U.S. Department of the Interior
Bureau of Land Management

Environmental Assessment

Term Grazing Permit Renewal

June 2010

Term Grazing Permit Renewal for Authorization #2700045 on the Medicine Butte, North Butte, and Goshute Basin Allotments as well as the Jakes Unit, Preston-Lund, and White River Trails

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Environmental Assessment: Term Grazing Permit Renewal

June 2010

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Chapter 1. Introduction

This document identifies issues, analyzes alternatives, and discloses the potential environmental impacts associated with: 1) renewing the proposed term grazing permit for the permittee with authorization 2700045 on the Medicine Butte, North Butte, and Goshute Basin Allotments as well as the Jakes Unit, Preston-Lund, and White River Trails (Appendix A), Figure 1) converting a temporary fence established following the 2000 cherry fire within the Medicine Butte Allotment into a permanent fence (Figure 2). The Bureau of Land Management (BLM) Egan Field Office proposes to fully process and issue a term grazing permit for the permittee with authorization 270045 and authorize grazing on the Medicine Butte, North Butte, and Goshute Basin Allotments as well as the Jakes Unit, Preston-Lund, and White River Trails. Changes to the existing permit are recommended to achieve the Standards and Guidelines for Nevada's Northeastern Great Basin Area as established by the Northeastern Great Basin Area Resource Advisory Council (RAC) and Nevada's Mojave-Southern Great Basin Area were developed by the Mojave-Southern Great Basin Resource Advisory Council (RAC), approved in 1997. Additionally, the proposed decision proposes to convert a temporary fence established following the 2000 cherry fire into a permanent fence.

Monitoring data were reviewed and an assessment of the rangeland health was completed in 2010 during the term permit renewal process through Standards Determination Documents for the Medicine Butt and North Butte Allotments (Appendix C). SDD's for the Goshute Basin Allotment as well as the Jakes Unit, Preston-Lund, and White River Trails have been previously completed (Appendix C). The following is a summary of the Medicine Butte, North Butte, and Goshute Basin Allotments as well as the Jakes Unit, Preston-Lund, and White River Trails SDD for achievement of the standards.

Table 1.1. Summary of the SDD by allotment for achievement of the standards.

Allotment	STANDARD 1 Upland Sites	STANDARD 2 Riparian and Wetland Sites	STANDARD 3 Habitat
Medicine Butte (00501)	Standard Achieved	Not achieving the Standard, but making significant progress towards achieving the Standard; Livestock are not a causal factor; Causal factors to not meeting the standard include wild horse and wildlife trampling and weedy species establishment following a fire.	Not achieving the Standard, but making significant progress towards achieving the Standard; Livestock are a contributing causal factor; Additional causal factors include recent droughty conditions in combination with wild horse use, altered natural disturbance regimes, and past historic livestock overgrazing.

North Butte (00502)	Standard Achieved	Not Applicable	Not achieving the Standard, but making significant progress towards achieving the Standard; Livestock are not a causal factor; Causal factors include altered natural disturbance regimes, past historic livestock overgrazing, and recent droughty conditions in combination with wild horse use.
Goshute Basin (00402)	Standard Achieved	Not achieving the Standard, but making significant progress towards; Livestock are a causal factor to not meeting the standard. Additionally, failure to meet the standard is related to other issues and conditions.	Standard Achieved
Jakes Unit Trail (00821)	Standard Achieved	Not Applicable	Not achieving the Standard, but making significant progress towards. Livestock are not a significant contributing factor. Failure to meet the standard is related to other issues or conditions i.e. location of the designated trail, drought, historic livestock use and fire suppression.
Preston-Lund Trail (00822)	Standard Achieved	Not Applicable	Not achieving the Standard, but making significant progress towards. Livestock are not a significant contributing factor. Failure to meet the standard is related to other issues or conditions. i.e. location of the designated trail,

			droughty conditions, and fire suppression.

	STANDARD 1 Soils	STANDARD 2 Ecosystem Components	STANDARD 3 Habitat and Biota
White River Trail (11005)	Standard Achieved	Not achieving the Standard, not making significant progress towards achieving the Standard; Livestock are not a causal factor. Failure to meet the standard is related to other issues or conditions	Not achieving the Standard, not making significant progress towards achieving the Standard; Livestock are not a causal factor. Failure to meet the standard is related to other issues or conditions.
Definitions per the BLM Manual H-4180-1 – Rangeland Health Standards (1/19/01) **Significant Progress:** Movement toward meeting standards and conforming to guidelines that is acceptable in terms of rate and magnitude. Acceptable levels of rate and magnitude must be realistic in terms of the capability of the resource, but must also be as expeditious and effective as practical. **Significant Factor:** Principal causal factor in the failure to achieve the land health standard(s) and conform with the guidelines. A significant factor would typically be a use that, if modified, would enable an area to achieve or make significant progress toward achieving the land health standard(s). To be a significant factor, a use may be one of several causal factors contributing to less-than-healthy conditions; it need not be the sole causal factor inhibiting progress towards the standards.			

Current management practices have been implemented since the Final Multiple Use Decisions were issued for the Medicine Butte (1992) and North Butte (2001) Allotments. The Goshute Basin Allotment and Jakes Unit, Preston-Lund, and White River Trails have recently been evaluated in Standard Determination Documents (SDD) and been managed under recent proposed decisions.

1.1. Identifying Information:

1.1.1.

Authorization 2700045 Term Grazing Permit Renewal on the Medicine Butte, North Butte, and Goshute Basin Allotments as well as the Jakes Unit, Preston-Lund, and White River Trails, DOI-BLM-NV-L010-2010-0500-EA

1.1.2. Location of Proposed Action:

The proposed action location is within the Medicine Butte, North Butte, and Goshute Basin Allotments as well as the Jakes Unit, Preston-Lund, and White River Trails (Appendix A). The

Medicine Butte Allotment encompasses approximately 287,368 public land acres within the BLM Ely District (Figure 3). The grazing allotment occurs entirely within White Pine County and is situated approximately 23 miles northwest of Ely, Nevada. The legal location of the Medicine Butte Allotment is as follows: T20N R61ET20N R62ET20N R63ET21N R61ET21N R62ET21N R63ET22N R60ET22N R61ET22N R62ET22N R63ET23N R60ET23N R61ET23N R62ET23N R63ET24N R60ET24N R61ET24N R62ET24N R63ET25N R60ET25N R61ET25N R62ET25N R63ET26N R60ET26N R61ET26N R62ET26N R63E.

Within the Medicine Butte Allotment occurs the temporary cherry fire fence that was constructed in 2000 following the 2000 cherry fire (Figure 2). The fence is approximately six miles in length and was constructed to temporarily prevent livestock from grazing the burned area for a minimum of two growing seasons or until the rehabilitation objectives were met. To date, rehabilitation objectives have been met and livestock grazing has commenced. The fence location occurs in sections 4, 9, and 10 of T24N R62E and sections 26, 27, and 33of T25N R62E.

The North Butte Allotment encompasses approximately 27,856 public land acres within the BLM Ely District (Figure 4). The grazing allotment occurs entirely within White Pine County and is situated approximately 42 miles northwest of Ely, Nevada. The legal location of the North Butte Allotment is as follows:T20N R60ET23N R60ET24N R60ET24N R61E

The Goshute Basin Allotment encompasses approximately 9,397 public land acres within the BLM Ely District (Figure 5). The grazing allotment occurs entirely within White Pine County and is situated approximately 40 miles north of Ely, Nevada. The legal location of the Goshute Basin Allotment is as follows:T25N R63ET26N R63E

The Jakes Unit Trail encompasses approximately 15,056 public land acres within the BLM Ely District (Figure 6.). The grazing allotment occurs entirely within White Pine County and is situated approximately 15 miles west of Ely, Nevada.The legal location of the Jakes Unit Trail is as follows: T13N R61ET14N R61ET15N R60ET15N R61ET16N R60ET16N R61ET17N R60ET17N R61ET18N R60ET18N R61ET19N R61ET19N R62ET20N R62E

The Preston-Lund Trail encompasses approximately 10,856 public land acres within the BLM Ely District (Figure 7). The grazing allotment occurs within White Pine and Lincoln Counties, and is situated approximately 23 miles southwest of Ely, Nevada. The legal location of the Preston-Lund Trail is as follows: T09N R60ET09N R61ET10N R60ET10N R61ET11N R60ET11N R61ET12N R61ET13N R61E

The White River Trail encompasses approximately 19,300 public land acres within the BLM Ely District (Figure 8.). The grazing allotment occurs entirely within Lincoln County, and is situated approximately 48 miles southwest of Ely, Nevada. The legal location of the White River Trail is as follows: T04N R58ET04N R59ET05N R59ET05N R60ET05N R62ET06N R60ET06N R61ET06N R62ET07N R60ET07N R61ET07N R62ET08N R60ET08N R61ET09N R60ET09N R61E

1.1.3. Name and Location of Preparing Office:

Lead Office - Egan Field Office, LLNVL01000

1.1.4. Identify the subject function code, lease, serial, or case file number:

DOI-BLM-NV-L010-2010-0500-EA

1.1.5. Applicant Name:

Authorization 2700045

1.2. Purpose and Need for Action:

The need for the term permit renewal is to provide for multiple uses of the public lands by renewing the term grazing permit for authorization 2700045 with new terms and conditions for grazing use that conform to guidelines and achieve standards for Nevada's Northeastern Great Basin Area and Nevada's Mojave-Southern Great Basin Area in accordance with all applicable laws, regulations, and policies and in accordance with Title 43 CFR 4130.2(a) which states, "Grazing permits or leases authorize use on the public lands and other BLM-administered lands that are designated in land use plans as available for livestock grazing."

The need for the cherry fence is to convert the temporary fence into a permanent fence. The purpose for the fence is more strict management control of livestock distribution. Therefore, a rotation can be used to promote rest and recovery within and between pastures without livestock drift occurring. This strict livestock control will be beneficial to vegetation resources and promote making progress toward achieving the standards and guidelines for Nevada's Northeastern Great Basin Area.

1.3. Objectives for the Proposed Action

1. To improve vegetative health and growth conditions on the allotments and continue to meet or make progress towards achieving the Standards and Guidelines for rangeland health as approved and published by Northeastern Great Basin Area Resource Advisory Council and Nevada's Mojave-Southern Great Basin Area Resource Advisory Council. This will be achieved by:

    a. Renewing the grazing term permit for authorization 2700045 and authorizing grazing in accordance with modified (i.e. proposed) terms and conditions, applicable laws, regulations, and land use plans (LUP) on approximately 369,833 acres of public land.

    b. Converting the temporary cherry fire fence into the permanent cherry pasture fence to improve livestock management; therefore, improving vegetation resource conditions.

1.4. Scoping, Public Involvement and Issues:

The term permit renewal proposal was initiated on December 7, 2009, with a presentation to the internal resource specialist team to identify any relevant issues. A letter was mailed to the grazing permittee regarding the permit renewal action on December 18, 2009, requesting comments by April 1, 2010. The permittee initiated a discussion and their comments were considered and

incorporated where appropriate. A letter notifying interested publics of the term permit renewal was sent December 22, 2009. No comments were received. A Grazing Permit Renewal Summary for these permits was published on the Ely District website on January 6, 2010. No comments were received. On January 6, 2010 a Notice of Proposed Action on lands in wilderness was mailed to individuals and organizations that have expressed an interest in wilderness related actions requesting comments by February 8, 2010. No comments were received from the wilderness mailing list. On January 8, 2010, a letter was sent to local tribes requesting comments by February 8, 2010. No comments were received regarding these permit renewals.

Chapter 2. Proposed Action and Alternatives

2.1. Description of the Proposed Action:

The BLM proposes to issue and fully process a new term grazing permit for authorization 2700045 and authorize grazing use on the Medicine Butte, North Butte, and Goshute Basin Allotments as well as the Jakes Unit, Preston-Lund, and White River Trails (Appendix A). Changes to the permit are recommended to achieve the Standards and Guidelines for Nevada's Northeastern Great Basin Area on the Associated Allotments and Trails (Appendix C).

The BLM proposes to convert the temporary Cherry Fire fence into a permanent pasture fence. The fence is BLM regulation four strand wire fence with the bottom wire being smooth for wildlife to go under and is open on each end to allow wild horses to pass through. This conversion is recommended so the area burned in 2000 can be a separate pasture since vegetation composition within the burned area is much different than the native shrub and pinion-juniper range surrounding the burn. With the fence converted to a permanent fence, there is more strict management control of livestock distribution. Therefore, a rotation can be used to promote rest and recovery within and between pastures without livestock drift occurring.

1. **Proposed term permit**

   The renewal of the term grazing permit will be for a period of up to 10 years. If base property is transferred during this ten year period with no changes to the terms and conditions the new term permit would be issued for the remaining term of this term permit.

   The proposed term permit for authorization 2700045 and terms and conditions are as follows:

   This will remain a cattle, sheep, and domestic horse permit with a permitted use grazing preference of 17,675 AUMs from March 1 to February 28. Of these 17,675 AUMs, 9,249 AUMs will be active and 8,426 AUMs will be suspended nonuse.

   Changes to "Other Terms and Conditions," "Terms and Conditions Specific to Each Allotment," and "Additional Stipulations Common to All Grazing Allotments" have been made as described below. Recommended changes within the SDD's have been brought forward within the proposed term permit.

Table 2. Summary of the Proposed Term Permit for Authorization #2700045

Allotment Name and Number	Livestock Number/Kind	Grazing Period Begin End	% Public Land*	Type Use	AUMs**
Medicine Butte (00501)	2765 Sheep	4/15–11/15	100	Active	3909
	316 Cattle	3/1–2/28	100	Active	3792
North Butte (00502)	21 Cattle	8/1–4/15	100	Active	179
Goshute Basin (00402)	498 Sheep	7/1–10/15 (**Odd Years**)	100	Active	350
Jakes Unit Trail (00821)	930 Sheep	4/1–4/30	100	Active	183
	930 Sheep	11/1–11/30	100	Active	183
Preston-Lund Trail (00822)	1040 Sheep	4/1–4/30	100	Active	205
	1040 Sheep	11/1–11/30	100	Active	205

White River Trail (11005)	3980 Sheep	4/15–4/20	100	Active	157
	1180 Sheep	11/10–11/20	100	Active	85

*% Public Land is the percent of public land for billing purposes.

**AUMs may differ from Active Permitted Use due to a rounding difference with the number of livestock and the period of use.

Allotment AUM Summary

Allotment	Active AUM's	Suspended AUM's	Grazing Permitted Use AUM's
Medicine Butte	7,701	7,473	15,174
North Butte	180	518	698
Goshute Basin	350	435	785
Jakes Unit Trail	366	0	366
Preston-Lund Trail	410	0	410
White River Trail	242	0	242

a. Terms and Conditions Specific to Each Allotment

- **Medicine Butte Allotment**

Summary of Authorized Season of Use for Medicine Butte Allotment Use Areas

Pasture	Livestock #	Kind	Grazing Period	% Public Land	AUM's
BLACK MT./ CANYON	151	Sheep	4/15–11/15	100	213
BUTTE VALLEY	317	Sheep	4/15–11/15	100	449
	65	Cattle	3/1–2/28	100	788

HUNTER POINT	482	Sheep	4/15–11/15	100	681
	79	Cattle	9/1–3/31	100	473
CHERRY	188	Sheep	4/15–11/15	100	266
	22	Cattle	3/1–2/28	100	264
PONY MT./ PARIS SDG.	641	Sheep	4/15–11/15	100	906
SLOUGHS/ MEADOWS	113	Cattle	5/1–2/28	100	1130
SNOW CREEK NORTH	31	Sheep	4/15–11/15	100	44
	38	Cattle	4/15–2/28	100	401
	5	Horses	4/15–2/28	100	53
SNOW CREEK SOUTH	14	Sheep	4/15–11/15	100	20
	45	Cattle	4/15–2/28	100	476
	8	Horses	4/15–2/28	100	84
SNOW CREEK WEST	24	Cattle	4/15–2/28	100	257
	4	Horse	4/15–2/28	100	42
TELEGRAPH	941	Sheep	4/15–11/15	100	1330

- The total active use on the Medicine Butte Allotment would be 7,701 AUM's, of which 3,909 AUM's would be for sheep use and 3,792 AUM's would be for cattle use.

