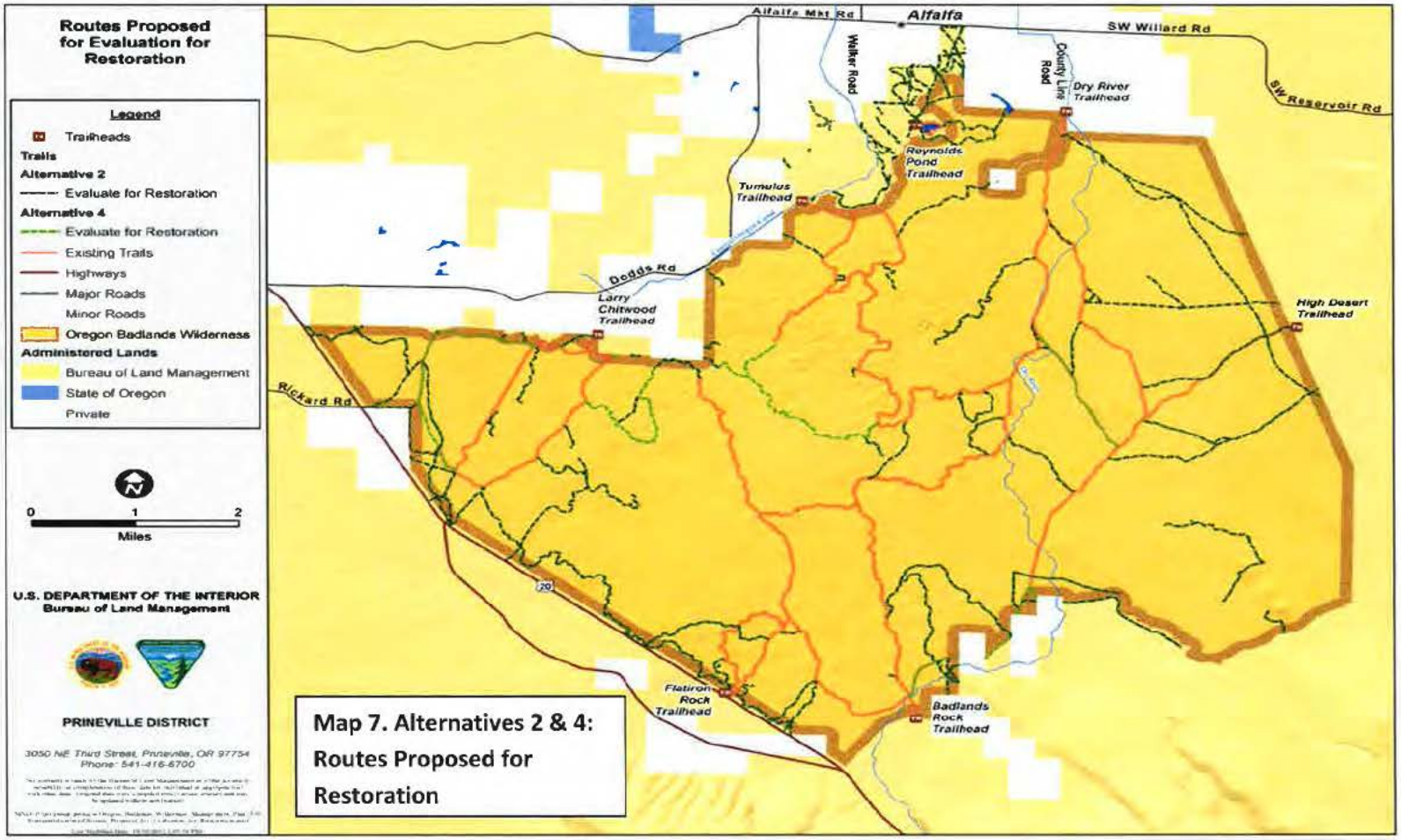
Map 4. Alternative 2: Livestock Grazing and Wildlife Improvements



Map 5. Alternative 2: Access, Trail System and Trailheads



Map 6. Alternative 2: Northern Access, Trail System and



Map 7. Alternatives 2 & 4: Routes Proposed for Restoration

Alternative 3, Human Activity Most Present

This alternative reduces short-term degradation to wilderness character by minimizing active restoration. However, humankind's imprint on the wilderness landscape would persist over the long term. This alternative prioritizes routes-to-trails conversions over route rehabilitation. More emphasis would be placed on passive restorative actions (let nature restore routes through natural re-vegetation) and converting up to 62 miles of existing vehicle routes to trails for recreationists (Map 8). This alternative would still include limited active restoration of duplicate routes near each other by raking and seed planting and placing dead, down wood on old vehicle routes.

Use of Stock Animals

Same as Alternative 2.

Dogs

Allowed off-leash at trailheads and in the OBW. Dog waste would not be required to be removed at all trailheads or within the OBW.

Rock Climbing

Same as Alternative 2.

Special Recreation Permits

SRPs would be issued using the guidelines outlined in Alternative 2.

Campfires

Same as Alternative 2.

Travel, Transportation, and Access

The following actions would occur:

- A 0.9 mile portion of the Dry River trail would be constructed away from the ROW road. A connector trail from the Tumulus Trail to Black Lava, Flatiron Rock and Larry Chitwood trailswould be constructed and designated,
- A re-route around private property on the southern portion of the Dry River trail would be constructed and designated,
- New single-track connector trails totaling 1.1 miles between Dry River TH and Reynolds TH would be constructed and designated,
- Seven former vehicle routes totaling 17.6 miles would be converted to trails within the OBW and one route to trail conversion of 3.1 miles outside and adjoining the OBW,
- No trails would be removed or rehabilitated. Other than routine corrections to erroneous data, no changes to trail references on BLM's website or in BLM literature would occur,

- A new trail 0.3 mile in length would be constructed, originating from a new trailhead south of the BLM 6521-0-00 road trailhead,
- Approximately 0.17 miles of this new trail would be within the OBW and would serve as hiking-only access to the Homestead Trail,
- Foot-worn hiking paths would be available for use. Creation of new foot-worn paths would be discouraged. All foot-worn paths would not be maintained and would not be displayed on maps,
- Up to 62 miles of primitive routes would remain open to non-motorized and non-mechanized use,
- Old, duplicate vehicle routes within close proximity of each other and not part of the designated trail system and dead-end routes may be rehabilitated through active or passive actions,
- In the event that the Central Oregon Irrigation District (COID) canal is piped, no barrier would be constructed to prevent motorized vehicle trespass into the OBW,
- All trailheads, except Badlands Rock TH, would be hardened and/or relocated,
- Badlands Rock TH would be allocated for equestrian use and a nearby Homestead TH would be constructed on the south side of the BLM 6521-0-00 road (Map 10);
- Larry Chitwood TH would be moved southwest from its present location near private property and Obernolte Road. Parking would be established for 10 sedan-sized vehicles and six stock trailers.
- Dry River TH would be expanded to accommodate 10 sedan-sized vehicles and four stock trailer parking spaces ,
- Reynolds Pond TH footprint would be defined and hardened with parking for 20 vehicles and up to five stock trailers,
- High Desert TH would be developed with parking for five vehicles and five stock trailers,
- Tumulus TH would accommodate six vehicles and no trailers,
- Camping would be allowed at all trailheads; and,
- Stock trailers would be allowed at all trailheads, except Tumulus and a new trailhead ¼ mile southeast of the BLM 6521 paved road to the Badlands Rock TH, named " Undeveloped" on Map 10.
- All trailheads planned for stock trailer use would be designed with space for vehicle and trailer turnaround parking.

Signs

Wilderness access points may have signs and/or kiosks for resource protection, trail and interpretive information, or visitor safety as needed. Wooden signs would be installed at key junctions. Signs may be installed on a case-by-case basis for short-term periods and removed upon successful restoration. Interpretive panels at the new trailhead south of the BLM 6521-0-00 road would be installed and designed with information on the OBW and Leave-No-Trace messages. Interpretive panels at the Badlands Rock trailhead would focus on equestrian Leave-No-Trace themes.

Livestock Grazing

New fence construction and re-location of existing interior fence would be the same as Alternative 2. New, repaired, or replacement interior fence would be the same as Alternative 1 (see Map 9).

Wildlife

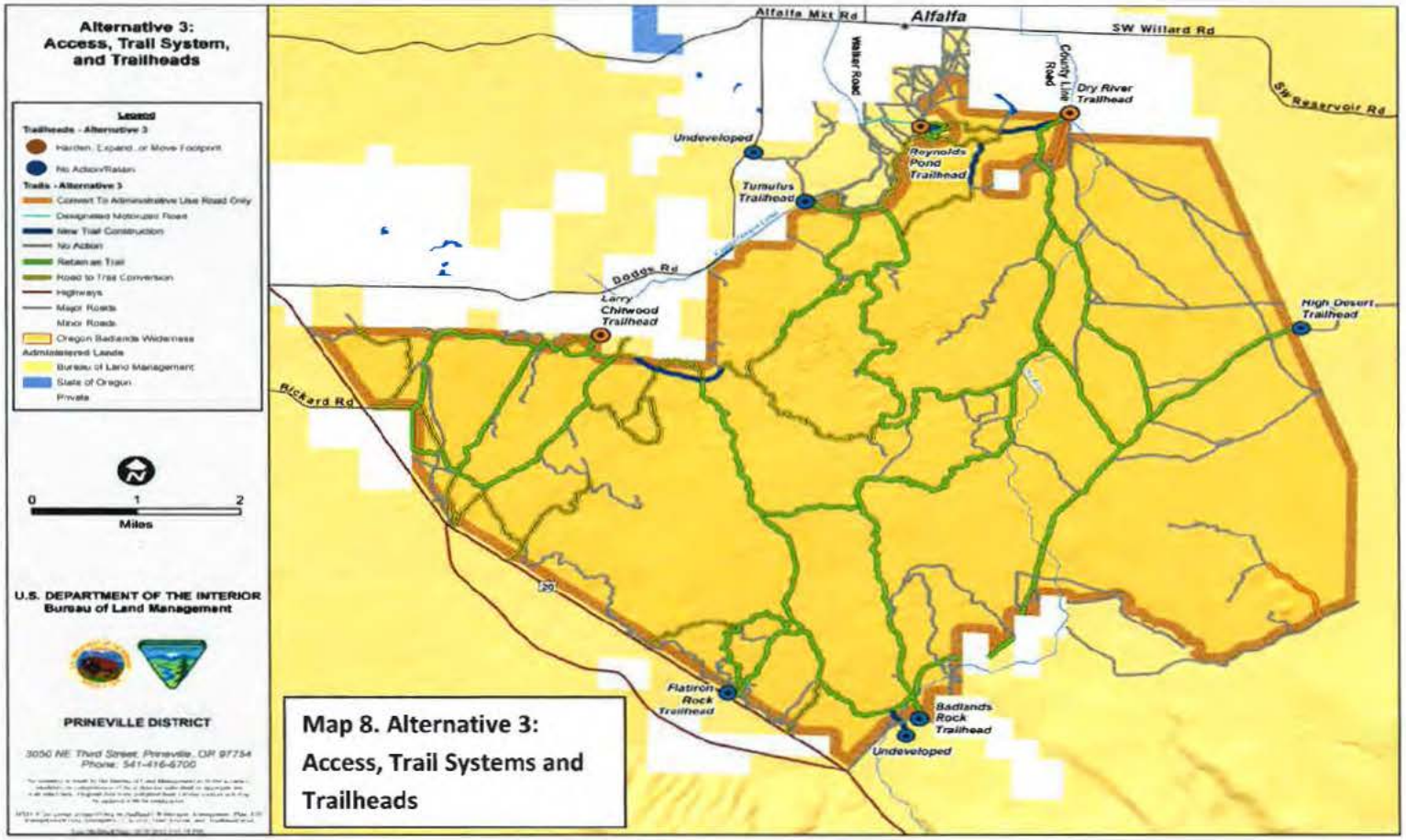
Guzzlers would remain in place. Colored vinyl fence markers would be placed on the top wire of new or rebuilt fences.

