



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

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



### RECEIVED

SEP 28 2007

DEPARTMENT OF ADMINISTRATION  
OFFICE OF THE DIRECTOR  
BUDGET AND PLANNING DIVISION

#### In Reply Refer to:

NV-040-07-016  
4160  
NV-045.09  
Case File

SEP 25 2007

Dean Carter and Sons  
P.O. Box 245  
Minersville, Utah 84752

CERTIFIED MAIL 7006 0810 0003 0772 3109  
RETURN RECEIPT REQUESTED

## PROPOSED DECISION

### Dean Carter and Sons Term Permit Renewal for the Rattlesnake Allotment

#### Background Information

On September 20, 2007 the Finding of No Significant Impact (FONSI) was signed for the Environmental Assessment to Renew the Grazing Permit for Dean Carter and Sons for the Rattlesnake Allotment (EA No. NV-040-07-016) was signed. The Environmental Assessment (EA) and the FONSI are attached. 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 EAs as per the requirement set forth in BLM Washington Office IMs WO 2003-071 and WO 2004-126.

The proposed action associated with EA-NV-040-00-016 is to issue a new term permit to Dean Carter and Sons. The term grazing permit under consideration is for the Rattlesnake Allotment (#1058). The Rattlesnake Allotment is a cattle allotment with a permitted use of 1,504 Animal Unit Months (AUMs). Of these, 1,180 AUMs are active and 324 AUMs are suspended nonuse. The current permitted season of use is October 16 to May 30. The allotment is ranked as an "M" (Maintain Condition) category in the Caliente Resource Area Rangeland Program Summary (1985). The current term permit for the Rattlesnake Allotment has been issued for the period of 3/1/2006 to 2/28/2016. The allotment encompasses 39,948 acres of BLM managed lands.

Fully processing and renewing the term permit for Dean Carter and Sons for the Rattlesnake Allotment provides for a legitimate multiple use of the public lands and includes terms and conditions for grazing use that conform to Guidelines and will achieve significant progress

toward 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 "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 will ensure that Standards for Rangeland Health and multiple use objectives continue to be met and that significant progress is made towards those that are currently not met.

The standards were assessed for the Rattlesnake Allotment by a BLM interdisciplinary team consisting of rangeland management specialists, wildlife biologist, weeds specialist, and watershed specialist. The interdisciplinary team used rangeland monitoring data, professional observations, and photographs to assess achievement of the Standards and conformance with the Guidelines. The "Standard Riparian Functioning Condition Checklist" (USDI-BLM 2000) was completed for the one riparian area in the Rattlesnake Allotment.

The assessment of rangeland health for the Rattlesnake Allotment was conducted in 2007. It was determined that the Standards were not being achieved. Grazing management is not occurring in complete conformance with the Guidelines. A review and analysis of the monitoring data was conducted. As a result of this review, changes to the management of livestock were proposed to improve the vegetative conditions of the allotment. The complete standards determination is located in Appendix I of the EA (EA-NV-040-07-016). A summary of the findings for the allotment are as follows:

1. Soils Standard: Not achieving the Standard and not making significant progress toward achieving.
2. Ecosystem Components: Not achieving the Standard and not making significant progress toward achieving.
3. Habitat and Biota: Not achieving the Standard and not making significant progress toward achieving.

#### Conclusions of the Standard Determination:

Standard 1. Soils: Not achieving the Standard and not making significant progress toward achieving Standard. The Standard is not being achieved due to vegetative cover inadequate for the ecological site at Key Areas 1 and 3. Cover was measured in 2007 which indicated perennial native cover was 12% and 9% at Key Areas 1 and 3 respectively. Much less than the desirable level of 20-30% ground (basal and crown) cover. Douglas' rabbitbrush has increased at these sites while key perennial species have decreased.

Standard 2. Ecosystem Components: Not achieving the Standard and not making significant progress toward achieving Standard. The Standard is not being achieved due to the vegetation

community conditions at the key areas. Line Intercept Cover data collected at the key areas indicates the major plant communities are lacking major plant species such as desert needlegrass, bush muhly and ephedra, and minor species listed in the range site description such as other perennial grasses, and other shrubs. The key species appear to have decreased while Douglas' rabbitbrush has increased on site or replaced key species at the key areas. Whereas away from the areas affected by normal grazing patterns, the vegetation composition and cover is more appropriate.

Standard 3. Habitat and Biota: Not achieving the Standard and not making significant progress toward achieving Standard. The Standard is not being achieved due to the degradation of vegetation in the habitat. Habitat quality in the desert is defined by proper vegetation composition, appropriate structure and age class. Corridors and edges provide microhabitats. Overall productivity of individual native plant species contributes to the basic habitat requirements of forage and cover for numerous wildlife species in the salt desert. The allotment should ultimately reflect the potential based on the Ecological Site Descriptions.

The project proposal was posted on the Ely Field Office web site, January 25, 2007, at [http://www.nv.blm.gov/ely/nepa/ea\\_list.htm](http://www.nv.blm.gov/ely/nepa/ea_list.htm). During this early scoping process, no comments were received.

The preliminary EA was posted on the Ely external webpage on June 11, 2007 for a thirty day comment period. A hard copy of the preliminary EA was mailed to the permittee and those publics who have specifically requested one and who have expressed an interest in range management actions on the Rattlesnake Allotment. Public comments to the EA were received from Cindy MacDonald and Western Watersheds Project. Comments pertinent to, and within the scope of the EA are listed in Appendix IV of the final EA. The comments were reviewed and considered in association with completing the final EA. A few minor changes were made to the final EA relating to management practices and allowable grazing use levels. Additional monitoring data was added to the data section of the Standards Determination Document found in Appendix I of the EA.

## LIVESTOCK MANAGEMENT DECISION

In accordance with 43 CFR 4110.3, 4110.3-2(b), 4130.3-1, and 4130.3-3 permitted use for Dean Carter and Sons on the Rattlesnake Allotment is changed as follows:

**TABLE 1. FROM:**

Allotment Name and Number	Livestock Number/Kind	Grazing Period		% Public Land	Type Use	AUMs
		Begin	End			
Rattlesnake 01058	158 Cattle	10/16	5/30	100	Active	1,180
<b>Allotment AUMs Summary</b>						
<b>ACTIVE AUMS</b>		<b>SUSPENDED AUMS</b>		<b>PERMITTED USE</b>		
1,180		324		1,504		

**TABLE 2. TO:**

Allotment Name and Number	Livestock Number/Kind	Grazing Period		% Public Land	Type Use	AUMs
		Begin	End			
Rattlesnake 01058	169 Cattle	10/1	4/30	100	Active	1,180
<b>Allotment AUMs Summary</b>						
<b>ACTIVE AUMS</b>		<b>SUSPENDED AUMS</b>		<b>PERMITTED USE</b>		
1,180		324		1,504		

The permit will be renewed for a period of ten years in accordance with 4130.2 (d). This decision will be effective upon the decision becoming final or pending final determination on appeal.

In addition to the permit terms and conditions applicable to all grazing permits, the following stipulations for grazing use are specific to the Rattlesnake Allotment and the Dean Carter and Sons Permit (#2705027):

1. Salt and/or mineral supplements for livestock are to be located no closer than ¼ mile from any water sources. Use of nutritional supplements (not forage) is encouraged to improve the ability of cattle to utilize forage in the winter months and to improve livestock distribution across the allotment.

2. Maximum allowable use levels are established as follows:

- Perennial grasses: 40% on current year's growth
- Perennial shrubs, half-shrubs and forbs: 40% use on current year's growth

3. Wildlife escape ramps provided by the BLM are required to be installed and maintained by the permittee at each trough used on the allotment.

Stipulations Common to All Allotments:

1. Livestock numbers identified in the term grazing permit are a function of seasons of use and permitted use for each allotment. Deviations from those livestock numbers and seasons of use may be authorized on an annual basis where such deviations would not prevent attainment of the multiple-use objectives for the allotment.

2. Deviations from specified grazing use dates will be allowed when consistent with multiple-use objectives. Such deviations will require an application and written authorization from the authorized officer prior to grazing use.

3. The authorized officer is requiring that an actual use report (form 4130-5) be submitted within 15 days after completing your annual grazing use.

4. The payment of your grazing fees is due on or before the date specified in the grazing bill. This date is generally the opening date of your allotment. If payment is not received within 15 days of the due date, you will be charged a late fee assessment of \$25 or 10 percent of the grazing bill, whichever is greater, not to exceed \$250. Payment with Visa, Mastercard or American Express is accepted. Failure to make payment within 30 days of the due date may result in trespass action.

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

6. Grazing use will be in accordance with the Mojave Southern Great Basin Standards and Guidelines for grazing administration as developed by the respective resource advisory council and were approved by the Secretary of the Interior on February 12, 1997 with subsequent revisions. Grazing use will also be in accordance with 43 CFR Subpart 4180 – Fundamentals of Rangeland Health and Standards and Guidelines for Grazing Administration.

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

**Rationale For Changes in Grazing Use**

Livestock grazing has been determined to be a contributing factor to not achieving the Standards. The primary reasons cited include an inappropriate vegetation community and soil protection. The season of use which extends through the end of May, was cited as the primary cause for the loss or reduction of cool season plants. The change in the season of use to disallow grazing in

May except for flexibility subject to yearly approval is needed to reduce grazing pressure on perennial native species throughout the primary use area.

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

4100.0-8: “The authorized officer shall manage livestock grazing on public lands under the principle of multiple-use and sustained yield and in accordance with applicable land use plans. Land use plans shall establish allowable resource uses (either singly or in combination), related levels of production or use to be maintained, areas of use, and resource condition goals and objectives to be obtained. The plans also set forth program constraints and general management practices needed to achieve management objectives. Livestock grazing activities and management actions approved by the authorized officer shall be in conformance with the land use plan as defined at CFR 601.0-5(b).”

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

4110.3-2 (b): “When monitoring or field observations show grazing use or patterns of use are not consistent with the provisions of subpart 4180, or grazing use is otherwise causing an unacceptable level or pattern of utilization, or when use exceeds the livestock carrying capacity as determined through monitoring, ecological site inventory or other acceptable methods, the authorized officer shall reduce permitted grazing use or otherwise modify management practices.”

§ 4130.2 (a): 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 (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.

§ 4130.3-1 (c) Permits and leases shall incorporate terms and conditions that ensure conformance with subpart 4180 of this part.

§ 4130.3-2: 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.

§ 4130.3-3: Following consultation, cooperation, and coordination with the affected lessees or permittees, the State having lands or responsible for managing resources within the area, and the interested public, the authorized officer may modify terms and conditions of the permit or lease when the active use or related management practices are not meeting the land use plan, allotment management plan or other activity plan, or management objectives, or is not in conformance with the provisions of subpart 4180 of this part.

§ 4160.1 (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.

§ 4160.1 (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.

§ 4180.1: 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 to William E. Dunn, Assistant Field Manager for Renewable Resources, Ely Field Office Box 33500, 702 North Industrial Way HC33 Ely, Nevada 89301 within 15 days after receipt of such decision. 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 William E. Dunn, Assistant Field Manager for Renewable Resources, Ely Field Office Box 33500, 702 North Industrial Way HC33 Ely, Nevada 89301. Within 15 days of filing the appeal and any petition for stay, the appellant also must serve a copy of the appeal and any petition for stay on any person named in the decision and listed at the end of the decision, and on the Office of the Solicitor, Regional Solicitor, Pacific Southwest Region, U.S. Department of the Interior, 2800 Cottage Way, Room E-1712, Sacramento, California 95825-1890.

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

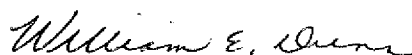
- (1) The relative harm to the parties if the stay is granted or denied;
- (2) The likelihood of the appellant's success on the merits;
- (3) The likelihood of immediate and irreparable harm if the stay is not granted; and,
- (4) Whether the public interest favors granting the stay.

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

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

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

Sincerely,



William E. Dunn  
Assistant Field Manager  
Renewable Resources

Enclosures:

1. Finding of No Significant Impact (FONSI )
2. EA NV-040-07-016 with Appendices
3. Allotment Map

cc: Interested Publics:

**CERTIFIED RETURN RECEIPT NUMBER:**

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**FINDING OF NO SIGNIFICANT IMPACT FOR  
Environmental Assessment to Renew the Grazing Permit for  
Dean Carter and Sons (#2705027) for the Rattlesnake Allotment (#1058)  
EA # NV-040-07-016**

I have reviewed Environmental Assessment (EA) NV-040-00-016, dated September 7, 2007. After consideration of the environmental effects as described in the EA, and incorporated herein, I have determined that the proposed action associated with fully processing the term permit renewal identified in the EA will not significantly affect the quality of the human environment and that an Environmental Impact Statement (EIS) is not required to be prepared. Environmental Assessment (EA) NV-040-00-016 has been reviewed through the interdisciplinary team process and was scoped publicly as a preliminary EA.