- A portion of the Butte Valley Pasture (7,761 acres) would be transferred to establish a new grazing pasture within the Medicine Butte Allotment. This is the area within the Cherry Fire fence. The Cherry Pasture would be managed as a separate pasture since vegetation composition within the burned area is much different than the native shrub and pinion-juniper range surrounding the burned area. Along with the acreage from the Butte Valley Pasture, 64 AUM's (32 cattle AUM's and 32 sheep AUM's) from the Butte Valley Pasture would also be transferred to the Cherry Pasture. In addition to the 64 AUM's transferred from the Butte Valley Pasture, 469 AUM's (234 cattle AUM's and 235 sheep AUM's) would be moved from Suspended Non-Use to Active Use, giving the Cherry Pasture a total of 533 AUM's (266 cattle AUM's and 267 Sheep AUM's). The 469 AUM's being moved from Suspended Non-Use to Active Use is a result of additional forage which is now available due to the area burned in the Cherry Fire. For specific details on the AUM calculations, see Appendix III of the Medicine Butte SDD (Appendix C).

- The Cherry Pasture cannot be grazed two consecutive years from 3/1 to 7/1.

- Permittee agrees to place 453 AUM's of their 906 sheep AUM's in the Paris Seeding/Pony Mountain pasture into voluntary non-use for conservation purposes for a period of 5 years starting 4/15/2011 OR two years following a horse gather, whichever is sooner.

- Domestic horse use is authorized in all of the Snow Creek Seedings. Total authorized horse use is 180 AUMs. 180 AUMs can be substituted for an equal amount of cattle AUMs in all of the Snow Creek Seedings. Authorized use by sheep, cattle and domestic horses combined will not exceed the total amount of AUMs authorized for all of the Snow Creek Seedings, which is 1,198 AUMs, as well as remain within the period of use specified above.

- **Year 1**: The North Snow Creek Seeding may be grazed from 4/15 to 7/15; The South Snow Creek Seeding may be grazed from 7/16 to 2/28; The West Snow Creek Seeding must be rested.

  Year 2: The North Snow Creek Seeding must be rested; The South Snow Creek Seeding may be grazed from 4/15 to 7/15; The West Snow Creek Seeding may be grazed from 7/16 to 2/28.

  Year 3: The North Snow Creek Seeding may be grazed 7/16 to 2/28; The South Snow Creek Seeding must be rested; The West Snow Creek Seeding may be grazed from 4/15 to 7/15.

  The cycle then will start over.

- Sheep and cattle will be moved within and between use areas so that the same area is not being grazed at the same time every year (e.g. avoid using the slough every year during the summer. Some years this pasture should be used

during the spring, fall, and winter). This promotes growth, re-growth, and reproduction within palatable plants.

- Maintain the Snow Creek Seedings pasture fences and gates to control and restrict the movement of wild horses onto the Snow Creek Seedings from the Triple B Wild Horse Herd Management Area (HMA) and to control and restrict the movement of domestic horses out of the Snow Creek Seedings onto the Triple B Wild Horse (HMA), which is not part of the Triple B Wild Horse (HMA).
- Sheep bedding and camp sites must be at least 1/2 mile from Winterfat dominated sites, known riparian areas, cultural sites and special status species locations.
- Sheep will be herded daily away from riparian areas.
- Water haul site must be at least 1/2 mile from Winterfat dominated sites, known riparian areas, cultural sites and special status species locations.
- Permittee and Range Management Specialist must meet on an annual basis to develop a grazing plan for that year prior to the start of the grazing season OR permittee is required to submit advanced billing to ensure licensed livestock use does not exceed appropriate levels.

- **North Butte Allotment**
  - The total active use on the North Butte Allotment would remain 180 cattle AUM's and the season of use would change from 2/15–4/15 and 8/1–10/31 to 8/1 to 4/15. For further details, see Part 4 of the North Butte SDD (Appendix C).
- **Goshute Basin Allotment**
  - The total active use would remain 350 sheep AUMs.
  - Grazing will occur every other year on odd years (see Table 2).
  - Sheep will be herded daily away from riparian areas.
  - Sheep bedding and camp sites must be at least 1/2 mile from Winterfat dominated sites, known riparian areas, cultural sites and special status species locations.
  - Maintain the boundary fence between the Goshute Basin Allotment and the Indian Creek Allotment.
  - Maintain the riparian exclosure fences within the Goshute Basin Allotment.
- **Jakes Unit Trail, Preston-Lund Trail and White River Trail**

- The total active use on the Jake's Unit trail would remain 366 sheep AUM's, total active use on the Preston-Lund trail would remain 410 sheep AUM's and total active use on the White River trail would remain 242 sheep AUM's.
- The livestock numbers and their associated AUM's in the permitted grazing schedule (Table 2) were adjusted form the current permit (Table 3) to better reflect the full potential use of active AUM's on the Preston-Lund and Jake's Unit trails. Jake's Unit trail was adjusted from 900 sheep and 178 AUM's with a season of use of 4/1–4/30 and 11/1–11/30 on the current permit to 930 sheep and 183 AUM's with the same seasons of use of 4/1–4/30 and 11/1–11/30 on the proposed permit. The Preston-Lund trail was adjusted from 900 sheep and 178 AUM's with a season of use of 4/1–4/30 and 11/1–11/30 on the current permit to 1040 sheep and 205 AUM's with the same seasons of 4/1–4/30 and 11/1–11/30 on the proposed permit.
- The permittee will haul water to designated locations during the time their livestock are on the trail.
- Sheep will be moved a minimum of five miles a day when trailing.
- Sheep bedding and camp sites must be at least 1/2 mile from Winterfat dominated sites, known riparian areas, cultural sites and special status species locations.
- Water haul site must be at least 1/2 mile from Winterfat dominated sites, known riparian areas, cultural sites and special status species locations.

b. Other Terms and Conditions:

- Livestock numbers are flexible as long as permitted use (i.e. AUM's) is not exceeded during the authorized season of use.
- Permittee, through livestock control, will leave enough photosynthetic material to promote production and re-growth. Maximum utilization levels are as follows:
  - Perennial native grasses: 50% current year's growth. *This use level is necessary to allow desirable key herbaceous species to 1) develop above ground biomass for protection of soils, 2) to contribute to litter cover, and 3) develop roots to improve carbohydrate storage for vigor, reproduction, and improve/increase desirable perennial cover.*
  - Perennial shrubs and half-shrubs: 50% use on current annual production. *This use level is necessary to allow desirable perennial key browse species to develop branchlets and woody stature able to withstand the pressure of grazing use. Use would be read in April or prior to the spring re-growth. Use during spring contributes to following season's use level.*
  - Crested wheatgrass: 65% current year's growth. *This use level is necessary to allow desirable key herbaceous species to 1) develop above ground biomass for protection of soils, 2) to contribute to litter cover, and 3) develop roots to*

improve carbohydrate storage for vigor, reproduction, and improve/increase desirable perennial cover.

- Permittee will move livestock to another authorized pasture or from the allotment no later than 5 days following attainment of maximum utilization levels. Any deviation in livestock movement will require authorization from the authorized officer.
- Salt and/or mineral supplements for livestock must be located at least 1/2 mile from water sources, riparian areas, winterfat bottoms, sensitive sites, and cultural resource sites. Such supplements may be used to encourage livestock distribution. However, feeding of forage products on public rangelands is prohibited.
- Sheep bedding and camp sites must be at least 1/2 mile from Winterfat dominated sites, known riparian areas, cultural sites and special status species locations.
- Permittee must employ short duration grazing where applicable (as opposed to season long or continuous grazing). *This encourages a single defoliation event on a plant, which is much more beneficial to the plant than multiple defoliations. Multiple defoliation events on a plant retard root-growth, causing a decrease in total absorptive surface. Decreasing the total absorptive surface decreases total plant growth and reduces carbohydrate reserves necessary to maintain plant vigor.*
- No motorized access is permitted within the designated Goshute Canyon Wilderness without approval of the district manager. Motorized access may be permitted for emergency situations, or where practical alternatives for reasonable grazing management needs are not available and such motorized use would not have an adverse impact on the natural environment.

c. Terms and Conditions Common to all Allotments

- Livestock numbers identified in the Term Grazing Permit are a function of seasons of use and permitted use. Deviations from those livestock numbers and seasons of use may be authorized on an annual basis where such deviations would not prevent attainment of the multiple-use objectives for the allotment.
- Deviations from specified grazing use dates will be allowed when consistent with multiple-use objectives. Such deviations will require an application and written authorization from the authorized officer prior to grazing use.
- The authorized officer is requiring that an actual use report (form 4130-5) be submitted within 15 days after completing your annual grazing use.
- Grazing use will be in accordance with the Standards and Guidelines for Grazing Administration. The Standards and Guidelines have been developed by the respective Resource Advisory Council and approved by the Secretary of the Interior on February 12, 1997. Grazing use will also be in accordance with 43 CFR

Subpart 4180 - Fundamentals of Rangeland Health and Standards and Guidelines for Grazing Administration.

- If future monitoring data indicates that Standards and Guidelines for Grazing Administration are not being met, the permit will be reissued subject to revised terms and conditions.

- Pursuant to 43 CFR 10.4 (G) the holder of this authorization must notify the authorized officer by telephone, with written confirmation, immediately upon discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony (as defined at 43 CFR 10.2). Further, pursuant to 43 CFR 10.4 (C) and (D), you must stop activities in the immediate vicinity of the discovery and protect it from your activities for 30 days or until notified to proceed by the authorized officer.

- The permittee must notify the authorized officer by telephone, with written confirmation, immediately upon discovery of any hazardous or solid wastes as defined in 40 CFR Part 261.

- The permittee is responsible for all maintenance of assigned range improvements including wildlife escape ramps for both permanent and temporary water troughs.

- When necessary, control or restrict the timing of livestock movement to minimize the transport of livestock-borne noxious weed seeds, roots, or rhizomes between weed-infested and weed-free areas.

2. **Invasive, Non-Native Species and Noxious Weeds**

   A Weed Risk Assessment (See Appendix D) was completed on July 8, 2010. The stipulations listed in the Weed Risk Assessment will be followed when grazing occurs on the allotment.

3. **Monitoring**

   The Ely District Approved Resource Management Plan (August 2008) identifies monitoring to include, "Monitoring to assess rangeland health standards will include records of actual livestock use, measurements of forage utilization, ecological site inventory data, cover data, soil mapping, and allotment evaluations or rangeland health assessments." Conditions and trends of resources affected by livestock grazing will be monitored to support periodic analysis/evaluation, site-specific adjustments of livestock management actions, and term permit renewals.

2.2. Alternative 1— Renewal of the Proposed Term Permit while Removing the Temporary Fence

The term permit would be renewed as described under the proposed action. The temporary fence would be removed as described under the no action alternative.

2.3. No Action Alternative

The No Action Alternative represents the status quo – the permit would be renewed without modifications to the permit terms and conditions. Additionally, the No Action Alternative will result in all six miles of the temporary fence being removed. This alternative would not establish maximum allowable use levels or modify the terms and conditions of the current permit. A summary of the current term permit 2700045 is shown in Table 3.

1. **Current Permit**

   This is a cattle, sheep, and domestic horse permit with a total grazing preference of 17,433 AUMs from March 1 to February 28. Of these 17,433 AUMs, 8,538 AUMs are active and 8,895 AUMs are suspended nonuse.

   This permit, in the Northern portion of the BLM Ely district, operates in conjunction with two other northern permits (2703115 and 2703467) with adjacent allotments and another permit (2700046) with allotments located in the southern portion of the BLM Ely district.

   Sheep are currently rotated between the three northern permits during the late spring, summer, and fall, while using the allotments included on the southern permit during the winter and early spring. Sheep are typically trailed from the Medicine Butte allotment to the southern allotments through the Jakes Unit, Preston-Lund, and White River trails between 11/1 and 11/30. Sheep are trailed from the southern allotments to the northern allotments through the White River, Preston-Lund, and Jakes Unit Trail or shipped by livestock truck to the Medicine Butte allotment between 4/1 and 4/30. Sheep graze the Medicine Butte allotment and the three trails every year, while grazing the Goshute Basin allotment alternating years during the summer and fall, which lightens use on the Medicine Butte allotment.

   a. Mandatory Terms and Conditions

Table 3. Summary of the Current Permit for Authorization #2700045

Allotment Name and Number	Livestock Number/Kind	Grazing Period Begin End	% Public Land*	Type Use	AUMs**
Medicine Butte (00501)	2599 Sheep	4/15–11/15	100	Active	3674
	296 Cattle	3/1–2/28	100	Active	3552
North Butte (00502)	34 Cattle	2/15–4/15	100	Active	67
	37 Cattle	8/1–10/31	100	Active	112
Goshute Basin (00402)	498 Sheep	7/1–10/15	100	Active	350
Jakes Unit Trail (00821)	900 Sheep	4/1–4/30	100	Active	178
	900 Sheep	11/1–11/30	100	Active	178
Preston-Lund Trail (00822)	900 Sheep	4/1–4/30	100	Active	178
	900 Sheep	11/1–11/30	100	Active	178
White River Trail (11005)	3980 Sheep	4/15–4/20	100	Active	157
	1180 Sheep	11/10–11/20	100	Active	85

*% Public Land is the percent of public land for billing purposes.

**AUMs may differ from Active Permitted Use due to a rounding difference with the number of livestock and the period of use.

Allotment AUM Summary

Allotment	Active AUM's	Suspended AUM's	Grazing Permitted Use
Medicine Butte	7,232	7,942	15,174
North Butte	180	518	698
Goshute Basin	350	435	785
Jakes Unit Trail	366	0	366
Preston-Lund Trail	410	0	410
White River Trail	242	0	242

b. Terms and Conditions Specific to each Allotment

- **Medicine Butte Allotment (00501):**
  - Grazing use will be in accordance with the Northeastern Great Basin area standards and guidelines, and with the Final Multiple Use Decision dated February 3, 1992.
  - Permitted use on the Medicine Butte Allotment is 7,232 AUMs of which 3,557 AUMs are cattle use and 3,675 AUMs are sheep use. This is in conformance with the Medicine Butte Allotment Final Multiple Use Decision (FMUD) issued February 1992. Also, the following terms and conditions were stipulated in the FMUD:
  - The season of use in the Hunter Point use ares is April 15 to November 15 for sheep and November 1 to February 28 for cattle. Permitted use is 473 AUMs for cattle and 681 AUMs for sheep.
  - The season of use in the Telegraph use area is April 15 to November 15 for sheep. Permitted use is 1,330 AUMs for sheep.
  - The season of use in the Snow Creek Seedings is April 15 to November 15 for sheep and April 15 to February 28 for cattle and/or domestic horses. Permitted use in the North Seeding is 401 AUMs for cattle and 44 AUMs for sheep. Permitted use in the South Seeding is 476 AUMs for cattle and 20 AUMs for sheep. Permitted use in the West Seeding is 257 AUMs for cattle and no AUMs for sheep. A domestic horse preference of 180 AUMs can be

substituted for an equal amount of sheep and/or cattle AUMs in all of the Snow Creek Seedings combined.

- Season of use in the Pony Mountain use area (including Paris Seeding) is April 15 to November 15 for sheep. Permitted use is 906 AUMs for sheep.
- The season of use in the Butte Valley use area is April 15 to November 15 for sheep and March 1 to February 28 for cattle. Permitted use is 820 AUMs for cattle and 481 AUMs for sheep.
- The season of use in the slough use area is May 1 to February 28 for cattle. Permitted use is 1,130 AUMs for cattle.
- Season of use in the Black Mountain/Black Canyon use area is April 15 to November 15 for sheep. Permitted use is 213 AUMs for sheep.
- Sheep trailing through the Thirty Mile Spring Allotment (00503) and the South Butte Allotment (00504) during the spring and fall will be in accordance with the terms and conditions of the certified letter dated May 26, 1994 (see letter and map in case file).

- **North Butte Allotment (00502):**
  - Grazing use will be in accordance with the Northeastern Great Basin area standards and guidelines, and with the Final Multiple Use Decision dated March 28, 2001.
  - Permit use on North Butte Allotment is 180 AUM's of cattle use. The season of use is from February 15 to April 15 and August 1 to October 31.
  - If future monitoring data indicates that standards and guidelines for grazing administration are not being met, the permit will be reissued subject to revised terms and conditions.

- **Goshute Basin Allotment (00402):**
  - Grazing use will be in accordance with the Northeastern Great Basin area standards and guidelines, and with the Final Multiple Use Decision dated July 20, 2001.
  - Permitted use on the Goshute Basin Allotment is 350 AUMs of sheep use. The season of use is July 1 to October 15. This is in accordance with the livestock grazing agreement between Bertrand Paris and Sons and the BLM in February 2000. The following terms and conditions were stipulated in the agreement:
  - Salt and/or minerals for sheep will be placed at least 100 yards from any water source or fenced or unfenced riparian areas.
  - Sheep will be herded away from fragile riparian areas.
  - The Goshute Basin/Indian Creek Allotment boundary fence will be maintained in part by Bertrand Paris and Sons (or lessee). The Goshute Basin Allotment will be grazed by sheep every other year. During those years the allotment is

rested, the 350 AUMs of sheep grazing will be authorized in the Medicine Butte Allotment within designated sheep use areas.