Cultural Resources

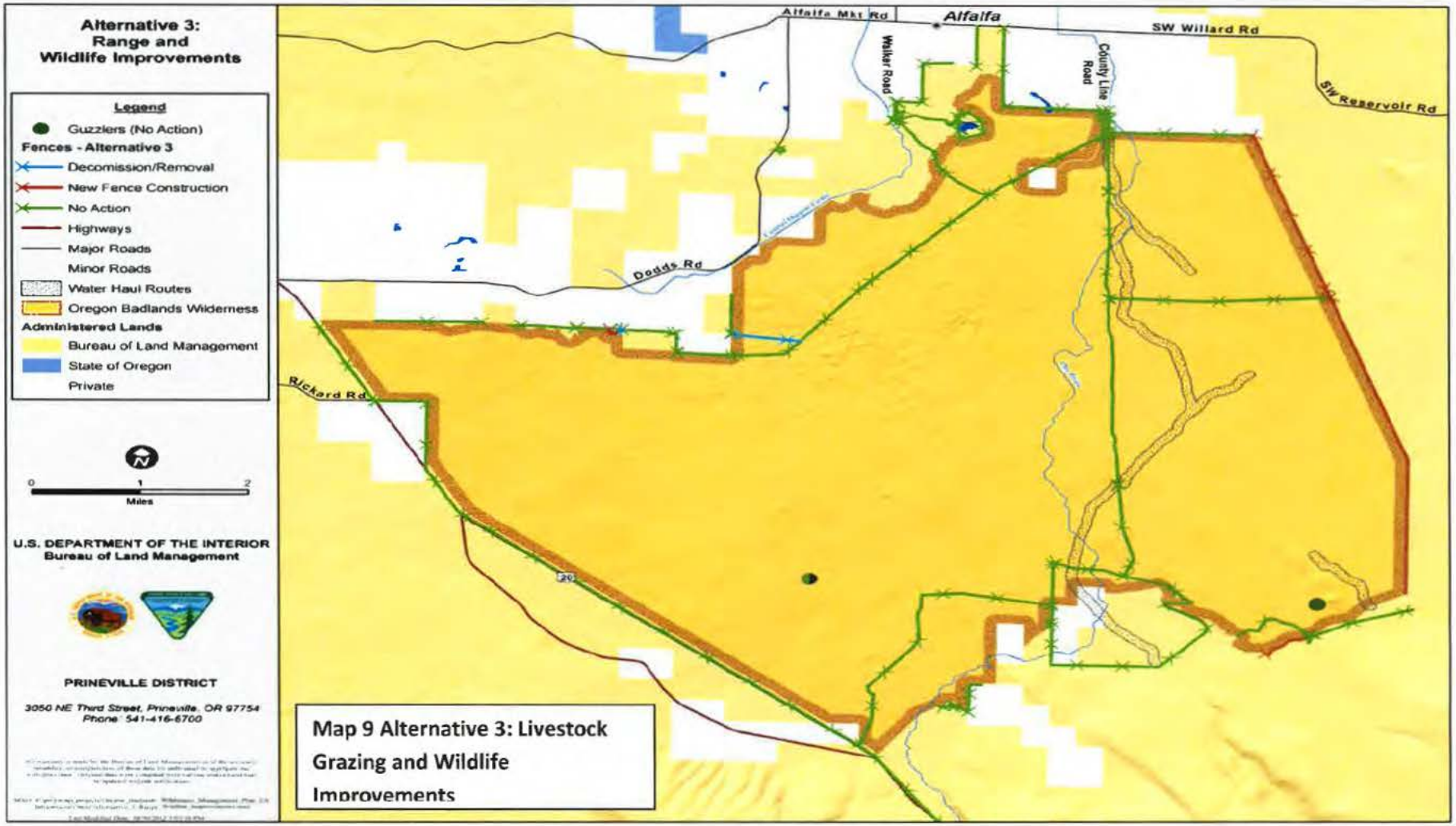
Same as Alternative 1.

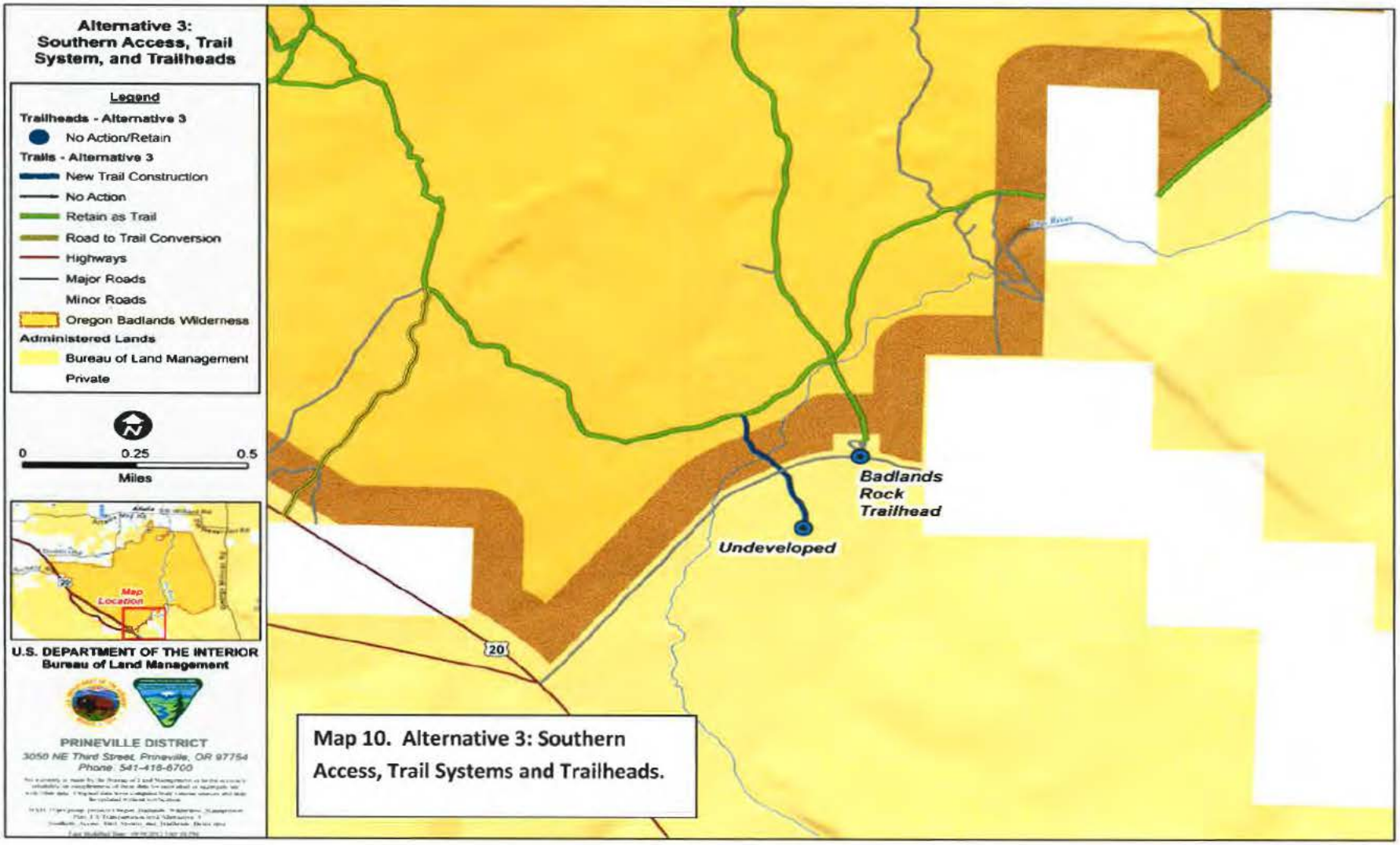
Fire Management

Same as Alternative 2



Map 8. Alternative 3: Access, Trail Systems and Trailheads


Alternative 3:
Range and
Wildlife Improvements
Legend
Guzzlers (No Action)
Fences - Alternative 3
Decomission/Removal
New Fence Construction
No Action
Highways
Major Roads
Minor Roads
Water Haul Routes
Oregon Badlands Wilderness
Administered Lands
Bureau of Land Management
State of Oregon
Private
0
1
2
Miles
U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
PRINEVILLE DISTRICT
3050 NE Third Street, Prineville, OR 97754
Phone: 541-416-6700
Alfalfa Mkt Rd
Alfalfa
SW Willard Rd
Walker Road
County Line Road
SW Reservoir Rd
Dodds Rd
Rickard Rd
20
Map 9 Alternative 3: Livestock Grazing and Wildlife Improvements



Map 10. Alternative 3: Southern Access, Trail Systems and Trailheads.

Alternative 4, Human Activity Least Present

Under this alternative, visitors with stock would be limited only to the designated trail system, as in Alternative 1. All other visitors would have access to the designated trail system, and the freedom to travel cross-country. There would be short-term minor impacts to wilderness areas and long-term beneficial effects to wilderness character, due to more emphasis on enhancing the natural condition of the OBW over time. However, visitors with stock animals would have fewer trail riding or hiking opportunities. No campfires would be allowed under this alternative. This alternative would emphasize rehabilitation of up to 62 miles of old vehicle routes that are not part of the designated trail system.

Use of Stock Animals

Same as Alternative 1.

Dogs

Dogs would not be allowed off-leash at parking areas, trailheads, or in the OBW. Dog waste would be required to be removed from within the OWB, and from all trailheads and all parking areas.

Rock Climbing

Same as Alternative 2.

Special Recreation Permits (SRPs)

SRPs would be issued using the guidelines outlined in Alternative 2; however, SRPs would be issued only for commercial or non-commercial adaptive (physically challenged) activities. Permitted SRP and group parking potential restrictions at all trailheads accessing the OBW would be the same as described in Alternative 2.

Campfires

Campfires would be prohibited.

Travel, Transportation, and Access

- No trail re-routes would be constructed, no roads-to-trails conversions would occur, and no new trails would be constructed or designated (Map 12),
- The Sand and High Desert Trails as well as portions of the Larry Chitwood, Dry River, and Homestead Trails (13.9 miles) would be removed from the designated trail system,
- Short segments of duplicate trails would be removed from the designated trail system,
- Any references to these trails would be removed from BLM literature and website,
- Creation and use of new foot-worn paths would be discouraged,
- Foot-worn hiking paths would not be maintained and would not be displayed on maps,
- Outside of the OBW, 1.5 miles of road would be converted to trail near Alfalfa Pond,
- In the event that the COID canal is piped, a vehicle-resistant barricade would be constructed to prevent motor vehicle trespass where legal motorized access is adjacent to the pipe,
- Camping would be prohibited at all trailheads,

- Stock trailers would be limited to Reynolds Pond and Badlands Rock Trailheads.
- No trailheads would be expanded, but existing footprints (existing parking areas) would be hardened, except for Badlands Rock TH, which is already hardened,
- High Desert and Tumulus Trailheads would not be developed or moved,
- A pedestrian access point near Dodds Road, MP 6 would be gated with a pedestrian gate to accommodate non-motorized access to the Alfalfa Ponds area; and,
- Larry Chitwood TH would not be moved away from private property and Obernolte Road.

