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DEPARTMENT OF ADMINISTRATION  
OFFICE OF THE DIRECTOR  
BUDGET AND PLANNING DIVISION



## United States Department of the Interior

### BUREAU OF LAND MANAGEMENT

Ely Field Office  
HC33 Box 33500 (702 N. Industrial Way)  
Ely, Nevada 89301-9408  
<http://www.blm.gov/nv/st/en.html>



NOV 21 2007

In Reply Refer to:  
4160  
EA File  
NV-045.01

Tempiute Grazing Association  
c/o Dirk R. & Marta Agee  
HCR 61 Box 50  
Alamo, Nevada 89001

CERTIFIED MAIL #7006 0810 0005 7113 5684  
RETURN RECEIPT REQUESTED

### FINAL DECISION

#### **Tempiute Gazing Association Term Permit Renewal for the Sand Springs Allotment**

#### **Background Information**

On 9/19/07 the Finding of No Significant Impact (FONSI) for Tempiute Grazing Association term permit renewal on the Sand Springs Allotment (EA No. NV-045-06-52) was signed. The Environmental Assessment (EA), Standards Determination Document and FONSI documents are attached. This Final Decision is issued in accordance with CFR § 4160.3. The Proposed Decision was issued on September 20, 2007. On October 19, 2007 a protest to the Proposed Decision was received from Western Watersheds Project by Ely BLM. 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.

The allotment is ranked as "I" (Improve) category allotment in the Caliente Resource Area Rangeland Program Summary (1985). The current term permit issuance period for each of the current term permits is illustrated in the table above. The allotment encompasses approximately 249,685 acres of public land. The new grazing permit will reflect terms and conditions in accordance with the EA.

Processing and renewing the term permit for Tempiute Grazing Association on the Sand Springs Allotment 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.

The standards were assessed for the Sand Springs Allotment 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 Pahrangat-Penoyer Area, Nevada; Sampling Vegetation Attributes; National Range and Pasture Handbook published by the Natural Resources Conservation Service (NRCS); Nevada Plant List; and Major Land Resource Area (MLRA) Rangeland Ecological Site Descriptions. These documents are available for public review at the Caliente Field Station during business hours.

Current 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). These data are available for public review at the Caliente Field Station during business hours.

The results of the findings, regarding the achievement or non-achievement of the Standards for Rangeland Health, are displayed in the following table. The data also indicates that grazing is in conformance with all applicable Guidelines. As a result, no changes in livestock management practices have been identified.

<b>Standard</b>	<b>Status</b>
1. Soils	Achieved
2. Riparian and Wetland Sites Standard	Not Applicable
3. Habitat and Biota Standard	Achieved

**Conclusions of the Standards Determination Document:**

*Standard 1: Achieved.*

Ground cover is adequate. Measured cover data at the seven of the key areas shows that cover approximately equals or exceeds the minimum amount indicated, at PNC, as stated in each of the respective MLRA Rangeland Ecological Site Descriptions associated with each respective key area with the exception of Smith Well. This indicates that a vast majority of the allotment has ample vegetative cover to maintain stability and to resist accelerated erosion, maintain soil productivity, and sustain the hydrologic cycle.

Prior to TNR issuance in 2005, monitoring and personal observations showed that low grazing use levels over most of the allotment indicated that trampling and compaction were minimal and inconsequential. After TNR issuance, use pattern mapping and personal observations showed that grazing use over a vast majority of the observed portions of the allotment was less than or equal to the light use category, thereby further indicating the same.

Collectively, low grazing use levels and ample cover infers litter production that further adds to increased soil protection and stability.

*Standard 2: Not applicable.*

*Standard 3: Not Achieved.*

Livestock are **NOT** a causal factor.

The dominant present vegetation within the Sand Springs Allotment, baseline range studies (ecological condition and line intercept) and professional observations (including photographs) all indicate a diverse habitat that is distributed in a mosaic across the landscape within the allotment. Main forage species that are widespread within the allotment consists of winterfat, Indian ricegrass, galleta, various forbs, bud sagebrush, 4-wing saltbush and shadscale. These are known to be nutritious, palatable plant species.

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 distributed in a mosaic across the landscape, allowable grazing use levels and ample ground cover translate into sufficient habitat for wildlife for nesting protection, food sources (vegetative and insectivorous) and mating. The result is an increase in total biodiversity (flora and fauna).

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 public comment period. A hard copy of the preliminary EA was mailed to the permittee and those publics who had specifically requested one and who had expressed an interest in range management actions on the Sand Springs Allotment. No comments were received from interested publics.

### **LIVESTOCK MANAGEMENT DECISION**

In accordance with 43 CFR §§ 4110.3 and 4110.3-1 the current suspended use of 2,995 AUMs for the Tempiute Grazing Association on the Sand Springs Allotment will be reinstated. Active use will increase from 7,005 AUMs to 10,000 AUMs according to the following:

The proposed term grazing permit changes and allotment information for the Tempiute Grazing Association are as follows:

**FROM**

ALLOTMENT		LIVESTOCK		GRAZING PERIOD		* % Public Land	PERMITTED USE AUMs		
Name	Number	Number	Kind	Begin	End		Active Use	Hist. Susp. Use	Permitted Use
Sand Springs	01066	584	Cattle	3/1	2/28	100	7,005	2,995	10,000

\* This is for billing purposes

**TO:**

ALLOTMENT		LIVESTOCK		GRAZING PERIOD		* % Public Land	PERMITTED USE AUMs		
Name	Number	Number	Kind	Begin	End		Active Use	Hist. Susp. Use	Permitted Use
Sand Springs	01066	834	Cattle	3/1	2/28	100	10,000	0	10,000

\* This is for billing purposes

The renewal of the term grazing permit would be for a period of 10 years. This decision will be effective upon the decision becoming final or pending final determination on appeal. The new term permit would include terms and conditions for grazing use that continue to achieve the Standards and Guidelines for Grazing Administration and the other pertinent land use objectives for livestock use.

Therefore, In addition to the aforementioned proposed changes to the permit and in accordance with 43 CFR §§ 4130.3 and 4130.3-1 and 4130.3-2 the following terms and conditions will be included in the new Term Grazing Permit for the Sand Springs Allotment for the Tempiute Grazing Association.

1. The use of salt and/or herding may be used to promote maximum cattle distribution - especially into areas feasible to graze, but where cattle may be reluctant to go or to relieve grazing pressure in areas where it is deemed necessary.
2. Allowable use levels (AULs) will not exceed 50% on perennial grasses and forbs, and 45% on shrubs during the authorized use period (Rangeland Monitoring Handbook (September 1984) as measured through a combination of key areas readings and use pattern mapping.
3. Use of watering locations within the allotment will be rotated annually, so that the area serviced by a given water source will be periodically rested from grazing during the spring growing season.

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.

**Rationale:**

The average utilization levels, using the aforementioned 13 years of data, has demonstrated that the allotment is capable of supporting a permanent increase in grazing use while maintaining the Standards for Rangeland Health and AULs over a vast majority of the allotment.

Furthermore, the installation of the new pipeline and associated watering troughs, during 2004 - 2006, has greatly increased allotment potential, further supporting additional grazing beyond the current Active Use while still maintaining allotment objectives. This is because it encourages cattle to visit areas that were previously either ungrazed or under-utilized due to lack of water. This, in essence, “creates” a larger forage base than was available prior to the installation of the pipeline, while simultaneously enhancing cattle distribution. It is anticipated that vegetation immediately around water sources would be impacted on a proportionally higher level than areas

farther away with the degree of grazing use at the source being highest and decreasing with increased distance from the source.

The newly installed pipeline will not only encourage cattle to visit areas that were previously either ungrazed or under-utilized due to lack of water, but to consume some of the “wolfy”, and possibly decadent, plants of the desirable species in these areas, thereby stimulating new growth with the potential of increasing palatability of these plants during subsequent growing seasons.

Salting locations within the allotment are varied from year to year and within the same year to further attempt to distribute livestock and to offer a respite to areas which would have a tendency to receive more grazing than others simply due to topography, plant species and/or proximity to water. This helps to reduce grazing impacts in the areas where salt isn't placed, thereby potentially reducing/distributing the effects of grazing impacts on soils, vegetation, wildlife and recreation uses. Salt will also be used, for a short period of time, near new watering locations supplied by the new pipeline to help the livestock realize where the new waters are located. After the livestock become accustomed to where the new waters are located, salting near such waters will cease.

Use pattern mapping, following TNR issuance during the 2005 grazing year (1/26/06 – 2/28/06), revealed that the acreage occurring within the heavy and severe use categories, combined, equaled approximately 15 % of the total acreage observed within the allotment (eight percent heavy use and seven percent severe use). Except for areas vicinal to watering sources within the allotment, a majority of this use occurred in the northwest and south pastures. In the east-central portion of the northwest pasture (bottomland) unacceptable levels of heavy and severe use occurred. In the south pasture most of the severe use occurred, at unacceptable levels, in the vicinity of the private lands and may to be attributed mostly to livestock trailing from the private lands onto the allotment and vice-versa. These unacceptable areas of heavy and severe use are a result of a lack of effective livestock management. However, overgrazing within these problematic areas can be rectified, relatively quickly, through proper livestock management monitored through frequent observations.

It is anticipated that the Standards for Rangeland Health will continue to be achieved and grazing use levels will remain at or below AULs throughout a majority of the allotment.

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

§ 4000.0-8 “The authorized officer shall manage livestock grazing on public lands under the principle of multiple-use and sustained yield and in accordance with applicable land use plans. Land use plans shall establish allowable resource uses (either singly or in combination), related levels of production or use to be maintained, areas of use, and resource condition goals and objectives to be obtained. The plans also set forth program constraints and general management practices needed to achieve management objectives. Livestock grazing activities and management actions approved by the authorized officer shall be in conformance with the land use plan as defined at CFR 1601.0-5(b).”

§ 4110.3 Changes in Permitted Use

“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.”

§ 4110.3-1 Increasing permitted use.

“Additional forage may be apportioned to qualified applicants for livestock grazing use consistent with multiple-use management objectives.

- (b) Additional forage available on a sustained yield basis for livestock grazing use shall first be apportioned in satisfaction of suspended permitted use to the permittee(s) or lessee(s) authorized to graze in the allotment in which the forage is available.”

§ 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 administered by 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:

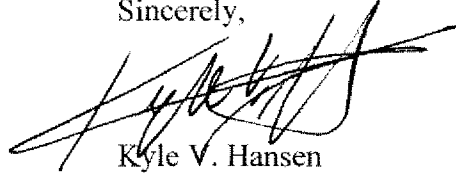
- (1) The relative harm to the parties if the stay is granted or denied;
- (2) The likelihood of the appellant’s success on the merits;
- (3) The likelihood of immediate and irreparable harm if the stay is not granted; and,
- (4) Whether the public interest favors granting the stay.

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,

A handwritten signature in black ink, appearing to read 'Kyle V. Hansen', written over a horizontal line.

Kyle V. Hansen  
Acting Assistant Field Manager  
Renewable Resources

Enclosures:

1. Finding of No Significant Impact (FONSI)
2. EA NV-045-06-52 (includes the Standards Determination Document)

cc:

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# FINDING OF NO SIGNIFICANT IMPACT

## Tempiute Grazing Association Term Permit Renewal Sand Springs Allotment

EA (NV-045-06-52)

I have reviewed Environmental Assessment (EA) (NV-045-06-52). 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-045-06-52 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 Sand Springs Allotment is located approximately 60 miles west of Caliente, Nevada and surrounds the town of Rachel, Nevada. It encompasses approximately 249,685 acres of public land and is indicative of the Great Basin.

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, prime and unique farmland, or ecologically critical areas (ACECs) within the area of analysis. The Sand Springs Allotment is predominately within a low to medium 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.

One site, identified within the DOE rail line corridor inventory, was found within the northwest pasture. The site was field assessed for grazing conflict and was found to have “no effect” in accordance with the State Protocol Agreement.

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 no comments were received 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.***

No significant 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. For any actions that may be proposed in the future, further environmental analysis, including the assessment of cumulative impacts, will be required.

