



## United States Department of the Interior

### BUREAU OF LAND MANAGEMENT

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Ely, Nevada 89301-9408  
<http://www.blm.gov/nv/st/en.html>



NOV 20 2007

In Reply Refer to:  
4160  
EA File  
NV-045.01

Thomas L. and Warren Williams  
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### FINAL DECISION

#### **Tom Williams Term Permit Renewal for the Bennett Spring, Black Canyon and Klondike Allotments**

#### **Background Information**

On 9/19/07 the Finding of No Significant Impact (FONSI) for Tom Williams, Bradley Guymon and Jared Cornelius (Bennett Spring, Black Canyon, Klondike and Highland Peak Allotments) term permit renewals (EA No. NV-040-07-21) was signed. The Environmental Assessment (EA) and FONSI documents are attached. This Final Decision is issued in accordance with 43 CFR § 4160.3. The Proposed Decision was issued on September 20, 2007. On October 7, 2007 an emailed protest to the Proposed Decision was received from Western Watersheds Project by Ely BLM. A hard copy of same said protest was received by Ely BLM on October 19, 2007. No other protests were received. All protest points were considered during preparation of the Final Decision.

This decision complies with BLM Nevada Instruction Memorandum (IM) No. NV-2006-034 which provides guidance to facilitate the preparation of grazing permit renewal Environmental Assessments (EAs) as per the requirement set forth in BLM Washington Office IMs WO 2003-071 and WO 2004-126.

All three allotments are ranked as "C" (Custodial Condition) category allotments in the Caliente Resource Area Rangeland Program Summary (1985). The current term permit issuance period for the current term permit is illustrated in the table above. The Bennett Spring, Black Canyon, Klondike Allotments encompass approximately 48,264, 8,438 and 7,072 acres of BLM managed

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DEPARTMENT OF ADMINISTRATION  
OFFICE OF THE DIRECTOR  
BUDGET AND PLANNING DIVISION

lands, respectively. The new grazing permit will reflect terms and conditions in accordance with the EA.

Processing and renewing the term permit for Tom Williams on the Bennett Spring, Black Canyon and Klondike Allotments provides for a legitimate multiple use of the public lands. The permit includes terms and conditions for grazing use that conform to Guidelines and will continue to achieve, or make progress toward achieving, the Standards for 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 in part, "Grazing permits or leases shall be issued to qualified applicants to authorize use on the public lands and other lands under the administration of the Bureau of Land management that are designated as available for livestock grazing through land use plans". This decision specifically identifies management actions and terms and conditions to be appropriate to achieve management and resource condition objectives. The proposed actions that were developed under the Proposed and Final Decisions execute management actions that would ensure that Standards for Rangeland Health and multiple use objectives continue to be met and that significant progress is made towards those that are currently not met.

The standards were assessed for the Bennett Spring, Black Canyon and Klondike Allotments by a BLM interdisciplinary team consisting of rangeland management specialists, wildlife biologist, weeds specialist, and watershed specialist. Publications used in assessing and determining achievement of the Standards include: Soil Survey of Meadow Valley Wash; Sampling Vegetation Attributes; National Range and Pasture Handbook published by the Natural Resources Conservation Service (NRCS); Nevada Plant List; Major Land Resource Area (MLRA) Rangeland Ecological Site Descriptions; Soil Survey of South Lincoln County, Nevada and Soil Survey of North Lincoln County, Nevada. These documents are available for public review at the Caliente Field Station during business hours.

Monitoring data was reviewed and an assessment of the rangeland health was completed during the permit renewal process and a Standards Determination document was prepared (Appendix II of EA).

The results of the findings, regarding the achievement or non-achievement of the Standards for Rangeland Health, are displayed in the following table. It has been determined that livestock are **NOT** a causal factor for those Standards which have not been achieved. The data also indicates that grazing is in conformance with all applicable Guidelines. As a result, no changes to the current term grazing permit information -- displayed in the table under the Proposed Action in the EA -- have been identified.

Standard	Allotment	Status
1. Soils	Bennett Spring	Achieved
	Black Canyon Klondike	Not Achieved
2. Riparian and Wetland Sites Standard	Klondike	Achieved
3. Habitat and Biota Standard	Bennett Spring	Achieved
	Black Canyon	
	Klondike	

### Conclusions of the Standards Determination Document:

#### Bennett Spring Allotment

*Standard 1 Achieved.*

Cover data collected at Key Areas BS-1 (Bennett Spring) was either within the range of values found in the Rangeland Ecological Site Description (NRCS).

At Key Area BS-1 cover was determined to be 22.2 %. Three perennial native grasses accounted for a total of 1.9% of the total cover while three perennial native shrubs and juniper accounted for 20.25% and 5% of the total cover, respectively. Key area readings on these allotments, at the end of each grazing season during the four aforementioned years, showed grazing use to always be in the slight use category with one exception. Use at Key Area BS-2 (Bennett Spring) was found to be in the light use category (25.5 %) during the 1998-1999 grazing season. To illustrate this, Table 2 in Appendix B of the Standards Determination Document, found in Appendix II of the EA, shows the year in which utilization data was gathered and the corresponding vegetative growth year on which data was gathered (e.g., key areas were read in 1998 on vegetative growth which occurred in 1997). Furthermore, overall, general observations on the allotments indicated that soils were stable, native plants were not pedestalled and there were no signs of soil compaction. This indicates that each of the allotments has sufficient vegetative cover to maintain stability and to resist accelerated erosion, maintain soil productivity and, thus, sustain the hydrologic cycle. It further indicates that there is minimal wind and/or water erosion of topsoil and appropriate percolation and infiltration of water from snowmelt and rainfall. Collectively, low grazing intensities and sufficient vegetative cover infers litter production that further adds to increased soil protection and stability.

#### Black Canyon and Klondike Allotments

*Standard 1 Not Achieved.*

Livestock are **NOT** a causal factor.

Cover data collected at Key Areas BC-1 (Black Canyon) and K-1 (Klondike) was less than the potential ground cover indicated in the Rangeland Ecological Site Description at both Key

Areas: BC-1 (Black Canyon) and K-1 (Klondike). At Key Area BC-1 cover was determined to be 14.6%. Perennial native grasses accounted for a total of .55% of the total cover while perennial native shrubs accounted for 14.5%. Cover data at K-1 was 14.85%. Grasses comprised .15% of the total cover while shrubs comprised 14.7%. However, general observations on the allotments did indicate that soils were stable, native plants were not pedestalled and there were no signs of soil compaction. Utilization levels for these allotments, from 1997 through 2000 showed grazing use to always be in the slight use category. This indicates that livestock are having relatively little impact on the plant community changes leading to failure to achieve the standard.

### Klondike Allotment

*Standard 2 Achieved.*

Klondike Spring, within the Klondike Allotment, is the only natural spring and riparian area found on public land within any of the four allotments. The spring was originally used for servicing stage lines and was a developed spring at one time with signs of excavation, remnants of metal pipe and small concrete walls still existing, but currently it is undeveloped. The spring and associated riparian zone is fenced. The spring does not produce enough water to cause surface flow outside the fenced area; it seeps back into the surrounding soil. Sheep are herded so that they circumvent this natural riparian area; thus, it receives no impacts from livestock grazing.

### Bennett Spring, Black Canyon and Klondike Allotments

*Standard 3. Achieved.*

Ecological Condition data shows that there is good species diversity within the Bennett Spring, Black Canyon and Klondike Allotments; Allotment. However, in all three allotments shrubs are dominant. The dominant present vegetation within the Bennett Spring, Black Canyon and Klondike Allotments, as indicated by baseline range studies (ecological condition and line intercept) and general observations (including photographs), all indicate a diverse habitat that is distributed across the landscape. Main grass species that are widespread within the Bennett Spring and Black Canyon Allotments consist of Indian ricegrass (*Achnatherum hymenoides*), bottlebrush Squirreltail (*Elymus elymoides*), galleta (*Pleuraphis jamesii*) and needleandthread (*Hesperostipa comata*). On the Klondike Allotment Indian ricegrass, needleandthread and bottlebrush squirreltail are widespread. These are known to be nutritious, palatable plant species for livestock and wild horses. Black Sagebrush (*Artemisia nova*), common and plentiful throughout all three allotments, is nutritious and palatable to sheep and antelope. Ecological condition studies indicate moderate to good species diversity (composition) of perennial plant species and low levels of grazing use combined with line intercept studies all indicate that there is sufficient ground cover to protect soils and perpetuate vegetative productivity while ensuring appropriate vegetative structure.

Collectively, moderate to good species diversity, low grazing use levels and ample ground cover translate into sufficient habitat for wildlife for nesting protection, food sources (vegetative and insectivorous) and mating.

### Noxious and Invasive Weeds

Cheatgrass (*Bromus tectorum*) occurs sporadically throughout the allotments, though it is confined to areas along and adjacent to roads.

Surface disturbance through livestock movement may increase the risk of non-native, invasive species establishment.

### Bennett Spring, Black Canyon and Klondike Allotments:

No known noxious weeds exist on the Black Canyon Allotment. The only known noxious weed on the Bennett Springs and Klondike Allotments is tamarisk (*Tamarix spp.*); there are two known infestations on the Klondike Allotment and one on the Bennett Spring Allotment. The infestation on the Bennett Spring Allotment is found on the private lands surrounding Bennett Springs. The two infestations on the Klondike Allotment are found within one-quarter mile of Klondike Spring.

The project proposal was posted on the Ely Field Office web site, January 30, 2007, at [http://www.nv.blm.gov/ely/nepa/ea\\_list.htm](http://www.nv.blm.gov/ely/nepa/ea_list.htm) and no comments were received.

The preliminary EA was posted on the Ely external webpage on June 30, 2007 for a thirty day comment period. A hard copy of the preliminary EA was mailed to the permittee and those publics who have specifically requested one and who have expressed an interest in range management actions on the Bennett Spring, Black Canyon, Klondike and Highland Peak Allotments. Comments were received from Cindy MacDonald. They were reviewed and considered in association with completing the final EA.

## **LIVESTOCK MANAGEMENT DECISION**

In accordance with 43 CFR 4110.3 permitted use for Tom Williams on the Bennett Spring, Black Canyon and Klondike Allotments will remain unchanged and will be as follows:

Tom Williams (#2705087)

ALLOTMENT		LIVESTOCK		GRAZING PERIOD		* % Public Land	AUMs		
Name	Number	Number	Kind	Begin	End		Active Use	Hist. Susp. Use	Permitted Use
Bennett Spring	21006	1,165	Sheep	10/16	4/30	100	1,506	1,149	2,655
Black Canyon	11007	260	Sheep	10/16	4/30	100	335	88	423
Klondike	01085	525	Sheep	10/16	4/30	100	678	222	900

\* This is for billing purposes

This decision will be effective upon the decision becoming final or pending final determination on appeal. The renewal of the term grazing permit will be for a period of 10 years. Utilization objectives (allowable use levels or AULs) for each of the allotments will be included as part of

the Terms and Conditions (Appendix III). The AULs are a quantification of the land use plan objectives.

The new term permit will include terms and conditions for grazing use which will further assist in achieving the Standards and Guidelines for Grazing Administration and the other pertinent land use objectives for livestock use.

In accordance with 43 CFR §§ 4110.3, 4130.3, 4130.3-1 and 4130.3-2, the following terms and conditions will be included in the term grazing permits for the Bennett Spring, Black Canyon, and Klondike Allotments.

#### Specific Terms and Conditions

1. Allowable use levels, as measured through a combination of key areas readings and use pattern mapping, will not exceed 50% on grasses and forbs, and 45% on shrubs during the authorized use period indicated in the Term Grazing Permit.

#### Stipulations Common to All Allotments:

1. Livestock numbers identified in the term grazing permit are a function of seasons of use and permitted use for each allotment. 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.
2. 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.
3. The authorized officer is requiring that an actual use report (form 4130-5) be submitted within 15 days after completing your annual grazing use.
4. 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 your 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.
5. 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.
6. Grazing use will be in accordance with the Mojave Southern Great Basin Standards and Guidelines for grazing administration as developed by the respective resource advisory

council and were approved by the Secretary of the Interior on February 12, 1997 with subsequent revisions. Grazing use will also be in accordance with 43 CFR Subpart 4180 – Fundamentals of Rangeland Health and Standards and Guidelines for Grazing Administration.

7. 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.

The Following Preventative Measures for Noxious Weeds will also be added to the new term permit:

1. Herding will be used to avoid point sources of Tamarisk within the allotments.

**Rationale:**

The permittee typically uses approximately one-third to two thirds of his Active Use while continuously herding his animals throughout the grazing period, thereby, creating a relatively even distribution of sheep across the landscape and, consequently, a relatively homogenous level of grazing. This combination has resulted in a relatively low level (slight use), even distribution of grazing use as evidenced by the slight use levels exhibited over a majority of all three allotments during each of the four years use pattern mapping was conducted. Most of the grazing period each year, on all three allotments, typically occurs during the winter months when the ground is frozen and may periodically be covered with snow (from January through the first part of March). During a majority of this time the vegetation is mostly in a dormant state.

It is anticipated that the Standards for Rangeland Health will continue to be achieved and grazing use levels will remain at low levels throughout a majority of all three allotments each year without any changes to the current term grazing permit information displayed in the table on page five, above.

**AUTHORITY:** The authority for this decision is contained in Title 43 of the Code of Federal Regulations, which states in pertinent part:

§ 4110.3: “The authorized officer shall periodically review the permitted use specified in a grazing permit or lease and shall make changes in the permitted use as needed to manage, maintain or improve rangeland productivity, to assist in restoring ecosystems to properly functioning condition, to conform with land use plans or activity plans, or to comply with the provisions of subpart 4180 of this part. These changes must be supported by monitoring, field observations, ecological site inventory or other data acceptable to the authorized officer.”

§ 4130.2 Grazing Permits and Leases

- (a) States in part: “Grazing permits or leases shall be issued to qualified applicants to authorize use on the public lands and other lands under the administration of the Bureau of Land management that are designated as available for livestock grazing through land use plans”

§ 4130.3: “Livestock grazing permits and leases shall contain terms and conditions determined by the authorized officer to be appropriate to achieve the management and resource condition objectives for the public lands and other lands administered by the Bureau of Land Management, and ensure conformance with the provisions of subpart 4180 of this part.”

