

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

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**Proposed Decision**

(DOI-BLM-NV-045-2009-0015-EA)

May 21, 2009

Lewis Wendell Mathews Term Permit Renewal  
on the  
Panaca Cattle and Buckboard Allotments

*Lincoln County, Nevada*

U.S. Department of the Interior  
Bureau of Land Management  
Caliente Field Office  
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# United States Department of the Interior



## BUREAU OF LAND MANAGEMENT

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**MAY 21, 2009**

In Reply Refer to:  
4110 (NVL0300)

## PROPOSED DECISION

Lewis Wendell Mathews Term Permit Renewal  
on the Panaca Cattle and Buckboard Allotments

### Background Information

On May 21, 2009 the Finding of No Significant Impact (FONSI) for the Lewis Wendell Mathews term permit renewal on the Panaca Cattle and Buckboard Allotments was signed. The Environmental Assessment (DOI-BLM-NV-045-2009-0015-EA), Finding of No Significant Impact (FONSI) and Standards Determination Documents are contained herein. This proposed decision is issued in accordance with 43 CFR § 4160.1.

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 proposed action is in conformance with the Ely District Record of Decision and Approved Resource Management Plan dated August 20, 2008. The proposed action is specifically provided for in the following Management Decisions: “LG-1: Make approximately 11,246,900 acres and 545,267 animal unit months available for livestock grazing on a long-term basis. LG-5: Maintain the current preference, season-of-use, and kind of livestock until the allotments that have not been evaluated for meeting or making progress toward meeting the standards or are in conformance with the policies are evaluated. Depending on the results of the standards assessment, maintain or modify grazing preference, seasons-of-use, kind of livestock, and grazing management practices to achieve the standards for rangeland health. Changes, such as improved livestock management, new range improvement projects, and changes in the amount and kinds of forage permanently available for livestock use, can lead to changes in preference, authorized season-of-use, or kind of livestock. Ensure changes continue to meet the RMP goals and objectives, including the standards for rangeland health.”

The proposed action, associated with EA DOI-BLM-NV-045-2009-0015-EA (EA), is to fully process and issue a new term grazing permit to Orren J. Nash (#2705130) on the Lewis Wendell Mathews (#2705055) on the Panaca Cattle (#1053) and Buckboard (#21011) Allotments.

The current Term Grazing Permit for Lewis Wendell Mathews has been issued for the period 3/1/06 – 2/28/2016. The Panaca Cattle and Buckboard Allotments encompass approximately 16,275 and 10,842 acres of BLM managed lands, respectively. The new grazing permit will reflect terms and conditions in accordance with the EA.

Fully processing and renewing the term permit for Lewis Wendell Mathews - to authorize grazing on the Panaca Cattle and Buckboard Allotments - provides for a legitimate multiple use of the public lands. The permit includes terms and conditions for grazing use that conform to Guidelines and will continue to achieve, or make progress toward achieving, the Standards for Nevada's Mojave-Southern Great Basin Area in accordance with all applicable laws, regulations, and policies; and in accordance with Title 43 CFR § 4130.2(a) which states in part, "Grazing permits or leases shall be issued to qualified applicants to authorize use on the public lands and other lands under the administration of the Bureau of Land management that are designated as available for livestock grazing through land use plans". This decision specifically identifies management actions and terms and conditions to be appropriate to achieve management and resource condition objectives. The proposed actions that were developed under this proposed decision 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 Panaca Cattle and Buckboard Allotments by a BLM interdisciplinary team consisting of rangeland management specialists, wildlife biologist, weeds specialist, and watershed specialist. Publications used in assessing and determining achievement of the Standards include: Ely Record of Decision and Approved Resource Management Plan (RMP); Sampling Vegetation Attributes; National Range and Pasture Handbook published by the Natural Resources Conservation Service (NRCS); Nevada Rangeland Monitoring Handbook; Utilization Studies and Residual Measurements; Nevada Plant List; Major Land Resource Area (MLRA 29) Rangeland Ecological Site Descriptions; Soil Survey of Meadow Valley Area, Nevada and Utah. These documents are available for public review at the Caliente Field Office 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 Office during business hours.

### **Conclusions of the Standards Determination Document**

The results of the findings, regarding the achievement or non-achievement of the Mojave-Southern Great Basin Area Standards for Rangeland Health for the aforementioned allotments are summarized in the following table.

ALLOTMENT	STANDARD	STATUS
Panaca Cattle	1. Soils	Achieved.
	2. Riparian and Wetland Sites Standard	Not Applicable
	3. Habitat and Biota Standard	Not Achieved, not making significant progress towards meeting the Standard. Livestock are <u>NOT</u> a contributing factor to <u>NOT</u> meeting the Standard / Failure to meet the Standard is related to other issues or conditions.
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Buckboard	1. Soils	<u>North-Half of the Allotment</u> Achieved.  <u>South-Half of the Allotment</u> Not Achieved, not making significant progress towards meeting the Standard. Livestock are <u>NOT</u> a contributing factor to <u>NOT</u> meeting the Standard / Failure to meet the Standard is related to other issues or conditions.
	2. Riparian and Wetland Sites Standard	Not Applicable
	3. Habitat and Biota Standard	Not Achieved, not making significant progress towards meeting the Standard. Livestock are <u>NOT</u> a contributing factor to <u>NOT</u> meeting the Standard / Failure to meet the Standard is related to other issues or conditions.

The data indicate that grazing is in conformance with all applicable Guidelines. As a result, no changes in the Terms and Conditions, related directly to grazing management, have been identified.

### Consultation and Coordination

The project proposal was posted on the Ely Field Office web site, December 29, 2008, at [http://www.blm.gov/nv/st/en/fo/ely\\_field\\_office.html](http://www.blm.gov/nv/st/en/fo/ely_field_office.html) and no comments were received.

A hard copy of the Preliminary EA was mailed to those interested publics who - for the 2009 calendar year - had requested it and who had expressed an interest in range management actions on the Panaca Cattle and Buckboard Allotments. Comments were received from Western Watersheds Project and the Nevada Department of Wildlife – Southern Region. Changes to the Preliminary EA were made as appropriate and were based upon relevant public input.

## LIVESTOCK MANAGEMENT DECISION

In accordance with 43 CFR §§ 4110.3 permitted use for Lewis Wendell Mathews Term Permit Renewal on the Panaca Cattle and Buckboard Allotments will remain unchanged according to the following:

ALLOTMENT		LIVESTOCK		GRAZING PERIOD		** % Public Land	Permitted Use	AUMs	
Name	Number	* Number	Kind	Begin	End			Hist. Susp. Use	Total Use
Panaca Cattle	1053	14	C	3/01	2/28	100	163	85	248
Buckboard	21011	22	C	3/01	2/28	100	263	88	351

\* These numbers are approximate

\*\* This is for billing purposes only

The renewal of the term grazing permit will be for a period of up to 10 years. This decision will be effective upon the decision becoming final or pending final determination on appeal. If an associated base property is transferred during this ten year period - with no changes to the terms and conditions of the permit - the new term permit would be issued for the remaining period of the term permit. If a term permit is renewed during this ten year period - with no changes to the terms and conditions - the new term permit would be issued for the remaining period of the term permit.

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

In accordance with 43 CFR §§ 4130.3, 4130.3-1 and 4130.3-2, the following will be included as terms and conditions in the term grazing permit for Lewis Wendell Mathews on the Panaca Cattle and Buckboard Allotments.

### **Standard Operating Terms and Conditions (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 great basin area standards and guidelines for grazing administration. The Standards and Guidelines have been developed by the respective Resource Advisory Council and approved by the Secretary Of The Interior on February 12, 1997. Grazing use will also be in accordance with 43 CFR Subpart 4180 - Fundamentals of Rangeland Health and Standards and Guidelines for Grazing Administration.
7. If future monitoring data indicates that Standards and Guidelines for Grazing Administration are not being met, the permit will be re-issued subject to revised terms and conditions.
8. The permittee must notify the authorized officer by telephone, with written confirmation, immediately upon discovery of any hazardous or solid wastes as defined in 40 CFR Part 261.
9. The permittee is responsible for all maintenance of assigned range improvements including wildlife escape ramps for both permanent and temporary water troughs.
10. When necessary, control or restrict the timing of livestock movement to minimize the transport of livestock-borne noxious weed seeds, roots, or rhizomes between weed-infested and weed-free areas.

The following Best Management Practices will also be included, as Other Terms and Conditions, in the term grazing permit for the Lewis Wendell Mathews on the Panaca Cattle and Buckboard Allotments. Utilization objectives (allowable use levels or AULs), which are a quantification of the land use plan objectives, will be included as part of these Other Terms and Conditions.

### **Other Terms and Conditions**

1. Allowable Use Levels on current year's growth of upland vegetation (grasses, forbs and shrubs) within the Panaca Cattle and Buckboard Allotments – during the authorized grazing use period – will not exceed 45%.

2. Livestock will either be moved to another authorized pasture or removed from the allotment, whichever is applicable, before utilization objectives are met; or no later than 5 days after meeting the utilization objectives. Any deviation in livestock movement will require authorization from the authorized officer.
3. Salt and/or mineral supplements for livestock will be located no closer than 3/4 mile from existing water sources.
4. Water troughs
  - Place troughs connected with spring developments outside of riparian and wetland habitats to reduce livestock trampling damage to wet areas.
  - Control trough overflow at springs with float valves or deliver the overflow back into the native channel.

In relation to grazing, there would be no additional terms and conditions needed for management practices to conform to guidelines and achieve standards.

**Rationale:**

A Summary of the Assessment of the Mojave-Southern Great Basin Area Standards for the Panaca Cattle and Buckboard Allotments is displayed in Table 1.1-1 of the Environmental Assessment.

On the Panaca Cattle Allotment, Standard 3 is not being achieved. However livestock are not a contributing factor. Grazing has not occurred on the allotment since 2001. In addition, only 37% of the combined permitted use (of both permittees) on the allotment was licensed during each of the years 1999 and 2000.

On the Buckboard Allotment, the south-half is not achieving Standard 1. There is a heavy encroachment of large pinyon and juniper trees. As a result, the understory has diminished greatly. Black sagebrush appears to be dying-off, as a result, as indicated by abundance remaining plant skeletons in the area. Consequently, the understory vegetation is not appropriate for the site, because it is lacking the main grass species – Indian ricegrass and Thurber’s needlegrass (*Achnatherum thurberianum*) – listed in the Rangeland Ecological Site Description, while the main shrub species listed in the Range Site Description is lacking in quantity. Because the allotment has not been grazed since the end of the 2000 Grazing Year, failing to achieve Standard 1 is not due to livestock grazing. Professional observations indicate that it is due to pinyon/juniper encroachment.

The entire Buckboard Allotment is not achieving Standard 3. Here too, because of the lack of livestock grazing since the end of the 2000 Grazing Year it is not reasonable to assume that livestock is a causal factor in the lack of achievement of this Standard.

**AUTHORITY:** The authority for this decision is contained in Title 43 of the Code of Federal Regulations (2004), which states in pertinent part(s):

§ 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.”

§ 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.”



§ 4160.1 Proposed Decisions

- (a) “Proposed decisions shall be served on any affected applicant, permittee or lessee, and any agent and lien holder of record, who is affected by the proposed actions, terms or conditions, or modifications relating to applications, permits and agreements (including range improvement permits) or leases, by certified mail or personal delivery. Copies of proposed decisions shall also be sent to the interested public.
- (b) Proposed decisions shall state the reasons for the action and shall reference the pertinent terms, conditions and the provisions of applicable regulations. As appropriate, decisions shall state the alleged violations of specific terms and conditions and provisions of these regulations alleged to have been violated, and shall state the amount due under §§ 4130.8 and 4150.3 and the action to be taken under § 4170.1.
- (c) The authorized officer may elect not to issue a proposed decision prior to a final decision where the authorized officer has made a determination in accordance with § 4110.3-3(b) or § 4150.2(d).”

§ 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.

## **Protest and Appeal**

### **Protest**

In accordance with 43 CFR § 4160.2, any applicant, permittee, lessee or other interested public may protest the proposed decision under § 4160.1 of this title, in person or in writing within 15 days after receipt of such decision to:

Victoria Barr  
Field Manager  
Caliente Field Office  
1400 S. Front Street  
Box 237  
Caliente, NV 89008

The protest, if filed, must clearly and concisely state the reason(s) why the protestant thinks the proposed decision is in error.

In accordance with 43 CFR § 4160.3 (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.

In accordance with 43 CFR § 4160.3 (b), should a timely protest be filed with the authorized officer, the authorized officer will reconsider the proposed decision and shall serve the final decision on the protestant and the interested public.

### **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:

Victoria Barr  
Field Manager  
Caliente Field Office  
1400 S. Front Street  
Box 237  
Caliente, NV 89008

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,

**/s/ Victoria Barr**

Victoria Barr  
Field Manager  
Caliente Field Office

Enclosures

# FINDING OF NO SIGNIFICANT IMPACT

Lewis Wendell Mathews Term Permit Renewal  
Panaca Cattle and Buckboard Allotments

DOI-BLM-NV-045-2009-0015-EA

I have reviewed Environmental Assessment (EA) (DOI-BLM-NV-045-2009-0015-EA). 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 DOI-BLM-NV-045-2009-0015-EA has been reviewed through the interdisciplinary team process.

I have determined the proposed action is in conformance with the Ely District Record of Decision and Approved Resource Management Plan (RMP) signed August 20, 2008. 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 Panaca Cattle and Buckboard Allotments are land based allotments which are located within Lincoln County in the central portion of the Ely District BLM, approximately 15 miles north of Caliente, Nevada. The Panaca Cattle and Buckboard Allotments encompass approximately 16,275 and 10,842 acres of BLM managed lands, respectively. The Panaca Cattle and Buckboard Allotments are not located within any Wild Horse Herd Management Areas (HMA). There is no desert tortoise habitat within any of the allotments.

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 park lands, wetlands, wild and scenic rivers or ecologically critical areas (ACECs) within the area of analysis. A small amount of Prime and unique farmland is found only in the extreme northwest corner, contiguous to private lands, in the Panaca Cattle Allotment. Livestock grazing will not impact prime farmlands, because it will not change soil characteristics that affect farmland status.

No effects to unique characteristics of the geographic area such as proximity to historic or cultural resources were identified. No historic properties are located in any of the allotments.

**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 Ely District Record of Decision and Approved RMP. Public input was solicited for the proposed action. Comments were received, and considered, from Western Watersheds and the Nevada Department of Wildlife – Southern Region regarding 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.***

Based on detailed analysis, this proposal will not adversely affect districts, sites, highways, structures, or other objects listed or eligible for listing. Nor will the proposed project cause 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/ Victoria Barr**

Victoria Barr  
Field Manager  
Caliente Field Office

**5/21/09**

Date

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

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**Final Environmental Assessment**

**DOI-BLM-NV-045-2009-0015-EA**

**May 1, 2009**

Grazing Permit Renewal for Orren J. Nash on the McGuffy, Roadside, White Hills  
and Panaca Cattle Allotments,

and

Lewis Wendell Mathews on the Panaca and Buckboard Allotments

*Lincoln County, Nevada*

U.S. Department of the Interior  
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## **1.0 Introduction: Need for Action**

This document identifies issues, analyzes alternatives, and discloses the potential environmental impacts associated with the proposed term grazing permit renewals for Orren J. Nash on the McGuffy (#1043), Panaca Cattle (#1053), Roadside (#1061), White Hills (#1082) Allotments; and Lewis Wendell Mathews on the Panaca Cattle and Buckboard (#21011) Allotments.

These land based allotments are located within Lincoln County in the central portion of the Ely District BLM, approximately 15 miles north of Caliente, Nevada (Appendix I, Map #1).

The McGuffy, Panaca Cattle, Roadside and White Hills and Buckboard Allotments encompass approximately 22,115, 16,275, 1,123, 2,755 and 10,842 acres, respectively. The Panaca Cattle, Roadside and White Hills Allotments are located within the Panaca Valley Watershed (#210), while McGuffy Allotment is located in the Escalante Desert Watershed (#208). The extreme south portion of the Buckboard Allotment is located within the Clover Creek North Watershed (#212 N), while the remaining north portion is located within the Panaca Valley Watershed (#210).

The legal locations of the allotments are as follows:

### McGuffy Allotment

T.1 S., R.70 E., MDBM, many sections  
T.2 S., R.70 E., MDBM, many sections  
T.2 S., R.71 E., MDBM, many sections

### White Hills and Roadside Allotments

T.2 S., R.68 E., MDBM, many sections

### Panaca Cattle Allotment

T.2 S., R.67 E., MDBM, many sections  
T.2 S., R.68 E., MDBM, many sections  
T.3 S., R.68 E., MDBM, many sections

### Buckboard Allotment

T.2 S., R.68 E., MDBM, many sections  
T.3 S., R.68 E., MDBM, many sections  
T.3 S., R.69 E., MDBM, many sections

## **1.0.1 Background**

Current management practices are a reflection of Best Management Practices (BMPs) as coordinated between the permittees and the appropriate Range Management Specialist.



## 1.1 Introduction of the Proposed Action.

The BLM proposes to fully process and issue new term grazing permits for Orren J. Nash (#2705126) and Lewis Wendell Mathews (#2705055). The permits would authorize livestock grazing for Mr. Nash on the McGuffy, Roadside, White Hills and Panaca Cattle Allotments; and Mr. Mathews on the Panaca Cattle and Buckboard Allotments.

Changes are recommended which would establish Allowable Use Levels (AULs) within all five allotments. 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. These AULs would assist in achieving or maintaining the upland and riparian Standards.

Monitoring data were collected and analyzed and an assessment of the rangeland health for all allotments was completed in 2008 – 2009, during the permit renewal process, through a Standards Determination Document (SDD) (**Appendix II**).

A summary of this information follows:

**Table 2.1-1. Summary of Assessment of the Mojave-Southern Great Basin Area Standards for the McGuffy, Roadside, White Hills, Panaca Cattle and Buckboard Allotments.**

ALLOTMENT	STANDARD	STATUS
McGuffy	1. Soils	<p><u>East-Half of the Allotment and the Two-Kiln Burn.</u> <b>Achieved.</b></p> <p><u>West-Half of the Allotment, Excluding the Two-Kiln Burn</u> <b>Not Achieved</b>, not making significant progress towards meeting the Standard.</p> <p>Livestock are <u>NOT</u> a contributing factor to <u>NOT</u> meeting the Standard / Failure to meet the Standard is related to other issues or conditions.</p>
	2. Riparian and Wetland Sites Standard	<p><u>Marchell and Summit Springs</u> <b>Achieved.</b></p> <p><u>Kiln Springs</u> Unusual circumstance – Vandalism of Exclosure Fence - see Standard Determination Document. <b>Not Achieved</b>, but making significant progress towards meeting the Standard. Livestock <u>ARE</u> a contributing factor to <u>NOT</u> meeting the Standard. Grazing is in conformance with the Guidelines.</p>
	3. Habitat and Biota Standard	<p><u>East-Half of the Allotment</u> <b>Achieved.</b></p> <p><u>West-Half of the Allotment</u> <b>Not Achieved</b>, not making significant progress towards meeting the Standard.</p> <p>Livestock are <u>NOT</u> a contributing factor to <u>NOT</u> meeting the Standard</p>

		/ Failure to meet the Standard is related to other issues or conditions.
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<b>Roadside and White Hills</b>	<b>1. Soils</b>	<b>Achieved.</b>
	<b>2. Riparian and Wetland Sites Standard</b>	<b>Not Applicable.</b>
	<b>3. Habitat and Biota Standard</b>	<b>Achieved.</b>
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<b>Panaca Cattle</b>	<b>1. Soils</b>	<b>Achieved.</b>
	<b>2. Riparian and Wetland Sites Standard</b>	Not Applicable
	<b>3. Habitat and Biota Standard</b>	<b>Not Achieved</b> , not making significant progress towards meeting the Standard. Livestock are <u>NOT</u> a contributing factor to <u>NOT</u> meeting the Standard / Failure to meet the Standard is related to other issues or conditions.
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<b>Buckboard</b>	<b>1. Soils</b>	<u>North-Half of the Allotment</u> <b>Achieved.</b>
		<u>South-Half of the Allotment</u> <b>Not Achieved</b> , not making significant progress towards meeting the Standard. Livestock are <u>NOT</u> a contributing factor to <u>NOT</u> meeting the Standard / Failure to meet the Standard is related to other issues or conditions.
	<b>2. Riparian and Wetland Sites Standard</b>	Not Applicable
	<b>3. Habitat and Biota Standard</b>	<b>Not Achieved</b> , not making significant progress towards meeting the Standard. Livestock are <u>NOT</u> a contributing factor to <u>NOT</u> meeting the Standard / Failure to meet the Standard is related to other issues or conditions.