**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 in 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.

/s/ Kyle V. Hansen for

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

9/19/07

Date

**FINAL**  
**ENVIRONMENTAL ASSESSMENT**  
for the  
Grazing Permit Renewal for the Tempiute Grazing Association  
on the  
Sand Springs Allotment

(EA-NV-045-06-52)

September 18, 2007

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

Prepared by:

Domenic A. Bolognani  
Caliente Field Station, Nevada



## I. BACKGROUND INFORMATION

This environmental assessment (EA) addresses the impacts to public land resources from a proposal to renew the term grazing permit for the Tempiute Grazing Association (# 2705112) on the Sand Springs Allotment (#01066). 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.

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.

Total grazing preference for the Sand Springs Allotment is 10,000 Animal Unit Months (AUMs) of which 7,005 AUMs are active use and 2,995 AUMs are suspended nonuse. The term permit currently authorizes 584 cattle from March 1 to February 28 (yearlong).

Neither a grazing allotment evaluation nor a Final Multiple Use Decision (FMUD) has been completed for the Sand Springs Allotment to date.

Current monitoring data was reviewed and an assessment of the rangeland health was completed during the permit renewal process (Appendix I). As a result of the monitoring data review and assessment, it has been determined that the two applicable Standards for Rangeland Health are being achieved on the Sand Springs Allotment. The data also indicates that grazing is in conformance with all applicable Guidelines. A summary of findings for the allotment is displayed in the following table:

<b>Standard</b>	<b>Status</b>
1. Soils	Achieved
2. Riparian and Wetland Sites Standard	Not Applicable
3. Habitat and Biota Standard	Achieved

There are no riparian or wetland areas present on the Sand Springs Allotment and the allotment is not located within a Wild Horse Herd Management Area (HMA).

The following are the Allotment Specific Objectives for the Sand Springs Allotment. They are a quantification of the Caliente MFP, Rangeland Program Summary (RPS) and Mojave-Southern Great Basin RAC Standards for Rangeland Health.

1. Short term objective: To manage the Allowable Use Levels (AULs) by season of use and/or stocking levels to improve or maintain the desired vegetative community throughout the allotment.
2. Long term objective: To manage for the most appropriate seral stage to provide desired quantity, quality and variety of forage in order to meet the requirements for livestock forage production on a sustained yield basis.

Both of the objectives are currently being met.

The following assessment is based on a review and analysis of monitoring information obtained between 1986 and 2005.

### **Monitoring Data**

Forage utilization at key areas, use pattern mapping, ecological condition (which includes percent composition by plant species) and line intercept cover data were used in determining the attainment of the standards.

There are eight key foraging areas, currently within the allotment (Map #6, Appendix II). The key area names and the pastures in which they are located are listed in Table 1 in Appendix III.

Four of these key areas were used for the purpose of collecting utilization and cover data. The remaining four key areas were used for the collection of utilization data, cover data and ecological condition, because upon establishment it was decided that these key areas would represent the pasture in which they were located for such purposes (these are marked with an asterisk in the table)

The following is a summary of the analysis of monitoring data which was used to evaluate applied management practices during the evaluation period. These data were used to determine if such management practices yielded results that were in conformance with the Mojave-Southern Great Basin Standards.

### Utilization

The Key Forage Plant Utilization Method was used to determine grazing use according to the Nevada Rangeland Monitoring Handbook (September 1984). This method defines grazing utilization classes according to Table 2 in Appendix III.

During the 2005 Grazing Year, Temporary Non-Renewable (TNR) grazing was approved with approximately 1,844 AUMs being authorized above the active use noted on the Term Grazing Permit (above 7,005 AUMs) for a total of 8,889 AUMs or 127% of Active Use. Following the end of the TNR period utilization values on the allotment - measured at the low end - ranged from 1% - 28% or slight to light use. The average forage utilization values on the allotment - measured at the high end - ranged from 19% - 43.5% or slight to moderate use.

The Grazing Years 1986-1995, 1997, 1999 and 2005 (a total of 13 years) were used to calculate the average forage utilization - at both, the low end and the high end - on the allotment prior to the authorization of any TNR grazing use during any particular grazing year. The average forage utilization values on the allotment - measured at the low end - ranged from 2% - 15% or slight use. The average forage utilization values on the allotment - measured at the high end - ranged from 10% - 33% or slight to light use.

A summary of data collected during the years 1986 - 1995, 1997, 1999 and 2005 (totaling 13 years), and prior to any TNR use, is shown in Table 3 in Appendix III. It shows the 13 year average of the percent utilization range - the 13 year average high and the 13 year average low - observed on the respective key species at each key area within each pasture.

### Use Pattern Mapping

Use Pattern Mapping was conducted during March 2006 at the end of the TNR grazing period. Consequently, it reflects grazing use after the total consumption of approximately 8,887 AUMs or approximately 127% of Active Use during the 2005 grazing year (Map #4, Appendix II). The map shows utilization data with respect to existing livestock facilities (waters, fences and pipelines), key areas and private lands within the allotment.

Those portions of the allotment which were inordinately steep and/or mountainous, and therefore inaccessible, and not likely to have been visited by livestock were not observed.

Table 4 in Appendix III illustrates the approximate amount of acreage occurring within each utilization class, and the percentage of each utilization class with respect to the total acreage observed within the allotment.

The use pattern map shows that the range of grazing use in a majority of the observed portions of the allotment ranged between No Measurable Use and Light Use. The acreage of these three use categories, combined, totaled approximately 74% with 45% of this occurring within the slight use category. Approximately 15% of the area observed was in the heavy to severe use category mostly occurring near watering points and adjacent private lands.

In contrast, within the observed portions of the allotment the acreage in the heavy and severe use categories, combined, totaled approximately 15 % of the total (eight percent heavy use and seven percent severe use). Except for areas vicinal watering sources within the allotment a majority of this use, at an unacceptable level, occurred in the northwest and south pastures. In the east-central portion of the northwest pasture (bottomland) heavy use with a small proportion of severe use occurred. In the south pasture most of the severe use occurred in the vicinity of the private lands and may be attributed mostly to livestock trailing from the private lands onto the allotment and vice-versa.

### Ecological Condition

Ecological Condition was determined in June 2001 at four designated key areas. Most of the allotment occurs within the mid to late seral stage with moderate to good species diversity of perennial species (see Table 5 in Appendix III).

### Line Intercept

Approximate ground cover (basal and crown) was determined at each of the eight key foraging areas on September 14, 2006, using the line intercept method, and compared to ground cover noted in the applicable Range Site Description (PNC conditions) associated with the Range Site determined at each key area (Table 6 in Appendix III).

It should be noted that the cover data was collected following the 2005 grazing season after 1,842 AUMs of TNR issuance from 1/26/06 – 2/28/06 and following subsequent grazing during the early portion of the 2006 grazing year (March/April).

## **Need for the Proposal**

This need for the proposal is to renew the term grazing permit for the Sand Springs Allotment in accordance with all applicable laws, regulations, and policies. In accordance with Title 43 CFR 4130.2(a), "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."

## **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**

The proposed action 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) 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.

## **Issues**

There was an interdisciplinary team meeting held 7/24/2006 in Ely/Caliente NV. No issues were identified at this meeting. The public was invited to participate in the NEPA process and will be given the opportunity to comment on this NEPA action.

## II. PROPOSED ACTION AND ALTERNATIVES

### Proposed Action

The proposed action is to reinstate the suspended use of 2,995 AUMs for the Tempiute Grazing Association (# 2705112), permittee on the Sand Springs Allotment (#01066), increasing the current Active Use AUMs from 7,005 AUMs to 10,000 AUMs.

#### FROM:

Existing Term Grazing Permit for the Tempiute Grazing Association for the Sand Springs Allotment						
Livestock Number	Kind	Period of Use	% Public Land	Active Use (AUMs)	Historically Suspended Use	Permitted Use
584	Cattle	03/01 – 02/28	100	7,005	2,995	10,000

#### TO:

Proposed Term Grazing Permit for the Tempiute Grazing Association for the Sand Springs Allotment						
Livestock Number	Kind	Period of Use	% Public Land	Active Use (AUMs)	Historically Suspended Use	Permitted Use
584	Cattle	03/01 – 02/28	100	10,000	0	10,000

See stocking rate calculations in Appendix IV.

The allotment is divided into three approximately equally divided fenced pastures: the northwest, northeast and south pastures (Map #2, Appendix II). Grazing typically occurs from approximately mid-October to approximately mid-April (fall to spring). All three pastures are generally used simultaneously.

Although the proposed term grazing permit describes the season of use as yearlong, cattle would graze the allotment from approximately mid to late October until approximately mid to late April. Maintaining a yearlong season of use will allow for flexibility. This grazing scheme will utilize all three pastures during the cool months when vegetation is mostly dormant. The result will be healthier plants throughout the year which lends itself to maintaining or improving range condition.

The Agees would take advantage of the watering locations now existing within the allotment by rotating the watering locations within each pasture, so that the AULs would not be exceeded, the Standards would be maintained and cattle distribution would be maximized. This would allow some areas to rest (even within the same pasture) while other areas are grazed. In addition, periodic herding would also be used in cattle distribution.

Gates between pastures would remain closed, so that cattle remain in designated pastures,

The allotment would continue to be monitored through time, following the increase to assure that grazing management practices along with the new stocking levels are achieving the Standards for Rangeland health.

In accordance with 43 CFR §§ 4110.3, 4110.3-1, 4130.3, 4130.3-1 and 4130.3-2, the following terms and conditions would be included, along with the current standard office stipulations, in the new Term Grazing Permit for the Sand Springs Allotment for the Tempiute Grazing Association:

1. The use of salt and/or herding may be used to promote maximum cattle distribution - especially into areas feasible to graze, but where cattle may be reluctant to go or to relieve grazing pressure in areas where it is deemed necessary.
2. Allowable use levels (AULs) will not exceed 50% on perennial grasses and forbs, and 45% on shrubs during the authorized use period (Rangeland Monitoring Handbook (September 1984) as measured through a combination of key areas readings and use pattern mapping.
3. Use of watering locations within the allotment will be rotated annually, so that the area serviced by a given water source will be periodically rested from grazing during the spring growing season.

#### **No-Action Alternative**

Under the no action alternative, the terms and conditions in the grazing permit would not change on the Sand Springs Allotment. Active use would remain at 7,005 AUMs.

#### **Other Alternatives**

The No Grazing alternative was addressed in the Caliente ES. Not issuing term grazing permits was considered but eliminated from detailed analysis, because Title 43 of the Code of Federal Regulations (43 CFR), more specifically 43 CFR 4230.2 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**

The affected environment is described in Caliente ES which is incorporated by reference.

#### **The Sand Springs Allotment**

The Sand Springs Allotment is located approximately 60 miles west of Caliente, Nevada and surrounds the town of Rachel, Nevada (Map #1, Appendix II). It encompasses most of Sand Springs (Penoyer) Valley, contains approximately 249,685 acres of public land and is indicative of the Great Basin. The terrain of the allotment is primarily a valley bottom with the borders encompassing the lower slopes of several surrounding mountain ranges. Approximately 5,200 acres of private land occur within the allotment. Elevations range from approximately 6,000 feet

in the hills located in the west and east portions of the allotment to 4,750 feet on the allotment bottoms. Elevation, topography, soils, underlying parent materials, slopes and exposures all contribute to the general vegetation composition and diversity throughout the assessment area. Approximately 6,600 acres of the Worthington Mountains Wilderness Area falls within the allotment.

The allotment is watered by various wells, reservoirs and pipelines. The allotment is a water based allotment, therefore, the springs that feed the pipelines and the wells constitute the base property for the allotment.

The allotment is divided into three approximately equally divided fenced pastures: the northwest, northeast and south pastures (Map #2, Appendix II). Grazing typically occurs from approximately mid-October to approximately mid-April (fall to spring). All three pastures are generally used simultaneously.

Cattle are currently utilizing portions of the allotment which were recently ungrazed or under-utilized due to lack of water. The additional water was made possible through the recent construction of a new water pipeline system and the installation of associated troughs (Map #3, Appendix II).

Salting is used to manage livestock within the allotment. Salting locations are varied from year to year and within the same year to further attempt to distribute livestock and to offer a respite to areas which would have a tendency to receive more grazing than others simply due to topography, plant species and/or proximity to water.

