BASQUE HILLS ALLOTMENT MANAGEMENT PLAN

ENVIRONMENTAL ASSESSMENT OR-06-026-030

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

May 2007

TABLE OF CONTENTS

BASQUE HILLS ALLOTMENT MANAGEMENT PLAN
ENVIRONMENTAL ASSESSMENT
OR-06-026-030

CHAPTER I: INTRODUCTION

A. Background

Basque Hills Allotment (#6042) is located 126 miles south of Burns, west of Pueblo Mountain and east of Beaty Butte (Attachment A) within the Andrews Resource Area. It is a one-pasture allotment consisting of 39,449 acres (Attachment B). Basque Hills Allotment was split off Pueblo Lone Mountain Allotment (#6020) in 1996, which was a large community allotment encompassing 270,000 acres to the east of Basque Hills. In 2005, Basque Hills Allotment grazing preference was transferred. There are 1,047 Animal Unit Months (AUMs) of active grazing preference within the allotment. The former term permit was from April 1 to June 30 every year. The current grazing authorization would include a 2 to 3 week grazing period within the February 15 to May 1 season and a 2 to 3 week period within the August 1 to November 15 season, every other year. The new grazing system and development of livestock water well are proposed as part of the 2007 Basque Hills Allotment Management Plan (AMP). The allotment is meeting Standards and Guides (S&Gs) for livestock grazing except in one area that has frequently been burned by wildfire (three times in 12 years). This area is dominated by invasive weeds such as cheatgrass and Russian thistle that outcompetes native vegetation when it is recovering from wildfire. Nonconformance in this area is not due to livestock, but rather the frequency of fire coupled with Wilderness Study Area (WSA) policy that has restricted the most effective fire rehabilitation activities, including seeding of nonnative species that could outcompete noxious weeds to stabilize the site. Basque Hills is a Management Category "I" (Improve) allotment. The "Improve" category identifies allotments with management and resource concerns. These allotments receive priority for implementation, effectiveness, and performance monitoring.

B. Purpose and Need for the Action

This Environmental Assessment (EA) addresses the impacts of changing grazing season use to provide periodic growing season rest for native rangeland vegetation during the critical growth period. Use of this allotment would coincide with permitted use of the Beaty Butte Allotment on Lakeview District. Beaty Butte Allotment use is a north-south rotation; on even numbered years livestock use the north end, and on odd numbered years cattle use the south end of the allotment. Livestock would spend 2 to 3 weeks trailing through Basque Hills Allotment in spring and in fall (depending on water availability) going to and from Beaty Butte Allotment. This cooperative use with Lakeview District would allow for critical growing season rest of Basque Hills Allotment every year, and grazing during the early and deferred periods every other year (Attachment C, grazing schematic).

The permit holder has also requested a well be constructed in order to provide livestock water. A well was identified as a potential range improvement project in the Andrews Management Unit Resource Management Plan (AMU RMP) Appendix J-42.

The goal of the project is to maintain the ecological condition of the upland vegetation community within the Basque Hills Allotment by changing the grazing season of use RMP Appendix J-42) in a manner consistent with AMU RMP management direction for Social and Economic Values, Vegetation, and Grazing Management, including:

1. Resource Use - Provide for sustainable livestock grazing that meets allotment management (natural resource) objectives and the S&Gs (Social and Economic Values, RMP p. 45).
2. Resource Enhancement – Maintain, restore or improve the integrity of desirable vegetation communities including perennial, native, and desirable introduced plant species. Provide for their continued existence and normal function in nutrient, water, and energy cycles (Vegetation, RMP p. 30).
3. Resource Use - Implement administrative solutions and rangeland projects to provide proper management for livestock grazing while meeting resource objectives and requirements for S&Gs (Grazing Management, RMP pp. 54-56).

Specifically, the objective is to increase diversity and vigor of upland plant species within the Basque Hills Allotment. Post-season utilization monitoring, photo points, and long-term trend monitoring should be able to recognize the following potential indicators (BLM Technical Reference 1734-6 2000, pp. 7-38):

1. The capacity of the site to limit redistribution and loss of soil resources (including nutrients and organic matter) by wind and water.

C. Decision Factors

1. Does the alternative achieve RMP management direction for Social and Economic, Vegetation and Grazing Management in a balanced manner without placing greater importance on one over the other three?
2. Is the alternative likely to achieve Standards for Rangeland Health and Guidelines (S&Gs) for Livestock Management for Oregon and Washington in accordance with 43 CFR 4180.2(b).
3. Does the alternative have an unreasonable management cost to the livestock grazing permit holder.
4. When considering grazing use, does the alternative provide for sustainable livestock grazing in areas allocated for livestock grazing in RMPs where such use results in achievement of rangeland health standards and guidelines.

D. Conformance with Land Use Plans, Laws, Regulations, and Policy

This EA/AMP is in conformance with applicable Tribal, State, and County Land Use Plans. The AMP is in conformance with the AMU RMP/Record of Decision (ROD), 2005 (also see Appendix J, p. J-42).

E. Issues Considered but not Analyzed Further

An inventory evaluating the presence of wilderness characteristics on Bureau of Land Management (BLM) administered lands within and in the vicinity of the project area was completed. The final intensive inventory decision found wilderness characteristics were not present given the units contained less than 5,000 acres of roadless public lands (Wilderness Inventory – Oregon and Washington, Final Intensive Inventory Decisions, November 1980). In April of 2007, BLM staff reviewed current conditions for the two parcels in the project area not within a WSA. Both parcels contain less than 5,000 acres of roadless lands, therefore, wilderness characteristics have been determined not to be present and this issue will not be analyzed further in this EA.

CHAPTER II: ALTERNATIVES INCLUDING THE PROPOSED ACTION

A. No Action Alternative

A new AMP would not be implemented. This alternative would continue the growing season use that has generally been followed since 1985. A well would not be drilled to provide off season water for livestock and wildlife. Use occurs April 1 to June 30. Permitted use would remain at 1,047 AUMs of active preference.