Signs

No signs would be installed within the interior of the OBW. Existing interior signs would be removed.

Livestock Grazing

Same as Alternative 2, except new, repaired, or replacement interior fence would use juniper posts for fence. Fence removal would be the same as Alternative 2 (Map 11).

Wildlife

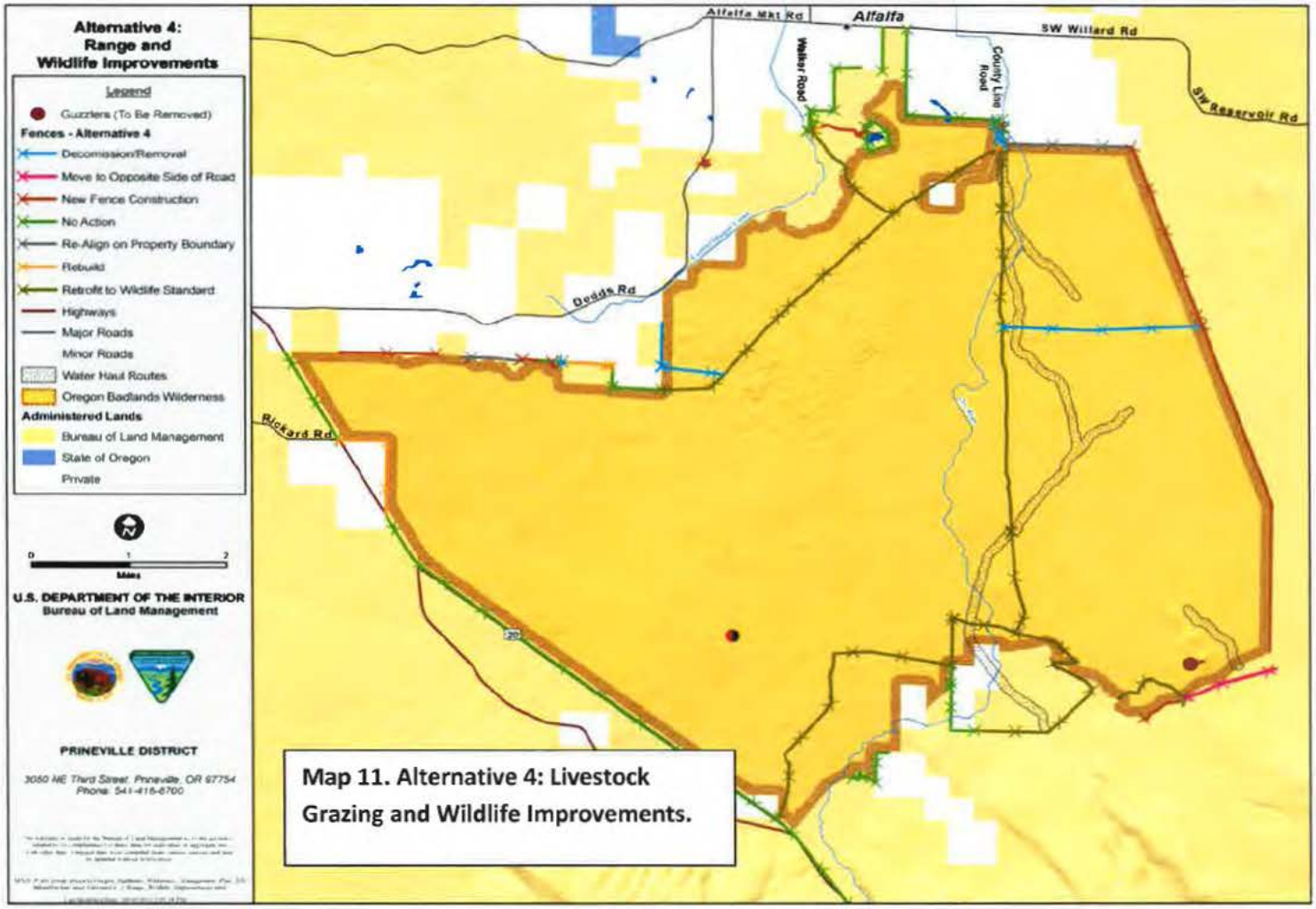
Same as Alternative 2. No colored vinyl fence markers would be placed on the top wire of new or rebuilt fences.

Cultural Resources

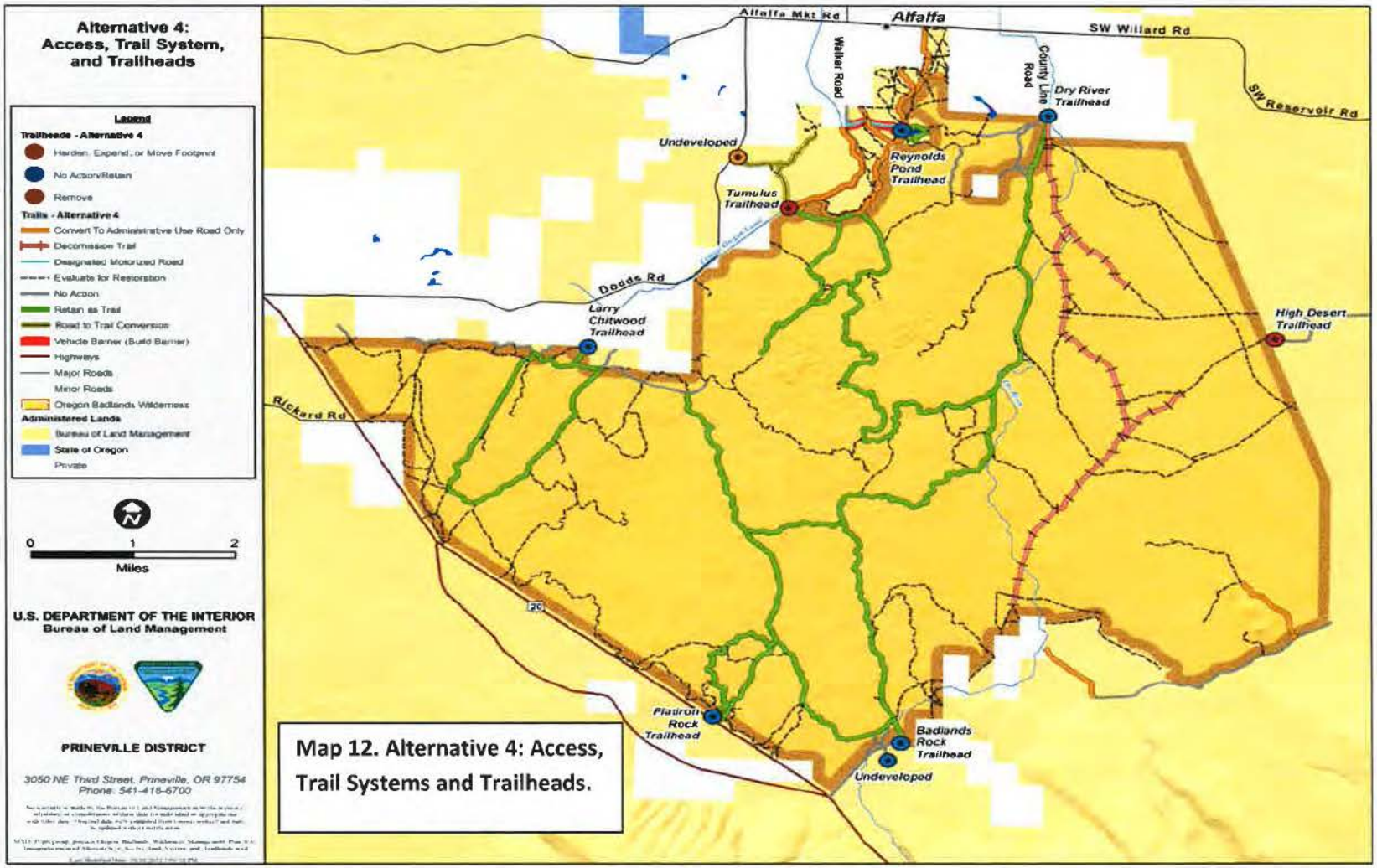
Same as Alternative 2.

Fire Management

Same as Alternative 1.



Map 11. Alternative 4: Livestock Grazing and Wildlife Improvements.



Map 12. Alternative 4: Access, Trail Systems and Trailheads.

Project Design Features

The design features listed below would be included in all action alternatives.

Wilderness

Any proposed non-emergency project work within the OBW involving tools and/or equipment would emphasize traditional tools and skills and would require a Minimum Tool Analysis and decision.

Recreation

At trailheads where stock trailer parking is allowed, accommodation would be made for drive-through trailer parking. Trailheads would be designed to either prevent or make difficult access for motorcycles and all-terrain vehicles.

Livestock Grazing

Fence work, outside of routine maintenance, would be conducted when livestock are not present.

Cultural

Cultural resource inventory would occur prior to any ground disturbing activities within the OBW or its adjacent project areas as regulated by Section 106 (16 U.S.C. 470f) of the National Historic Preservation Act, and in accordance with OR BLM/OSHPO standards and protocols. Once project areas are identified, inventory needs would be assessed prior to ground-disturbing project implementation.

Unevaluated cultural resources and cultural resources eligible to or listed on the NRHP would be avoided by ground disturbance or have the effects of the ground disturbance mitigated prior to or during project implementation. If any new cultural or paleontological resources are observed during project implementation, then the project would stop and the BLM Prineville District Archaeologist would be contacted. The project could resume upon completion of an assessment by and in coordination with the District Archaeologist.

Fire Management

When suppression action is taken on either a natural or human-caused fire, MIST would be utilized.

Alternatives considered but eliminated from detailed analysis

- Ban trapping: Wildlife is regulated by the Oregon Department of Fish and Wildlife. Trapping does not have an effect on wilderness characteristics, so banning it would not help meet the Purpose and Need of this plan. The action is therefore not considered further in this EA.

- Ban livestock grazing: The enabling legislation for the OBW, the Omnibus Public Lands Act of 2009, explicitly allows for the continuation of livestock grazing in accordance with provisions in

the Wilderness Act of 1964. Banning livestock from the OBW is not consistent with the Wilderness Act of 1964 and Congressional designation of this area. The action is therefore not considered further in this EA.

- Continue water delivery to Red Pond: BLM does have a water right with Central Oregon Irrigation District (COID), and that in-stream water right has been leased through 2015. Filling this pond, which is outside the wilderness boundary, would not have a substantive effect on wilderness characteristics, so the action would not help meet the Purpose and Need of this plan. The action is therefore not considered further in this EA.

Conformance

The plan conforms to the Wilderness Act of 1964 (Public Law 88-577), the OBW enabling legislation (the Omnibus Public Lands Management Act of 2009), Public Law No. 111-011, Section 1700 (March 30, 2009) (Appendix A), FLPMA (Public Law 94-579), and NEPA (Public Law 91-190). The plan is also in conformance with 43 CFR Part 6300 – Management of Designated Wilderness Areas, and BLM Manuals 6340 – Management of Designated Wilderness Areas, and 8561 – Wilderness Management Plans.
Table 2 in the OBW Plan/EA summarizes specific actions proposed to occur, by alternative.
All action alternatives are consistent with the UDRMP. Specifically, the following plan objectives in the UDRMP would be attained in the region that includes the OBW:

Objective R – 2: Provide designated access points (includes entry points, parking areas, trailheads, and/or staging areas) to enhance visitor experience, protect resources, and minimize conflicts with adjacent landowners.
Objective R – 3: Manage off -highway motorized vehicle use on BLM-administered land to provide visitor satisfaction, protect natural resources, provide visitor safety, minimize conflicts among public land visitors and adjacent land owners and integrate opportunities with adjacent land management agencies.
Objective R – 4: Provide identifiable non-motorized recreation opportunities to provide visitor satisfaction, protect natural resources, and minimize conflicts among public land visitors and adjacent land owners.
Objective R – 5: Provide for projects, programs, and permits that promote a diverse range of recreation opportunities. Provide for individual, group, and competitive event recreational use that could not be reasonably accommodated on private land.
Objective R – 7: Provide appropriate recreational opportunities while reducing conflicts between recreational users, and between recreational users and adjacent landowners.