### 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			<u>Noxious Weeds</u> Tamarisk ( <i>Tamarix spp.</i> ) is found within the allotment.  <u>Non-native Invasive species</u> Halogeton ( <i>Halogeton glomeratus</i> ) is also found within the allotment. To a lesser extent, cheatgrass ( <i>Bromus tectorum</i> ) occurs sporadically throughout the allotment.
Air Quality	X			Minor dust is associated with normal livestock trailing to/from water locations.
Wilderness Values	X			The northeast portion of the allotment is located within the Worthington Mountain Wilderness Area.
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.
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.
Native American Religious Concerns		X		A Native American Coordination Meeting was held in the BLM Ely Field Office on October 17, 2006. No concerns were identified.
Wastes (hazardous or solid)		X		No hazardous or solid wastes are known to be located within the allotment, nor would they be introduced by the proposed action.
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 Sand Springs Allotment is predominately within a low to medium 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.  One site, identified within the DOE rail line corridor inventory, was found within the northwest pasture. The site was field assessed for grazing conflict and was found to have "no effect" in accordance with the State Protocol Agreement.  There are no Traditional Cultural Properties currently identified within the Ely District.
Special Status Species (Federally listed, proposed or candidate threatened or endangered species and state sensitive species) (animals)		X		Existing data base shows that sage grouse (BLM Sensitive) are known to exist in the north half (northwest and northeast pastures) of the allotment yearlong. However, databases indicate that they do not nest within the allotment. Conclusions reached by the Governor's Sage Grouse Plan indicate that when Standards are achieved, grouse are not impacted by grazing in areas where nesting doesn't occur.
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 that there are no known special status plant species located within the allotment.
Wetlands/Riparian			X	Two developed natural spring sources - Wild Horse Spring and Mud Spring - occur on public land within the allotment. There are no riparian areas associated with either spring.
Areas of Critical Environmental Concern (ACEC)			X	No areas of critical environmental concern are located or proposed within the allotment.
Floodplains			X	There has been no formal mapping of floodplains within the project area; however the proposed action would have no effect on flood plains.
Water Quality (drinking/ground)			X	Ground water located in a deep aquifer would not be impacted. No surface water in the proposed action area is used for drinking water within the allotments.
Wild and Scenic Rivers			X	There are no wild and scenic rivers within the allotment.
Farmlands (Prime or Unique)			X	Prime and unique farmland does not occur on the allotment.
Wild Horses and Burros			X	Neither the allotment, nor portions thereof, is located within a Wild Horse Herd Management Area (HMA).



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**

<b>Resource or Issue</b>	<b>May Affect</b>	<b>No Effect</b>	<b>Not Present</b>	<b>Rationale</b>
Range/Livestock Grazing/Standards and Guidelines	X			Standard 1 Achieved. Standard 2 Not applicable Standard 3 Achieved.
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			Areas near waters would receive impacts of hoof action on surface soils. Some temporary reduction in soil protection would occur as a result of biomass consumption.
Wildlife	X			Deer and elk occur yearlong in the high elevations on the fringes of the allotment; however, no crucial winter range exists within the allotment for either species. Antelope reside in the allotment yearlong.  The allotment also provides habitat for various species of microbes, invertebrates, reptiles, birds and mammals.
Recreation		X		Dispersed recreation in this area includes large and small game hunting, wildlife observation and photography, hiking and general off highway vehicle use. Therefore, it is reasonable to expect that there would be no impacts to recreational uses.
Visual Resources		X		The proposed term permit renewal is consistent with the Visual Resource Management (VRM) Class 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
- Wilderness Values

- Range/Livestock Grazing/Standards and Guidelines
- Socioeconomics
- Vegetation
- Soils
- Wildlife

### *Noxious Weeds*

The noxious weed, tamarisk, is found in three small areas within the allotment on public lands and one small area on private land. Each area is approximately 100 square feet or less in size. No additional known noxious weeds are known to exist within the allotment. In addition, halogeton and cheatgrass, which are not listed as noxious but non-native invasive species, are also present within the allotment (Appendix V).

### *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.

### *Wilderness*

The far northeast corner of the allotment – the northeast portion of the northeast pasture - falls within the Worthington Mountains Wilderness Area (Map #5, Appendix II). This area has been grazed for years while it was designated as a Wilderness Study Area.

The following describes the key values of the wilderness area:

#### 1. Naturalness

The 6,596 acres of the 30,664 acre Worthington Mountains Wilderness, which overlaps a portion of the allotment, is in a predominantly natural state with evidence of human activity localized. Human imprints include both authorized and unauthorized activities. Authorized activities include range developments such as water troughs and pipelines. Unauthorized disturbances include vehicle routes, now closed as a result of wilderness designation. These routes are generally 4WD access roads created by repeated unauthorized cross-country travel.

#### 2. Opportunities for Solitude or Primitive and Unconfined Recreation

Recreational uses of the wilderness areas include day hiking, backpacking, caving, photography, rock-hounding, big game and upland bird hunting, wildflower viewing, bird watching, sightseeing and other activities.

There are outstanding opportunities for solitude in all 14 wilderness areas. A variety of geologic formations and vegetative screening all provide excellent opportunities for solitude.

### 3. Supplemental Values

Several special features were mentioned in the Lincoln County Conservation, Recreation and Development Act of 2004 including ecologically diverse habitat and prehistoric cultural resources.

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

Historically, the Sand Springs Allotment has been permitted for cattle grazing. The permit renewal would incrementally reinstate 2,995 AUMs by removing them from Suspended Use and placing them in Active Use. Direct impacts would include the increased removal of above ground biomass within the allotment which would temporarily reduced cover.

#### ***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***

Most of the allotment is divided between the salt-desert shrub and the northern desert shrub communities.

Vegetation, within the allotment, varies from extensive and dominant stands of winterfat (*Ceratoides lanata*) in the north portion of the northeast pasture and winterfat flats scattered throughout the valley bottom and into the foothills; to black sage on some hillsides; to mixed stands dominated by Indian ricegrass (*Achnatherum hymenoides*), galleta (*Hilaria jamesii*), Bud Sagebrush (*Artemisia spinescens*), fourwing saltbush (*Atriplex canescens*) and shadscale (*Atriplex confertifolia*). Indian rice grass and small galleta are the primary grasses across the allotment with needleandthread present in the southern portion (South Pasture) of the allotment. Sagebrush (*Artemisia spp.*) and various annual and perennial forbs are also widely scattered throughout the allotment. Some of the aforementioned perennial plants can grow very large during good precipitation years, and produce a substantial amount of forage.

Ecological condition data indicates that most of the allotment is in a mid to late seral stage indicating moderate to good species diversity of perennial species.

Condition ratings for Ecological Condition, at the four key areas are displayed in Table 5 in Appendix III.

Ground cover is adequate. Measured cover data (Line Intercept Studies) at the seven of the key areas shows that cover approximately equals or exceeds the minimum amount indicated, at PNC, as stated in each of the respective MLRA Range Site Descriptions associated with each

respective key area with the exception of Smith Well (Table 6, Appendix III). This indicates that a vast majority of the allotment has ample vegetative cover to maintain stability and to resist accelerated erosion, maintain soil productivity, and sustain the hydrologic cycle.

Furthermore, as formerly stated, the main forage species (found widespread within the allotment) consists of winterfat, Indian ricegrass, galleta, bud sagebrush, 4-wing saltbush and shadscale. These are known to be nutritious, palatable plant species for ungulates.

Summarily, the dominant present vegetation within the Sand Springs Allotment, baseline range studies (ecological condition and line intercept) and professional observations (including photographs) all indicate a diverse habitat that is distributed in a mosaic across the landscape within the allotment.

### ***Soils***

Soils within the allotment are typically moderately deep to deep and well drained. The soils vary from sandy to gravelly to very gravelly. Water infiltration rates range from moderate to high with low to very low available water capacity. They are typically moderately deep to deep and well drained and have coarse textured and/or sandy surfaces and have low (< 20%) clay content with some soils having a restrictive layer below the main plant rooting depth.

### ***Wildlife***

Deer and elk occur yearlong in the high elevations on the fringes of the allotment; however, no crucial winter range exists within the allotment for either species. The allotment also provides habitat for various species of microbes, invertebrates, reptiles, birds and mammals.

The wildlife that occurs within the allotment is representative of those that occur within the Great Basin (e.g., antelope, coyote, badger, upland bird species, rabbits, foxes, small reptile species, rodents and native birds). There are seasonal areas of use for antelope, elk and deer. The east and north portion of the allotment is considered summer and winter deer range, while yearlong elk use is associated with the north and northwest areas of the allotment. The east side of the Sand Springs Allotment is considered yearlong antelope range. The antelope population appears to have increased due to the increased availability of water provided by the new pipeline.

## **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*.

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

The average utilization levels, using the aforementioned 13 years of data, has demonstrated that the allotment is capable of supporting a permanent increase in grazing use while maintaining the Standards for Rangeland Health and AULs over a vast majority of the allotment.

Furthermore, the installation of the new pipeline and associated watering troughs, during 2004 - 2006, has greatly increased allotment potential, further supporting additional grazing beyond the current Active Use while still maintaining allotment objectives. This is because it encourages cattle to visit areas that were previously either ungrazed or under-utilized due to lack of water. This, in essence, “creates” a larger forage base than was available prior to the installation of the pipeline, while simultaneously enhancing cattle distribution. It is anticipated that vegetation immediately around water sources would be impacted on a proportionally higher level than areas farther away with the degree of grazing use at the source being highest and decreasing with increased distance from the source.

The newly installed pipeline will not only encourage cattle to visit areas that were previously either ungrazed or under-utilized due to lack of water, but to consume some of the “wooly”, and possibly decadent, plants of the desirable species in these areas, thereby stimulating new growth with the potential of increasing palatability of these plants during subsequent growing seasons.

Salting locations within the allotment are varied from year to year and within the same year to further attempt to distribute livestock and to offer a respite to areas which would have a tendency to receive more grazing than others simply due to topography, plant species and/or proximity to water. This helps to reduce grazing impacts in the areas where salt isn't placed, thereby potentially reducing/distributing the effects of grazing impacts on soils, vegetation, wildlife and recreation uses. Salt will also be used, for a short period of time, near new watering locations supplied by the new pipeline to help the livestock realize where the new waters are located. After the livestock become accustomed to where the new waters are located, salting near such waters will cease.

Use pattern mapping, following TNR issuance during the 2005 grazing year (1/26/06 – 2/28/06), revealed that the acreage occurring within the heavy and severe use categories, combined, equaled approximately 15 % of the total acreage observed within the allotment (eight percent heavy use and seven percent severe use). Except for areas vicinal to watering sources within the allotment, a majority of this use occurred in the northwest and south pastures. In the east-central portion of the northwest pasture (bottomland) unacceptable levels of heavy and severe use occurred. In the south pasture most of the severe use occurred, at unacceptable levels, in the vicinity of the private lands and may to be attributed mostly to livestock trailing from the private lands onto the allotment and vice-versa. These unacceptable areas of heavy and severe use are a result of a lack of effective livestock management. However, overgrazing within these problematic areas can be rectified, relatively quickly, through proper livestock management monitored through frequent observations.

In consequence, waters will be turned off where the unacceptable heavy and severe use occurred in the bottom area, in the east-central portion of the northwest pasture, and herding will be used to force and train livestock to use the uplands until the lower area has recovered sufficiently. In the vicinity of the private lands in the south pasture, waters will also be turned off to allow

recovery and to force cattle to use waters elsewhere; preferably along the newly constructed pipeline in the south foothills. Closer management observations of said areas will also occur to help eliminate the potential of a re-occurrence.

It is anticipated that the Standards for Rangeland Health will continue to be achieved and grazing use levels will remain at or below AULs throughout a majority of the allotment.

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

A noxious weed risk assessment was completed on March 8, 2006 (Appendix V). The results indicated that the noxious weed, tamarisk, is found in three small areas within the allotment on public lands and one small area on private land. Each area is 100 square feet or less in size. No additional noxious weeds are known to exist within the allotment. The assessment indicated that grazing activity is not likely to result in the establishment of tamarisk or other noxious weed species within the allotment.