I have determined the proposed action is in conformance with the Caliente Management Framework Plan approved under the Caliente Planning Unit Decision Summary and Record of Decision issued July 1, 1983, and the Final Environmental Statement (ES) Proposed Domestic Livestock Grazing Management Program for the Caliente Area signed September 21, 1979. 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 Rattlesnake Allotment is located 16 miles northeast of Caliente, Nevada in Dry Lake Valley. It is situated on the northern end of the North Pahroc Range. The allotment encompasses 39,948 acres of BLM managed lands, all in Lincoln County, Nevada. Lincoln County is sparsely populated, with less than one person per square mile. Impacts from livestock grazing are dispersed, and compatible with the rural, agricultural setting throughout Lincoln County. The allotment is approximately 130 miles from metropolitan Las Vegas, Nevada.

**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. The deferment of livestock grazing during the critical growing season and reduction of allowable use levels will be beneficial to the rangeland resources on the allotment and the habitats they support by reducing direct impacts that are adverse to rangeland health associated with livestock use.

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

The Proposed Action will not result in potentially substantial or adverse impacts to public health and safety. The presence of the livestock on the allotment would be dispersed over a large area.

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

There are no parks, wetlands, wild and scenic rivers, or Areas of Critical Environmental Concern (ACECs) within the area of analysis. Cultural and historic resources typical of the general area may occur on the allotment, but assessments by District cultural specialists revealed no impacts to known sites as a result of the proposed action. Prime farmland soils occur on the allotment but are not affected by the Proposed Action.

***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. These effects were disclosed in the Caliente Grazing ES. Public input was sought during scoping of the proposed action for the EA. Comments were received by two individuals. Scoping for the EA did not generate comments which would be considered highly controversial.

***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 applied to meet resource objectives and to make progress toward achieving the Mojave Southern Great Basin Standards for Rangeland Health. The analysis in the EA demonstrates the effects are not uncertain, and do not involve unique or unknown risk. Management practices recommended in the proposed action do not have unknown impacts. Methods of improving rangeland health through the actions identified in the proposed action are well documented.

***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 permit does not establish a precedent for other similar decisions. Any future projects within the area or in surrounding areas will be analyzed on their own merits and implemented or not, independent of the actions currently selected. The proposed action renews the grazing permit for a period of ten years.

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

No significant cumulative impacts were revealed as a result of the analysis. Past, present, and reasonably foreseeable future actions on-going in the cumulative impact assessment area would not result in cumulatively significant impacts. For any actions that may be proposed in the

future, further environmental analysis, including the assessment of cumulative impacts, will be required.

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

No districts, highways, or structures listed in or eligible for listing in the National Register of Historic Places (NRHP) were identified in the project area and EA. The proposed action will not cause the loss or destruction of significant scientific, cultural or historical resources. Known sites and/or objects are protected from any possible impacts that could occur from grazing by permitted livestock.

**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.***

There are no known endangered or threatened species or their habitat occurring in the planning area for the EA. 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 potential effects of this decision on listed species have been analyzed and documented. 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.

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

9/25/07  
Date

**FINAL  
ENVIRONMENTAL ASSESSMENT  
TO RENEW THE GRAZING PERMIT FOR DEAN CARTER AND SONS  
(#2705027) FOR THE RATTLESNAKE ALLOTMENT (#1058)**

**(EA-NV-040-07-016)**

**September 24, 2007**

**Bureau of Land Management  
Ely Field Office and  
Caliente Field Station**

**Prepared by:  
Shirley A. Johnson, Caliente Field Station, Nevada**



## I. INTRODUCTION

### A. Background Information

This environmental assessment (EA) addresses the impacts to public land resources from a proposal to renew the term grazing permit for Dean Carter and Sons (#2705027) for the Rattlesnake Allotment. This EA fulfills the National Environmental Policy Act (NEPA) requirement for site-specific analysis of resource impacts. Both the proposed action and alternatives to the proposed action are considered.

This EA is tiered to and incorporates by reference the Caliente Environmental Statement (ES) INT-FES 79-44, dated September 21, 1979 which disclosed cumulative impacts associated with livestock grazing.

The term grazing permit under consideration is for Rattlesnake Allotment (#1058). The Rattlesnake Allotment is a cattle allotment with a grazing preference of 1,504 Animal Unit Months (AUMs). Of these, 1,180 AUMs are active and 324 AUMs are suspended nonuse. The current permitted season of use is October 16 to May 30. The allotment is ranked as an "M" (Maintain Condition) category in the Caliente Resource Area Rangeland Program Summary (1985). The current term permit for the Rattlesnake Allotment has been issued for the period of 3/1/2006 to 2/28/2016. The allotment encompasses 39,948 acres of BLM managed lands.

The Mojave Southern Great Basin Area Standards for Rangeland Health were approved in 1997. An assessment of rangeland health for the Rattlesnake Allotment was conducted in March, 2007. It was determined that the Standards were not being achieved. Grazing management is not in complete conformance with the Guidelines. A review and analysis of the monitoring data was conducted. As a result of this review, changes to the management of livestock were proposed to improve the vegetative conditions of the allotment. The complete standards determination is located in Appendix I. A summary of the findings for the allotment are as follows:

1. Soils Standard: Not achieving the Standard and not making significant progress toward achieving.
2. Ecosystem Components: Not achieving the Standard and not making significant progress toward achieving.
3. Habitat and Biota: Not achieving the Standard and not making significant progress toward achieving.

Conclusions of the Standard Determination:

Standard 1. Soils: Not achieving the Standard and not making significant progress toward achieving Standard. The Standard is not being achieved due to vegetative cover inadequate for the ecological site at Key Areas 1 and 3. Cover was measured in 2007 which indicated perennial native cover was 12% and 9% at Key Areas 1 and 3 respectively. Much less than the desirable

level of 20-30% ground (basal and crown) cover. Douglas' rabbitbrush has increased at these sites while key perennial species have decreased.

Standard 2. Ecosystem Components: Not achieving the Standard and not making significant progress toward achieving Standard. The Standard is not being achieved due to the vegetation community conditions at the key areas. Line Intercept Cover data collected at the key areas indicates the major plant communities are lacking major plant species such as desert needlegrass (*Achnatherum speciosum*), bush muhly (*Muhlenbergia porteri*), and ephedra (*Ephedra nevadensis*), and minor species listed in the range site description such as other perennial grasses, and other shrubs. The key species appear to have decreased while Douglas' rabbitbrush has increased on site or replaced key species at the key areas. While away from the areas affected by normal grazing patterns, the vegetation composition and cover is more appropriate.

Standard 3. Habitat and Biota: Not achieving the Standard and not making significant progress toward achieving Standard. The Standard is not being achieved due to the degradation of vegetation in the habitat. Habitat quality in the desert is defined by proper vegetation composition, appropriate structure (height/width/breadth) and age class. Corridors and edges based on appropriate disturbances provide microhabitats. Overall productivity of individual native plant species contributes to the basic habitat requirements of forage and cover for numerous wildlife species in the salt desert. The allotment should ultimately reflect the potential based on the Ecological Site Descriptions.

The invasive annual cheatgrass (*Bromus tectorum*) occurs in varying levels throughout the allotment but is most predominant wherever wildfire has occurred. Noxious weed species including Russian knapweed (*Acroptilon repens*), salt cedar (*Tamarix spp.*), tall whitetop (*Lepidium latifolium*) and hoary cress (*Lepidium draba*) have been mapped at almost every watering source on the allotment.

## **B. Need for the Proposal**

The need for the proposal is to provide for legitimate multiple uses of the public lands by renewing the term grazing permit for Dean Carter and Sons for the Rattlesnake Allotment with new terms and conditions for grazing use that conform to Guidelines and achieve 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 "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."

## **C. Relationship to Planning**

The proposed action is consistent with Federal, State, and local plans to the maximum extent possible. The proposed action is in conformance with the Caliente Management Framework Plan (Approved 26 February 1982). The proposed action has been analyzed within the scope of other relevant plans, statutes, regulations, and executive orders listed below and found to be in compliance:

- 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 – Revised 2006
- Endangered Species Act - 1973
- Wilderness Act - 1964
- Migratory Bird Treaty Act (1918 as amended) and Executive Order (1/11/01).
- Lincoln County Public Land and Natural Resource Management Plan (1997)  
 “Grazing shall be managed to support a healthy range resource.” (P. 15)

### **Relationship to Bureau Guidance**

The proposed action also complies with BLM Nevada Instruction Memorandum (IM) No. NV-2006-034 which provides guidance to facilitate the preparation of grazing permit renewal Environmental Assessments (EA) as per the requirement set forth in BLM Washington Office IMs WO 2003-071 and WO 2004-126. This document complies with the IM guidance. It also complies with the requirements outlined in the following policies and manuals:

- Ely District Policy: Management Actions for the Conservation of Migratory Birds – 5/01/01.
- BLM Manual 8560, H-8560-1, 8561 (Wilderness Management)  
 “The BLM must foster a natural distribution of native species of wildlife, fish, and plants by ensuring that ecosystems and ecological processes continue to function naturally” (.11 A 1).
- BLM Manual 8400 - Visual Resources Management

### **D. Identification of Issues**

This permit renewal proposal was scoped internally by resource specialists on January 31, 2007 at the Ely BLM Field Office. It was identified that the allotment is not achieving the Standards for Rangeland Health as written by the Mojave Southern Great Basin RAC. The allotment is home to the Desert Valley kangaroo mouse: a BLM sensitive species.

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

### **A. Proposed Action**

The Bureau of Land Management would issue and fully process a new term grazing permit for Dean Carter and Sons and authorize grazing on the Rattlesnake Allotment. Changes to the permit are recommended to achieve the Standards on the allotment. The current term permit is shown in Table 1. Proposed changes are reflected in Table 2.

**Table 1. Current Term Permit for Dean Carter and Sons (#2705027)**

Allotment Name and Number	Livestock Number/Kind	Grazing Period		% Public Land*	Type Use	AUMs**
		Begin	End			
Rattlesnake 01058	158 Cattle	10/16	5/30	100	Active	1,180
*% Public Land is the percent of public land for billing purposes.						
**AUMs may differ from Active Preference due to a rounding difference with the number of livestock and the period of use.						
<b>Allotment AUMs Summary</b>						
ACTIVE AUMS		SUSPENDED AUMS		GRAZING PREFERENCE		
1,180		324		1,504		

The proposed term permit and allotment information is as follows:

**Table 2. Proposed Term Permit for Dean Carter and Sons (#2705027)**

Allotment Name and Number	Livestock Number/Kind	Grazing Period		% Public Land*	Type Use	AUMs**
		Begin	End			
Rattlesnake 01058	169 Cattle	10/1	4/30	100	Active	1,180
*% Public Land is the percent of public land for billing purposes.						
**AUMs may differ from Active Preference due to a rounding difference with the number of livestock and the period of use.						
<b>Allotment AUMs Summary</b>						
ACTIVE AUMS		SUSPENDED AUMS		GRAZING PREFERENCE		
1,180		324		1,504		

The renewal of the term grazing permit would be for a period of ten years. Proposed changes to the permit terms and conditions would affect the overall management of livestock based on timing and duration of grazing, and allowable use levels on perennial native plants.

Terms and conditions for grazing use which would become pertinent to the Dean Carter and Sons permit are proposed as follows:

1. The grazing season of use would be changed to 10/01 to 4/30 to allow for reduced spring use of cool season perennial grasses and shrubs to ensure full development of annual growth and seed development and to encourage regeneration and improved current vegetative condition. Up to 14 days extension may be permitted on a case by case basis and requires the approval of the authorized officer prior to use. Active use AUMs may not be exceeded.

The following recommended management practices would become part of the permit stipulations for grazing management to achieve the Standards for Rangeland Health:

1. Salt and/or mineral supplements for livestock would be located no closer than ¼ mile from water sources. Use of nutritional supplements (not forage) would be encouraged to improve the

ability of cattle to utilize forage in the winter months and to improve livestock distribution across the allotment.

2. Maximum allowable use levels would be established as follows:

- Perennial grasses: 40% current year's growth.

*This use level is necessary to allow desirable key herbaceous species to 1) develop above ground biomass for protection of soils, 2) to contribute to litter cover, and 3) develop roots to improve carbohydrate storage for vigor, reproduction, and improve/increase desirable perennial cover.*

- Perennial shrubs, half-shrubs and forbs: 40% use on current annual production.

*This use level is necessary to allow desirable perennial key browse species to develop woody stature able to withstand the pressure of grazing use.*

3. Wildlife escape ramps would be required to be installed and maintained by the permittee at each trough used on the allotment.

A full description of the proposed revised term permit is located in Appendix II of this EA.

Monitoring: Rangeland monitoring would continue to be collected for the Rattlesnake Allotment to determine if the livestock management practices are meeting allotment objectives and progressing towards achieving the Standards for Rangeland Health as provided by the Mojave Southern Great Basin RAC.