Chapter 3 Affected Environment

Introduction

The affected environment describes the present condition and trend of issue-related elements of the human environment that may be affected by implementing the proposed action or an alternative. It describes past and ongoing actions that contribute to present conditions, and provides a baseline for analyzing effects described in Chapter 4.

This EA focusses on the issues presented in Chapter 1. Each of the issues relates to elements of wilderness characteristics.

Location and Background

The OBW contains 29,301 acres of public land and is located approximately 15 miles southeast of Bend, Oregon. This wilderness area is managed by the Prineville District of the BLM as a unit of the National Wilderness Preservation System and the BLM's National Landscape Conservation System. Located in both Crook and Deschutes counties, the OBW is topographically flat to gently rolling with terrain elevation slightly dropping from the southwest to the northeast side of the OBW along the gently sloping Badlands volcano (See Map 1 in the OBW plan).

One 40-acre private inholding and associated 0.9 -mile Right-of-Way exist on the north end of the OBW and pre-date wilderness designation. In the OBW's 2009 enabling legislation, a 25-foot wide "potential wilderness" corridor was also excluded from the unit, but only until such time as the nonconforming use authorized for the specific existing private in-holder occurring in the corridor ceased. This corridor largely follows the northern three-quarters of the Dry River trail.

In the fall of 2011, BLM acquired 236 acres through purchases near the northern end of the Flatiron Rock Trail.

Naturalness

Due to its shape, topography and vegetative screening, adverse signs of human impacts are dispersed and most portions of the OBW appear to be in a natural condition and primarily affected by the forces of nature. The dense canopy of juniper trees and numerous basalt outcroppings contribute to its overall primeval character, particularly within the central regions of the OBW.

Highly scenic vistas of the Cascade Mountain range, Smith Rocks, West Butte, and Horse Ridge are all available from elevated basalt pressure ridges within the OBW.

In recent years, several miles of fence have been removed. Most routes that are not part of the designated trail system are reverting to a natural appearance and are becoming less apparent primarily due to the sandy, rocky terrain and infrequent use.

Wilderness Trailhead Access: Over 46-mile miles of designated trails are currently served by five developed trailheads. The High Desert Trailhead on the eastern boundary of the OBW is presently undeveloped and the Tumulus Trailhead near the COID canal is signed but not developed. The overwhelming majority of recreation access is from two developed trailheads along US Highway 20 on the southern boundary of the OBW. Four additional trailheads off of adjacent county and BLM roads provide access from the northern and northwestern boundaries (Map 3).

Naturalness is reduced at these trailheads, as soil has compacted and vegetation removed to accommodate visitor access into the OBW. However, these trailheads are outside the OBW, so the naturalness of the OBW is only reduced by visitor and stock use on the designated trail system.

Visitors with stock frequently use the designated trail system, so these trails are compacted and apparent. However, the remaining area is not affected by stock animal use and is natural in appearance. Some visitors bring dogs to the OBW for companionship and exercise. Rock climbing occurs in the central areas where basalt ridges provide climbing opportunities. Some areas have rock anchors, reducing their natural appearance. During the cold months, campfires are built to warm visitors and heat up food. Evidence of campfire rings can be seen near the designated trails and rarely seen away from them.

Seasonal, non-motorized, cross-country use associated with big game hunting originates along the US Highway 20 corridor and the eastern Bonneville Power Administration ROW. Neighborhood non-motorized access from parcels adjacent to Dodds Road occurs year-round. Recreational stock use originates via neighborhood access or by trailering to the Badlands Rock Trailhead, along with the Reynolds Pond and Dry River Trailheads. Due to on-going vandalism of COID facilities, access to the Tumulus Trailhead was gated by COID in 2010.

Livestock Grazing: See narrative in the OBW Plan (Map 2).

Portions of three pastures in the Millican Allotment lie inside the OBW: the Bombing Range pasture includes 191 acres and 20 Animal Unit Months (AUMs); Jordan Seeding has 1,408 acres and 70 AUMs; and Low Desert has 114 acres and 7 AUMs. These pastures can be grazed anytime between March 1 and October 31 on a deferred rotation that provides rest for a portion of the growing period for each pasture.

The eastern Rambo allotment includes portions of two pastures within the OBW that are divided by a fence, which trends west from the BPA power line ROW. The North pasture has 2,168 acres and 89 AUMs, and the South pasture has 6,420 acres and 265 AUMs. The Rambo Allotment is grazed anytime

between the dates of March 1 and February 28th, with alternating seasons of use between the two pastures. Remnants of an old pipeline exist in this allotment.

Permittees for Millican and Rambo Allotments have water hauling privileges along designated routes when livestock are grazing. This privilege allows the permittee to use a motorized vehicle to drive into the OBW to haul water livestock during livestock season of use, where there are no other options to provide water. A portion of the Zell Pond Allotment also lies within the OBW, with 765 acres and 47 AUMs, and is grazed anytime between May 15 and October 14.

Wildlife: Habitats found in the OBW are ideal for many species of birds and small mammals. Northern portions of the OBW include year-round habitat for pronghorn. The southern portions of the OBW are also considered crucial winter range for mule deer. The two existing wildlife guzzlers in the OBW reduce naturalness, due to their unnatural appearance.

The guzzler in the southeast corner of the OBW is still functioning and its effect on naturalness is limited to a small area, due to topographic and vegetative screening. The other guzzler in the west-central part of the OBW is not functioning, and is also unnatural in appearance, but is screened by topography and vegetation too.

Cultural Resources: A review of General Land Office land records reveals early attempts to homestead areas of the OBW. Evidence of woodcutting, ranch routes, stock driveways and a homestead site are still visible today.

Numerous refuse dump sites occur throughout the OBW. These sites originated long before motorized use in the OBW was prohibited. A 0.5 acre site near the Chitwood Trailhead is the largest known of these dump sites. These sites would be inventoried and assessed for eligibility for inclusion into the NRHP.

Fire: Wildfires are most common in the hot, dry portions of the summer, are usually lightning-caused, may involve one or two western junipers and frequently stay less than an acre in size. Generally, little surface fuel exists to promote larger wildfires; however, lightning, coupled with dry conditions, pockets of weeds and a high wind event could spread fire to consume larger acreages. Currently, fire managers have a range of management options from monitoring to full suppression on all naturally-caused wildfires. Human-caused fires are fully suppressed.

Outstanding Opportunities for Solitude and Primitive and Unconfined Recreation

Outstanding opportunities for solitude exist primarily within the central and western portions of the OBW where there are either dense stands of old juniper, or rocky basalt outcroppings that limit or hide the sounds and views of other visitors.

The existing trail network is a combination of trails and old vehicle routes. These old vehicle routes usually offer a higher quality of outstanding solitude and also primitive recreation opportunities than the trails, because fewer visitors travel on these routes. Some visitors stay overnight in the OBW to experience fewer encounters with other visitors and to experience the OBW at night.

Most visitors with dogs don't leash them when walking. Dog encounters with other visitors, or visitors also with dogs occurs and temporarily reduces solitude due to dogs barking and visitors trying to control their dogs during these encounters.

The area serves as refuge from civilization for inhabitants of nearby communities and regional cities. Outstanding opportunities for several different types of primitive recreation are available including hiking, hunting, primitive camping, nature study, photography, sightseeing, and horseback riding. Cross-country hiking opportunities are challenging because the topography and juniper trees make it difficult to identify landmarks for direction. It's also difficult for hikers to accurately determine their location due to the size and topography within this area. This is especially true when low clouds or freezing fog are present.

Special Features

Cryptogams (mosses, lichens, etc.) grow on the basalt formations throughout the area. The Dry River is a dry prehistoric river channel that winds through the wilderness. Erosion from this massive water drainage has created interesting features in the southeast portion of the study area such as carved and smoothed boulders and small narrow cuts through basalt ridges. There are also countless pressure ridges formed by the compressive force of slowly moving lava with many shapes and formations. These pressure ridges are mainly within the center of the OBW.

Chapter 4 Environmental Effects

Introduction:

Table 3 is a Summary of Effects of Proposed Actions and other ongoing/future actions. The environmental effects are the known and predicted effects from implementation of the actions, limited to the identified issues. Direct effects are those caused by the action and occurring at the same time and place. Indirect effects are those caused by the action but occurring later or in a different location.

Cumulative effects result from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions. The cumulative effects analysis includes other BLM actions, other federal actions, and non-federal (including private) actions. Reasonably foreseeable future actions are those for which there are existing decisions, funding, formal proposals, or which are highly probable, based on known opportunities or trends.

Table 3. Summary of effects of proposed actions and other ongoing/future actions.

	Effect →	Naturalness			Solitude			Unconfined rec.		
	Action ↓ Alternative →	2	3	4	2	3	4	2	3	4
Actions considered in this EA	Stock: use off trails	+	+	+	+	+	+	+	+	+
	Dogs	Na	Na	Na	+	0	+	-	0	-
	Rock climbing	+	+	+	Na	Na	Na	-	-	-
	SRP: leave-no-trace training	-	-	-	Na	Na	Na	Na	Na	Na
	SRP: potential limits on weekends, holidays, etc.	Na	Na	Na	+	+	+	-	-	-
	SRP: wilderness-dependent or physically challenged	+	+	+	+	+	+	+	+	+
	Campfires	-	-	+	Na	Na	Na	+	+	-
	Travel: trail re-routes	-	+	0	+	+	0	+	+	-
	Travel: vehicle barriers	+	0	+	Na	Na	Na	Na	Na	Na
	Travel: new trails	-	-	+	-	-	+	+	+	-
	Travel: road to trail conversion	-	-	+	+	+	-	+	+	-
	Travel: trail removal and restoration	+	0	+	+	0	+	-	0	-
	Travel: trailhead modification	+	+	+	Na	Na	Na	+	+	0
	Travel: trailhead camping	+	0	+	Na	Na	Na	-	+	-
	Travel: trailhead parking	0	0	+	Na	Na	Na	+	+	-
	Travel: closing roads outside OBW	+	0	+	+	0	+	+	0	+
	Signs	-	-	+	-	-	+	0		-
	Livestock: fence removal	+	+	+	Na	Na	Na	+	+	+
	Livestock: fence construction	Na	Na	Na	Na	Na	Na	Na	Na	Na
	Livestock: fence post type	-	-	+	Na	Na	Na	Na	Na	Na
	Wildlife: guzzler removal	+	-	+	Na	Na	Na	Na	Na	Na
	Wildlife: vinyl markers on fences	+	-	+	Na	Na	Na	Na	Na	Na
	Cultural: historic refuse dump removal	0	+	0	Na	Na	Na	Na	Na	Na
	Fire Management: Fire Suppression and rehabilitation	+	+	0	Na	Na	Na	Na	Na	Na
Other actions	Vehicle use to maintain fences and haul water for livestock	-			-			Na		
	Vehicle use on adjacent county roads and Hwy 20; operations at nearby rock quarry; and aircraft en route to/from Bend airport.	Na			-			Na		
	Increased visitation due to growing population and publicity regarding wilderness	-			-			Na		

Table 3 is a summary of effects of proposed actions by alternative. Symbols: not applicable (Na), increase (+), decrease (-), no change (0) relative to Alternative 1.For "other actions" the effects are the same for all alternatives, including Alternative 1, so the comparison is to the "other action" not occurring rather than relative to Alternative 1.