- **Preston Lund Trail (00822):**
  - Grazing use in White Pine County, Nevada will be in accordance with the Northeastern Great Basin area standards and guidelines, and with the Final Multiple Use Decision dated July 20, 2001. Grazing use in Lincoln &/or Nye County, Nevada will be in accordance with the Mojave—Southern Great Basin area standards and guidelines.
  - Permitted use on the Preston Lund Trail is 410 AUMs of sheep use.

- **Jakes Unit Trail (00821):**
  - Grazing use will be in accordance with the Northeastern Great Basin area standards and guidelines.
  - Permitted use on the Jakes Unit Trail is 366 AUMs of sheep use.

- Terms And Conditions Common to all Allotments:
  - Grazing use will also be in accordance with 43 CFR Subpart 4180 — Fundamentals Of Rangeland Health And Standards And Guidelines For Grazing Administration.
  - Livestock numbers identified in the term grazing permit are a function of seasons of use and permitted use. Deviations from those livestock numbers and seasons of use may be authorized on an annual basis where such deviations would not prevent attainment of the multiple-use objectives for the allotment.
  - Deviations from specified grazing use dates will be allowed when consistent with multiple-use objectives. Such deviations will require an application and written authorization from the authorized officer prior to grazing use.
  - The authorized officer is requiring that an actual use report (form 4130-5) be submitted within 15 days after completing your annual grazing use.
  - The payment of your grazing fees is due on or before the date specified in the grazing bill. This date is generally the opening date of you allotment. If payment is not received within 15 days of the due date, you will be charged a late fee assessment of $25 or 10 percent of the grazing bill, whichever is greater, not to exceed $250 . Payment with Visa, Mastercard or American Express is accepted. Failure to make payment within 30 days of the due date may result in trespass action.
  - Pursuant to 43 cfr 10.4 (g) the holder of this authorization must notify the authorized officer by telephone, with written confirmation, immediately upon discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony (as defined at 43 cfr 10.2). Futher, pursuant to 43 cfr 10.4

(c) and (d), you must stop activities in the immediate vicinity of the discovery and protect it from your activities for 30 days or until notified to proceed by the authorized officer.

- If future monitoring data indicates that standards are not being met or not in conformance with the guidelines for grazing management, the permit will be reissued subject to revised terms and conditions.

2.4. Alternatives Considered but not Analyzed in Detail

The Ely Proposed Resource Management Plan/Final Environmental Impact Statement (November, 2007) analyzes five alternatives of livestock grazing (p.4.16-1 to 4.16-15.). Two of the alternative were brought forward as being considered but were then dismissed from further analysis in this document.

- **Alternative B, the maintenance and restoration of healthy ecological systems**

  This alternative would close grazing in all Bighorn Sheep and Desert Tortoise habitat. The Goshute Basin Allotment and portions of the Medicine Butte, North Butte Allotment as well as portions of the Jakes Unit, Preston-Lund and White River Trails are within unoccupied Rocky Mountain and Desert Bighorn Sheep habitat. According to the Nevada Department of Wildlife's Bighorn Sheep Management Plan (Oct. 2001), "livestock, horses, and burros compete directly with bighorns for forage, water and space. It is important that bighorn sheep habitats are managed to ensure land use objectives are achieved and that habitats are maintained in good to excellent ecological condition" (pg. 11). The Bighorn Sheep Management Plan also states as a management action, "the Division will encourage and support land management decisions and resource management techniques that result in the attainment of good to excellent ecological condition on public and private lands" (pg. 12). The proposed action works to maintain or improve habitat conditions toward those described in the Standards and Guidelines for Nevada's Northeastern Great Basin Area and the Ecological Site Descriptions which would also be beneficial to Big Horn Sheep habitat.

  In addition, the Standards Determination Document (SDD) for the Medicine Butte, North Butte and Goshute Basin Allotments as well as the sheep trails did not identify any resource concerns or recommendation in which alternative B would be needed to achieve the rangeland health standards or improve habitat conditions and was not a reasonable alternative. The design features of the proposed action would essential accomplish the goal for alternative B by progressing towards or achieving rangeland health standards which would also maintain and restore habitat conditions and watershed function and health while still meeting the goal for the Ely District RMP, which states, "Manage livestock grazing on public lands to provide for a level of livestock grazing consistent with multiple use, sustained yield, and watershed function and health" and "To allow livestock grazing to occur in a manner and at levels consistent with multiple use, sustained yield, and the standards for rangeland health (p 85-86)."

- **Alternative D, conservation alternative (no grazing alternative)**

The no grazing alternative does not meet the purpose and need for the action. In addition, this action is not consistent with existing regulation policies, and would not meet the goal for the Ely District RMP, which states, "Manage livestock grazing on public lands to provide for a level of livestock grazing consistent with multiple use, sustained yield, and watershed function and health." In addition, "To allow livestock grazing to occur in a manner and at levels consistent with multiple use, sustained yield, and the standards for rangeland health (p 85-86)." The Standards Determination Documents (SDD's) for the Medicine Butte, North Butte and Goshute Basin Allotments as well as the Jake's Unit, Preston-Lund and White River Trails did not identify any resource concerns or recommendation in which the no grazing alternative would be a reasonable alternative or needed to progress towards or achieve the rangeland health standards and meet the Ely District goals for livestock grazing.

A study done by Courtois et al. (2004) found that 65 years of protection from grazing on 16 exclosures at different locations across Nevada resulted in relatively few differences between vegetation inside the exclosures and those exposed to moderate grazing outside the exclosures. Where differences did occur, total vegetation cover was greater inside the exclosures while density was greater outside the exclosures. Protection from grazing failed to prevent the expansion of cheatgrass and was generally more dense inside exclosures than outside. The current habitat conditions would likely continue with the possibility of temporary improvements due to favorable precipitation (Courtois et al. 2004) (West et al. 1984).

The design features of the proposed action could meet the goal for the Ely District by allowing sustainable livestock grazing while still progressing towards or achieving rangeland health standards which would also maintain and restore habitat conditions and watershed function and health.

2.5. Conformance

The proposed action and the no action alternative are in conformance with the Ely District Record of Decision and Approved Resource Management Plan signed August 20, 2008, which states, "Manage livestock grazing on public lands to provide for a level of livestock grazing consistent with multiple use, sustained yield, and watershed function and health." In addition, "To allow livestock grazing to occur in a manner and at levels consistent with multiple use, sustained yield, and the standards for rangeland health (p 85-86)." Management Action LG-1 states, "Make approximately 11,246,900 acres and 545,267 animal unit months available for livestock grazing on a long-term basis." Management Action LG-5 states, "Maintain the current grazing preference, season-of-use, and kind of livestock until the allotments that have not been evaluated for meeting or making progress toward meeting the standards or are in conformance with the policies are evaluated. Depending on the results of the standards assessment, maintain or modify grazing preference, seasons-of-use, kind of livestock and grazing management practices to achieve the standards for rangeland health. Changes, such as improved livestock management, new range improvement projects, and changes in the amount and kinds of forage permanently available for livestock use, can lead to changes in preference, authorized season-of-use, or kind of livestock. Ensure changes continue to meet the RMP goals and objectives, including the standards for rangeland health."

1. **Relationship to Other Plans**

The proposed action is consistent with the following Federal, State, and local plans to the maximum extent possible.

- White Pine County Portion (Lincoln/White Pine Planning Area) Sage-grouse Conservation Plan (2004)
- State Protocol Agreement between the Bureau of Land Management, Nevada and the Nevada Historic Preservation Office (2009)
- Northeastern Great Basin Area Resource Advisory Council (RAC) Standards and Guidelines (1997)
- Mojave-Southern Great Basin Resource Advisory Council (RAC) Standards and Guidelines (2006)
- Wilderness Act – 1964
- Migratory Bird Treaty Act (1918 as amended) and Executive Order 13186 (1/11/01)
- White Pine County Land Use Plan (2007)
- White Pine County Elk Management Plan (2007 revision)

2. **Tiering**

This document is tiered to the Ely Proposed Resource Management Plan/Final Environmental Impact Statement (November 2007).

Chapter 3. Affected Environment:

1. **Allotment Information**

The Medicine Butte, North Butte, and Goshute Basin Allotments as well as the Jakes Unit, Preston-Lund, and White River Trails encompass approximately 369,833 public land acres within the BLM Ely District. The grazing allotments occur within White Pine and Lincoln Counties. The majority of the Medicine Butte, North Butte, and Goshute Basin Allotments and a small portion (approximately 16%) of the Jakes Unit Trail occur within the Triple B Wild Horse Herd Management Area (Figures A.3–6.). The majority of the Goshute Basin Allotment and a small portion (approximately 3.5%) of the Medicine Butte Allotment occurs within the Goshute Canyon Wilderness (Figures A.3. and A.5.).

Native vegetation varies throughout the Medicine Butte, North Butte, and Goshute Basin Allotments as well as the Jakes Unit, Preston-Lund, and White River Trails and includes Curl-Leaf Mountain Mahogany, (*Cercocarpus ledifolius*), Utah Juniper (*Juniperus osteosperma*), Singleleaf Pinyon Pine (*Pinus monophylla*), Four-Wing Saltbush (*Atriplex canescens*), Shadscale (*Atriplex confertifolia*), Winterfat (*Krasheninnikovia lanata*), Basin Big Sagebrush (*Artemisia tridentata var. tridentata*), Wyoming Big Sagebrush (*Artemisia tridentata var. wyomingensis*), Mountain Big Sagebrush (*Artemisia tridentata var. vaseyana*), Black Sagebrush (*Artemisia nova*), Black Greasewood (*Sarcobatus vermiculatus*), Spiny Hopsage (*Grayia spinosa*), Great Basin Wildrye (*Leymus cinereus*), Indian ricegrass (*Achnatherum hymenoides*), Squirreltail (*Elymus elymoides*), Needleandthread (*Hesperostipa comata*), Bluebunch Wheatgrass (*Pseudoroegneria spicata*), Alkali Sacaton (*Sporobolus airoides*), Alkali Cordgrass (*Spartina gracilis*), sedge (*Carex sp*.), rush (*Juncus sp.*), and saltgrass (*Distichlis spicata*).

The Medicine Butte, North Butte, and Goshute Basin Allotments as well as the Jakes Unit, Preston-Lund, and White River Trails contains habitat for pronghorn antelope (Antilocapra Americana), elk (Cervus canadensis), mule deer (Odocoileus hemionus), greater sage-grouse (Centrocercus urophasianus), pygmy rabbit (Brachylagus idahoensis), and goshawk (Accipiter gentilis).

2. **Resources/Concerns Considered for Analysis - Proposed Action**

The following items have been evaluated for the potential for significant impacts to occur, either directly, indirectly, or cumulatively, due to implementation of the proposed action. Consideration of some of these items is to ensure compliance with laws, statutes or Executive Orders that impose certain requirements upon all Federal actions. Other items are relevant to the management of public lands in general and to the BLM Ely district in particular.

Resource/ Concern Considered	**Issue(s) Analyzed**	**Rationale for Dismissal from Analysis or Issue(s) Requiring Detailed Analysis**
Air Quality	No	Air quality in the affected area is generally good except for occasional dust storms. The proposed action would contribute to ambient dust in the air due to trailing, but the impact would be temporary and would not approach a level that would exceed any air quality standards. Further analysis is not necessary.
Areas of Critical Environmental Concern (ACEC)	No	Resource is not present
Cultural Resources	No	Impacts from livestock grazing on Cultural Resources are analyzed on page 4.9-5 of the Ely Proposed Resource Management Plan/Environmental Impact Statement (November 2007). A complete inventory of this allotment has not been conducted, therefore unknown cultural resources that are potentially eligible to the National Register of Historic Places may be present. All previously known eligible historic resources will be monitored for impacts. Mitigation and treatment will be applied as concerns are identified. Further analysis is not necessary.
Forest Health	No	No Forest Health concerns occur within or adjacent to the project area.
Rangeland Health	Yes	Analyzed in EA (Section 3.2–3 and chapter 4)
Migratory Birds	No	While overgrazing can lead to detrimental changes in nesting habitat for migratory birds, or nests can be trampled on, especially when sheep are trailed in tight bands, the proposed changes in the permitted grazing practices outlined in this document may reduce the likelihood of these things occurring. A list of bird species which are likely to occur in these allotments can be found in Appendix C.

Resource/ Concern Considered	**Issue(s) Analyzed**	**Rationale for Dismissal from Analysis or Issue(s) Requiring Detailed Analysis**
Native American Religious Concerns and other concerns	No	Tribal Coordination Letters were sent out January 8, 2008 for the authorization 270045 term permit renewal notifying the tribes of a 30 day comment period. No concerns were identified. Direct impacts and cumulative impacts would not occur because there were no identified concerns through coordination.
FWS Listed or proposed for listing Threatened or Endangered Species or critical habitat.	No	There is one known species Listed as Threatened or Endangered or Proposed for Listing in the project area. The White River spinedace *(Lepidomeda albivallis)* is known from the Wayne E. Kirch Wildlife management Area, and is managed by the Nevada Department of Wildlife (NDOW). The project will have no effect on the species. The greater sage grouse is a Candidate for listing and is known to exist in the project area. It will be analyzed under BLM Sensitive species.
Wastes, Hazardous or Solid	No	No hazardous or solid wastes exist on the permit renewal area, nor would any be introduced by the proposed action.
Water Quality, Drinking/Ground	No	Impacts from livestock grazing on Water Resources was discussed in the Ely Proposed Resource Management Plan/Final Environmental Impact Statement (November 2007). No surface or groundwater in the project area is used as human a drinking water source and no 303(d) listed impaired water bodies are found in the analysis area. The proposed action or alternatives would not affect existing uses of water in the analysis area and as such would not affect the water quality of surface or ground water sources. No further analysis is required.

Resource/ Concern Considered	**Issue(s) Analyzed**	**Rationale for Dismissal from Analysis or Issue(s) Requiring Detailed Analysis**
Wilderness	No	The Goshute Basin Allotment and the far northeastern corner of the Medicine Butte Allotment are within the Goshute Canyon Wilderness Area. Trammeling activities will occur in the form of removal of vegetation through livestock grazing, but would not impair wilderness characteristics.
Environmental Justice	No	No environmental justice issues are present at or near the project area. No minority or low income populations would be unduly affected by the proposed action
Floodplains	No	No floodplains have been identified by HUD or FEMA within the analysis area. Localized floodplains surrounding surface water sources (creeks and springs) may be utilized by livestock but the function and/or health of floodplain systems would not be affected by proposed or alternative actions. See Wetland/Riparian discussion. No further analysis is required
Watershed Management	No	Impacts from livestock grazing on Watershed Management was discussed in the Ely Proposed Resource Management Plan/Final Environmental Impact Statement (November 2007). The physical, biological, and chemical components which define a watershed in terms of its function, health, and vegetative resilience would not be affected by the proposed action or alternatives. The interrelationships between the physical constituents in the watersheds and affects to vegetative components would not be altered. No further analysis is required.
Wetlands/Riparian Zones	Yes	Analyzed in EA (Section 3.2–4 and chapter 4)

Resource/ Concern Considered	Issue(s) Analyzed	Rationale for Dismissal from Analysis or Issue(s) Requiring Detailed Analysis
Noxious and Invasive Weed Management	No	Several noxious species are found along roads within the project area, and halogeton and cheatgrass have spread into the uplands. The invasive species halogeton is found in pockets displacing native vegetation on salt desert shrub range sites. Salt from the soil can accumulate in the halogeton plant tissues and leach from dead plants and roots back onto the soil surface increasing salinity and favoring establishment of halogeton over other species. Grazing can increase the populations of the noxious and invasive weeds already within the permitted areas and could aid in the introduction of weeds from surrounding areas. Also, the movement of sheep across the trail system could introduce new weed species to the permitted areas. This risk is minimal since the sheep have moved to the same areas for the past century. If new sheep are brought in this risk increases. However the design features of the proposed action would help prevent weeds from establishing or spreading. No additional analysis is needed.
Special Status Plant Species, other than those listed or proposed by the FWS as Threatened or Endangered	Yes	Analyzed in EA (Section 3.2–1 and chapter 4)
Wild Horses	No	Impacts from livestock grazing on Wild Horses are analyzed on page 4.8-6 of the Proposed Resource Management Plan/Final Environmental Impact Statement (November 2007). The majority of the Medicine Butte Allotment and all of the Goshute Basin and North Butte Allotments are within the Triple B Wild Horse Herd Management Area (HMA). Site specific examination of the allotments did not reveal any concerns above those addressed in the EIS.