Monitoring studies typically include but would not limited to: use pattern mapping, key forage plant method for utilization, cover studies, ecological condition studies, frequency (trend), apparent trend (based on observations), weed detection, professional observations, and photography. Drought assessments would be conducted as needed. Rapid assessment (riparian proper functioning condition) would be conducted as needed. Baseline monitoring could be conducted in association with watershed assessment. Monitoring could be conducted before, during, or following grazing use.

If a future assessment should result in a determination that changes are necessary for achieving the Standards and conforming to the Guidelines, the permit would be reissued subject to revised terms and conditions.

## **B. No Action Alternative**

Under the No Action Alternative, the permit would be renewed without changes to season of use or to grazing use and management.

## **C. Other Alternatives**

Since the alternative of no livestock grazing was fully described and analyzed in the Caliente Proposed Domestic Livestock Grazing Management Program Environmental Statement (page 8-19), released September 21, 1979, the effects of not renewing the term grazing permit are not analyzed in this document. The decision was that the lands within the Rattlesnake Allotment would be available for grazing, in which case, 43 CFR requires the issuance of grazing permits to qualified applicants. No additional site specific alternatives are necessary for analysis since there are no unresolved conflicts concerning alternative uses of available resources.

In addition to the proposed action and the no grazing alternatives, the *Caliente ES* analyzed several other alternatives:

1. The no-action alternative, which would have maintained the current level of grazing by livestock, cattle and wildlife
2. The Wild Horse and Burro Alternative, which would have slightly increased AUM's for livestock, and also have tripled the allocation of forage for Wild Horses and Burros.
3. The "Restricted Period of Use by Livestock" alternative, which would have eliminated grazing during the forage growing season and increased by about 50% the AUMs allocated for livestock
4. The "Reduced levels of Livestock" Alternative, which would have decreased livestock grazing by about half the current level
5. The "Reduced Management" Alternative, which would have increased livestock grazing by about 50%.

No additional site specific alternatives are necessary for analysis since there are no unresolved conflicts concerning alternative uses of available resources.

### **III. DESCRIPTION OF THE AFFECTED ENVIRONMENT**

The Rattlesnake Allotment is located 16 miles northeast of Caliente, Nevada in Dry Lake Valley. It is situated on the northern end of the North Pahroc Range. The allotment encompasses 39,948 acres of BLM managed lands, all in Lincoln County, Nevada. Elevation ranges from 4200 - 6100 ft above sea level. The allotment is situated in Dry Lake Valley in Lincoln County, Nevada. The North Pahroc Range bisects the allotment from north to south and divides the grazed portion (east of the North Pahroc Range) from the un-grazed portion (west of the North Pahroc Range) of the allotment. Average annual precipitation is 5-8 inches in the lower elevations and 8-10 inches in the upper elevations. The majority of the allotment is characterized by the vegetation of the salt desert. The pluvial Dry Lake bed concentrated salts in the soils and supports alkali tolerant vegetation. In the benches near the foot of the North Pahroc Range, the salt desert vegetation transitions into Wyoming sagebrush and black sage. Much of these areas burned in the 2002 North Pahroc Fire. The area is in the Major Land Resource Area 29 – Southern Nevada Basin and Range.

## Mandatory Elements of the Human Environment

The mandatory elements of the human environment which must be considered because of requirements specified in statute, regulation, executive order or Bureau policy, are listed in Table 3. Elements that may be affected are further described in this EA. Those elements that are not present or would not be affected are also listed in Table 3, but will not be considered further in this document.

**Table 3. Mandatory Elements of the Human Environment**

Mandatory Element	No or Negligible Effect Beyond Those Disclosed in the RMP/FMP/Grazing EIS	May Be Affected	Not Present	Rationale
Air Quality	X			Dust occurs due to high valley winds and characteristically loose soil surfaces in and around lake beds with or without livestock grazing. Changes in grazing management could improve soil surface conditions.
Areas of Critical Environmental Concern (ACEC)			X	No ACECs occur in the allotment.
Cultural Resources	X			Cultural sites have been identified on the allotment and are protected from grazing impacts. However, they are already protected from the impacts of grazing use.
Environmental Justice			X	No minority or low-income groups would be affected by disproportionately high and adverse health or environmental effects identified in the allotment.
Farmlands (Prime or Unique)	X			Prime farmland soils occur in the allotment. However livestock grazing does not change soil characteristics that affect farmland status.
Floodplains	X			The pluvial dry lake bed served as a floodplain in the valley in prehistoric times. Today, surface water does not flow on or through the allotment via any flood channel or plain. Rather, it gathers in the lake bed and evaporates.
Migratory Birds	X			A number of migratory bird species are known to have a

**Table 3. Mandatory Elements of the Human Environment**

Mandatory Element	No or Negligible Effect Beyond Those Disclosed in the RMP/FMP/Grazing EIS	May Be Affected	Not Present	Rationale
				distribution that overlaps with the proposed action area. Migratory bird nesting and foraging habitat may be located throughout the allotment. Based on known habitat associations, species composition may be somewhat anticipated. Where sagebrush occurs, migratory obligate species may use the area. Outside the breeding season, a number of species have the potential to use the area during the winter or migration. The potential for the proposed livestock grazing to negatively affect migratory birds is discountable because of low density of livestock within the allotments.
Native American Religious Concern	X			No concerns for the proposed action were identified by tribal representatives at the coordination meeting on March 22, 2007.
Noxious Weeds and Non-Native, Invasive Species		X		Surface disturbing activities associated with the proposed action may increase the risk of establishment or spread of these species in the allotment.
Federally Listed or Proposed Plant and Animal Species			X	None present
Special Status Animal and Plant Species (Federally candidate threatened or endangered species and state sensitive species)	X			One Nevada Special Status Species occurs on the allotment. The Desert Valley kangaroo mouse occupies habitat adjacent to the dry lake bed. No other state or BLM listed sensitive species are known to reside within the allotments. It is highly unlikely that individuals would be impacted by livestock grazing as proposed in this EA due to the relative low density of livestock within the allotments.



**Table 3. Mandatory Elements of the Human Environment**

<b>Mandatory Element</b>	<b>No or Negligible Effect Beyond Those Disclosed in the RMP/FMP/Grazing EIS</b>	<b>May Be Affected</b>	<b>Not Present</b>	<b>Rationale</b>
				In addition, the proposed grazing management practices may allow the improvement of habitat for these species. The species' populations would not be expected to be negatively impacted by the proposed livestock grazing.
Wastes (Hazardous and Solid)			X	No hazardous or solid wastes exist in the allotment nor would be introduced by the proposed action.
Water Quality (Drinking and Ground)	X			Sources of drinking water do not occur in the allotment. No surface water in the area is used for domestic drinking water.
Wetlands/Riparian	X			The only spring on the allotment is fenced to prevent use by livestock. No wetlands occur on the allotment.
Wild Horses and Burros	X			Horse use occurs only occasionally on the allotment and in the Rattlesnake Herd Management Area (HMA). The Appropriate Management Level (AML) is 1 for the HMA. Horses do not live on the allotment year round. The HMA is combined with the Dry Lake Complex. The current census for the HMA is zero horses.
Wild and Scenic Rivers			X	There are no wild and scenic rivers in or near the allotment.
Wilderness Values			X	The allotment boundary does not overlap with any Wilderness or Wilderness Study Area or Instant Study Area.

In addition to the mandatory elements of the human environment, the BLM considers other resources and uses that occur on public lands and the issues that may result from the implementation of the Proposed Action. The potential resources and uses, or non-mandatory elements that may be affected are listed in Table 4. A brief rationale for either considering or not considering the non-mandatory element further is provided. The non-mandatory elements that

are considered in the EA are described in the Affected Environment and are analyzed in the Environmental Consequences section.

**Table 4. Other Resources and/or Issues in the Allotment**

Resource or Issue	No or Negligible Effect Beyond Those Disclosed in the RMP/FMP/Grazing EIS	May Be Affected	Not Present	Rationale
Livestock Grazing/Range/Standards and Guidelines		X		The proposed action reduces the season of use and implements changes to the management of livestock which would affect the livestock operation and progress toward achieving the Standards for Rangeland Health.
Vegetation		X		Proposed grazing management changes may affect vegetation in the allotment through improved management.
Soils		X		Grazing management changes may affect soils on the allotment through improved management.
Wildlife		X		Grazing management changes may affect wildlife habitat through improved grazing management.
Recreation	X			Grazing management changes would not affect recreation activities which occur on the allotment.
Visual Resource	X			Grazing activities would not affect Class IV VRM classified landscapes.

**Potentially Affected Elements of the Human Environment**

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

- Livestock Grazing/Rangeland Health/Standards and Guidelines
- Noxious Weeds and Invasive Non-Native Species

- Soils
- Vegetation
- Wildlife

**A. Livestock Grazing/Rangeland Health/Standards and Guidelines**

The Rattlesnake Allotment is currently permitted for cattle use only. The current permit for cattle use is described in the proposed action. Grazing bills were examined for the permittee for grazing years 1998-2006. Over the 9-year period, the average use was 716 AUMs or 61% of permitted use.

Grazing management typically involves cattle turnout in the fall and removal in the early or late spring, though at times, turnout occurs later, nearer the spring season. The allotment has experienced drought conditions in the recent past, resulting in poor vegetative production in drought years and decreased forage availability. The permittee has responded proactively to drought conditions by reducing herd size or by not turning livestock into the allotment.

The allowable use levels for the allotment were established in 1983 by proposed/final decision issued to Dean Carter and Sons. The use levels from the decision are shown in Table 5:

**Table 4. Current Allowable Use Levels for the Rattlesnake Allotment**

Key Species	Spring	Fall	Winter
Indian Ricegrass	50%	60%	60%
Small Galleta	50%	60%	60%
Winterfat	30%	50%	50%

In 2002 the North Pahroc Fire burned 2,079 acres of public land on the allotment. The area was fenced to keep cattle and/or horses off the burn area during rehabilitation. Grazing was allowed to resume in 2006 in the burn area. Grazing use in the burn area continues to be controlled by fencing and occurs at a reduced level.

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

Russian knapweed, tall whitetop, hoary cress, and salt cedar have been mapped on the allotment. All are State listed noxious weed species. These noxious weeds are monitored and treated on a treatment cycle. The Noxious Weed Risk Assessment is located in Appendix III of this EA.

Cheatgrass, an invasive annual grass is also present throughout the allotment. It is most abundant in the North Pahroc Burn but currently occurs to a much lesser degree on the remainder of the allotment. When moisture conditions are optimal, the allotment and Dry Lake Valley in general can become dominated by cheatgrass which is a concern for wildfire.

**C. Soils**

A basic analysis of the soils for the majority of the allotment (particularly the area accessible by cattle) indicates most of the soils occur on gentle slopes, with soils ranging from silty with

frequent ponding and low plant species diversity to sandy loamy sites with increased potential for good water infiltration and plant species diversity.

In the upper slopes closest to the North Pahroc Range, the Richinde-Chubard Association supports both Wyoming sagebrush and black sagebrush. The Richinde very gravelly ashy sandy loam is dominated by Wyoming sage. This site occurs close to the bouldery slopes of the North Pahroc Range. Soils are moderately deep. The blacksage sites occur on a Shallow Calcareous Loam with a restrictive layer around 20 inches below the surface.

The Ewelac Silt Loam soil is characterized as a sodic flat and represents 3,200 acres on the allotment. Soils are deep and salinity occurs in the soil profile.

The soils within the salt desert shrub community encompass 4,700 acres east of the North Pahroc Range and occur on 0-4% slopes, on fan skirts and fan remnants. This represents the area where most of the livestock use has occurred traditionally.

Soil mapping units were analyzed for the area east of the North Pahroc Range only since the rest of the allotment is not used by the permittee due to limitations of water and lack of control fences. The area is approximately 18,360 acres in size. It is not assumed that all of this area is utilized equally by livestock; rather, the area is deemed suitable and available to livestock use.

#### **D. Vegetation**

The allotment is characterized by the salt desert shrub community which dominates much of Dry Lake Valley and sagebrush in the benchlands. Soils determine largely which plant communities occur on the ground. The soils are described in the soils section of this document. The primary range sites are 029XY079NV (Droughty Loam – 5-8” p.z. – Spiny Hopsage-Ephedra/Indian Ricegrass-Desert Needlegrass and 029XY046NV – Sandy Loam – 5-8” p.z. – Fourwing Saltbush-Winterfat/Indian Ricegrass.

The majority of the allotment is dominated by three vegetation groups: sagebrush dominated groups, salt desert shrub, and spiny hopsage dominated groups. Sagebrush occurs on the lower slopes of the North Pahroc Mountains. The rest of the allotment is salt desert shrub and transitions into the dry lake playa.