In addition, halogeton and cheatgrass, which are not listed as noxious, are also present within the allotment.

The assessment also indicates that preventive management measures for noxious weeds should be developed. These measures (mitigation) are as follows:

1. The project proponent (grazing permittee) will watch for, report, and eradicate any small noxious weed patches in their allotment area.
2. Noxious weeds would be treated by methods to be approved by the Authorized Officer.
3. The 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 Sand Springs Grazing Allotment will include weed detection into project compliance inspection activities.
5. The grazing project area will be monitored for at least three consecutive years following the conclusion of winter grazing.

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

### ***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.

## ***Wilderness Values***

Because a portion of the allotment falls within the Worthington Mountains Wilderness Area the following impacts would be anticipated.

### **A. Naturalness**

The addition of AUMs would not impact the naturalness of the Wilderness Area. The Wilderness Area within the Allotment is less than, approximately, three percent of the total allotment acreage. It is anticipated that most of the additional AUMs would occur outside of the Wilderness to utilize the new water developments. Continued use is not anticipated to have any additional impacts on wilderness values over and above that which occurs during the course of the normal grazing period indicated on the grazing permit

### **B. Opportunities for Solitude or Primitive and Unconfined Recreation**

The proposed action would not have impacts to solitude or unconfined recreation. The majority of recreational use of the Worthington Mountains is caving, and occurs at the higher elevations outside of the Sand Springs Allotment boundary. Access to the caves of the Worthington Mountains is predominantly from the East side of the Range, opposite that of the allotment boundaries.

### **C. Special Features**

The special features of the Worthington Range lie outside of the allotment boundaries.

## ***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***

Cattle have been grazing the allotment from approximately mid to late October until approximately mid to late April. This grazing scheme utilizes all three pastures during the cool months when most forage vegetation is mostly dormant. Consequently, the majority of green up and plant reproduction occurs after most of the cattle have been removed from the allotment. The result is healthier plants throughout the year which lends itself to maintaining or improving range condition.

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.

The degrees of allowable use were developed for use as a set of definitive criteria to assist in managing rangeland vegetation on a sustained yield basis. It is the degree of utilization considered desirable. They were established to provide for ample residual biomass, the allowance of adequate maintenance of plant vigor, the continued production of seed, and adequate ground cover. By maintaining AULs, negative impacts to the growth and reproductive cycle of vegetation would not occur. This would favor a plant's production and storage of carbohydrate reserves, vigor, reproduction, and a tendency towards favorable species composition, for both livestock and wildlife, in the area.

As a grass plants progress into decadence they get wolfy, palatability and nutrient values decrease, the potential for new growth during the spring growing period becomes hindered, it produces more dry dead matter and the potential for spreading wildfire increases. The potential for grazing decadent plants and plants approaching decadence, as a result of the new pipeline extension into areas previously receiving low amounts of grazing use by livestock, may help reduce the potential or rate of spread of wildfires in the area by decreasing fire fuels. It would also stimulate new plant growth while increasing plant palatability and nutritive values as well as plant vigor. Wildlife habitat would be enhanced. The result is an increase in healthier, more viable plants lending itself to a healthier ecosystem.

The allotment is mostly within the moderate to late seral stage. This indicates that moderate to good species diversity of perennial species exists with regards to the major plant species listed in each of the three MLRA Range Site Descriptions describing the four key areas from which Ecological Condition was obtained. In addition, species composition varied from 30% to 56% of PNC. Higher PNC values would indicate either a higher production of those species listed as yielding the higher percentages of composition (and pounds per acre) at PNC, or higher diversity or both. It is anticipated that an increase in AUM consumption will not negatively affect either species composition or diversity, especially with the new pipeline addition.

It is anticipated that vegetation at or vicinal to water sources would be impacted on a proportionally higher level than areas farther away with use at the source being highest and decreasing with increased distance from the source.

If grazing did continue yearlong, there would be a lesser number of cattle out on the range than if the current grazing plan of grazing from approximately mid-October to approximately mid-April occurred, assuming that the same amount of active use (AUMs) were consumed in both cases. In addition, the adherence to AULs would still be required. Therefore, the degree of potential vegetation trampling, forage removal due to grazing and subsequent negative impacts to the environment would not conceivably change.

### ***Soils***

Areas immediately surrounding watering sources would receive compaction due to an increased amount of hoof action. However, the degree of trampling would proportionally decrease with increased distanced from a water source. Rotating watering sources would help minimize such potential impacts and allow for recovery if impacted locations are not used annually.

As formerly stated, the soils on which grazing commonly occurs range from deep to very deep with coarse textured surfaces. They are relatively sandy and have relatively low clay content.



Infiltration rates range from moderate to rapid and runoff ranges from low to moderate. Therefore, it is not anticipated that compaction would be consequential. However, small increments of soil compaction and trampling can be reasonably expected from the additional livestock use.

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. The effects of trailing may also be amplified on the allotment. Such impacts can be mitigated by the distribution of livestock (herding and watering location rotations) and the establishment of the Allowable Use Levels.

Soil cover from litter accumulation would be somewhat reduced by additional 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.

It is expected that the lack of grazing from mid spring to mid fall would potentially result in increased forage production, improved cover, less soil erosion, better soil/water relations and, collectively, an overall improved habitat. It is also anticipated that overall soil characteristics would benefit from improved livestock distribution due to the added pipeline.

If grazing did continue yearlong, there would be a lesser number of cattle out on the range than if the current grazing plan of grazing from approximately mid-October to approximately mid-April occurred, assuming that the same amount of active use (AUMs) were consumed in both cases. Therefore, it is anticipated that the difference in impacts between the former and the latter would not be substantially different.

### ***Wildlife***

Impacts on the wildlife populations should not occur due to the low grazing intensity of use analyzed by this EA. Small reptile species, rodents, and native birds may be somewhat impacted by the Proposed Action through the temporarily reduction of available cover. However, because AULs would not be exceeded, an adequate supply of forage and cover would still be available for wildlife.

### **Anticipated Impacts of the No Action Alternative**

#### **Anticipated Impacts**

According to the No Action Alternative, the grazing permit would not be renewed and impacts as described above, under the ***Proposed Action***, would not occur. Active use would not be increased, but would remain status quo.

#### **1. Range**

The allotment was already receiving low intensity grazing, as shown in the aforementioned 13 year Summary Data Table (Table 3, Appendix III), prior to the new pipeline installation. With the addition of new watering locations into areas previously ungrazed or under-utilized due to

lack of water, due to this new pipeline, grazing intensity throughout the allotment will, in all likelihood, further diminish.

## 2. Soils

Areas immediately surrounding watering sources, would conceivably receive less compaction due to hoof action, because of fewer cattle on the range.

## 3. Vegetation

With less livestock on the range less biomass would be removed during the course of the grazing year. This would provide more overall cover following the end of the grazing period, thereby offering more soil protection.

The potential for woody plants with diminished palatability, nutrient values and a diminished potential for new growth on these plants during the spring growing period would increase and overall plant vigor would potentially be reduced. Subsequently, the potential for the enhancement of wildlife habitat would diminish. The potential for the production of dry dead matter would increase, which would potentially provide increased fuel supplies for the spreading of wildfires.

It is anticipated that vegetation at or vicinal to water sources would conceivably be impacted to a lesser degree than would otherwise occur with fewer cattle numbers.

## 4. Wildlife

Because less AUMs would be consumed, impacts on the wildlife populations would be proportionately less. Small reptile species, rodents, and native birds would be impacted to a lesser degree, also.

## 5. Social and Economic Values

The social and economic values of the area would not be increased and opportunities for livestock grazing to the applicant would not be provided. Economic values within Lincoln County, through direct income to residents, would not increase. Expenditures for supplies and contributions to the local economy wouldn't occur.

### ***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**

The land which comprises the current Sand Springs Allotment has been grazed since the 1800's. The BLM has been managing such grazing since 1946 when the General Land Office merged with the Grazing Service to form the BLM.

In 1948, the Sand Springs Unit (Allotment) was established and the grazing preference was adjudicated to nine permittees according to base waters owned. The base waters on which the permit is based include: Wild Horse Spring & pipeline, Mud Spring & pipeline, Stinkbug Spring, Sand Springs, Black Rock Well, No. 6 Well, Buttes Well, Tempiute Well, Smith Well, Highway Well, Southeastern Well, Hot Water Well, Quinn Canyon Spring & pipeline, Shadow Well, Honest John Well. The original active grazing preference associated with the base waters totaled 29,797 AUMs. In 1960, the Paris Brothers purchased ½ of the water share on Shadow Well. The Paris Brothers used their water share in Shadow Well as base to gain preference to graze sheep within the service area of the water. In 1961, adjustments were made on the grazing privileges and the active grazing preference was reduced to a total of 19,175 AUMs. In 1962-63, Edwin Burns purchased the existing base waters for the Sand Springs Allotment which included the other ½ share in Shadow Well. The serviceable area around Shadow Well was designated a dual use area where Edwin Burns had preference to run cattle as part of his Sand Springs Permit and the Paris Brothers had preference to run sheep. In 1965, the grazing preference for Sand Springs was reduced to a total of 10,000 AUMs of which 6,509 AUMs were active and the remaining 3,491 AUMs were placed into suspension. In 1966, an Allotment Management Plan was implemented on the Sand Springs Allotment introducing a yearlong 3 pasture rest-rotation system. In 1983, the Shadow Well Dual Use Area was moved to its current location through a range line agreement. In 1985, the authorized grazing use was increased on the Sand Springs Allotment to 7,005 active AUMs keeping the total at 10,000 AUMs.

The current permittee for the Sand Springs Allotment is the Tempiute Grazing Association, LLC. Dirk and Marta Agee began grazing cattle on the Sand Springs Allotment after obtaining the permit from William Jay Wright in 1985. The Agees maintained the permit, in their name, until the grazing privileges were transferred to the Tempiute Grazing Association, LLC (created by Dirk and Marta Agee) in December 1998. Dirk and Marta are spokespersons for the association.

By 1987, it was determined that substantial progress was made towards meeting the allotment objectives. An adjustment of the Sand Spring grazing program was done in January 1988 at which time it was determined that the allotment was ready for authorized TNR until utilization was optimum and in balance with the realistic sustained yield.

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**

Rangeland improvements are being implemented and maintained, in accordance with the land use plans, in order to help livestock distribution which can improve rangeland health.

Present grazing use is being managed to maintain or improve rangeland health and to maintain conformance with the *Standards and Guidelines*.

### **Reasonably Foreseeable Future Actions**

Continued maintenance of existing range improvements and construction of new improvements would occur.

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

Past actions, as identified above, have provided a foundation on which current grazing management actions occur. Past management actions and development of improvements have allowed for the continued improvement of the allotment and conformance with the *Mojave Southern Great Basin Area Guidelines*.

The monitoring data which has been collected on the allotment since 1986 shows that livestock grazing use on vegetation, after repeated issuances of TNR, is consistently below the established Allowable Use Levels for the allotment, and that current grazing management is in conformance with the *Guidelines* for grazing administration on BLM lands. Additionally, the relatively new installation of the aforementioned extensive pipeline will not only result in an improvement in livestock distribution, but expand grazing into areas which were previously either ungrazed or under-utilized due to lack of water. This, in essence, will translate into a larger forage base than previously existed, while further lessening the overall impacts of grazing within the allotment. This combined with the fact that cattle numbers are the same now as they were prior to the pipeline installation, when key area readings showed slight to light grazing use throughout much of the allotment, supports the restoration of the suspended AUMs.

In view of the aforementioned, the proposed action of grazing additional forage would continue to be in conformance with the *Guidelines* for grazing administration. Allowable use levels (AULs) would be monitored and maintained and, correspondingly, so would the *Guidelines* for grazing administration.

## **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 as part of the proposed action. No additional monitoring has been suggested as a result of the analysis of the potential impacts.

Use pattern mapping, following the TNR grazing period during 2005, showed that problematic areas exist. Except for areas near watering sources within the allotment areas of unacceptable

grazing levels occurred in the northwest and south pastures due to a lack of effective livestock management.