Resource/ Concern Considered	**Issue(s) Analyzed**	**Rationale for Dismissal from Analysis or Issue(s) Requiring Detailed Analysis**
Soil Resources	No	Impacts from livestock grazing on Soil Resources was discussed in the Ely Proposed Resource Management Plan/Final Environmental Impact Statement (November 2007). General observations pertaining to soil surface susceptibility to wind and/or water erosion was discussed in the Nevada Northeastern Great Basin Resource Advisory Council Standard 1 in the SDD (Appendix II). It was found that wind and water erosion occur during unusually large wind or precipitation events and that in general the soils are exhibiting signs of stability. The proposed or alternative actions would lead to continued compaction of soils along animal trails and watering sources. Compaction and soil disturbance at or along such sites would not be reduced but would not be expected to increase in areal extent. No further analysis is required.
Prime and Unique Farmlands	No	There are approximately 7445 acres of classified Prime and Unique Farmlands within the project area. The potential of the soils to become farmlands was determined to be dependent upon application of surface irrigation and desalinization of soil surface horizons. The proposed action or alternatives would not alter the characteristics which contribute to classification of potential Prime and Unique Farmlands and would not act to preclude the conversion to farmlands in the future. No further analysis is required.
Special Designations other than Designated Wilderness	No	No Special Designations occur within the project area.
VRM	No	The proposed action is consistent with the VRM classification 1, 2, 3, and 4 for the area therefore no direct or cumulative impacts to visual resources would occur.

Resource/ Concern Considered	**Issue(s) Analyzed**	**Rationale for Dismissal from Analysis or Issue(s) Requiring Detailed Analysis**
Special Status Animal Species, other than those listed or proposed by the FWS as Threatened or Endangered	Yes	Impacts to greater sage-grouse are analyzed in chapter 4. There is one known population of the pygmy rabbit *(Brachylagus idahoensis)*in the Goshute Basin Allotment and scattered locations which are thought to be potentially suitable habitat in the Medicine Butte Allotment, North Butte Allotment and along the Jakes Unit Trail. Suitable habit for the pygmy rabbit is found in areas with relatively tall sagebrush growing in deep soils which are friable and suitable for digging burrows. The US Fish and Wildlife has found that there is not enough information available at the current time to propose the species for listing. While there is not enough information available on the effects of grazing on the rabbit, keeping the amount of grazing at appropriate levels may help to prevent degradation of pygmy rabbit habitat. Therefore, further analysis will not be conducted in this EA. There is a population of White River speckled dace *(Rhinichthys osculus* ssp. (unnamed)), a BLM Sensitive species, on the Kirch WMA, near where the White River sheep trail crosses state land. It is not thought that grazing at appropriate levels will have any impacts on the fish, therefore further analysis will not be conducted in this EA.
Fish and Wildlife	No	Impacts from livestock grazing on Fish and Wildlife were analyzed on pages 4.6-10 through 4.6-11 in the Ely Proposed Resource Management Plan/Final Environmental Impact Statement (November 2007). General habitat could be maintained or improved by the changes to grazing season and active AUMs in the proposed action.
Lands and Realty	No	There would be no modifications to land use authorizations through the proposed action, therefore no impacts would occur. There are no rights of way or other realty actions proposed at or near the project sites.

Resource/ Concern Considered	Issue(s) Analyzed	Rationale for Dismissal from Analysis or Issue(s) Requiring Detailed Analysis
Recreation Uses	No	The proposed action would result in no impacts to recreational activities.
Paleontological Resources	No	Currently there are no identified paleontological resources identified. If new resources are discovered they will be mitigated as identified.
Mineral Resources	No	There would be no modifications to mineral resources through the proposed action, therefore no direct, indirect, or cumulative impacts would occur to minerals.
Vegetative Resources	Yes	Analyzed in EA
Wild and Scenic Rivers	No	No Wild and Scenic Rivers occur within or adjacent to the project area.

3.2–1 Special Status plant species

Affected Environment

The Nachlinger Catchfly (*Silene nachlingerae*) is known from 14 mapped occurrences in Nevada, where it is an endemic. This species is known to occur within the Goshute Basin allotment. The Nachlinger catchfly which is found in generally dry, exposed or somewhat sheltered carbonate (rarely quartzite) crevices in ridgeline outcrops, talus, or very rocky soils on or at the bases of steep slopes or cliffs, on all aspects but predominantly on northwesterly to northeasterly exposures, mainly in the subalpine conifer zone with sparse Petrophytum caespitosum, Erigeron cf. simplex, Pinus flexilis, P. longaeva, Artemisia arbuscula, Cercocarpus betuloides, Ericameria watsonii, Symphoricarpos oreophila, Leucopoa nevadensis, Jamesia tetrapetala, Primula nevadensis, etc. There is no estimated population size, however, due to its known habitats it is thought to be fairly inaccessible to cattle. The location in Goshute Basin allotment is approximately one mile from the nearest water source.

The White River catseye (*Cryptantha welchii*) is known from 35 occurrences in Nevada, where it is an endemic. There are several populations along the three sheep trails, especially where the White River trail crosses the state-owned Kirch Wildlife Management Area. The White River catseye is found in dry, open, sparsely vegetated outcrops, and derived sandy to silty or clay soils,

of whitish calcareous or carbonate deposits, often forming knolls or gravelly hills, and on soils adjacent to such habitats, mostly in Juniperus - Artemisia - Chrysothamnus vegetation with Artemisia pygmaea, Stenotus acaulis, Eriogonum shockleyi, Hymenopappus filifolius, Physaria, Erigeron compactus, Enceliopsis nudicaulis, Lepidium nanum, L. montanum, Linum perenne, Stanleya pinnata, Hilaria jamesii, Astragalus calycosus, Leucelene ericoides, Phlox tumulosa, Frasera albomarginata, etc. The population is estimated at 44,000 and it appears to tolerate or even increase with transient disturbances within its habitat, such as animal trampling and roadside maintenance. Other than occasional habitat loss from road building or other conversion, no impacts are known.

The Sunnyside green gentian (*frasera gypsicola*) is known from seven or nine populations where it is either an endemic or may be found in Utah. It is also known to occur in the Kirch Wildlife Management Area (WMA). The Sunnyside green gentian is found on open, dry, whitish, alkaline, often salt-crusted and spongy silty-clay soils on calcareous flats and barrens, with little if any gypsum content, in cushion-plant associations surrounded by sagebrush, greasewood, and occasionally barberry and swamp cedar (Juniperus scopulorum) vegetation, with Artemisia pygmaea, A. tridentata, Eriogonum shockleyi, Physaria chambersii, Cryptantha welshii, Hymenopappus filifolius, Phlox tumulosa, Lepidium nanum, etc.The population is estimated at between 69,8000 and 203,000 and possible impacts to the species in Nevada are potential land developments, seismic exploration, and livestock grazing and/or trampling.

The Charleston grounddaisy (*Townsendia jonesii* var. *tumulosa*) is known from 27 populations where it is a Nevada endemic. It is also found on the WMA. Its habitat is open, sparsely vegetated calcareous areas, on shallow gravelly carbonate soils on slopes and exposed knolls in forest clearings mostly in the montane conifer zone with Pinus ponderosa, extending to the pinyon-juniper, mountain mahogany, and lower subalpine conifer zones, recurring on knolls of white, alkaline, calcareous, silty lacustrine deposits in the upper shadscale/mixed-shrub and lower sagebrush zones. The estimated population is unknown and it is not known if sheep will eat it.

The parish phacelia (*Phacelia parishii*) is known from 16 occurrences and is found in Nevada, California and Arizona. It is located where the White River trail crosses the WMA, where the habitat is moist to superficially dry, open, flat to hummocky, mostly barren, often salt-crusted silty-clay soils on valley bottom flats, lake deposits, and playa edges, often near seepage areas, sometimes on gypsum deposits, surrounded by saltbush scrub vegetation but with few immediate associates such as *Atriplex confertifolia, A. canescens, A. argentea, Poa secunda, Monolepis nuttalliana, Phacelia fremontii, Lepidium flavum, Sarcobatus vermiculatus*, etc. Aquatic or wetland-dependent in Nevada. The estimated population is 37,000,000 and it is not known if sheep will eat it.

3.2–2 Special Status Animal Species

Affected Environment.

The greater sage-grouse (*Centrocercus urophasianus*) is a high-profile Sensitive Species that has been determined to be warranted for listing but which is precluded by other species of higher priority. (Federal Register /Vol. 75, No. 55 /Tuesday, March 23, 2010). The project areas contain breeding, nesting, brood-rearing, and winter habitat for greater sage-grouse, an “umbrella” species identified by the Ely District BLM to represent the habitat needs of the sagebrush-(Artemisia spp.) obligate or sagebrush-woodland dependent guild (BLM 2007; p. 4.7-10). The project area is located within the Butte Valley, Ruby Valley and Quinn greater sage-grouse Population Management Units (PMU). The Lincoln/White Pine County sage-grouse conservation plan

(hereafter termed the Plan; 2004) identified approximately 49 percent (950,773 ac.) of potential (1,870,317 ac.) sage-grouse habitat within the Butte/Buck/White Pine PMU and possibly 50% of potential sage-grouse habitat within the Quinn/Lincoln/Nye PMU as not meeting the sage-grouse habitat guideline standards outlined in Connelly et al. (2000). In the sagebrush habitat rating system used in the Plan, one category, termed "R2", is defined as "Areas with inadequate grass/forb understory composition, adequate sagebrush cover". Based on the cover data collected for the Medicine Butte, North Butte and Goshute Basin Allotments, some of the sagebrush habitat communities at the key areas and study sites measured within the allotments fall under this category. Site specific evaluation of sage-grouse habitat guidelines should be tempered with consideration of site potentials described in the rangeland ecological site descriptions: "There is much variability among sagebrush-dominated habitats (Tisdale and Hironaka 1981, Hironaka et al. 1983), and some Wyoming sagebrush and low sagebrush breeding habitats may not support 25% herbaceous cover. In these areas, total herbaceous cover should be >15 %. Further, the herbaceous height requirement may not be possible in habitats dominated by grasses that are relatively short when mature. In all of these cases, local biologists and range ecologists should develop height and cover requirements that are reasonable and ecologically defensible" (Connelly et al. 2000). The Ely District Approved Resource Management Plan (2008) states, "Sagebrush in the mid-late phase of the herbaceous state is desired for wildlife habitat." All of the evaluated key areas are in the mid to late phase of the herbaceous state (seral stages). Eighteen (two inactive, seven unknown, nine active in 2009) leks occur within the project area and approximately ten (four active and four inactive in 2009) occur within a three mile buffer of the project area. The key areas within the Medicine Butte allotment are almost all not in sagebrush habitats. One of them, 28, is in black sage and has a combined grass/forb cover of 54 percent while sagebrush cover is 45 percent. The total cover at this key area is 29 percent which since the ESD is 15–20 percent means that the area is meeting the herbaceous understory requirements set forth within the sage-grouse guidelines (Connelly et al. 2000). In the North Butte Allotment all three key areas are located in vegetation types that are not considered to be important sage-grouse habitat (Connelly et al. 2000). Therefore, two random points were generated within sagebrush habitat and cover was sampled using the line-point intercept method. Vegetation cover measured in 2009 at random sites 1 and 2 was 45 and 29 percent, respectively, exceeding the range presented in the ESD's. Random site 1 had a shrub, grass, and forb composition by cover of 98, 2, and 0 percent, respectively, which diverges from compositional weight estimates presented in the ESD of 35 percent shrubs, 55 percent grasses, and 10 percent forbs. Shrub, grass, and forb composition by cover for key area 2 was 100, 0, and 0 percent respectively, which diverges from the ESD (45% shrubs, 50% grasses, 5% forbs).

3.2–3 Rangeland Health and Vegetative Resources

Affected Environment

The project area includes several major plant communities as outlined in the SDDs. The proposed action is expected to have an effect on vegetative resources as follows: grazing of vegetation and occasional trampling of vegetation as livestock move through it. The impacts to vegetation by grazing or trampling based on the proposed action design features including setting utilization levels would result in maintaining or improving plant health, reproduction, diversity, and composition by allowing the plants to maintain and continue photosynthetic processes to initiate regrowth for recovery and grow adequately for reproduction. Sheep grazing with cattle grazing use is beneficial to vegetation (Cook 1985). Combining sheep and cattle grazing provides a more balanced grazing system to improve vegetation including reducing shrub cover in rangelands where there is a lack of natural disturbances and shrub composition is higher than it should be.

An assessment and evaluation of livestock grazing managements achievement of the standards and conformance to the guidelines was completed in conjunction with this project (see SDD'sAppendix C). The Medicine Butte, North Butte, Goshute Basin Allotments and the Jakes Unit Trail and Preston-Lund Trail occur within the Northeastern Great Basin Area Resource Advisory Council (RAC) area. The White River Trail occurs within the Mojave-Southern Great Basin Area Resource Advisory Council (RAC) area. The Standards and Guidelines reflect the stated goals of improving rangeland health while providing for the viability of the livestock industry, all wildlife species, and wild horses and burros in the Northeastern Great Basin Area and the Mojave-Southern Great Basin Area. Standard 2 is not addressed in this section, but is in section 3.2–4 and chapter 4.

- **Medicine Butte Allotment**

  Currently, the Medicine Butte allotment is achieving the soil stability standard, Standard 1. Rangeland monitoring data and professional observation indicate that infiltration and permeability rates are appropriate for the Medicine Butte Allotment. Cover values measured at key areas exceeded cover values presented in the Ecological Site Descriptions (ESD). The allotment is not meeting the habitat standard, Standard 3, but is making significant progress towards meet it. Rangeland monitoring data and professional observations indicate that some pastures within the Medicine Butte Allotment are healthy, productive, and have a diverse population of native and/or desirable plant species, appropriate to the site characteristics. This, in turn, provides suitable habitat for wildlife as a function of vegetation structure, distribution, productivity, and composition. However, other pastures are failing to achieve the habitat standard as a result of skewed vegetation composition and structure. Existing livestock grazing management was identified as a significant contributing factor to not meeting the standards in only one use area on the allotment in addition to other natural and historical factors. Existing livestock grazing management was not identified as a significant contributing factor, but other natural and historical factors, in the remainder of the allotment as a cause to not meet the standard.

- **North Butte Allotment**

  The North Butte allotment is achieving the soil stability standard, Standard 1. Rangeland monitoring data and professional observation indicate that infiltration and permeability rates are appropriate for the North Butte Allotment. Cover values measured at key areas exceeded cover values presented in the Ecological Site Descriptions (ESD). The allotment is not meeting the habitat standard, Standard 3, but is making significant progress towards meet it. Rangeland monitoring data and professional observations indicate that the North Butte allotment is providing suitable wildlife habitat as a function of vegetation structure, distribution, and productivity. However, vegetation composition diverges from values presented in the ESD's for all key areas. Existing livestock grazing management was not identified as a significant contributing factor, but other natural and historical factors are a cause to not meet the standard.

- **Goshute Basin Allotment**

  The Goshute Basin allotment is achieving the soil stability standard, Standard 1. Rangeland monitoring and professional observation indicates that overall soil condition is currently being maintained. Soils are stable and productive and the topsoil is holding in place. The allotment is also achieving the habitat standard, Standard 3. Rangeland monitoring and professional observations show habitat conditions throughout a large portion of the allotment exhibit a

healthy and productive plant community that is achieving suitable habitat for wildlife and maintaining ecological processes.

- **Jakes Unit Trail and Preston-Lund Trail**

  The Jakes Unit Trail and Preston-Lund Trail are achieving the soil stability standard, Standard 1. Rangeland monitoring and professional observation indicates that soil condition is currently being maintained for the majority of native range within the trails. The trails are not meeting the habitat standard, Standard 3, but are making significant progress towards meet it. Rangeland monitoring and professional observation indicates the habitats lack healthy, productive and diverse populations of native and/or desirable plant species, appropriate to the site characteristics and are not maintaining ecological processes along the trails. Diversity of habitat is limited due to the physical placement and location of the trails. Existing livestock grazing management was not identified as a significant contributing factor, but other natural and historical factors are a cause to not meet the standard.

- **White River Trail**

  The White River Trail is achieving the soil stability standard, Standard 1. Rangeland monitoring and professional observation indicates that overall soil condition is currently being maintained. Rangeland monitoring and professional observations show habitat conditions throughout a large portion of the trail are not exhibiting a healthy and productive plant community with suitable habitat for wildlife. Existing livestock grazing management was not identified as a significant contributing factor, but other natural and historical factors are a cause to not meet the standard.

A summarization of standards is in Table 1, and a more detailed discussion is presented in the SDD (Appendix C).