## 1.2 Need for the Proposed Action.

The need for the proposal is to provide for legitimate multiple uses of the public lands by renewing the term grazing permits for Orren J. Nash and Lewis Wendell Mathews with new terms and conditions for grazing use that continue to conform to guidelines and achieve standards for Nevada’s Mojave-Southern Great Basin in accordance with all applicable laws, regulations, and policies; and in accordance with Title 43 CFR 4130.2(a) which states, “Grazing permits or leases authorize use on the public lands and other BLM-administered lands that are designated in land use plans as available for livestock grazing.”

### **1.3 Objectives for the Proposed Action.**

**1.3.1.** To renew the grazing term permits for Orren J. Nash and Lewis Wendell Mathews and authorize grazing in accordance with applicable laws, regulations, and land use plans (LUP) on approximately 53,110 acres of public land.

**1.3.2.** To improve vegetative health and growth conditions on the allotments and continue to meet or make progress towards achieving the Standards and Guidelines for rangeland health as approved and published by Mojave-Southern Great Basin RAC.

### **1.4 Relationship to Planning**

The proposed action is in conformance with the Ely District Record of Decision and Approved Resource Management Plan signed August 20, 2008, which states, “Manage livestock grazing on public lands to provide for a level of livestock grazing consistent with multiple use, sustained yield, and watershed function and health.” In addition, “To allow livestock grazing to occur in a manner and at levels consistent with multiple use, sustained yield, and the standards for rangeland health (p. 85-86).”

Management Action LG-1 states, “Make approximately 11,246,900 acres and 545,267 animal unit months available for livestock grazing on a long-term basis.”

Management Action LG-5 states, “Maintain the current grazing preference, season-of-use, and kind of livestock until the allotments that have not been evaluated for meeting or making progress toward meeting the standards or are in conformance with the policies are evaluated. Depending on the results of the standards assessment, maintain or modify grazing preference, seasons-of-use, kind of livestock and grazing management practices to achieve the standards for rangeland health. Changes, such as improved livestock management, new range improvement projects, and changes in the amount and kinds of forage permanently available for livestock use, can lead to changes in preference, authorized season-of-use, or kind of livestock. Ensure changes continue to meet the RMP goals and objectives, including the standards for rangeland health.”

#### **1.4.1 Relationship to Other Plans**

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

- State Protocol Agreement between the Bureau of Land Management (BLM), Nevada and the Nevada State Historic Preservation Office (1999).
- Mojave-Southern Great Basin Resource Advisory Council (RAC) Standards and Guidelines (12 February 1997).
- Lincoln County Elk Management Plan (approved July, 1999) – Revised 2006
- Endangered Species Act – 1973.
- Wilderness Act – 1964.
- Migratory Bird Treaty Act (1918 as amended) and Executive Order 13186 (1/11/01).

## **1.4.2 Tiering**

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

## **1.5 Relevant Issues and Internal Scoping/Public Scoping.**

On November 14, 2008, the permittees associated with the , Panaca Cattle, Roadside and White Hills and Buckboard Allotments – Orren Nash and Lewis Mathews – were sent letters informing them of the proposed term permit renewal process scheduled for their respective allotments during 2009. No comments were received.

On November 19, 2008, a letter was sent to local Indian tribes requesting comments, regarding these permit renewal proposals, by December 22, 2008. No comments were received.

The Ely District Office mails an annual Consultation, Cooperation, and Coordination (CCC) Letter to individuals and organizations who have expressed an interest in rangeland management related actions. Those receiving the annual CCC Letter have the opportunity to request, from the District Office, more information regarding specific actions.

On November 20, 2008, the Ely BLM annual CCC letter was mailed which notified interested publics of the livestock grazing term permit renewals scheduled for 2009. No public scoping comments were received related to the 2009 scheduled permit renewals associated with the McGuffy, Panaca Cattle, Roadside and White Hills and Buckboard Allotments at this time.

However, the following individuals and organizations who were sent the annual CCC letter on November 20, 2008 have requested additional information regarding rangeland related actions within the aforementioned allotments:

Nevada State Clearinghouse (electronic copy only)  
Western Watersheds Project, Katie Fite  
Steven Carter  
Sustainable Grazing Coalition, Richard Orr  
Eastern Nevada Landscape Coalition, Betsy Macfarlan  
Craig C. Downer  
Raymond Thompson, DBA 100 Ranch  
Linda Carriger, Tuffy Ranch Properties  
Assistant Field Supervisor USFS, NFO

On December 29, 2008, the proposals to fully process the term permits were posted on the Ely BLM internet site ([http://www.blm.gov/nv/st/en/fo/ely\\_field\\_office.html](http://www.blm.gov/nv/st/en/fo/ely_field_office.html)). Comments were received from Western Watersheds Project.

On January 13, 2009, in an internal meeting held in coordination between the Caliente Field Office the Ely BLM District Office, the Orren Nash and Lewis Mathews term permit renewal proposals were presented and scoped by resource specialists to identify any relevant issues. Potential issues identified were related to Noxious Weeds.

A hard copy of the Preliminary EA was mailed to those interested publics who - for the 2009 calendar year - had requested it and who had expressed an interest in range management actions on the McGuffy, Panaca Cattle, Roadside and White Hills and Buckboard Allotments. Comments were received from Western Watersheds Project and the Nevada Department of Wildlife – Southern Region. Changes to the Preliminary EA were made as appropriate and were based upon relevant public input.

## **2.0 Alternatives Including the Proposed Action**

### **2.1 Proposed Action**

The Bureau of Land Management (BLM) Caliente Field Office proposes to fully process and issue a new term grazing permit for both, Orren J. Nash (#2705126) to authorize grazing on the McGuffy, Panaca Cattle, Roadside and White Hills Allotments; and Lewis Wendell Mathews (#2705055) to authorize grazing on the Panaca Cattle and Buckboard Allotments.

The Proposed Action would also establish BMPs - such as Allowable Use Levels (AULs) - within the within all five allotments. This would aid in either continuing to achieve or maintaining achievement of both, the upland and riparian (where applicable) Mojave-Southern Great Basin Standards.

Such changes would also aid in allowing plants to develop above ground biomass for protection of soils; contribute to litter cover; and continue to develop root masses which would lend itself to improved carbohydrate storage for vigor, reproduction, and desirable perennial cover for soil protection and wildlife.

Other BMPs would also be incorporated into both permits. No other changes to the permits would be made.

#### **2.1.1 Current Permit**

The current Term Grazing Permit for the Orren J. Nash has been issued for the period 3/1/05 – 2/28/2015. The current Term Grazing Permit for Lewis Wendell Mathews has been issued for the period 3/1/06 – 2/28/2016. Tables 2 and 3, below, display the current term grazing permits for Orren Nash and Lewis Mathews, respectively:

**Table 2.** Current Term Grazing Permit for Orren J. Nash (#2705126) on the McGuffy, Panaca Cattle, Roadside and White Hills Allotments.

ALLOTMENT		LIVESTOCK		GRAZING PERIOD		** % Public Land	Permitted Use	AUMs	
Name	Number	* Number	Kind	Begin	End			Hist. Susp. Use	Total Use
McGuffy	1043	25	C	3/01	2/28	100	298	2,010	2,308
Panaca Cattle	1053	25	C	3/01	2/28	100	290	153	443
Roadside	1061	11	C	12/01	2/28	100	32	54	86
White Hills	1082	34	C	12/01	2/28	100	101	96	197

\* These numbers are approximate

\*\* This is for billing purposes only.

**Table 3.** Current Term Grazing Permit for Lewis Wendell Mathews (#2705055) to authorize grazing on the Panaca Cattle and Buckboard Allotments

ALLOTMENT		LIVESTOCK		GRAZING PERIOD		** % Public Land	Permitted Use	AUMs	
Name	Number	* Number	Kind	Begin	End			Hist. Susp. Use	Total Use
Panaca Cattle	1053	14	C	3/01	2/28	100	163	85	248
Buckboard	21011	22	C	3/01	2/28	100	263	88	351

\* These numbers are approximate

\*\* This is for billing purposes only

### 2.1.2 Proposed Term Permit

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

The new term permit would include the current terms and conditions directed toward the achievement of the Standards and Guidelines for Grazing Administration, and the other pertinent land use objectives for livestock use (Appendix III). There are no proposed changes to these particular terms and conditions of the permit.

However, the following BMPs would be included as Other Terms and Conditions in the term grazing permits, for both permittees, as indicated. Utilization objectives for all allotments are quantified in these BMPs.

## Best Management Practices

The following Best Management Practices would be added to the Term Grazing Permits for both Orren J. Nash and Lewis Wendell Mathews as indicated:

Orren J. Nash:

1. Allowable Use Levels on current year's growth of upland vegetation (grasses, forbs and shrubs) within the McGuffy, Roadside, White Hills and Panaca Cattle Allotments - during the authorized grazing use period - will not exceed 45%

Lewis Wendell Mathews:

1. Allowable Use Levels on current year's growth of upland vegetation (grasses, forbs and shrubs) within the Panaca Cattle and Buckboard Allotments – during the authorized grazing use period – will not exceed 45%

Orren J. Nash and Lewis Wendell Mathews:

1. Livestock will either be moved to another authorized pasture or removed from the allotment, whichever is applicable, before utilization objectives are met; or no later than 5 days after meeting the utilization objectives. Any deviation in livestock movement will require authorization from the authorized officer.
2. Salt and/or mineral supplements for livestock will be located no closer than 3/4 mile from existing water sources.
3. Water troughs
  - Place troughs connected with spring developments outside of riparian and wetland habitats to reduce livestock trampling damage to wet areas.
  - Control trough overflow at springs with float valves or deliver the overflow back into the native channel.

In relation to grazing, there would be no additional terms and conditions needed for management practices to conform to guidelines to either make progress toward or maintain achievement of the standards.

However, the following Term and Condition, which will allow better livestock control by the permittee, will be added to the Term Grazing Permit for Orren Nash:

1. At the discretion of the BLM, ear tags will be used for all livestock grazed on BLM administered allotments, on which the permittee is authorized to graze, in accordance with the ear tag issuance procedures established on the Ely BLM District.

Only cattle bearing BLM issued ear tags will be authorized to graze on an allotment. Any cattle owned or controlled by the permittee and found on the allotment without BLM issued ear tags will be deemed in excess of the authorized numbers and a violation of 43 CFR 4140.1(b)(1)(ii).

Ear tagging of livestock will be required for each animal six (6) months of age or older at the time of entering public lands; for all weaned animals regardless of age; and for all animals which become six (6) months of age during the authorized period-of-use.

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

Weed Risk Assessments (Appendix IV) were completed on December 8, 2008 for the Orren J. Nash and Lewis Wendell Mathews term grazing permit renewals. The following stipulations listed in the Weed Risk Assessments would be followed when grazing occurs on the allotment to minimize the effects on weeds:

- Prior to entering public lands, the BLM will provide information regarding noxious weed management and identification to the permit holders affiliated with the project. The importance of preventing the spread of weeds to uninfested areas and importance of controlling existing populations of weeds will be explained.
- The range specialist for the allotments will include weed detection into project compliance inspection activities. If the spread of noxious weeds is noted, appropriate weed control procedures will be determined in consultation with BLM personnel and will be in compliance with the appropriate BLM handbook sections and applicable laws and regulations.
- To eliminate the introduction of noxious weed seeds, roots, or rhizomes all interim and final seed mixes, hay, straw, hay/straw, or other organic products used for feed or bedding will be certified free of plant species listed on the Nevada noxious weed list or specifically identified by the BLM Ely Field Office.
- 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.
- Any newly established populations of noxious/invasive weeds discovered will be communicated to the Ely District Noxious and Invasive Weeds Coordinator for treatment.

### **2.1.4 Monitoring**

The Ely District Approved Resource Management Plan (August 2008) identifies monitoring to include, "Monitoring to assess rangeland health standards will include records of actual livestock use, measurements of forage utilization, ecological site inventory data, cover data, soil mapping, and allotment evaluations or rangeland health assessments. Conditions and trends of resources



affected by livestock grazing will be monitored to support periodic analysis/evaluation, site-specific adjustments of livestock management actions, and term permit renewals” (pg. 88).

## **2.2 No Action Alternative**

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

## **2.3 Alternatives Considered but Eliminated from Further Analysis**

The Ely Proposed Resource Management Plan/Final Environmental Impact Statement (November, 2007) analyzes five alternatives of livestock grazing (p.4.16-1 to 4.16-15.), including a no-grazing alternative (D). No further analysis is necessary in this document.

- The Proposed RMP
- Alternative A, The Continuation of Current Existing (No Action alternative)
- Alternative B, the maintenance and restoration of healthy ecological systems
- Alternative C, commodity production
- Alternative D, conservation alternative (no-grazing alternative)

## **3.0 Description of the Affected Environment and Associated Environmental Consequences**

### **3.1 Allotment Information**

The McGuffy, Panaca Cattle, Roadside and White Hills and Buckboard Allotments are land based allotments which are located within Lincoln County in the central portion of the Ely District BLM, approximately 15 miles north of Caliente, Nevada (Map #1).

The McGuffy, Panaca Cattle, Roadside and White Hills and Buckboard Allotments encompass approximately 22,115, 16,275, 1,123, 2,755 and 10,842 acres, respectively. The Panaca Cattle, Roadside and White Hills Allotments are located within the Panaca Valley Watershed (#210), while McGuffy Allotment is located in the Escalante Desert Watershed (#208). The extreme south portion of the Buckboard Allotment is located within the Clover Creek North Watershed (#212 N), while the remaining north portion is located within the Panaca Valley Watershed (#210). The Panaca Cattle, Roadside and White Hills Allotments are not located within any Wild Horse Herd Management Areas (HMA). However, the McGuffy Allotment is located within the Eagle Wild Horse Herd Management Area. There is no desert tortoise habitat within any of the allotments.

### **3.2 Resources/Concerns Considered for Analysis - Proposed Action**

The following items have been evaluated for the potential for significant impacts to occur, either directly, indirectly, or cumulatively, due to implementation of the proposed action.

Consideration of some of these items is to ensure compliance with laws, statutes or Executive

Orders that impose certain requirements upon all Federal actions. Other items are relevant to the management of public lands in general and to the Ely BLM in particular.

Resource/Concern Considered	Issue(s) Analyzed	Rationale for Dismissal from Analysis or Issue(s) Requiring Detailed Analysis
Air Quality	No	Air quality in the affected area is generally good except for occasional dust storms. The proposed action would contribute to ambient dust in the air due to trailing, but the impact would be temporary and would not approach a level that would exceed any air quality standards. Detailed analysis is not required.
Cultural Resources	No	<p>According to the Ely District Approved Resource Management Plan, August 2008, (RMP) it is the goal of the Ely District to identify, preserve, and protect significant cultural resources and ensure that they are available for appropriate uses by present and future generations. They are to protect and maintain these cultural resources on BLM-administered land in stable condition. To accomplish this they are to seek to reduce imminent threats and resolve potential conflicts from natural or human-caused deterioration or potential conflict with other resource uses by ensuring that all authorizations for land use and resource use will comply with the National Historic Preservation Act, Section 106. In accordance with this act, "any material remains of past human life or activities which are of archaeological interest" shall be assessed and secured "for the present and future benefits of the American People". Therefore, all ground disturbing activities related to livestock grazing (such as fence construction, road construction, water developments, etc.) within the allotment(s) covered by this Term Permit will be subject to Section 106 review and, if needed, SHPO consultation as per BLM Nevada's implementation of the Protocol for cultural resources.</p> <p>Livestock grazing has been an historic use of federal lands, now managed by the Caliente Field Office, since the mid-19th century. The extent of effects from livestock grazing on archeological sites is difficult to determine, since extensive livestock grazing has occurred in this region for over 150 years. Though, it is likely that the majority of the livestock-related impacts on cultural resources occurred prior to the passage of the Taylor Grazing Act in 1934.</p> <p>The BLM conducts field investigations and maintains files of archeological sites on public lands. Analyses of existing documentation indicates that concentrated livestock activities near water sources, along fences, and in areas where livestock seek shelter, could adversely affect cultural resources.</p> <p>The cultural staff will identify cultural properties being impacted by grazing activities to be monitored in order to determine condition, impacts, deterioration, and use of these properties. Site monitoring is conducted by BLM archeologists, law enforcement rangers, and trained site stewards, to identify impacts and evaluate site conditions. As necessary, strategies are developed and implemented in order to reduce threats and resolve conflicts to the property.</p>
Paleontological Resources	No	No currently identified paleontological resources are present in the project area.
Native American Religious Concerns and other concerns	No	<p>Tribal Coordination Letters were sent our November 19, 2008 for the term permit renewals for Orren J. Nash and Lewis Wendell Mathews notifying the tribes of a 30 day comment period. No concerns were identified.</p> <p>Direct impacts and cumulative impacts would not occur because there were no identified concerns through coordination.</p>
Noxious and Invasive Weed Management	Yes	Addition of Best Management Practices in the permits would result in changes in the impacts to noxious and invasive weeds.
Vegetative Resources	No	Impacts from livestock grazing on Vegetation Resources were analyzed on page

Resource/Concern Considered	Issue(s) Analyzed	Rationale for Dismissal from Analysis or Issue(s) Requiring Detailed Analysis
		4.5-9 in the Ely Proposed Resource Management Plan/Environmental Impact Statement (November 2007). Beneficial impacts to vegetative resources are consistent with the need and objectives for the proposed action. No further analysis is needed.
Rangeland Standards and Health	No	Impacts from livestock grazing on Rangeland Standards and Health are analyzed on pages 4.16-3 through 4.16-4 of the Ely Proposed Resource Management Plan/Environmental Impact Statement (November 2007). Beneficial impacts to rangeland standards and health are consistent with the need and objectives for the proposed action. An assessment and evaluation of livestock grazing managements achievement of the standards and conformance to the guidelines (Standards Determination Document) was completed in conjunction with this project (Appendix II). No further analysis is needed.
Forest Health <sup>1</sup>	No	Pinyon-juniper woodlands, which lack appreciable forage in the understory, are found within the Buckboard Allotment. However, given the location of the woodlands with respect to available watering locations and non-palatability of such trees to livestock, the impact of grazing in the woodlands is cumulatively negligible.
Wastes, Hazardous or Solid	No	No hazardous or solid wastes exist on the permit renewal area, nor would any be introduced by the proposed action.
Wilderness	No	None of the Allotments are located within a Wilderness Area.
Special Designations other than Designated Wilderness	No	No Special Designations occur within the project area.
Wetlands/Riparian Zones	No	Impacts from livestock grazing on riparian areas are analyzed on page 4.3-5 of the Ely Proposed Resource management Plan/Final Environmental Impact Statement (November 2007).  There are three natural springs located within the McGuffey Allotment: Kiln Spring, Marchell Spring and Summit Spring. Fence exclosures have been constructed around all three. Keel and Buckboard Springs are found within the Buckboard Allotment and have no riparian areas associated with them. There are no natural riparian areas found within the Panaca Cattle, Roadside and White Hills Allotments.
Water Quality, Drinking/Ground	No	Impacts from livestock grazing on Water Resources were analyzed on page 4.3-5 in the Ely Proposed Resource Management Plan/Final Environmental Impact Statement (November 2007).  The proposed action does not pose any impact to ground water in the project area. No surface water in the project area is used as human drinking water sources and no impaired water of the State are present in the project area.
Water Resources (Water Rights)	No	The Proposed Action would have no affect on water rights.
Floodplains	No	No floodplains have been identified by HUD or FEMA within the allotment. Floodplains, as defined in Executive Order 11988, may exist in the area, but would not be affected by the proposed action.
Watershed Management	No	Impacts from livestock grazing on Watershed Management are analyzed on page 4.19-8 of the Ely Proposed Resource Management Plan/Final Environmental Impact Statement (November 2007). Further changes to livestock management may be recommended by the watershed analysis process, however no concerns have been identified at this time.
Migratory Birds	No	The migratory bird species that likely occur in or near the project area are listed in Appendix V.