Alternative 1, No Action - Continue present management

Naturalness

Use of Stock Animals: The use of recreational stock would continue to be limited to the approximately 46-mile miles of designated trails, so naturalness would be reduced on the designated trails due to repeated use.

Rock Climbing: Impacts to rock features and equipment caching for greater than 24 hours would continue to occur. Permanent anchors would continue to be placed and over time would reduce the natural character of popular rock climbing features.

Campfires: Visitors would continue to gather and burn down juniper branches and create campfire rings adjacent to the designated trail system, but some visitors will have campfires and build fire rings in the more remote areas of the OBW too. Fire rings reduce naturalness within the immediate vicinity of where they are built.

Travel, Transportation, and Access : There would be no road to trail conversions. Frequent foot use on up to 62 miles of former vehicle routes would restrict surrounding vegetation from expanding into most routes, due to frequent use. The human imprint associated with frequently used primitive vehicle routes in the past would continue, while other less used primitive routes would naturally heal over an extended period of time.

Signs: Signs would continue to be a development in wilderness. These unnatural features will reduce naturalness in the immediate vicinity of their location.

Fire Management: Human-caused wildland fires would be suppressed, while an appropriate response would be considered in responding to naturally-caused ignitions. Fire as an integral ecological component of the OBW would enhance the vegetative diversity and thus naturalness of the OBW by increasing the variety of grasses, and shrubs growing in this area over the long term. Short-term effects from fire include the visible evidence of fire suppression such as the fire containment line, along with an increase in cheatgrass and other annuals that are eventually replace by bunch grasses and shrubs.

Livestock Grazing: Livestock use would be more evident around water troughs and livestock trails to the troughs. Rebuilt fences will attract visitor attention, but only for a short distance as vegetation and topography screen these features from visitors hiking through the area.

Cultural Resources: Historic refuse dump sites at trailheads would remain in place and would reduce naturalness in the locations where these dumpsites are located.

Wildlife: The evidence of guzzlers and remnants would remain in place and continue to reduce naturalness in these areas. Rebuilt fences won't have plastic markers on the top two wires and therefore would have reduced visual contrasts. Guzzlers, livestock grazing improvements, and debris would persist on the landscape, impacting the undeveloped character of the wilderness.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Recreation

Use of Stock Animals: Fewer opportunities for Solitude would be available for horseback riders being restricted to designated trails. Solitude would also be reduced as more visitor encounters occur between horses and hikers (some with dogs) than Alternatives 2 and 3, which allow for more dispersed use off the designated trail system. In this alternative, encounters between horses and vehicles both on the northernmost 0.9 mile of the Dry River Trail, where the trail serves as a ROW for a private inholding would continue to occur.

Primitive recreation opportunities would remain high under this alternative, because all most visitors with stock would be confined to the 46-mile designated trail system. Cross-country navigators, hunters, bird watchers and other visitors seeking a more remote primitive recreation experience would find these opportunities off of the designated trail system.

Dogs: Trailhead conflicts would result from unrestrained dogs at trailheads. The potential for on-trail conflict between dogs and other dogs, hikers, equestrians, and wildlife would continue to occur at a higher level than all other alternatives, detracting from solitude.,

Special Recreation Permits (SRPs): Encounters between non-commercial and commercial, or organized group encounters would reduce solitude, especially on weekends and holidays when more visitors are in the OBW. Repeated encounters between visitor groups would result from limiting these users to the same designated trail system, especially near the Badlands Rock and Flatiron Trailheads. Some visitors will choose to use the OBW during the week, or go to another area where there would be less encounters with other commercial and organized groups, than in the OBW.

Travel, Transportation, and Access : Confining equestrian riders to the 46-mile designated trail system would result in more encounters with other visitors, resulting in less solitude than by traveling cross-country, or on unmarked, old vehicle routes. Visitors pursuing cross-country travel to achieve outstanding opportunities for primitive recreation activities and solitude, may find more opportunities for solitude in this alternative, than under Alternatives 2, and 3, because visitors with stock animals would be limited to the designated trail system under this alternative.

Since hikers are not limited to the existing network of trails, they would find a higher degree of solitude by traveling cross-country or traveling on former vehicle routes not available to visitors with stock animals, than opportunities provided under Alternatives 2 and 3, which emphasize more cross-country

travel. Trails would not be clearly identified on the ground, or in agency produced materials, so individuals desiring a more primitive experience would find unmarked areas challenging to navigate.

Solitude opportunities would be reduced in locations next to the Central Oregon Irrigation District (COID) canal, if repeated motorized vehicle use into the OBW occurs due to the lack of a vehicle barrier being erected after the piping of the COID canal.

Alternative 2, Proposed Action

Naturalness

Use of Stock Animals: As in Alternative 1, naturalness would be reduced on the designated trails, due to repeated use by visitors with stock using the 46-mile mile designated trail system. However, since visitors with stock animals can also travel cross-country, the effects of designated trail use on naturalness would be less than Alternative 1. Off-trail tracks left on the ground would be more visible to the casual observer than under Alternative 1, restricting stock use to the designated trails. Damage to the soil would not be long-term from cross-country travel; however, due to the soil's sandy nature and random stock use.

Rock Climbing: Naturalness would be retained at a higher level than Alternative 1 because fewer caches would be present in the wilderness and no fixed or fixed anchor routes would be allowed. Rock climbing and/or removal would improve naturalness of the OBW.

Campfires: Same as Alternative 1.

Travel, Transportation and Access: Restoration of up to 62 miles of old vehicle routes not part of the designated trail system would enhance naturalness by converting old vehicle routes to a more natural appearing landscape. Converting roads to trails would also be expected to enhance naturalness by helping to prevent degradation of these natural resources. Trail reroutes of 0.9 miles of the Dry River, 0.9 miles of the Larry Chitwood trails, a connecting trail from the Tumulus trail to Black Lava, Flatiron and the Larry Chitwood trails and constructing up to three miles of new trails would affect naturalness in the short-term. However, reducing trail encounters due to trail re-routes and construction outweighs localized effects to naturalness.

Moving the Tumulus Trailhead away from the OBW would provide better access to the OBW. Boundary fence and barrier construction outside the wilderness would reduce motorized vehicle trespass within the OBW, thereby enhancing naturalness and primeval character within the OBW.

Signs: All new signs within the OBW would slightly degrade the undeveloped character of the OBW. Additionally, restoration efforts would be enhanced through restoration area signs used on a case-by-case basis to direct visitors away from restored sites help improve the success of restoration projects.

Fire Management: Although firefighters may take suppression action on lightning and human-caused wildfires to prevent wildfires from spreading to private land, many wildfires in the OBW would be monitored and managed for resource benefits with little or no suppression action taken. Allowing wildfire to burn would affect naturalness in the short-term, but would allow increased vegetative diversity in the long-term. Rehabilitation projects would have a trammeling effect within the first five years until vegetation is expected to have re-established.

Livestock Grazing: Removing 3.1 miles of interior fence removal would improve naturalness of the OBW by not having this unnatural linear feature within the OBW. Construction of 6.1 miles of fence along the eastern boundary of the OBW would not affect naturalness within the OBW. Juniper posts or t-posts would be used for new and/or replacement interior fences. Naturalness would be more retained by using juniper posts, and less retained if metal t-posts are used for fencing within the OBW.

Cultural Resources: If cultural resource historic refuse dump sites are determined to be ineligible for inclusion into the NRHP, they may be removed along with other refuse less than 50 years old. Removal of these sites would enhance naturalness near these areas. If these sites are determined eligible for inclusion into the NRHP, they would be retained and managed appropriately. The effects of leaving these historic refuse dumpsites on naturalness will be limited, due to the topography and vegetation that screens them from view. Most visitors seeing these old dump sites are more curious as to how old they are and why they are in the OBW.

Wildlife: The Hobbywood guzzler would be moved to a location outside of OBW. The Badlands guzzler remnants would be removed. These actions would increase naturalness in these locations by removing these manmade features. Not installing colored vinyl markers on interior fence wires to increase visibility for wildlife passage would avoid increasing the developed nature of the area.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Recreation

Use of Stock Animals: Outstanding opportunities for solitude would increase by allowing recreational stock use off the 46-mile designated trail system. Fewer trail encounters would result, by dispersing visitors with stock animals in a larger area within the OBW.

Dogs: Dog owners may experience some increase in being confined by having more restrictions imposed upon them, such as being required to remove dog waste in the OBW and at THs. Conflicts at trailheads between hikers with dogs and other recreationists would be reduced by requiring dogs to be leashed within 500 feet of trailheads. This proposed action would not affect solitude at any trailhead, but may enhance the primitive recreation experience of some visitors by reducing conflicts.

Solitude and primitive recreation opportunities may be reduced within the interior of the OBW, because the same potential for on-trail conflict between dogs and people would occur, as with Alternative 1.

Special Recreation Permits: SRPs would only be issued for wilderness-dependent and adaptive (physically challenged) activities, and may be issued for educational studies. Therefore, the number of visitors to the area is expected to be less than under Alternative 1. This proposed action would help retain outstanding opportunities for solitude and primitive recreation by limiting commercial and organized use to activities truly dependent upon the wilderness character of the OBW. This action would also result in increasing the quality of experiences for these visitors.

Travel, Transportation, and Access: Visitor use would be more widely distributed as a result of allowing cross-country travel and access to the designated trail system. The effects of this alternative allows for a greater distribution of visitors and potential reductions in trail encounters, but not an increase in the number of starting points.

Equestrians would be better able to avoid hiking parties by being able to leave designated trails. Equestrians would also realize greater off-trail hunting opportunities and the ability to retrieve game away from trails. There would also be less conflict between horses and vehicles on the Dry River ROW road because horse riders could travel off this road to avoid vehicle encounters.

Since hikers are not limited to the existing network of trails, they would also find a higher degree of solitude by traveling cross-country, rather than travel on the designated trail system. Visitors who pursue cross-country travel to achieve outstanding opportunities for primitive recreation activities and solitude may actually find more of these opportunities available than under Alternative 3, which allows visitor use on the designated trail system and also on up to 62 miles of old primitive vehicle routes, instead of rehabilitating these linear features.

Construction of new connecting trails between and Larry Chitwood and Flatiron trails would result in an increase in looping options created by the new connectivity. This action would improve the qualities of solitude and recreation.

The northern trailheads would receive slightly more use, while the trailheads off US Highway 20 (Badlands Rock, Flatiron and the undeveloped TH south of the OBW) would receive the same or slightly less use as a result of developing the Reynolds Pond, Dry River, Tumulus and Larry Chitwood trailheads.

Construction of new connecting trails would reduce trail encounters and increase trail looping opportunities created by the new connectivity between the Larry Chitwood and north end of Flatiron trails. This action would also improve solitude and recreation by reducing out and back travel on dead-end trails, increasing solitude as fewer trail encounters would likely occur between visitors.

Alternative 3, Human Impacts Most Evident Long-Term

Naturalness

Stock Animal Use: Same as Alternative 2.

Rock Climbing: Same as Alternatives 2 and 4.

Campfires: Same as Alternative 1.

Travel, Transportation and Access: Recreational stock users would continue to use the 46-mile mile designated trail system and up to 62 additional miles of primitive vehicle routes. The effects of that use on naturalness would be less than Alternatives 1 and 4, because all stock are limited to designated trails the No Action and the Human Impact Least Evident Alternatives.