The project area includes several major plant communities as outlined in the SDD's. The vegetative resources for the allotment are primarily described in the SDD's for this permit renewal. Vegetation is typical of the Intermountain Great Basin Area. The primary vegetation types on the allotments are a mixture of Curl-Leaf Mountain Mahogany, (*Cercocarpus ledifolius*), Utah Juniper (*Juniperus osteosperma*), Singleleaf Pinyon Pine (*Pinus monophylla*) and Mountain Big Sagebrush (*Artemisia tridentata var. vaseyana* in the higher eleveations, , Wyoming Big Sagebrush (*Artemisia tridentata var. wyomingensis*), Black Sagebrush (*Artemisia nova*), Great Basin Wildrye (*Leymus cinereus*), Indian ricegrass (*Achnatherum hymenoides*), Squirreltail (*Elymus elymoides*), Needleandthread (*Hesperostipa comata*), and Bluebunch Wheatgrass (*Pseudoroegneria spicata*) at the mid to upper eleveations, Four-Wing Saltbush (*Atriplex canescens*), Shadscale (*Atriplex confertifolia*), Winterfat (*Krasheninnikovia lanata*), Basin Big Sagebrush (*Artemisia tridentata var. tridentata*), Black Greasewood (*Sarcobatus vermiculatus*), Spiny Hopsage (*Grayia spinosa*) in the lower elevations and valley bottoms, Alkali Sacaton (*Sporobolus airoides*), Alkali Cordgrass (*Spartina gracilis*), sedge (*Carex sp*), rush (*Juncus sp.*), and saltgrass (*Distichlis spicata*) in the saline bottoms and meadows. Large portions of the allotments appear to be transitioning toward an altered, shrub-dominant, vegetative state.

3.2–4 Riparian

Affected Environment

Livestock grazing on Water Resources and Vegetation Resources (riparian) were evaluated in the Standard Determination Documents (Appendix C) and in the Ely Proposed Resource Management Plan/Final Environmental Impact Statement (November 2007). BLM used the accepted Proper Functioning Condition method to assess wetland/riparian systems on public lands along with other rangeland monitoring methods to reflect upon Standard 2 for grazing as accepted by the Nevada Northeastern Great Basin Resource Advisory Council. Riparian condition, health, and resilience to change was assessed for wetland/riparian systems. Though the systems were being used by livestock, wildlife, and wild horses it was found that the riparian systems were functioning and showed the resilience necessary to function with continued use as proposed. For a summarization of Standard 2: Wetland/Riparian achievement for each of the allotments see Table 1 and the SDD's (Appendix C)

- **Medicine Butte Allotment**

  The Medicine Butte allotment is not achieving Standard 2 and livestock were not identified as a significant contributing factor to not achieving the standard. Eleven springs distributed throughout the Medicine Butte Allotment were identified for Proper Functioning Condition (PFC) assessment based solely on accessibility and use by livestock. These springs were visited and assessed in 2009 by an interdisciplinary team . Of these riparian areas , seven were summarily assessed as Proper Functioning Condition. Of the remaining four sites , two were rated as Functional at Risk with an upward trend (lack of adequate vegetation cover, bare soil, and channelization), another was rated as Functional at Risk with a downward trend (channelization and the lack of adequate vegetation cover), and one was rated as Not Functioning (excessive water fluctuation levels, channelization and a lack of adequate vegetation cover). A more detailed discussion is given in the Medicine Butte SDD (Appendix C).

- **North Butte Allotment**

  No known riparian areas occur on the North Butte Allotment.

- **Goshute Basin Allotment**

  The Goshute Basin Allotment is not meeting the Standard 2 but is making significant progress towards meeting the standard. Livestock was identified as a significant contributing factor to not achieving the standard. Riparian sites were last assessed in 2008. The majority of the riparian sites were rated as in Proper Functioning Condition with many having improved from Functional at Risk to Proper Functioning since the previous assessment in 1995. Some of the sites that are not meeting the standard had improved since the previous assessment and a small number of them had not improved or had declined from the previous assessment. Not meeting the standard for these sites was determined to be caused by excessive trampling and hoof action by wildlife and livestock. In addition to this permit authorization, there is one other permit associated with this allotment which authorizes cattle use in the years the sheep are not on the allotment. A more detailed discussion is given in the Goshute Basin SDD (Appendix C).

- **Jakes Unit Trail**

  Jakes Unit Trail has no riparian areas and there are no natural water sources within this trail.

- **Preston-Lund Trail**

  Preston-Lund Trail has no riparian areas and there are no natural water sources within this trail.

- **White River Trail**

  Preston-Lund Trail has no riparian areas and there are no natural water sources within this trail.

Chapter 4. Environmental Effects:

1. Direct and Indirect

a. Environmental Effects: Proposed Action

- **Special Status Animal Species**

Impacts from livestock grazing on selected Special Status Species were analyzed on page 4.7-28 through 4.7-32 of the Ely Proposed Resource Management Plan/Final Environmental Impact Statement (November 2007). The grazing rotation described in the proposed action and the established allowable use levels would be beneficial in providing perennial grass cover and forage for sage grouse habitat. A pasture rotation promotes herbaceous plant growth, re-growth and reproduction within all pastures. Allowable use levels allow for desirable key herbaceous species to develop above ground biomass for soil protection and to contribute to litter cover, and develop roots to improve carbohydrate storage for vigor, reproduction, and improve/increase desirable perennial cover. Leaving the Cherry Fire fence would allow for more strict management of livestock use on the Cherry pasture which would maintain or promote a healthy herbaceous composition in the Cherry pasture.

The combination of both cattle and sheep grazing throughout the Medicine Butte Allotment may also be beneficial to sage grouse habitat. Recent research indicates that sage grouse brood rearing habitat dominated by dense stands of decadent sagebrush can be manipulated to increase herbaceous components through strategic sheep grazing (McGinty et al. 2009). Cook (1985) summarized several studies conducted on northern Utah foothill rangelands. "Sheep generally consumed approximately 17% of the grass, 51% of the forbs and 57% of the browse produced when grazed alone, while cattle consumed 52% of the grass, 20% of the forbs and 18% of the browse when grazed alone. When grazed in common, all three forage classes received approximately 50% use." Combining sheep and cattle grazing provides a more balanced grazing system to improve rangeland health including reducing shrub cover in rangelands where there is a lack of natural disturbances and shrub composition is an issue.

Specific requirement regarding the placement of salt/mineral blocks would be included with the terms and conditions of the permit to improve distribution and protect riparian areas which would also be beneficial to sage grouse. Insofar as the proposed action works to move sagebrush community conditions toward those described in the Ecological Site Descriptions, it will also benefit the greater sage-grouse.

- **Special Status Plant Species**

Impacts from livestock grazing on selected Special Status Species were analyzed on page 4.7-28 through 4.7-32 of the Ely Proposed Resource Management Plan/Final Environmental Impact Statement (November 2007). The possible effects to sensitive plants would be either grazing itself or trampling. The catchfly's

habitat is not in areas where cattle or sheep are likely to be and the catseye is thought to be able to withstand some disturbance. The other species' effects from cattle or sheep grazing are largely unknown but the fact that most of them occur on state land will minimize any potential effects.

- **Rangeland Health and Vegetative Resources**

Medicine Butte Allotment

Impacts from livestock grazing on Rangeland Standards and Health are analyzed on pages 4.16-3 through 4.16-4 of the Ely Proposed Resource Management Plan/Environmental Impact Statement (November 2007). Beneficial impacts to rangeland standards and health are consistent with the need and objectives for the proposed action. The Ely RMP/EIS analyzed and disclosed general effects of livestock grazing and associated actions on vegetative resources on page 4.5-9. The effects of the proposed action on Rangeland Health and the Vegetative Resources would be expected to improve conditions. The grazing rotation throughout the Medicine Butte Allotment requires that sheep and cattle would not use the same areas every year and a specific rotation schedule would be established for the Snow Creek Seedings. Allowing grazing to occur in the same place, at the same time, year after year inhibits palatable plants from completing their life-cycle within certain pastures while a pasture rotation promotes herbaceous plant growth, re-growth and reproduction within all pastures.

Leaving the Cherry Fire fence would allow for more strict management of livestock use on the Cherry pasture which would promote overall rangeland health and an appropriate vegetative composition. With the establishment of the Cherry pasture, 234 sheep AUMs and 235 cattle AUMs would be moved from the suspended AUMs category to the active category as a result of the increased forage production in the Cherry Fire or Cherry pasture. Thirty-two sheep AUMs and 32 cattle AUMs would be removed from the Butte Valley pasture and placed in the Cherry pasture giving a total of 266 sheep AUMs and 267 cattle AUMs in the Cherry pasture. These changes would alleviate some of the grazing pressure from the Butte Valley pasture and assist in progressing towards meeting the rangeland health standards as well as achieve management objectives and maintain the vegetative community within the Cherry pasture.

The rotations as well as the Cherry Fire fence would allow perennial grasses and forbs to grow and establish healthy roots and would be beneficial in providing perennial grass cover and forage for habitat (Standard #3). Allowable use levels would also be established to allow for desirable key herbaceous species to develop above ground biomass for soil conservation and to contribute to litter cover (Standard #1), and develop roots to improve carbohydrate storage for vigor, reproduction, and improve/increase desirable perennial cover. The change of the season of use in the Hunter Point pasture of the Medicine Butte Allotment from 11/1–2/28 to 9/1–3/31 would encourage better distribution between the Hunter Point pasture, which has generally been under utilized, and the Butte Valley pasture, which has generally been over utilized, by allowing the permitee to make use earlier in the fall before deep snow may restrict access and/or early in the spring when forage is becoming available and there are enough resources available

to allow for regrowth of grazed plants. Research has shown that moderate levels of fall grazing can increase grass species and total biomass availability the following spring and perennial grass and forb cover increases and shrub cover decreases (McGinty et al. 2009). However, regardless of the season of grazing, livestock should be managed to allow optimum growth of forbs, grasses, and sagebrush, and the amount of forage removed is not nearly as important as the amount of residue that remains (McGinty et al. 2009).

Placing 453 of the available 906 AUMs in the Paris Seeding/Pony Mountain pasture in voluntary non-use for the period of 5 years would reduce the impacts to vegetative resources in that pasture due to the combined resource use of both domestic livestock and a large number of wild horses.

Several studies have shown that biological diversity is increased in areas where both sheep and cattle are part of a grazing system. Cook (1985) summarized several studies conducted on northern Utah foothill rangelands. "Sheep generally consumed approximately 17% of the grass, 51% of the forbs and 57% of the browse produced when grazed alone, while cattle consumed 52% of the grass, 20% of the forbs and 18% of the browse when grazed alone. When grazed in common, all three forage classes received approximately 50% use." Combining sheep and cattle grazing provides a more balanced grazing system to improve rangeland health including reducing shrub cover in rangelands where there is a lack of natural disturbances and high shrub composition is an issue.

North Butte Allotment

Changing the season of use in the North Butte Allotment from 2/15–4/15 and 8/01–10/31 to 8/01–4/15 would open up the winter season for grazing. Winterfat and sickle saltbush are preferentially selected for by livestock during the winter season over grasses. In addition, grazing during this season, when grasses are dormant, does not discourage growth during the following growing season. Utilizing shrubs during the winter removes photosynthetic material, slowing resource (e.g. water, nutrients) acquisition by shrubs the following spring. In response, grasses are able to acquire additional resources, promoting grass production. Since very little grasses exist at key areas currently, opening up and promoting use during the winter season could encourage grass production and a better compositional balance and thus, help in progressing towards or achieving the rangeland health standards.

Goshute Basin Allotment

The proposed action should continue to maintain or improve vegetative resource throughout the allotment and continue to achieve the rangeland health standards. Allowable use levels would allow for desirable key herbaceous species to develop above ground biomass for soil protection and to contribute to litter cover (Standard #1), and develop roots to improve carbohydrate storage for vigor, reproduction, and improve/increase desirable perennial cover (Standard #3).

Jakes Unit Trail, Preston-Lund Trail and White River Trail

The proposed action should improve vegetative resources along all of the trails and continue to progress towards or achieve the rangeland health standards. Establishing allowable use levels would allow for desirable key herbaceous species to develop above ground biomass for soil conservation and to contribute to litter cover (Standard #1), and develop roots to improve carbohydrate storage for vigor, reproduction, and improve/increase desirable perennial cover (Standard #3). In addition, the period of use for the trails (April and November) may also be beneficial to vegetative resources because it has been suggested that the implementation of short-duration grazing seasons in the fall may be an economical way to enhance the diversity of sagebrush steppe vegetation communities (McGinty et al. 2009). A stipulation would be added to the permit requiring sheep herds to move a minimum of 5 miles per day to avoid sitting in one area too long. The trails are grazed for a short time in the early portion of the critical growing season but are then rested for the remainder of the growing season until fall to allow vegetation to complete the phenological cycle and maintain forage and vegetative cover.

All Allotments

These management practices would strengthen the native herbaceous plant component relative to the current shrub composition. Overall, the proposed action could assist in reducing the impacts of grazing on grasses and forbs and is expected to increase plant health, reproduction, diversity and composition by allowing the plants to maintain and continue photosynthetic processes, recover and grow adequately for reproduction. In addition, specific stipulations regarding the placement of livestock supplements would be added to this permit for all allotments and trails to improve distribution and protect riparian areas which would overall assist in the achievement of the standards. The terms and conditions that would be established for the proposed action would allow for balanced growth of forbs, grasses, and sagebrush. These management practices would provide a good opportunity to achieve and make significant progress toward achieving Standards and maintaining or improving native vegetative composition.

- **Riparian**

General impacts from livestock grazing on Water Resources and Vegetation Resources (Riparian) were introduced and discussed in the Ely Proposed Resource Management Plan/Final Environmental Impact Statement (November 2007) and in the SDDs. Several design features in the proposed action were developed specifically to address resource and management concerns such as herding livestock away from riparian areas, maintaining the current riparian exclosure fences, alternating the seasons of use to only odd years in the Goshute Basin Allotment, and rotational grazing in the Medicine Butte Allotment. A Term and Condition common to all BLM grazing permits, including this proposed action, addresses the placement of salt and mineral supplements and their proximity to watering locations. The relative distance from watering sites or riparian systems with water helps to maintain livestock distribution in upland locations and divert livestock away from riparian areas. Specific design features and general terms and conditions as applied in the proposed action are expected to result in significant progress being made towards achieving Standard 2.

Existing livestock management was not identified as a significant contributing factor for not meeting the standard in the Medicine Butte Allotment. Being mindful of the direct affects of wildlife and wild horses and the recommendations in the Medicine Butte SDD regarding wild horses there the direct and indirect effects of the proposed action on the Riparian/Wetlands resources are expected to incrementally improve in the odd years and in the months livestock are not utilizing the riparian systems. It is believed that the numbers of sheep being permitted, the duration of use, and the intensity and season of grazing within the riparian areas will not prove detrimental to the riparian vegetation. The riparian vegetation is expected to recover from livestock use later in the growing season prior to winter season and its non-growth or dormancy period. Utilization of riparian resources by wildlife, wild horses, and livestock associated with other grazing permits is not expected to change.

b. **Environmental Effects: Alternative 1**

- **Special Status Animal Species**

  Impacts to Sage Grouse would likely be similar to those described in the Proposed Action. Removal of the fence could reduce effects on Sage Grouse since the barrier and the danger of entanglement would be reduced. However, the separation of the area into a pasture would allow for more strict management of livestock use, which could help to improve overall habitat conditions within the allotment.

- **Special Status Plant Species**

  Impacts to special status plant species would likely be the same as those described in the Proposed Action. The removal of the fence would not change effects to Sensitive plants.

- **Rangeland Health and Vegetative Resources**

  Impacts to rangeland health and vegetative resources would likely be similar to those described in the Proposed Action since the same management actions would be used. However, the removal of the fence would reduce the ability to manage livestock in that particular area of the Medicine Butte Allotment, which could result in livestock overusing the burned area due to the abundance of desirable forage. This may reduce the ability to achieve or progress towards meeting the Standards #1 and #3 in that area of the allotment.

- **Riparian**

  Impacts to riparian areas would likely be similar to those described in the Proposed Action.

c. **Environmental Effects: No Action Alternative**

- **Special Status Animal Species**

  The current impacts to special status animal species, including sage grouse would likely continue. The current permit does not establish allowable use levels or stipulations regarding the placement of salt/mineral blocks which could result

in the over use of perennial grasses and forbs or poor livestock distribution and available forage utilization.

- **Special Status Plant Species**

  There is little possibility of effects to Sensitive plants from grazing due to the factors listed under the Proposed Action.