B. Proposed Action Alternative

The proposed action would implement partial removal of livestock changing the current season of use from April 1 to June 30 (every year) to February 15 to May 1 and August 1 to November 15 (every other year), with use being 2 to 3 weeks in early spring and 2 to 3 weeks in late fall, depending on water availability. A well would be drilled within 30 feet of centerline of an existing road (the Civilian Conservation Corp. road) in the northwest corner of the allotment to provide off season water for livestock, wildlife, and occasional wild horses. A small, portable covered generator would be used to pump water from the well through 1-mile of buried pipeline to a trough (with bird ramp). These improvements are necessary to make the grazing rotation work allowing season of use change to benefit the allotment. The 2-foot wide disturbance area from installation of the well and pipeline would be seeded with native species to mitigate soil exposure and loss of vegetation.

Basque Hills Allotment Management Plan

Objective: Maintain an upward trend in Wyoming big sagebrush/bluebunch wheatgrass range sites over the next 10 years. Trend would be measured by relative frequency of occurrence of forbs, shrub, and perennial grass species as compared with total ground cover (RMP).

Address the following resource concerns:

* Noxious weed introduction and spread
* Special Status Species: Bighorn sheep and sage-grouse
* WSAs: Basque Hills WSA and Rincon WSA

Achieve the following standards:

* Watershed Function-Uplands
* Ecological Processes and Native Threatened and Endangered and Locally Important Species

Standards not present:

* Watershed Function-Riparian
* Water Quality

Management actions needed to address the objective and conform to the guidelines:

Grazing System: A grazing system that allows for periodic rest for rangeland vegetation during critical growth periods would be implemented. In year one, grazing would generally occur from February 15 to May 1, then August 1 to November 15. Then a 1-year rest would occur.

Authorized Flexibility: Operator may adjust permitted use dates by 2 weeks either way dependant upon weather, plant phenology, or general ranch operation needs. Active permitted use for the Basque Hills Allotment would remain unchanged at 1,047 AUMs.

Range Improvements: In addition to implementing a grazing system that provides periodic growing season rest to native upland vegetation, installing a new well in the northwest corner of the allotment would increase cattle distribution and provide water for occasional wild horses and wildlife, as well as for livestock.

Billing: After the fact, actual use billing is authorized.

Monitoring needs and schedule:

Utilization data would be collected annually. Utilization studies need to be completed after each grazing use in order to determine whether or not management actions are being met. A set target utilization level of 50 percent post growing season use is for key forage species (in this area this includes bluebunch wheatgrass, and needlegrass species including Thurber's needlegrass and needleandthread.)

Collect Pace 180° data and photos every 5 years. Trend data must be collected when a site is established and again on 5-year intervals because the allotment is in an "Improve" management category.

Actual use data would also be collected to monitor livestock numbers, season and to correlate with utilization monitoring. Actual use data is required for after season billing.

C. Alternatives Considered but not Analyzed Further

Complete removal of livestock from the allotment would allow for growing season rest that native plants require; however, it would not maintain the economic viability of the permittee's operation, and would not be in conformance with the AMU RMP/ROD which allows for sustainable livestock grazing in Basque Hills Allotment as long as rangeland health standards are met.

CHAPTER III: DESCRIPTION OF THE AFFECTED ENVIRONMENT

A. Critical Elements

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

Areas of Critical Environmental Concern, Air Quality, American Indian Traditional Practices, Prime or Unique Farmlands, Flood Plains, Hazardous Materials, Paleontology, Special Status Species – Flora, Water Quality, Wetland and Riparian Zones, Wild and Scenic Rivers, and Wilderness.

Executive Order 12898 requires Federal agencies to adopt strategies to address Environmental Justice concerns within the context of agency operations. After review of the proposal the BLM has determined implementation of the proposal would not result in a disproportionately adverse effect on minority or economically disadvantaged populations as such populations do not occur in or near the project area. Environmental Justice will not be discussed further in this document.

The following critical elements are known to be present within the Basque Hills Allotment.

1. Special Status Species – Fauna

Bighorn sheep habitat occurs within this allotment on the eastern edge along the South Catlow Rim south to the Lone Mountain Area. Bighorn sheep utilize the steeper slopes but may come down to the flatter areas during winter and spring months.

Greater sage-grouse or its habitat is known to exist within the allotment. There are no known leks in this allotment although sage-grouse may nest and early brood rear or winter in some areas in the allotment. Late brood-rearing habitat, moist areas such as wet meadows with sagebrush nearby, does not occur in this allotment.

There are no known occurrences of pygmy rabbits in the allotment. Verts and Carraway (1998) have historical pygmy rabbit occurrences listed in the book, "Land Mammals of Oregon" which shows none in the Basque Hills Allotment. More recently, areas thought to be the most likely to have pygmy rabbits based on vegetation type and soil type in the Burns District were surveyed in 2001 (unpublished report). No pygmy rabbits were found in the areas surveyed; this included several areas in the Basque Hills Allotment.

2. Migratory Birds

Migratory birds common to this allotment include brown-headed cowbird, Brewer's sparrow, black-throated sparrow, gray flycatcher, horned lark, loggerhead shrike, mourning dove, sage sparrow, sage thrasher, and western meadowlark. These species probably nest in this area although more species migrate through this area during the spring and early fall months.

South Catlow Rim has been identified as an area with high concentrations of nesting raptors, most of which are migratory.

3. Noxious Weeds

The Burns District database currently lists eight noxious weed sites totaling 0.37-acre in the Basque Hills Allotment. There have been three different noxious weed species documented in the allotment: one diffuse knapweed site (0.0001-acre), six Scotch thistle sites (.293-acre), and one perennial pepperweed site (.08-acre). Systematic weed inventory of this allotment was conducted on the road network in 2000. All documented weed sites occur along roads (Burns Weed Plan). For the relatively high number of road miles running through this allotment there are relatively few infestations of noxious weeds.