Continued use of these primitive routes would limit their rehabilitation. However, many existing primitive vehicle routes have been compacted over decades of past use, reducing potential for natural rehabilitation to occur, unless these compacted linear features are changed to allow re-vegetation. The lack of restoration in this alternative eliminates the need for additional short-term restoration signs that are proposed in the two other action alternatives.

Converting seven former vehicle routes totaling 17.6 miles of roads- to- trails within the OBW would be expected to reduce trail width, increasing opportunities for natural re-vegetation of part of the converted routes not used by visitors. Construction of 7.5 miles of new trail to connect to the designated trail system would reduce naturalness in the short term, but enhance it over time as more visitors use these trail connectors, rather than create new trails to the trail system. Moving the Tumulus Trailhead away from the OBW would reduce illegal motorized activity southwest of Reynolds Pond.

Boundary fence and barrier construction outside the wilderness would not occur and would not reduce motorized vehicle trespass within the wilderness, potentially reducing naturalness and primeval character. Having a longer trail system may further degrade naturalness, but the designated trail system and existing old vehicle routes are already compacted, limiting rehabilitation over the short and long term.

Signs: Same as Alternatives 1 and 2, which would have the effect of adding evidence of human use to the area.

Fire Management: Same as Alternative 2.

Livestock Grazing: Same as Alternative 1.

Cultural Resource: same as Alternative 1.

Wildlife: Guzzlers and remnants would remain in place, as in Alternative 1, continuing to reduce naturalness in these locations. Although the use of colored vinyl markers on fences would reduce injury to wildlife, they are much more visible to visitors and would reduce naturalness of the OBW wherever these bright plastic markers are hung on fence lines.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Recreation

Stock Animal Use: Same as Alternative 2.

Dogs: Same as Alternative 1, leading to the potential for more encounters with dogs and other dogs, people or stock. These encounters would detract from a visitor's sense of solitude.

Special Recreation Permits: Same as Alternative 2.

Travel, Transportation, and Access: Visitors to the OBW would enjoy the greatest degree of primitive recreation opportunities under this alternative. Because the designated trail system includes the most miles of any alternative, it would have the ability to absorb and disperse a greater volume of use. Under this alternative, distribution of visitation and use in the OBW would be more evenly spread throughout the wilderness. The northern trailheads would receive slightly more use while the US highway 20 trailheads would receive the same or slightly less use.

Outstanding Opportunities for solitude may be less than under Alternatives 1 and 4, because in Alternatives 1 and 4, visitors with stock animals would be limited to the designated trail system, allowing other visitors to find and enjoy locations in the OBW without visitors with stock animals.

Visitors who pursue cross-country travel to achieve outstanding opportunities for solitude, may find more of these opportunities under Alternatives 1 and 4, because under this alternative, visitors would also have easier access to more areas within the OBW, by using the 46 mile designated trail system and also up to 62 additional miles of old primitive routes, reducing opportunities for solitude for those visitors wanting to avoid others in the same area.

In Alternatives 1,2, and 4, visitors would not have an additional 62 miles of old vehicle routes to travel on, because these alternatives would close these primitive routes to visitor use and/or rehabilitate them.

The configuration of the trailheads and trail system would allow for a greater distribution-and an increase in the number of-starting points and looping opportunities, thereby reducing the number of trail encounters and thereby increasing outstanding opportunities for solitude.

Connecting two separate trail systems and increasing looping opportunities would result in less out and back travel on dead-end trails, thus increasing solitude, as fewer trail encounters would likely occur

between visitors. Hiker and equestrian use would also be separated at Badlands Rock trailhead which would reduce social conflict. A greater number of available trailheads would likely attract increased use, although, like the other action alternatives, capacities would be low.

More visitor encounters are expected to occur on weekends, holidays and during archery and rifle big game hunting seasons. Equestrians would be less confined by allowing their use off trail, Opportunities for solitude and primitive, unconfined recreation may be more, or less than the other alternatives, depending on visitor navigation skills and time of year.

Cultural Resources: This alternative would not have any effect on solitude or primitive, unconfined recreation.

Wildlife: This alternative would not have any effect on solitude or primitive, unconfined recreation.

Alternative 4, Human Impacts Least Evident Long-Term

Naturalness

Use of Stock Animals: Same as Alternative 1.

Rock Climbing: Restrictions to protect rock features and vegetation would enhance naturalness in the short and long term, but rock climbers would experience more restrictions imposed upon them, verses Alternative 1.

Campfires: Campfires would be prohibited.

Travel, Transportation and Access: The natural and primeval character of the OBW would be improved, compared to all other alternatives. Up to 62 miles of former vehicle routes would be restored to enhance the natural character of the OBW. No roads to trails would occur within the OBW. One and a half miles of old primitive route would be converted to a trail outside the OBW, to help reduce degradation of natural resources.

The removal of the Tumulus trailhead would reduce motorized trespass southwest of Reynolds Pond. Boundary fence and barrier construction outside the wilderness would reduce motorized vehicle trespass within the OBW, thereby enhancing naturalness and primeval character.

Removing the Sand and High Desert trails as well as portions of the Larry Chitwood, Dry River and Homestead trails would increase naturalness in the short and long term, more than Alternatives 1 and 3, which don't have these proposed restoration actions.

Signs: No signs would be installed within the interior of the OBW and approximately 16 existing interior direction signs would be removed. This may increase disorientation among recreationists. No signs would be used to improve the effectiveness of site restoration. No colored vinyl fence markers for wildlife awareness would be used, increasing naturalness.

Fire Management: Same as Alternative 1.

Livestock Grazing: Pasture configuration changes would have the same effects as Alternative 2. New fence construction would have the same effects as Alternatives 2 and 3.

Cultural Resources: The effects to naturalness would be the same as in Alternative 2.

Wildlife: Naturalness would be enhanced by removing both wildlife guzzlers within the OBW and also not requiring plastic flagging on new interior fences.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Recreation

Stock Animal Use: Outstanding opportunities for solitude would decrease for visitors using horses: fewer miles of designated trail (34 miles, compared to 46 miles in Alternative 2) would be available, but equestrians would be less confined than under Alternative 1, by allowing their use off-trail.

Opportunities for solitude or primitive unconfined recreation would be less than Alternatives 2 and 3. Reduced trail loop opportunities would also result in less trail looping opportunities and less trailhead access, when compared to trailhead development and loop opportunities proposed under Alternatives 2 and *3,* leading to more trail encounters and less opportunities for solitude.

A reduction in on-trail visitor distribution would occur, thereby potentially increasing the number of trail encounters on the designated trail system, reducing opportunities for solitude on these trails.
The absence of trail junction signs would promote self-reliance through a higher level of required navigation skills, but for the same reason may not provide enough trail information for novice recreationists, because these visitors would generally use the designated trail system and not venture cross-county, even though this alternative allows cross-country use.

Dogs: The same potential for on-trail conflict between dogs and people, other dogs, stock animals, and wildlife would occur, as Alternatives 1, 2, and 3, but fewer encounters may result at trailheads, due to dogs not being allowed off-leash at these locations under this alternative.

Special Recreation Permits: SRPs would be issued only for adaptive activities, which would offer opportunities to those with mobility limitations and who could not otherwise experience the OBW. This alternative would help retain and outstanding opportunities for solitude and primitive recreation by limiting commercial and organized use to activities truly dependent upon the wilderness character of the OBW. This action would also result in increasing the quality of solitude and primitive recreation experiences for these visitors.

Travel, Transportation, and Access: A small, unsigned roadside access point at MP 6 on Dodds Road would provide very limited gated pedestrian remote access to the OBW. A reduction in the number of designated trail miles available to recreationists (34 miles, compared to 46 miles in the Proposed Action) may result in an increase in the number of trail encounters. The continuation of dead-end trails would reduce looping opportunities, compared with Alternatives 2 and 3, and would also potentially increase trail encounters under this alternative.

In total, these actions would create a limiting effect for access to the OBW. Solitude may increase in the interior of the wilderness. However, trailhead crowding may increase, because visitors with trailers would have less access to the OBW, due to less trailhead development proposed under this alternative. If trailhead crowding does occur, some visitors may choose to use other areas outside the OBW. Less

trail encounters with equestrians would likely occur, as some equestrian visitors go elsewhere to ride in a less crowded area.

Cultural Resources: This alternative would not have any effect on solitude or primitive, unconfined recreation.

Wildlife: This alternative would not have any effect on solitude or primitive, unconfined recreation.

Cumulative effects

This section describes ongoing actions that are expected to have an effect on naturalness, opportunities for solitude and opportunities for unconfined recreation in the OBW. These actions will occur regardless of alternative selected; their effects will combine with those of the selected alternative. The effects of the actions below are the same for each alternative; therefore there is not a separate discussion for each alternative. The effects are displayed in relation to the alternatives in Table 3, Summary of Effects.

The BLM will conduct annual and five year monitoring of all actions (those proposed in this EA as well as other actions described in this cumulative effects section)(see Table 1 of the OBW Plan). If there are continued reductions in wilderness values, BLM will consider the need to take further action including increased emphasis on Leave No Trace Principles, re-directing trail use to less popular ones, or placing limits on number of special recreation permits.

Naturalness

Besides the actions proposed in this EA, naturalness will continue to be affected by two other actions, as described in the paragraphs below: 1) vehicle use to maintain fences and haul water for livestock, and 2) increased visitation due to increased publicity regarding wilderness and a growing human population within driving distance.

Permittees generally make one trip per year around all allotment and pasture boundary fences prior to turning out livestock, and a second trip to check for breaks if livestock stray outside the pasture. They use an all-terrain vehicle or pickup truck, since any repairs that need to be done will require tools and wire. Water hauling is done with a heavier vehicle and more frequently than for fence maintenance; however, the use is entirely on existing routes that already have bare, compacted soil with little vegetation.

The permittees make about three trips per week to deliver water and/or check troughs while cattle are in the area; generally May through September. Fence repair results in about six miles of on-route use and 16 miles of off route use once or twice a year; water hauling results in about 11 miles of on-route use three times a week for eight weeks. Vehicle tracks from fence repair and water hauling trips are visible for several weeks, depending on wind, rain, and the amount of pedestrian or equestrian use in the area that may obscure the vehicle tracks.

The limited number of trips and limited extent of soil and vegetation disturbance from fence repair preclude long term effects to naturalness. Water hauling occurs more frequently, and will continue to compact the soil and prevent these routes from re-vegetating. In addition, the BLM is precluded from closing or restoring these routes unless alternate water can be provided, or grazing is discontinued, therefore this effect (a visible road, not just visible vehicle tracks) is long term.

With Congressional designation of the OBW, local organizations, outdoor writers and media sources stepped up the already widespread publicity about the uniqueness of and easy access to the area. The increased publicity, combined with the expected continued increasing population just a few minutes' drive away from the OBW, mean that visitation will continue to increase. With more people using the area, trails will become compacted faster, and crowding may lead people to avoid the heavily used trails and blaze new ones. The amount of new trails that will be blazed is unknown. Regardless of alternative selected, BLM will close and rehabilitate these trails, but it is a process that can take years, so there will be short term effects on naturalness from the temporary presence of these new trails.

Solitude

Besides the actions proposed in this EA, opportunities for solitude will continue to be affected by five other actions, described in the paragraphs below: 1) vehicle use to maintain fences and haul water for livestock, 2) vehicle use on adjacent county roads and Highway 20, 3) operations at nearby rock quarry, 4) aircraft en route to/from Bend airport, and 5) increased visitation due to increased publicity regarding wilderness and a growing human population within driving distance.