##### *Salt Desert Shrub*

This area is extensive on the allotment and occupies all of the primary grazing area. Often these areas are dominated by salt tolerant species but the sites range in location from the dry lake beds to mid-slope. Vegetation is characterized by four-wing saltbush (*Atriplex canescens*), shadscale (*Atriplex confertifolia*), ephedra, winterfat (*Krascheninnikovia lanata*), Indian ricegrass, green molly (*Kochia americana*), and small galleta (*Pleuraphis jamesii*). Closer to the dry lake bed, greasewood (*Sarcobatus spp.*) dominates the community.

## *Sagebrush*

These areas are not very extensive on the allotment and do not occur in the primary grazing area. This community is characterized by Wyoming sagebrush (*Artemisia tridentata* var. *Wyomingensis*) which may be accompanied by an assortment of perennial native bunch grasses (Indian ricegrass (*Achnatherum hymenoides*), squirreltail (*Elymus elymoides*), *Poa* spp. needleandthread (*Hesperostipa comata*), etc.)

The invasive introduced annual grass cheatgrass is typically present throughout the allotment in varying densities. It is most dense in the 202 North Pahroc Burn Area. It occurs in smaller densities elsewhere and is not a common problem in unburned areas. When climatic conditions are prime for cheatgrass, the species can amplify to undesirable densities putting the valley at high risk of wildfire.

## **E. Wildlife**

The allotment provides year round habitat for game animals such as mule deer. Elk habitat encompasses the area but the allotment's location is not high quality habitat for elk. Elk have moved into the area recently, though their current numbers in the area are not known. Elk use was observed at Rattlesnake Spring in 2007. Elk have begun using the fenced spring site for foraging and bedding purposes. Antelope are often observed in the flats on the allotment as well. The Rattlesnake Allotment is in Big Game Hunting Unit 223.

Wintering and breeding raptors are assumed to occupy and hunt in the area and pursue locally abundant prey species such as various small mammals and rodents. Blacktail jackrabbit numbers are currently high on the allotment. One might also be able to observe foxes, cottontail rabbits, a variety of snakes and lizards, and numerous species of small mammals and songbirds.

## **IV. ENVIRONMENTAL CONSEQUENCES OF THE PROPOSED ACTION**

### **A. Livestock Grazing/Rangeland Health/Standards and Guidelines**

Proposed Action: Permitted livestock use would be affected by the change in the season of use. The season of use is proposed to change *from* October 16 to May 30 *to* October 1 to April 30. This represents a decrease by one full month in the spring critical growing season and an increase of two weeks of grazing in the fall.

The adjustment to the allowable use levels takes into account the reduction in quantity of winterfat, fourwing saltbush, and cool season perennial grasses at the key areas. Allowable use levels set the limit which livestock can graze plant groups expressed in the percent of the plants' yearly annual production. For example, 40% use on Indian ricegrass restricts usage to this level for the ricegrass population at the key areas and on the allotment in general.

Proper management through additional terms and conditions on the permit would result in improved livestock distribution, reduced grazing intensity on historically grazed areas serviced by the permanent watering sites, and progression towards achieving the Standards for Rangeland

Health as described by the Mojave Southern Great Basin RAC. Further, livestock grazing would conform to the Guidelines provided in the Standards for Rangeland Health.

No Action: The season of use would remain unchanged at October 16 through May 30. Reduced spring use on cool season plants would not occur. No progress would be made toward achievement of the Standards.

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

Proposed Action: Noxious weeds and invasive, non-native species management could improve. Reducing spring grazing use would allow healthier native plants to outcompete noxious weeds by filling in bare spaces and preventing weeds from spreading. The allowable use levels identified in the proposed action are designed to prevent negative impacts to plant root development, carbohydrate storage and to maximize leaf growth. The roots of native plants fill the interspaces inhibit weed infestations and occurrences (Dietz. 1989).

The proposed action would result in progressing toward achieving the Standards for Rangeland Health, particularly the Habitat and Biota Standard.

No Action: It is expected that noxious weeds would continue to have the ability to spread through direct competition for resources in the current vegetation community.

### **C. Soils**

Proposed Action: The proposed action would increase litter, improve vegetative cover, thereby, further maintaining resiliency to erosion and improve soil loss potential. Organic matter contributes to both the permeability of the soil and the soils' ability to hold moisture. Some soil compaction would occur where livestock congregate in small areas particularly around waters or supplement barrels. The proposed action would result in progressing toward achieving the Standards for Rangeland Health, particularly the Soils Standard.

No Action: If management of livestock does not change then the interactions between soils, vegetation, and animals as described would not improve through reduced spring grazing use.

### **D. Vegetation**

Proposed Action: Vegetation would be affected by the proposed changes in season of use, rotational grazing, and allowable use levels. These changes would impact vegetative production, vigor of individual plants and would improve the overall community structure. The allowable use levels identified in the proposed action are designed to prevent use levels so high that they affect root development, carbohydrate storage, and root growth stoppage. When 50% leaf volume is removed from the perennial grass plant the result is a 2-4% root growth stoppage. At 40%, there is no impact to the roots (Dietz. 1989). According to the National Range and Pasture Handbook, clipping perennial grasses to 30% to simulate grazing resulted in continued root growth. Grazing at 50% averaged a 3% root growth stoppage for 14 days. The proposed allowable use level occurs between these figures as an average. This use level is low enough to

prevent the individual plants from losing root mass. The reduce season of use allows sufficient time for the plants to regrow and store energy.

The proposed changes would make progress toward achieving the Standards for Rangeland Health and conformance to the Guidelines as established by the Mojave Southern Great Basin RAC.

No Action: Vegetative conditions would continue to be affected by grazing occurring well into the spring growing season, grazing at levels not conducive to root development.

## **E. Wildlife**

Proposed Action: Wildlife would be affected by the change in season of use and allowable use levels. By removing livestock by May 1, wildlife and livestock interactions and competition would decrease by 30 days. With improved vegetative conditions, there would be more grass, forb, and shrub seed available for seed caching and use by small wildlife species. The community of vegetation, small mammals, small reptiles, birds, large mammals, predators, etc., would be enhanced overall in the area. Habitat improvement through improved vegetation conditions would make progress toward achieving the Standard for Rangeland Health.

No Action: If no changes to livestock management are implemented, wildlife could be impacted through the probability of continued habitat degradation. Changes are necessary to improve habitat conditions.

## **F. Cumulative Impacts**

According to the 1994 BLM Handbook "Guidelines for Assessing and Documenting Cumulative Impacts" the analysis can be focused on those issues and resource values identified during scoping that are of major importance. The only issue raised during internal and external scoping was that the allotment rangeland conditions apparently were failing to meet the Standards for Rangeland Health as written by the Mojave Southern Great Basin RAC. The issue relates to most of the elements of the human environment because the relationship between vegetation conditions and soil/water/animal interactions and environmental health is affected by the amount, distribution, and composition of the vegetation as a community where they occur.

Cumulative impacts include not only those identified as pertaining to the proposed action and/or No Action alternative, but those actions planned or occurring in the environment of the project area which have impacts on the human environment. A general discussion of past, present, and reasonably foreseeable future actions follows as they pertain to the major issue of rangeland and habitat health.

### **1. Past Actions**

In recent years, actions that have occurred in the project area include emergency stabilization efforts for the North Pahroc Fire (Y109) in 2002. The 2,079 acre fire burned sagebrush and salt desert shrub communities. Approximately 700 acres were drill seeded with a mixture of

perennial grasses and shrubs and forage kochia (*Kochia prostrata*) to prevent cheatgrass invasion and spread of noxious weeds and repair damaged wildlife habitat. To protect the rehab area, 3.25 miles of 4-strand barb-wire fence (metal posts) was installed. The fence transects the allotment from north to south enclosing the burn area to the west of the fence and east of the North Pahroc Range. The 112-acre Rattlesnake Fire occurred on the allotment in 2006 and was proposed to be reseeded aerially.

The Thorley Fence was installed in 2004 in the Thorley Use Area of the Wilson Creek Allotment directly north of the Rattlesnake Allotment. The fence is an open-ended drift fence which extends less than 5 miles and terminates on the bench.

## **2. Present Actions**

Current actions or projects occurring in the project area include the Silver State OHV Trail which is a congressionally designated OHV trail. Planning is currently underway for actions related to the trail. The trail transects the allotment west of the North Pahroc Range. An environmental assessment is also being issued for a grazing term permit renewal for Dean Carter (Operator # 2704431) on the North Chokeycherry Allotment (20134). The proposed action would be to authorize 110 cattle from 10/15 - 05/15 for 770 AUMs.

Current livestock grazing occurs within or often well-below permitted use levels on an annual basis on the Rattlesnake Allotment. The permittee licensed cattle at a reduced rate for several years due to circumstances beyond his control including drought and wildfire.

Allotment monitoring activities occur as needed but do not cause surface disturbance. All of the neighboring allotments are currently managed with livestock use. Other permit renewals for each allotment managed by the Ely and Caliente Field Offices are ongoing.

## **3. Reasonably Foreseeable Future Actions**

Major projects are being planned and scoped for Dry Lake Valley including the Southwest Intertie Project (SWIP) (a major right of way for power transmission) and the Southern Nevada Water Authority (SNWA) (a major pipeline to transport water to Clark County from White Pine and Lincoln County). The Department of Energy is currently planning and studying the various possible routes for the Yucca Mountain Nuclear Waste Railroad. The railroad will be analyzed in an Environmental Impact Statement. The Caliente Corridor of the Yucca Mountain Rail crosses north Dry Lake Valley from the east to the west. All three projects are environmental impact statement (EIS) level NEPA analysis documents. None of these projects occur in or cross the Rattlesnake Allotment.

Future planning regarding the existing Silver State OHV Trail could include trail head facility development which could increase travel on the trail. More trails could be designated on existing roads and trails and some trails could be constructed to make for loop travel routes. Future planning would cover these actions due to Congressional requirements of the Lincoln County Conservation and Recreation Development Act.



The Ely Field Office is currently developing a new Resource Management Plan (RMP). This document when finalized would guide land management of BLM managed lands in White Pine and Lincoln County, and portions of Nye County, all in Nevada. The plan should be out for public review in 2007.

Linear type range improvements such pipelines and fence lines are planned and developed in the Ely District as the need arises on a case by case basis. No other range improvements are being planned in the Rattlesnake Allotment at this time.

### **Cumulative Impacts Summary:**

The proposed action in conjunction with the past actions, present actions and reasonable foreseeable future actions would result in no noticeable overall changes to the affected environment. The proposed permit renewal would make progress toward meeting the rangeland health standards. There would be little cumulative visual impairment to the area as a result of the term permit renewal/ There may be perceived increased conflicts between dispersed recreation and livestock grazing if recreation increases as a result of foreseeable future actions. The proposed action would improve grazing management. No cumulative impacts of major or minor concern are anticipated as a result of the proposed project.

### **VI. PROPOSED MITIGATING MEASURES**

Appropriate mitigation has been included as part of the proposed action, and no additional mitigation is proposed based on this environmental analysis. Terms and conditions identified in the proposed action would be included as part of the term grazing permit for the proper management of livestock on the public lands in the Rattlesnake Allotment.

### **VII. SUGGESTED MONITORING**

Rangeland monitoring data would continue to be gathered for the Rattlesnake Allotment to determine if livestock management practices are in conformance with the Guidelines and achieving the Standards for Rangeland Health as well as other multiple use objectives for the allotment.

Monitoring studies may include cover, key forage plant method for utilization, ecological condition, weed detection and identification, repeat photography, and professional observations. If a future monitoring assessment results in another determination that the Standards for Rangeland Health are not being achieved the grazing permit would be reissued subject to revised terms and conditions. Baseline data collection may be conducted associated with future watershed assessments.

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

## VIII. CONSULTATION AND COORDINATION

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

There is general public interest in the proper grazing management of public lands. Dean Carter, the permittee, has keen interest in the renewal of the grazing permit.

The Dean Carter and Sons Rattlesnake permit renewal proposal was presented at the Tribal coordination meeting at the Ely BLM Field Office on March 22, 2007. No concerns were identified during this meeting. There were no questions or concerns regarding the proposal from the Tribal participants.

January 8, 2007, this permit renewal proposal was scoped internally by resource specialists on at the Ely BLM Field Office. It was identified that the allotment key areas are not meeting the Standards for Rangeland Health as written by the Mojave Southern Great Basin RAC. The project proposal was posted on the Ely Field Office web site, January 25, 2007, at [http://www.nv.blm.gov/ely/nepa/ea\\_list.htm](http://www.nv.blm.gov/ely/nepa/ea_list.htm) and no comments were received.

The Preliminary version of this EA was posted on the Ely external webpage for 30 days, inviting public comment. A hard copy of the EA was mailed to the permittee and those publics who specifically requested one and who expressed an interest in range management actions for the Rattlesnake Allotment. Comments were received from two parties including Western Watersheds Project and Cindy MacDonald. These comments were given consideration.