§ 4130.3-1 Mandatory terms and conditions.

- (a) “The authorized officer shall specify the kind and number of livestock, the period(s) of use, the allotment(s) to be used, and the amount of use, in animal unit months, for every grazing permit or lease. The authorized livestock grazing use shall not exceed the livestock carrying capacity of the allotment.
- (b) All permits and leases shall be made subject to cancellation, suspension, or modification for any violation of these regulations or of any term or condition of the permit or lease.
- (c) Permits and leases shall incorporate terms and conditions that ensure conformance with subpart 4180 of this part.”

§ 4130.3-2 Other Terms and Conditions

“The authorized officer may specify in grazing permits or leases other terms and conditions which will assist in achieving management objectives, provide for proper range management or assist in the orderly administration of the public rangelands.”

§ 4160.3 Final Decisions.

- (a) “In the absence of a protest, the proposed decision will become the final decision of the authorized officer without further notice unless otherwise provided in the proposed decision.
- (b) Upon the timely filing of a protest, the authorized officer shall reconsider her/his proposed decision in light of the protestant's statement of reasons for protest and in light of other information pertinent to the case. At the conclusion to her/his review of the protest, the authorized officer shall serve her/his final decision on the protestant or her/his agent, or both, and the interested public.



- (c) A period of 30 days following receipt of the final decision, or 30 days after the date the proposed decision becomes final as provided in paragraph (a) of this section, is provided for filing an appeal and petition for stay of the decision pending final determination on appeal. A decision will not be effective during the 30-day appeal period, except as provided in paragraph (f) of this section. See Sec. Sec. 4.21 and 4.470 of this title for general provisions of the appeal and stay processes.”

§ 4180.1 Fundamentals of Rangeland Health and Standards and Guidelines for Grazing Administration.

“The authorized officer shall take appropriate action under subparts 4110, 4120, 4130, and 4160 of this part as soon as practicable but not later than the start of the next grazing year upon determining that existing grazing management needs to be modified to ensure that the following conditions exist.

- (a) Watersheds are in, or are making significant progress toward, properly functioning physical condition, including their upland, riparian-wetland, and aquatic components; soil and plant conditions support infiltration, soil moisture storage, and the release of water that are in balance with climate and landform and maintain or improve water quality, water quantity, and timing and duration of flow.
- (b) Ecological processes, including the hydrologic cycle, nutrient cycle, and energy flow, are maintained, or there is significant progress toward their attainment, in order to support healthy biotic populations and communities.
- (c) Water quality complies with State water quality standards and achieves, or is making significant progress toward achieving, established BLM management objectives such as meeting wildlife needs.
- (d) Habitats are, or are making significant progress toward being, restored or maintained for Federal threatened and endangered species, Federal Proposed, Category 1 and 2 Federal candidate and other special status species.”

### Appeal

#### **Appeal**

In accordance with 43 CFR 4.470 and 4160.4, any person who wishes to appeal or seek a stay of a BLM grazing decision must follow the requirements set forth in 4.470 through 4.480 of this title. The appeal or petition for stay must be filed with the BLM office that issued the decision within 30 days after its receipt or within 30 days after the proposed decision becomes final as provided in 4160.3 (a).

The appeal and any petition for stay must be filed at the office of the authorized officer Kyle V. Hansen, Acting Assistant Field Manager for Renewable Resources, Ely Field Office Box 33500, 702 North Industrial Way HC33 Ely, Nevada 89301. Within 15 days of filing the appeal and any petition for stay, the appellant also must serve a copy of the appeal and any petition for stay on any person named in the decision and listed at the end of the decision, and on the Office of the Solicitor, Regional Solicitor, Pacific Southwest Region, U.S. Department of the Interior, 2800 Cottage Way, Room E-1712, Sacramento, California 95825-1890.

Pursuant to 43 CFR 4.471(c), a petition for stay, if filed, must show sufficient justification based on the following standards:

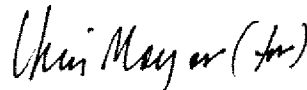
- (1) The relative harm to the parties if the stay is granted or denied;
- (2) The likelihood of the appellant's success on the merits;
- (3) The likelihood of immediate and irreparable harm if the stay is not granted; and,
- (4) Whether the public interest favors granting the stay.

43 CFR 4.471(d) provides that the appellant requesting a stay bears the burden of proof to demonstrate that a stay should be granted.

Any person named in the decision from which an appeal is taken (other than the appellant) who wishes to file a response to the petition for a stay may file with the Hearings Division in Salt Lake City, Utah, a motion to intervene in the appeal, together with the response, within 10 days after receiving the petition. Within 15 days after filing the motion to intervene and response, the person must serve copies on the appellant, the Office of the Solicitor and any other person named in the decision (43 CFR 4.472(b)).

At the conclusion of any document that a party must serve, the party or its representative must sign a written statement certifying that service has been or will be made in accordance with the applicable rules and specifying the date and manner of such service (43 CFR 4.422(c)(2)).

Sincerely,



Kyle V. Hansen  
Acting Assistant Field Manager  
Renewable Resources

Enclosures:

1. Finding of No Significant Impact (FONSI)
2. EA NV-040-07-21 (includes the Standards Determination Document)

cc:

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**FINDING OF NO SIGNIFICANT IMPACT  
FOR  
Tom Williams, Bradley Guymon and Jared Cornelius  
Term Permit Renewals  
(Bennett Spring, Black Canyon, Klondike and Highland Peak Allotments)**

**EA (NV-040-07-21)**

I have reviewed Environmental Assessment (EA) NV-040-07-21. After consideration of the environmental effects as described in the EA, and incorporated herein, I have determined that the proposed action associated with fully processing the term permit renewal identified in the EA will not significantly affect the quality of the human environment and that an Environmental Impact Statement (EIS) is not required to be prepared. Environmental Assessment (EA) NV-040-07-21 has been reviewed through the interdisciplinary team process

I have determined the proposed action is in conformance with the *Caliente Management Framework Plan* approved under the *Caliente Planning Unit Decision Summary and Record of Decision* issued July 1, 1983, and the *Caliente Final Environmental Statement - Proposed Domestic Livestock Grazing Management Program (INT FES 79-44)* (September 21, 1979) (*Caliente ES*). This finding and conclusion is based on my consideration of the Council on Environmental Quality's (CEQ) criteria for significance (40 CFR 1508.27), both with regard to the context and the intensity of impacts described in the EA.

Context: The Bennett Springs and Highland Peak Allotments are located, approximately, 4 miles west of Panaca, Nevada. The Black Canyon and Klondike Allotments are located, approximately, 12 miles west of the same said town. The Bennett Spring, Black Canyon, Klondike and Highland Peak Allotments encompass approximately 48,264, 8,438, 7,072 and 45,542 acres of public land, respectively.

Lincoln County is sparsely populated, with approximately 4,300 people living mostly within five towns. Although the acreage involved is extensive, impacts from livestock grazing are dispersed, and compatible with the rural, agricultural setting throughout most of the County.

**Intensity:**

**1) *Impacts that may be both beneficial and adverse.***

The Environmental Assessment considered both, beneficial and adverse impacts of the proposed action. None of the impacts disclosed in the EA approach the threshold of significance (i.e., exceeding air or drinking water quality standards, contributing a decline in the population of a listed species, etc.)

**2) *The degree to which the proposed action affects public health or safety.***

The Proposed Action will not result in substantial, adverse impacts to public health and safety.

**3) *Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.***

There are no parks, wetlands, wild and scenic rivers, or ecologically critical areas (ACECs) within the area of analysis. Prime and unique farmland is found only on the Highland Peak Allotment. Livestock grazing will not impact prime farmlands, because it will not change soil characteristics that affect farmland status.

Cultural and historic resources typical of the general area may occur on the allotment, but there are no known sites of particular importance or interest. The Bennett Springs, Black Canyon, Klondike, and Highland Peak Allotments are predominately within a medium to high cultural sensitivity level. Prehistoric cultural resources (habitation/non habitation sites; lithic scatters, projectile points, camp areas) may be found in areas adjacent to spring sites, ridge tops and adjacent hillsides throughout the district. There are no National Register eligible sites within these allotments except for 26LN2969 (all artifacts were collected). Therefore there is “no effect” in accordance with the State Protocol.

There are no Traditional Cultural Properties currently identified within the Ely District.

**4) *The degree to which the effects on the quality of the human environment are likely to be highly controversial.***

The effects of livestock grazing on public lands have become more controversial in the past several years. However, most effects were disclosed in the *Caliente ES*. Although public input has been sought for the proposed action, there has been little public interest and only a relatively few pertinent comments on effects analyzed in the attached EA.

**5) *The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.***

The effects of livestock grazing are well known and documented. Management practices are employed to meet resource objectives. The effects analysis demonstrates the effects are not uncertain, and do not involve unique or unknown risk

**6) *The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.***

The Proposed Action will not establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration. Renewing the grazing permits does not establish a precedent for other Rangeland Health Assessments and Decisions. Any future projects within the proposed action area or in surrounding areas will be fully analyzed as a separate action and independently of the proposed action.

**7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.**

Cumulative impacts have been identified in the EA. Past, present, and reasonably foreseeable future actions on-going in the cumulative impact assessment area would not result in cumulatively significant impacts. An environmental analysis, including the assessment of cumulative impacts, will be required for any actions that may be proposed in the future.

**8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the NRHP or may cause loss or destruction of significant scientific, cultural, or historical resources.**

No districts, sites, highways, structures or objects listed, or eligible for listing, in the National Register of Historic Places (NRHP) were identified in the project area and EA. The proposed action will not cause the loss or destruction of significant scientific, cultural or historical resources.

**9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the ESA of 1973.**

The BLM is required by the Endangered Species Act of 1973, as amended, to ensure that no action on the public lands jeopardizes a threatened, endangered, or proposed species. The action complies with the Endangered Species Act, in that the potential effects of this decision on listed species have been analyzed and documented (EA Chapter IV). The action will not adversely affect any endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species act of 1973, as amended.

**10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.**

The proposed action will not violate or threaten to violate any Federal, State, or local law or requirement imposed for the protection of the environment. The proposed action seeks to maintain the applicable Standards for Rangeland Health.

/s/ Kyle V. Hansen for

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William E. Dunn  
Assistant Field Manager Renewable Resources  
Ely Field Office

9/19/07

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Date

**FINAL**  
ENVIRONMENTAL ASSESSMENT  
for the  
Grazing Permit Renewals for Tom Williams, Bradley Guymon and Jared Cornelius  
on the Bennett Spring, Black Canyon, Klondike and Highland Peak  
Allotments

(EA-NV-040-07-21)

September 19, 2007

United States Department of the Interior  
Bureau of Land Management  
Caliente Field Station

Prepared by:

Domenic A. Bolognani  
Caliente Field Station, Nevada



## I. INTRODUCTION

### Background Information

This environmental assessment (EA) addresses the impacts to public land resources from a proposal to renew the term grazing permits for Tom Williams (#2705087) on the Bennett Spring (#21006), Black Canyon (#11007) and Klondike (#01085) Allotments; Bradley Guymon (#2705096) on the Bennett Spring and Black Canyon Allotments; and Jared Cornelius (#2703084) on the Highland Peak Allotment (#11035). This EA fulfills the National Environmental Policy Act (NEPA) requirement for site-specific analysis of resource impacts. Both the proposed action and alternatives to the proposed action are considered.

The term permits under consideration are for the Bennett Spring, Black Canyon, Klondike and Highland Peak Allotments (Appendix I, Map #1). Sheep are the kind of livestock grazed on these allotments. All four allotments were ranked as category "C" (Custodial) in the Caliente Rangeland Program Summary (Pgs. 3-4; June 1985).

General information regarding the existing permits is as follows:

Permittee	Current Term Grazing Permit Information						Current Term Permit Issuance Period
	Allotment	Begin	End	Permitted Use	Hist. Susp. Use	Total Use	
Tom Williams	Bennett Spring	10/16	4/30	1,506	1,149	2,655	9/01/2000 – 8/31/2010
	Black Canyon	10/16	4/30	335	88	423	
	Klondike	10/16	4/30	678	222	900	
Bradley Guymon	Bennett Spring	10/16	4/30	1,992	1,518	3,510	10/01/2000 – 3/31/2007
	Black Canyon	10/16	4/30	770	176	946	
Jared Cornelius	Highland Peak	10/16	5/15	3,704	804	4,508	1/03/2007 – 02/28/2016

Standards and Guidelines for Grazing Administration were developed by the by the Mojave-Southern Great Basin Resource Advisory Council (RAC) and approved by the Secretary of the Interior on February 12, 1997.

Monitoring data was reviewed and an assessment of the rangeland health was completed during the permit renewal process (Appendix II).

The results of the findings, regarding the achievement or non-achievement of the Standards for Rangeland Health, are displayed in the following table. It has been determined that livestock are **NOT** a causal factor for those Standards which have not been achieved. The data also indicates that grazing is in conformance with all applicable Guidelines. As a result, no changes to the current term grazing permit information – displayed in the tables under the Proposed Action – have been identified. A summary of information regarding the achievement of Standards is as follows:

Standard	Allotment	Status
<b>1. Soils</b>	Bennett Spring	Achieved
	Highland Peak	
<b>2. Riparian and Wetland Sites Standard</b>	Black Canyon	Not Achieved
	Klondike	
<b>3. Habitat and Biota Standard</b>	Klondike	Achieved
	Bennett Spring	Achieved
	Black Canyon	
	Klondike	Not Achieved
Highland Peak		

### Conclusions of the Standards Determination Document:

#### Bennett Spring and Highland Peak Allotments

*Standard 1 Achieved.*

Cover data collected at Key Areas BS-1 (Bennett Spring) and HP-1 (Highland Peak) was either within or exceeded the range of values found in the Rangeland Ecological Site Description (NRCS).