Opportunities for solitude are reduced when visitors see or hear other people in the wilderness. Actions associated with livestock grazing have an effect on opportunities for solitude. The type and amount of use associated with fence maintenance and water hauling are described above under naturalness. Fence maintenance will have a limited effect, because it involves only one or two trips per year for each allotment, or six days total. On those days, there will be a slight decrease in opportunities for solitude, because visitors may see or hear a grazing permittee's vehicle.

Water hauling also decreases opportunities for solitude up to 60 days per year (three trips per week for entire time livestock are in the area, generally May through September). Effects from these single vehicle trips are nominal, given the vehicle's low speeds, the soft road surface, and the diluting effects from hundreds of vehicles per day on roads surrounding the OBW and described in the next paragraph.

Vehicles on Highway 20 and adjacent county roads (e.g., Dodd's and Obernolte) can also be heard within the OBW. Sound from the highway is particularly noticeable because traffic is light enough to not be a steady distant hum; instead there is repeated contrast between silence and the sound of large trucks and motorcycles.

Sound from other roads surrounding the OBW are much less noticeable, due to slower traffic speeds, fewer large trucks, and generally lower traffic volume. Topography and juniper trees help to limit vehicle noise, as well as shield OBW visitors from seeing vehicles.

Other noises that can be heard within OBW include those from equipment operation and truck traffic at the sand and gravel pit just to the southeast , and aircraft on their way to or from the Bend Airport, less than ten miles to the northwest.

As described under naturalness above, increased publicity about the OBW and increased population in central Oregon both contribute to increased numbers of visitors to the wilderness. The chance of seeing someone else when one is out in the OBW is likely to increase each year, reducing opportunities for solitude. The BLM will monitor this and other effects for any cumulative reductions in wilderness values, as described in Appendix B of the OBW Plan.

Primitive, unconfined recreation

There are no ongoing or future actions expected to affect this wilderness value. The cumulative effect is therefore just the effects of the actions in the selected alternative, as displayed in Table 3, summary of effects.

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Appendix A: Omnibus Public Land Management Act of 2009

Excerpt from the Omnibus Public Land Management Act of 2009,

Public Law 111-11, Section 1701

Subtitle I--Oregon Badlands Wilderness

SEC. 1701. DEFINITIONS.

In this subtitle:

(1) DISTRICT- The term `District' means the Central Oregon Irrigation District.

(2) SECRETARY- The term `Secretary' means the Secretary of the Interior.

(3) STATE- The term `State' means the State of Oregon.

(4) WILDERNESS MAP- The term `wilderness map' means the map entitled `Badlands Wilderness' and dated September 3, 2008.

SEC. 1702. OREGON BADLANDS WILDERNESS.

(a) Designation- In accordance with the Wilderness Act (16 U.S.C. 1131 et seq.), the approximately 29,301 acres of Bureau of Land Management land in the State, as generally depicted on the wilderness map, is designated as wilderness and as a component of the National Wilderness Preservation System, to be known as the `Oregon Badlands Wilderness'.

(b) Administration of Wilderness-

(1) IN GENERAL- Subject to valid existing rights, the Oregon Badlands Wilderness shall be administered by the Secretary in accordance with the Wilderness Act (16 U.S.C. 1131 et seq.), except that--

(A) any reference in the Wilderness Act to the effective date of that Act shall be considered to be a reference to the date of enactment of this Act; and

(B) any reference in the Wilderness Act to the Secretary of Agriculture shall be considered to be a reference to the Secretary of the Interior.

(2) INCORPORATION OF ACQUIRED LAND AND INTERESTS- Any land or interest in land within the boundary of the Oregon Badlands Wilderness that is acquired by the United States shall--

(A) become part of the Oregon Badlands Wilderness; and

(B) be managed in accordance with this subtitle, the Wilderness Act (16 U.S.C. 1131 et seq.), and any other applicable law.

(3) GRAZING- The grazing of livestock in the Oregon Badlands Wilderness, if established before the date of enactment of this Act, shall be permitted to continue subject to such reasonable regulations as are considered necessary by the Secretary in accordance with-

(A) section 4(d)(4) of the Wilderness Act (16 U.S.C. 1133(d)(4)); and

(B) the guidelines set forth in Appendix A of the report of the Committee on Interior and Insular Affairs of the House of Representatives accompanying H.R. 2570 of the 101st Congress (H. Rept. 101-405).

(4) ACCESS TO PRIVATE PROPERTY- In accordance with section 5(a) of the Wilderness Act (16 U.S.C. 1134(a)), the Secretary shall provide any owner of private property within the boundary of the Oregon Badlands Wilderness adequate access to the property.

(c) Potential Wilderness-

(1) IN GENERAL- In furtherance of the purposes of the Wilderness Act (16 U.S.C. 1131 et seq.), a corridor of certain Federal land managed by the Bureau of Land Management with a width of 25 feet, as generally depicted on the wilderness map as `Potential Wilderness', is designated as potential wilderness.

(2) INTERIM MANAGEMENT- The potential wilderness designated by paragraph (1) shall be managed in accordance with the Wilderness Act (16 U.S.C. 1131 et seq.), except that the Secretary may allow nonconforming uses that are authorized and in existence on the date of enactment of this Act to continue in the potential wilderness.

(3) DESIGNATION AS WILDERNESS- On the date on which the Secretary publishes in the Federal Register notice that any nonconforming uses in the potential wilderness designated by paragraph (1) that are permitted under paragraph (2) have terminated, the potential wilderness shall be--

(A) designated as wilderness and as a component of the National Wilderness Preservation System; and

(B) incorporated into the Oregon Badlands Wilderness.

(d) Map and Legal Description-

(1) IN GENERAL- As soon as practicable after the date of enactment of this Act, the Secretary shall file a map and legal description of the Oregon Badlands Wilderness with-

(A) the Committee on Energy and Natural Resources of the Senate; and

(B) the Committee on Natural Resources of the House of Representatives.

(2) FORCE OF LAW- The map and legal description filed under paragraph (1) shall have the same force and effect as if included in this subtitle, except that the Secretary may correct typographical errors in the map and legal description.

(3) PUBLIC AVAILABILITY- The map and legal description filed under paragraph (1) shall be on file and available for public inspection in the appropriate offices of the Bureau of Land Management.

SEC. 1703. RELEASE.

(a) Finding- Congress finds that, for the purposes of section 603(c) of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1782(c)), the portions of the Badlands wilderness study area that are not designated as the Oregon Badlands Wilderness or as potential wilderness have been adequately studied for wilderness or potential wilderness designation.

(b) Release- Any public land described in subsection (a) that is not designated as wilderness by this subtitle--

(1) is no longer subject to section 603(c) of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1782(c)); and

(2) shall be managed in accordance with the applicable land use plan adopted under section 202 of that Act (43 U.S.C. 1712).

(a) Clarno Land Exchange-

(1) CONVEYANCE OF LAND- Subject to subsections (c) through (e), if the landowner offers to convey to the United States all right, title, and interest of the landowner in and to the non-Federal land described in paragraph (2)(A), the Secretary shall--

(A) accept the offer; and

(B) on receipt of acceptable title to the non-Federal land, convey to the Landowner all right, title, and interest of the United States in and to the Federal land described in paragraph (2)(B).

(2) DESCRIPTION OF LAND-

(A) NON-FEDERAL LAND- The non-Federal land referred to in paragraph (1) is the approximately 239 acres of non-Federal land identified on the wilderness map as `Clarno to Federal Government'.

(B) FEDERAL LAND- The Federal land referred to in paragraph (1)(B) is the approximately 209 acres of Federal land identified on the wilderness map as `Federal Government to Clarno'.

(3) SURVEYS- The exact acreage and legal description of the Federal land and non-Federal land described in paragraph (2) shall be determined by surveys approved by the Secretary.

(b) District Exchange-

(1) CONVEYANCE OF LAND- Subject to subsections (c) through (e), if the District offers to convey to the United States all right, title, and interest of the District in and to the non-Federal land described in paragraph (2)(A), the Secretary shall--

(A) accept the offer; and

(B) on receipt of acceptable title to the non-Federal land, convey to the District all right, title, and interest of the United States in and to the Federal land described in paragraph (2)(B).

(2) DESCRIPTION OF LAND-

(A) NON-FEDERAL LAND- The non-Federal land referred to in paragraph (1) is the approximately 527 acres of non-Federal land identified on the wilderness map as `COID to Federal Government'.

(B) FEDERAL LAND- The Federal land referred to in paragraph (1)(B) is the approximately 697 acres of Federal land identified on the wilderness map as `Federal Government to COID'.

(3) SURVEYS- The exact acreage and legal description of the Federal land and non-Federal land described in paragraph (2) shall be determined by surveys approved by the Secretary.

(c) Applicable Law- Except as otherwise provided in this section, the Secretary shall carry out the land exchanges under this section in accordance with section 206 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1716).

(d) Valuation, Appraisals, and Equalization-

(1) IN GENERAL- The value of the Federal land and the non-Federal land to be conveyed in a land exchange under this section--

(A) shall be equal, as determined by appraisals conducted in accordance with paragraph (2); or

(B) if not equal, shall be equalized in accordance with paragraph (3).

(2) APPRAISALS-

(A) IN GENERAL- The Federal land and the non-Federal land to be exchanged under this section shall be appraised by an independent, qualified appraiser that is agreed to by the Secretary and the owner of the non-Federal land to be exchanged.

(B) REQUIREMENTS- An appraisal under subparagraph (A) shall be conducted in accordance with--

(i) the Uniform Appraisal Standards for Federal Land Acquisitions; and

(ii) the Uniform Standards of Professional Appraisal Practice.

(3) EQUALIZATION-

(A) IN GENERAL- If the value of the Federal land and the non-Federal land to be conveyed in a land exchange under this section is not equal, the value may be equalized by--

(i) making a cash equalization payment to the Secretary or to the owner of the non-Federal land, as appropriate, in accordance with section 206(b) of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1716(b)); or

(ii) reducing the acreage of the Federal land or the non-Federal land to be exchanged, as appropriate.

(B) CASH EQUALIZATION PAYMENTS- Any cash equalization payments received by the Secretary under subparagraph (A)(i) shall be--

(i) deposited in the Federal Land Disposal Account established by section 206(a) of the Federal Land Transaction Facilitation Act (43 U.S.C. 2305(a)); and

(ii) used in accordance with that Act.

(e) Conditions of Exchange-

(1) IN GENERAL- The land exchanges under this section shall be subject to such terms and conditions as the Secretary may require.

(2) COSTS- As a condition of a conveyance of Federal land and non-Federal land under this section, the Federal Government and the owner of the non-Federal land shall equally share all costs relating to the land exchange, including the costs of appraisals, surveys, and any necessary environmental clearances.

(3) VALID EXISTING RIGHTS- The exchange of Federal land and non-Federal land under this section shall be subject to any easements, rights-of-way, and other valid rights in existence on the date of enactment of this Act.

(f) Completion of Land Exchange- It is the intent of Congress that the land exchanges under this section shall be completed not later than 2 years after the date of enactment of this Act.