The Ely Field Office Permit Renewals Team met in Ely on August 8, 2007 to discuss comments received on EAs. As a result of the meeting, a process for addressing comments in the EAs was developed. Comments relevant to the proposed action for this EA are listed and addressed in Appendix IV of this document. Minor changes have been made to the EA and SDD in response to comments received deemed to be pertinent and within the scope of this EA. Some additional data has been added to the SDD pertaining to ecological conditions in response to public comments.

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

The following individuals and organizations, who were sent the annual CCC letter in January, 2007, have requested additional information regarding rangeland related actions within the Rattlesnake Allotment:

Dean Carter

Lyle Carter  
Steven Carter  
Steve Foree  
Brad Hardenbrook  
Lincoln County Commissioners  
Curt Leet  
Betsy MacFarlan  
Cindy MacDonald  
John McLain  
Nevada State Clearinghouse  
Mike Scott  
Katie Fite  
Jerry Reynoldson

### **C. Internal Ely District Review**

Benjamin Noyes	Wild Horses and Burros
Bonnie Waggoner	Invasive, Non-Native, Noxious Species
Bruce Winslow	Visual Resource Management, Recreation
Chris Mayer	Rangeland Management
Elvis Wall	Native American Religious Concerns, Tribal Coordination
Gary Medlyn	Watershed Analysis Evaluations and Determinations
Kari Harrison	Soil, Water, and Air, Floodplains, Riparian, and Wetlands
Lorie Leshner	Cultural and Historic Resources
Melanie Peterson	Wastes, Hazardous and Solid, Hazmat
Shirley Johnson	EA Author, Rangeland Management
Steve Abele	Wildlife, Migratory Birds, Special Status Animals and Plants, Areas of Critical Environmental Concern
Susan Howell	Planning and Environmental Coordinator

## REFERENCES:

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Kim, D. 1999. "*Microdipodops megacephalus*" (On-line), Animal Diversity Web. Accessed February 02, 2007 at [http://animaldiversity.ummz.umich.edu/site/accounts/information/Microdipodops\\_megacephalus.html](http://animaldiversity.ummz.umich.edu/site/accounts/information/Microdipodops_megacephalus.html).

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Zipcode Zoo. "*Microdipodops megacephalus* (Dark Kangaroo Mouse)" [Online] Available [http://zipcodezoo.com/Animals/M/Microdipodops\\_megacephalus.asp](http://zipcodezoo.com/Animals/M/Microdipodops_megacephalus.asp), February 2, 2007.

## EA - APPENDIX I

### ***STANDARDS DETERMINATION DOCUMENT Dean Carter and Sons (2705027) Term Permit Renewal Rattlesnake Allotment***

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

The Standards and Guidelines for Nevada's Mojave-Southern Great Basin Area were developed by the Mojave-Southern Great Basin Resource Advisory Council (RAC) and approved in 1997. Standards and guidelines are likened to objectives for healthy watersheds, healthy native plant communities, and healthy rangelands. Standards 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.

This Standards Determination Document evaluates and assesses livestock grazing management achievement of the Standards and conformance with the Guidelines for the Rattlesnake Allotment in the Ely BLM District. This document does not evaluate or assess achievement of the wild horse and burro or Off Highway Vehicle Standards or conformance to the respective Guidelines.

The standards were assessed for the Rattlesnake Allotment by a BLM interdisciplinary team consisting of rangeland management specialists, wildlife biologist, weeds specialist, and watershed specialist. Documents and publications used in the assessment process include the Soil Survey of Lincoln County Nevada, North Part, Ecological Site Descriptions for Major Land Resource Area 29, Interpreting Indicators of Rangeland Health (USDI-BLM et al. 2000), Sampling Vegetation Attributes (USDI-BLM et al. 1996) and the National Range and Pasture Handbook (USDA-NRCS 1997). A complete list of references is included at the end of this document. All are available for public review in the Caliente BLM Field Station. The interdisciplinary team used rangeland monitoring data, professional observations, and photographs to assess achievement of the Standards and conformance with the Guidelines. The "Standard Riparian Functioning Condition Checklist" (USDI-BLM 2000) was completed for the one riparian area in the Rattlesnake Allotment.

Two key areas were established in 1982 on the allotment based on accessibility and general use by livestock, vegetation, and ecological range sites. These key areas have been monitored periodically. In addition, a supplemental key management area was selected in 2007 for vegetative cover and utilization. Line Intercept method for determining vegetative cover was conducted at all three sites in 2007. Frequency/trend data was collected at Key Areas 1 and 2 in 1985 and 2001. Utilization was measured in 2001, 2004 and estimated in 2007. Key forage species include Indian ricegrass (*Achnatherum hymenoides*), small galleta (*Pleuraphis jamesii*), winterfat (*Krascheninnikovia lanata*) and fourwing saltbush (*Atriplex canescens*). A summary of monitoring data is located in Appendix I of this document.

All monitoring data and reports are available for public inspection at the Caliente Field Station during business hours.

The following Rangeland Health Standards information has been incorporated into Environmental Assessment number NV-040-06-016.

## **PART 1. STANDARD CONFORMANCE REVIEW**

### ***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 crust, pavement).
- Compaction/infiltration.

#### Riparian Soil Indicators:

- Stream bank stability.

#### ***Determination:***

- Achieving the Standard
- Not Achieving the Standard, but making significant progress towards achieving
- Not Achieving the Standard, and not making significant progress toward standard**

#### ***Causal Factors***

- Livestock are a contributing factor to not achieving the standard.**
- Livestock are not a contributing factor to not achieving 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**

#### Conclusion: *Standard Not Achieved*

UPLANDS: Vegetative cover collected at Key Areas 1 and 3 is deficient compared to the Rangeland Ecological Site Description (NRCS). The ecological site for both of these key areas is a Droughty Loam 5-8” P.Z. – 029XY079NV - Spiny Hopsage-Ephedra/Ricegrass - Desert Needlegrass. The approximate potential ground cover (basal and crown) according to the range site is 20-30%.

The native cover at Key Area 1 was measured at 11.6%. Three perennial native grasses accounted for a total of 1.4% cover representing 12% of the total cover measured while six perennial native shrubs accounted for 9.21% cover. Douglas’ rabbitbrush (*Chrysothamnus*

*viscidiflorus*) represented the majority of the vegetative cover. Rabbitbrush is not a desirable species and should not be the dominant plant species on the site.

At Key Area 3, there is only 9% vegetative cover. Shrubs represent 86% of the cover and grasses represent 14% with no forbs contributing to cover measurements. Douglas' rabbitbrush was again the major dominant species with 4% cover.

Cover was slightly better at Key Area 2 which had 18.6% cover. The ecological site is a Sandy Loam 5-8" p.z. – 029XY046NV – Fourwing Saltbush-Winterfat/Ricegrass. Potential cover is 15-25%. Cover is still low but falls within the lower range of the potential for the site. The site is dominated by spiny hopsage (*Grayia spinosa*) which accounted for 7% of the cover.

Trend data indicates small galleta, Indian ricegrass, globemallow (*Sphaeralcea* spp.), fourwing saltbush, and winterfat all decreased at Key Area 1 between 1985 and 2001. All were significant decreases except for fourwing saltbush.

The site description discusses the increase of rabbitbrush on the site. It states, "*Where management results in abusive grazing use by cattle and/or feral horses, littleleaf horse brush, Douglas' rabbitbrush, Anderson wolfberry and galleta increase, while spiny hopsage, fourwing saltbush, Indian ricegrass and Nevada ephedra decrease. Further, it states, "This site when in deteriorated condition, subjected to wildfire, may become a nearly solid stand of horsebrush, snakeweed, and rabbitbrush with annuals or galleta occurring within the shrub interspaces."*

The line intercept cover data indicates Key Areas 1 and 3 are deficient in overall vegetative cover, with each representing less than the minimum range of the desirable cover (canopy and ground) and less than desirable representation by preferred species.

Although soils in the uplands are stable and exhibit no outward signs of erosion, vegetative cover appropriate for the site is essential for maintaining proper soil surface stability, reducing compaction and improving overall water infiltration. These are all indicators for the standard.

RIPARIAN: The only riparian area on the allotment is Rattlesnake Spring. It has been developed for several decades. The soils were previously dug out when and the spring was developed for a pipeline. Impounded soil was used to form a berm to capture water for a small reservoir. The enclosure fence burned in 2002 and was rebuilt to protect the spring source.

The Standard only references stream bank stability. There are no streambanks present at this small spring to evaluate. The small amount of water at the source creates a minimal saturation zone for a short distance upstream from the berm. Livestock use has generally occurred away from the spring. The Soils Standard is therefore not assessed for riparian areas for the Rattlesnake Allotment.

## ***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 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).
  - Other covers (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.

***Determination:***

- Achieving the Standard
- Not Achieving the Standard, but making significant progress towards
- Not Achieving the Standard, and not making significant progress toward standard**

***Causal Factors***

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

***Guidelines Conformance:***

- Not in conformance with the Guidelines**



Conclusion: Standard Not Achieved

UPLANDS: Line Intercept Cover data collected at the key areas indicates the major plant communities are lacking major plant species such as desert needlegrass (*Achnatherum speciosa*), bush muhly (*Muhlenbergia porteri*), and ephedra (*Ephedra nevadensis*) (except at Key Area 2 which had 1.85% ephedra), and minor species listed in the range site description as other perennial grasses, and other shrubs. The key species appear to have decreased while rabbitbrush (an increaser species) has increased on site or replaced key species at the key areas. Away from the areas affected by normal grazing patterns, the vegetation cover is appropriate and vigorous.

Utilization data collected on the allotment during the evaluation period indicate use by livestock has been within acceptable limits.

Frequency data collected in 1985 and 2001 indicate several important key species have declined at Key Area 1 in the years between 1985 and 2001. Overall, trend is downward at Key Area 1 based on the increase of cheatgrass and Douglas' rabbitbrush indicating a poor trend for desirable species and the beginning of a shift to less desirable species. Galleta, ricegrass, four-wing, and winterfat all decreased. Galleta, ricegrass, and winterfat decreased significantly. Spiny hopsage and budsage (*Artemisia spinescens*) both increased slightly but not significantly.

In the North Pahroc Fire, vegetation in the seeded area has not recovered to the extent desired. The fire and rehabilitation efforts occurred during a severe drought period in the region. According to the BLM precipitation data collected at the neighboring Mustang Allotment, annual rainfall in 2002 measured only 2.67". Whereas rainfall varied from 6-11 inches from 2000 to 2006. Cheatgrass can be found in the seed rows indicating a poor response by seeded species. Use by rabbits of new vegetation in the reseeded area has been high.

Elk use on riparian vegetation inside the spring exclosure was heavy in 2007. As a result, the spring vegetation has not recovered since it was burned over in 2002. No livestock use has occurred in the riparian area due to the exclosure fence.

Livestock contributed moderate use in the burn seeded area in 2006.

RIPARIAN: The Standard is not assessed for Rattlesnake Spring which is developed and fenced so cattle cannot have an influence on the spring. Upland grazing management above the spring has no impact on the spring because cattle use rarely occurs above the spring.

***Standard 3. Habitat and Biota:***

As indicated by:

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

**Determination:**

- Achieving the Standard
- Not Achieving the Standard, but making significant progress towards
- Not Achieving the Standard, not making significant progress toward standard**

**Causal Factors:**

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

**Guidelines Conformance:**

- Not in conformance with the Guidelines**

Conclusion: *Standard Not Achieved*

Vegetation communities in the valley are dominated by salt desert species. The main valley floor shrub species generally include winterfat, fourwing saltbush, and spiny hopsage. The herbaceous species include squirreltail (*Elymus elemoides*), Indian ricegrass, and small galleta.

Dominant species on the slopes adjacent to the North Pahroc Range include Wyoming sagebrush (*Artemisia tridentata* var. *Wyomingensis*), black sagebrush (*A. nova*) with galleta, squirreltail and Indian ricegrass in the understory. The North Pahroc Range is extremely rocky desert range with a minimum amount of vegetation and practically inaccessible to livestock.

The invasive annual cheatgrass occurs in varying levels throughout the allotment but is most dominant wherever wildfire has occurred. Noxious weed species including Russian knapweed (*Acroptilon repens*), salt cedar (*Tamarix spp.*), tall whitetop (*Lepidium latifolium*) and hoary cress (*Lepidium draba*) have been mapped at almost every watering source on the allotment. These species all have potential to degrade wildlife habitat for a variety of species. Noxious weeds are typically unpalatable or protected by chemicals or spines which prevent grazing or use from occurring. They outcompete native species and can form monocultures where left untreated.

Utilization data shows the allotment have generally been grazed within the moderate range (41-60% current year's growth) or less for the recent past years. But due to continuous grazing through the critical growing season for cool season plants, frequency, vigor, and community structure have been reduced which has degraded habitat in general terms, especially within the perimeter serviced by three main water sources.