Therefore, even though stocking rate calculations show that the allotment has a capacity for 14,328 AUMs, only a restoration of the suspended 2,995 AUMs will occur. Use pattern mapping and utilization data would continue to be collected after each grazing year in which a warranted increase was issued to assure that the Standards for Rangeland Health were being achieved and AULs were not being exceeded. If monitoring data indicates that either of these two is failing in any of the pastures, reasons for the lack of attainment of the Standards or AULs would be determined and, subsequently, adjustments to grazing management practices would be made until these objectives are met.

Upon assessment of the completed pipeline, additional new key areas may be established, as needed, to facilitate monitoring needs.

## **VII. CONSULTATION and COORDINATION**

### **Intensity of Public Interest and Record of Contacts**

There is a continued public interest in the proper grazing management of public lands. The permittee on the Sand Springs Allotment, Tempiute Grazing Association, has a strong interest in this permit renewal.

On October 17, 2006 the Sand Springs Term Grazing Permit Renewal was 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 July 24, 2006 the proposal was presented to the Ely BLM internal scoping team and no issues were identified at that time. The project proposal was posted on the Ely Field Office website on September 21, 2006 ([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 March 12, 2007 the proposed action was sent to a wilderness review team for a 30 day review soliciting input. The comment period ended on April 16, 2007. No comments were received.

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 Sand Springs Allotment. No comments were received.

Interested publics will be notified again, by either 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 Sand Springs grazing allotment.

Mr. and Mrs. R. Dirk Agee  
George Andrus  
Steven Carter  
Mr. Steve Foree  
Brad Hardenbrook  
Patricia N. Irwin  
Mike Kuyper  
Curt Leet  
Lincoln County Commissioners  
Cindy MacDonald  
Betsy Macfarlan  
Laurel Marshall  
John McLain  
Nevada State Clearinghouse  
Richard Orr  
Jerry Reynoldson  
Mike Scott  
Western Watersheds Project - Katie Fite

### **Internal District Review**

Gary Medlyn	Air, Water, Floodplains, Riparian and Wetlands
Lisa Gilbert	Archaeology/Historic Paleontological Wildlife /Migratory Birds /Special Status Species (plants and animals),
Steve Abele	Areas of Critical Environmental Concern
Elvis Wall	Native American Religious Concerns
Domenic A. Bolognani	Noxious Weeds, Rangeland Management
Chris Mayer	Rangeland Management Lead
Mark Lowrie	Noxious Weeds
Steve Leslie	Wilderness Values
Bruce Winslow	Visual Resource Management, Recreation
Sheri Wysong	Planning and Environmental Coordinator

# APPENDIX I

## STANDARDS DETERMINATION DOCUMENT

Tempiute Grazing Association Term Permit Renewal  
Sand Springs Allotment

EA #NV-045-06-52

### **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 Sand Springs Allotment in the Ely District BLM. The allotment is not located within a Wild Horse Herd Management Area. Publications used in assessing and determining achievement of the Standards include: 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 Pahrangat-Penoyer Area, 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 eight key areas on the Sand Springs Allotment (Map #6 in Appendix II of the EA). 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.

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.

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 #NV-045-06-52.

**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);
- Compaction/infiltration.

Riparian soil indicators:

- Stream bank stability.

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

Determination:

**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 causal factor to not meeting the standard.

Livestock are not a causal factor to not meeting the standard.

Failure to achieve the standard is related to other issues or conditions.

Guidelines

**In conformance with the Guidelines**

Not in conformance with the Guidelines

Conclusion: *Standard 1 Achieved*

The three prominent range sites are: 029XY012NV (Sandy 5-8 P.Z.), 029XY017NV (Loamy 5-8 P.Z.) and 029XY046NV (Sandy Loam 5-8 P.Z.). Expected cover value for each of these sites is 15% - 25% (Table 6 in Appendix III of the EA).

Line intercept (cover data) studies, conducted during September 2006, showed that a majority of the allotment had cover values either slightly less than, equal to or greater than the minimum value shown in each MLRA range site description respective to each key area, with one exception: Smith Well key area, in the northeast pasture. Percent cover varied according to the following: Quinn (Northwest Pasture) had 15% cover; Honest John #2, Wildhorse and Apple and Smith Well, which are located in the Northeast Pasture, had 14%, 21%, 13% and 9% cover,



respectively; Hotwater Well, Southeast Well and Honest John #1, which are located in the south pasture, had 19%, 17% and 14% cover, respectively (Table 6 in Appendix III of this EA). It should be noted that the cover data was collected following the 2005 grazing season after 1,842 AUMs of TNR issuance from 1/26/06 – 2/28/06 and following subsequent grazing during the early portion of the 2006 grazing year (March/April).

Use levels have been consistently slight to light as noted at the eight key areas using a 13 year average prior to any TNR issuance (Table 3 in Appendix III).

Those portions of the allotment which were inordinately steep and/or mountainous, and therefore inaccessible, and not likely to have been visited by livestock were not observed during use pattern mapping. Use pattern mapping, after TNR issuance of 1,842 AUMs from 1/26/06 to 2/28/06, shows that the range of grazing use in a majority of the observed portions of the allotment ranged between No Measurable Use and Light Use. The acreage of these three use categories, combined, totaled approximately 74% with 45% of this occurring within the slight use category.

In contrast, the acreage in the heavy and severe use categories, combined, totaled approximately 15 % (eight percent heavy use and seven percent severe). Most of the heavy use occurred in the east-central portion of the northwest pasture and was apparently due to lack of sufficient herding. Most of the severe use in the south pasture occurred in the vicinity of the private lands and was due mostly to trailing from the private lands onto the allotment and vice-versa. Management actions will be implemented during the next grazing season to correct this problem.

Ground cover is deemed to be adequate. Measured cover data at the seven of the key areas shows that cover approximately equals or exceeds the minimum amount indicated, at PNC, as stated in each of the respective MLRA Rangeland Ecological Site Descriptions associated with each respective key area with the exception of Smith Well. This indicates that a vast majority of the allotment has ample vegetative cover to maintain stability and to resist accelerated erosion (e.g., sheet and rill erosion), maintain soil productivity, and sustain the hydrologic cycle.

Prior to TNR issuance in 2005, monitoring and personal observations showed that low grazing use levels over most of the allotment indicated that trampling and compaction were minimal and inconsequential. After TNR issuance, use pattern mapping and personal observations showed that grazing use over a vast majority of the observed portions of the allotment was less than or equal to the light use category, thereby further indicating the same.

Collectively, low grazing use levels and ample cover infers litter production that further adds to increased soil protection and stability.

## **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 area 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:

- 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

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

Natural spring sources on public land within the allotment consist of Wildhorse Spring and Mud Spring. Both springs are developed springs. Wildhorse Spring supplies water to the existing pipeline system. Mud Spring only supplies water to vicinal troughs and is not connected to the main pipeline system. There are no riparian areas associated with either spring.

Conclusion: *Standard 2 is not applicable.*

**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.

Determination:

**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 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

Conclusion: *Standard 3 Achieved.*

The dominant present vegetation within the Sand Springs Allotment, baseline range studies (ecological condition and line intercept) and professional observations (including photographs) all indicate a diverse habitat that is distributed in a mosaic across the landscape within the allotment. Main forage species that are widespread within the allotment consists of winterfat, Indian ricegrass, galleta, various forbs, bud sagebrush, 4-wing saltbush and shadscale. These are known to be nutritious, palatable plant species.

Cover data as discussed under Standard 1 was deemed to be appropriate in a vast majority of the allotment with respect to the applicable Ecological Range Site Description.

Use levels have been consistently slight to light as noted at the eight key areas using a aforementioned 13 year average prior to any TNR issuance.

Use pattern mapping as discussed under Standard 1 shows that the range of grazing use in a majority of the observed portions of the allotment ranged between No Measurable Use and Light Use.

The combination of ecological condition studies - which show moderate to good species diversity (composition) of perennial plant species - low levels of grazing use and 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 distributed in a mosaic across the landscape, low grazing use levels and ample ground cover translate into sufficient habitat for wildlife nesting protection, food sources (vegetative and insectivorous) and mating.

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

Standard 1 and Standard 3 are being achieved.  
Standard 2 is not applicable.

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

GUIDELINES for SOILS (Standard 1):

See Conclusion for Standard 1 above.

Current livestock grazing management practices conform with 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 cover.

GUIDELINES for ECOSYSTEM COMPONENTS (Standard 2):

See Conclusion for Standard 2 above.

No riparian habitat exists on the allotment, therefore Standard 2 and associated Guidelines are not applicable.

GUIDELINES for HABITAT AND BIOTA (Standard 3):

See Conclusion for Standard 3 above.

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

**PART 4. MANAGEMENT PRACTICES TO MAINTAIN OR CONFORM WITH GUIDELINES**

1. The use of salt and/or herding may be used to promote maximum cattle distribution - especially into areas feasible to graze, but where cattle may be reluctant to go or to relieve grazing pressure in areas where it is deemed necessary.
2. Allowable use levels (AULs) will not exceed 50% on perennial grasses and forbs, and 45% on shrubs during the authorized use period (Rangeland Monitoring Handbook (September 1984) as measured through a combination of key areas readings and use pattern mapping.
3. Use of watering locations within the allotment will be rotated annually, so that the area serviced by a given water source will be periodically rested from grazing during the spring growing season.

**Prepared by:**

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Domenic A. Bolognani, Rangeland Management Specialist

9/19/07  
Date

**Reviewed by:**

/s/ Chris Mayer  
Chris Mayer, Lead Rangeland Management Specialist

9/19/07  
Date

**I concur:**

/s/ Kyle V. Hansen  
Authorized Officer

9/19/07  
Date

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**REFERENCES**

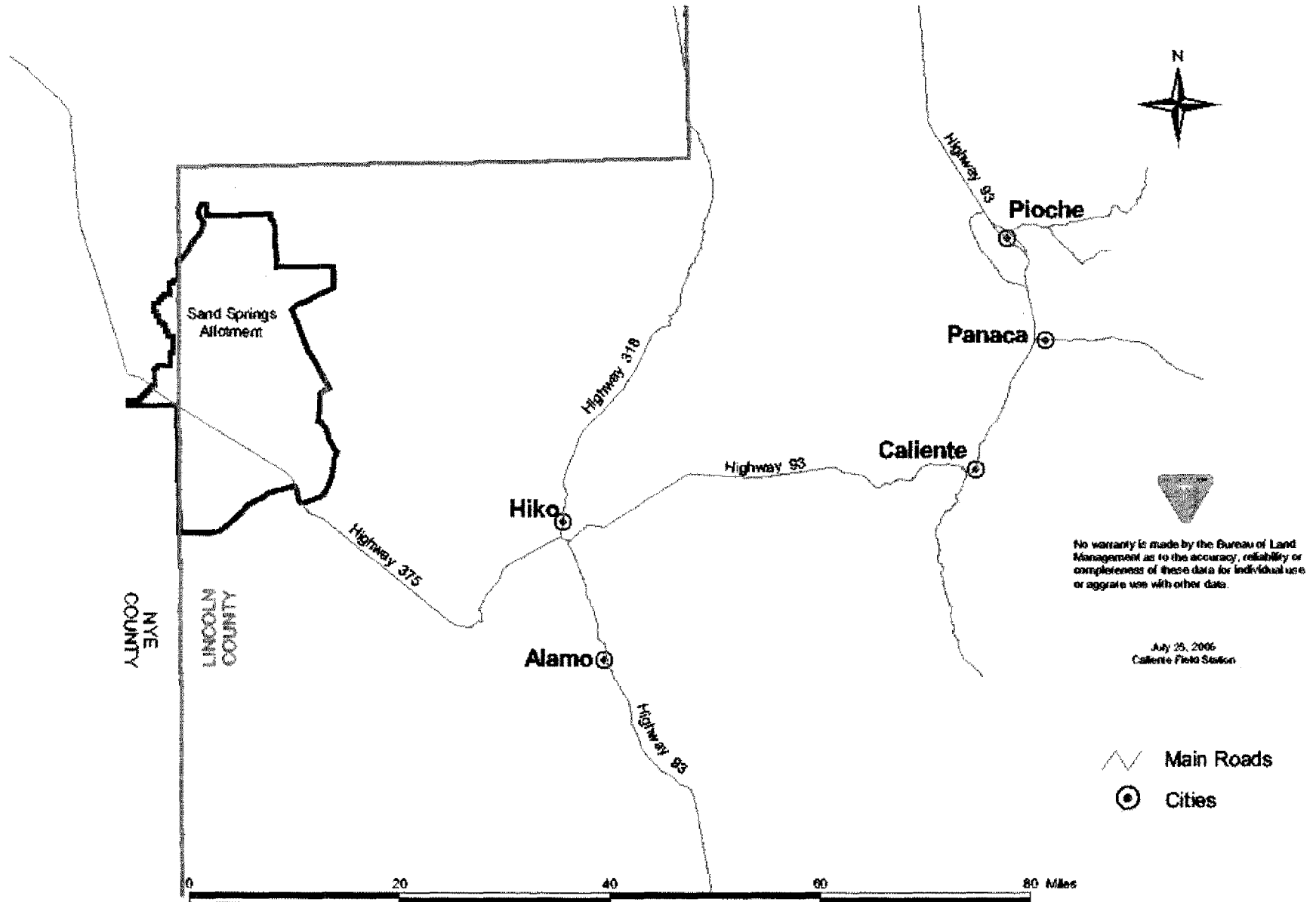
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## **APPENDIX II**