Resource/Concern Considered	Issue(s) Analyzed	Rationale for Dismissal from Analysis or Issue(s) Requiring Detailed Analysis
		<p>Establishment of Best Management Practices, including Allowable Use Levels, on all allotments would aid in either continuing to achieve or in making progress towards achieving the upland and riparian Mojave-Southern Great Basin Standards; thereby, improving habitat condition for all migratory birds of concern.</p> <p>There is potential of livestock trampling of migratory bird nests, however the likelihood of this happening is minimal, because of the low number of livestock grazed during any year. The impacts to migratory bird populations as a whole would be negligible.</p>
U.S. Fish and Wildlife Service (USFWS) Listed or proposed for listing Threatened or Endangered Species or critical habitat.*	No	There are no known Threatened or Endangered Species which are listed or are proposed for listing or critical habitat within the McGuffy, Panaca Cattle, Roadside, White Hills or Buckboard Allotments.
Special Status Plant Species, other than those listed or proposed by the UFWS as Threatened or Endangered	No	<p>The following <u>BLM Sensitive</u> Plant Species are known to occur within the listed allotments:</p> <p><u>McGuffy</u> Long-calyx eggvetch (<i>Astragalus oophorus</i> var. <i>lonchocalyx</i> )</p> <p><u>Road Side</u> Pioche blazingstar (<i>Mentzelia argillicola</i>)</p> <p><u>Panaca Cattle</u> Needles Mountains milkvetch (<i>Astragalus eurylobus</i>)</p> <p><u>Buckboard</u> Needles Mountains milkvetch (<i>Astragalus eurylobus</i>)</p> <p>Only a few isolated locations of these plants exist within any of the allotments on which they're found. The plants are not only located in areas relatively far from water sources, but are located in such secluded areas within each allotment that the likelihood of an encounter with livestock is extremely low.</p>

Resource/Concern Considered	Issue(s) Analyzed	Rationale for Dismissal from Analysis or Issue(s) Requiring Detailed Analysis
Special Status Animal Species, other than those listed or proposed by the UFWS as Threatened or Endangered	No	<p>The following BLM Sensitive Animal Species are known to occur within the listed allotments:</p> <p><u>McGuffy</u>  Lewis' woodpecker (<i>Melanerpes lewis</i>)  Pinyon jay (<i>Gymnorhinus cyanocephalus</i>)  Yellow-breasted chat (<i>Icteria virens</i>)</p> <p><u>Panaca Cattle</u>  Long-billed curlew (<i>Numenius americanus</i>)</p> <p><u>Buckboard</u>  Gray vireo (<i>Vireo vicinior</i>)</p> <p>There is potential of livestock trampling of migratory bird nests, however the likelihood of this happening is minimal, because of the low number of livestock grazed during any year. The impacts to migratory bird populations as a whole would be negligible.</p>
Fish and Wildlife	No	<p>Impacts from livestock grazing on Fish and Wildlife are analyzed on pages 4.6-10 through 4.6-11 in the Ely Proposed Resource Management Plan/Final Environmental Impact Statement (November 2007).</p> <p>The following habitat or species are known to exist within the respective allotments. These data are not comprehensive, and additional species not listed here may be present within the allotment boundary.</p> <p><u>McGuffy Allotment</u>  Pronghorn antelope (<i>Antilocapra americana</i>) - No special status  Elk (<i>Cervus canadensis</i>) - No special status  Mule deer habitat (<i>Odocoileus hemionus</i>) - No special status.</p> <p><u>Panaca Cattle, Road Side, White Hills and Buckboard Allotments</u>  Mule deer habitat (<i>Odocoileus hemionus</i>).</p> <p><u>Panaca Cattle and Buckboard Allotments</u>  Mule deer crucial winter habitat.</p>
Wild Horses	No	<p>The Ely District RMP was completed in August 2008. Since its completion, the Panaca Cattle, Roadside, White Hills and Buckboard Allotments are not considered as being located within any Wild Horse Herd Management Areas (HMA). However, the McGuffy Allotment is located within the newly named Eagle Wild Horse Herd Management Area. Prior to the completion and subsequent signing of the RMP, the Panaca Cattle, Roadside, White Hills and Buckboard Allotments were located within the Little Mountain HMA. Therefore, these allotments received wild horse use and would continue to do so until such time that the wild horses can be removed as directed in the RMP.</p> <p>Impacts from livestock grazing on Wild Horses are analyzed on page 4.8-6 of the Proposed Resource Management Plan/Final Environmental Impact Statement (November 2007). Site specific examination of the allotment did not reveal any concerns above those addressed in the EIS.</p>

<b>Resource/Concern Considered</b>	<b>Issue(s) Analyzed</b>	<b>Rationale for Dismissal from Analysis or Issue(s) Requiring Detailed Analysis</b>
Soil Resources	No	Impacts from livestock grazing on Soil Resources were analyzed on page 4.4-4 in the Ely Proposed resource Management Plan/Final Environmental Impact Statement (November 2007).  Soils were analyzed in the Standard Determination Document. There are no anticipated impacts as a result of the Proposed Action.
Mineral Resources	No	There would be no modifications to mineral resources through the proposed action, therefore, no direct or cumulative impacts would occur to minerals.
VRM	No	The proposed action is consistent with the VRM classifications 2, 3 and 4 for the area; therefore no direct or cumulative impacts to visual resources would occur.
Recreation Uses	No	Design features identified in the proposed action would result in negligible impacts to recreational activities
Grazing Uses	No	The proposed action and the changes to the term grazing permits for Orren J. Nash and Lewis Wendell Mathews would continue to meet the RMP goals and objectives, including maintaining achievement or progressing toward achieving the Standards for Rangeland Health. The proposed action is consistent with the need for the action, so no further analysis is necessary.
Land Uses	No	There would be no modifications to land use authorizations through the proposed action, therefore no impacts would occur. No direct or cumulative impacts would occur to access and land use.
Environmental Justice	No	No environmental justice issues are present at or near the project area. No minority or low income populations would be unduly affected by the proposed action

<sup>1</sup> Healthy Forests Restoration Act projects only

\*Consultation required unless a “not present” or “no effect” finding is made.

The resources/concerns that are not present in the proposed action allotments or are affected negligibly by the proposed action and do not require a detailed analysis include Air Quality, Paleontological Resources; Native American Religious Concerns; Forest Health; Wastes-Hazardous or Solid; Wilderness; Special Designations other than Designated Wilderness; Water Quality-Drinking/Ground; Water Resources (Water Rights); Floodplains; Migratory Birds; FWS Listed or proposed for listing Threatened or Endangered Species or critical habitat; Special Status Plant Species-other than those listed or proposed by the FWS as Threatened or Endangered; Mineral Resources; VRM; Recreation Uses; Grazing Uses; Land Uses and Environmental Justice.

The resources that have impacts from livestock grazing are analyzed in the Ely Proposed Resource Management Plan/Final Environmental Impact Statement (November 2007) and include Cultural Resources (page 4.9-5); Noxious and Invasive Weed Management (page 4.21-5); Vegetation Resources (page 4.5-9); Rangeland Standards and Health (pages 4.16-3 through 4.16-4); Water Resources (Wetlands/Riparian) (page 4.3-5); Watershed Management (page 4.19-8); Special Status Species Animal (page 4.7-28 through 4.7-30); Fish and Wildlife (pages 4.6-10 through 4.6-11); Wild Horses (page 4.8-6); Soil Resources (page 4.4-4). These resources do not require a further detailed analysis.

### 3.2.1 Noxious and Non-native, Invasive Weeds

#### Affected Environment

No field weed surveys were completed for this project. Instead the Ely District weed inventory data was consulted.

#### Orren J. Nash – McGuffy, Roadside, White Hills and Panaca Cattle Allotment

There are currently no documented weed infestations in the Panaca Cattle or White Hills allotments.

The following species is found within the boundaries of both, McGuffy and Roadside allotments:

<i>Onopordum acanthium</i>	Scotch thistle
----------------------------	----------------

The following species are found along roads and drainages leading to all allotments:

<i>Acroptilon repens</i>	Russian knapweed
<i>Ailanthus altissima</i>	Tree of heaven
<i>Carduus nutans</i>	Musk thistle
<i>Cirsium vulgare</i>	Bull thistle
<i>Centaurea stoebe</i>	Spotted knapweed
<i>Conium maculatum</i>	Poison hemlock
<i>Lepidium draba</i>	Hoary cress
<i>Lepidium latifolium</i>	Tall whitetop
<i>Linaria dalmatica</i>	Dalmatian toadflax
<i>Onopordum acanthium</i>	Scotch thistle
<i>Tamarix spp.</i>	Salt cedar

All allotments were last inventoried for noxious weeds in 2003. It should be noted that the McGuffy allotment runs along the boundary with Utah and no weed inventory data for Utah is currently available. While not officially documented the following non-native invasive weeds probably occur in or around both allotments: cheatgrass (*Bromus tectorum*), field bindweed (*Convolvulus arvensis*), Russian olive (*Elaeagnus angustifolia*), horehound (*Marrubium vulgare*), Russian thistle (*Salsola kali*), and puncturevine (*Tribulus terrestris*).

#### Lewis Mathews Permit – Panaca Cattle and Buckboard Allotments

There are currently no documented weed infestations in the Panaca Cattle allotment. The following species is found within the boundaries of the Buckboard allotment:

<i>Tamarix spp.</i>	Salt cedar
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The following species are found along roads and drainages leading to both allotments:

<i>Acroptilon repens</i>	Russian knapweed
<i>Ailanthus altissima</i>	Tree of heaven
<i>Cirsium vulgare</i>	Bull thistle
<i>Centaurea stoebe</i>	Spotted knapweed

<i>Conium maculatum</i>	Poison hemlock
<i>Lepidium draba</i>	Hoary cress
<i>Lepidium latifolium</i>	Tall whitetop
<i>Linaria dalmatica</i>	Dalmatian toadflax
<i>Onopordum acanthium</i>	Scotch thistle
<i>Tamarix spp.</i>	Salt cedar

Both allotments were last inventoried for noxious weeds in 2003. While not officially documented the following non-native invasive weeds probably occur in or around both allotments: cheatgrass (*Bromus tectorum*), field bindweed (*Convolvulus arvensis*), Russian olive (*Elaeagnus angustifolia*), horehound (*Marrubium vulgare*), Russian thistle (*Salsola kali*), and puncturevine (*Tribulus terrestris*).

### **Environmental Consequences**

Noxious and Invasive Weed Risk Assessments were completed for this project (Appendix IV). The proposed action could increase the populations of the noxious and invasive weeds already within the allotments and could aid in the introduction of weeds from surrounding areas. Within the allotments, watering and salt block sites are of particular concern of new weed infestations due to the concentration of livestock around those sites and the amount of ground disturbance associated with that. If new weed infestations become established within the allotments, this could have an adverse impact to those native plant communities however, since there are many weed infestations currently within the allotments, those impacts would be limited. Also, any increase of cheatgrass could alter the fire regime in the area. These impacts would be less than the No-Action Alternative due to the addition of Best Management Practices. This change would limit grazing utilization levels during the grazing season, allowing for more vigorous native plant communities which could better compete against non-native invasive plant invasion.

## **4.0 Cumulative Impacts**

According to page 36 of the 1994 BLM publication *Guidelines for Assessing and Documenting Cumulative Impacts*, the cumulative analysis should be focused on those issues and resource values where the incremental impact of the Proposed Action results in a meaningful change in the cumulative effect from other past, present and reasonably foreseeable future actions within the Cumulative Effects Study Area (CESA). The CESA is defined as the Panaca Valley Watershed (#210), the Escalante Desert Watershed (#208), the Clover Creek North Watershed (#212 N), and the Panaca Valley Watershed (#210).

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

A comprehensive cumulative impacts analysis can be found on pages 4.28-1 through 4.36-1 of the Ely Proposed Resource Management Plan/Final Environmental Impact Statement (November 2007).



Most past and all present and reasonably foreseeable future actions, as identified in the Ely Proposed Resource Management Plan/FEIS, have noxious and invasive weed prevention stipulations and weed treatment requirements associated with each project. This in combination with the active BLM Ely District Weed Management Program would minimize the spread of weeds throughout the watersheds.

The proposed action in conjunction with the past, present and reasonable foreseeable future actions would result in no noticeable overall changes to the affected environment. Grazing under the proposed permit renewal would aid in either making progress toward achievement or maintaining achievement of the rangeland health Standards, with the understanding that adjustments to grazing management would occur when any of the Standards are not being achieved.

No cumulative impacts of concern are anticipated as a result of the proposed action in combination with any other existing or planned activity.

## **5.0 Proposed Mitigation and Monitoring**

### **5.1 Proposed Mitigation**

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

### **5.2 Proposed Monitoring**

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

## **6.0 Consultation and Coordination**

### **6.1 List of Preparers - BLM Resource Specialists**

Domenic A. Bolognani	Rangeland Management Specialist/Project Lead
Chris Mayer	Supervisory Rangeland Management Specialist
Joseph David	Planning and Environmental Coordinator
Bonnie Million	Noxious and Invasive, Non-native Species
Alicia Styles	Wildlife, Special Status Species, Migratory Birds
Chris Linehan	Recreation, Visual Resources
Nick Pay	Cultural Resources
Mark D'Aversa	Soil, Water, Wetlands and Riparian, Floodplains
Benjamin Noyes	Wild Horse and Burro Resources
Elvis Wall	Native American Cultural Concerns
Melanie Peterson	Hazardous & Solid Waste/Safety

## **6.2 Persons, Groups or Agencies Consulted**

Orren J. Nash, Permittee  
Lewis Wendell Mathews, Permittee  
Nevada State Clearinghouse (electronic copy only)  
Western Watersheds Project, Katie Fite  
Steven Carter  
Sustainable Grazing Coalition, Richard Orr  
Eastern Nevada Landscape Coalition, Betsy Macfarlan  
Craig C. Downer  
Raymond Thompson, DBA 100 Ranch  
Linda Carriger, Tuffy Ranch Properties  
Assistant Field Supervisor USFS, NFO

### **Public Notice of Availability**

On November 19, 2008, a letter was sent to local Indian tribes requesting comments, regarding the permit renewal proposals, by December 22, 2008.

On November 20, 2008, the Ely BLM annual CCC letter was mailed which notified interested publics of the livestock grazing term permit renewals scheduled for 2009; this included the 7J Ranch and the Lyle and Ruth Whiteside term grazing permit renewals.

On December 29, 2008, the proposal to fully process the term permits were posted on the Ely BLM internet site ([http://www.blm.gov/nv/st/en/fo/ely\\_field\\_office.html](http://www.blm.gov/nv/st/en/fo/ely_field_office.html)).

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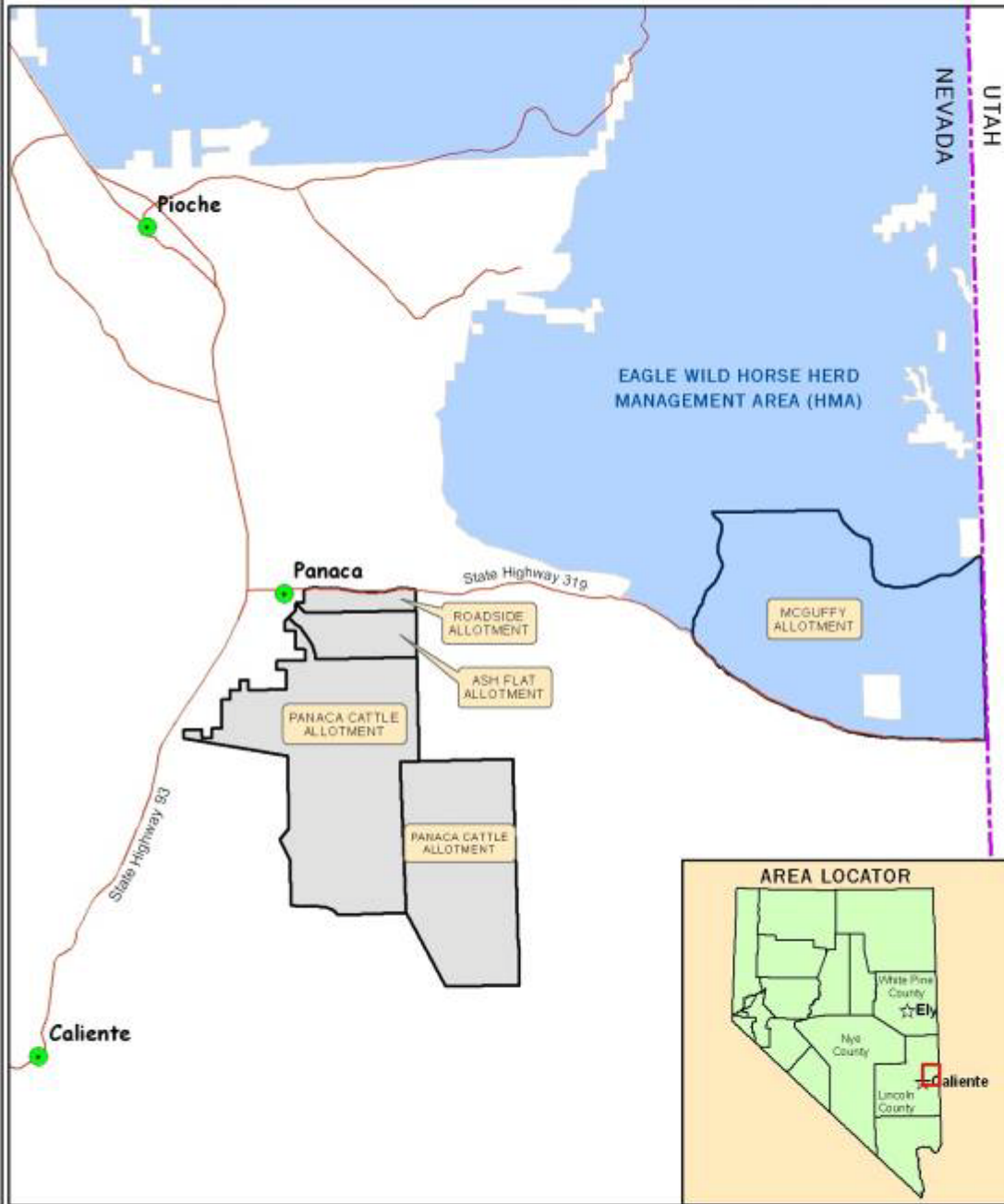
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**APPENDIX I**  
(EA)

MAP

Location of McGuffey, Panaca Cattle, Roadside, White Hills and Buckboard Allotments with Respect to the Surrounding Towns and the Eagle Wild Horse Herd Management Area (HMA).



Ely District Office

November 9, 2008  
Caliente Field Station

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.