Fourwing saltbush plants exhibit poor growth forms based on removal of primary branches. Winterfat plants show poor vigor and minimal stature. Shrubs are decreasing in general at Key Areas 1 and 3. This translates to reduced habitat quality due to less escape cover for small rodents, less perching and nesting opportunities for birds, and reduced forage opportunities for many wildlife species. Noxious weeds impact wildlife species through increased competition

with desirable native plants and degradation of habitats around waters and at the spring. These plants offer little if any, nutritional value to wildlife and may even be toxic.

Wildlife habitat quality in the desert is based partly on proper vegetation community, appropriate structure (height/width/breadth) and age class. Corridors and edges based on appropriate disturbances provide microhabitats. Overall productivity of individual native plant species contributes to the basic habitat requirements of forage and cover for numerous wildlife species in the salt desert. The allotment should ultimately reflect the potential based on the Ecological Site Descriptions.

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

### Standard #1: Soils

Livestock grazing is one contributing factor to not achieving the Standard. The primary reason cited is inadequate soil protection through inappropriate vegetation community. The primary causal factor is the season of use. The permit allows use to begin in Mid-October and doesn't end until May 31. Late May is mid- to late spring on the allotment. Many plants are in the critical growing period at this time. Utilization of cool season plants, especially Indian ricegrass and winterfat, during late May has resulted in a significant decrease in these species in the primary grazing area.

The reduction of key perennial species can have impacts on the overall protection of soils. Additionally, the vegetative cover which should be 20-30% at Key Areas 1 and 3 is currently only 12% and 9% respectively. The reduced cover can be due to reduction and subsequent replacement of key perennial plants with Douglas' rabbitbrush. The reduction of important grass, forb, and shrub species, some of which are highly favored by livestock, results in the reduced resilience of the community to resist (or recover from) disturbance. Large wildfires are becoming more commonplace in the salt desert due to the momentous increase of cheatgrass. Cheatgrass returns with robust vigor following fire thereby adding to the threat of habitat loss.

It should be noted that soils appear to be stable in the allotment as no outward signs of soil loss or soil movement was observed during monitoring. The gentle slopes of the allotment help reduce or even prevent soil loss due to overland flow.

### Standard #2: Ecosystem Components

Livestock grazing is one contributing factor to not achieving the Standard. Vegetative cover is inadequate for the sites where livestock grazing has occurred during the evaluation period. The magnification of "increaser species" and the decline of "decreaser species" are attributed to continued spring grazing by livestock. Although utilization limits were not exceeded, the almost yearly continued spring use has had an impact on the community, as reflected by the cover and frequency data.

### Standard #3: Habitat and Biota

Livestock grazing is one contributing factor to not achieving the Standard. General observations and data analysis indicate habitat is in a degraded state due to diminishing vegetative cover and poor community structure in the primary grazing area. Important wildlife cover and forage species such as ricegrass, winterfat, and fourwing saltbush are decreasing in number and vigor. Plant vigor and stature of desirable native shrub species have been affected in part by livestock grazing, particularly in the critical growing season. Fourwing, spiny hopsage and winterfat plants show poor growth forms and reduced woody biomass.

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

#### Current livestock management practices do not conform to Guideline 1.1 for Soils.

Upland management practices should maintain or promote adequate vegetative ground cover to achieve the standard. Grazing through the end of May is not in conformance with the guideline where it results in reduced cover, vigor, and reproduction of key perennial grasses or shrubs.

#### Current livestock grazing management practices do not conform with Guidelines 2.3, and 2.6.

Management practices should maintain or promote the physical and biological conditions necessary for achieving surface characteristics and desired natural plant community. At the key areas, the plant community has changed based on season long grazing resulting in the significant decrease in key perennial species including galleta, ricegrass, and winterfat.

The design of spring and seep developments should serve to maintain or promote ecological functions and processes. Rattlesnake Spring delivers water to two earthen impoundments which allow for waste through evaporation and seepage. This has not served the spring well and has resulted in a lack of water sufficient to support a thriving riparian ecosystem.

#### Current livestock grazing practices do not conform to Guideline 3.1.

Mosaics of plant and animal communities that foster diverse and productive ecosystems should be maintained or achieved. The reduction of key perennial native grass and shrub species which has been documented on the allotment is an impact from grazing through the late spring months. Additionally, livestock distribution and management results in livestock grazing the same areas yearly. This management impacts vegetation and degrades habitat.

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

#### Discussion:

Several management practices are recommended to conform to the Guidelines in order to make progress toward meeting the Standards for Rangeland Health. In general, livestock need more management throughout the grazing period to encourage them to disperse and distribute throughout the allotment. This would improve those areas cited in this document where plants appear to suffer repeated grazing use. No reduction in the permitted active AUMs is proposed, nor is deemed necessary at this time. However, it should be stated that the AUMs for the entire allotment are being utilized on less than 2/3 of the allotment. The area west of the North Pahroc Range should be evaluated for opportunities for fencing and water development to fully utilize the allotment as was the original intention during adjudication.

#### Recommendations:

1. The grazing season of use would be changed to 10/01 to 4/30 to allow for reduced spring use of cool season perennial grasses and shrubs to ensure full development of annual growth and seed development and to encourage regeneration and improved current vegetative condition. Up to 14 days extension (in accordance with 4130.3-2) may be permitted on a case by case basis and requires the approval of the authorized officer prior to use. Active use AUMs may not be exceeded.

2. Salt and/or mineral supplements for livestock shall be located no closer than ¼ mile from water sources. Use of nutritional supplements (not forage) is encouraged to improve the ability of cattle to utilize forage in the winter months and to improve livestock distribution into areas previously slightly or occasionally grazed by livestock. Supplements are to be placed ½ mile from existing waters.

3. Maximum allowable use levels would be established as follows:

- Perennial grasses: 40% current year's growth.

*This use level is necessary to allow desirable key herbaceous species to 1) develop above ground biomass for protection of soils, 2) contribute to litter cover, 3) develop roots to improve carbohydrate storage for vigor, reproduction, and improve/increase overall cover.*

- Perennial shrubs and half-shrubs: 40% use on current year's growth.

*This use level is necessary to allow desirable perennial key browse species to develop woody stature able to withstand the pressure of grazing use. Use will be read in March or prior to the spring regrowth.*

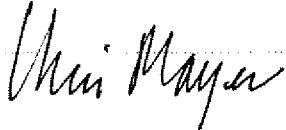
4. Wildlife escape ramps will be installed and maintained by the permittee at each trough used on the allotment (permanent or temporary).

**Prepared by:**

  
\_\_\_\_\_  
Shirley Johnson, Rangeland Management Specialist

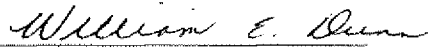
9/17/07  
Date

**Reviewed by:**

  
\_\_\_\_\_  
Chris Mayer, Lead Rangeland Management Specialist

9/25/2007  
Date

**I concur:**

  
\_\_\_\_\_  
William E. Dunn  
Assistant Field Manager  
Renewable Resources

9/25/07  
Date

## REFERENCES

- Drews, Michael and Eric Ingbar. Technical Report: Cultural Resources Analysis and Probability Model for the Bureau of Land Management, Ely District. Carson City: Gnomon, Inc., 2004.
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## *SDD - APPENDIX I*

### DATA ANALYSIS – RATTLESNAKE ALLOTMENT

#### 1. Licensed Livestock Use:

Grazing authorizations were examined for the permittee for grazing years 1998-2006. The licensed use ranged from 311 to 1079 AUMs during the period. Reduced grazing use occurred due to both BLM and permittee initiative. From 1998-2001, use was stable with use ranging from 819 to 1079 (75%-100%) AUMs. The lowest use occurred in 2002 and 2004. The permittee applied for use for 2004 and agreed upon 140 cattle but then removed them 2.5 months early. The North Pahroc burn area opened to limited use in 2006.

LICENSED USE	
Grazing Year	AUMs Used
2006	463
2005	1008
2004	311
2003	520
2002	395
2001	1079
2000	819
1999	825
1998	1023

#### 2. Utilization

Utilization was measured using the key forage plant method in 2007, 2004 and 2001. Use measured in winter 2007 showed use was slight within the eastern portions of the allotment. The upper benches show no use by livestock and light to moderate use by wildlife from 2006. Use by elk at Rattlesnake Spring was heavy on the riparian grasses. Light use had occurred on basin wildrye (*Leymus cinereus*) at the spring. Key species observed were Indian ricegrass, bottlebrush squirreltail, galleta grass, and fourwing saltbush. Use by rabbits was the major concern in the burn areas in 2006.

Utilization conducted in February 2004 revealed use levels in the light to moderate range. Use at Key Area 1 was 56% (moderate) on galleta, 42% (moderate) on winterfat. Ricegrass plants were too few in number to measure. At Key Area 2, use on galleta was 46% (moderate) and use on winterfat was 34% (light).

In 2001, monitoring indicated areas of slight, moderate and heavy use. Moderate to heavy use was concentrated along the eastern part of the allotment with slight to no use along the western benches of the North Pahroc Range. There has been no use made in the western portion of the allotment that occurs west of the North Pahroc Range. It is unfenced and not serviced by water.



Examination of older utilization data on the allotment back to 1989 indicates use levels occurred in the slight to light range. This data is not considered to be useful due to the age of the data. Utilization data is useful for short term adaptive management of grazing uses.

### 3. Precipitation Data

<b>Mustang</b>	<b>(N 37 41.731 W 114 50.750 UTM'S 689926 4174010)</b>						
<b>Month</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
Jan.			0.50	0.12			1.00
Feb.	1.50		0.43	0.31	0.50		0.15
Mar.		2.54	0.12	2.03			1.65
Apr.			0.00	0.05	2.85	3.94	0.00
May	3.50		0.07	1.55	0.16	0.20	0.04
Jun.	0.35		0.00	0.00	0.13	0.90	0.05
Jul.		1.70		0.04	0.48	0.15	2.20
Aug.	0.06		0.07	0.48	0.91	1.09	
Sep.		0.56	0.00	1.16	0.58	0.52	
Oct.	2.93		0.76	0.00	3.15	1.05	
Nov.		0.55		0.53		0.76	2.10
Dec.	3.00	0.80	0.72	1.15	1.15		
<b>Total</b>	<b>11.34</b>	<b>6.15</b>	<b>2.67</b>	<b>7.42</b>	<b>9.91</b>	<b>8.42</b>	<b>7.19</b>

The precipitation data comes from the raincan on the Mustang Allotment (adjacent to and directly south of the Rattlesnake Allotment). Data is collected monthly (whenever possible) by the staff of the Caliente BLM Field Station. The average annual rainfall at the raincan from 2000 to 2006 was 7.59 inches.

4. Line Intercept Cover

Cover data was collected in 2007 at the key areas. Data in the following table compares current cover to potential cover for the site.

LINE INTERCEPT COVER DATA ANALYSIS

KEY AREA INFORMATION		SPECIES	COVER REPRESENTED BY INDIVIDUAL SPECIES
<b>KEY AREA 1</b>		Galleta	0.8%
Range site: 029XY079NV		Squirreltail	0.4%
Potential Cover For Site: 20-30%		Indian Ricegrass	0.2%
Percent Cover Measured 2007: 11.6%		Douglas' Rabbitbrush	2.56%
		Fourwing Saltbush	1.4%
		Spiny Hopsage	1.4%
		Winterfat	0.8%
		Budsage	1.2%
		Ephedra	1.85
RELATIVE COVER BY GROUPS			
SHRUBS	88		
GRASSES	12		
FORBS	0		
<b>KEY AREA 2</b>		Indian Ricegrass	2.4%
Range site: 029XY046NV		Galleta	0.18%
Potential Cover For Site: 15-25%		Douglas' Rabbitbrush	0.16%
Percent Cover Measured 2007: 18.6%		Ephedra	1.85%
Data collected outside of the burned area.		Fourwing	2.05%
		Spiny hopsage	7.03%
RELATIVE COVER BY GROUPS			
SHRUBS	81		
GRASSES	19		
FORBS	0		
<b>KEY AREA 3</b>		Galleta	0.96%
Range site: 029XY079NV		Squirreltail	0.2%
Potential Cover For Site: 20-30%		Indian Ricegrass	0.14%
Percent Cover Measured 2007: 9.0%		Spiny Hopsage	0.64%
		Douglas' Rabbitbrush	4.0%
		Wyo Sagebrush	1.15%
		Winterfat	0.075%
RELATIVE COVER BYGROUPS			
SHRUBS	86		
GRASSES	14		
FORBS	0		

## 5. Ecological Condition

Ecological condition data was collected in 2001 at Key Area 1 on the allotment. The results of the data analysis reveal the site is in fair condition based on seral condition. Seral condition refers to the departure of the ecological site from the potential natural community. Seven perennial native species contributed to the condition rating of 43.9%. The Fair rating range is from 26% to 50% climax vegetation by percent (by weight). It should be noted that the native shrub Douglas' rabbitbrush contributed an additional 10% (allowable) which would bring the total score to 53.9% which is in the "Good" range. However, since this shrub is an increaser on the site and is an indicator of abusive grazing practices according to NRCS, it wasn't applied to the score for the Fair rating.