At Key Area BS-1 cover was determined to be 22.2 %. Three perennial native grasses accounted for a total of 1.9% of the total cover while three perennial native shrubs and juniper accounted for 20.25% and 5% of the total cover, respectively.

Cover data at HP-1 was 32.05% which exceeds the values in the aforementioned Rangeland Ecological Site Description. Shrubs comprised 31.9% of this value while grasses comprised .15%.

Key area readings on these allotments, at the end of each grazing season during the four aforementioned years, showed grazing use to always be in the slight use category with one exception. Use at Key Area BS-2 (Bennett Spring) was found to be in the light use category (25.5 %) during the 1998-1999 grazing season. To illustrate this, Table 2 in Appendix B of the Standards Determination Document (Appendix II) shows the year in which utilization data was gathered, the corresponding vegetative growth year on which data was gathered (e.g., key areas were read in 1998 on vegetative growth which occurred in 1997) and the total AUM consumption occurring on each allotment by year. Furthermore, overall, general observations on the allotments indicated that soils were stable, native plants were not pedestalled and there were no signs of soil compaction.

This indicates that each of the allotments has sufficient vegetative cover to maintain stability and to resist accelerated erosion, maintain soil productivity and, thus, sustain the hydrologic cycle. It further indicates that there is minimal wind and/or water erosion of topsoil and appropriate percolation and infiltration of water from snowmelt and rainfall.

Collectively, low grazing intensities and sufficient vegetative cover infers litter production that further adds to increased soil protection and stability.

### Black Canyon and Klondike Allotments

*Standard 1 Not Achieved.*

Livestock are **NOT** a causal factor.

Cover data collected at Key Areas BC-1 (Black Canyon) and K-1 (Klondike) was less than the potential ground cover indicated in the Rangeland Ecological Site Description at both Key Areas: BC-1 (Black Canyon) and K-1 (Klondike).

At Key Area BC-1 cover was determined to be 14.6%. Perennial native grasses accounted for a total of .55% of the total cover while perennial native shrubs accounted for 14.5%.

Cover data at K-1 was 14.85%. Grasses comprised .15% of the total cover while shrubs comprised 14.7%.

However, general observations on the allotments did indicated that soils were stable, native plants were not pedestalled and there were no signs of soil compaction.

Utilization levels for these allotments, from 1997 through 2000 showed grazing use to always be in the slight use category. This indicates that livestock are having relatively little impact on the plant community changes leading to failure to achieve the standard.

### Klondike Allotment

*Standard 2 Achieved.*

Klondike Spring, within the Klondike Allotment, is the only natural spring and riparian area found on public land within any of the four allotments. The spring was originally used for servicing stage lines and was a developed spring at one time with signs of excavation, remnants of metal pipe and small concrete walls still existing, but currently it is undeveloped. The spring and associated riparian zone is fenced. The spring does not produce enough water to cause surface flow outside the fenced area; it seeps back into the surrounding soil. Sheep are herded so that they circumvent this natural riparian area; thus, it receives no impacts from livestock grazing.

### Bennett Spring, Black Canyon and Klondike Allotments

*Standard 3. Achieved.*

Ecological Condition data shows that there is good species diversity within the Bennett Spring, Black Canyon and Klondike Allotments; Allotment. However, in all three allotments shrubs are dominant.

The dominant present vegetation within the Bennett Spring, Black Canyon and Klondike Allotments, as indicated by baseline range studies (ecological condition and line intercept) and

general observations (including photographs), all indicate a diverse habitat that is distributed across the landscape.

Main grass species that are widespread within the Bennett Spring and Black Canyon Allotments consist of Indian ricegrass (*Achnatherum hymenoides*), bottlebrush Squirreltail (*Elymus elymoides*), galleta (*Pleuraphis jamesii*) and needleandthread (*Hesperostipa comata*). On the Klondike Allotment Indian ricegrass, needleandthread and bottlebrush squirreltail are widespread. These are known to be nutritious, palatable plant species for livestock and wild horses. Black Sagebrush (*Artemisia nova*), common and plentiful throughout all three allotments, is nutritious and palatable to sheep and antelope.

Ecological condition studies indicate moderate to good species diversity (composition) of perennial plant species and low levels of grazing use combined with line intercept studies all indicate that there is sufficient ground cover to protect soils and perpetuate vegetative productivity while ensuring appropriate vegetative structure.

Collectively, moderate to good species diversity, low grazing use levels and ample ground cover translate into sufficient habitat for wildlife for nesting protection, food sources (vegetative and insectivorous) and mating.

### Highland Peak Allotment

*Standard 3. Not Achieved.*

Livestock are **NOT** a causal factor.

There is low species diversity in the Highland Peak as indicated in Table 3 in Appendix B of the Standards Determination Document (Appendix II). Shrubs clearly dominate the vegetative communities. Grasses and forbs are making an extremely small contribution to species composition.

Key area readings on the allotment, at the end of each grazing season, from 1997 through 2000, showed grazing use to always be in the slight use category. This is illustrated in Table 2 in Appendix B of the Standards Determination Document (Appendix II). This indicates that livestock are having relatively little impact on the plant community changes leading to failure to achieve the standard.

### **Need for the Proposal**

The proposed action is needed to provide for a legitimate multiple use of the public lands by renewal of term permits for Tom Williams on the Bennett Spring, Black Canyon and Klondike Allotments; Bradley Guymon on the Bennett Spring and Black Canyon Allotments; and Jared Cornelius on the Highland Peak Allotment in accordance with all applicable laws, regulations and policies. In accordance with Title 43 CFR § 4130.2(a), "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."

## **Relationship to Planning**

The proposed action is in conformance with the *Caliente Management Framework Plan* (MFP) (February 1982) approved under the Caliente Planning Unit Decision Summary and Record of Decision issued July 1, 1983; and is tiered to the *Caliente Final Environmental Statement - Proposed Domestic Livestock Grazing Management Program (INT FES 79-44)* (September 21, 1979) (*Caliente ES*). The proposed action implements livestock management decisions from these approved land use plans.

The *Caliente ES* states, "Data from [monitoring] would be evaluated to determine the effectiveness of current management and to assist in making appropriate adjustments...Changes in use requested by the livestock operator, which were outside the limits of the proposed action and were consistent with management objectives, would be requested in writing and must be approved in advance of the grazing period" (page 1-22).

The proposed action is also consistent with the *Lincoln County Public Land and Natural Resource Management Plan* (December 5, 1997) which states, "Lincoln County supports multiple use of the public lands, grazing is a part of this system. Grazing shall be managed to support a healthy range resource. Resource utilization must be monitored according to standard accepted range monitoring standards" (page 15).

The proposed action is also in conformance with the Lincoln County Elk Management Plan approved July, 1999.

## **Relationship to Bureau Guidance**

This document is in compliance with BLM Nevada Instruction Memorandum (IM) No. NV-2006-0034, which provides guidance to facilitate the preparation of grazing permit renewals Environmental Assessments (EAs) as per the requirement set forth in BLM Washington Office IM-WO-2003-071 and IM-WO-2004-126. This document complies with the IM guidance.

## **Identification of Issues**

There were no issues identified during public scoping for these proposed term permit renewals. These term permit renewals were scoped by resource specialists during a meeting held February 1, 2007 at the Ely BLM Field Office. The public was invited to provide input and will be afforded the opportunity to provide comments on this analysis.

## **II. DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES**

### **Proposed Action**

The Bureau of Land Management would fully process and issue new term grazing permits for the Bennett Spring, Black Canyon, Klondike and Highland Peak Allotments and authorize grazing on these allotments. The current term permit information, for each of the permittees, is as follows:

Tom Williams (#2705087)

ALLOTMENT		LIVESTOCK		GRAZING PERIOD		* % Public Land	AUMs		
Name	Number	Number	Kind	Begin	End		Active Use	Hist. Susp. Use	Total Use
Bennett Spring	21006	1,165	Sheep	10/16	4/30	100	1,506	1,149	2,655
Black Canyon	11007	260	Sheep	10/16	4/30	100	335	88	423
Klondike	01085	525	Sheep	10/16	4/30	100	678	222	900

Bradley Guymon (#2705096)

ALLOTMENT		LIVESTOCK		GRAZING PERIOD		* % Public Land	AUMs		
Name	Number	Number	Kind	Begin	End		Active Use	Hist. Susp. Use	Total Use
Bennett Spring	21006	1,538	Sheep	10/16	4/30	100	1,992	1,518	3,510
Black Canyon	11007	518	Sheep	10/16	4/30	100	770	176	946

Jared Cornelius (#2703084)

ALLOTMENT		LIVESTOCK		GRAZING PERIOD		* % Public Land	AUMs		
Name	Number	Number	Kind	Begin	End		Active Use	Hist. Susp. Use	Total Use
Highland Peak Allotment	11035	2646	Sheep	10/16	5/15	100	3,704	804	4,508

\* This is for billing purposes

The renewal of each of the term grazing permits would be for a period of 10 years. Utilization objectives (allowable use levels or AULs) for each of the allotments would be included as part of the Terms and Conditions (Appendix III). The AULs are a quantification of the land use plan objectives.

The new term permit would include terms and conditions for grazing use which would further assist in achieving the Standards and Guidelines for Grazing Administration and the other pertinent land use objectives for livestock use.

The following terms and conditions would be included in the term grazing permits for the Bennett Spring, Black Canyon, Klondike and Highland Peak Allotments.

Specific Terms and Conditions

1. Allowable use levels, as measured through a combination of key areas readings and use pattern mapping, will not exceed 50% on grasses and forbs, and 45% on shrubs during the authorized use period indicated in the Term Grazing Permit.

Terms and Conditions for Preventative Measures for Noxious Weeds:

1. Herding will be used to avoid point sources of Tamarisk within the allotments.

## Monitoring

Rangeland monitoring data would continue to be collected on all four allotments to determine if the livestock management practices are continuing to achieve or making progress towards achieving the Standards for Rangeland Health and other vegetative objectives for the allotments.

Monitoring studies may include use pattern mapping, key forage plant method utilization transects (KFPM), cover studies, ecological condition studies, frequency trend studies, observed apparent trend studies, weed detection, professional observations, and photographs. Rapid riparian assessment (proper functioning condition studies) would be conducted on an as needed basis. Baseline monitoring (ecological condition, cover, utilization, and trend) may be conducted in association with watershed assessment.

Prior to authorizing annual grazing use, monitoring should be conducted to determine forage availability, grazing use areas and grazing management practices. Following the grazing period, monitoring may be conducted to determine overall utilization levels and grazing use patterns.

If a future assessment results in a determination that changes are necessary for compliance with the Standards and Guidelines, the permit would be revised subject to revised terms and conditions.

The term permit renewal area would also be monitored by the BLM for noxious weeds or non-native invasive species. Control treatments would be initiated on noxious weed populations that become established in the project area. Further mitigation measures for weeds are identified in the Noxious Weed Risk Assessment (Appendix IV).

## No Action Alternative

The no action alternative is the same as the proposed action alternative and will not be further addressed in accordance with IM NV-2006-0034.

## Other Alternatives

The *Caliente ES* addressed several alternatives (Chapter 8), including the No Grazing alternative (Chapter 8 pgs. 19-33). Not issuing term grazing permits was considered. The Code of Federal Regulations at § CFR 4130.2 requires the issuance of grazing permits to qualified applicants. No additional site specific alternatives are necessary for analysis since there are no unresolved conflicts concerning alternative uses of available resources.

## III. DESCRIPTION OF THE AFFECTED ENVIRONMENT

### Bennett Spring, Black Canyon and Klondike Allotments

These three allotments are within the Highland Peak Wild Horse Herd Management Area (HMA) in their entirety and form its bottom half. Two mountain ranges may be found within

these allotments: the Chief Range which runs north-south and extends through the central portion of the Bennett Springs Allotment and the Black Canyon Range which occupies the top one-third of the Black Canyon Allotment. The Bennett Springs Allotment is located, approximately, 4 miles west of Panaca, Nevada. The Black Canyon and Klondike Allotments are located, approximately, 12 miles west of the same said town. The Bennett Spring, Black Canyon and Klondike Allotments encompass approximately 48,264, 8,438 and 7,072 acres of public land, respectively.

The Black Canyon and Klondike Allotments occur within the Dry Lake Valley (#183) watershed. The northwest portion of the Bennett Spring Allotment is located within same said watershed. The extreme south end of the allotment falls within the Meadow Valley Wash North (#214a) Watershed, while the remaining portion of the allotment is located in the Panaca Valley (#210) watershed.

Elevations in the Bennett Springs Allotment vary from 7,474 feet on Chief Mountain to 4,700 feet in the extreme northeast and southeast portions of the allotment. Elevations in the Black Canyon and Klondike Allotments vary from 6,400 feet in the Black Canyon Range to an average of 5,500 feet in the lower elevations south of this range. Precipitation varies from 8-12 inches in the bottomland to 10-14 inches in the mountainous ranges.

Bennett Spring, a developed spring, is the only natural spring found within the Bennett Springs Allotment and it occurs on private land. Table 1 in Appendix V, shows the type of water right (Manner of Use), water right ownership and legal location associated with Bennett Springs. This information was obtained from the Office of the State Division of Water Resources.

Klondike Spring is the only natural spring found within the Klondike Allotment. The spring was originally used for servicing stage lines and was a developed spring at one time with signs of excavation, remnants of metal pipe and small concrete walls still existing, but currently it is undeveloped. The spring and associated riparian zone is fenced. There is an inactive well (George Roger Well), also within the Klondike Allotment, approximately one-third mile northeast of the spring.

Table 2 in Appendix V shows the type of water right (Manner of Use), water right ownership and legal location associated with Klondike Spring and George Rogers Well according to the records of the Office of the State Division of Water Resources.

### Highland Peak Allotment

The Highland Peak Allotment is situated in the central portion of the Highland Peak HMA and is located, approximately, 4 miles west of Panaca, Nevada. It encompasses approximately 45,542 acres of public land. The portion of the allotment east of the Caselton road is located outside the HMA. However, the portion of the allotment west of the Caselton road is located within the HMA and comprises approximately 25% of it. Most of the private land within this allotment is located outside the HMA, in the extreme northeast portion of the allotment, and includes the towns of Pioche and Caselton and lands owned by private companies. The permittee owns 160 acres of private land located along the south border; Approximately 126 acres of this falls within



the allotment while the remaining 34 acres fall within the Bennett Springs Allotment.