- **Rangeland Health and Vegetative Resources**

  The current status on the Rangeland Health would continue because no changes would be made to the current permit. This includes not establishing allowable use levels on forage, no stipulations regarding the placement of salt/mineral supplements, maintaining the current season of use on all pastures and allotments and removing the Cherry Fire fence. The removal of the fence would reduce the ability to manage livestock in that particular area of the Medicine Butte Allotment, which could result in livestock overusing the burned area due to the abundance of desirable forage. Maintaining the current season of use on the allotments and pastures, the lack of allowable use levels, stipulations regarding the placement of salt/mineral supplements combined with the removal of the fence would reduce the ability to achieve or progress towards meeting the Standards #1 and #3. The current status on vegetative resources would also likely continue without the establishment of the rotation system, allowable use levels and stipulations regarding the placement of salt/mineral supplements. The impacts to vegetation by grazing or trampling based on the current permit could be increased because allowable use levels would not be established. Plants may be heavily grazed resulting in declining recovery, reducing plant health and delaying or preventing reproduction. The opportunity for perennial grasses and forbs to establish healthy roots and achieve full phenological development would be reduced. Plant vigor, seed production, vegetative production, structure, composition, diversity and vegetative cover as well as soil conditions would likely not be improved to the degree which could result from the proposed action or Alternative 1.

- **Riparian**

  The current status on Wetland/Riparian Sites (Standard 3) would likely continue.

2. **Cumulative Effects**

According to the 1994 BLM publication (attached to WO-IB-94-310) "Guidelines for Assessing and Documenting Cumulative Impacts, "The cumulative analysis can be focused on those issues and resource values identified by management, the public and others during scoping that are of major importance."

Additionally, the guidance provided in The National BLM NEPA Handbook H-1790-1 (2008), for analyzing cumulative effects issues states, "determine which of the issues identified for analysis may involve a cumulative effect with other past, present, or reasonably foreseeable future actions. If the proposed action and alternatives would have no direct or indirect effects on a resource, you do not need a cumulative effects analysis on that resource" (p.57). Also, a comprehensive cumulative impacts analysis can be found

on pages 4.28-1 through 4.36-1 of the Ely Proposed Resource Management Plan/Final Environmental Impact Statement (November 2007).

The Cumulative Effects Study Area (CESA) on special status animal species including sage-grouse and special status plant species is defined as the Medicine Butte, North Butte, and Goshute Basin Allotments as well as the Jakes Unit, Preston-Lund, and White River Trails.

a. **Past Activities**

Livestock grazing has a long history in the region dating back to the late 1800's. Throughout its history, livestock grazing has been characterized by localized areas of intense use. Wild horse use also has a long history in the region dating back to the late 1800's. Range improvements have occurred on the allotment to improve grazing management and include fencing and stockwater developments. The Cherry Fire fence, constructed in 2000, excluded livestock use during the initial vegetation recovery to promote achievement of resource objectives. Once objectives were achieved, the fence has provided managers with better livestock control, promoting sustainable grazing and land health. Hunting, trapping, wildlife viewing, OHV use and other activities have also occurred on these allotment year round.

b. **Present Activities**

Currently, the Medicine Butte and North Butte Allotments are authorized for grazing use by cattle, sheep, and domestic horses to one permittee, authorization #2700045 and the sheep trails are used for a short period of time by several other livestock operators every year. In addition, one additional grazing permittee is authorized for cattle grazing on the Goshute Basin Allotment in the even years.Wild horse use currently occurs within the allotments and trails. Maintenance of range improvements is ongoing. The Cherry Fire fence aids managers in achieving resource objective through controlling livestock distribution. Hunting, trapping, wildlife viewing, OHV use and other activities currently occur on the allotments year round.

c. **Reasonably Foreseeable Future Activities (RFFA)**

Livestock grazing as well as wild horse use is likely to continue within the CESA. One additional grazing permittee would likely continue to be authorized for cattle grazing on the Goshute Basin Allotment in the even years and the sheep trails would also likely be used for a short period of time annually by other permittees. Maintenance of range improvements would be ongoing. New range improvement projects are considered on an annual basis and analyzed on a site specific basis. New range improvement projects benefit vegetation resources and wildlife habitat through better livestock distribution and control. Hunting, trapping, wildlife viewing, OHV use and other activities will likely occur on all allotments year round. Wildfires could occur within the CESA. If the Silver State Trail is designated, then increased traffic on existing roads and trails may occur. This would increase the interaction between recreation and livestock. Potential impacts may include: increased livestock harassment, increased potential of livestock being hit by recreation vehicles, increased tampering with range improvement projects, and increase off-road travel. If the Ely Wind Mountain project is implemented, the following impacts may occur: increased traffic and reduction of grazable land area leading to a reduction in AUM's in pastures containing wind turbines.

3. **Cumulative Effects Summary**

a. **Special Status Animal Species**

- **Proposed Action**

  The proposed action is designed to maintain habitat which would reduce effects to sage-grouse habitat. The proposed action in combination with the reasonably foreseeable future activities (RFFA) are not anticipated to have any cumulative effects on sage-grouse habitat.

- **Alternative 1**

  The effects of the alternative would be similar to those described in the proposed action. The removal of the fence would reduce the ability to manage livestock use in the Cherry Fire burned area and possibly resulting in the over use of this area and a decline in favorable habitat.

- **No Action Alternative**

  Uses of public lands are not expected to change in intensity, duration, or frequency within the allotments. The combined effects of the current permit and the removal of the fence to sage-grouse habitat would likely remain the same to those currently existing in the Medicine Butte, North Butte, Goshute Basin Allotments and the Jakes Unit, Preston-Lund and White RiverTrails and less improvements to habitat would be made.

b. **Special Status Plant Species**

- **Proposed Action**

  All present and RFFAs and some past actions have considered the special status plant species. Most of the projects have been designed to avoid these species to reduce effects. The proposed action in combination with other actions is not anticipated to have cumulative effects on the particular plant species or their habitat.

- **Alternative 1**

  The effects of the alternative would be similar to those described in the proposed action.

- **No Action Alternative**

  Uses of public lands are not expected to change in intensity, duration, or frequency within the allotments. As such, effects to the special status plant species habitat would remain similar to those currently existing in the Medicine Butte, North Butte, Goshute Basin Allotments and the Jakes Unit, Preston-Lund and White River Trails.

c. **Rangeland Health, Vegetative Resources and Riparian**

- **Proposed Action**

  Transportation activities, including existing road maintenance, grazing, recreation and wildfires within the CESA can contribute to affects of the achievement or progress towards the rangeland standards. The proposed action, in combination with any RFFAs, is expected to continue to achieve or progress towards meeting RAC standards within the CESA. The Cherry Fire fence would aid in achieving resource objectives if converted to a permanent fence as a result of controlling livestock distribution, which prevents over-utilization. As the proposed action works to continue progress toward the RAC standards, it would also benefit vegetative resources and riparian areas within the CESA.

- **Alternative 1**

  The cumulative effects of this proposal would be the same as those in the proposed action. The removal of the fence may reduce the ability to achieve or progress towards the RAC standards in that area of the Medicine Butte Allotment. If the Cherry Fire fence is removed, livestock would likely drift to the burn, from adjacent native range due to the abundance of desirable vegetation, resulting in poor livestock distribution and over-utilization.

- **No Action Alternative**

  The cumulative effects on Rangeland Health, Vegetative Resources and Riparian of this proposal may increase due to the lack of management practices that would be established in the Proposed Action and Alternative 1. If the Cherry Fire fence is removed, livestock would likely drift to the burn, from adjacent native range due to the abundance of desirable vegetation, resulting in poor livestock distribution and over-utilization.

Chapter 5. Proposed Mitigation and Monitoring

Proposed Mitigation

Outlined design features incorporated into the proposed action are sufficient. No additional mitigation is proposed based on the analysis of environmental consequences.

Proposed Monitoring

Appropriate monitoring has been included as part of the Proposed Action. No additional monitoring is proposed as a result of the impact analysis.

Chapter 6. Tribes, Individuals, Organizations, or Agencies Consulted:

The following persons, groups, and agencies were contacted during the preparation of this document.

Permittees

Authorization 270045

Nevada Department of Wildlife

Steve Foree

Tribal Consultation

Tribal Coordination Letters were sent January 8, 2010. No concerns were identified through coordination.

Public Notice of Availability

The Ely District Office mails an annual Consultation, Cooperation, and Coordination (CCC) letter to individuals and organizations that have expressed an interest in rangeland management related actions. Those receiving the annual CCC letter have the opportunity to request from the Field Office more information regarding specific actions. The following individuals and organizations, who were sent the annual CCC letter on December 22, 2009, have requested additional information regarding rangeland related actions or programs within the Medicine Butte, North Butte, and Goshute Basin Allotments as well as the Jakes Unit, Preston-Lund, and White River Trails :

- Nevada Department of Wildlife, Alan Jenne
- Nevada Department of Wildlife, D. Bradford Hardendbrook
- Nevada Division of Forestry
- Nevada Land and Resource, David Buhlig
- Eureka County Department of Natural Resources
- Western Watersheds Project
- White Pine Conservation District
- Frank Reid
- Steven Carter
- U.S. Fish and Wildlife Service, Robert D. Williams
- Sustainable Grazing Coalition, Richard Orr
- Eastern Nevada Landscape Coalition, Betsy Macfarlan
- PLUAC, Jacob Carter
- Craig F. Baker

- Wendy Paris
- John Uhalde and Company
- N-4 Grazing Board
- Laurel Marshall
- Drew Herbst
- Nevada State Clearinghouse (electronic copy only)

The above interested persons and organizations on the Ely District Rangeland Management Interested Public List will be mailed a copy of the preliminary EA with finalized Goshute Basin Allotment and Jakes Unit, Preston-Lund, and White River Trails SDDs and draft Medicine Butte, North Butte, SDD's for review and comment. Note: The Goshute Basin Allotment and Jakes Unit, Preston-Lund, and White River Trails SDDs are finalized; therefore comments to these documents will not be considered.

Chapter 7. List of Preparers

Table 4. List of Preparers

Name	Title/Resource Area
Mark Freese, TJ Mabey	Rangeland Resources/Project Lead
Mindy Seal	Vegetation; Noxious and Invasive, Non-native Species
Gina Jones	Ecologist/Planning and Environmental Coordinator
Marian Lichtler	Wildlife, Special Status Species, Migratory Birds
Lisa Gilbert	Cultural Resources
Mark D'Aversa	Soil, Water, Wetlands and Riparian, Floodplains
Ruth Thompson	Wild Horse and Burro
Elvis Wall	Native American Cultural Concerns
Dave Jacobson	Wilderness
Chris Mayer	Supervisory Rangeland Management Specialist

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Appendix A. Figures

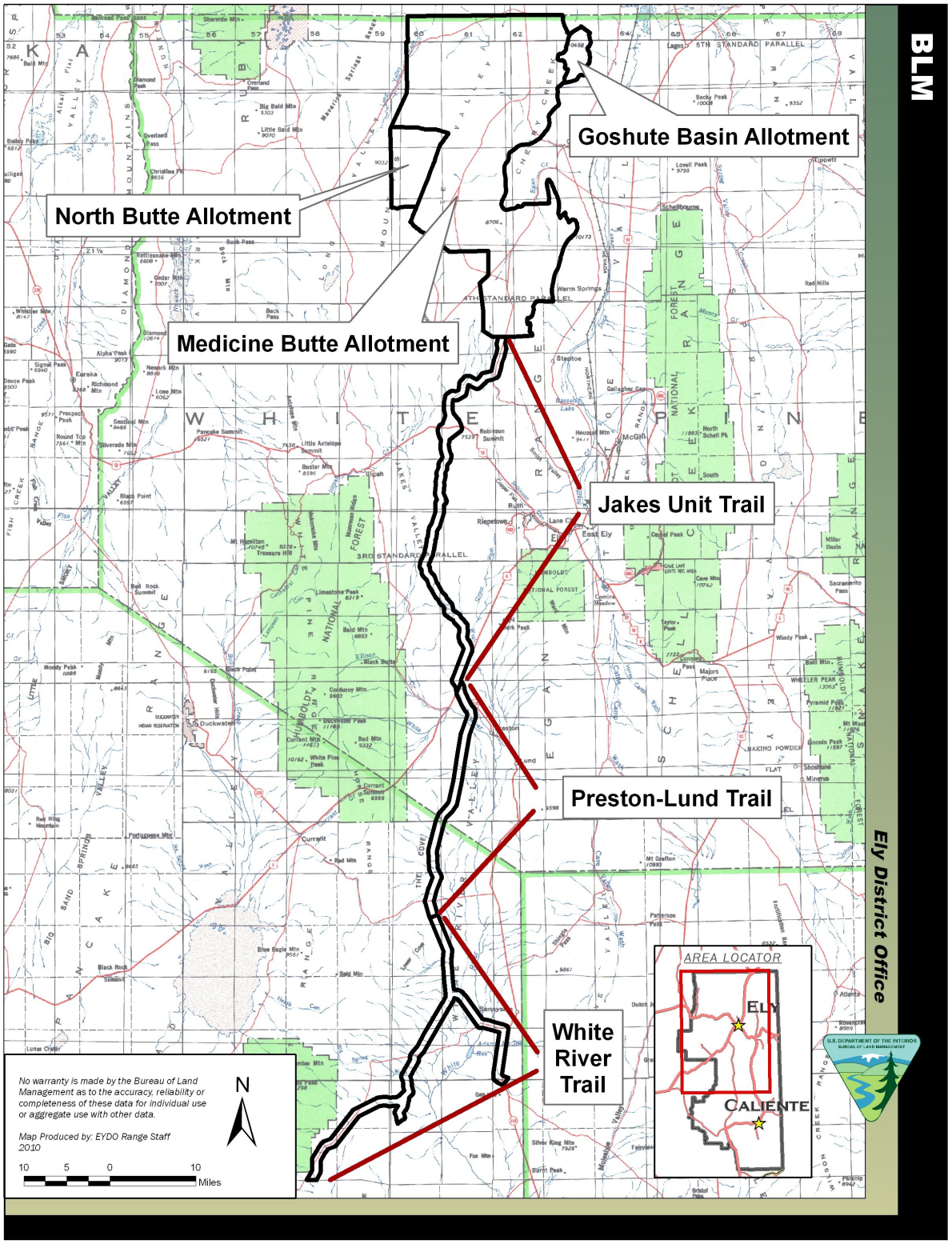

Figure 1. Medicine Butte, North Butte, and Goshute Basin Allotments as well as the Jakes Unit, Preston-Lund, and White River Trails Map