4. Cultural Resources

Twenty-six acres (0.06 percent) of the Basque Hills Allotment have been inventoried for cultural resources and paleontological localities. No archaeological sites or paleontological localities have been found in these miniscule inventory areas. The potential for finding archaeological sites of significance is low to moderate because the allotment is upland centered and most sites occur near lakes and other water sources. Unfortunately, it is nearly impossible to evaluate the affected environment when so little is known about the area in question.

No American Indian Traditional Practice areas are known to occur within this allotment.

5. Wilderness Study Areas

Ninety-seven percent of the Basque Hills Allotment contains BLM-administered lands within portions of the Basque Hills and Rincon WSAs.

Wilderness characteristics within WSAs include naturalness, outstanding opportunities for solitude or primitive and unconfined recreation, and the presence of special features. The following definitions are from BLM Manual Handbook H-8550-1 – Interim Management Policy for Lands under Wilderness Review.

Naturalness - refers to an area which "generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable." *Solitude* - is defined as "the state of being alone or remote from habitations; isolation. A lonely, unfrequented, or secluded place." *Primitive and Unconfined Recreation* - is defined as nonmotorized and undeveloped types of outdoor recreation activities. *Supplemental Values* - are listed in the Wilderness Act as "ecological, geological, or other features of scientific, educational, scenic, or historical value."

Wilderness characteristics of the Basque Hills and Rincon WSAs are summarized from Volume I of the Oregon BLM Wilderness Study Report (1991).

Basque Hills WSA

Basque Hills WSA is 140,308 acres and 26,404 acres (37 percent) of the WSA falls within the Basque Hills Allotment. The WSA extends into the Lakeview District and with completion of land exchanges mandated by the Steens Mountain Cooperative Management and Protection Act of 2000, Public Law 106-399, 3,743 acres of the WSA became private land and 3,641 acres of private land became WSA.

Naturalness: The Basque Hills WSA is in a relatively natural condition. The study area is a high desert area with some foothills and rimrock. Scattered throughout the area are dry lakebeds. None of the unnatural features within the study area are substantially noticeable and most of the features can be seen from only a very small portion of the study area. The portion of the WSA which falls within the Basque Hills Allotment contains two waterholes, three wells, and five wildlife guzzlers.

Solitude: Opportunities for solitude in Basque Hills WSA are outstanding and are enhanced by the area's large size and the topographic screening provided by rolling hills. Low growing sagebrush is present, but does not provide vegetative screening.

Primitive and Unconfined Recreation**:** The area does not provide any outstanding opportunities for primitive forms of recreation. Opportunities for day hiking, backpacking, hunting, and sightseeing are only of moderate or low quality due to the lack of topographic features, vegetative diversity, and availability of water.

Special Features: Three special features add to the value of Basque Hills WSA as wilderness. A newly discovered plant species, *Eriogonum crosbyae*, has been located in the northwest portion of the WSA (outside the Basque Hills Allotment). Golden eagles, red-tailed hawks, kestrels, prairie falcons, and great horned owls nest along the rims in the eastern half of the WSA. The kit fox, an Oregon Threatened species, may range into the WSA.

Rincon Wilderness Study Area

Rincon WSA is 104,980 acres and 9,870 acres (9 percent) of the WSA falls within the Basque Hills Allotment.

Naturalness: Rincon WSA appears to be in a relatively natural condition. The WSA contains a variety of distinct natural features, including portions of Catlow Rim, Lone Mountain, and Oregon End Table. The WSA provides habitat for a wide variety of bird, mammal, and reptile species using big sagebrush, low sagebrush, and antelope bitterbrush habitats, cliffs, and rugged canyons. Raptors commonly nest along Catlow Rim. The portion of the WSA which falls within the Basque Hills Allotment contains four unnatural features; two waterholes and two wildlife guzzlers.

Solitude: Opportunities for solitude in Rincon WSA are outstanding. These opportunities are enhanced by the area's size and diverse topography, particularly rolling hills, rugged rock outcroppings, and rims and elevation differences associated with Catlow Rim and Oregon End Table. The only vegetative screening is some western juniper on the south side of Lone Mountain. Vegetative screening does not enhance opportunities for solitude.

Primitive and Unconfined Recreation: Rincon WSA provides outstanding opportunities for primitive recreation, including day hiking, camping, backpacking, horseback riding, hunting, observing wildlife, sightseeing, and photography. The primary attractions for day hiking, backpacking, or horseback riding are Catlow Rim, Lone Mountain, and Oregon End Table. There are abundant level areas suitable for camping.

Special Features: Wildlife, geologic, cultural, and vegetative features add to the value of Rincon WSA as wilderness. Wildlife is discussed above in the Special Status Species – Fauna section and below in the Wildlife section. The WSA's geology is a special feature because Catlow Rim, a prominent fault scarp, forms the western edge of the Steens Mountain fault block. The rim, which also serves as the eastern boundary of Catlow Valley, is characterized by Pleistocene shoreline features, including gravel bars, spits, wave-built terraces, and wave-cut benches. Noteworthy cultural resources include a well-known cave and an area with rock art. There is one plant species of special interest, naked-stemmed phacelia (*Phacelia gymnoclada*), which is found only in the extreme southeastern corner of the WSA and not in the Basque Hills Allotment.

B. Noncritical Elements

The following noncritical elements are known to be present and may be affected by the proposed action.

1. Grazing Management

Since 1985, livestock grazing has occurred from approximately April 1 to June 30 (1,147 AUMs). This continuous growing season use does not allow for periodic rest during the critical growth period for rangeland vegetation. This allotment is in an I (Improve) management category due to invasive weeds such as cheatgrass and Russian thistle that has outcompeted native vegetation removed from wildfires.

2. Vegetation

The vegetative community type present in the majority of this allotment is bluebunch wheatgrass/Wyoming big sagebrush with some low elevation areas having remnant needleandthread communities.

3. Wildlife

This allotment contains some mule deer winter range, as well as yearlong habitat for pronghorn antelope and provides habitat for a number of small mammals including badgers, bobcats, coyotes, black-tailed jackrabbits, cottontails, bats, deer mice, and wood rats. Some reptiles and amphibians such as toads and lizards are present in this area.