The west one-third of the allotment falls within the Highland Range. Elevations within the allotment vary from 9,395 feet on Highland Peak to 5,165 feet in the southeast portions. Precipitation varies from 8-12 inches in the bottomland to 10-14 inches in the mountainous ranges. That portion of the allotment along the west slopes of the Highland Range, generally speaking, falls within the Dry Lake Valley Watershed. The extreme northwest and northeast parts of the allotment falls within the Patterson Wash (#187) watershed.

**Critical Elements of the Human Environment**

The Critical Elements of the Human Environment, which must be considered because of requirements specified in statute, regulation, or executive order, are listed below in Table 1. Elements that may be affected are further described in this EA. Those elements that are not present or would not be affected are also listed in Table 1, but will not be considered further in this document.

**Table 1. Critical Elements of the Human Environment**

Critical Element	May Affect	No Effect	Not Present	Rationale
Noxious weeds and non-native, invasive species	X			<p>Cheatgrass (<i>Bromus tectorum</i>) occurs sporadically throughout the allotments, though it is confined to areas along and adjacent to roads.</p> <p>Surface disturbance through livestock movement may increase the risk of non-native, invasive species establishment.</p> <p><u>Bennett Spring, Black Canyon and Klondike Allotments:</u> No known noxious weeds exist on the Black Canyon Allotment. The only known noxious weed on the Bennett Springs and Klondike Allotments is tamarisk (<i>Tamarix spp.</i>); there are two known infestations on the Klondike Allotment and one on the Bennett Spring Allotment. The infestation on the Bennett Spring Allotment is found on the private lands surrounding Bennett Springs. The two infestations on the Klondike Allotment are found within one-quarter mile of Klondike Spring.</p> <p><u>Highland Peak Allotment</u> Scotch thistle (<i>Onoropodum acanthium</i>) is found within three-quarters miles of Highland Peak summit in three small locations. Tamarisk is found along and vicinal to the Caselton Wash and adjacent to private property in the south central portion of the allotment.</p> <p>Within and near to the town of Pioche and south of Pioche, along Highway 93 are large infestations of Dalmatian toadflax (<i>Linaria dalmatica</i>), tamarisk, Scotch thistle, Spotted knapweed (<i>Centaurea stoebe</i>), Tall Whitetop (<i>Lepidium latifolium</i>), and Whitetop (<i>Lepidium draba</i>). Spotted knapweed is also located along the southwest edge of the Highland Range along Pan American Road.</p>

				Dalmatian toadflax, tamarisk and Bull Thistle ( <i>Cirsium vulgare</i> ) are also found along the extreme southeast corner of the allotment along its border.
Air Quality	X			Minor dust is associated with normal livestock trailing to/from water locations.
Special Status Species (Federally listed, proposed or candidate threatened or endangered species and state sensitive species) (plants)	X			Examination of databases and other sources indicate there are two sensitive plant species (BLM sensitive) occurring within the project area:  Waxflower ( <i>Jamesia tetrapetala</i> ), located in the crest of the Highland Peak Mountain Range.  Schlesser's pincushion ( <i>Sclerocactus schlesseri</i> ), located in the northeast portion of the Bennett Spring Allotment and the southeast portion of the Highland Peak Allotment.
Special Status Species (Federally listed, proposed or candidate threatened or endangered species and state sensitive species) (animals)			X	There are no listed or candidate Threatened/Endangered animal species known to occur in any of the allotments.
Wild Horses and Burros	X			All allotments are located within the Highland Peak Wild Horse Herd Management Area (HMA).
Migratory Birds			X	Several species of migratory birds are known to have a distribution that overlaps with the proposed action area. However, the potential for the proposed livestock grazing to negatively affect migratory birds is discountable, because of low density of livestock within the allotment.  No damaging effects to existing or potential nesting sites are expected, particularly since livestock graze the allotments from, approximately, mid winter until early spring.
Environmental Justice			X	No minority or low-income groups would be affected by disproportionately high and adverse health or environmental effects identified in the Proposed Action Area.
Farmlands (Prime or Unique)			X	Prime and unique farmland is found only on the Highland Peak Allotment. Livestock grazing will not impact prime farmlands, because it will not change soil characteristics that affect farmland status.
Native American Religious Concerns			X	A Native American Coordination Meeting was held in the BLM Ely Field Office on January 17, 2007. No concerns were identified.
Wastes (hazardous or solid)			X	No hazardous or solid wastes would be introduced by the proposed action.
Wetlands/Riparian			X	There are no wetlands in the environment.  Klondike Spring, within the Klondike Allotment, is the only natural spring and riparian area found within any of the four allotments. The spring and associated riparian zone are fenced. Sheep are herded to circumvent the area.
Cultural Resources			X	According to the <i>Cultural Resource Analysis and Probability Model for the Bureau of Land Management Ely District</i> (Drews and Ingbar 2004), the Bennett Springs, Black Canyon, Klondike, and Highland Peak Allotments are predominately

				<p>within a medium to high cultural sensitivity level. Prehistoric cultural resources (habitation/non habitation sites; lithic scatters, projectile points, camp areas) may be found in areas adjacent to spring sites, ridge tops and adjacent hillsides throughout the district. There are no National Register eligible sites within these allotments except for 26LN2969 (all artifacts were collected). Therefore there is “no effect” in accordance with the State Protocol.</p> <p>There are no Traditional Cultural Properties currently identified within the Ely District.</p>
Areas of Critical Environmental Concern (ACEC)			X	No areas of critical environmental concern have been proposed or designated within the allotments.
Floodplains			X	There are no known floodplains within the project area; however the proposed action would have no effect on flood plains.
Water Quality (drinking/ground)			X	No surface water in the proposed action area is used for drinking water. Ground water located in a deep aquifer would not be impacted.
Wild and Scenic Rivers			X	There are no wild and scenic rivers within the allotments.
Wilderness Values			X	None of the allotments, or portions thereof, is located within a wilderness or wilderness study Area (WSA).

In addition to the critical elements of the human environment, the BLM considers other resources and uses that occur on public lands and the issues that may result from the implementation of the Proposed Action. The potential resources and uses, or non-critical elements that may be affected are listed below in Table 2. A brief rationale for either considering or not considering the non-critical element further is provided. The non-critical elements that are considered in the EA are described in the Affected Environment (Section III) and are analyzed in the Environmental Consequences (Section IV).

**Table 2. Other Resources and Uses**

Resource or Issue	May Affect	No Effect	Not Present	Rationale
Socioeconomics	X			The Proposed Action would provide stability to livestock operator.
Vegetation	X			Direct impacts would include the increased removal of above ground biomass within the allotment which would temporarily reduced cover.
Soils	X			Soils are stable. Hoof action on surface soils would occur. Some temporary reduction in soil protection would occur as a result of biomass consumption.
Wildlife	X			Deer and elk occur yearlong in all four allotments; however, no crucial winter range exists. The allotments also provide habitat for various species of microbes, invertebrates, reptiles, birds and mammals.
Range/Livestock Grazing/Standards and Guidelines	X			Standards and Guidelines have been achieved.

Recreation		X		Dispersed recreation in this area includes large and small game hunting, wildlife observation and photography, hiking and general off highway vehicle use.
Visual Resources		X		The proposed term permit renewal is consistent with the Visual Resource Management (VRM) Class II and IV objectives.

### **Potentially Affected Elements of the Human Environment**

Based on the review of existing baseline data and surveys conducted in preparation of this EA, BLM specialists have identified the following as potentially affected elements of the human environment:

- Noxious Weeds and Non-native Invasive Species
- Air Quality
- Special Status Species (Federally listed threatened or endangered, proposed, and candidate species; state protected species; and BLM sensitive species.
- Wild Horse and Burros
- Socioeconomics
- Vegetation
- Soils
- Wildlife
- Range/Livestock Grazing/Standards and Guidelines

#### ***Noxious Weeds and Invasive, Non-Native Species***

A Noxious and Invasive Weed Risk Assessment was completed on March 15, 2007 for the proposed action (Appendix IV). This assessment indicated a moderate potential (16) for the spread of known noxious weeds with continued livestock grazing.

Invasive annuals include cheatgrass (*Bromus tectorum*) which occurs sporadically throughout the allotments though it is confined to areas along and adjacent to roads.

#### **Bennett Spring, Black Canyon and Klondike Allotments**

No known noxious weeds exist on the Black Canyon Allotment (Map #1, Appendix IV). The only known noxious weeds on the Bennett Springs and Klondike Allotments are tamarisk (*Tamarix spp.*); there are two known infestations on the Klondike Allotment and one on the Bennett Spring Allotment. The infestation on the Bennett Spring Allotment is found on the private lands surrounding Bennett Springs. The two infestations on the Klondike Allotment are found within one-quarter mile of Klondike Spring.

#### **Highland Peak Allotment**

Within the Highland Peak Allotment Scotch thistle (*Onoropodium acanthium*) is found within three-quarters miles of Highland Peak summit in three small locations. Tamarisk is found along

and vicinal to the length of Caselton Wash and adjacent to private property in the south central portion of the allotment.

Within and vicinal to the town of Pioche and south of Pioche, along Highway 93, there are large infestations of Dalmatian toadflax (*Linaria dalmatica*), tamarisk, Scotch thistle, Spotted knapweed (*Centaurea stoebe*), Tall Whitetop (*Lepidium latifolium*), and Whitetop (*Lepidium draba*). An infestation of Spotted Knapweed is also located along the southwest edge of the Highland Range along Pan American Road.

Dalmatian toadflax, tamarisk and Bull Thistle (*Cirsium vulgare*) are also found along the extreme southeast corner of the allotment along its border.

### *Air Quality*

It is expected that the current air quality within the proposed project area is within acceptable limits and meets State standards. The proposed project area is not within an area containing residential or industrial development. There are currently no activities occurring within the area which would affect air quality standards.

### ***Special Status Species (Federally listed, proposed or candidate Threatened or Endangered Species, and State sensitive species)***

Nevada BLM Sensitive Species list are species designated by the State Director, in cooperation with the State of Nevada Department of Conservation and Natural Resources, that are not already included as BLM Special Status Species under (1) Federally listed, proposed, or candidate species; or (2) State of Nevada listed species. Species which were eliminated from the U. S. Fish and Wildlife Service's Category II candidate list in 1995 were maintained by BLM as per Instruction Memorandum No. NV-98-013. Nevada BLM policy is to provide these species with the same level of protection as is provided for candidate species in BLM Manual 6840.06 C. The Policy ( BLM Manual section 6840.06 C) states in pertinent part, "BLM shall carry out management, consistent with the principles of multiple use, for the conservation of candidate species and their habitats and shall ensure that actions authorized, funded, or carried out do not contribute to the need to list any of these species as threatened or endangered."

### Federally listed, proposed or candidate Threatened or Endangered Species

There are no listed or candidate Threatened/Endangered plant or animal species known to occur in any of the allotments.

### BLM sensitive species

The Nevada Heritage database indicates two sensitive species located with the project area:

Waxflower, which is located in the crest of the Highland Peak Mountain Range; and Schlessler's pincushion, located in the northeast portion of the Bennett Spring Allotment and the southeast portion of the Highland Peak Allotment.

### ***Wild Horses and Burros***

All four of the allotments are located within the Highland Peak Wild Horse Herd Management Area (HMA). No burros are known to exist in the HMA.

A Horse Gather was conducted in December 2006 on the Highland Peak HMA. The appropriate management level (APM) is between 20 – 33 horses. Sixty-four horses were removed during the gather leaving an approximate 25 horses remaining.

### ***Socioeconomics***

The local economy of Lincoln County has been dependent on the areas farming and ranching community this includes the county tax base. The farming and ranching life style has been and continues to be important in the county and State of Nevada.

### ***Vegetation***

#### Bennett Spring, Black Canyon and Klondike Allotments

Pinyon-juniper varies from dense stands in the Chief Range and the Black Canyon Range to scattered less dense stands at the lower elevations where it is invading. Most of the acreage of the three allotments is composed of a sagebrush/grass/forb mix with black sagebrush being the predominant existing sagebrush species.

#### Highland Peak Allotment

Most of the west one-half of the allotment is dominated by pinyon-juniper overstory with sagebrush stands primarily occupying areas where either pinyon-juniper is still invading or has failed to invade. Pinyon-juniper understory varies from little to no vegetation, with possible pavement under denser tree canopies, to various types of shrubs and grasses under the less dense canopies.

The soils and ecological sites, within all four allotments, have been described and classified by the Natural Resource Conservation Service (NRCS).

### ***Soils***

A majority of the soils within the allotments occur generally within the 8-12” precipitation zone, are calcareous, and have a shallow effective rooting depth (having restrictive layers within the rooting zone). They vary from having high amounts of gravels throughout the soil profile with the available water capacity being low, to being characterized by being stony, cobbly or gravelly on the surface and have an available water capacity of low to moderate.

Available water capacities vary from very low to moderate with runoff ranging from slow to rapid.

Elevations range from 4,800-7,000 feet.

### ***Wildlife***

Deer and elk occur yearlong in all four allotments. However, there is no crucial winter range known to exist. The allotments also provide habitat for all natural biological diversity including species of microbes, invertebrates, reptiles, birds and mammals.

### ***Range/Livestock Grazing/Standards and Guidelines***

Tom Williams typically uses approximately 32% of his active preference on the Bennett Spring and Klondike Allotments and approximately 64% of his permitted use on the Black Canyon Allotment each year.

Bradley Guymon typically uses approximately 33% of his permitted use on the Bennett Spring Allotments and approximately 66% of his permitted use on the Black Canyon Allotment, annually.

Jared Cornelius, the new permittee on the Highland Peak Allotment as of January 3, 2007, and is currently intending to annually utilize approximately the same number of AUMs as the previous permittee. The previous permittee, Brent Hunter, typically utilized approximately 33% of his active preference on the allotment.