Caliente and Clover Mountain  
1:100,000 Quad Maps

LEGEND

- Eagle HMA
- Towns
- Nevada Roads



**APPENDIX II**  
(EA)

STANDARDS DETERMINATION DOCUMENT

# STANDARDS DETERMINATION DOCUMENT

Orren Nash Permit Renewal (#2705083)  
Wendell Mathews Permit Renewal (#2705055)

McGuffy (#01043), Panaca Cattle (#01053), Roadside (#01061),  
White Hills (#01082) and Buckboard (#21011) Allotments

(DOI-BLM-NV-045-2009-0015-EA)

## 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 McGuffy, Roadside, White Hills, Panaca Cattle and Buckboard Allotments in the Ely District BLM. It does not evaluate or assess the Standards or Guidelines for Wild Horses and Burros. Publications used in assessing and determining achievement of the Standards include: Ely Record of Decision and Approved Resource Management Plan (RMP); Sampling Vegetation Attributes; National Range and Pasture Handbook published by the Natural Resources Conservation Service (NRCS); Nevada Rangeland Monitoring Handbook; Utilization Studies and Residual Measurements; Nevada Plant List; Major Land Resource Area (MLRA 29) Rangeland Ecological Site Descriptions; Soil Survey of Meadow Valley 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 Office during business hours.

The McGuffy, Panaca Cattle, Roadside, White Hills and Buckboard Allotments encompass approximately 22,115, 16,275, 1,123, 2,755 and 10,842 acres, respectively. They are located within Lincoln County in the central portion of the Ely District BLM, approximately 15 miles north of Caliente, Nevada (Appendix A, Map #1). The Panaca Cattle, Roadside and White Hills Allotments are located within the Panaca Valley Watershed (#210); the Buckboard Allotment is located within the Panaca Valley and Clover Creek North (#212 N) Watersheds; while McGuffy Allotment is located in the Escalante Desert Watershed (#208).

The Ely District RMP was completed in August 2008. Since its completion, the Panaca Cattle, Roadside, White Hills and Buckboard Allotments are not considered as being located within any

Wild Horse Herd Management Areas (HMA). However, the McGuffy Allotment is located within the newly named Eagle Wild Horse Herd Management Area. Prior to the completion and subsequent signing of the RMP, the Panaca Cattle, Roadside, White Hills and Buckboard Allotments were located within the Little Mountain HMA. Therefore, these allotments received wild horse use and will continue to do so until such time that the wild horses can be removed as directed in the RMP.

There is no desert tortoise habitat within any of the allotments. Neither any of the allotments, nor any portions of them, thereof, are located within a Wilderness Study Area or Wilderness Area.

There are three natural springs located within the McGuffy Allotment: Kiln Spring, Marchell Spring and Summit Spring. Each spring produces sufficient water to support domestic and wild animals during a normal precipitation year. Fence enclosures have been constructed around all three springs. On May 28, 2008, Proper Functioning Condition (PFC) Lentic studies were conducted on these springs. Keel and Buckboard Springs are found within the Buckboard Allotment and have no riparian areas associated with them. There are no natural riparian areas found within the Panaca Cattle, Roadside and White Hills Allotments.

Table 1 in Appendix B shows the type of water right (Manner of Use), water right ownership and legal location associated with each of the aforementioned springs. This information was obtained from the Office of the State Division of Water Resources.

Orren Nash acquired his grazing privileges on the McGuffy, Roadside, White Hills and Panaca Cattle Allotments in 1981. He is the sole permittee on the former three allotments. Licensed grazing use records show that the McGuffy Allotment is the only allotment he has ever grazed. This is because the Panaca Cattle Allotment lacks water and the Roadside and White Hills Allotments lack both, water and fencing, thereby making livestock grazing on these allotments economically impractical. Because the Roadside and White Hills Allotments are contiguous to each other, unfenced, relatively small, share much of the same soils and vegetation, and have received no livestock grazing for the past 28 years, cover and utilization data was obtained in an area representative of both allotments (RS/WH-1) (Appendix A, Map #2).

Lewis Wendell Mathews is the permittee of record on the Panaca Cattle and Buckboard Allotments. Therefore, he shares the Panaca Allotment, in common, with Orren Nash. According to licensed use records, Lewis Mathews has not grazed any of his allotments since the end of the 2000 grazing year (3/1/00 – 2-28-01).

Livestock grazing use for Orren Nash on the McGuffy Allotment, and Lewis Wendell Mathews on the Panaca Cattle and Buckboard Allotments is illustrated in Tables 2 and 3 in Appendix B, respectively. Table 2 displays grazing use, for Orren Nash, as AUMs Licensed and Percent of Active Use by Grazing Year from March 1, 1994 through February 28, 2009 (15 years). Table 3 displays grazing use, for Lewis Mathews, also as AUMs Licensed and Percent of Active Use by Grazing Year; however, it covers the years March 1, 1999 through February 28, 2009 (10 years). Grazing records indicate that Orren Nash has grazed the McGuffy Allotment on a regular basis (annually), since he acquired the grazing privileges, while Lewis Mathews has not grazed any of his allotments following the 2000 grazing year (8 years). Therefore, grazing records reaching further back in time are displayed for Nash. Both tables also show the Active Use and Season of Use for each allotment.



Table 4 in Appendix B illustrates the combined Livestock Grazing Use for Orren Nash and Wendell Mathews on the Panaca Cattle Allotment. This table displays the Combined AUMs Licensed and Percent of Combined Active Use by Grazing Year, from March 1, 1999 through February 28, 2009. It should be noted that even though the two aforementioned permittees have shared the Panaca Cattle Allotment in common since 1981, Mr. Mathews has been the only one to ever graze the allotment. To place this in perspective, records show that, at least, for the past 15 grazing years (1994 – 2009) licensed grazing has never exceeded more than 37 % of the combined Total Active Use permitted on the allotment.

There are two Study Sites on McGuffy Spring Allotment (McG-1 and McG-2); one representing the Roadside and White Hills Allotments (RS/WH-1); three on Panaca Cattle Allotment (PC-1, PC-2 and PC-3); and two on Buckboard Allotment (B-1 and B-2) (Appendix A, Map #2). These nine Study Sites were used for cover and utilization. All Study Site locations were selected based on accessibility, along with the Soil Mapping Units and corresponding Rangeland Ecological Site Descriptions as determined by the NRCS. They were placed in areas which would most represent their respective portions of the allotments with regards to Soil Mapping Units, existing range sites and associated vegetation. In the case of Study Site PC-1, professional field observations were necessary in determining the applicable Range Site, because it was determined that the NRCS soil mapping unit for this location was in error.

During June 2008, cover and utilization data was collected at the Study Site Transects in Buckboard, and at the representative area for Roadside and White Hills Allotments. During January 2009, same said data was collected on the Panaca Cattle Allotment. Table 5 in Appendix B shows a comparison of cover data - collected at Study Site Transects within the McGuffy, Roadside/White Hills, Panaca Cattle and Buckboard Allotments - to potential natural community (PNC) cover values for the applicable range site.

During July 1994, the Two-Kiln Burn consumed a total of approximately 1,869 acres. Approximately 555 acres of this burn occurred within the McGuffy Allotment. The entire burn was subsequently seeded as a rehabilitation measure. In October/November of 2007, cover and utilization was collected within the McGuffy Allotment in both, a representative area within the Two-Kiln Burn (McG-2) and at the Study Site Transect in the east portion of the allotment (McG-1). Livestock tend to use the east-half of the McGuffy Allotment in the colder winter months and the west-half in the warmer summer months.

The Key Species Method was used in determining grazing use according to the Nevada Rangeland Monitoring Handbook (2006). This method is based on percent utilization of current year's growth, by weight. Cover data were obtained using the Line Intercept Method. The method is described in Sampling Vegetation Attributes (USDI-BLM et. al., 1996). General field observations and professional judgment were used in determining achievement of Standard 3.

In September 2008, a wild horse gather was conducted on the Little Mountain/Miller Flat HMA. A total of 36 horses were removed.

The Natural Resource Conservation Service (NRCS) is currently conducting a remapping of the Meadow Valley Wash Soil Survey. Information regarding the soil mapping units and corresponding range sites found within the allotments were obtained through direct conversation

with the lead person in charge of the survey at the NRCS. Such soil information has not yet been published.

The following is an analysis of monitoring data which were 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.

**STANDARD 1. SOILS:**

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

Soil indicators:

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

Riparian soil indicators:

- Stream bank stability.

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

**McGuffy (East-Half and the Two- Kiln Burn),  
Roadside and White Hills Allotments**

Determination:

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

Causal Factors:

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

*Guidelines Conformance:*

- In conformance with the Guidelines** – McGuffy Allotment
- Not in conformance with the Guidelines
- Guidelines not applicable at this time** - Roadside and White Hills

East-Half McGuffy Allotment and the Two-Kiln Burn

According to a combination of the Soil Mapping Units and corresponding Rangeland Ecological Site Descriptions determined by the NRCS, there is one prevalent Rangeland Ecological Site throughout a majority of the east half of the allotment where Study McG-1 is located: a Loamy 10-12” P.Z. (029XY029NV – Wyoming Big Sagebrush (*Artemisia tridentata Wyomingensis*))

/Needleandthread (*Hesperostipa comata*) - Indian Ricegrass (*Achnatherum hymemoides*) (Figure 1).



Figure 1. Overview of Study Site McG-1 showing existing vegetation.

The soils of this site are moderately deep to deep and moderately well to well drained. Surface soils are moderately fine to medium textured and normally more than 10 inches thick to the subsoil or underlying material. The available water capacity is low to moderate and some soils are modified with high volumes of rock fragments through the soil profile. In some soils there will be a slight or moderate concentration of salts and sodium accumulation in the lower subsoil. Runoff is slow to moderate.

According to the site description, potential ground cover (basal and crown) should range between 15 – 25%.

At McG-1, utilization was in the Slight Use category with 11.5% use on needleandthread.

**Conclusion:** *Standard 1 Achieved*

Grazing use data indicates that overgrazing is not an issue.

Ground cover, composed of various shrubs and grasses, at Study Area Transect McG-1 was approximately 18%. This is within the range given in the applicable Ecological Rangeland Site Description. Cover within the old Two Kiln Burn was approximately 29% with general field observations indicating no measureable use. It should be noted that because of the seeding treatment, the burned area cannot be properly compared to any Ecological Rangeland Site Descriptions for determining satisfaction of Standards.

Field observations on the allotment, including the burn, have substantiated that soils were stable, native plants were not pedestalled and there were no signs of soil compaction. This indicates that the allotment has sufficient vegetative cover to maintain stability and to resist accelerated erosion, maintain soil productivity and, thus, sustain the hydrologic cycle. It further indicates that there is minimal wind and/or water erosion of topsoil, and apparent appropriate infiltration of water from snowmelt and rainfall. In addition, the gravelly/stony soil characteristics described above further contribute to soil protection.

Collectively, slight grazing intensities and sufficient vegetative cover infers litter production that further adds to increased soil protection and stability. Field observations have substantiated various amounts of scattered litter throughout the allotment.

### Roadside and White Hills Allotments

According to the NRCS, the Rangeland Ecological Site associated with the study site is a Shallow Calcareous Loam, 8-12" P.Z. (029XY008NV) – Black Sagebrush /Indian Ricegrass (Figure 3).



Figure 3. Overview of Study Site RS/WH-1 showing existing vegetation.

The soils of this site are shallow or they have a restrictive layer within the main rooting depth. These soils are moderately to strongly calcareous and soil reaction increases with soil depth. Some soils will accumulate variable concentrations of salts and sodium in their lower substratum. The soils are often modified with high amounts of gravels, cobbles or stones on the surface. The available water capacity is low to moderate and runoff is slow to rapid depending on slope.

According to the site description, potential ground cover should range between 20 – 30%.

At RS/WH-1 utilization was in the upper levels of the Heavy Use category with 78% use on Indian ricegrass (*Achnatherum hymenoides*).

**Conclusion:** *Standard 1 Achieved*

The allotments have not been grazed by livestock since Orren Nash acquired the grazing privileges in 1981. Because wild horse sign is prevalent through both allotments, it is reasonable to assume that most of the grazing may be attributed to wild horse use with incidental use from wildlife. This infers that, according to utilization data, overgrazing by wild horses is an issue (see RMP information discussed earlier in this document).

Ground cover, composed of various shrubs and grasses, at the Study Area Transect was approximately 18%. This is just 2% shy of the range given in the applicable Ecological Rangeland Site Description.

Even so, field observations on the allotments have substantiated that soils were stable, native plants were not pedestalled and there were no signs of soil compaction. This indicates that the allotment has sufficient vegetative cover to maintain stability and to resist accelerated erosion, maintain soil productivity and, thus, sustain the hydrologic cycle. It further indicates that there is minimal wind and/or water erosion of topsoil, and apparent appropriate infiltration of water from snowmelt and rainfall. In addition, field observations showed that this site contained a voluminous amount of surface gravels and rock fragments, as described above, with scattered litter which further contribute to soil protection.

### **McGuffy Allotment (West-Half, Excluding the Two- Kiln Burn)**

*Determination:*

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

*Causal Factors:*

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

*Guidelines Conformance:*

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

According to a combination of the Soil Mapping Units and corresponding Rangeland Ecological Site Descriptions determined by the NRCS, the following four Rangeland Ecological Sites are prevalent throughout most of the west-half of the allotment:



- 1) Shallow Clay Loam, 8-12" P.Z (029XY104NV) – Black Sagebrush (*Artemisia nova*)/Indian ricegrass - Thurber's Needlegrass (*Achnatherum thurberianum*). The soils of this site are shallow. These soils are often modified with high amounts of gravels, cobbles or stones on the surface that occupy plant growing space and reduce the potential soil moisture-holding capacity. The available water capacity is low to moderate and varies with soil texture, amount of rock fragments within the soil profile, and soil depth;
- 2) Loamy 10-12" P.Z. (029XY029NV) – Wyoming Big Sagebrush /Needleandthread - Indian Ricegrass (*Achnatherum hymemoides*). This soil has been described above in the description for the east-half of the McGuffy Allotment;
- 3) Pinyon (*Pinus monophylla*) Forestland (approximately 40% of the central portion of the allotment); and,
- 4) Cobbly Claypan 12-14" P.Z. (not published yet).

**Conclusion:** *Standard 1 Not Achieved*

In most of the west-half of the allotment, the encroaching pinyon/juniper (*Juniperus osteosperma*) trees become dense enough to prevent any reasonable understory which would support livestock or wildlife forage. Therefore, there is little overall understory production (ground cover) (Figure 2).



Figure 2. Photo showing the dense canopy of pinyon/juniper trees in the west half of the McGuffy Allotment.

The lack of achievement of Standard 1 can be attributed to a combination of both, the encroachment of pinyon/juniper and the lack of fire and/or tree harvesting.

## Panaca Cattle Allotment

Determination:

**Achieving the Standard**

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

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

Causal Factors:

Livestock are a contributing factor to not meeting the standard.

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

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

Guidelines Conformance:

In conformance with the Guidelines

Not in conformance with the Guidelines

**Guidelines not applicable at this time**

According to Soil Mapping Units and corresponding Rangeland Ecological Site Descriptions, and professional field observations Study Sites PC-1, PC-2 and PC-3 each occur on three different Rangeland Ecological Sites which represent a majority of the allotment.

### PC-1

This Study Site was determined to be within a Sandy 5-8" P.Z. (029XY012NV) – fourwing saltbush (*Atriplex canescens*)/Indian ricegrass (Figure 4).



Figure 4. Overview of Study Site PC-1 showing existing vegetation.

Soils are typically moderately deep to deep sands of mixed origin. Other soils with a thick layer, greater than 20 inches, of overblown or alluvial sand may also support this site. These soils have rapid infiltration and percolation rates, low available water capacity and are excessively drained with low to no runoff. These soils are fragile and subject to wind erosion if misused. Approximate ground cover (basal and crown) for this site is 15 – 25%.

### PC-2

This Study Site was determined to be within a Shallow Calcareous Slope, 8-12” P.Z (029XY014NV) – black sagebrush/Indian ricegrass (Figure 5).



Figure 5. Overview of Study Site PC-2 showing existing vegetation.

The soils of this site are calcareous or carbonatic and have a shallow effective rooting zone with depth to a hardpan or bedrock ranging from 5 to 20 inches. The soils have high amounts of gravels throughout the soil profile. The soil surface typically has a cover of 75 percent or more rock fragments. The available water capacity is very low. Runoff is moderate to rapid. Rock fragments on the soil surface have a stabilizing effect on surface erosion conditions. Approximate ground cover (basal and crown) for this site is 15 – 25%.

### PC-3

This Study Site was determined to be within a Shallow Calcareous Loam, 8-12” P.Z (029XY008NV) – black sagebrush/Indian ricegrass (Figure 6).





Figure 6. Overview of Study Site PC-3 showing existing vegetation.

The soils of this site are shallow or they have a restrictive layer within the main rooting depth. These soils are moderately to strongly calcareous and soil reaction increases with soil depth. Some soils will accumulate variable concentrations of salts and sodium in their lower substratum. The soils are often modified with high amounts of gravels, cobbles or stones on the surface. The available water capacity is low to moderate and runoff is slow to rapid depending on slope. Approximate ground cover (basal and crown) for this site is 20 to 30%.

Vegetative cover values determined at Study Sites PC-1, PC-2 and PC-3 were 20% with an additional 9% litter, 25% with an additional 10% litter and 28% with an additional 5% litter, respectively.

Professional field observations indicated that grazing use at all three Study Sites (PC-1, PC-2 and PC-3) was determined to be in the heavy to severe use category.

Biological crusts were also prevalent at all three Study Sites (Figures 7, 8, and 9).





Figure 7. Photo showing biological crusts at Study Site PC-1.



Figure 8. Photo showing biological crusts at Study Site PC-2. Soils and Crusts are damp in this photo.





Figure 9. Photo showing biological crusts at Study Site PC-3.

**Conclusion:** *Standard 1 Achieved*

Because the Panaca Cattle Allotment has not been grazed by livestock since 2000 and wild horse sign is prevalent throughout the allotment, it is reasonable to assume that most of the grazing may be attributed to wild horse use with incidental use from wildlife. This infers that, according to utilization data, overgrazing by wild horses is an issue (see RMP information discussed earlier in this document).

Vegetative ground cover values collected at PC-1, PC-2 and PC-3 were within the range of values indicated in the appropriate Rangeland Ecological Site Descriptions. Of the three study sites, PC-1 possesses the most fragile soils. However, field observations showed that well developed biological crusts were abundant and prevalent throughout the soil mapping units represented by all three Study Sites, further indicating soil stability.

In addition, there were other noted factors promoting soil stability and protection. Field observations showed that Study Sites PC-2 and PC-3 contained a large amount of surface gravels and rock fragments which – in combination with the scattered litter amounts indicated above and the biological crusts noted in field observations – further contribute to soil protection.

Field observations at the three Study Sites have substantiated that soils were stable, native plants were not pedestalled and there were no signs of soil compaction. In conclusion, all evidence indicates that the allotment has sufficient soil surface protection to maintain stability and to resist accelerated erosion, maintain soil productivity and, thus, sustain the hydrologic cycle. It further indicates that there is minimal wind and/or water erosion of topsoil, and apparent appropriate infiltration of water from snowmelt and rainfall.

## Buckboard Allotment

### Study Site B-1 (north-half of the allotment)

#### Determination:

**Achieving the Standard**

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

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

#### Causal Factors:

Livestock are a contributing factor to not meeting the standard.

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

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

#### *Guidelines Conformance:*

In conformance with the Guidelines

Not in conformance with the Guidelines

**Guidelines not applicable at this time**

According to Soil Mapping Units and corresponding Rangeland Ecological Site Descriptions, Study Site B-1 occurs on the following Rangeland Ecological Site which represents approximately the north half of the allotment.

Shallow Calcareous Loam, 8-12" P.Z (029XY008NV) – black sagebrush/Indian ricegrass (Figure 10).



Figure 10. Overview of Study Site B-1 showing existing vegetation.