Coyote Rim in the northern part of Basque Hills WSA is heavily used by nesting raptors, including golden eagles, great horned owls, and American kestrels. Chukars are found along rimrock areas. Bushy-tailed wood rat, canyon mouse, and long-eared myotis (bat) may be found using cliff habitat near Coyote Rim and other rough topography. Districtwide inventories are being completed on which water troughs need bird escape ramps repaired/replaced.

Forage allocations outlined in the AMU RMP are 5 AUMs for deer and 2 AUMs for antelope.

4. Recreation

Primary recreation activities in the Basque Hills Allotment include hunting (pronghorn antelope, bighorn sheep, and chukar), camping, sightseeing, and photography. Most of this use is concentrated along Funnel Canyon Road. The area receives the most use during the fall hunting seasons. Roads are generally rough and rocky. Snow and mud limit use in winter and spring.

Basque Hills Allotment is within the Oregon Department of Fish and Wildlife's Beaty Butte Unit. Pronghorn antelope hunting seasons are generally from mid-August to late August. Bighorn sheep hunting seasons usually occur from mid-August to mid-September. Mule deer hunting seasons primarily last from late August through mid-October.

All public lands in the Basque Hills Allotment are designated as Limited to Designated roads and ways for motorized and mechanized vehicle travel.

5. Social and Economic Values

One of the highest individual agricultural sales revenues in Lake and Harney Counties is derived from cattle ranching, which is inextricably linked to the commodity value of public rangelands. Ranching revenues contribute greatly to the local economy, and tax dollars from ranching communities make up a large portion of County tax dollars.

6. Biological Soil Crust

During recent S&G field observations, moss components were noted as being widely distributed and very visible indicating an intact biological soil crust community for the elevational range of the Basque Hills Allotment.

Preliminary field observations in 2002 and 2003 indicate some of the most developed biological soil crust communities in the Andrews Resource Area occur in these highly rocky, unproductive systems. North and east slopes generally favor crustal development, providing moisture and temperature requirements for optimal physiological activity.

Current management practices such as proper stocking rates for livestock, rotation of grazing, improved designs of roads, rehabilitation of severely disturbed areas, restriction of motorized and mechanized vehicles to roads and ways, and control of concentrated recreational activities help to reduce loss of biological soil crusts.

7. Visual Resources

Most of the allotment falls within Visual Resource Management Class I category. Class I management objectives provide for the preservation of the existing character of the landscape. This class provides for natural ecological changes but does not preclude very limited management activity. The rest of the allotment falls within a Class IV category. Class IV management objectives provide for management activities that require major modification of the landscape. The level of change to the characteristic landscape can be high.

CHAPTER IV: ENVIRONMENTAL CONSEQUENCES

A. Critical Elements

Critical elements known to be present and may be affected by the proposed action.

1. Special Status Species – Fauna

a. No Action Alternative

Under the current grazing system key forbs and perennial grass species, preferred by sage-grouse, are not receiving critical growing season rest. The direction of trend is static for the area, but without periodic rest during the critical growing season plants may begin to lose vigor and become less productive. The habitat needs for sage-grouse may then be compromised.

Livestock generally do not interact with bighorn sheep, nor do they tend to inhabit the same places, therefore, having little effect.

b. Proposed Action Alternative

The proposed graze/defer system would allow for periodic rest from grazing of key forbs and perennial grass species preferred by sage-grouse allowing for improved vigor, reproduction, and productivity of these plant species. Although during years when the allotment is grazed early, key sage-grouse forbs could be used by livestock during the time when prebreeding and prenesting nutritional needs for female sage-grouse are high. This system allows for livestock to be present every other year during the breeding, nesting, and early brood-rearing seasons, causing fewer disturbances to sage-grouse during these critical periods.

During the defer grazing period, sage-grouse are probably not present since there are few wet meadows in this allotment. Livestock utilization levels would remain at or below the target level of 50 percent which would leave residual vegetation for forage and cover.

Bighorn sheep should not be affected by this change in season of use. There could be some increased competition for green forage every other year during the early grazing season when bighorn sheep would more likely be using the lower elevations at the base of South Catlow Rim.

The proposed well in the northwest portion of the allotment may cause some disturbance to sage-grouse if they are present during the drilling of the well, placement of 1-mile of pipeline and trough. The 2-foot wide disturbance area from installation of the well and pipeline would be seeded with native species to mitigate soil exposure and loss of vegetation.

Water would be left in the trough at the end of the grazing season to provide water for Special Status Species and other wildlife. Escape ramps for small wildlife that might get into the trough would be installed.

The proposed action would improve and/or maintain the good range condition present in the allotment for the foreseeable future, thereby improving conditions for sage-grouse and other wildlife species as well.

During the years that the generator runs to fill the troughs, there would be a slight disturbance to sage-grouse wanting to water, however, after the troughs are filled and the generator shuts off, birds will immediately return for water as needed.

The cumulative effects of the well, pipeline, trough, and use of the generator when running to fill troughs, should be minimal in sage-grouse habitat in the allotment since use would be every other year.

2. Migratory Birds

a. No Action Alternative

Migratory birds could be affected by the early season grazing which extends through most of the breeding season until fledging. Livestock presence could disturb nesting birds although it is not known if the disturbance would cause nest abandonment.

The current vegetative trend for the allotment is static and may continue, but the current grazing system does not allow for periodic rest during the critical growing season. Plants may begin to lose vigor and become less productive under the existing grazing system. The present system allows grazing during the nesting through fledging every year which may affect productivity of the birds.

b. Proposed Action Alternative

During the early grazing period, migratory birds would be present although many would be migrating through the allotment. Those birds nesting in the area would still experience livestock disturbance during this period but the length of disturbance would be shorter as the livestock would be removed earlier and the disturbance would occur only every other year. The birds would be through nesting and fledging by the time the defer grazing period started and most birds would be migrating south starting in September.