Sheep are herded continuously over the allotments and therefore are kept moving. This allows for a relatively even distribution of sheep across the landscape and, consequently, a relatively homogenous level of grazing.

There has been no domestic sheep grazing on the Highland Peak Allotment from March 20, 2002 until January 3, 2007. On the latter date a new permittee acquired the grazing privileges.

Most of the grazing period each year, on all four allotments, typically occurs during the winter months when the ground is frozen and may periodically be covered with snow (from January through the first part of March). During a majority of this time the vegetation is mostly in a dormant state. The diet of the sheep, during this time period is primarily black sagebrush (*Artemisia arbuscula nova*). Field observations show that prior to any green-up on native grasses or forbs they compete very little with wild horses regarding diet. Once grasses or forbs have begun green-up, some dietary overlap may occur and competition for such forage may increase, though black sagebrush tends to still be the primary food source for the sheep.

On the Highland Peak Allotment there is an area in the central portion of the Highland Peak Allotment, approximately  $\frac{1}{3}$  to  $\frac{1}{2}$  mile wide, that was used by the old permittee, as a sheep driveway during the 1998/1999 and 1999/2000 grazing seasons (see use pattern maps for this time period). Use along portions of this driveway exceeded the moderate use category during this time period. However, the allotment has received approximately 5 years of rest since said driveway was last used and the new permittee does not use said area for such purposes.

#### **IV. ENVIRONMENTAL CONSEQUENCES**

The environmental consequences of the proposed action were analyzed in the *Caliente ES*. The proposed action is within the array of options identified for the alternatives and proposed action as analyzed in the *Caliente ES*. There have been no changes made with the proposed term permit renewal that differ from the rangeland management actions presented in the *Caliente ES*. The proposed action is not substantially different than the actions analyzed in the *Caliente ES*. The following site specific analysis is in addition to that in the *Caliente ES*.

##### ***Noxious Weeds and Invasive, Non-Native Species***

Because of the mitigation added to the proposed action, the grazing permit renewal would not likely result in an increase in noxious weeds to the area. The Risk Factor for spread of noxious weeds, for all allotments, is moderate at the present time.

The proposed action could increase the populations of noxious and invasive weeds already found within the allotments through disturbance, and through transportation of seeds. There is also a potential for the introduction of new weed establishment

Grazing use may or may not cause an increase in invasive plants depending on climate, stocking level, timing of grazing, presence or absence of fire and other factors.

##### ***Air Quality***

The proposed term permit renewal may increase dust levels during trailing to and from water sources. Any increase in dust would be transitory and quickly dissipate. Dust is not expected to exceed Nevada and National Ambient Air Quality Standards. In addition, it is expected that any emissions would not affect any Class I air quality areas.

##### ***Special Status Species (Federally listed, proposed or candidate Threatened or Endangered Species, and State sensitive species)***

The only known threatened/endangered plant species, waxflower, is located near the crest of the Highland Mountainous Range where grazing does not occur.

Schlesser's pincushion only occurs within the Highland Peak Allotment, where its occurrences are rare, and the probability of disturbance (trampling) is extremely low to non-existent. It is also not a plant considered palatable by sheep. Its physical characteristics would result in avoidance by sheep. In addition, watering locations are not located in the areas occupied by the plant.



### ***Wild Horses and Burros***

Implementing the proposed action would have little to no impact on wild horses in the Highland Peak HMA, because the proposed action implements no changes to current management practices.

### ***Socioeconomics***

Lifestyles of local residents would not be impacted. The proposed term permit renewal would provide economic benefits for the livestock permittee in this area by improving the efficiency of their overall operation. The proposed permit renewal would facilitate livestock management and could provide stability to the livestock operation

### ***Vegetation***

By maintaining AULs, negative impacts to the growth and reproductive cycle of vegetation would not occur.

Direct impacts would include the increased removal of above ground biomass within the allotment. This would temporarily reduced cover. However, in keeping grazing intensity at or below AULs it would provide the residual vegetation necessary to provide ample forage and cover for wildlife, and to meet soil and watershed objectives.

Several years of utilization studies show that grazing has consistently been well below AULs throughout a vast majority of the areas grazed. Therefore, the negative impacts to vegetation are neither an issue nor anticipated.

### ***Soils***

The continuous herding and resulting even distribution of sheep across the landscape, especially during the winter months, results in very little (almost negligible) impacts of hoof action on surface soils. Previously disturbed areas (wide spots in existing roads) are purposely selected for watering locations, with the same areas being used each year. Therefore, hoof action impacts in such instances are of minor consequence.

The proposed action would allow the partial removal of vegetation by livestock. This would technically reduce the foliar groundcover and standing biomass and may introduce some lack of protection of the soil surface from precipitation events and subsequent runoff. Soil cover from litter accumulation would be somewhat reduced through forage consumption. The lost litter would not be available to microbial populations for the recycling of carbon, nitrogen, and other nutrients from the organic matter.

### ***Wildlife***

Because there is no crucial deer or elk winter range located within any of the allotments and they have very little dietary overlap with sheep (particularly during the winter months when most of

the sheep grazing occurs), there would be little, if any, impacts to such wildlife. Competition for grasses or forbs may increase as green-up begins.

### ***Range/Livestock Grazing/ Standards and Guidelines***

Each of the permittees typically uses approximately one-third to two thirds of their Active Use while continuously herding their animals throughout the grazing period, thereby, creating a relatively even distribution of sheep across the landscape and, consequently, a relatively homogenous level of grazing. This combination has resulted in a relatively low level (slight use), even distribution of grazing use as evidenced by the slight use levels exhibited over a majority of all four allotments each year use pattern mapping was conducted. Most of the grazing period each year, on all four allotments, typically occurs during the winter months when the ground is frozen and may periodically be covered with snow (from January through the first part of March). During a majority of this time the vegetation is mostly in a dormant state.

It is anticipated that the Standards for Rangeland Health will continue to be achieved and grazing use levels will remain at low levels throughout a majority of all four allotments each year, especially with the addition of the aforementioned proposed terms and conditions in Section II.

### ***Cumulative Impacts***

According to BLM handbook *Guidelines for Assessing and Documenting Cumulative Impacts* (1994), the Cumulative impact analysis can be limited to those issues and resource values identified during scoping that are of major importance. No issues or resource values of major importance were identified during the EA scoping period, thus no specific resource value is addressed below. A general discussion of past, present, and reasonably foreseeable future actions follows:

#### **Past Actions**

There have been limited previous actions occurring in any of the allotments. Off-highway vehicle (OHV) use has become established. During the 1800's and for the first half of the 1900's there has been an extensive amount of mining in the north portion of the Highland Peak Allotment, particularly vicinal to the town of Pioche, Nevada. However, there has been no historical oil or gas production or exploration within any of the allotments. Casual woodcutting, pine-nut picking, hunting, trapping, wildlife viewing and other recreational activity use has occurred and continues to present day.

There are also right-of-ways for power and telephone lines which dissect the Highland Peak Allotment. Livestock grazing has occurred in the area since settlement times in the mid-1800's. Fencing in the area, as a result has been minimal.

Rangeland management and activities within the Ely District, Caliente Field Station, have been in accordance with the Final Caliente ES – Proposed Domestic Livestock Grazing Management Program (INT-FES 79-44) (September 21, 1979).

### **Present Actions**

With the exception of mining all of the activities described above still continue and there has been an increased in OHV use in recent years.

Present grazing use is being managed to maintain and improve rangeland health as presented in the *Standards and Guidelines for Nevada's Mojave Southern Great Basin Area* for grazing administration, approved February 12, 1997.

Monitoring data is has been collected on the allotment in accordance with the *Standards and Guidelines*.

### **Reasonably Foreseeable Future Actions**

The current permittees would continue to be the permittees on their respective allotments. It is reasonable to expect that the permits would be active and that sheep would be permitted to graze on the allotments. Rangeland monitoring would be expected to continue at the present level and intensity on the allotment. Dozens of range permit renewals are expected to occur each year through 2009 and subsequent years

The Silver State Trail is a project in the planning phase at the present time. The proposed route uses existing roads and trails for OHV races and trail rides.

The Ely Field Office is working on a new Resource Management Plan (RMP). This document, when finalized, will guide resource management on public lands administered by the BLM in White Pine, Lincoln and portions of Nye County in Nevada. The plan will go to the public in 2007. When finalized, resource management would occur on a watershed basis.

### ***Cumulative Impacts Conclusion***

The proposed action in conjunction with the past, present and reasonable foreseeable future actions would result in no noticeable overall changes to the affected environment. Grazing under the proposed permit renewal would continue to meet the rangeland health standards. There would be negligible cumulative visual impairment to the area as a result of the term permit renewal. There may be perceived increased conflicts between dispersed recreation and livestock grazing if recreation increases as a result of foreseeable future actions. No cumulative impacts of concern are anticipated as a result of the proposed action in combination with any other existing or planned activity.

## **V. PROPOSED MITIGATING MEASURES**

Appropriate mitigation has been included as part of the proposed action (mitigation measures for weeds are identified in the Noxious Weed Assessment). No additional mitigation measures are proposed based on this environmental analysis.

## **VI. SUGGESTED MONITORING**

Appropriate monitoring has been included in the proposed action. No monitoring is suggested in response to anticipated impacts.

## **VII. CONSULTATION and COORDINATION**

### **A. Public Interest and Record of Contacts**

There is a continued public interest in the proper grazing management of public lands. The permittees on the Bennett Spring, Black Canyon, Klondike and Highland Peak Allotments have a strong interest in these permit renewals.

On January 17, 2007 the Bennett Spring, Black Canyon, Klondike and Highland Peak Term Grazing Permit Renewals were presented to a Tribal coordination meeting at the Ely BLM Office. No concerns were identified during this meeting. There were no questions or comments, regarding the proposal, from the Tribal participants.

On January 30, 2007 a letter was mailed to the public. Also on this date, the proposed action for this EA was posted on the Ely BLM internet site ([http://www.nv.blm.gov/ely/nepa/ea\\_list.htm](http://www.nv.blm.gov/ely/nepa/ea_list.htm)) and no comments were received.

On January 31, 2007 the proposal was presented to the Ely BLM internal scoping team and issues were identified and discussed.

On February 6, 2007 the respective permittees were sent a letter informing them of the permit renewal process.

This EA was posted for a 30 day public review and comment period on the Ely BLM external website. A hard copy was also mailed to those interested publics who had requested it and who had expressed an interest in range management actions on the Bennett Spring, Black Canyon, Klondike and Highland Peak Allotments. Comments were received from Western Watersheds Project and from Cindy MacDonald. Changes in the EA, based upon public input, were made as appropriate.

Interested publics will be notified, again, by mail or email when the Proposed Decision Record and Finding of No Significant Impact (DR/FONSI) is signed. Before including addresses, phone numbers, email addresses or other personal identifying information in comments, you should be aware that the entire comment – including personal identifying information – may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so. These documents will also be mailed to interested publics that request a hard copy. The signed DR/FONSI initiates a 15 day protest period followed by a 30 day appeal period.

The Ely Field 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. Those requesting notification of range improvement actions are requested to respond if they want to receive a copy of the final EA and signed Decision Record/Finding of No Significant Impact. The individuals and organizations, who were sent the annual CCC letter in January, 2007 have requested additional information regarding rangeland related actions or programs within the Bennett Spring, Black Canyon, Klondike and Highland Peak grazing allotments.

**B. Interested Publics Mail List**

George Andrus  
Steven Carter  
Mr. Steve Foree  
Brad Hardenbrook  
Curt Leet  
Lincoln County Commissioners  
Cindy MacDonald  
Betsy McFarlan  
John McLain  
Nevada State Clearinghouse  
Jerry Reynoldson  
Mike Scott  
Katie Fite

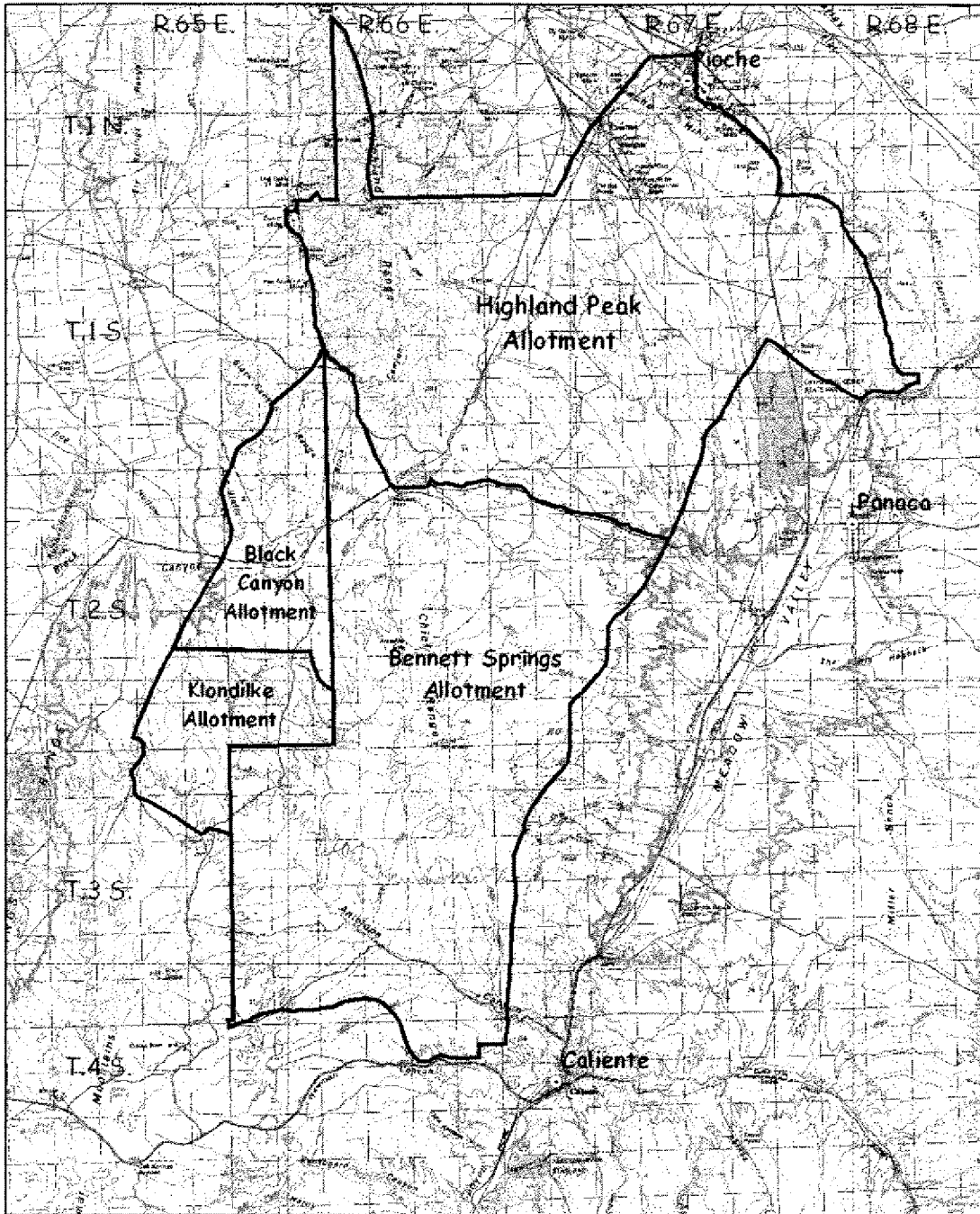
**C. Internal District Review**

Kari Harrison	Soil, Water, and Air; Floodplains, Riparian, and Wetlands
Lisa Gilbert	Archaeology/Historic Paleontological Wildlife /Migratory Birds /Special Status Species (plants and animals), Areas of Critical Environmental Concern
Steve Abele	Native American Religious Concerns
Elvis Wall	Rangeland Management
Domenic A. Bolognani	Rangeland Management Lead
Chris Mayer	Visual Resource Management, Recreation
Bruce Winslow	Invasive, Non-Native, Noxious Species
Bonnie Waggoner	Wild Horses and Burros
Benjamin Noyes	Environmental Coordination
Susan Howell	Environmental Coordination
Sheri Wysong	Wastes, Hazardous and Solid, Hazmat
Melanie Peterson	