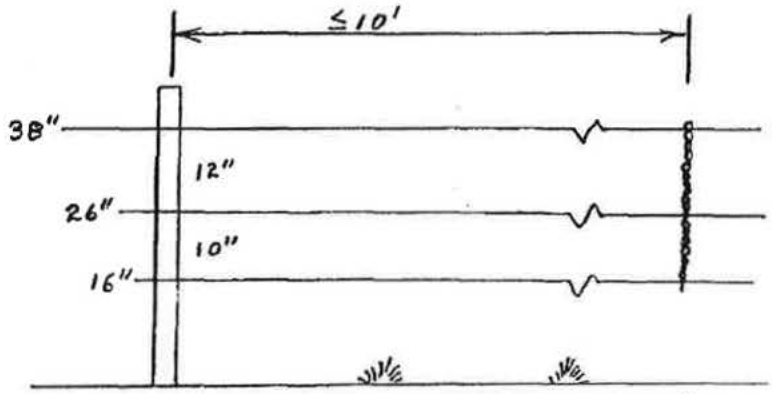
SEC. 1705. PROTECTION OF TRIBAL TREATY RIGHTS.

Nothing in this subtitle alters, modifies, enlarges, diminishes, or abrogates the treaty rights of any Indian tribe, including the off-reservation reserved rights secured by the Treaty with the Tribes and Bands of Middle Oregon of June 25, 1855 (12 St

Appendix B: Fence standards

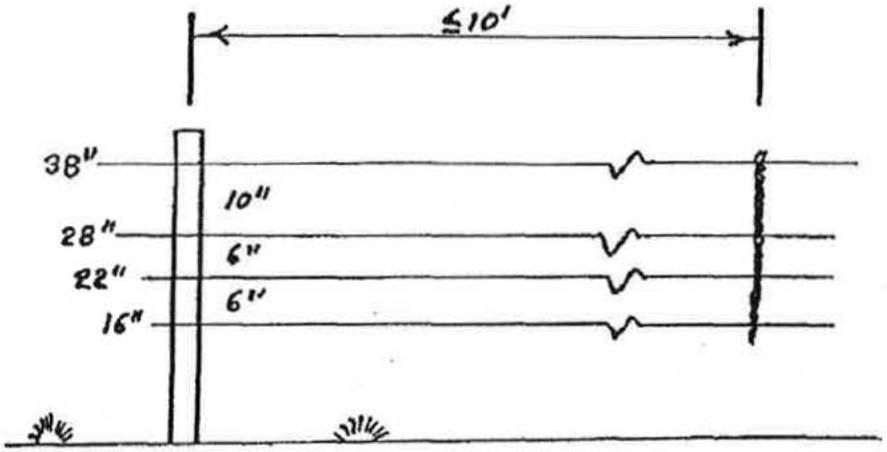
Interior 3-Strand Fence

This is the preferred 3-strand fence for big game habitats in Central Oregon. Top and bottom wires are best if smooth, rather than barbed. This is more critical for the top wire. Fence posts and stays should be no more than 10 feet apart, to keep a taut fence. Wires should be at 16, 26, and 38 inches above the ground to accommodate crawling, penetrating, and jumping animals. Juniper fence posts are used.



Exterior 4-Strand Fence

This is a 4-strand fence with nearly-equal wire spacing. Top and bottom wires are best if smooth, rather that barbed. This is more critical for the top wire. Fence posts and stays should be no more than 10 feet apart, to keep a taut fence. Wires should be at 16, 22, 28, and 38 inches above ground to accommodate crawling and jumping animals. Steel tee-posts are used.



Appendix C: Wilderness fire management guidelines

The following guidelines would apply to Alternatives 2-4:

1. The full range of appropriate response would be considered for managing fires in the Oregon Badlands Wilderness.
2. A resource/wilderness advisor would be assigned to every fire more than 1/10 acre in size.
3. All response vehicles would carry maps of wilderness boundaries.
4. All fire suppression activities would use Minimum Impact Suppression Techniques (MIST) at all times.
5. A " Leave No Trace" policy would be used in the wilderness. All evidence of human activity must be removed to the maximum extent possible.
6. Use of existing roads or ways within the wilderness or cross-country vehicle travel is prohibited unless specifically authorized by the BLM District Manager or to protect from imminent harm to life or property.
7. Human caused fires will be suppressed. Wildfires would be monitored; suppression activities would occur only if it is determined there could be a threat to human health or safety.
8. Mechanized equipment use for fire line construction within the wilderness boundary would be restricted, and requires prior authorization from the District Manager.
9. The guiding principle for fire management activities would be to preserve the area's natural condition, consistent with principles of safe fire management.
10. Hand tools are preferred, mechanized equipment requires line officer approval.
11. Locate fire camps outside of the Oregon Badlands Wilderness.
12. Use of retardant must be approved by the District Manager; if retardant is not approved, water may be dropped from retardant aircraft as ordered by the Incident Commander without additional authorization.
13. Mechanized equipment, including but not limited to chainsaws, pumps, and vehicles are not allowed in the wilderness. However, in emergency situations which present a threat to health and safety of people using the wilderness or property adjacent to the wilderness, or jeopardize wilderness values, mechanized equipment (including bulldozers) may be authorized. The District Manager (or Field Area Manager, if delegated), may, on a case by case basis, approve such action in writing. These actions should be considered if fire must be controlled to prevent loss of human life or property, and to prevent spread of fire outside of the wilderness where life, resources or property may be threatened. Any impacts from fire related wilderness travel or use of motorized equipment must be obliterated and rehabilitated in a manner that provides rapid wilderness resource recovery. The resource/wilderness advisor should be directly involved with decisions to request use of mechanized equipment.
14. Sling loading materials into or out of the wilderness must be approved by the District Manager.
15. Helibases and helispots would be located outside of wilderness boundaries. When not feasible, the District Manager could approve sites within the wilderness that would require minimal vegetative clearing.

Finding of No Significant Impact

Oregon Badlands Wilderness Management Plan
Environmental Assessment
NEPA Register Number DOI-BLM-OR-P060-2011-0030-EA
US Department of the Interior
Bureau of Land Management, Prineville District
3050 NE Third Street, Prineville, Oregon 97754

Introduction

The Bureau of Land Management (BLM) has completed an Environmental Assessment (EA), No. DOI-BLM-OR- P060-2011-0030-EA that analyzes the effects of three action alternatives that protect wilderness values, while also managing visitor use on over 46 miles of designated trails, improve trailhead access and parking, and connect isolated designated trails.

Other proposed actions analyzed in this EA include: trailhead creation, removal, hardening and/or expansion, boundary fence construction and wildlife guzzler re-location.

The EA is incorporated by reference in this Finding of No Significant Impact (FONSI). Both are available at the BLM office listed above, and on the internet at
http://www.blm.gov/or/districts/prineville/plans/index.php

The Council on Environmental Quality (CEQ) regulations state that the significance of impacts must be determined in terms of both context and intensity (40 CFR 1508.27).

Context

The Oregon Badlands Wilderness (OBW) was designated by Congress as Wilderness in 2009. BLM is required by the Wilderness Act of 1964 to protect Wilderness values. This area has retained its natural character and offers outstanding opportunities for Solitude and Primitive, Unconfined Recreation. The OBW also contains geological, cultural and botanical, and values.

The OBW is a popular area for hiking, horseback riding, running, big game hunting and exploration. The area receives local and regional destination recreational use. Visitor use occurs year-round, but is more popular during the winter. Viewing the geologic features is an important part of the quality recreational experience. Almost all use is day-use, as there is no water in this area.

No commercial or organized group BLM Special Recreation Permits (SRP's) have been issued in the OBW at this time.

Currently there are seven access points with limited parking space, and no trailhead access at desirable locations, which restricts access, particularly visitors with stock animals.

Intensity

I have considered the potential intensity and severity of the impacts anticipated from implementation of a Decision on this EA relative to each of the ten areas suggested for consideration by the CEQ. With regard to each:

1. Would any of the alternatives have significant beneficial or adverse impacts (40 CFR 1508.27(b) (I)? No.

Rationale: None of the effects are potentially significant. Benefits of the proposed action (Alternative 2 effects analysis, Chapter 4 of EA) include increased recreation trail use opportunities (trail connections to isolated trail segments; routes to trails, upgrades to six trailheads), 3.1 miles of fence re-location outside the OBW, and increased natural character, resulting from up to 62 miles of old vehicle routes restored back to a natural appearing condition.

2. Would any of the alternatives have significant adverse impacts on public health and safety (40 CFR 1508.27(b)(2)? No.

Rationale: None of the alternatives would have significant adverse impacts on public health and safety. A summary of Alternatives is presented in Table 1 in the EA.

3. Would any of the alternatives have significant adverse impacts on unique geographic characteristics (cultural or historic resources, park lands, prime and unique farmlands, wetlands, wild and scenic rivers, designated wilderness or wilderness study areas, or ecologically areas (ACECs, RNAs, significant caves) (40 CFR 1508.27(b)(3)? No.

Rationale: The OBW is a designated Wilderness Area; alternatives have been designed to protect and enhance wilderness values. Cultural and historic characteristics within the OBW would not be affected by the Proposed Action alternative (see item 8).

4. Would any of the alternatives have highly controversial effects (40 CFR 1508.27(b) (4)? No.

Rationale: No proposed actions are controversial. Restoring old vehicle routes used by visitors is expected to reduce the total miles of old vehicle routes available for visitors to use in Alternatives 2 and 4, which proposes to rehabilitate old vehicle routes and not retain them for visitor use. Some visitors may prefer that these routes remain open for future use, while other visitors prefer closure and rehabilitation.

5. Would any of the alternatives have highly uncertain effects or involve unique or unknown risks (40 CFR 1508.27(b)(5)? No.

Rationale: There are no uncertain effects or unique or unknown risks. All effects are described in Chapter 4 of the EA.

6. Would any of the alternatives establish a precedent for future actions with significant impacts (40 CFR 1508.27(b)(6)? No.

Rationale: The proposed actions, including connecting existing designated trails together, increasing the size of trailheads, providing trailhead parking, restoring up to 62 miles of old primitive vehicle routes, removing and re-locating 3.1 miles of fence outside of the OBW, and other actions identified in the alternatives would not set a precedent for future actions with significant impacts.

7. Are any of the alternatives related to other actions with potentially significant cumulative impacts (40 CFR 1508.27(b)(7)? No.

Rationale: There are no potentially significant cumulative impacts, as described in Chapter 4 of the EA.

8. Would any of the alternatives have significant adverse impacts on scientific, cultural, or historic resources, including those listed or eligible for listing on the National Register of Historic Resources (40 CFR 1508.27(b)(8)? No.

Rationale: There are cultural and historic resources in the project area, but the proposed action and alternatives include design features to prevent effects on these resources. There are no scientific resources; therefore, there are no effects on them.

9. Would any of the alternatives have significant adverse impacts on threatened or endangered species or their critical habitat (40 CFR l508.27(b)(9)? No.

Rationale: The proposed action and alternatives do not contain any actions that would have an effect on threatened or endangered species because the project design features would be designed to void potential impacts to T&E species.

10. Would any of the alternatives have effects that threaten to violate Federal, State, or local law or requirements imposed for the protection of the environment (40 CFR l508.27 (b)(lo) No.

Rationale: None of the alternatives would have effects that threaten to violate any laws.

Finding

On the basis of the information contained in the EA, the consideration of intensity factors described above, all other information available to me, it is my determination that: (1) implementation of the alternatives would not have significant environmental impacts beyond those already addressed in the Upper Deschutes Resource Management Plan EIS, (2) the alternatives are in conformance with the Upper Deschutes Resource Management Plan; and (3) none of the alternatives would constitute a major federal action having a significant effect on the human environment. Therefore, an EIS or a supplement to the existing EIS is not necessary and will not be prepared.

An unsigned FONSI is issued during the EA comment period. The FONSI will be signed after the EA comment period and issued with the Decision Record.

_____

Molly M. Brown
Field Manager, Deschutes Resource Area