The proposed graze/defer system with rest every other year is designed to maintain or improve vegetation conditions. This would also provide rest during the breeding and nesting to fledging season every other year which could improve productivity through less disturbance by livestock and improved forage resources for migratory birds.

The proposed well in the northwest portion of the allotment may cause some disturbance to migratory birds, if they are present during the drilling of the well, placement of 1-mile of pipeline and trough, but this is not likely to affect migratory birds. To help expedite any loss of vegetation, a 2-foot wide disturbance area from installation of the well, trough, and pipeline would be seeded with native species to mitigate soil exposure. Water would be left in the trough at the end of the grazing season to provide water for migratory birds and other wildlife. Escape ramps for small wildlife would be installed into the trough.

During the years that the generator runs to fill the troughs, there would be a slight disturbance to birds wanting to water, however, after the troughs are filled and the generator shuts off, birds will immediately return for water as needed. The cumulative effects of the well, pipeline, and trough should be negligible to migratory birds and their habitat in the allotment since use would be every other year.

3. Noxious Weeds

a. No Action Alternative

The current system would increase potential sites for noxious weed invasion by continuing to deteriorate the health of the rangeland plant communities.

b. Proposed Action Alternative

This system which provides periods of rest to rangeland vegetation allowing it to remain vigorous, productive, and competitive would also help prevent noxious weed introduction.

4. Cultural Resources

a. No Action Alternative

If cultural resource sites are located within livestock congregation areas, these sites have likely been affected during the last 100+ years of grazing. The possible effects are soil churning up to 12 inches deep, lateral movement of cultural artifacts and artifact breakage.

Retaining the season of use followed since 1985 would not further affect cultural resources within the allotment to any measurable degree.

b. Proposed Action Alternative

If cultural resource sites are located within livestock congregation areas, these sites have likely been affected during the last 100+ years of grazing. The effects are soil churning up to 12 inches deep, lateral movement of cultural artifacts and artifact breakage.

The proposed change of season is not likely to further affect cultural resources within the allotment to any discernable degree. Because much of the allotment soils are loam to loamy sand, early grazing would not result in livestock trampling affects to cultural resources as would be expected if soils were finer in grain size.

Cultural clearances will be conducted prior to construction of well, pipeline, and trough.

5. Wilderness Study Areas

a. No Action Alternative

No modifications to the grazing system would occur and no changes to naturalness, solitude, primitive and unconfined recreation in the WSAs are expected. No changes to cultural or geologic special features are expected. Effects to wildlife and vegetation special features are addressed in their respective sections of this chapter.

b. Proposed Action Alternative

Naturalness: Overall, changing the grazing system would enhance naturalness in the WSAs. Under the proposed action, livestock would only be observable every other year. Native plant vigor would increase, plant diversity would be maintained, and areas showing indications of concentrated livestock use would likely improve. Changing the grazing system would require providing a well and associated facilities within Basque Hills WSA.

There would be some surface disturbance required to drill the well, bury pipe (up to 1-mile) and install a trough. All of the work would occur along a way to help minimize ground disturbance. Disturbed areas would be seeded with native species to promote the return of vegetation. The trough would be installed in a manner (painted, buried or located behind vegetation) that would help it blend into the surrounding area. Only the well pipe (12 to 36 inches in aboveground height) and the trough would be observable aboveground year-round. Both of these aboveground features could be easily removed if necessary. There would be some loss of vegetation around the trough due to livestock use. Locating the well in proximity of known areas of prolonged use (e.g., campsites) by visitors would be avoided if at all possible.

During years where grazing occurs, a generator would temporarily (approximately 3 weeks during each spring and fall grazing period) be brought in on a small enclosed trailer the size of a standard truck bed with a canopy. Given that the well would be located along a way, the visual effects of visitors encountering the trailer would not be unlike those which already occur with other vehicles.

While installing the well would result in a very limited and localized reduction in naturalness, overall naturalness would be enhanced in the WSAs from the change in grazing system.

Solitude: Though provided for as a grandfathered use in WSAs, the presence of livestock for some visitors reduces their perceived sense of solitude. Under the proposed action, livestock presence would be reduced from 12 weeks each year to 6 weeks every other year.

There would be some temporary and short-term (days) loss of solitude during the installation of the well if any encounters with visitors actually occurred. Disturbance to solitude associated with the noise from the portable generator would only occur when livestock are being grazed and would be muffled by putting it in an enclosed trailer and visitor encounters would be limited to minutes as they pass by. Locating the well in proximity of known areas of prolonged use (e.g., campsites) by visitors would be avoided if at all possible.

Primitive and Unconfined Recreation: No changes to the types of primitive and unconfined recreational opportunities provided in the WSAs are expected under the proposed action. For some visitors, their experience may be enhanced by the lack of livestock presence during years when livestock grazing does not occur. Locating the well away from any known areas of prolonged visitor use would minimize any potential effects on recreational activities.

Special Features: No changes to cultural or geologic special features are expected. Changes to wildlife and vegetation are addressed in their respective sections of this chapter.

There are no other known reasonably foreseeable actions that would contribute to effects to wilderness characteristics in either of the WSAs. Overall, wilderness characteristics would be enhanced by the change in grazing system. Changes associated with installation of the well would be localized and any aboveground features are designed as temporary and could be easily removed if required as part of the designation of the area as wilderness.

B. Noncritical Elements

Noncritical elements known to be present and may be affected by the proposed action.

1. Grazing Management

a. No Action Alternative

Under the no action alternative livestock would continue to graze annually during the active growth period which includes critical growth periods for all herbaceous rangeland vegetation.

The current condition of the rangeland in this allotment is good, but could be compromised with the current grazing management (no action alternative) that does not allow for any critical growing season rest. This may in effect cause a decline in the overall range condition and negatively effect four of the Standards for Rangeland Health; Watershed Function – Uplands; Ecological Processes; Water Quality (through runoff); and/or Native, Special Status, and Locally Important Species.

b. Proposed Action Alternative

This alternative would allow for periodic rest during the critical growth periods for herbaceous rangeland vegetation by using an early/defer treatment.