The soil characteristics have been described under PC-3 of the Panaca Cattle Allotment. The approximate ground cover (basal and crown) expectancy for this site is 20 – 30%.

Vegetative cover and determined at Study Site B-1 was determined to be 19%.

The only grass species found, vicinal to the Study Site, was Squirreltail (*Elymus elymoides*) which was protected under the canopy of other plants. Therefore, determining use on grass species was not practical.

**Conclusion:** *Standard 1 Achieved*

In all practicality, vegetative ground cover was appropriate for the Ecological Site.

In addition, there were also other noted factors promoting soil stability and protection. Field observations showed that this site contained a voluminous amount of surface gravels and rock fragments with scattered litter.

Field observations at the Study Site have substantiated that soils were stable, native plants were not pedestalled and there were no signs of soil compaction.

Collectively, all evidence indicates that the approximate north half of the allotment has sufficient soil surface protection to maintain stability and to resist accelerated erosion, maintain soil productivity and, thus, sustain the hydrologic cycle. It further indicates that there is minimal wind and/or water erosion of topsoil, and apparent appropriate infiltration of water from snowmelt and rainfall.

Study Site B-2 (south-half of the allotment)

Determination:

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

Causal Factors:

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

*Guidelines Conformance:*

- In conformance with the Guidelines
- Not in conformance with the Guidelines
- Guidelines not applicable at this time**

According to Soil Mapping Units and corresponding Rangeland Ecological Site Descriptions, Study Site B-2 occurs on the following Rangeland Ecological Site which represents approximately the south half of the allotment.

Shallow Clay Loam, 8-12" P.Z (029XY104NV) (Figure 11).





Figure 11. Overview of Study Site B-2 showing existing vegetation.

The soils of this site are shallow. These soils are often modified with high amounts of gravels, cobbles or stones on the surface that occupy plant growing space and reduce the potential soil moisture-holding capacity. The available water capacity is low to moderate and varies with soil texture, amount of rock fragments within the soil profile, and soil depth.

The approximate ground cover (basal and crown) expectancy for this site is 20 – 35%.

Vegetative cover and determined at Study Site B-2 was determined to be .1%.

**Conclusion:** *Standard 1 Not Achieved*

There is a heavy encroachment of large pinyon and juniper trees. As a result, the understory has diminished greatly. Black sagebrush appears to be dying-off, as a result, as indicated by abundance remaining plant skeletons in the area. There is a high amount of gravels and rock fragments on the soil surface.

Various unknown perennial forbs with scattered pricklypear cactus (*Opuntia spp.*), bitterbrush (*Purshia tridentata*) and Gambel oak (*Quercus gambelii*) may be found in the understory. However, understory production is extremely low.

Consequently, the understory vegetation is not appropriate for the site, because it is lacking the main grass species – Indian ricegrass and Thurber’s needlegrass (*Achnatherum thurberianum*) – listed in the Rangeland Ecological Site Description, while the main shrub species listed in the Range Site Description is lacking in quantity.

Therefore, this portion of the allotment is not achieving Standard 1. Because the allotment has not been grazed since the end of the 2000 Grazing Year and has not been grazed in any appreciable amount, failing to achieve Standard 1 is not due to livestock grazing. Professional observations indicate that it is due to pinyon/juniper encroachment.

## **STANDARD 2 ECOSYSTEM COMPONENTS:**

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

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

### Upland indicators:

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

### Riparian indicators:

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

### Water quality indicators:

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

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

### **Marchell and Summit Springs**

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 Conformance:

**In conformance with the Guidelines**

- Not in conformance with the Guidelines

Proper Functioning Condition Lentic studies conducted at Marchell Spring and Summit Spring indicated that these two springs were in PFC (Figures 12 and 13).



Figure 12. Photo showing overview of Marchell Spring.





Figure 13. Photo showing overview of Summit Spring.

**Conclusion:** *Standard 2 Achieved*

The following was observed during the PFC Lentic Survey for both springs:

Hydrologic

- Riparian-wetland area was saturated at or near the surface and is inundated in “relatively frequent” events (1-3 years).
- The fluctuation of water levels is not excessive and the riparian-wetland zone has achieved potential extent or may even be enlarging.
- Water quality is sufficient to support riparian/wetland plants and the upland watershed is not contributing to riparian/wetland degradation.
- The natural surface or subsurface flow patterns are not altered by disturbance (i.e., hoof action, trails, roads, rills, gullies).

Vegetation

- Species present indicate maintenance of riparian-wetland soil moisture characteristics.

- Vegetation is comprised on those plants or plant communities that have root masses capable of withstanding wind events, wave flow events or overland flows (i.e., snow events, snowmelt)
- Riparian-wetland plants exhibit high vigor with adequate cover present soil surface and dissipate energy during high wind events and overland flows.
- Frost and abnormal hydrologic heaving is not present.
- There is a favorable micro-site condition (i.e., woody debris, water temperature etc.) is maintained by adjacent site characteristics.

#### Soil-Erosion Deposition

- The accumulation of chemicals affecting plant productivity/composition is not apparent.
- Saturation of soils (i.e., ponding, flooding frequency and duration) is sufficient to compose and maintain hydric soils.
- Underlying geologic structure/soil material is capable of restricting water percolation.
- The riparian-wetland is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition).

### **Kiln Spring**

#### 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 Conformance:

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

A special circumstance exists here, which is not related to overall grazing in this portion of the allotment. During November 2007, field observations showed that this spring would have been deemed in Proper Functioning Condition. However, when a Proper Functioning Condition study was conducted on May 28, 2008 the rating was determined to be Functioning at Risk – Downward Trend.

Between the visits in November 2007 and May 2008, it was discovered that a portion of the fence enclosure was vandalized (destroyed) and livestock entered the previously protected riparian area. Elk and deer tracks were also noted inside the enclosure. This resulted in severe grazing use on vegetation and heavily trampled banks, leading to bank sloughing. This also left the surface water exposed to sunlight which resulted in a water temperature increase and some algal production (Figure 14).

Since the time of the PFC study, the fence has been repaired. Therefore, it is believed that the riparian area will rebound to PFC as long as the fence remains in place.



Figure 14. Photo showing overview of Kiln Spring.

**Conclusion:** *Standard 2 NOT Achieved*

The following was observed during the PFC Lentic Survey:

Hydrologic

- Riparian-wetland area was saturated at or near the surface and is inundated in “relatively frequent” events (1-3 years).
- The fluctuation of water levels is not excessive and the riparian-wetland zone has achieved potential extent or may even be enlarging.
- The upland watershed is not contributing to riparian/wetland degradation.

### Vegetation

- Species present indicate maintenance of riparian-wetland soil moisture characteristics.
- Vegetation is comprised on those plants or plant communities that have root masses capable of withstanding wind events, wave flow events or overland flows (i.e., snow events, snowmelt)
- Frost and abnormal hydrologic heaving is not present.

### Soil-Erosion Deposition

- Saturation of soils (i.e., ponding, flooding frequency and duration) is sufficient to compose and maintain hydric soils.
- Underlying geologic structure/soil material is capable of restricting water percolation.

The following criteria were lacking according to the PFC Survey:

### Hydrologic

- The riparian-wetland zone is NOT enlarging.
- Water quality is NOT sufficient to support riparian/wetland plants and the upland watershed is not contributing to riparian/wetland degradation.
- The natural surface or subsurface flow patterns ARE altered by disturbance (i.e., hoof action). Head cutting is occurring.

### Vegetation

- There is NOT a diverse age-class distribution (recruitment for maintenance/recovery) or diverse composition of vegetation for maintenance/recovery.
- Riparian-wetland plants DO NOT exhibit high vigor, because of severe grazing use by undulates; and there is NOT adequate cover present soil surface and dissipate energy during high wind events and overland flows.
- There is NOT a favorable micro-site condition (i.e., woody debris, water temperature etc.) is maintained by adjacent site characteristics (there is algae blooming and NO cover or shade is present).

### Soil-Erosion Deposition

- The accumulation of chemicals affecting plant productivity/composition IS apparent - There is a high amount of animal feces present.

- The riparian-wetland is NOT in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition). Banks are NOT stable with some sloughing occurring.

**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.

**McGuffy (East-Half), Roadside and White Hills Allotments**

*Determination:*

**Achieving the Standard**

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

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

*Causal Factors:*

Livestock are a contributing factor to not meeting the standard.

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

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

*Guidelines Conformance:*

**In conformance with the Guidelines** – McGuffy Allotment

Not in conformance with the Guidelines

**Guidelines not applicable at this time** - Roadside and White Hills

McGuffy Allotment – East-Half

Professional field observations revealed that, at least, two different species of trees, two different perennial species of shrubs, five different perennial species of grasses and various annual and perennial forbs exist widespread within the east-half of the allotment represented by Study Site McG-1. The following table displays these observations:

Trees	Shrubs	Grasses
Pinyon ( <i>Pinus monophylla</i> )	Big Sagebrush ( <i>Artemisia tridentata wyomingensis</i> )	Needleandthread ( <i>Hesperostipa comata</i> )
Juniper ( <i>Juniperus osteosperma</i> )	Douglas rabbitbrush ( <i>Chrysothamnus viscidiflorus</i> )	Squirreltail ( <i>Elymus elymoides</i> )
		Galleta ( <i>Pleuraphis jamesii</i> )
		Blue grama ( <i>Bouteloua gracilis</i> )
		Threeawn ( <i>Aristida purpurea</i> )

**Conclusion:** *Standard 3 Achieved*

Observations indicate a diversity of various vegetation types that are distributed in a patchy nature, while creating corridors, across the landscape within the east-half of the allotment. They also indicate that species composition is appropriate throughout said area with the main species listed in the Rangeland Ecological Site Description being present.

Big sagebrush and Douglas rabbitbrush, needleandthread, squirreltail, galleta, blue grama, and, to a lesser extent, threeawn (during green-up) are known to be nutritious, palatable plant species for livestock and/or wildlife.

Therefore, for the east-half of the allotment, it is applicable to state that moderate to good species diversity of perennial plant species and low levels of grazing use indicate that there is sufficient ground cover to protect soils and perpetuate vegetative productivity; while ensuring appropriate vegetative structure, cover, edge and a nutritional food base for domestic and wild animals.

Therefore, based on professional observations, Standard 3 is being achieved.

Roadside and White Hills Allotments

Professional field observations revealed that, at least, five different perennial species of shrubs and four different perennial species of grasses and various annual and perennial forbs exist widespread within the Roadside and White Hills Allotments represented by Study Site RS/WH-1. The following table displays these observations:

Shrubs	Grasses
Black Sagebrush ( <i>Artemisia nova</i> )	Indian ricegrass ( <i>Achnatherum hymenoides</i> )
Bud sagebrush ( <i>Picrothamnus desertorum</i> )	Squirreltail ( <i>Elymus elymoides</i> )
Nevada ephedra ( <i>Ephedra nevadensis</i> )	Galleta ( <i>Pleuraphis jamesii</i> )
Douglas rabbitbrush ( <i>Chrysothamnus viscidiflorus</i> )	
Beavertail ( <i>Opuntia spp.</i> )	

**Conclusion:** *Standard 3 Achieved*

The dominant present vegetation, as indicated by field observations, indicates that a diverse habitat is distributed across the landscape within both the Roadside and White Hills Allotments. Observations also indicate that species composition is appropriate throughout said area with the main species listed in the Rangeland Ecological Site Description being present.

The following forage species are found within the allotments: Black sagebrush, bud sagebrush, Nevada ephedra, Indian ricegrass, squirreltail and galleta. These are known to be nutritious, palatable plant species for livestock and wildlife.

Therefore, for both allotments it is applicable to state that moderate to good species diversity of perennial plant species indicates that there is sufficient ground cover to protect soils and perpetuate vegetative productivity while ensuring appropriate vegetative structure.

High utilization levels (78%) have been addressed under Standard 1, whereby evidence indicates that over-utilization by wild horses is a problem. As a result of the aforementioned wild horse gather, it is expected that plants will rebound, thereby providing an increase in cover and improved structure in plant communities where such grazing occurred.

Therefore, based on professional observations, Standard 3 is being achieved.

**McGuffy Allotment (West-Half)**

*Determination:*

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

*Causal Factors:*

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

*Guidelines Conformance:*

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

The west-half of the McGuffy Allotment is composed mostly of dense, maturing stands of pinyon/juniper trees.

**Conclusion:** *Standard 3 Not Achieved*

In most of the west-half of the allotment, the encroaching pinyon/juniper trees become dense enough to prevent any reasonable understory which would support livestock or wildlife forage. Therefore, there is little overall understory production. Diversity, composition, patchiness of various vegetation types, structure, the formation of vegetative corridors and a reasonably reliable



forage base are all lacking. This can be attributed to a combination of both, the encroachment of pinyon/juniper and the lack of fire and/or tree harvesting.

Consequently, livestock grazing and wildlife foraging, in the west-half of the allotment, chiefly occurs in the aforementioned Two Kiln Burn where there is a plentiful diversity of grasses, forbs and shrubs due to the success of the fire rehabilitation seeding of 1995 (Appendix B, Footnote of Table 5). However this only accounts for, approximately, 555 acres of the entire allotment.

Therefore, based on professional observations, Standard 3 is not being achieved in the west-half of the allotment.

### Panaca Cattle Allotment

Determination:

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

Causal Factors:

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

Guidelines Conformance:

- In conformance with the Guidelines
- Not in conformance with the Guidelines
- Guidelines not applicable at this time**

Professional field observations revealed the following species as observed at Study Sites PC-1, PC-2 and PC-3, respectively.

#### Study Site PC-1 (Range Site 029XY012NV)

Shrubs	Grasses
Fourwing saltbush ( <i>Atriplex canescens</i> )	Indian ricegrass ( <i>Achnatherum hymenoides</i> )
Winterfat ( <i>Krascheninnikovia lanata</i> )	Galleta ( <i>Pleuraphis jamesii</i> )
Bud sagebrush ( <i>Picrothamnus desertorum</i> )	
Douglas rabbitbrush ( <i>Chrysothamnus viscidiflorus</i> )	
Beavertail ( <i>Opuntia spp.</i> )	

#### Study Site PC-2 (Range Site 029XY014NV)

Trees	Shrubs	Grasses
Juniper ( <i>Juniperus osteosperma</i> )	Black Sagebrush ( <i>Artemisia nova</i> )	Indian ricegrass ( <i>Achnatherum hymenoides</i> )
	Nevada ephedra ( <i>Ephedra nevadensis</i> )	Galleta ( <i>Pleuraphis jamesii</i> )



Study Site PC-3 (Range Site 029XY008NV)

Trees	Shrubs	Grasses
Juniper ( <i>Juniperus osteosperma</i> )	Black Sagebrush ( <i>Artemisia nova</i> )	Galleta ( <i>Pleuraphis jamesii</i> )
	Nevada ephedra ( <i>Ephedra nevadensis</i> )	
	Beavertail ( <i>Opuntia spp.</i> )	

**Conclusion:** *Standard 3 Not Achieved*

Field observations indicated that Study Sites PC-1 and PC-3 were each lacking two species of the main grasses listed in the respective Rangeland Ecological Site Descriptions; sand dropseed (*Sporobolus cryptandrus*) and needleandthread on Study Site PC-1; and Indian ricegrass and needleandthread on Study Site PC-3.

Study Site PC-2 was lacking one main grass species; needleandthread. In addition, Indian ricegrass at PC-2 was also not present in the appreciable amounts listed in the Range Site Description.

Consequently, diversity, composition, structure and production is lacking in these range sites across the allotment, even though there is a patchiness of the various vegetation types widespread within the allotment.

Therefore, based on professional observations, Standard 3 is not being achieved.

**Buckboard Allotment**

Determination:

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

Causal Factors:

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

*Guidelines Conformance:*

- In conformance with the Guidelines
- Not in conformance with the Guidelines
- Guidelines not applicable at this time**

Professional field observations revealed the following species as observed at Study Sites B-1 and B-2, respectively.

Study Site B-1 (Range Site 029XY008NV)

Trees	Shrubs	Grasses
Pinyon Pine ( <i>Pinus monophylla</i> )	Black Sagebrush ( <i>Artemisia nova</i> )	Squirreltail ( <i>Elymus elymoides</i> ) (protected by shrubs only, none in interspaces)
Juniper ( <i>Juniperus osteosperma</i> )	Nevada ephedra ( <i>Ephedra nevadensis</i> )	
	Stansbury cliffrose ( <i>Purshia stansburiana</i> )	
	Banana yucca ( <i>Yucca brevifolia</i> )	
	Beavertail ( <i>Opuntia spp.</i> )	
	Cholla ( <i>Cylindropuntia spp.</i> )	

Study Site B-2 (Range Site 029XY104NV)

Trees	Shrubs
Pinyon Pine ( <i>Pinus monophylla</i> )	Black Sagebrush ( <i>Artemisia nova</i> )
Juniper ( <i>Juniperus osteosperma</i> )	Nevada ephedra ( <i>Ephedra nevadensis</i> )
	bitterbrush ( <i>Purshia tridentata</i> )
	Gamble oak ( <i>Quercus gambelii</i> )
	Beavertail ( <i>Opuntia spp.</i> )

**Conclusion:** *Standard 3 Not Achieved*

Although there appears to be good species diversity regarding shrubs and trees, field observations indicated that all of the main grass species, as listed in each of the respective Rangeland Ecological Site Descriptions, were lacking. This includes, at a minimum, Indian ricegrass and needleandthread at Study Site B-1; and Indian ricegrass and Thurber’s needlegrass at Study Site B-2. As the tables above show, squirreltail was only grass species noted at Study Site B-1 and did not occur in the interspaces, while no grasses were noted at Study Site B-2.

Consequently, diversity, composition, structure and production is lacking in these range sites across the allotment, even though there is a patchiness of the various vegetation types creating edge and corridors widespread within the allotment.

Therefore, based on professional observations, Standard 3 is not being achieved.

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

**STANDARD 1**

McGuffy Allotment – West Half

No, livestock are NOT a contributing factor to not meeting Standard 1 in the allotment. In most of the west-half of the allotment, the encroaching pinyon/juniper trees become dense enough to prevent any reasonable understory which would support livestock or wildlife forage. Therefore, there is little overall understory production.

The lack of achievement of Standard 1 can be attributed to a combination of both, the encroachment of pinyon/juniper and the lack of fire and/or tree harvesting.

#### Buckboard - South Half (B-2)

No, livestock are NOT a contributing factor to not meeting Standard 1 in the allotment. There is a heavy encroachment of large pinyon and juniper trees. As a result, the understory has diminished greatly. Black sagebrush appears to be dying-off, as a result, as indicated by abundance remaining plant skeletons in the area.

Consequently, the understory vegetation is not appropriate for the site, because it is lacking the main grass species – Indian ricegrass and Thurber’s needlegrass (*Achnatherum thurberianum*) – listed in the Rangeland Ecological Site Description, while the main shrub species listed in the Range Site Description is lacking in quantity.

Therefore, this portion of the allotment is not achieving Standard 1.

Because the allotment has not been grazed since the end of the 2000 Grazing Year, failing to achieve Standard 1 is not due to livestock grazing. Professional observations indicate that it is due to pinyon/juniper encroachment.

### **STANDARD 2**

#### Kiln Spring

Yes, livestock ARE a contributing factor to not meeting Standard 2 in the allotment. During November 2007, field observations showed that this spring would have been in Proper Functioning Condition. However, when a Proper Functioning Condition study was conducted on May 28, 2008 the rating was determined to be Functioning at Risk – Downward Trend.

Between the visits in November 2007 and May 2008, it was discovered that a portion of the fence enclosure was destroyed and livestock entered the previously protected riparian area. Elk and deer tracks were also noted inside the enclosure. This resulted in severe grazing use on vegetation and heavily trampled banks, leading to bank sloughing. This also left the surface water exposed to sunlight which resulted in a water temperature increase and some algal production.