The data for Key Area 1 is as follows:

<b>Plant Species Name</b>	<b>Percent Composition</b>	<b>Percent Composition Allowed by Ecological Site Description</b>
Indian Ricegrass	3.7%	3.7%
Bud Sagebrush	3.5%	3.5%
Globemallow	2.2%	2.2%
Winterfat	6.2%	5%
Phlox	0.5%	0.5%
Galleta	4%	4%
Spiny Hopsage	33.9%	25%
Douglas Rabbitbrush	17%	10%
	<b>Condition rating:</b>	<b>53.9% = Good</b>
	<b>Adjusted condition rating without rabbitbrush:</b>	<b>43.9% = Fair</b>

## 6. Proper Functioning Condition (PFC) – Riparian Assessment

PFC was conducted on the Rattlesnake Spring in February, 2007. The spring was rated as functional at risk by the team. Due to the recent burn and the continued overuse by wildlife for bedding and browsing, the existing vegetation shows heavy use and the spring has shown very little recovery since being burned over in 2002. Livestock and wild horses have not contributed to the overuse or current condition of the spring.

7. Frequency Data:

KEY AREA	SPECIES	INCREASE	DECREASE	NO CHANGE	SIGNIFICANT?	COMMENTS
1	Cheatgrass	X			Yes	Climate dependent. Undesirable.
	Small Galleta		X		Yes	Decreased from 1985 to 2001.
	Ricegrass		X		Yes	Decreased with each reading. Significantly each time and from 15 to 1.5.
	Squirreltail			X	No	Wasn't read in 2001.
	Globemallow		X		Yes	It increased from 82 to 85 then down in 2001. Climate dependent.
	Budsage	X			No	Very slight increase from 1985 to 2001.
	Fourwing Saltbush		X		No	Decreased from 1982-1985 but not significantly. Not read in 2001.
	Winterfat		X		Yes	Decreased from 1985 to 2001 significantly (by more than ½.)
	Douglas' Rabbitbrush	X			No	Increased from 1982-1985. Not read in 2001. But prevalent.
	Spiny Hopsage	X			No	Increased from 1982-1985. Not read in 2001. Is present at key area based on current observations.

Frequency data was read at Key Area 1 in 1985 and 2001. Overall, trend is decreasing at Key Area 1 based on the increase of cheatgrass and Douglas' rabbitbrush indicating a downward trend for desirable native species and the beginning of a shift to less desirable species. Hopsage and budsage both increased slightly but not significantly. The "significance" column indicates that computer statistical analysis indicated a significant change.

8. North Pahroc Fire Emergency Stabilization Treatment Data Results:

Data collected in 2005 in drill seeded and natural regeneration treatment areas is summarized below:

Study Site Number and Treatment	Perennial Plants per m <sup>2</sup>	Firmly Rooted Perennials per m <sup>2</sup>	Percent Perennial Cover	Species Noted
P(DS)1 Drill Seeded	14	6	2	Desert bitterbrush Ephedra

				Fourwing Galleta
P(DS)2 Drill Seeded	5	2.5	1.6	Ephedra Fourwing Douglas' rabbitbrush
T(DS)1 Drill Seeded	12	6	7.8	Fourwing Globemallow Ricegrass Yucca
T(DS)2 Drill Seeded	14	8.6	5	Ricegrass Galleta Globemallow
P(NR)1 Natural regeneration	1.8	1.8	1.9	Ricegrass Cliffrose Squirreltail
P(NR)2 (Drilled or natural?)	10	2.6	20	
T(NR)1 Natural regeneration	10	8.2	5	

9. Major soil units represented on the allotment by acreage:

AREA EAST OF PAHROC RANGE		
MU SYM	ACRES	DOM VEG
3700	5060	Winterfat/Hopsage/Fourwing/Ricegrass
1132	4308	Wyoming Sagebrush
1021	4039	Fourwing/Winterfat/Ricegrass
1885	2457	Wyoming Sagebrush
2292	1200	Blacksage/Ricegrass
3194	745	Winterfat/Shadscale/Green Molly
3193	551	Fourwing/Shadscale/Greasewood
total acres:	18360	

**EA - APPENDIX II**

**GRAZING PERMIT AND  
TERMS AND CONDITIONS  
DEAN CARTER AND SONS (2705027)**

<b>Number</b>	<b>Allotment</b>	<b>Livestock Number</b>	<b>Livestock Kind</b>	<b>Grazing Begin</b>	<b>Grazing End</b>	<b>% Public Land</b>	<b>Type Use</b>	<b>AUMs</b>
01058	Rattlesnake	169	Cattle	Oct 1	April 30	100	Active	1183

The allotment summary is as follows:

<b>Allotment</b>	<b>Active AUMs</b>	<b>Suspended AUMs</b>	<b>Total AUMs</b>
Rattlesnake	1,180	324	1,504

**Terms and Conditions:**

In accordance with 4130.3-2 the following terms and conditions will be included in the grazing permit for Dean Carter and Sons on the Rattlesnake Allotment:

Stipulations Common to All Allotments:

1. Livestock numbers identified in the term grazing permit are a function of seasons of use and permitted use for each allotment. Deviations from those livestock numbers and seasons of use may be authorized on an annual basis where such deviations would not prevent attainment of the multiple-use objectives for the allotment.
2. Deviations from specified grazing use dates will be allowed when consistent with multiple-use objectives. Such deviations will require an application and written authorization from the authorized officer prior to grazing use.
3. The authorized officer is requiring that an actual use report (form 4130-5) be submitted within 15 days after completing your annual grazing use.
4. The payment of your grazing fees is due on or before the date specified in the grazing bill. This date is generally the opening date of your allotment. If payment is not received within 15 days of the due date, you will be charged a late fee assessment of \$25 or 10 percent of the grazing bill, whichever is greater, not to exceed \$250. Payment with visa, mastercard or American express is accepted. Failure to make payment within 30 days of the due date may result in trespass action.
5. Pursuant to 43 CFR 10.4(G) the holder of this authorization must notify the authorized officer by telephone, with written confirmation, immediately upon discovery of human remains.

funerary objects, sacred objects, or objects of cultural patrimony (as defined at 43 CFR 10.2). Further, pursuant to 43 CFR 10.4 (C) and (D), you must stop activities in the immediate vicinity of the discovery and protect it from your activities for 30 days or until notified to proceed by the authorized officer.

6. Grazing use will be in accordance with the Mojave Southern Great Basin Standards and Guidelines for grazing administration as developed by the respective RAC and were approved by the Secretary of the Interior on February 12, 1997 with subsequent revisions. Grazing use will also be in accordance with 43 CFR Subpart 4180 – Fundamentals of Rangeland Health and Standards and Guidelines for Grazing Administration.

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

#### Management Practices Applicable to the Rattlesnake Allotment:

1. Salt and/or mineral supplements for livestock would be located no closer than ¼ mile from water sources. Use of nutritional supplements (not forage) would be encouraged to improve the ability of cattle to utilize forage in the winter months and to improve livestock distribution across the allotment.

2. Maximum allowable use levels would be established as follows:

- Perennial grasses: 40% current year's growth.
- Perennial shrubs, half-shrubs and forbs: 40% use on current annual production.

3. Wildlife escape ramps would be required to be installed and maintained by the permittee at each trough used on the allotment.

**EA - APPENDIX III**  
**RISK ASSESSMENT FOR NOXIOUS & INVASIVE WEEDS**  
**Term Grazing Permit Renewals for Dean Carter & Sons**  
**Rattlesnake Allotment**  
**Lincoln County, Nevada**

A noxious weed assessment was conducted on March 2, 2007 for the Environmental Assessment to Renew the Grazing Permit for Dean Carter and Sons (#2705027) on the Rattlesnake Allotment (#1058). The EA analyzes the impacts of renewing the 10-year grazing permit for the allotment. The permit currently allows the permittee to graze 158 cattle from 10/16-2/28 for a total of 1,180 active Animal Unit Months (AUMs). See attached map. For this assessment, the district weed inventory data was consulted and the weed locations were inspected on the allotment.

Known populations of Russian knapweed (*Acroptilon repens*), tall whitetop (*Lepidium latifolium*), hoary cress (*Lepidium draba*), and salt cedar (*Tamarix spp.*) occur on the Rattlesnake Allotment. Spotted knapweed (*Centaurea stoebe*) occurs within 5 miles of the allotment and is a concern in the Highway 93 Right of Way where it has proliferated. Two sightings of spotted knapweed occur on the Highway 318 Right of Way as well. Weeds are a concern at three watering sources: at the last reservoir for the Rattlesnake Pipeline, at Rattlesnake Spring, at the reservoir east of the North Pahroc Fence. These infestations are mapped, are being controlled through a treatment cycle, and were not observed in February at any of the listed locations.

Cheatgrass (*Bromus tectorum*) is on most of the allotment though it is prevalent mainly in the North Pahroc Burn area, a 2000 acre burn from 2002. Dry Lake Valley has had a few years where the cheatgrass was so dense it was almost monotypic. It occurs elsewhere but in small amounts.

**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 (5) at the present time. The specific weeds on the allotment are of important concern due to their ability to become established and their difficulty to control (Russian knapweed, tall whitetop and hoary cress) and the fact that they occur at the spring and two watering sources. Livestock, wildlife and wild horses all have potential for spreading the weeds and for improving the weeds' chances of success through competition and spread by animals using the water sources.

**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.

For this project, the factor rates as Moderate (5) at the present time. However, the climate in Dry Lake Valley may be the limiting factor preventing the weeds from spreading from their sources. The drought conditions which prevail in the valley impede the weeds from becoming established into new undisturbed areas. These weed populations are scattered in the valley but without severe disturbance, do not appear to have much potential for spread. This could change with a major event or combination of events such as a wildfire in an infested area followed by several years of good, timely moisture. The tall whitetop at Rattlesnake Spring was enhanced due to the North Pahroc Burn in 2002.

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

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

For this project, the Risk Rating is Moderate (25) at the present time. This indicates that the project can proceed as planned. To insure that noxious and invasive weeds do not become established the following measures should be followed:

1. The BLM will provide information regarding noxious weed management and identification to the permittee. The importance of preventing the spread of weeds to uninfested areas and importance of controlling existing populations of weeds will be explained.
2. Control treatments would be initiated on noxious weed populations that establish in the project area by methods to be approved by the Authorized Officer.
3. The grazing will be conducted in compliance with the Ely District BLM noxious weed schedules. The scheduled procedures can significantly and effectively reduce noxious weed spread or introduction into the project area.
4. The range specialist for the allotments will include weed detection into project compliance inspection activities. Any newly established populations of noxious/invasive weeds discovered should be communicated to the Ely District Noxious and Invasive Weeds Coordinator for treatment.

Reviewed by: /s/Bonnie Waggoner

Bonnie Waggoner  
Ely District Noxious & Invasive Weeds Coordinator

\_\_\_\_\_ Date

**EA – APPENDIX IV**

**COMMENTS TO PRELIMINARY EA**

<b>No.</b>	<b>COMMENTER</b>	<b>COMMENT</b>	<b>BLM RESPONSE</b>
1	Western Watersheds Project (WWP)	How have recent fires affected these or nearby lands, wildlife, wild horses, watersheds. Native vegetation communities, risks of cheatgrass/brome weed invasion and dominance? Have these lands been re-opened to grazing following fires? If so, please provide a detailed assessment of any recovery that has occurred?	The last fire on the allotment was the North Pahroc Fire of 2002 (2,079 acres). The fire was conditionally reopened to controlled grazing use in 2006. Fire recover data has been added to the monitoring data section of the Standard Determination Document in Appendix I. Cheatgrass is present in the burn area.
2	WWP	The allowable use level is much too high – and not in concert with even current range science that demonstrates such high use levels cause harm to native grasses and forbs.	The standard use levels have traditionally been adapted from the Nevada Monitoring Handbook. The EA proposes a lower overall use level of 40% on perennial grasses, perennial shrubs half-shrubs and forbs based on annual production. The National Range and Pasture Handbook indicates a use level between 30-50% on perennial grasses varies the impacts to the root system. At 30% there is no impact to root development and root growth still occurs. At 50% use root stoppage of 3% generally occurs. At 40% use, root development still occurs with little stoppage.
3	WWP	There is greatly expanded Oil and Gas, geothermal and other leasing development activity and potential wind facility development occurring in central Nevada. How is habitat for important and sensitive species being affected by this? Are these or surrounding lands being affected? Or are they being exploited by Las Vegas for aquifer mining?	This comment is outside the scope of this EA.
4	WWP	How can BLM develop a range of alternatives here that serve to enhance, rather than degrade habitats, in order to accommodate the needs of wildlife, and the public that are increasingly being diminished by new development and exploitation?	The proposed action is designed to enhance wildlife habitat through improved vegetative and soil conditions. With healthy stable soils and vegetation communities comes healthy high quality habitat for wildlife.
5	WWP	Has BLM conducted any fuels or other treatments in or near these allotments – or are any planned? Have watershed Analysis documents been prepared? If so, please provide these to all Interested Publics so that a better understanding can be had of ecological conditions and BLM information on hand here.	No fuels projects are planned in the permit renewal area. Watershed analysis has not occurred yet. Dry Lake Valley watershed will be analyzed in the near future based on funding.