Grazing management that allows periodic rest during the critical growth season for rangeland vegetation (proposed action alternative) would maintain or improve the resources associated with meeting S&Gs in the foreseeable future.

2. Vegetation

a. No Action Alternative

Under the no action alternative livestock would continue to graze annually during the active growth period which includes critical growth periods for herbaceous rangeland vegetation. Continuous growing season use would eventually reduce the vigor of certain species and may also cause a decrease in desirable species that make up the current diverse good condition plant community. If these species are decreased, then less desirable species and/or noxious weeds may invade resulting in poor condition rangelands.

If the overall health of vegetation communities in this allotment is compromised due to continuous seasonal grazing during critical growth periods for key forage species, the overall range condition would decline. Poor condition usually opens up areas for noxious weed introductions, decreases availability of wildlife habitat, impacts ecological processes and upland watershed function. This would happen over time with the no action alternative.

b. Proposed Action Alternative

This action conforms to guidelines for grazing management taking into consideration the health and life cycle requirements of rangeland vegetation.

This alternative would allow for periodic rest during critical growth periods. Typical results from this type of system are increased vigor, reproduction, and productivity of most plant species. The expected response of the current vegetative community would be increased vigor on those plants more readily available to livestock and maintained condition of those already in good condition. A majority of the allotment is in good condition, but those small patches in fair to poor condition would be given the chance to improve by providing forage species an opportunity to reproduce and maintain plant vigor.

The proposed action avoids all of the results described under the no action alternative and conforms to the guidelines for grazing management. The foreseeable future with the proposed action is a continuous upward trend in rangeland condition. This would be accomplished by establishing and maintaining an upward trend in Wyoming big sagebrush/bluebunch wheatgrass range sites over the next 10 years. Trend would be measured by relative frequency of occurrence of forbs, shrubs, and perennial grass species as compared with relative total ground cover.

Vegetation at the site of the well and trough would temporarily be removed in an area totaling about 0.2-acre. To help expedite any loss of vegetation, a 2-foot wide disturbance area from installation of the well, 1-mile pipeline and trough would be seeded with native species to mitigate soil exposure.

3. Wildlife

a. No Action Alternative

This alternative could compromise the vigor and diversity of rangeland vegetation since it is grazed during the same time each year and in a critical growing season. In turn, the decline in the health of the vegetation would negatively impact wildlife and their habitat needs.

b. Proposed Action Alternative

The proposed action would increase vigor and productivity of native rangeland vegetation resulting in improved habitat for domestic and wildlife species.

If the health of rangeland vegetation was to decline with either action, wildlife would move to find habitat in other areas, thus increasing pressure and causing a chain reaction in the foreseeable future. This can be avoided by outlining a grazing system for this allotment that maintains and/or improves the rangeland trend.

The proposed well in the northwest portion of the allotment may cause some disturbance to wildlife species if they are present during the drilling of the well, placement of 1-mile of pipeline and trough. To help expedite any loss of vegetation, a 2-foot wide disturbance area from installation of the well, trough, and pipeline would be seeded with native species to mitigate soil exposure. Grasses and forbs may be displaced from around the trough area due to the concentration of livestock when the trough is in use. Water would be left in the trough at the end of the grazing season to provide water for wildlife. Escape ramps for small wildlife would be installed in the trough.

During the years that the generator runs to fill the troughs, there would be a slight disturbance to local wildlife wanting to water, however, after the troughs are filled and the generator shuts off, animals will immediately return to water as needed.

No long-term effects of this project are foreseen to affect wildlife or its habitat in the area of the well and trough.

4. Recreation

a. No Action Alternative

There would be no effects to recreation.

b. Proposed Action Alternative

The proposed spring grazing period (2 to 3 weeks between February 15 and May 1) would generally not affect recreation, since use of the area during this time period is very light because of wet and muddy road conditions. There could be effects to recreation from the proposed fall grazing period (2 to 3 weeks between August 1 and November 5). Because hunting seasons for pronghorn antelope, bighorn sheep, and mule deer overlap with the proposed fall grazing period, big game hunters could be displaced by the presence of livestock in areas where they have not been in the past. However, in alternate years when no grazing occurs, the recreation experience would be enhanced for hunters looking for areas without livestock presence.

5. Social and Economic Values

a. No Action Alternative

Adoption of the no action alternative could result in a decline in rangeland health. A decline could affect the numbers of AUMs allowed in the allotment, consequently affecting the permittee's livestock operation. As a result there would be an effect on the permittee's ranching livelihood, both socially and economically, as well as the economies of Lake and Harney Counties.

b. Proposed Action Alternative

Implementing the proposed action would increase the efficiency of the livestock operation in this allotment. Improvement would result from better cattle distribution and, therefore, healthier rangelands. The social and economic values of the ranching operation would improve thereby increasing those values for the local economies and social structure.

If the health of rangeland vegetation were to decline with either action, this area would become increasingly devalued by ranchers and cause a chain reaction in the foreseeable future. This can be avoided by outlining a grazing system for this allotment that maintains and/or improves the rangeland trend.

6. Biological Soil Crust

a. No Action Alternative

The current situation would not have any major impacts to the crust community due to the fact that recent field observations indicate moss components were noted as being widely visible indicating an intact biological soil crust community within the allotment.

The future condition of soil and biological soil crust resources would be dependent on the condition of other resources, primarily upland and riparian vegetation. Management actions that affect the condition of these resources would also affect soils and biological soil crusts.

b. Proposed Action Alternative

With the proposed change in livestock management within the allotment, biological soil crust community is expected to be maintained or even improved with time.