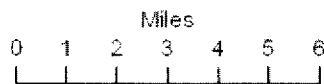
# **APPENDIX I**

MAP




Location of Bennett Springs, Black Canyon, Klondike and Highland Peak Allotments with Respect to Surrounding Towns



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.



**Legend**

-  Towns
-  Private Lands
-  Cathedral Gorge State Park

## APPENDIX II

### STANDARDS DETERMINATION DOCUMENT

Tom Williams, Bradley Guymon, Jared Cornelius Permit Renewals  
Bennett Spring, Black Canyon, Klondike and Highland Peak Allotments

EA NV-040-07-21

#### **Standards and Guidelines Assessment**

The Mojave-Southern Great Basin Standards and Guidelines for grazing administration were developed by the Mojave-Southern Great Basin Resource Advisory Council (RAC) and approved by the Secretary of the Interior on February 12, 1997.

Standards of rangeland health are expressions of physical and biological conditions required for sustaining rangelands for multiple uses. Guidelines point to management actions related to livestock grazing for achieving the Standards. Guidelines are options that move rangeland conditions toward the multiple use Standards. Guidelines are based on science, best rangeland management practices and public input. Therefore, determination of rangeland health is based upon conformance with these standards.

This Standards Determination document evaluates and assesses livestock grazing management and achievement of the Standards and Guidelines for the Bennett Spring, Black Canyon, Klondike and Highland Peak Allotments in the Ely District BLM. It does not evaluate or assess the Standards or Guidelines for Wild Horses and Burros. Publications used in assessing and determining achievement of the Standards include: Soil Survey of Meadow Valley Wash; Sampling Vegetation Attributes; National Range and Pasture Handbook; Nevada Plant List; Major Land Resource Area (MLRA) Rangeland Ecological Site Descriptions; Soil Survey of South Lincoln County, Nevada; Soil Survey of North Lincoln County, Nevada. A complete list of references is included at the end of this document. These documents are available for public review at the Caliente Field Station during business hours.

There are three key areas on the Bennett Springs Allotment, one key area on the Black Canyon Allotment, one on the Klondike Allotment and one on the Highland Peak Allotment (Map #1 in Appendix A of this Standards Determination document). Key areas were selected based on accessibility, soil mapping units, representative ecological (range) sites, livestock use patterns and permittee input. Photographs were taken and general observations noted.

Each year at the end of the grazing season, over a span of four years (1997-2000), utilization data was collected at all key areas and Use Pattern Mapping was conducted (Table 2 in Appendix B of this Standards Determination document). The Key Forage Plant Utilization Method (KFPM) was used in determining grazing use, at each key area, according to the Nevada Rangeland



Monitoring Handbook (September 1984). This method is based on percent utilization of current year's growth, by weight.

Cover and Ecological Condition data was collected simultaneously (Tables 1 and 3, respectively, in Appendix B of this Standards Determination document), from 6/10/99 to 6/14/99, at each of the respective key areas on the Black Canyon, Klondike and Highland Peak Allotments. Key area BS-1 was chosen on the Bennett Spring Allotment for the collection of said data, because it was determined that it was as equally representative as the remaining two. Cover was obtained during the same time period and at the same key areas as for Ecological Condition. Cover data was obtained using the Line Intercept Method. The method is described in Sampling Vegetation Attributes (USDI-BLM et. al., 1996).

Use pattern mapping showed that slight use occurred throughout a vast majority of all four allotments each of the four years data was collected. This indicates that overgrazing is not an issue.

The following is an analysis of monitoring data which was used to evaluate applied management practices during the evaluation period. These data were used in determining if such management practices yielded results that were in conformance with the Mojave-Southern Great Basin Standards. The results of the following analysis have been incorporated into the Environmental Assessment EA NV-040-07-21.

#### **STANDARD 1. SOILS:**

*“Watershed soils and stream banks should have adequate stability to resist accelerated erosion, maintain soil productivity, and sustain the hydrologic cycle.”*

Soil indicators:

- Ground cover (vegetation, litter, rock, bare ground);
- Surfaces (e.g., biological crusts, pavement); and
- Compaction/infiltration.

Riparian soil indicators:

- Stream bank stability.

All of the above indicators are appropriate to the potential of the ecological site.

#### **Bennett Spring and Highland Peak Allotments**

Determination:

**Achieving the Standard**

Not achieving the Standard, but making significant progress towards meeting the Standard.

Not achieving the Standard, not making significant progress towards meeting the Standard.

Causal Factors:

- Livestock are a contributing factor to not meeting the standard.
- Livestock are not a contributing factor to not meeting the standard.
- Failure to meet the standard is related to other issues or conditions.

Guidelines

- In conformance with the Guidelines**
- Not in conformance with the Guidelines

**Black Canyon and Klondike Allotments**

**Determination:**

- Achieving the Standard
- Not achieving the Standard, but making significant progress towards meeting the Standard.
- Not achieving the Standard, not making significant progress towards meeting the Standard.**

**Causal Factors:**

- Livestock are a contributing factor to not meeting the standard.
- Livestock are not a contributing factor to not meeting the standard.**
- Failure to meet the standard is related to other issues or conditions.

**Guidelines Conformance:**

- In conformance with the Guidelines**
- Not in conformance with the Guidelines

The prevalent Rangeland Ecological Site, according to the Natural Resource Conservation Service (NRCS), throughout all four allotments is a Shallow Calcareous Loam, 8-12" P.Z. - 029XY008NV – Black Sagebrush/Indian Ricegrass.

A majority of the soils within the allotments occur generally within the 8-12" precipitation zone, are calcareous, and have a shallow effective rooting depth (having restrictive layers within the rooting zone). They vary from having high amounts of gravels throughout the soil profile with the available water capacity being low, to being characterized by being stony, cobbly or gravelly on the surface and have an available water capacity of low to moderate. Available water capacities vary from very low to moderate with runoff ranging from slow to rapid.

Table 1 in Appendix B shows the comparison of cover data collected at key areas within the Bennett Spring, Black Canyon, Klondike and Highland Peak Allotments to Potential Natural Community (PNC) cover values for the aforementioned range site. The potential ground cover (basal and crown) according to the range site is 20-30%.

Table 2 in Appendix B illustrates utilization levels, from 1997 through 2000, at key areas within the Bennett Spring, Black Canyon, Klondike and Highland Peak Allotments.

### **Bennett Spring and Highland Peak Allotments**

Conclusion: *Standard 1 Achieved*

Cover data collected at Key Areas BS-1 (Bennett Spring) and HP-1 (Highland Peak) was either within or exceeded the range of values found in the Rangeland Ecological Site Description (NRCS).

At Key Area BS-1 cover was determined to be 22.2 %. Three perennial native grasses accounted for a total of 1.9% of the total cover while three perennial native shrubs and juniper accounted for 20.25% and 5% of the total cover, respectively.

Cover data at HP-1 was 32.05% which exceeds the values in the aforementioned Rangeland Ecological Site Description. Shrubs comprised 31.9% of this value while grasses comprised .15%.

Key area readings on these allotments, at the end of each grazing season during the four aforementioned years, showed grazing use to always be in the slight use category with one exception. Use at Key Area BS-2 (Bennett Spring) was found to be in the light use category (25.5 %) during the 1998-1999 grazing season. To illustrate this, Table 2 shows the year in which utilization data was gathered and the corresponding vegetative growth year on which data was gathered (e.g., key areas were read in 1998 on vegetative growth which occurred in 1997). Furthermore, overall, general observations on the allotments indicated that soils were stable, native plants were not pedestalled and there were no signs of soil compaction.

This indicates that each of the allotments has sufficient vegetative cover to maintain stability and to resist accelerated erosion (sheet and rill erosion), maintain soil productivity and, thus, sustain the hydrologic cycle. It further indicates that there is minimal wind and/or water erosion of topsoil and appropriate percolation and infiltration of water from snowmelt and rainfall.

Collectively, low grazing intensities and sufficient vegetative cover infers litter production that further adds to increased soil protection and stability.

### **Black Canyon and Klondike Allotments**

Cover data collected at Key Areas BC-1 (Black Canyon) and K-1 (Klondike) was less than the potential ground cover indicated in the Rangeland Ecological Site Description at both Key Areas: BC-1 (Black Canyon) and K-1 (Klondike).

At Key Area BC-1 cover was determined to be 14.6%. Perennial native grasses accounted for a total of .55% of the total cover while perennial native shrubs accounted for 14.5%.

Cover data at K-1 was 14.85%. Grasses comprised .15% of the total cover while shrubs comprised 14.7%.

However, general observations on the allotments did indicated that soils were stable with no accelerated erosion (sheet and rill erosion), native plants were not pedestalled and there were no signs of soil compaction.

### **Standard 2 ECOSYSTEM COMPONENTS:**

*"Watersheds should possess the necessary ecological components to achieve state water quality criteria, maintain ecological processes, and sustain appropriate uses."*

*"Riparian and wetlands vegetation should have structural and species diversity characteristic of the stage of stream channel succession in order to provide forage and cover, capture sediment, and capture, retain, and safely release water (watershed function)."*

Upland indicators:

- Canopy and ground cover, including litter, live vegetation, biological crust, and rock appropriate to the potential of the ecological site.
- Ecological processes are adequate for the vegetative communities.

Riparian indicators:

- Stream side riparian areas are functioning properly when adequate vegetation, large woody debris, or rock is present to dissipate stream energy associated with high water flows.
- Elements indicating proper functioning condition such as avoiding acceleration erosion, capturing sediment, and providing for groundwater recharge and release are determined by the following measurements as appropriate to the site characteristics:
  - Width/Depth ratio;
  - Channel roughness;
  - Sinuosity of stream channel;
  - Bank stability;
  - Vegetative cover (amount, spacing, life form); and
  - Other cover (large woody debris, rock).
- Natural springs, seeps, and marsh areas are functioning properly when adequate vegetation is present to facilitate water retention, filtering, and release as indicated by plant species and cover appropriate to the site characteristics.

Water quality indicators:

- Chemical, physical and biological constituents do not exceed the stat water quality standards.

The above indicators shall be applied to the potential of the ecological site.

**Determination:**

**X Meeting the Standard**

- Not meeting the Standard, but making significant progress towards meeting the Standard.
- Not meeting the Standard, not making significant progress towards meeting the Standard.

**Causal Factors:**

- Livestock are a contributing factor to not meeting the standard.
- Livestock are a contributing factor to not meeting the standard.
- Failure to meet the standard is related to other issues or conditions.

**Guidelines Conformance:**

**X In conformance with the Guidelines**

- Not in conformance with the Guidelines

Conclusion: *Standard 2 Achieved*

Klondike Spring, within the Klondike Allotment, is the only natural spring and riparian area found on public land within any of the four allotments. The spring was originally used for servicing stage lines and was a developed spring at one time with signs of excavation, remnants of metal pipe and small concrete walls still existing, but currently it is undeveloped. The spring and associated riparian zone is fenced. The spring does not produce enough water to cause surface flow outside the fenced area; it seeps back into the surrounding soil. Sheep are herded so that they circumvent this natural riparian area; thus, it receives no impacts from livestock grazing.

Because of these reasons the spring has not been assessed.

***Standard 3 HABITAT AND BIOTA:***

*"Habitats and watersheds should sustain a level of biodiversity appropriate for the area and conducive to appropriate uses. Habitats of special status species should be able to sustain viable populations of those species."*

Habitat indicators:

- Vegetation composition (relative abundance of species);
- Vegetation structure (life forms, cover, height, and age classes);
- Vegetation distribution (patchiness, corridors);
- Vegetation productivity; and
- Vegetation nutritional value.

Wildlife indicators:

- Escape terrain;
- Relative abundance;
- Composition;
- Distribution;

- Nutritional value; and
- Edge-patch snags.

The above indicators shall be applied to the potential of the ecological site.

**Bennett Spring and Black Canyon and Klondike Allotments**

**Determination:**

- Achieving the Standard**
- Not achieving the Standard, but making significant progress towards meeting the Standard.
- Not achieving the Standard, not making significant progress towards meeting the Standard.