Since the time of the PFC study, the fence has been repaired. Therefore, it is believed that the riparian area will rebound to PFC as long as the fence remains in place.

### **STANDARD 3**

#### McGuffy Allotment – West-Half.

In most of the west-half of the allotment, the encroaching pinyon/juniper trees become dense enough to prevent any reasonable understory which would support livestock or wildlife forage. Therefore, there is little overall understory production. Diversity, composition, patchiness of

various vegetation types, structure, the formation of vegetative corridors and a reasonably reliable forage base are all lacking. This can be attributed to a combination of both, the encroachment of pinyon/juniper and the lack of fire and/or tree harvesting.

Therefore, Standard 3 is not being achieved in the west-half of the allotment.

#### Panaca Cattle Allotment

No, livestock are NOT a contributing factor to not meeting Standard 3 in the allotment. The Panaca Cattle Allotment has not been grazed by livestock owned by Orren Nash since he acquired the grazing privileges in 1981. According to licensed use records, Lewis Mathews has not grazed the Panaca Cattle Allotment since the end of the 2000 grazing year. To place this in perspective, records show that for the past 15 grazing years (1994 – 2009) licensed grazing, on Mathew's behalf, has never exceeded more than 37 % of the Total Active Use available on the allotment.

Therefore, it is not reasonable to assume that livestock has caused the lack of achievement of Standard 3.

#### Buckboard Allotment

No, livestock are NOT a contributing factor to not meeting Standard 3 in the allotment. According to licensed use records, the Buckboard Allotment has not been grazed by livestock owned by Lewis Mathews since the end of the 2000 grazing year.

Therefore, it is not reasonable to assume that livestock has caused the lack of achievement of Standard 3.

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

GUIDELINES for *SOILS* (Standard 1):

See Conclusion for Standard 1, and Part 2 above.

#### McGuffy Allotment

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

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

#### Roadside and White Hills Allotments

Application of Guidelines for Standard 1 are inappropriate at this time. The allotments have not been grazed by livestock since Orren Nash acquired the grazing privileges in 1981.

### Panaca Cattle and Buckboard Allotments

Application of Guidelines are inappropriate at this time. Licensed use records show that the Panaca Cattle and Buckboard Allotments haven't been grazed since the end of the 2000 grazing year.

Records show that for the past 10 grazing years - March 1, 1999 through February 28, 2009 (10 years) - licensed grazing has never exceeded more than 37 % of the combined Total Active Use permitted on the Panaca Cattle Allotment for both permittees.

GUIDELINES for *ECOSYSTEM COMPONENTS* (Standard 2):

#### McGuffy Allotment

See Conclusion for Standard 2, and Part 2 above.

Current livestock grazing management practices on the allotment conform to Guideline 2.3, 2.4, 2.5, 2.6, and 2.8. The remaining three Guidelines are not applicable to the assessment area at this time.

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

See Conclusion for Standard 3, and Part 2 above.

#### McGuffy Allotment – West Half

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

### Roadside and White Hills Allotments

Application of Guidelines for Standard 1 are inappropriate at this time. The allotments have not been grazed by livestock since Orren Nash acquired the grazing privileges in 1981.

### Panaca Cattle and Buckboard Allotments

Application of Guidelines are inappropriate at this time. Licensed use records show that the Panaca Cattle and Buckboard Allotments haven't been grazed since the end of the 2000 grazing year.

Records also show that for the past 10 grazing years - March 1, 1999 through February 28, 2009 (10 years) - licensed grazing has never exceeded more than 37 % of the combined Total Active Use permitted on the Panaca Cattle Allotment for both permittees.

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

1. Maintain all terms and conditions as indicated in the current term grazing permits.

2. Allowable use levels on current year's growth, within the McGuffy, Roadside, White Hills, Panaca Cattle and Buckboard Allotments, during the authorized grazing use period will be as follows:
  - Utilization on grasses and forbs will not exceed 50% and utilization on shrubs will not exceed 45%. These utilization objectives will aid in maintaining the Standards.
3. Incorporate the following Best Management Practice into the Term Grazing Permit:
  - a. Salt and/or mineral supplements for livestock would be located no closer than 3/4 mile from existing water sources.
4. Livestock will be moved to another authorized pasture or removed from the allotment before utilization objectives are met or no later than 5 days after meeting the utilization objectives. Any deviation in livestock movement will require authorization from the authorized officer.

**Specialists:**

/s/ **Mark D' Aversa**

Mark D' Aversa – Soil, Water & Air Quality, Floodplains & Riparian

4/1/09

Date

/s/ **Bonnie Million**

Bonnie Million – Noxious Weed Coordinator

4/16/09

Date

/s/ **Alicia Styles**

Alicia Styles – Wildlife Biologist

4/13/09

Date

**Prepared by:**

/s/ **Domenic A. Bolognani**

Domenic A. Bolognani – Rangeland Management Specialist

4/10/09

Date

**Reviewed by:**

/s/ **Chris Mayer**

Chris Mayer – Lead Rangeland Management Specialist

4/1/09

Date

**I concur:**

/s/ **Victoria Barr**

Victoria Barr – Caliente Field Manager

4/16/09

Date

## **REFERENCES**

BLM – August 2008. Ely Record of Decision and Approved Resource Management Plan (RMP)

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

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USDA – USFS, USDA – NRCS, USDI – BLM, Univ. of Nevada Cooperative Extension. 2006. Nevada Rangeland Monitoring Handbook.

USDA – USFS, USDA – NRCS, USDI – BLM, Utah Cooperative Extension Service. 1999. Utilization Studies and Residual Measurements; Interagency Technical Reference 1734 – 3.

USDA – NRCS. 1998. Nevada Plant List.

USDA – NRCS. 2003. Major Land Resource Area 29, Southern Nevada Basin and Range Ecological Site Descriptions.

USDA – NRCS. Soil Survey of Meadow Valley Area, Nevada (not yet published).



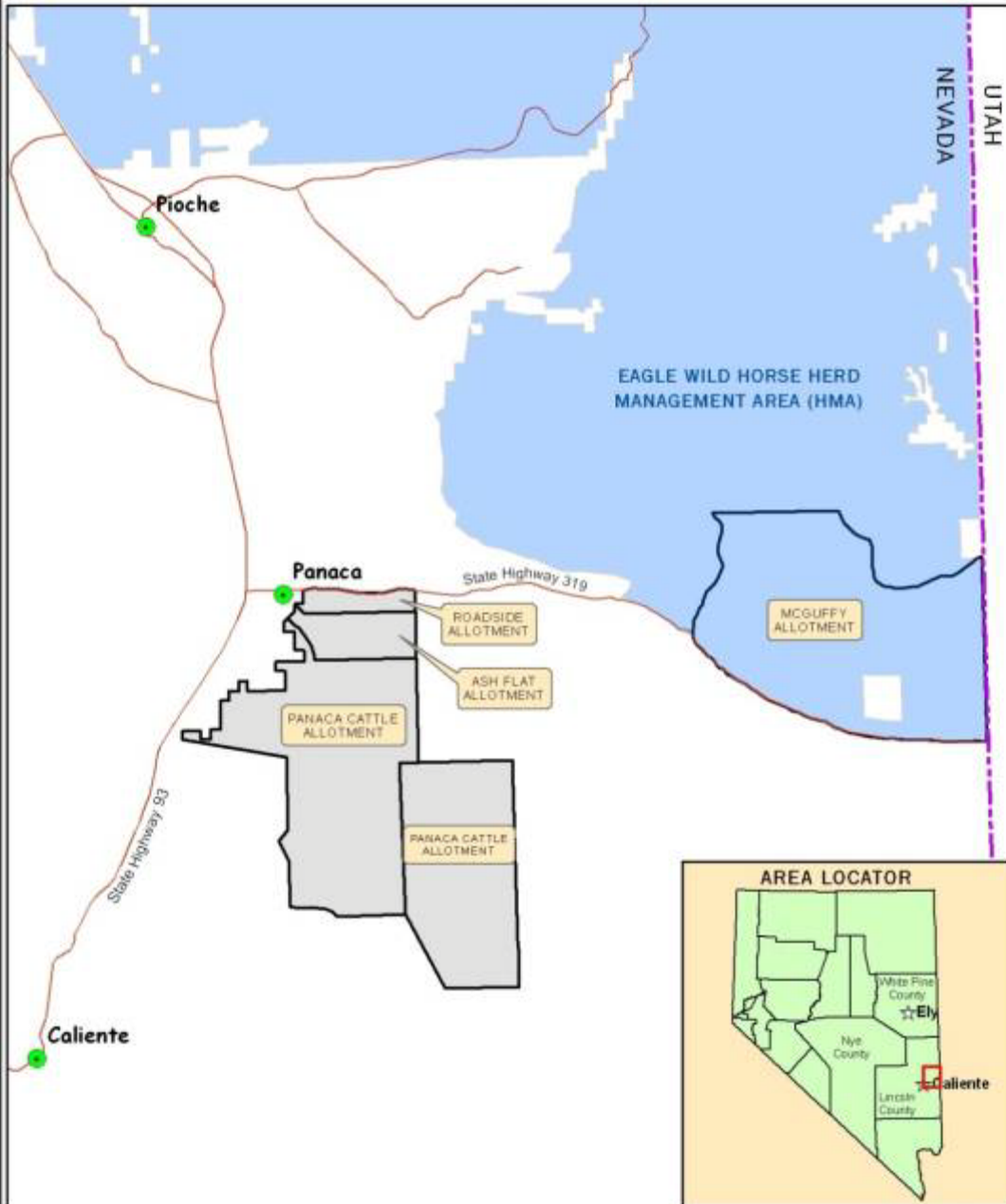
# **APPENDIX A**

## **MAPS**

Location of McGuffey, Panaca Cattle, Roadside, White Hills and Buckboard Allotments with Respect to the Surrounding Towns and the Eagle Wild Horse Herd Management Area (HMA).

MAP #1

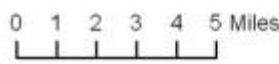
**BLM**



Ely District Office

November 9, 2008  
Caliente Field Station

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.



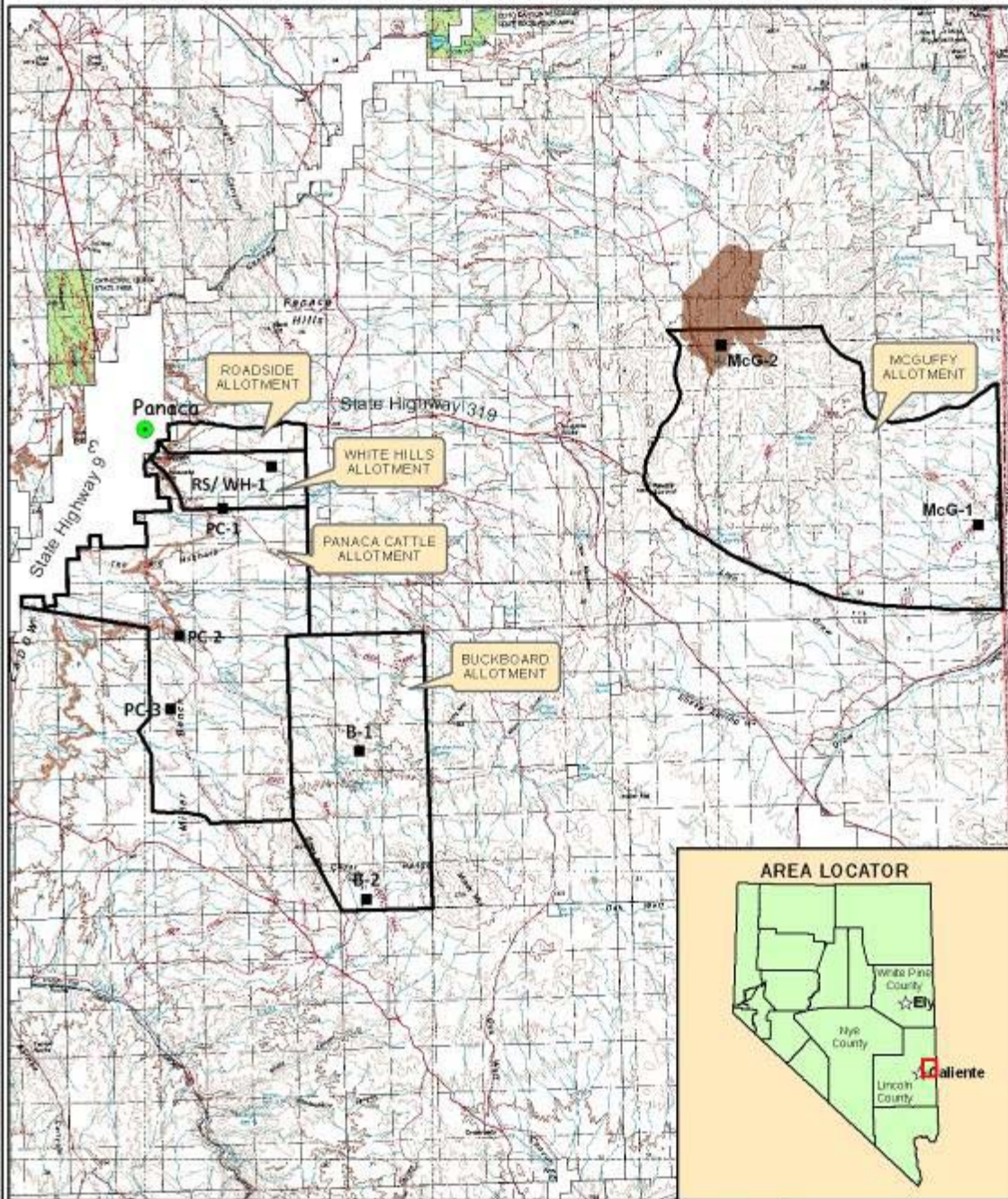
Caliente and Clover Mountain  
1:100,000 Quad Maps

**LEGEND**

- Eagle HMA
- Towns
- Nevada Roads



Location of Study Site Transects in McGuffey, Panaca Cattle, Roadside, White Hills and Buckboard Allotments and the Location of the Two Kiln Fire of 1994.



Ely District Office

January 9, 2009  
Caliente Field Station

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.



Caliente and Clover Mountain  
1:100,000 Quad Maps

LEGEND

- Study Site Transects
- Two Kiln Fire of 1994
- Private Lands



## APPENDIX B

### TABLES

#### Water Rights

Table 1. Water Right Type, Ownership and Legal Locations Associated with Natural Water Sources Within the McGuffy and Buckboard Allotments According to the Office of the State Division of Water Resources.

Spring Name	Water Right Type (Manner of Use)	Ownership	Legal Location
Kiln Spring	-----	No Water Rights are Listed with the Division of Water Resources, however, vested right may exist.	T. 2 S., R.70 E., sec. 4, SE¼NW¼
Marchell Spring	-----	No Water Rights are Listed with the Division of Water Resources, however, vested right may exist.	T. 2 S., R.70 E., sec. 11, SE¼SW¼
Summit Spring	-----	BLM has Reserved Water Right (# R04307)	T. 2 S., R.70 E., sec. 27, NW¼
Keel Spring	Certificated	Division of Water Resources lists William Keel Jr. as having a Certificated right for stock watering purposes.	T. 3 S., R.68 E., sec. 13, SE¼SE¼
Buckboard Spring	Vested Right	Division of Water Resources lists Philip Mathews as having a vested right for stock watering purposes.	T. 3 S., R.69 E., sec. 19, NW¼

Table 2. Livestock Grazing Use for Orren Nash on the McGuffy Allotment - as AUMs Licensed and Percent of Active Use by Grazing Year - from March 1, 1994 through February 28, 2009 (15 years).

Allotment/Active Use/Season of Use	Grazing Year (3/1 - 2/28)	AUMs Licensed	% of Active Use
McGuffy (Active Use = 298 AUMs)  Season of Use = 3/1 - 2/28	1994	95	32%
	1995	100	34%
	1996	129	43%
	1997	128	43%
	1998	135	45%
	1999	237	80%
	2000	254	85%
	2001	300	100%
	2002	174	58%
	2003	55	18%
	2004	192	64%
	2005	225	76%
	2006	240	80%
	2007	300	100%
	2008	300	100%

Table 3. Livestock Grazing Use for Lewis Wendell Mathews on the Panaca Cattle and Buckboard Allotments - as AUMs Licensed and Percent of Active Use by Grazing Year - from March 1, 1999 through February 28, 2009 (10 years).

Allotment/Active Use/Season of Use	Grazing Year (3/1 – 2/28)	AUMs Licensed	% of Active Use
Panaca Cattle (Active Use = 163 AUMs)  Season of Use = 3/1 – 2/28	1999	168	100%
	2000	165	100%
	2001	Non-Use	0
	2002	Non-Use	0
	2003	Non-Use	0
	2004	Non-Use	0
	2005	Non-Use	0
	2006	Non-Use	0
	2007	Non-Use	0
2008	Non-Use	0	
Buckboard (Active Use = 263 AUMs)  Season of Use = 3/1 – 2/28	1999	264	100%
	2000	265	100%
	2001	Non-Use	0
	2002	Non-Use	0
	2003	Non-Use	0
	2004	Non-Use	0
	2005	Non-Use	0
	2006	Non-Use	0
	2007	Non-Use	0
2008	Non-Use	0	

Table 4. Combined Livestock Grazing Use for Orren Nash and Lewis Wendell Mathews on the Panaca Cattle Allotment - as Combined AUMs Licensed and Percent of Combined Active Use by Grazing Year - from March 1, 1999 through February 28, 2009 (10 years).

Allotment/Active Use/Season of Use	Grazing Year (3/1 – 2/28)	Combined AUMs Licensed	% of Combined Active Use
<u>Panaca Cattle Allotment</u>  Nash (Active Use)      290 AUMs Mathews (Active Use) <u>163 AUMs</u> Total    453 AUMs  Season of Use = 3/1 – 2/28	1999	168	37%
	2000	165	36%
	2001	Non-Use	0
	2002	Non-Use	0
	2003	Non-Use	0
	2004	Non-Use	0
	2005	Non-Use	0
	2006	Non-Use	0
	2007	Non-Use	0
2008	Non-Use	0	



Table 5. Comparison of Cover Data - Collected at Study Site Transects within the McGuffy, Roadside/White Hills, Panaca Cattle and Buckboard Allotments - to Potential Natural Community (PNC) Cover Values for the Applicable Range Site.

Allotment (Key Area)	Range Site	Associated Vegetation Type	% Cover	% Cover at PNC In Applicable Rangeland Site Description
McGuffy (McG-1)	029XY029NV	ARTR2 / HECO26-ACHY Loamy 8 – 12" P.Z.	18%	20% – 30%
McGuffy (McG-2)	Two Kiln Burn (Seeded)	<sup>1</sup> Seeded with mixture of grasses, forbs and shrubs	29%	-----
Roadside/White Hills (RS/WH-1)	029XY008NV	ARNO4 / ACHY Shallow Calcareous Loam 8-12" P.Z.	19%	20 – 30%
Panaca Cattle (PC-1)	029XY012NV	ATCA2 / ACHY Sandy 5 -8" P.Z.	20%	15 – 25%
Panaca Cattle (PC-2)	029XY014NV	ARNO4 / ACHY Shallow Calcareous Slope 8-12" P.Z.	25%	15 – 25%
Panaca Cattle (PC-3)	029XY008NV	ARNO4 / ACHY Shallow Calcareous Loam 8-12" P.Z.	28%	20 – 30%
Buckboard (B-1)	029XY008NV	ARNO4 / ACHY Shallow Calcareous Loam 8-12" P.Z.	19%	20 – 30%
Buckboard (B-2)	029XY104NV	ARNO4 / ACHY – ACTH7 Shallow Clay Loam 8 – 12" P.Z.	0.1%	20% – 35%

<sup>1</sup> Pubescent wheatgrass (*Agropyron trichophorum*, var. *Luna*), Smooth Brome (*Bromus inermis*), Western wheatgrass (*Agropyron smithii*), yellow sweetclover (*Melilotus officinalis*), Small burnet (*Sanguisorba minor*), basin wildrye (*Elymus cinereus*), crested wheatgrass (*Agropyron cristatum*), Antelope bitterbrush (*Purshia tridentata*), Annual ryegrass (*Lolium multiflorum*).