The future condition of soil and biological soil crust resources would be dependent on the condition of other resources, primarily upland and riparian vegetation. Management actions that affect the condition of these resources would also affect soils and biological soil crusts

7. Visual Resources

a. No Action Alternative

No changes to the landscape character would be expected under the no action alternative.

b. Proposed Action Alternative

No changes to the landscape character would be expected from the proposed change of grazing system. The proposed well development would occur on BLM-administered lands that fall within a Class I category. When the well is not in operation, only the well, pipe, and trough would be observable for a few minutes as visitors pass by. When in operation, the portable generator would be observable, but it would not be unlike encountering a vehicle. From a distance, the portable generator would not likely draw attention, because it would be of a size and scale of a vehicle, which can be found present along routes in the area associated with recreation use.

There are no other known reasonably foreseeable actions that would contribute to effects to visual resources in the allotment.

CHAPTER V: CUMULATIVE EFFECTS

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

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

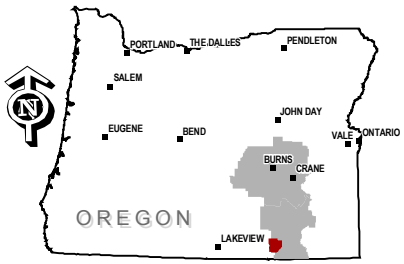
The second area in which the CEQ guidance states that information on past actions may be useful is in "illuminating or predicting the direct and indirect effects of a proposed action." The usefulness of such information is limited by the fact that it is anecdotal only, and extrapolation of data from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

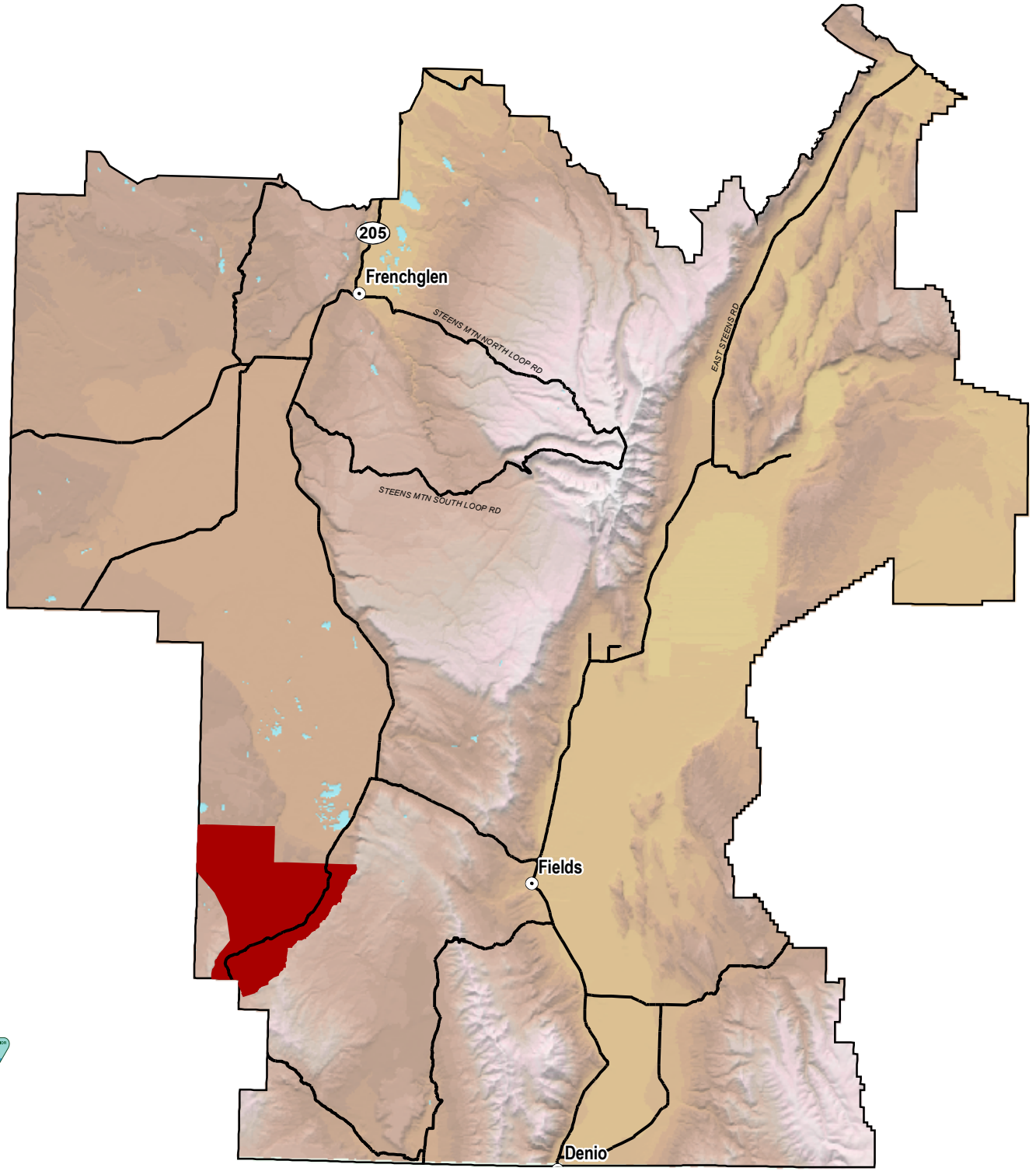
In this case, the basis for predicting effects of the proposed action and its alternatives is based on published empirical research and/or the general accumulated experience of the resource professionals in the agency with similar actions.