### **MAPS**

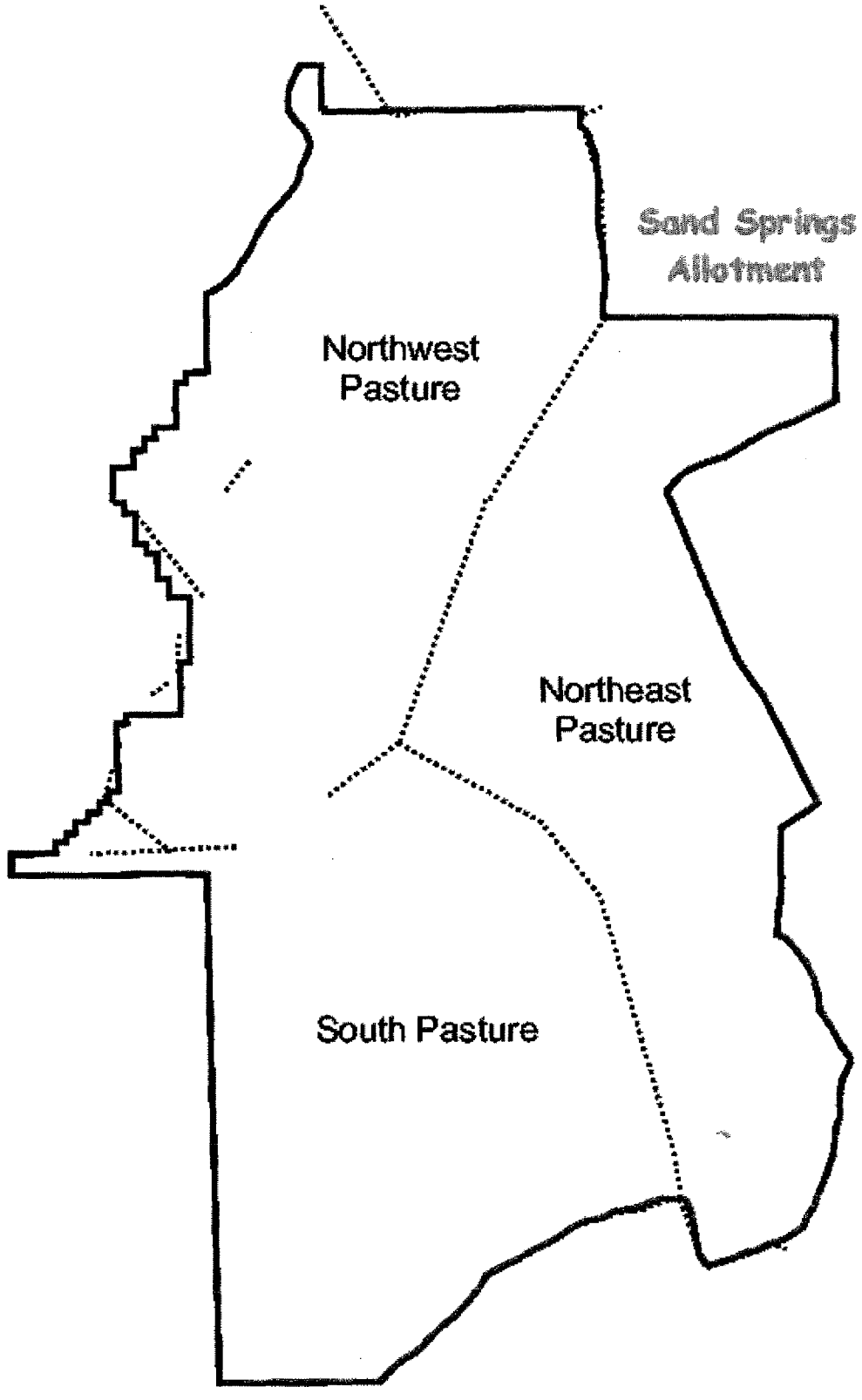
Location of Sand Springs Allotment within Lincoln and Nye Counties  
with  
Respect to Surrounding Towns

MAP #1





### Fenced Pastures within the Sand Springs Allotment



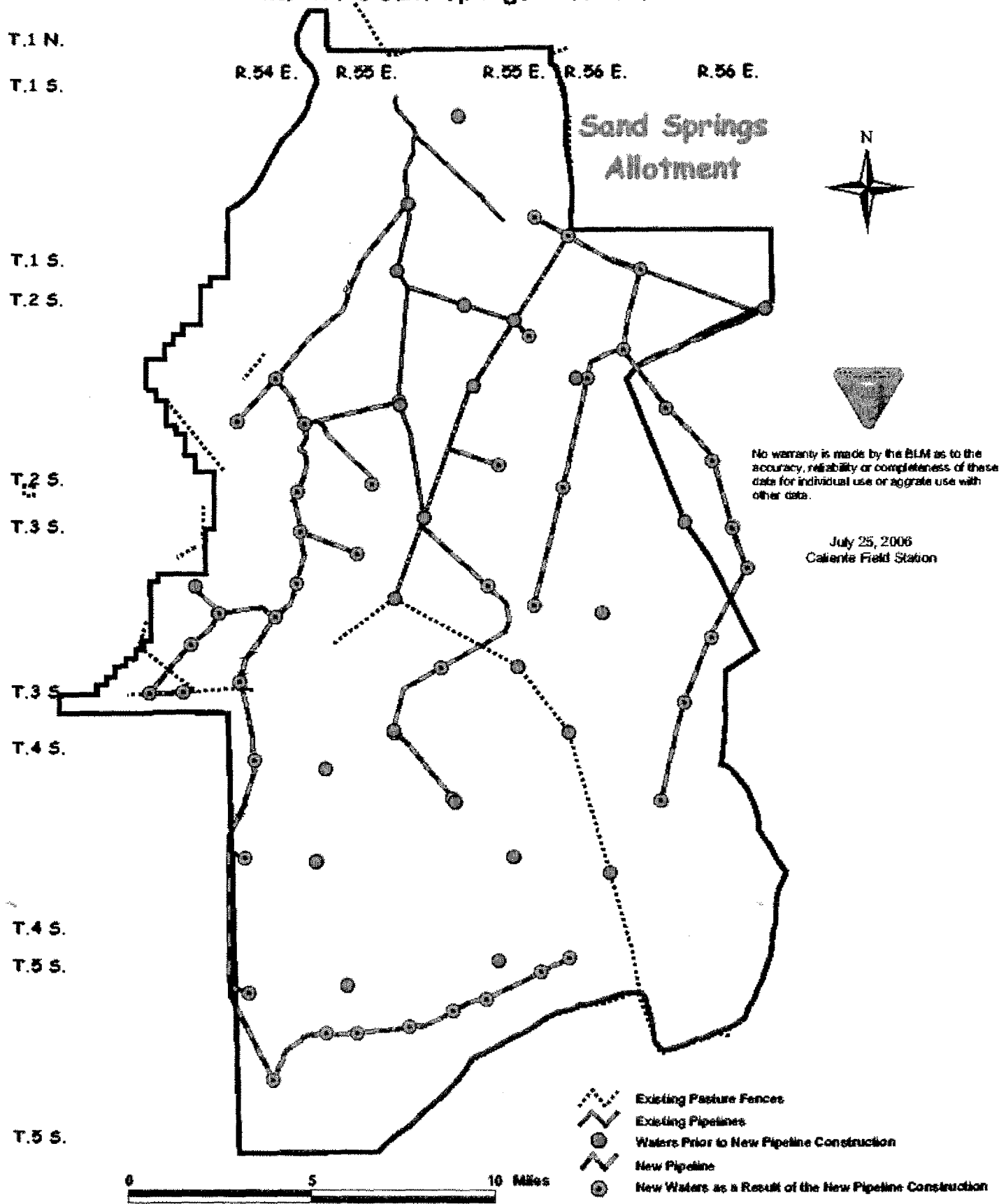
No warranty is made by the BLM as to the accuracy, reliability or completeness of these data for individual use or aggregate use with other data.

July 25, 2006  
Caliente Field Station

 Pasture Fences



# Old and Recently Installed Pipelines and Associated Watering Locations within the Sand Springs Allotment



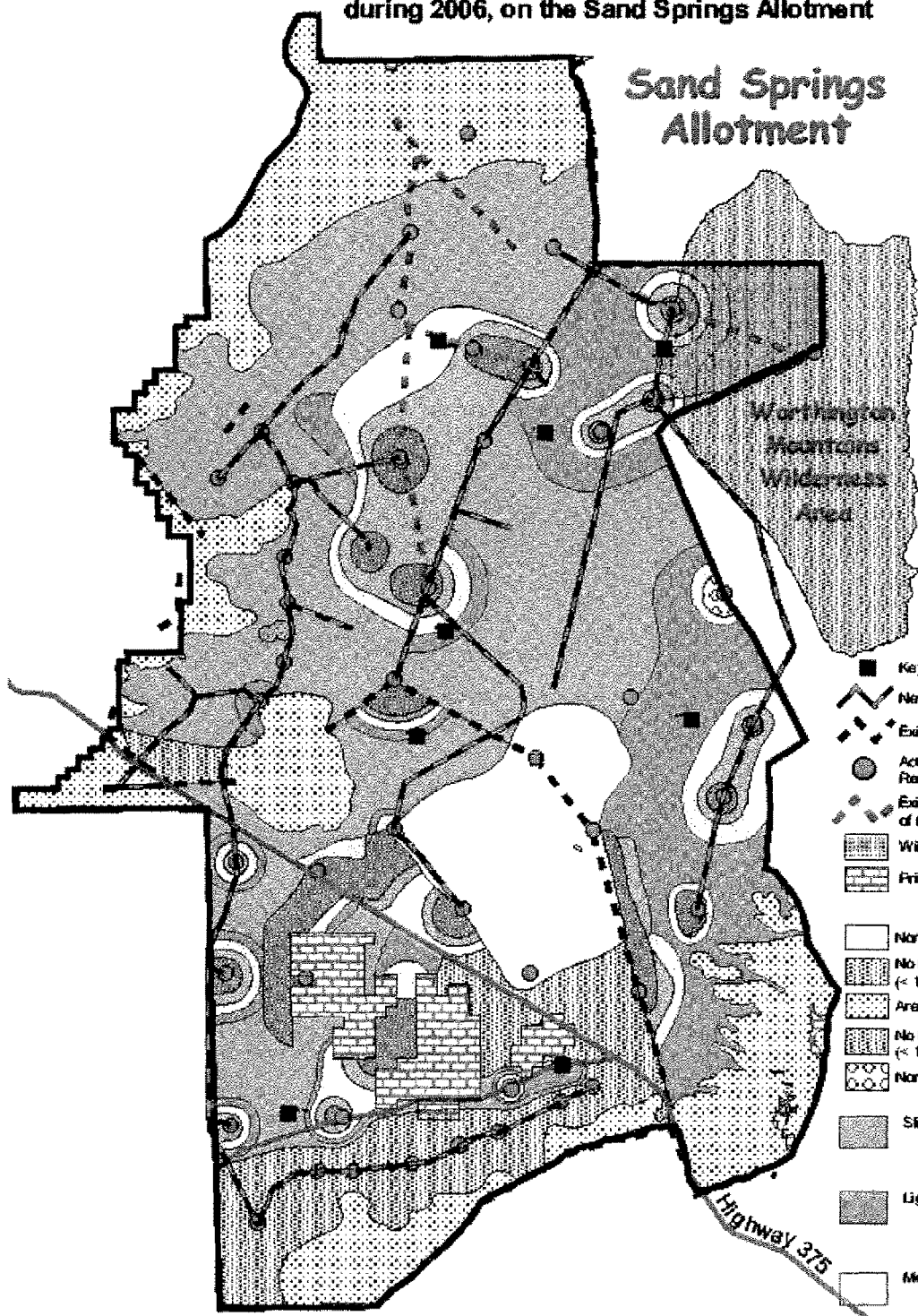
Use Pattern Map Following Temporary Non Renewable (TNR) Grazing Use, during 2006, on the Sand Springs Allotment

Sand Springs Allotment



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.