**Causal Factors:**

- Livestock are a contributing factor to not meeting the standard.
- Livestock are not a contributing factor to not meeting the standard.
- Failure to meet the standard is related to other issues or conditions.

**Guidelines:**

- In conformance with the Guidelines**
- Not in conformance with the Guidelines

**Highland Peak Allotment**

**Determination:**

- Achieving the Standard
- Not achieving the Standard, but making significant progress towards meeting the Standard.
- Not achieving the Standard, not making significant progress towards meeting the Standard.**

**Causal Factors:**

- Livestock are a contributing factor to not meeting the standard.
- Livestock are not a contributing factor to not meeting the standard.**
- Failure to meet the standard is related to other issues or conditions.

**Guidelines**

- In conformance with the Guidelines**
- Not in conformance with the Guidelines

Table 3 in Appendix B compares percent composition found at the key areas within the Bennett Spring, Black Canyon, Klondike and Highland Peak Allotments to Percent Composition Values expected at PNC. It illustrates that the contribution of grasses, and forbs in some instances, at each key area is low relative to what is expected at PNC.

## **Bennett Spring, Black Canyon and Klondike Allotments**

Conclusion: *Standard 3 Achieved*

Ecological Condition data shows that there is good species diversity within the Bennett Spring, Black Canyon and Klondike Allotments; Allotment. However, in all three allotments shrubs are dominant.

The dominant present vegetation within the Bennett Spring, Black Canyon and Klondike Allotments, as indicated by baseline range studies (ecological condition and line intercept) and general observations (including photographs), all indicate a diverse habitat that is distributed across the landscape.

Main grass species that are widespread within the Bennett Spring and Black Canyon Allotments consist of Indian ricegrass (*Achnatherum hymenoides*), bottlebrush Squirreltail (*Elymus elymoides*), galleta (*Pleuraphis jamesii*) and needleandthread (*Hesperostipa comata*). On the Klondike Allotment Indian ricegrass, needleandthread and bottlebrush squirreltail are widespread. These are known to be nutritious, palatable plant species for livestock and wild horses. Black Sagebrush (*Artemisia nova*), common and plentiful throughout all three allotments, is nutritious and palatable to sheep and antelope.

Ecological condition studies indicate moderate to good species diversity (composition) of perennial plant species and low levels of grazing use combined with line intercept studies all indicate that there is sufficient ground cover to protect soils and perpetuate vegetative productivity while ensuring appropriate vegetative structure.

Collectively, moderate to good species diversity, low grazing use levels and ample ground cover translate into sufficient habitat for wildlife for nesting protection, food sources (vegetative and insectivorous) and mating.

## **Highland Peak Allotment**

There is low species diversity in the Highland Peak as indicated in Table 3 in Appendix B. Shrubs clearly dominate the vegetative communities. Grasses and forbs are making an extremely small contribution to species composition.

Key area readings on the allotment, at the end of each grazing season, from 1997 through 2000, showed grazing use to always be in the slight use category. To illustrate this, Table 2 shows the year in which utilization data was gathered and the corresponding vegetative growth year on which data was gathered (e.g., key areas were read in 1998 on vegetative growth which occurred in 1997). This indicates that livestock are having relatively little impact on the plant community changes leading to failure to achieve the standard.

## **PART 2. ARE LIVESTOCK A CONTRIBUTING FACTOR TO NOT MEETING THE STANDARDS?**

### **Black Canyon and Klondike Allotments**

#### *Standard #1: Soils*

Livestock are **NOT** a causal factor.

Table 2 in Appendix B illustrates utilization levels for these allotments, from 1997 through 2000 showed grazing use to always be in the slight use category. This indicates that livestock are having relatively little impact on the plant community changes leading to failure to achieve the standard.

### **Highland Peak Allotment**

#### *Standard #3: Habitat and Biota*

Livestock are **NOT** a causal factor.

Key area readings on the allotment, at the end of each grazing season, from 1997 through 2000, showed grazing use to always be in the slight use category. To illustrate this, Table 2 shows the year in which utilization data was gathered and the corresponding vegetative growth year on which data was gathered (e.g., key areas were read in 1998 on vegetative growth which occurred in 1997). This indicates that livestock are having relatively little impact on the plant community changes leading to failure to achieve the standard.

## **PART 3. GUIDELINE CONFORMANCE REVIEW and SUMMARY**

### **GUIDELINES for SOILS (Standard 1):**

See Conclusion for Standard 1 and Part 2, above.

Current livestock grazing management practices, on all four allotments, conform to Guideline 1.1. The remaining three Guidelines are not applicable to the assessment area at this time.

Upland management practices are maintained and promoted through adequate vegetative ground cover.



GUIDELINES for *ECOSYSTEM COMPONENTS* (Standard 2):

See Conclusion for Standard 2.

Current livestock grazing management practices, on all four allotments, conform to Guidelines 2.3 and 2.4. The remaining six Guidelines are not applicable to the assessment area at this time.

GUIDELINES for *HABITAT AND BIOTA* (Standard 3):

See Conclusion for Standard 3 and Part 2, above.

Current livestock grazing management practices conform to Guidelines 3.1, 3.2, 3.3, 3.4, 3.5 and 3.6. The remaining three Guidelines are not applicable to the assessment area at this time.

**PART 4. MANAGEMENT PRACTICES TO CONFORM WITH GUIDELINES AND ACHIEVE STANDARDS**

1. Maintain all terms and conditions as indicated in the current term grazing permits for each of the three permittees. Introduce terms and conditions establishing allowable use levels and preventative measures for noxious weeds.
2. Allowable use levels, as measured through a combination of key areas readings and use pattern mapping, will not exceed 50% on grasses and forbs, and 45% on shrubs during the authorized use period indicated in the Term Grazing Permit.

**Prepared by:**

/s/ Domenic A. Bolognani

Domenic A. Bolognani, Rangeland Management Specialist

9/13/07

Date

**Reviewed by:**

/s/ Chris Mayer

Chris Mayer, Lead Rangeland Management Specialist

9/13/07

Date

**I concur:**

/s/ Kyle V. Hansen

Authorized Officer

9/19/07

Date

**REFERENCES:**

USDA – NRCS. 1976. Soil Survey of Meadow Valley Wash, Nevada.

USDA - USFS, NRCS, USDI - BLM, Cooperative Extension Service. 1996. Sampling Vegetative Attributes.

USDA – NRCS. 1997. National Range and Pasture Handbook.

USDA – NRCS. 1998. Nevada Plant List.

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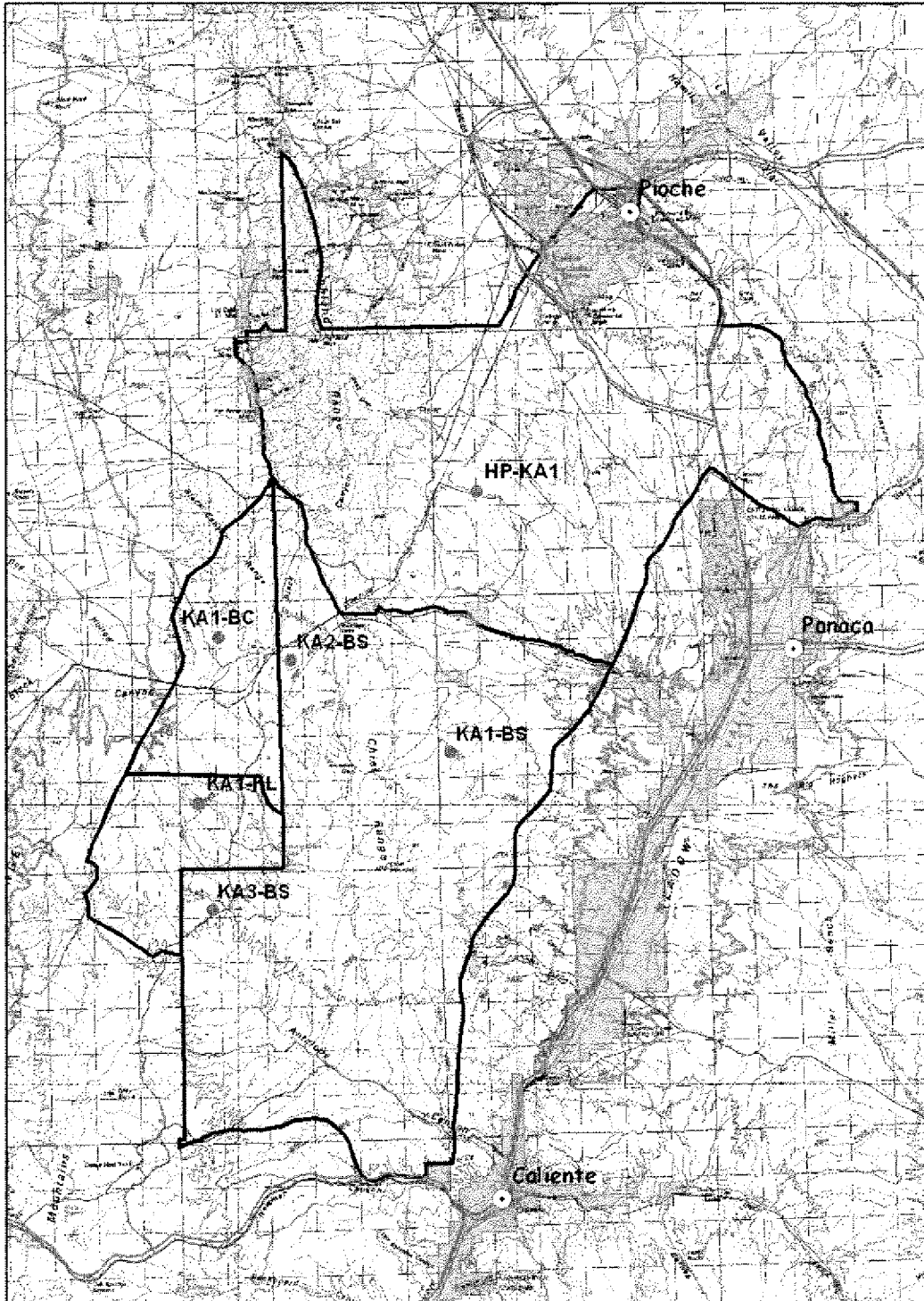
USDA – NRCS. 2006. Soil Survey of South Lincoln County, Nevada.

USDA – NRCS. 2007. Soil Survey of North Lincoln County, Nevada.

**APPENDIX A**

MAP

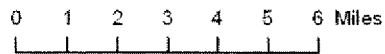
Key Area Locations  
within the  
Bennett Spring, Black Canyon, Klondike and Highland Peak Allotments



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data

Clover Mountain  
1:100,000 Quad Map

March 15, 2007  
Caliente Field Station



**Legend**

- Key Areas within Allotments

## APPENDIX B

### TABLES

Table 1. Comparison of Cover Data Collected at Key Areas within the Bennett Spring, Black Canyon, Klondike and Highland Peak Allotments to Potential Natural Community (PNC) Cover Values for the Applicable Range Site.

Allotment (Key Area)	Range Site	Associated Vegetation Type	% Cover	Percent Contribution to Total Cover from Vegetative species Components	% Cover at PNC in Rangeland Site Description
Bennett Spring (BS-1)	029XY008NV	ARARN / ACHY Shallow Calcareous Loam 8-12" P.Z.	22.2 %	Grasses = 1.9 Shrubs = 20.25 Juniper = 5	20% - 30%
Black Canyon (BC-1)			14.6 %	Grasses = .55 Shrubs = 14.05	
Klondike (K-1)			14.85 %	Grasses = .15 Shrubs = 14.7	
Highland Peak HP-1			32.05 %	Grasses = .15 Shrubs = 31.9	

Table 2. Utilization Levels and Associated Licensed Use, from 1997 through 2000, at Key Areas within the Bennett Spring, Black Canyon, Klondike and Highland Peak Allotments.

Year of Key Area Reading		1998	1999	2000	2001
Year of Plant Growth on which Data was Collected		1997	1998	1999	2000
Key Area					
Bennett Spring	BS-1	** Slight	Slight	Slight	Slight
	BS-2	Slight	*** Light	Slight	Slight
	BS-3	Slight	Slight	Slight	Slight
	* Total AUMs Licensed on Allotment Each Year	1,381	1,609	1,077	841
Black Canyon	BC-1	Slight	Slight	Slight	Slight
	* Total AUMs Licensed on Allotment Each Year	896	658	705	715
Klondike	K-1	Slight	Slight	Slight	Slight
	* Total AUMs Licensed on Allotment Each Year	233	225	217	208
Highland Peak	HP-1	Slight	Slight	Slight	Slight
	* Total AUMs Licensed on Allotment Each Year	1,454	1,450	903	1,089

\* From grazing billings.

\*\* Slight Use = 1% - 20% use of current year's growth.

\*\*\* Light Use = 21% - 40% use of current year's growth.

Table 3. Comparison of Percent Composition at Key Areas within the Bennett Spring, Black Canyon, Klondike and Highland Peak Allotments to Percent Composition Values at the Potential Natural Community (PNC) Stage.

Allotment (Key Area)	Range Site	Associated Vegetation Type	Ecological Status (Numerical Rating)	Existing Native Perennial Vegetative Composition (%)	Potential Vegetative Composition Expected at PNC (%)
Bennett Spring (BS-1)	029XY008NV	ARARN / ACHY Shallow Calcareous Loam 8-12" P.Z.	Late Seral (68%)	Grasses = 13 Forbs = 11 Shrubs = 76	Grasses = 50 Forbs = 5 Shrubs = 45
Black Canyon (BC-1)			Late Seral (60.5%)	Grasses = 9 Forbs = 2 Shrubs = 89	
Klondike (K-1)			Late Seral (69%)	Grasses = 26 Forbs = 1 Shrubs = 73	
Highland Peak HP-1			Late Seral (53%)	Grasses = 1 Forbs = .5 Shrubs = 98.5	

## APPENDIX III

In accordance with 43 CFR 4130.3-2, the following terms and conditions will be included in the term grazing permits for the Bennett Spring, Black Canyon, Klondike and Highland Peak Allotments.