## APPENDIX III

(EA)

### STANDARD TERMS AND CONDITIONS

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 great basin area standards and guidelines for grazing administration. The Standards and Guidelines have been developed by the respective Resource Advisory Council and approved by the Secretary Of The Interior on February 12, 1997. Grazing use will also be in accordance with 43 CFR Subpart 4180 - Fundamentals of Rangeland Health and Standards and Guidelines for Grazing Administration.
7. If future monitoring data indicates that Standards and Guidelines for Grazing Administration are not being met, the permit will be re-issued subject to revised terms and conditions.
8. The permittee must notify the authorized officer by telephone, with written confirmation, immediately upon discovery of any hazardous or solid wastes as defined in 40 CFR Part 261.
9. The permittee is responsible for all maintenance of assigned range improvements including wildlife escape ramps for both permanent and temporary water troughs.
10. When necessary, control or restrict the timing of livestock movement to minimize the transport of livestock-borne noxious weed seeds, roots, or rhizomes between weed-infested and weed-free areas.

**APPENDIX IV**  
(EA)

**WEED RISK ASSESSMENTS**



# **RISK ASSESSMENT FOR NOXIOUS & INVASIVE WEEDS**

Term Grazing Permit Renewal for Orren J. Nash on the McGuffy, Panaca Cattle,  
Roadside & White Hills Allotments

Lincoln County, Nevada

DOI-BLM-NV-L010-2009-0013-EA

On December 8, 2008 a Noxious & Invasive Weed Risk Assessment was completed for the term grazing permit renewal for Orren J. Nash on the McGuffy, Panaca Cattle, Roadside and White Hills Allotments in Lincoln County, NV. The proposed action is to fully process the renewal of the term grazing permit for Orren J. Nash on the McGuffy, Panaca Cattle, Roadside and White Hills Allotments. The issuance of the term grazing permit would be for a period of up to ten years. The current term permit expires on 2/28/2015 and authorizes cattle grazing according to the following:

ALLOTMENT		LIVESTOCK		GRAZING PERIOD		* % Public Land	AUMs		
Name	Number	* Number	Kind	Begin	End		Permitted Use	Hist. Susp. Use	Total Use
McGuffy	1043	25	C	3/01	2/28	100	298	2,010	2,308
Panaca Cattle	1053	25	C	3/01	2/28	100	290	153	443
Roadside	1061	11	C	12/01	2/28	100	32	54	86
White Hills	1082	34	C	12/01	2/28	100	101	96	197

\*This is for billing purposes only.

\*\*These numbers are approximate

These land based allotments are located within Lincoln County in the central portion of the Ely District BLM, approximately 15 miles north of Caliente, Nevada. The McGuffy, Panaca Cattle, Roadside and White Hills Allotments encompass approximately 22,115, 16,275, 1,123 and 2,755 acres, respectively. The Panaca Cattle, Roadside and White Hills Allotments are located within the Panaca Valley Watershed (#210), while McGuffy Allotment is located in the Escalante Desert Watershed (#208).

No field weed surveys were completed for this project. Instead the Ely District weed inventory data was consulted. There are currently no documented weed infestations in the Panaca Cattle or White Hills allotments.

The following species is found within the boundaries of both McGuffy and Roadside allotments:

*Onopordum acanthium*      Scotch thistle

The following species are found along roads and drainages leading to all allotments:

<i>Acroptilon repens</i>	Russian knapweed
<i>Ailanthus altissima</i>	Tree of heaven
<i>Carduus nutans</i>	Musk thistle
<i>Cirsium vulgare</i>	Bull thistle
<i>Centaurea stoebe</i>	Spotted knapweed
<i>Conium maculatum</i>	Poison hemlock
<i>Lepidium draba</i>	Hoary cress
<i>Lepidium latifolium</i>	Tall whitetop
<i>Linaria dalmatica</i>	Dalmatian toadflax
<i>Onopordum acanthium</i>	Scotch thistle
<i>Tamarix spp.</i>	Salt cedar

All allotments were last inventoried for noxious weeds in 2003. It should be noted that the McGuffy allotment runs along the boundary with Utah and no weed inventory data for Utah is currently available. While not officially documented the following non-native invasive weeds probably occur in or around both allotments: cheatgrass (*Bromus tectorum*), field bindweed (*Convolvulus arvensis*), Russian olive (*Elaeagnus angustifolia*), horehound (*Marrubium vulgare*), Russian thistle (*Salsola kali*), and puncturevine (*Tribulus terrestris*).

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

None (0)	Noxious/invasive weed species are not located within or adjacent to the project area. Project activity is not likely to result in the establishment of noxious/invasive weed species in the project area.
Low (1-3)	Noxious/invasive weed species are present in the areas adjacent to but not within the project area. Project activities can be implemented and prevent the spread of noxious/invasive weeds into the project area.
Moderate (4-7)	Noxious/invasive weed species located immediately adjacent to or within the project area. Project activities are likely to result in some areas becoming infested with noxious/invasive weed species even when preventative management actions are followed. Control measures are essential to prevent the spread of noxious/invasive weeds within the project area.
High (8-10)	Heavy infestations of noxious/invasive weeds are located within or immediately adjacent to the project area. Project activities, even with preventative management actions, are likely to result in the establishment and spread of noxious/invasive weeds on disturbed sites throughout much of the project area.

For this project, the factor rates as Moderate (4) at the present time. The proposed action could increase the populations of the noxious and invasive weeds already within the allotments and could aid in the introduction of weeds from surrounding areas. Within the allotments, watering and salt block sites are of particular concern of new weed infestations due to the concentration of livestock around those sites and the amount of ground disturbance associated with that.

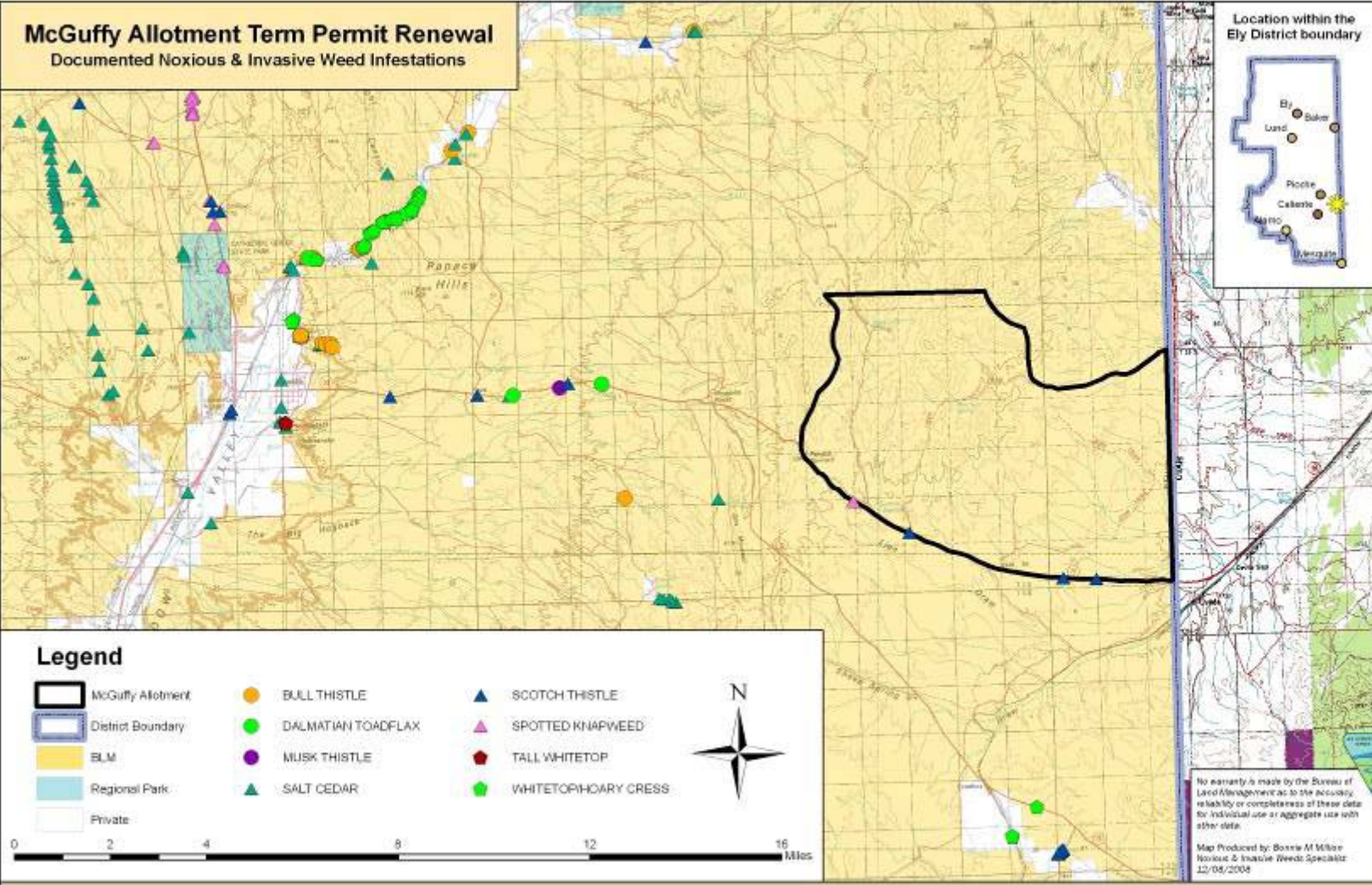
**Factor 2 assesses the consequences of noxious/invasive weed establishment in the project area.**

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

This project rates as High (8) at the present time. If new weed infestations establish within the allotments this could have an adverse impact those native plant communities especially since two of the allotments are currently considered to be weed-free. Also, any increase of cheatgrass could alter the fire regime in the area.



**McGuffy Allotment Term Permit Renewal**  
 Documented Noxious & Invasive Weed Infestations

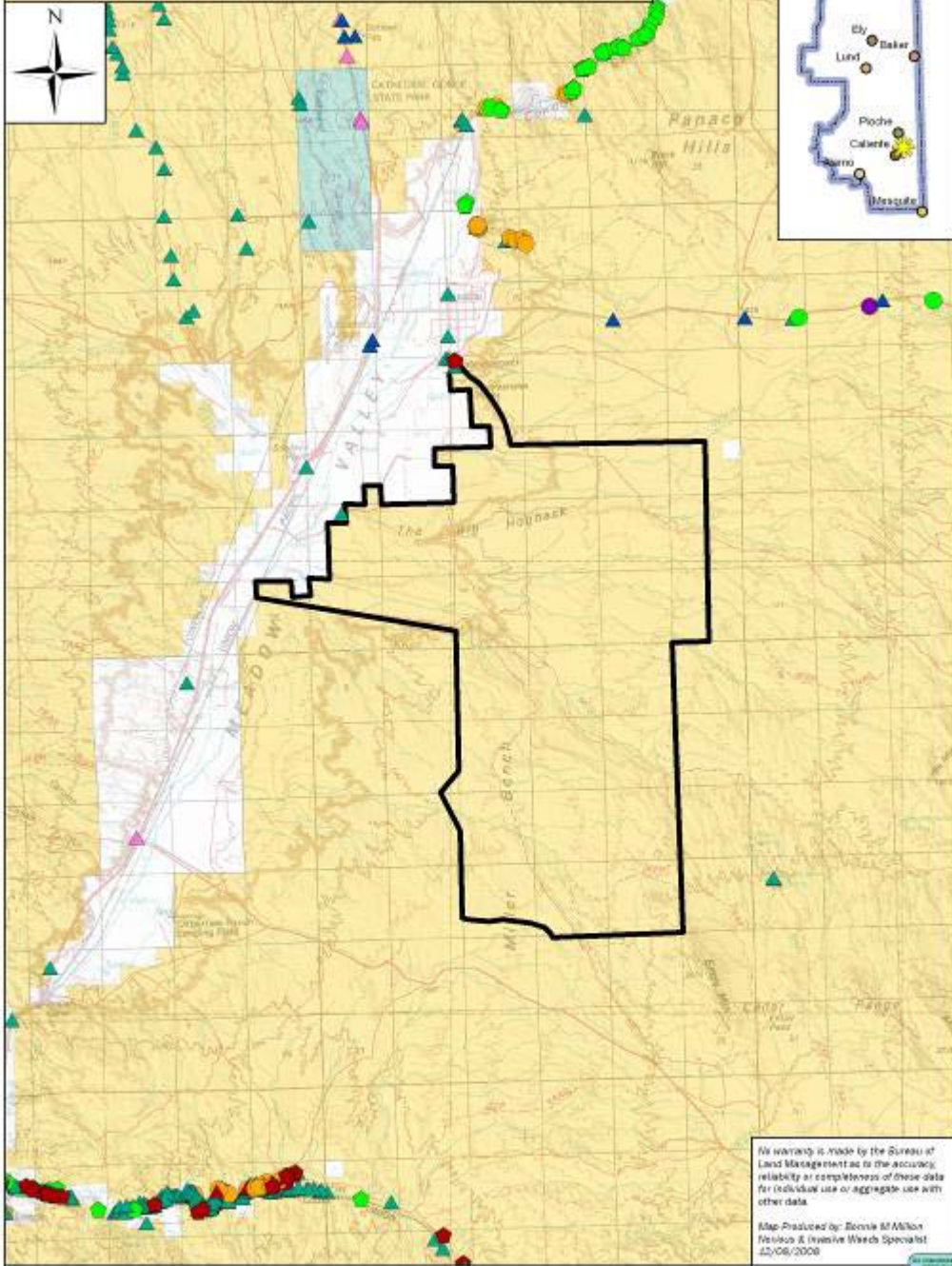
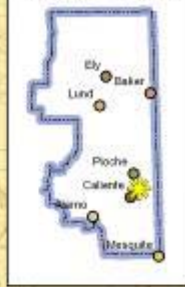


**BLM**



# Panaca Cattle Allotment Term Permit Renewal Documented Noxious & Invasive Weed Infestations

Location within the Ely District boundary



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.  
Map Produced by: Bonnie McMillon  
Noxious & Invasive Weeds Specialist  
12/06/2008

## Legend

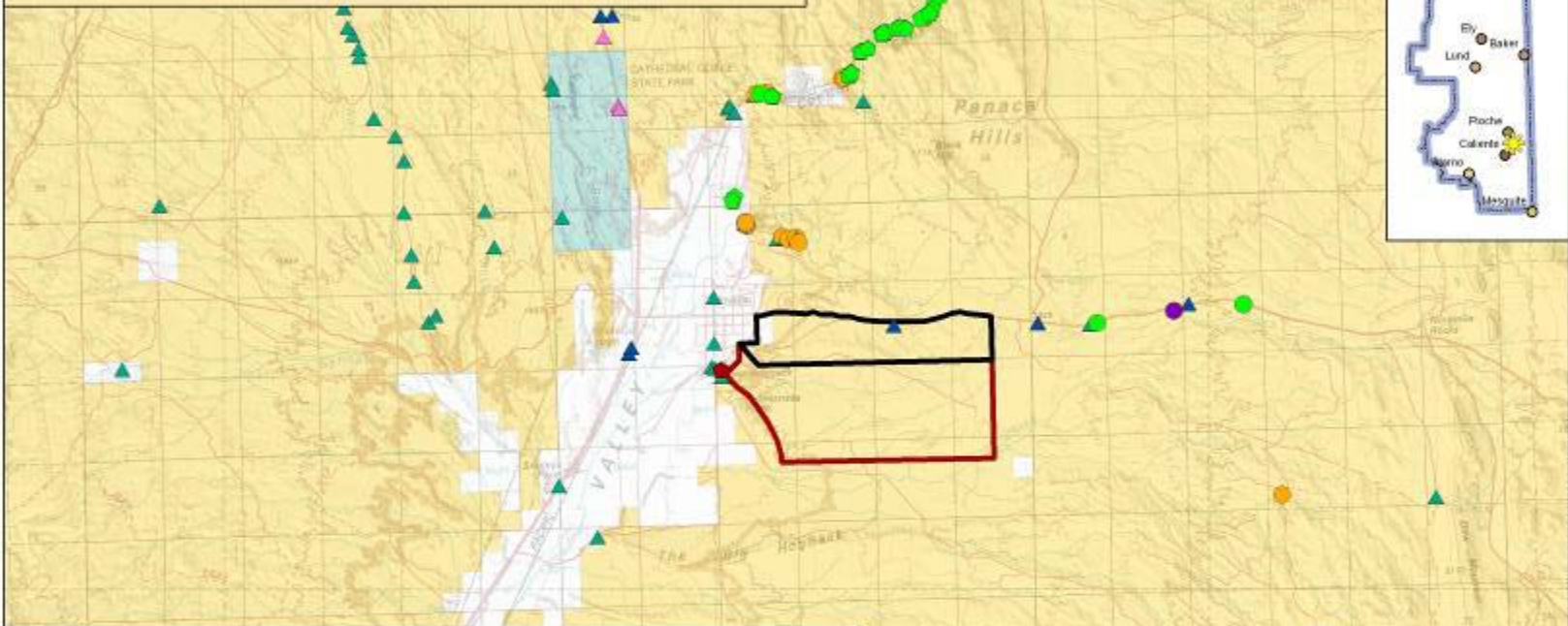
- |                         |                    |                  |                      |
|-------------------------|--------------------|------------------|----------------------|
| Panaca Cattle Allotment | BULL THISTLE       | RUSSIAN KNAPWEED | TALL WHITETOP        |
| BLM                     | DALMATIAN TOADFLAX | SALT CEDAR       | TREE OF HEAVEN       |
| Regional Park           | MUSK THISTLE       | SCOTCH THISTLE   | WHITETOP/HOARY CRESS |
| Private                 | POISON HEMLOCK     | SPOTTED KNAPWEED |                      |



Ely District Office

**BLM**

**Roadside & White Hills Allotments Term Permit Renewal**  
 Documented Noxious & Invasive Weed Infestations



**Legend**

- |                       |                    |                      |
|-----------------------|--------------------|----------------------|
| Roadside Allotment    | BULL THISTLE       | SCOTCH THISTLE       |
| White Hills Allotment | DALMATIAN TOADFLAX | SPOTTED KNAPWEED     |
| BLM                   | MUSK THISTLE       | TALL WHITETOP        |
| Regional Park         | SALT CEDAR         | WHITETOP/HOARY CRESS |
| Private               |                    |                      |



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.  
 Map Produced by: Dennis M. Miller  
 Noxious & Invasive Weeds Specialist  
 10/08/2008

**BLM**

Ely District Office



# **RISK ASSESSMENT FOR NOXIOUS & INVASIVE WEEDS**

Term Grazing Permit Renewal for  
Lewis Wendell Mathews on the Panaca Cattle & Buckboard Allotments

Lincoln County, Nevada

DOI-BLM-NV-L010-2009-0013-EA

On December 8, 2008 a Noxious & Invasive Weed Risk Assessment was completed for the term grazing permit renewal for Lewis Wendell Mathews on the Panaca Cattle and Buckboard Allotments in Lincoln County, NV. The proposed action is to fully process the renewal of the term grazing permit for Lewis Wendell Mathews on the Panaca Cattle and Buckboard Allotments. The issuance of the term grazing permit would be for a period of up to ten years. The current term permit expires on 2/28/2016 and authorizes cattle grazing according to the following:

ALLOTMENT		LIVESTOCK		GRAZING PERIOD		* % Public Land	AUMs		
Name	Number	* Number	Kind	Begin	End		Permitted Use	Hist. Susp. Use	Total Use
Panaca Cattle	1053	14	C	3/01	2/28	100	163	85	248
Buckboard	21011	22	C	3/01	2/28	100	263	88	351

\*This is for billing purposes only.