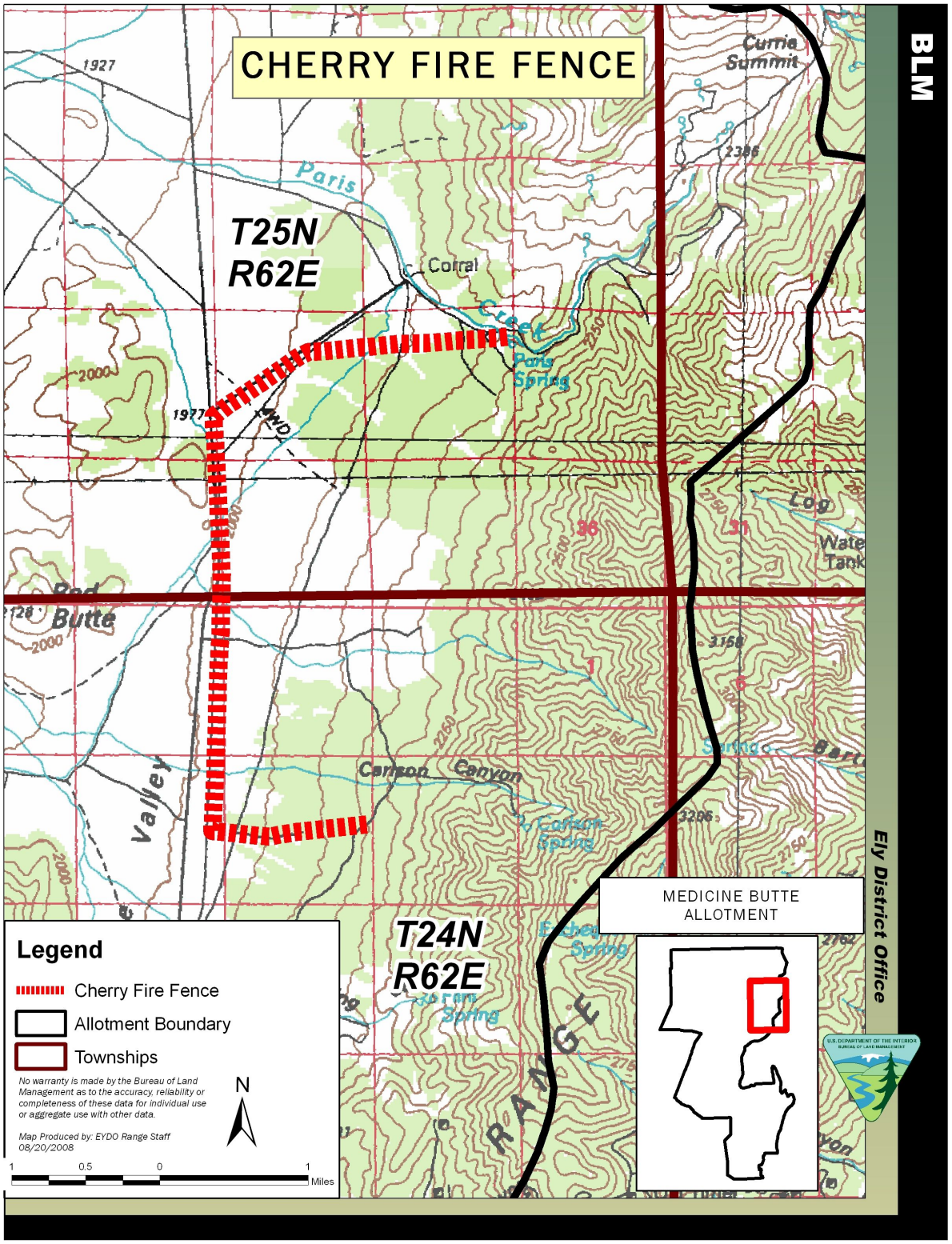

Figure 2. Cherry Fire Fence

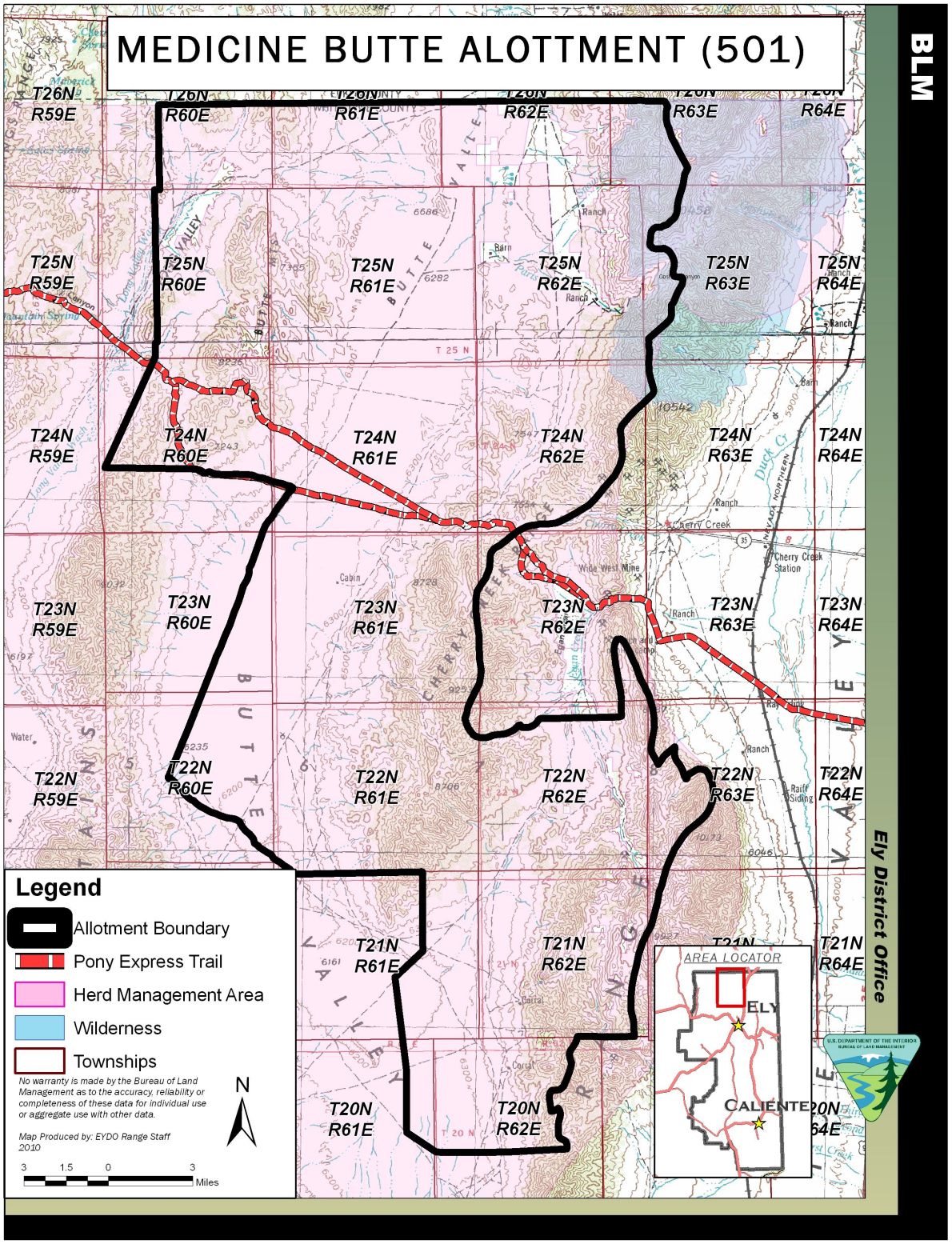

Figure 3. Medicine Butte Allotment

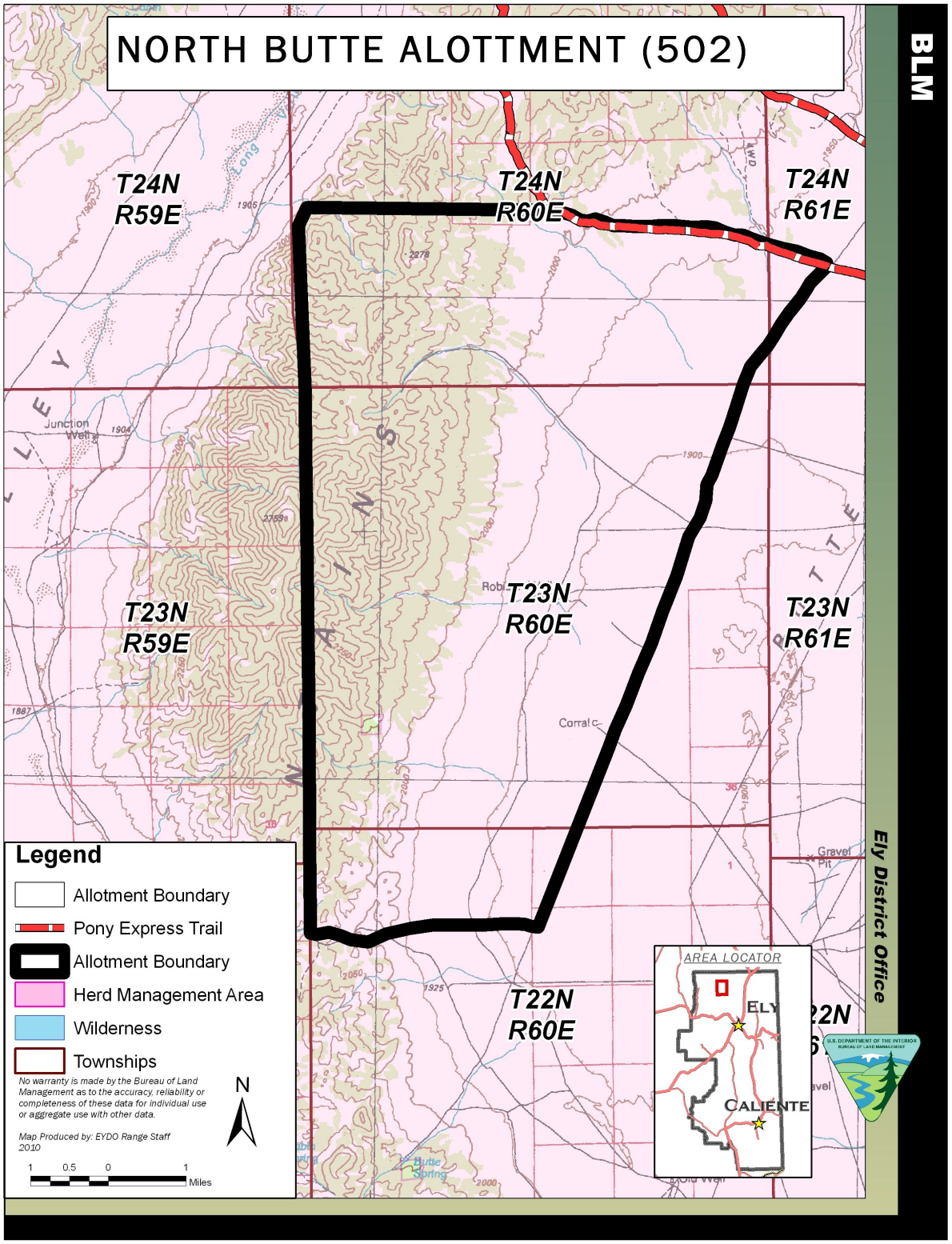

Figure 4. North Butte Allotment

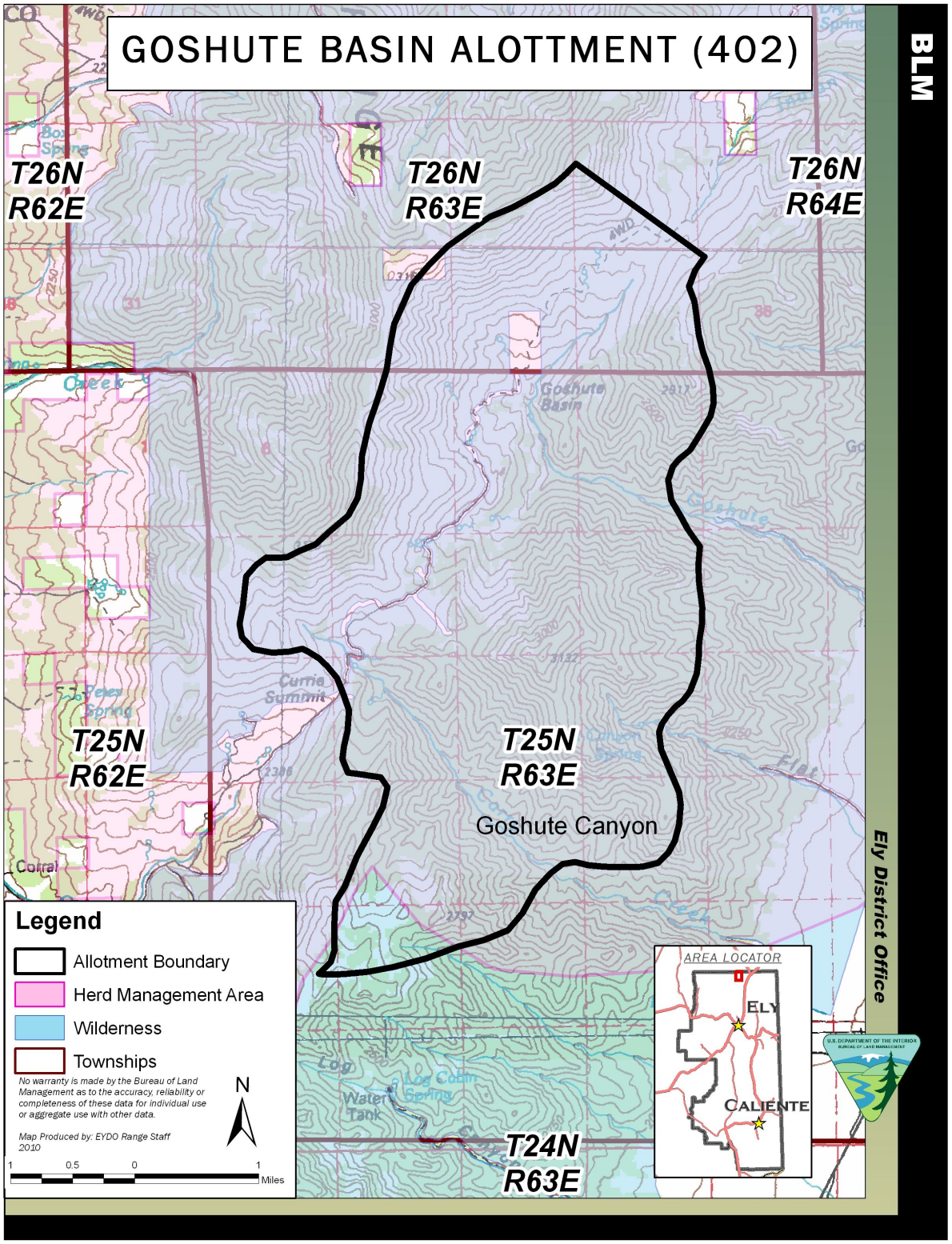

Figure 5. Goshute Basin Allotment

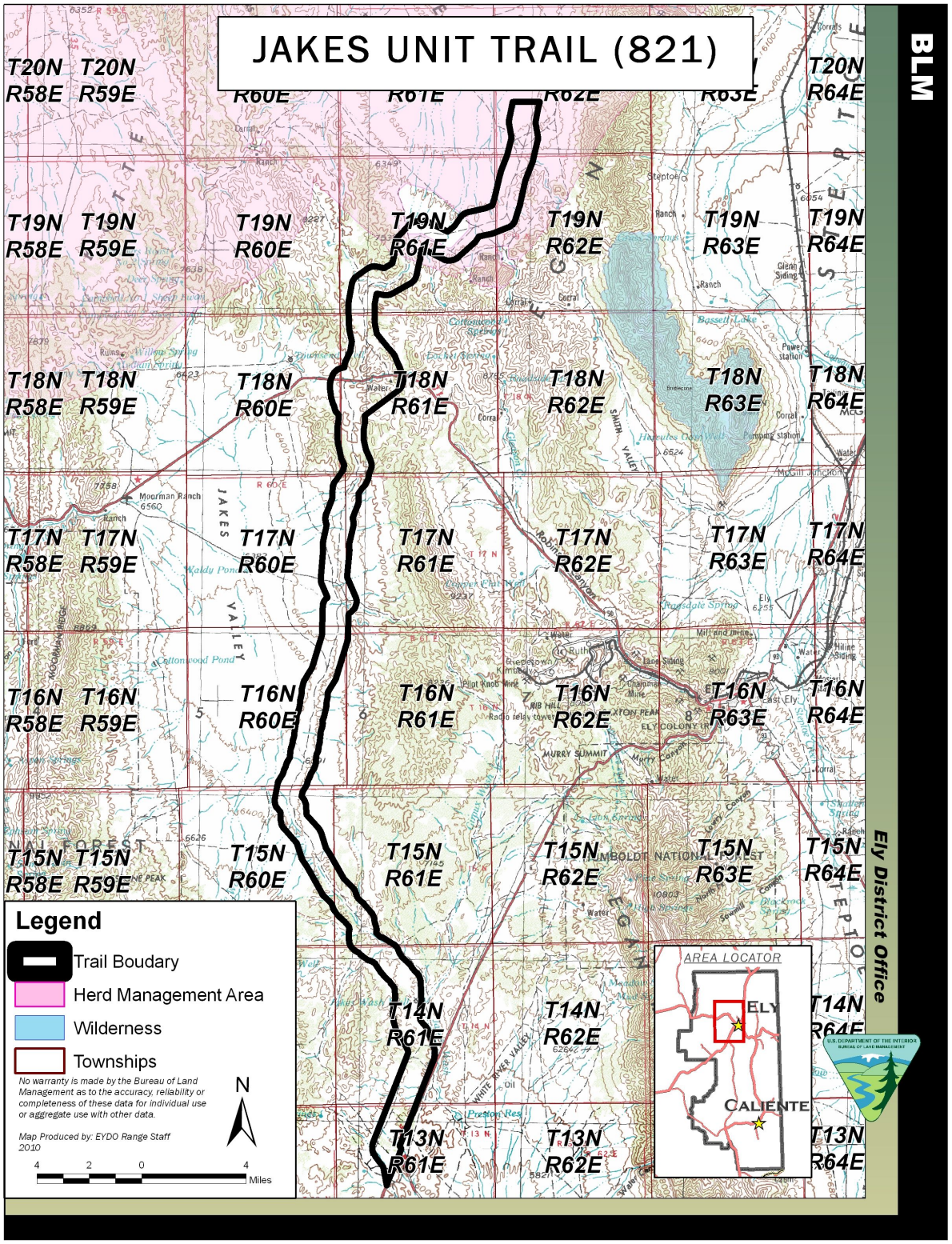

Figure 6. Jakes Unit Trail

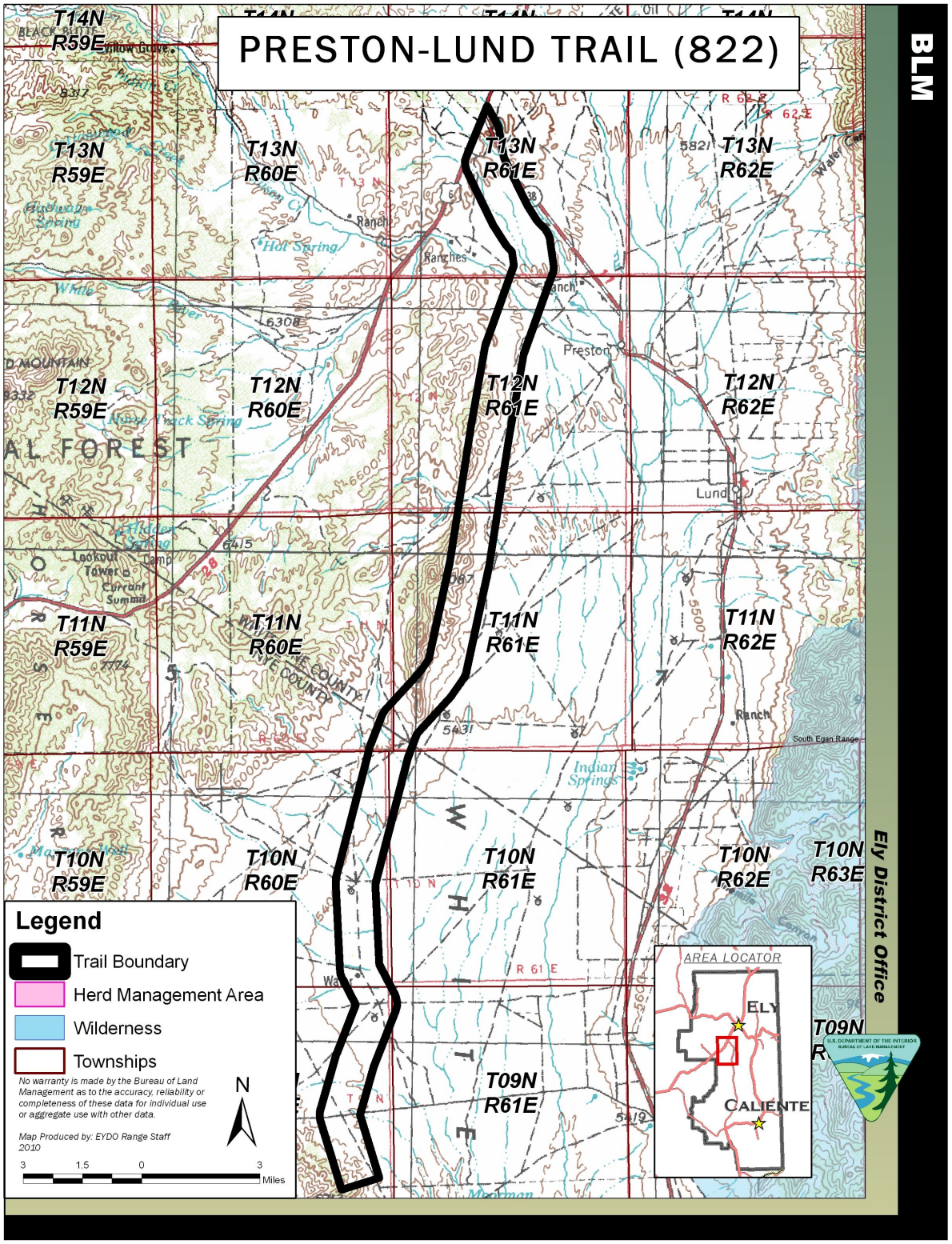

Figure 7. Preston-Lund Trail

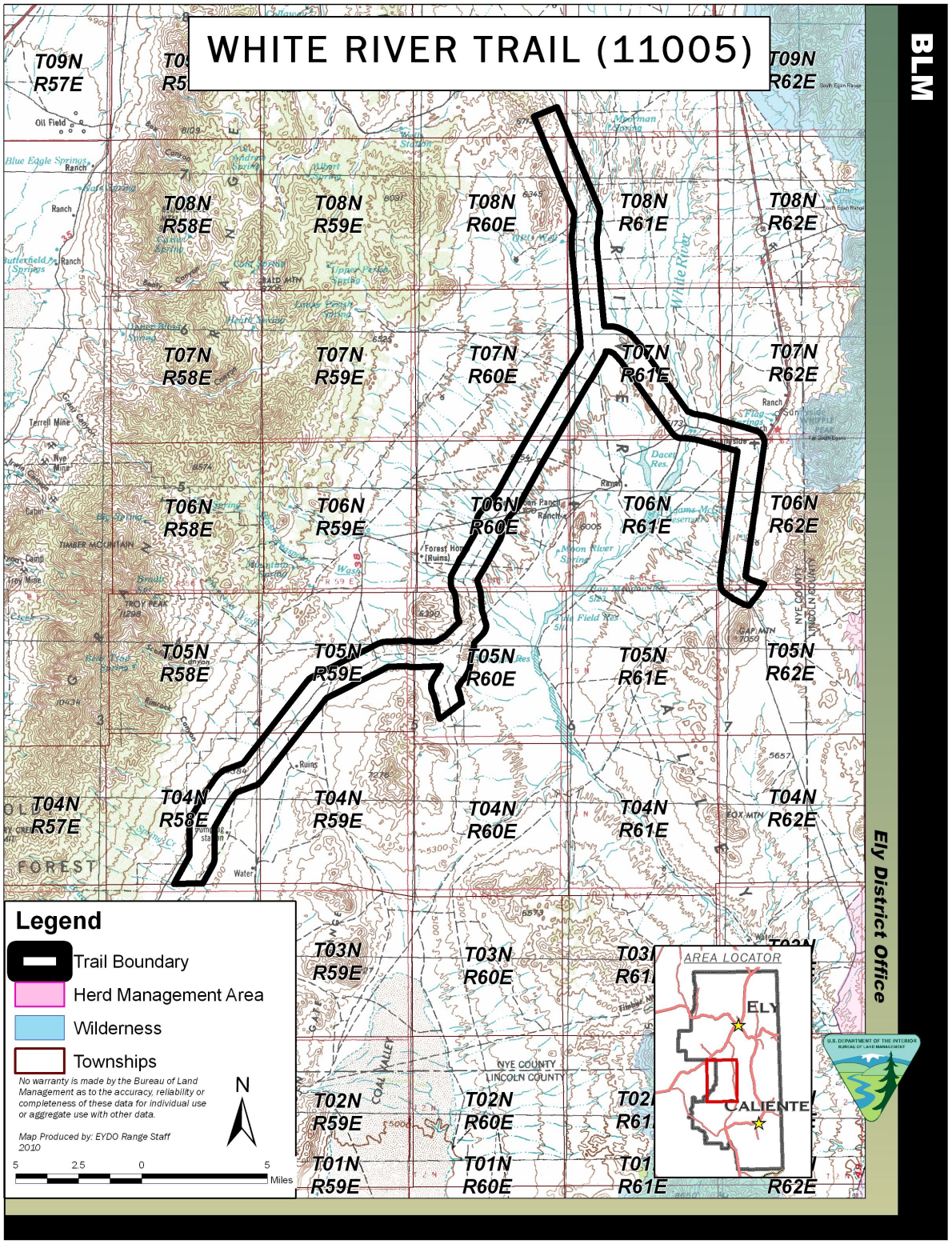

Figure 8. White River Trail

Appendix B. Birds

The following data reflect survey blocks and/or incidental sightings of bird species near the allotment boundaries from the Atlas of the Breeding Birds of Nevada (Floyd et al. 2007). These data represent birds that were confirmed, probably, or possibly breeding within the allotment boundaries. These data are not comprehensive, and additional species not listed here may be present within the allotment boundary.

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Medicine Butte, North Butte, and Goshute Basin Allotments as well as the Jakes Unit, Preston-Lund, and White River Trails

Common Name

*Brewer's sparrow (*Spizella breweri*)

*sage sparrow (*Amphispiza belli*)

American coot (*Fulica americana*)

American kestrel (*Falco sparverius*)

barn swallow (*Hirundo rustica*)

black-necked stilt (*Himantopus mexicanus*)

Brewer's blackbird (*Euphagus cyanocephalus*)

chipping sparrow (*Spizella passerina*)

cinnamon teal (*Anas cyanoptera*)

common nighthawk (*Chordeiles minor*)

common raven (*Corvus corax*)

common yellowthroat (*Geothlypis trichas*)

ferruginous hawk (*Buteo regalis*)

gadwall (*Anas strepera*)

horned lark (*Eremophila alpestris*)

killdeer (*Charadrius vociferus*)

long-billed curlew (*Numenius americanus*)

mallard (*Anas platyrhynchos*)

marsh wren (*Cistothorus palustris*)

mourning dove (*Zenaida macroura*)

northern harrier (*Circus cyaneus*)

northern pintail (*Anas acuta*)

northern rough-winged swallow redhead (*Aythya americana*)

red-winged blackbird (*Agelaius phoeniceus*)

sage thrasher (*Oreoscoptes montanus*)

Savannah sparrow (*Passerculus sandwichensis*)

song sparrow (*Melospiza melodia*)

tree sparrow (*Spizella arborea*)

turkey vulture (*Cathartes aura*)

vesper sparrow (*Pooecetes gramineus*)

western meadowlark (*Sturnella neglecta*)

yellow-headed blackbird (*Xanthocephalus xanthocephalus*)

* = Sensitive or Species of Concern

Appendix C. Standard Determination Documents

The Medicine Butte and North Butte SDD's were completed in August 2010 along with this term permit renewal process. The remaining allotment and trails were completed previously through other grazing permit renewals. As such, the other SDD's contain information on various allotments and for various authorizations. The SDD for the Goshute Basin allotment was completed and signed along with the Indian Creek allotment on November 25, 2008. The Jakes Unit and Preston Lund Trail SDD's were completed and signed in association with four other allotments not part of this grazing permit renewal process. The White River Trail was completed and signed on September 28, 2009.

Appendix D. Weed Risk Assessment

Term Grazing Permit Renewal for #2700045 Medicine Butte, North Butte, and Goshute Basin Allotments, Jakes Unit, Preston-Lund, and White River Trails White Pine County and Nye County, Nevada

On July 8, 2010 a Noxious & Invasive Weed Risk Assessment was completed for term grazing permit renewal for #2700045 on the Medicine Butte, North Butte, and Goshute Basin Allotments; Jakes Unit, Preston-Lund, and White River Trails. The Bureau of Land Management (BLM) Egan Field Office proposes to fully process and issue a term grazing permit. This permit includes cattle, sheep, and domestic horse with a permitted use grazing preference of 17,675 AUMs from March 1 to February 28. Of these 17,675 AUMs, 9,249 AUMs will be active and 8,426 AUMs will be suspended nonuse. Proposed changes to the "Mandatory Terms and Conditions" on the permit of authorization 2700045 include: Medicine Butte: Moving 235 cattle AUMs and 234 Sheep AUMs from suspended non-use to active use. North Butte: Changing the season of use to include the time frame from 11/1 to 2/14 (See EA for further discussion). Goshute Basin: Changing the Active use AUMs from 528 to 350. New allowable use levels (utilization levels) for key forage species are proposed along with new terms and conditions related to weed management. The proposed action also includes keeping the Cherry Fire Fence for grazing management. The proposed action also requires that stipulations identified in this Weed Risk Assessment be followed. Details of the permit are included in the proposed action of the EA.

No field weed surveys were completed for this project. Instead the Ely District weed inventory data was consulted. This area was lasted inventoried in 2008. The following species are found within the boundaries of the permitted area: Acroptilon repens Russian knapweed Carduus nutans Musk thistle Centaurea stoebe Spotted knapweed Cicuta maculata Water hemlock Cirsium arvense Canada thistle Cirsium vulgare Bull thistle Lepidium draba Hoary cress Onopordum acanthium Scotch thistle. The following species are found along roads and drainages leading to the permitted area: Acroptilon repens Russian knapweed Carduus nutans Musk thistle Centaurea stoebe Spotted knapweed Cirsium arvense Canada thistle Cirsium vulgare Bull thistle Hyoscyamus niger Black henbane Lepidium draba Hoary cress Lepidium latifolium Tall whitetop Linaria dalmatica Dalmatian toadflax Onopordum acanthium Scotch thistle Sorghum halepense Johnson grass Tamarix spp. Salt cedar Monitoring data collected by range staff has documented the following non-native invasive weeds along main county roads, some two track roads and in native range of the permitted area: cheatgrass (Bromus tectorum), and halogeton (Halogeton glomeratus).

Factor 1 assesses the likelihood of noxious/invasive weed species spreading to the project area.