### Standard Operating Terms and Conditions

1. Allowable use levels, as measured through a combination of key areas readings and use pattern mapping, will not exceed 50% on grasses and forbs, and 45% on shrubs during the authorized use period indicated in the Term Grazing Permit.
2. Livestock numbers identified in the term grazing permit are a function of seasons of use and permitted use for each allotment. 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.
3. 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.
4. 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.
5. The authorized officer is requiring that an actual use report (Form 4130-5) be submitted within 15 days after completing your annual grazing use.
6. 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 your 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.
7. Grazing use will be in accordance with the Mojave-Southern Great Basin Standards and Guidelines for grazing administration as developed by the Mojave-Southern Great Basin 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 Sub-part 4180 - Fundamentals of Rangeland Health and Standards and Guidelines for Grazing Administration.

## APPENDIX IV

### RISK ASSESSMENT FOR NOXIOUS & INVASIVE WEEDS

Term Grazing Permit Renewals for Tom Williams, Bradley Guymon and Jared Cornelius  
Bennett Spring, Black Canyon, Klondike and Highland Peak Allotments  
Lincoln County, Nevada

On March 12, 2007 a noxious weed assessment was conducted for and Environmental Assessment (#NV-040-07-21) to Renew the Term Grazing Permits for Tom Williams (#2705087) on the Bennett Spring (#21006), Black Canyon (#11007) and Klondike (#01085) Allotments; Bradley Guymon (#2705096) on the Bennett Spring and Black Canyon Allotments; and Jared Cornelius (#2703084) on the Highland Peak Allotment (#11035).

The allotments are located approximately 4-10 miles west of Panaca, Nevada in Lincoln County on public lands administered by the Bureau of Land Management Caliente Field Station (Map #1 at the end of this Noxious Weed Risk Assessment).

The current permits are as follows:

#### Tom Williams

ALLOTMENT		LIVESTOCK		GRAZING PERIOD		% Public Land	AUMs		
Name	Number	Number	Kind	Begin	End		Active Use	Hist. Susp. Use	Total Use
Bennett Spring	21006	1,165	Sheep	10/16	4/30	100	1,506	1,149	2,655
Black Canyon	11007	260	Sheep	10/16	4/30	100	335	88	423
Klondike	01085	525	Sheep	10/16	4/30	100	678	222	900

#### Bradley Guymon

ALLOTMENT		LIVESTOCK		GRAZING PERIOD		% Public Land	AUMs		
Name	Number	Number	Kind	Begin	End		Active Use	Hist. Susp. Use	Total Use
Bennett Spring	21006	1,538	Sheep	10/16	4/30	100	1,992	1,518	3,510
Black Canyon	11007	518	Sheep	10/16	4/30	100	770	176	946

#### Jared Cornelius

ALLOTMENT		LIVESTOCK		GRAZING PERIOD		% Public Land	AUMs		
Name	Number	Number	Kind	Begin	End		Active Use	Hist. Susp. Use	Total Use
Highland Peak Allotment	11035	2646	Sheep	10/16	5/15	100	3,704	804	4,508



Areas within and vicinal to the allotments were inventoried. District weed inventory maps and field observations were used.

The following results were obtained:

#### Bennett Spring, Black Canyon and Klondike Allotments

There are no known noxious weeds on the Black Canyon Allotment. The only known noxious weed on the Bennett Springs and Klondike Allotments is tamarisk (*Tamarix spp.*); there are two known infestations on the Klondike Allotment and one on the Bennett Spring Allotment. The infestation on the Bennett Spring Allotment is found on the private lands surrounding Bennett Spring itself. The two infestations on the Klondike Allotment are found within one-quarter mile of Klondike Spring.

#### Highland Peak Allotment

It should be noted that the area of the Highland Peak Allotment, located north of the latitudinal baseline meridian, is not grazed. This eliminates sheep contact with the heavy infestations of noxious weeds in and around the town of Pioche, Nevada. In addition, sheep do not graze any further west within the allotment than the base of the east foothills of the Highland Range.

Scotch thistle (*Onoropodium acanthium*) is found within three-quarters miles of Highland Peak summit in three small locations. Tamarisk is found along and vicinal to the length of Caselton Wash and adjacent to private property in the south central portion of the allotment.

Within and vicinal to the town of Pioche and along Highway 93, south of Pioche, there are large infestations of Dalmatian toadflax (*Linaria dalmatica*), tamarisk, Scotch thistle, Spotted knapweed (*Centaurea stoebe*), Tall Whitetop (*Lepidium latifolium*), and Whitetop (*Lepidium draba*). An infestation of Spotted knapweed is also located along the southwest edge of the Highland Range along Pan American Road.

Dalmatian toadflax, tamarisk and Bull Thistle (*Cirsium vulgare*) are also found along the extreme southeast corner of the allotment along its border.

The proposed action could increase the populations of noxious weeds already found within the Highland Peak Allotment through disturbance, and transportation of seeds during early spring use.

This noxious weed assessment identifies mitigation measures which would help control the probability of spreading noxious weeds.

**Bennett Spring, Black Canyon and Klondike Allotments**

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

<b>None (0)</b>	Noxious weed species are not located within or adjacent to the project area. Project activity is not likely to result in the establishment of noxious weed species in the project area.
<b>Low (1-3)</b>	Noxious 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 weeds into the project area.
<b>Moderate (4-7)</b>	Noxious weed species located immediately adjacent to or within the project area. Project activities are likely to result in some areas becoming infested with noxious weed species even when preventative management actions are followed. Control measures are essential to prevent the spread of noxious weeds within the project area.
<b>High (7-10)</b>	Heavy infestations of noxious 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 weeds on disturbed sites throughout much of the project area.

For this project, the factor rates as moderate (6) at the present time. As described above, no known noxious weeds are found on the Black Canyon Allotment, only two point sources of tamarisk are found on the Klondike Allotment and one point source of tamarisk is found on the Bennett Spring Allotment on private land. Project activity is not likely to result in the spread of tamarisk or other noxious weed species within these allotments, because herding can be used to avoid these point source areas.

**Factor 2 assesses the consequences of noxious 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 (7-10)	Obvious adverse effects within the project area and probable expansion of noxious weed infestations to areas outside the project area. Adverse cumulative effects on native plant communities are probable.

For this project, the factor rates as moderate (6) at the present time. The likelihood that noxious weeds will become established in the native plant community on Black Canyon Allotment (where none are known to exist), is very limited, for the same reasons as stated above. The likelihood that noxious weeds, including Tamarix, will spread within the native plant community on the Klondike and Bennett Spring Allotments are very limited due to same said reasoning. Therefore, there are no expected cumulative effects to native plant communities. Minor adverse effects of noxious weeds becoming established are possible.

**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 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 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 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 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 weeds and follow-up treatment for previously treated infestations.

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

For this project, the Risk Rating is moderate (36) at the present time. Preventive management measures for noxious weeds should be developed. These measures (mitigation) are as follows:

1. The grazing permittee will watch for and report new noxious weeds infestations in their allotment area.
2. Noxious weeds will be treated by methods to be approved by the Authorized Officer.
3. 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.
4. The range specialist for the allotments will include weed detection into project compliance inspection activities.
5. Herding will be used to avoid point sources of Tamarisk within the allotments.

The project can proceed as planned. Control treatments would be initiated on noxious weed populations that establish in the project area.

### Highland Peak Allotment

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

<b>None (0)</b>	Noxious weed species are not located within or adjacent to the project area. Project activity is not likely to result in the establishment of noxious weed species in the project area.
<b>Low (1-3)</b>	Noxious 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 weeds into the project area.
<b>Moderate (4-7)</b>	Noxious weed species located immediately adjacent to or within the project area. Project activities are likely to result in some areas becoming infested with noxious weed species even when preventative management actions are followed. Control measures are essential to prevent the spread of noxious weeds within the project area.
<b>High (7-10)</b>	Heavy infestations of noxious 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 weeds on disturbed sites throughout much of the project area.

For this project, the factor rates as moderate (6) at the present time. Spotted knapweed and Scotch thistle are mainly found, within the allotment, along Highway 93 in a few locations, where some grazing may occur within the allotment as livestock are moved from one side of Highway 93 to the other. There is also one location along the Caselton Road. These noxious weed species are also found adjacent to, but outside of, the allotment. Because of their location along the highway, the chance of spread would be low, not only because the permittees don't graze adjacent to the highway due to the high risk of vehicular collisions, but also they graze primarily during the winter months. Though there is a string of tamarisk along Caselton Wash, it is unlikely to be subject to much expansion, because herding can be used to avoid these point source areas.

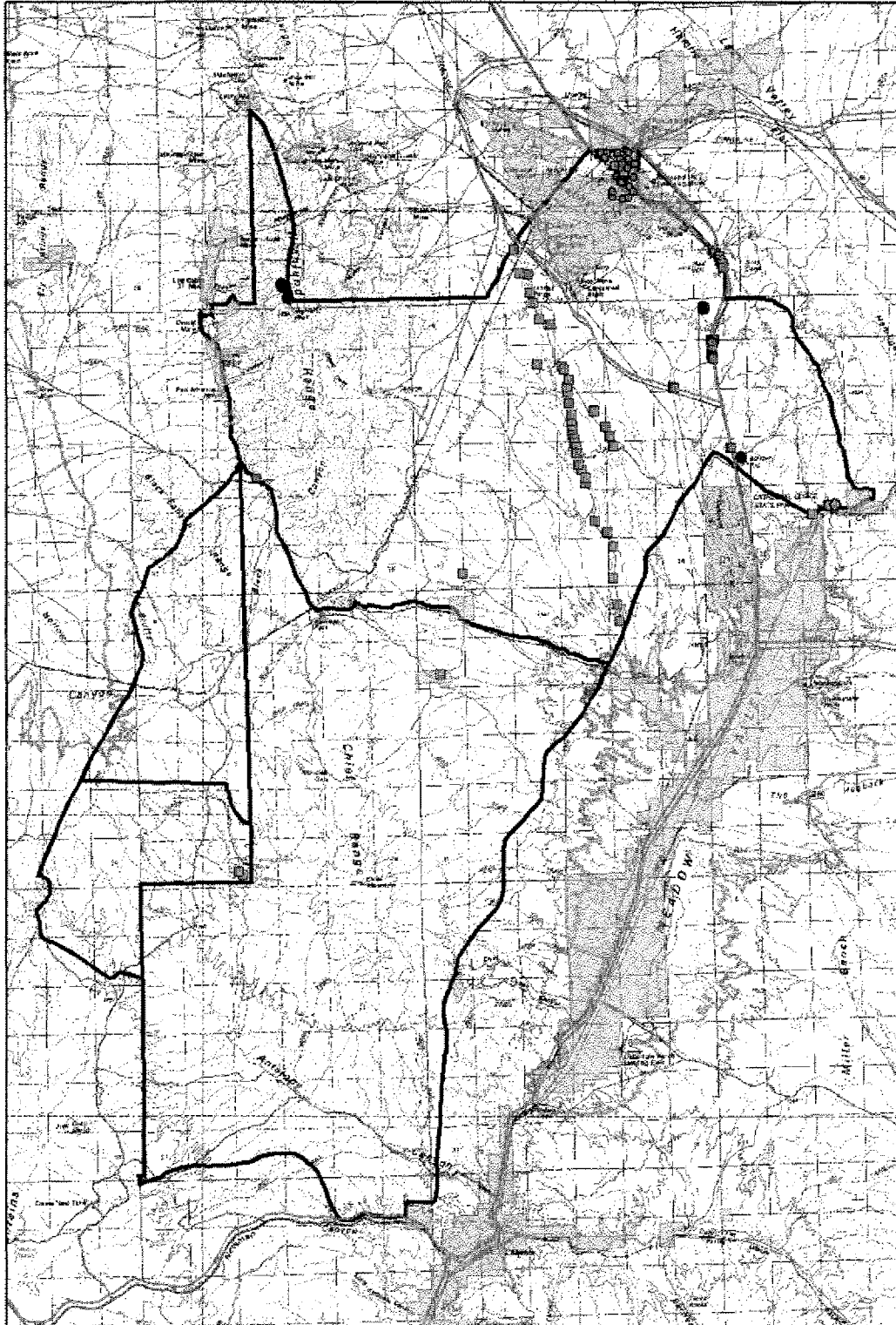
**Factor 2 assesses the consequences of noxious weed establishment in the project area.**

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



Known Noxious Weed Locations  
 within the Bennett Spring, Black Canyon, Klondike and Highland Peak Allotments.

MAP #1



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.

Clover Mountain  
 1:100,000 Quad Map

March 15, 2007  
 Callente Field Station



Legend	
Known Noxious Weeds	
Commonname	
	WHITETOP/HOARY CRESS
	SPOTTED KNIPWEED
	SALT CEDAR
	BULL THISTLE
	TALL WHITETOP
	SCOTCH THISTLE
	DALMATIAN TOADFLAX

## APPENDIX V

Table 1. Water Right Type, Ownership and Legal Location Associated with Bennett Springs Within the Bennett Springs Allotment According to the Records of the Office of the State Division of Water Resources.

Spring Name	Water Right Type (Manner of Use)	Ownership	Legal Location
Bennett Spring	Stockwater (vested right)	#1: Thomas L Williams (Williams Land Co.) (• Undivided Interest)  #2: Bradley K. Guymon (• Undivided Interest)  #3: Edwin & Nedra Larson (Larson Living Trust) (• Undivided Interest)	MDBM, T.2 S., R.67 E., sec. 7, SE¼SW¼

Table 2. Water Right Type, Ownership and Legal Locations Associated with Natural Water Sources Within the Klondike Allotment According to the Records of the Office of the State Division of Water Resources.

Spring Name	Water Right Type (Manner of Use)	Ownership	Legal Location
Klondike Spring	Stockwater (vested right)	Thomas L. Williams & Alex W. Williams	MDBM, T.2 S., R.66 E., sec. 33, SE¼SW¼
George Rogers Well	Stockwater	Thomas L. Williams & Alex W. Williams	MDBM, T.2 S., R.66 E., sec. 33, NE¼SW¼