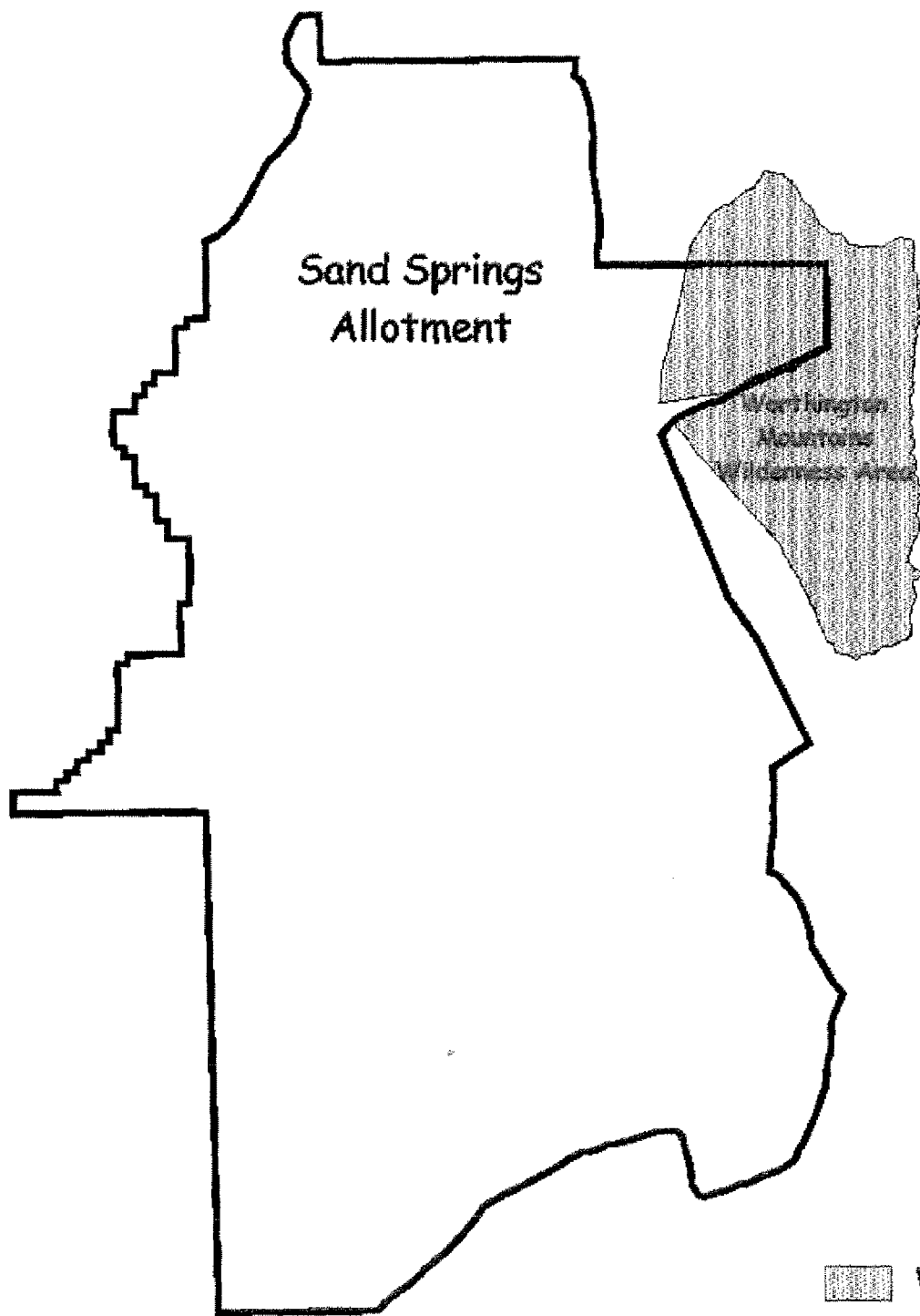
May 20, 2006  
Caliente Field Station



- Key Area Locations
  - New Pipeline
  - - - Existing Fences
  - Active Waters during Temporary Non Renewable Grazing (TNR) during 2006
  - - - Existing Pipelines Prior to Installation of New Pipeline
  - ▨ Wilderness (approx. 6,800 acres in allotment)
  - ▩ Private (Patented) Lands
- |   | ACRES  |
|---|--------|
| □ Non-forageable Lake Bed                       | 15,397 |
| ▨ No Measureable Use (south pasture) (< 1%)     | 19,645 |
| ▩ Areas Not Observed                            | 47,407 |
| ▨ No Measureable Use (Northwest Pasture) (< 1%) | 1,342  |
| ▩ Non-forageable Area (Northeast Pasture)       | 296    |
- 
- |                   | ACRES  |
|-------------------|--------|
| <b>Slight</b>     |        |
| Northwest Pasture | 38,873 |
| Northeast Pasture | 23,912 |
| South Pasture     | 13,255 |
| <b>Light</b>      |        |
| Northwest Pasture | 1,398  |
| Northeast Pasture | 24,438 |
| South Pasture     | 3,537  |
| <b>Moderate</b>   |        |
| Northwest Pasture | 4,329  |
| Northeast Pasture | 7,414  |
| South Pasture     | 4,328  |
| <b>Heavy</b>      |        |
| Northwest Pasture | 7,087  |
| Northeast Pasture | 4,229  |
| South Pasture     | 2,174  |
| <b>Severe</b>     |        |
| Northwest Pasture | 2,936  |
| Northeast Pasture | 3,093  |
| South Pasture     | 5,984  |



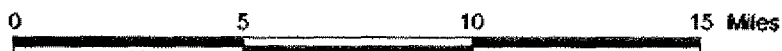
**Location of the Worthington Mountains Wilderness Area  
with Respect to the Sand Springs Allotment**



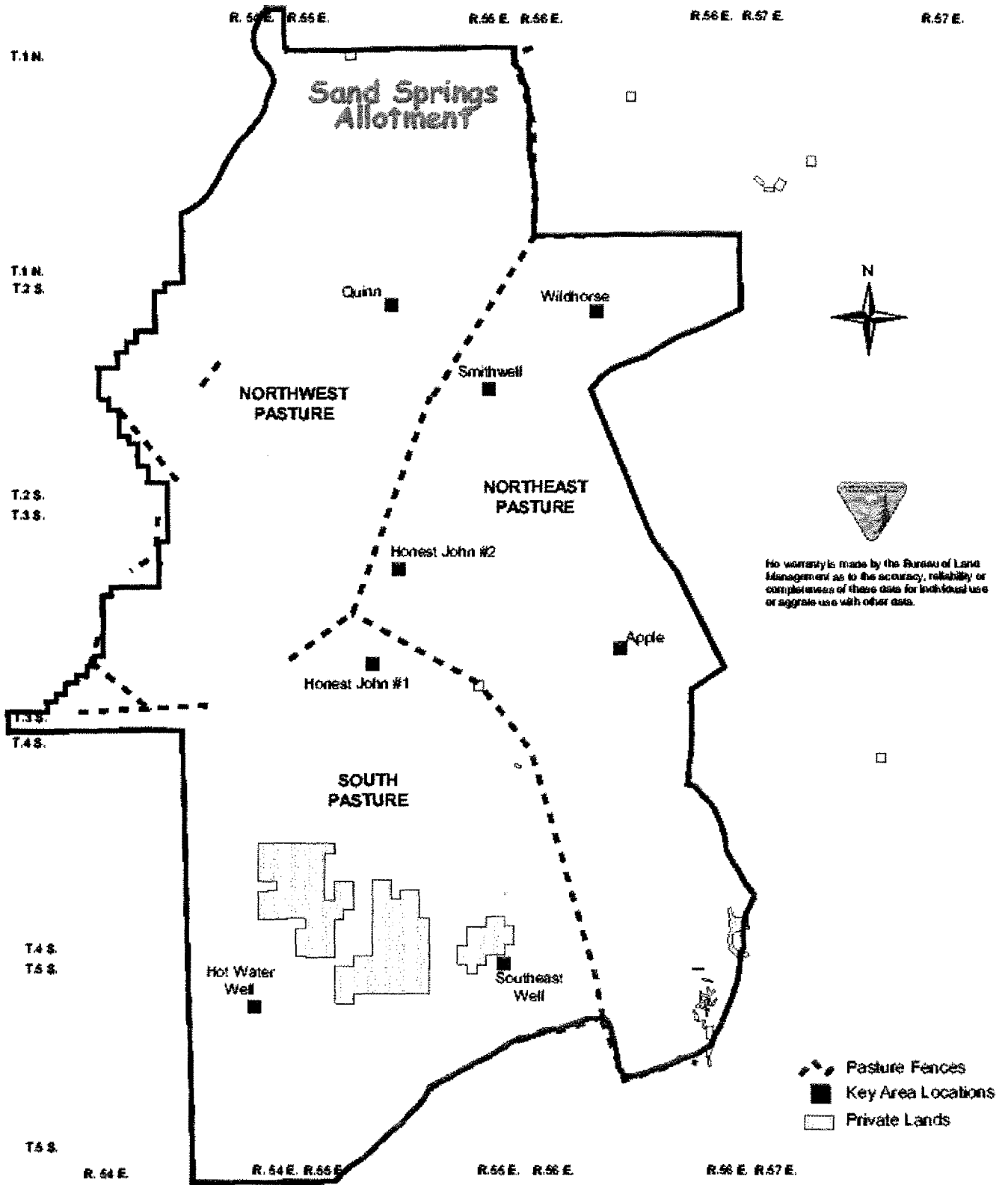
No warranty is made by the BLM as to the accuracy, reliability or completeness of these data for individual use or aggregate use with other data.

July 25, 2006  
Caliente Field Station

 **Wilderness**



### Location and Names of Key Areas within Each Pasture on the Sand Springs Allotment



## APPENDIX III

### Tables

**Table 1.** The eight key areas, within the Sand Springs Allotment, and the pastures on which they are located.

Pasture Name	Key Area Name
Northwest Pasture	*Quinn
Northeast Pasture	Wild Horse
	*Smith Well
	Honest John #2
	Apple
South Pasture	*Honest John #1
	*Hot Water Well
	Southeast Well

\* These Key Areas have been used in the acquisition of both, utilization and Ecological Condition Data.

**Table 2.** Utilization classes, used with the Key Forage Plant Utilization Method, as defined according the Nevada Range Monitoring Handbook (September 1984).

Utilization Class	Percent Use of Current Year's Growth, by Weight, of a Key Species
No Measurable Use	< 1%
Slight	1 – 20%
Light	21 – 40%
Moderate	41 – 60%
Heavy	61 – 80%
Severe	81 – 100%

**Table 3.** Summary of data collected during the years 1986 – 1995, 1997, 1999 and 2005 (totaling 13 years), and prior to any Temporary Non-Renewable (TNR) use, on the Sand Springs Allotment.