None (0)	Noxious/invasive weed species are not located within or adjacent to the project area. Project activity is not likely to result in the establishment of noxious/invasive weed species in the project area.
Low (1–3)	Noxious/invasive weed species are present in the areas adjacent to but not within the project area. Project activities can be implemented and prevent the spread of noxious/invasive weeds into the project area.

Moderate (4–7)	Noxious/invasive weed species located immediately adjacent to or within the project area. Project activities are likely to result in some areas becoming infested with noxious/invasive weed species even when preventative management actions are followed. Control measures are essential to prevent the spread of noxious/invasive weeds within the project area.
High (8–10)	Heavy infestations of noxious/invasive weeds are located within or immediately adjacent to the project area. Project activities, even with preventative management actions, are likely to result in the establishment and spread of noxious/invasive weeds on disturbed sites throughout much of the project area.

For this project, the factor rates as Moderate (4) at the present time. Grazing can increase the populations of the noxious and invasive weeds already within the permitted areas and could aid in the introduction of weeds from surrounding areas. Also, the movement of sheep across the trail system could introduce new weed species to the permitted areas. This risk is minimal since the sheep have moved to the same areas for the past century. If new sheep are brought in this risk increases. Keeping the Cherry Fire fence in place would not create any new disturbance so no new weeds are expected to occur at the fence location.

Factor 2 assesses the consequences of noxious/invasive weed establishment in the project area.

Low to Nonexistent (1-3)	None. No cumulative effects expected.
Moderate (4-7)	Possible adverse effects on site and possible expansion of infestation within the project area. Cumulative effects on native plant communities are likely but limited.
High (8-10)	Obvious adverse effects within the project area and probable expansion of noxious/invasive weed infestations to areas outside the project area. Adverse cumulative effects on native plant communities are probable.

This project rates as Moderate (5) at the present time. If new weed infestations establish within the permitted areas this could have an adverse impact those native plant communities however, the proposed action includes measures to increase native plants and to help prevent weeds from establishing. An increase of cheatgrass could alter the fire regime in the area. Also salt from the soil accumulates in the halogeton plant tissues and leaches from dead plants and roots back onto the soil surface increasing salinity and favoring establishment of halogeton over other species. Soil nutrient levels change significantly under halogeton cover.

The Risk Rating is obtained by multiplying Factor 1 by Factor 2.

None (0)	Proceed as planned.
Low (1-10)	Proceed as planned. Initiate control treatment on noxious/invasive weed populations that get established in the area.

Moderate (11-49)	Develop preventative management measures for the proposed project to reduce the risk of introduction of spread of noxious/invasive weeds into the area. Preventative management measures should include modifying the project to include seeding the area to occupy disturbed sites with desirable species. Monitor the area for at least 3 consecutive years and provide for control of newly established populations of noxious/invasive weeds and follow-up treatment for previously treated infestations.
High (50-100)	Project must be modified to reduce risk level through preventative management measures, including seeding with desirable species to occupy disturbed site and controlling existing infestations of noxious/invasive weeds prior to project activity. Project must provide at least 5 consecutive years of monitoring. Projects must also provide for control of newly established populations of noxious/invasive weeds and follow-up treatment for previously treated infestations.

For this project, the Risk Rating is Moderate (20). This indicates that the project can proceed as planned as long as the following measures are followed:

- To eliminate the introduction of noxious weed seeds, roots, or rhizomes all interim and final seed mixes, hay, straw, hay/straw, or other organic products used for feed or bedding will be certified free of plant species listed on the Nevada noxious weed list or specifically identified by the BLM Ely District Office.

- Prior to entering public lands, the BLM will provide information regarding noxious weed management and identification to the permit holders affiliated with the project. The importance of preventing the spread of weeds to uninfested areas and importance of controlling existing populations of weeds will be explained.

- The range specialist for the allotments will include weed detection into project compliance inspection activities. If the spread of noxious weeds is noted, appropriated weed control procedures will be determined in consultation with BLM personnel and will be in compliance with the appropriate BLM handbook sections and applicable laws and regulations.

- Grazing will be conducted in compliance with the Ely District BLM noxious weed schedules. The scheduled procedures can significantly and effectively reduce noxious weed spread or introduction into the project area.

- When necessary, control or restrict the timing of livestock movement to minimize the transport of livestock-borne noxious weed seeds, roots, or rhizomes between weed-infested and weed-free areas.

- Any newly established populations of noxious/invasive weeds discovered will be communicated to the Ely District Noxious and Invasive Weeds Program for treatment.

Reviewed by: /s/Mindy Seal Date: 7/8/2010

Mindy Seal

Natural Resource Specialist