\*\*These numbers are approximate

These land based allotments are located within Lincoln County in the central portion of the Ely District BLM, approximately 15 miles north of Caliente, Nevada. The Panaca Cattle and Buckboard Allotments encompass approximately 16,275 and 10,842 acres, respectively. The Panaca Cattle, Allotment is located within the Panaca Valley Watershed (#210). The extreme south portion of the Buckboard Allotment is located within the Clover Creek North Watershed (#212 N), while the remaining north portion is located within the Panaca Valley Watershed (#210).

No field weed surveys were completed for this project. Instead the Ely District weed inventory data was consulted. There are currently no documented weed infestations in the Panaca Cattle allotment.

The following species is found within the boundaries of the Buckboard allotment:

*Tamarix spp.*

Salt cedar

The following species are found along roads and drainages leading to both allotments:

<i>Acrotilon repens</i>	Russian knapweed
<i>Ailanthus altissima</i>	Tree of heaven
<i>Cirsium vulgare</i>	Bull thistle
<i>Centaurea stoebe</i>	Spotted knapweed
<i>Conium maculatum</i>	Poison hemlock
<i>Lepidium draba</i>	Hoary cress
<i>Lepidium latifolium</i>	Tall whitetop
<i>Linaria dalmatica</i>	Dalmatian toadflax
<i>Onopordum acanthium</i>	Scotch thistle
<i>Tamarix spp.</i>	Salt cedar

Both allotments were last inventoried for noxious weeds in 2003. While not officially documented the following non-native invasive weeds probably occur in or around both allotments: cheatgrass (*Bromus tectorum*), field bindweed (*Convolvulus arvensis*), Russian olive (*Elaeagnus angustifolia*), horehound (*Marrubium vulgare*), Russian thistle (*Salsola kali*), and puncturevine (*Tribulus terrestris*).

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

None (0)	Noxious/invasive weed species are not located within or adjacent to the project area. Project activity is not likely to result in the establishment of noxious/invasive weed species in the project area.
Low (1-3)	Noxious/invasive weed species are present in the areas adjacent to but not within the project area. Project activities can be implemented and prevent the spread of noxious/invasive weeds into the project area.
Moderate (4-7)	Noxious/invasive weed species located immediately adjacent to or within the project area. Project activities are likely to result in some areas becoming infested with noxious/invasive weed species even when preventative management actions are followed. Control measures are essential to prevent the spread of noxious/invasive weeds within the project area.
High (8-10)	Heavy infestations of noxious/invasive weeds are located within or immediately adjacent to the project area. Project activities, even with preventative management actions, are likely to result in the establishment and spread of noxious/invasive weeds on disturbed sites throughout much of the project area.

For this project, the factor rates as Moderate (4) at the present time. The proposed action could increase the populations of the noxious and invasive weeds already within the allotments and could aid in the introduction of weeds from surrounding areas. Within the allotments, watering and salt block sites are of particular concern of new weed infestations due to the concentration of livestock around those sites and the amount of ground disturbance associated with that.

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

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

This project rates as High (8) at the present time. If new weed infestations establish within the allotments this could have an adverse impact those native plant communities especially since the Panaca Cattle Allotment is currently considered to be weed-free. Also, any increase of cheatgrass could alter the fire regime in the area.



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

None (0)	Proceed as planned.
Low (1-10)	Proceed as planned. Initiate control treatment on noxious/invasive weed populations that get established in the area.
Moderate (11-49)	Develop preventative management measures for the proposed project to reduce the risk of introduction or spread of noxious/invasive weeds into the area. Preventative management measures should include modifying the project to include seeding the area to occupy disturbed sites with desirable species. Monitor the area for at least 3 consecutive years and provide for control of newly established populations of noxious/invasive weeds and follow-up treatment for previously treated infestations.
High (50-100)	Project must be modified to reduce risk level through preventative management measures, including seeding with desirable species to occupy disturbed site and controlling existing infestations of noxious/invasive weeds prior to project activity. Project must provide at least 5 consecutive years of monitoring. Projects must also provide for control of newly established populations of noxious/invasive weeds and follow-up treatment for previously treated infestations.

For this project, the Risk Rating is Moderate (32). This indicates that the project can proceed as planned as long as the following measures are followed:

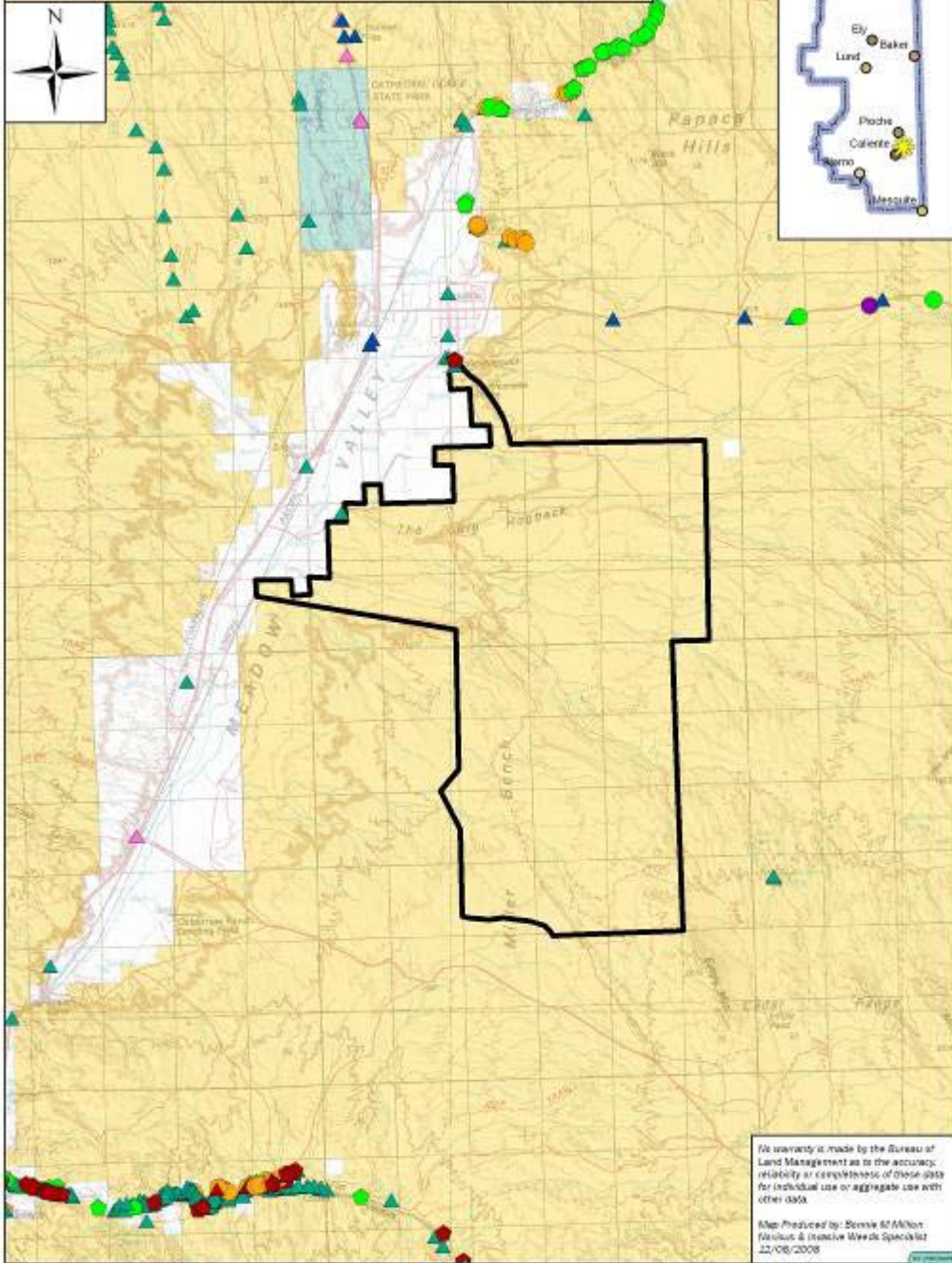
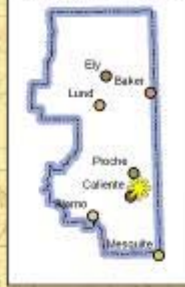
- Prior to entering public lands, the BLM will provide information regarding noxious weed management and identification to the permit holders affiliated with the project. The importance of preventing the spread of weeds to uninfested areas and importance of controlling existing populations of weeds will be explained.
- The range specialist for the allotments will include weed detection into project compliance inspection activities. If the spread of noxious weeds is noted, appropriated weed control procedures will be determined in consultation with BLM personnel and will be in compliance with the appropriate BLM handbook sections and applicable laws and regulations.
- To eliminate the introduction of noxious weed seeds, roots, or rhizomes all interim and final seed mixes, hay, straw, hay/straw, or other organic products used for feed or bedding will be certified free of plant species listed on the Nevada noxious weed list or specifically identified by the BLM Ely District Office.
- 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.
- Any newly established populations of noxious/invasive weeds discovered will be communicated to the Ely District Noxious and Invasive Weeds Coordinator for treatment.

Reviewed by:   /s/ Bonnie Million    
Bonnie Million  
Ely District Noxious & Invasive Weeds Coordinator

  12/8/2008    
Date

# Panaca Cattle Allotment Term Permit Renewal Documented Noxious & Invasive Weed Infestations

Location within the Ely District boundary



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.  
Map Produced by: Bonnie McMillon  
Invasive & Noxious Weeds Specialist  
22/06/2008

## Legend

- |                         |                    |                  |                      |
|-------------------------|--------------------|------------------|----------------------|
| Panaca Cattle Allotment | BULL THISTLE       | RUSSIAN KNAPWEED | TALL WHITETOP        |
| BLM                     | DALMATIAN TOADFLAX | SALT CEDAR       | TREE OF HEAVEN       |
| Regional Park           | MUSK THISTLE       | SCOTCH THISTLE   | WHITETOP/HOARY CRESS |
| Private                 | POISON HEMLOCK     | SPOTTED KNAPWEED |                      |



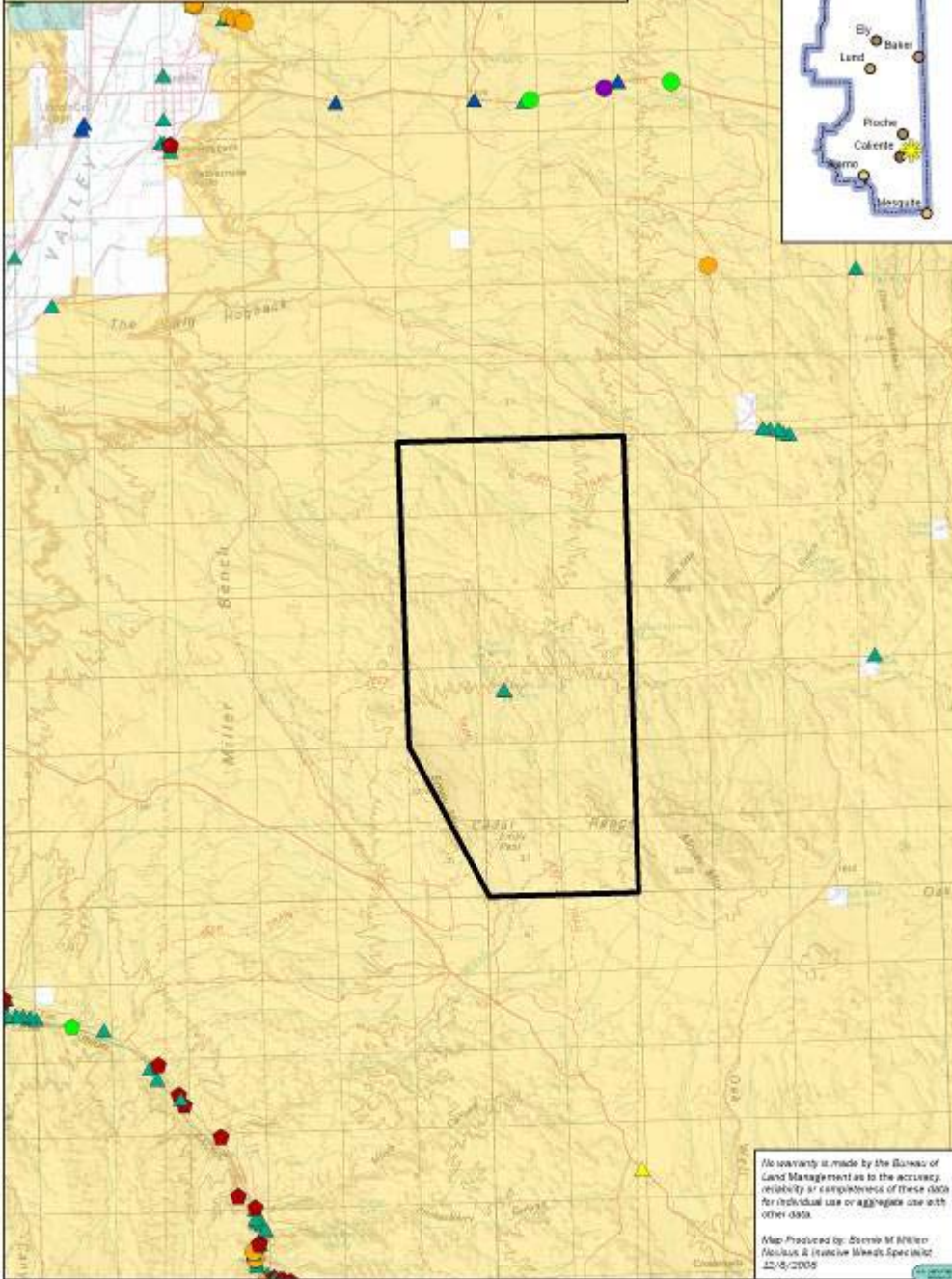
Ely District Office

**BLM**



# Buckboard Allotment Term Permit Renewal Documented Noxious & Invasive Weed Infestations

Location within the Ely District boundary



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.  
Map Produced by: Bernie M Miller  
Noxious & Invasive Weeds Specialist  
12/8/2008

## Legend

- Buckboard Allotment
- BLM
- Regional Park
- Private
- BULL THISTLE
- DALMATIAN TOADFLAX
- MUSK THISTLE
- RUSSIAN KNAPWEED
- SALT CEDAR
- SCOTCH THISTLE
- TALL WHITETOP
- WHITETOP/HOARY CRESS



Ely District Office

BLM

**APPENDIX V**  
(EA)

**MIGRATORY BIRDS**

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

### **Works Cited**

Floyd T, Elphick CS, Chisholm G, Mack K, Elston RG, Ammon EM, and Boone JD. 2007. Atlas of the Breeding Birds of Nevada. Reno: University of Nevada Press.

### **McGuffy Allotment**

Turkey vulture (*Cathartes aura*)  
Red-tailed hawk (*Buteo jamaicensis*)  
Mourning dove (*Zenaida macroura*)  
Broad-tailed hummingbird (*Selasphorus platycercus*)  
Lewis's woodpecker (*Melanerpes lewis*)  
Northern flicker (*Colaptes auratus*)  
Gray flycatcher (*Empidonax wrightii*)  
Ash-throated flycatcher (*Myiarchus cinerascens*)  
Western scrub-jay (*Aphelocoma californica*)  
Pinyon jay (*Gymnorhinus cyanocephalus*)  
Common raven (*Corvus corax*)  
Mountain chickadee (*Poecile gambeli*)  
Rock wren (*Salpinctes obsoletus*)  
Bewick's wren (*Thryomanes bewickii*)  
Blue-gray gnatcatcher (*Polioptila caerulea*)  
Western bluebird (*Sialia mexicana*)  
Mountain bluebird (*Sialia currucoides*)  
Northern mockingbird (*Mimus polyglottos*)  
Yellow-rumped warbler (*Dendroica coronate*)  
Black-throated gray warbler (*Dendroica nigrescens*)  
Yellow-breasted chat (*Icteria virens*)  
Green-tailed towhee (*Pipilo chlorurus*)  
Spotted towhee (*Pipilo maculatus*)  
Chipping sparrow (*Spizella passerine*)  
Lark sparrow (*Chondestes grammacus*)

### **Road Side Allotment**

No survey blocks or incidental sightings occur within in this allotment. Survey blocks with similar vegetation as this allotment contained the following bird species:

Northern harrier (*Circus cyaneus*)  
Mourning dove (*Zenaida macroura*)  
Horned lark (*Eremophila alpestris*)  
Northern mockingbird (*Mimus polyglottos*)



Black-throated sparrow (*Amphispiza bilineata*)  
Sage sparrow (*Amphispiza belli*)

### **White Hills Allotment**

No survey blocks or incidental sightings occur within in this allotment. Survey blocks with similar vegetation as this allotment contained the following bird species:

Northern harrier (*Circus cyaneus*)  
Mourning dove (*Zenaida macroura*)  
Horned lark (*Eremophila alpestris*)  
Northern mockingbird (*Mimus polyglottos*)  
Black-throated sparrow (*Amphispiza bilineata*)  
Sage sparrow (*Amphispiza belli*)

### **Panaca Cattle Allotment**

Mallard (*Anas platyrhynchos*)  
Northern pintail (*Anas acuta*)  
Cinnamon teal (*Anas cyanoptera*)  
Northern harrier (*Circus cyaneus*)  
Gambel's quail (*Callipepla gambelii*)  
Mourning dove (*Zenaida macroura*)  
Barn swallow (*Hirundo rustica*)  
Common raven (*Corvus corax*)  
Sage thrasher (*Oreoscoptes montanus*)  
Yellow warbler (*Dendroica petechia*)  
Common yellowthroat (*Geothlypis trichas*)  
Wilson's warbler (*Wilsonia pusilla*)  
Blue grosbeak (*Passerina caerulea*)  
Chipping sparrow (*Spizella passerina*)  
Black-throated sparrow (*Amphispiza bilineata*)  
Red-winged blackbird (*Agelaius phoeniceus*)  
Western meadowlark (*Sturnella neglecta*)  
Yellow-headed blackbird (*Xanthocephalus xanthocephalus*)  
Brewer's blackbird (*Euphagus cyanocephalus*)  
Brown-headed cowbird (*Molothrus ater*)  
Turkey vulture (*Cathartes aura*)  
Red-tailed hawk (*Buteo jamaicensis*)  
Long-billed curlew (*Numenius americanus*)  
Wilson's snipe (*Gallinago delicata*)  
Northern rough-winged swallow (*Stelgidopteryx serripennis*)  
Northern mockingbird (*Mimus polyglottos*)  
Brewer's sparrow (*Spizella breweri*)

## **Buckboard Allotment**

Mourning dove (*Zenaida macroura*)  
Broad-tailed hummingbird (*Selasphorus platycercus*)  
Northern flicker (*Colaptes auratus*)  
Gray flycatcher (*Empidonax wrightii*)  
Ash-throated flycatcher (*Myiarchus cinerascens*)  
Violet-green swallow (*Tachycineta thalassina*)  
Stellar's jay (*Cyanocitta stelleri*)  
Western scrub-jay (*Aphelocoma californica*)  
Common raven (*Corvus corax*)  
Bushtit (*Psaltriparus minimus*)  
Bewick's wren (*Thryomanes bewickii*)  
Blue-gray gnatcatcher (*Polioptila caerulea*)  
Gray vireo (*Vireo vicinior*)  
Plumbeous vireo (*Vireo plumbeus*)  
Black-throated gray warbler (*Dendroica nigrescens*)  
Spotted towhee (*Pipilo maculatus*)  
Chipping sparrow (*Spizella passerine*)  
Brewer's sparrow (*Spizella breweri*)  
Black-chinned sparrow (*Spizella atrogularis*)  
Brown-headed cowbird (*Molothrus ater*)