Summary of Utilization Data Collected During the Years 1986-1995, 1997, 1999 and 2005 Showing the 13 Year Average Percent Utilization Range Observed on Key Species at Each Key Area within Each Pasture Along with the 13 Year Average Licensed Use (AUMs), Prior to Any TNR Authorization, Over the Same Period.									
	13 Year Average Licensed Use Prior to any TNR Authorization (AUMs)	13 Year Average Low and 13 Year Average High Percent Utilization on Key Species at Each Key Area							
		North West Pasture	Northeast Pasture				South Pasture		
		Quinn	Smith Well	Apple Reservoir	Wild Horse Spring	Honest John (#2)	Hot Water Well	Honest John (#1)	Southeastern Well
AVERAGE	6,782	8% - 29%	14% - 33%	4% - 20%	15% - 29%	15% - 28%	4% - 10%	2% - 15%	10% - 27%

**Table 4.** The approximate amount of acreage occurring within each utilization class, and the percentage of each utilization class with respect to the total acreage observed within the allotment, following TNR issuance during the 2005 grazing year.

<b>Utilization Class</b>	<b>Acreage Determined within each grazing use class</b>	<b>Approximate Percentage of the Total Acreage of the Observed Portions of the Allotment Occurring within Each Grazing Use Class</b>
<b>No Measurable Use (&lt;1%)</b>	20,987	12%
<b>Slight (1 – 20%)</b>	76,040	45%
<b>Light (21 – 40%)</b>	29,373	17%
<b>Moderate (41 – 60%)</b>	16,071	10%
<b>Heavy (61 – 80%)</b>	13,490	8%
<b>Severe (81 – 100%)</b>	12,012	7%
<b>Total Acreage Observed on Allotment</b>	<b>167,973</b>	<b>100%</b>

**Table 5.** The key area name, vegetation type, current existing perennial vegetation and percent composition by species and by group, the associated condition rating for the respective range site associated with each key area and the potential composition of grasses, forbs and shrubs at PNC as a comparison.

Ecological Condition Obtained in May 2001 at Four Key Areas on the Sand Springs Allotment						
Key Area	Range Site	Associated Vegetation Type	Current Existing Perennial Vegetation by Species, Listed as Major Plant Species in the MLRA Range Site Descriptions, Along with Their Current Existing % Composition	Condition Rating (% of PNC)	Existing Vegetative Composition (%)	Potential Vegetative Composition Expected at PNC (%)
Quinn (Northwest Pasture)	029XY017NV	* <u>ATCO-ARSP5/ACHY</u> Loamy 5-8" P.Z.	Bud Sagebrush ( <i>Artemisia spinescens</i> ) 7.3% Shadscale ( <i>Atriplex confertifolia</i> ) ----- Galleta ( <i>Pleuraphis jamesii</i> ) 67.0% Indian ricegrass ( <i>Achnatherum hymenoides</i> ) 15.7% Bottlebrush Squirreltail ( <i>Elymus elymoides</i> ) 1.9% Globemallow ( <i>Sphaeralcea ambigua</i> ) 1.3% Aster 1.8%	Mid Seral (41%)	Grasses = 84.6% Forbs = 3.1% Shrubs = 7.3%	Grasses = 45% Forbs = 5% Shrubs = 50%
Smith Well (Northeast Pasture)	029XY046NV	ATCA2-KRLA2/ACHY Sandy Loam 5-8" P.Z.	Fourwing Saltbush ( <i>Atriplex canescens</i> ) 10.4% Winterfat ( <i>Krascheninnikovia lanata</i> ) 17.0% Bud Sagebrush 4.4% Indian Ricegrass 5.9% Galleta 6.3% Globemallow ( <i>Sphaeralcea ambigua</i> ) 6.5% Perennial Forbs 22.0%	Late Seral (56%)	Grasses = 12.2% Forbs = 28.5% Shrubs = 31.8%	Grasses = 45% Forbs = 5% Shrubs = 50%
Honest John #1 (South Pasture)	029XY017NV	* <u>ATCO-ARSP5/ACHY</u> Loamy 5-8" P.Z.	Bud Sagebrush 35.0% Shadscale ( <i>Atriplex confertifolia</i> ) ----- Indian Ricegrass 10.2% Galleta 47.7% Globemallow 1.6%	Mid Seral (42%)	Grasses = 57.9% Forbs = 1.6% Shrubs = 35.0%	Grasses = 45% Forbs = 5% Shrubs = 50%
Hot Water Well (South Pasture)	029XY012NV	ATCA2/ACHY Sandy 5-8" P.Z.	Winterfat 27% Indian Ricegrass 19.8% Needleandthread ( <i>Hesperostipa comata</i> ) 12.6% Galleta .77% Douglas Rabbitbrush ( <i>Chrysothamnus viscidiflorus</i> ) 63.9% Perennial Forbs .85%	Mid Seral (30%)	Grasses = 33.17% Forbs = .85% Shrubs = 64%	Grasses = 70% Forbs = 5% Shrubs = 25%

\* Underlined species are main component species listed in the SCS Range Site. It currently exists in the above pastures, but wasn't picked up on the random sample plots taken for the determination of Ecological Condition. Therefore, it was still listed as a line item in column four without a numerical value assigned and, consequently, played no role in determining the Condition Rating.

Each of the respective Range Sites at each of the key areas were determined using soil mapping units determined by the Soil Conservation Service, now called the Natural Resources Conservation Service (NRCS), as found in the Soil Survey of the Pahranaagat-Penoyer Areas, Nevada - 1968, and verified through a field inspection. During such field inspections adjustments were made, if needed, to determine the most appropriate range site for the area. Ecological Condition was completed on the listed key areas using the double sampling method described in the Soil Conservation Service National Range Handbook (July 13, 1976) and the Bureau of Land Management National Range Handbook H-4410-1 (1984). This data was then compared to the appropriate Major Land Resource Area (MLRA 29) Rangeland Site Description, also published by NRCS, which was determined for each key area. Rangeland sites are defined as ecological subdivisions of rangelands that are differentiated in terms of the climax (original or natural potential) plant community they are capable of supporting.

Seral stages were calculated using percent composition, derived from using the above double sampling method, and comparing these values to the most appropriately applicable range site to determine a rating. The rating is defined as being the percent of the Potential Natural Community (PNC) which may also be referred to as historic climax (existed before European immigration and settlement). Therefore, the seral stages listed above, for each key area, and the associated percentages are an indicator of the percent of climax for the respective range site on which they occur. A rating of  $\geq 75\%$  is considered the achievement of PNC with values approaching 100% being the species composition and plant diversity indicated in the applicable range site description.



**Table 6.** Approximate ground cover (basal and crown) determined at each of the eight key areas, using the line intercept method, as compared to ground cover noted in the applicable Range Site Description associated with the Range Site determined at each key area.

Key Area	Range Site	Approximate Ground Cover (Basal and Crown)	
		As Measured at the 8 Key Areas	As Noted in the Applicable Range Site Description
Quinn (Northwest Pasture)	029XY017NV	15	15% - 25%
Smith Well (Northeast Pasture)	029XY046NV	9	
Honest John #1 (South Pasture)	029XY017NV	14	
Hotwater Well (South Pasture)	029XY012NV	19	
Honest John #2 (Northeast Pasture)	029XY017NV	14	
Wild Horse (Northeast Pasture)	029XY012NV	21	
Apple (Northeast Pasture)	029XY017NV	13	10% - 20%
Southeast Well (South Pasture)	029XY020NV	17	

## APPENDIX IV

### STOCKING RATE CALCULATIONS

- The desired stocking level for each allotment was determined using the following formula (BLM Technical Reference 4400-7, Appendix 2, pages 54-56)

$$\frac{\text{Actual Use (AUMs)}}{\% \text{ Utilization}} = \frac{\text{Desired Actual Use (AUMs)}}{\text{Desired \% Utilization}}$$

The TNR grazing period for the 2005 grazing year ended on February 28, 2006. Final utilization readings, at each of the eight key areas, for the 2005 grazing year occurred on March 2, 2006. These readings were used in calculating the desired stocking rate for the allotment. When there was more than one key area within a pasture, the utilization readings for all key areas within that pasture were averaged to derive one figure. This figure was then put into the stocking rate formula to obtain a desired stocking rate for that pasture. The subsequent calculated stocking rates for all three pastures were then added together to acquire a total stocking rate for the allotment.

Key Area (s)	Total Actual Use for the 2005 Grazing Year (includes TNR) (AUMs)	Desired (%) Util.	Average % Util. within Each Pasture Following TNR	Desired AUMs
Quinn	2,067	0.50	0.435	2,376
Honest John #2 Smith Well Wild Horse Apple	3,825	0.50	0.340	5,625
Southeast Well Hotwater Well Honest John #1	2,995	0.50	0.23667	6,327
<b>Total AUMs</b>	<b>8,887</b>			<b>14,328</b>

## **APPENDIX V**

### Noxious Weed Assessment

## **Risk Assessment For Noxious Weeds Temporary Non Renewable Grazing Use**

**Environmental Assessment (EA) No.: NV-045-06-052**

On March 8, 2006 a Noxious Weed Risk Assessment was completed for a Term Grazing Permit increase in Active Use Animal Unit Months (AUMs) on the Sand Springs Allotment. The allotment is located in west-central Lincoln County, Nevada, on public lands administered by the Bureau of Land Management Caliente Field Station.

The allotment is located within the following legal location: Townships 1 North through 4 South; Ranges 53 through 57 East, Mount Diablo Base Meridian. The allotment encompasses approximately 249,685 acres, however, the livestock would realistically graze approximately 170,000 acres.

Major range sites found within the allotment are as follows:

029XY017NV      029XY012NV      029XY046NV      029XY020NV

The dominant vegetation on these sites includes mixtures of winterfat, Indian ricegrass, fourwing saltbush, galleta grass, bud sagebrush and shadscale.

The Ely Field Office noxious weed inventory shows very small areas (100 square foot areas) of the noxious species salt cedar (tamarisk) (*Tamarix ramosissima*) present on three areas of public land and one area of private land. Tamarisk is present south of Mud Spring about ½ mile, north of Rose Spring about 1 mile, and east of the old lakebed in the southeast portion of the allotment. Tamarisk is also present on private ground in the Sand Springs Valley bottom in the south-central part of the allotment. In addition to consulting the existing weed inventory, BLM specialists familiar with the allotment were asked about their awareness of weeds in this area. In addition, a general field reconnaissance was completed on the aforementioned date while touring the allotment and looking at existing forage. No additional known noxious weeds are known to exist within the allotment.

However, halogeton (*Halogeton glomeratus*), an invasive plant that is not listed as noxious, does occur on the allotment, growing mostly along and near county roads and two track roads. Halogeton was introduced as a soil stabilizer along the roads by the State of Nevada Highway Department sometime during the mid 1900s. In addition, cheatgrass (*Bromus tectorum*) also exists in sparse amounts that are widely scattered in the allotment. Of the two aforementioned species, halogeton is the most prominent and widespread.

The Noxious Weed Risk Assessment consists of two factors; each factor is assessed and given a score. The scores are multiplied together to obtain a Risk Rating.

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

For this project, the factor rates as moderate (4) at the present time. No noxious weeds were found in the grazing area during the allotment inspection of March 8, 2005. Halogeton and cheatgrass are present in or near the project grazing area. Project activity is not likely to result in the establishment of tamarisk or other noxious weed species in the project area, however, project activity could result in the spread and establishment of halogeton or cheatgrass.

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

For this project, the factor rates as moderate (4) at the present time. The likelihood that noxious weeds will

become established in the native plant community is very limited. There are no expected cumulative effects to native plant communities. Minor adverse effects of noxious weeds becoming established are possible. Some expansion of halogeton and/or cheatgrass is possible.

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

For this project, the Risk Rating is moderate (16) at the present time. Preventive management measures for noxious weeds should be developed. These measures (mitigation) are as follows:

1. The project proponent (grazing permittee) will watch for, report, and eradicate any small noxious weed patches in their allotment area.
2. Noxious weeds would be treated by methods to be approved by the Authorized Officer.
3. The 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 Sand Springs Grazing Allotment will include weed detection into project compliance inspection activities.
5. The grazing project area will be monitored for at least three consecutive years following the conclusion of winter grazing.

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

Reviewed by: Dennis A. Sorenson      August 27, 2016  
Noxious Weed Coordinator      Date