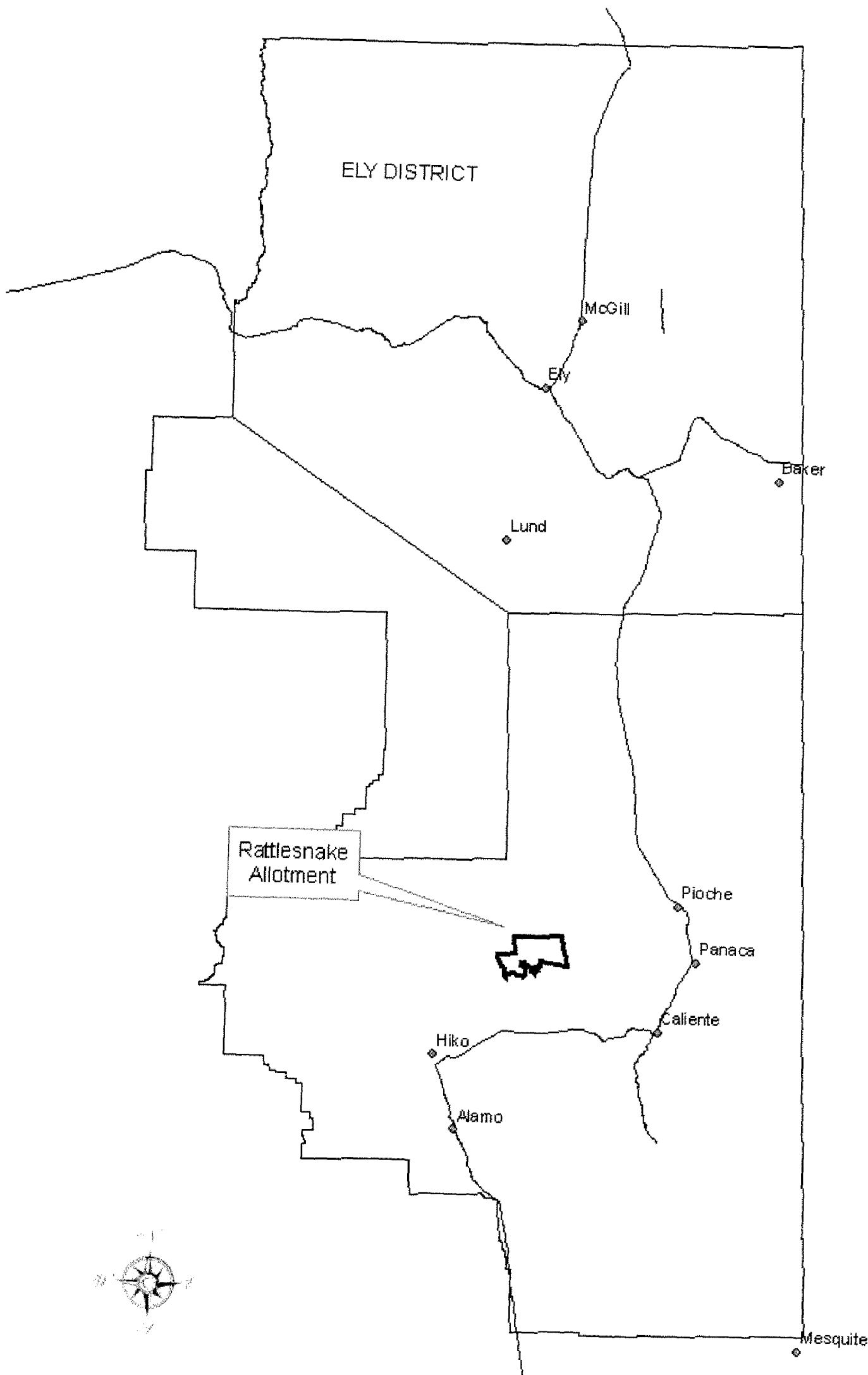
6	WWP	How has BLM decided which allotments to separate, or lump together? Why are you not preparing an EIS for this geographic area? This is essential to understand the environmental baseline, and provide information to develop appropriate management to accommodate wild horse, recreational and other important uses of these lands.	The proposed action is to issue the term permit. As analyzed in the EA, a grazing plan for the Rattlesnake Allotment would be implemented. This does not affect other grazing operations.
7	WWP	Where are ALL Utilization, actual use, and any other monitoring records for all years available. What is the current ecological condition and rangeland health of other allotments and lands in and near the site of the grazing permit renewal? What are the cumulative effects of grazing degradation on these other lands? For example, how are rangeland health concerns in other allotments affecting important and sensitive species habitats and populations? How can this allotment be managed to provide significantly improved mule deer, antelope, sagebrush, salt desert and other important species habitats?	Monitoring data is in Appendix I of the Standard Determination Document which is in Appendix I of the EA.  Ecological condition data was collected at one key area for the allotment in 2001. This data has been added to the data table in the Standards Determination Document in Appendix I of the EA.  The proposed action addresses changes needed to grazing management identified in the Standards Determination Document to improve habitat on the allotment.
8	WWP	Please provide a full and detailed assessment of any AUMs used in any trailing, the weed infestation risk from trailing, the other allotments where livestock associated with this allotment may be grazed or trailed – and provide site-specific monitoring identifying on-the-ground effects of trailing disturbance. Please detail weed problems on any lands used by the permittee. What other areas or allotments does this permittee or any association member graze?	Trailing does not occur in conjunction with this permit.  A noxious weed risk assessment was completed for the EA and is found in Appendix III. It describes the risks associated with the proposed action and mitigation requirements. The permittee holds one other permit in the Ely Field Office for the North Chokecherry Allotment.
9	WWP	We can find no evidence in the assessment of current and adequate site-specific inventories for important, sensitive and special status species across the allotment this is essential for BLM to conduct an adequate FRH assessment and analysis process. These species include Northern Goshawk, Lewis's Woodpecker, Red-naped Sapsucker, Loggerhead Shrike, Vesper Sparrow, Swainson's Hawk, Black Rosy Finch, Prairie Falcon, western Burrowing Owl – and also. Flammulated Owl and numerous sensitive bat species.	The latest BLM GIS data and the Nevada Heritage Data was consulted for the assessment and analysis associated with this EA. Only one species of concern was identified during scoping.
10	WWP	Actions must be developed to promote native species vigor, health, seedling establishment, and improved soil and	The proposed action includes a change in the season of use as well as appropriate allowable use levels on perennial grasses

		water infiltration.	and shrubs to enhance and improve native species vigor, reproduction, and recruitment as discussed in the Standard Determination Document.
11	WWP	Please provide much more detailed and current survey information for the rare plant species found in these lands.	No special status plant species were identified as occurring in the Rattlesnake Allotment.
12	WWP	What BLM terms "moderate" use is actually very heavy use, and is known to be deleterious to native bunchgrasses, shrubs and ecosystem processes (see Anderson 1991). Such heavy use and the extensive trampling use that occurs here – especially from grazing both classes of livestock on the same lands.	Moderate grazing use is when use of current year's growth on a key species occurs within 41-60%. Proposed allowable use levels allow for 40% use.  Only one class of livestock occurs on the allotment. Heavy use and trampling were identified in terms of unexpected elk use at Rattlesnake Spring. This has not been identified with respect to livestock use.
13	WWP	BLM has failed to conduct current site-specific inventories for rare plants and animals across the allotment. These include Loggerhead Shrike, Ferruginous Hawk, Burrowing Owl, Pygmy Rabbit, and numerous other rare, sensitive, declining and important species.	The only special status species identified/mapped as occurring on the allotment was identified and analyzed in the EA.
14	WWP	BLM has not provided systematically collected and site-specific information obtained across the allotment to demonstrate: soil stability, impacts to habitats, degree and severity of fragmentation of habitats, background information to demonstrate that any "progress" is being made, the adverse effects to soils, vegetation, habitats, recreational uses, cultural sites of water haul sites. Where are all water haul sites located? What weeds are found in association with water haul sites, and how have such practices lead to spread of weeds, cheatgrass, deterioration of native vegetation, increased risk of fire – through extending intensive trampling use and priming sites for cheatgrass invasion, etc.	The Standard Determination Document states that progress has not been made in achieving the Standards for Rangeland Health, hence the basis for the proposed action.  There are currently no water haul sites on the allotment. Water hauling is recommended to distribute cattle on the allotment to reduce concentrated use between permanent water haul sites. Prior to authorizing temporary water hauls, weed and cultural inventories are conducted to prevent the conditions described in the comments.
15	WWP	Please provide detailed Ecological Site Inventory, carrying capacity based on current and systematically collected data, provide full information on the effects of drought and factor frequent drought into any stocking rate set here.	Ecological Site Inventory data has not been collected on the allotment. No changes have been made to the stocking rates. The number of Animal Unit Months has not changed. The number of cattle changed to reflect the use of total active AUMs for a shorter period of time. Current stocking rates were evaluated associated with the current monitoring data.
16	WWP	Please provide all monitoring data for the last 20 years for this allotment - in at least summary form, and all Actual Use	Monitoring data and actual use data used for the Standards evaluation is provided in Appendix I of the SDD. Utilization

		reports, by area.	data collected in years prior to the evaluation period has been summarized and added to the monitoring data section in the Standard Determination Document found in Appendix I of the EA.
17	WWP	Where is a thorough and detailed current Fundamentals of Rangeland Health Assessment, Determination, and systematic and science-based examination of the lands and waters here and their health.	The Standard Determination Document is found in Appendix I of the EA.
18	WWP	It is imperative that a full, thorough and detailed assessment and analysis of seeps, springs, springbrooks, intermittent or ephemeral or perennial water sources, and the aquifers to which they are linked be provided.	Rattlesnake Spring was rated as functioning at risk in 2007. The conditions at the spring are attributed to excessive elk use not livestock grazing.
19	WWP	We are very concerned that the rubberstamping of livestock numbers. BLM also imposes prolonged and harmful seasons of use. These uncertain use periods that it seeks to impose here will result in extensive disturbance to these sites.	The season of use was shortened in the spring to relieve grazing pressure on cool season native plants.
20	WWP	The BLM fails to assess the effects of livestock grazing and trampling disturbance in damage or alteration of cultural sites – with effects ranging from trampling and erosional disruption of site stratigraphy to cheatgrass moving into livestock damaged areas and altering fire frequencies that lead to accelerated damage to cultural sites.	The cultural needs assessment was completed in 2007 with respect to the proposed action. It was determined that no harmful effects to cultural sites would occur.
21	WWP	Where are mandatory BMPs such as not allowing livestock to graze weed areas until infestations are eradicated, quarantining livestock before entry into an allotment or pasture if the are coming from an area with weeds, etc.?	Noxious weeds are being treated and monitored on the allotment.
22	Cindy MacDonald	The Caliente Field Station in conjunction with the Ely Field Office has effectively zeroed out all wild horse use in their legally established and “protected” habitat, also known as the Rattlesnake Herd Management Area (HMA).	The comment addresses changes to the appropriate management level. This is outside the scope of the EA which does not address wild horse populations. Other comments also made regarding wild horses which are also deemed outside the scope of the proposed action for the EA are not discussed further.
23	Cindy MacDonald	Elk Management Plan and elk management comments.	The commenter references the Lincoln County Elk Management Plan. This plan is a community based plan which applied principles of coordinated resource management (CRM) of which BLM

			participated as a stakeholder. Further comments addressing elk populations, resource degradation, by elk, etc. are not discussed further since BLM does not manage elk populations.
24	Nevada Division of Water Resources	Proposal supported as written.	
25	Nevada Department of Wildlife	Unable to review the document.	

DEAN CARTER AND SONS  
PERMIT RENEWAL  
OVERVIEW MAP



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.



# Dean Carter and Sons Permit Renewal Map

## Map Legend

- Pipeline
- Troughs and Reservoirs
- Rattlesnake Allotment Boundary
- ××× Fence
- North Pahroc Fire

1:50,763

1 inch equals 0.801177 miles



Rattlesnake  
Spring

K.A.1★  
TRAIL

To Dry Lake  
Valley

K.A.2★

To HWY 93  
12 Miles

Hiko 18 Miles

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R.62E.

R.63E.

NORTH PAHROC RANGE