CHAPTER VI: PARTICIPATING STAFF

Bill Andersen, District Range Lead
Laura Dowlan, Outdoor Recreation Planner
Gary Foulkes, District Planning/Environmental Coordinator
Joe Glascock, Rangeland Management Specialist, Lead Preparer
Fred McDonald, Supervisory Natural Resource Specialist
Matt Obradovich, Wildlife Biologist
Lesley Richman, District Weed Coordinator
Scott Thomas, District Archaeologist

Map A
Basque Hills Allotment
VICINITY MAP
Andrews Resource Area





Legend

- Allotment Boundary
- Resource Area Boundary

Note: No warranty is made by the Bureau of Land Management as to the accuracy, reliability or completeness of these data for individual or aggregate use with other data. Original data was compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

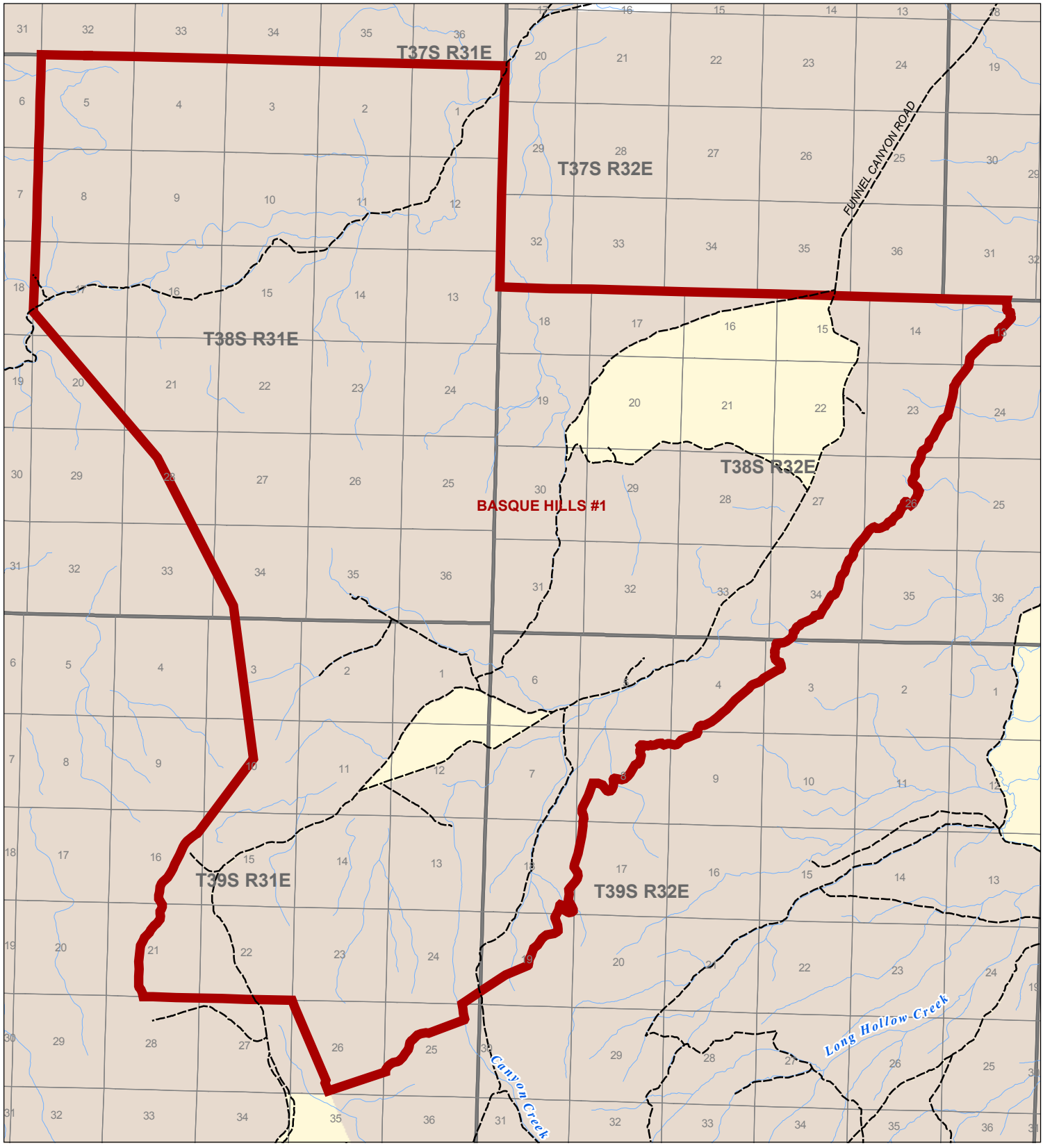
US DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Burns District, Oregon

/maps/mxd/sfenton/AllotmentMaps/BasqueHills_Vicin.mxd
2/14/2006

0 3.5 7 14 Miles

Map B

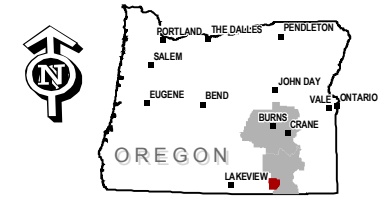
Basque Hills Allotment
LAND STATUS



Legend

Land Administration

- Bureau of Land Management
- BLM Wilderness Study Area
- Primitive or Unknown Road Condition
- Allotment Boundary
- Pasture Boundary
- Perennial Streams
- Intermittent Streams



Note: No warranty is made by the Bureau of Land Management as to the accuracy, reliability or completeness of these data for individual or aggregate use with other data. Original data was compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

US DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Burns District, Oregon

/maps/mxd/sfenton/AllotmentMaps/BasqueHills_OWN.mxd
2/14/2006

0 0.35 0.7 1.4 Miles

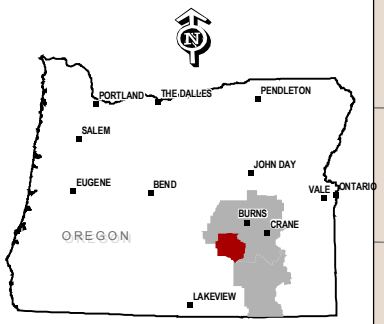
Map B
Basque Hills Allotment
RANGE IMPROVEMENTS

Legend

- GUZZLER
- TROUGH
- WATERHOLE
- WELL
- FENCE
- Pasture Boundary
- Allotment Boundary
- Primitive or Unknown Road Condition

Land Administration

- Bureau of Land Management
- BLM Wilderness Study Area
- Private



US DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Burns District, Oregon

/maps/mxd/sfenton/AllotmentMaps/BasqueHills_RIMP.mxd
2/14/2006