PRELIMINARY

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

(EA-NV-040-07-016)

June 1, 2007

Bureau of Land Management
Ely Field Office and
Caliente Field Station

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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 nor was grazing management 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 (an increaser[1] species) 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

[1] Increaser species are defined in the National Rangeland Pasture Handbook (NRCS) as "climax native plants in a community of different plants that, under excessive continuous grazing by livestock, are not selected initially, and increase in abundance." Whereas, decreaser species "decrease in relative amount with continued heavy defoliation grazing)".

The proposed action is consistent with Federal, State, and local laws, regulations, policies, and plans to the maximum extent possible. 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 Proposed Domestic Livestock Grazing Management Program for the Caliente Area signed September 21, 1979. The proposed action has been analyzed within the scope of other relevant plans, statutes, regulations, executive orders, and manuals listed below and found to be in compliance:

- State Protocol Agreement between the Bureau of Land Management, Nevada and the Nevada State Historic Preservation Office (1999)
- Mojave-Southern Great Basin Resource Advisory Council (RAC) Standards and Guidelines (12 February 1997).
- Ely District Policy: Management Actions for the Conservation of Migratory Birds – 5/01/01.
- 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).
- BLM Manual H-4180-1, Land Health Standards
- 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
- 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 (EAs) 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.

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. No other issues were identified.

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 Begin End	% Public Land*	Type Use	AUMs**
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.					

Allotment AUMs Summary		
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 Begin End	% Public Land*	Type Use	AUMs**
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.					

Allotment AUMs Summary		
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 from 9/30/2007 to 09/29/2017. 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 (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.

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

2. 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.

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

- Perennial grasses: 40% total above ground production at the key areas or areas serviced by temporary water sites or supplements (3/4 to one mile from any water source).

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

- Perennial shrubs and half-shrubs: 50% use from 10/1-3/14 on production (based on growth occurring prior to start of grazing use.

This use level is necessary to allow desirable perennial key browse species to develop branchlets and woody stature able to withstand the pressure of grazing use. Use would be read in March or prior to the spring re-growth. Use during spring contributes to following season's use level.

4. Use by livestock would be rotated by the operator in the spring months (3/15 – 4/30) to facilitate spring rest while remaining on the allotment. Rotational areas on the allotment could include the North Pahroc Burn area, the main grazing area east of the burn, and the portion of the allotment west of the North Pahroc Range.

Use of supplements, water control/placement and herding can be used to rest the east or west portions of the allotment (east of the North Pahroc Range). A separate EA would analyze the impacts of keeping the North Pahroc Burn Fence as a permanent structure on the allotment to facilitate rotational grazing.

5. All reservoirs on the allotment would be supplemented by the permittee with troughs and fitted with float valves for water conservation purposes. Unless otherwise specified in prior existing rights and in conformance with the laws of the State of Nevada, water would be left at the spring source sufficient enough to support riparian vegetation, supply a saturation zone, and provide for wildlife habitat. During times of extreme cold periods, the floats could be removed to allow water to overflow into the reservoirs to prevent freezing and damage to the pipeline facility. Floats are to be replaced within a reasonable timeframe to maintain the spring conditions.

6. Wildlife escape ramps would be required to be installed and maintained by the permittee at each trough (permanent or temporary) used on the allotment.

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

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

Not renewing term grazing permits was given consideration as an alternative but eliminated from detailed analysis because the Code of Federal regulations at CFR 4130.2 requires the issuance of grazing permits to qualified applicants. No additional site specific alternatives are necessary for analysis since there are no unresolved conflicts concerning alternative uses of available resources. The alternative of no livestock grazing was fully described and analyzed in the Caliente Environmental Statement on page 8-19.

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.

Critical Elements of the Human Environment

The critical elements of the human environment which must be considered because of requirements specified in statute, regulation, or executive order, are listed 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. Critical Elements of the Human Environment

Critical Element	No Effect	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		Habitat for several migratory bird species may overlap the general area of the allotment.
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.
Special Status Animal and Plant Species (Federally listed, proposed or candidate threatened or endangered species and state sensitive species)		X		The Desert Valley kangaroo mouse is a Nevada Special Status Species and occurs on a portion of the allotment adjacent to the dry lake bed.
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 critical elements of the human environment, the BLM considers other resources and uses that occur on public lands and the issues that may result from the implementation of the Proposed Action. The potential resources and uses, or non-critical elements that may be affected are listed in Table 4. A brief rationale for either considering or not considering the non-critical element further is provided. The non-critical elements that are considered in the EA are described in the Affected Environment and are analyzed in the Environmental Consequences section.

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

Resource or Issue	No Effect	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 through improved 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/Range/Standards and Guidelines
- Migratory Birds
- Noxious Weeds and Invasive Non-Native Species
- Soils
- Special Status Animal and Plant Species (Proposed or Candidate Threatened and Endangered and State Sensitive Species)
- Vegetation
- Wildlife

A. Livestock Grazing/Range/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. 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. Migratory Birds

Migratory and semi-migratory birds may occur in the allotment particularly from early spring through early fall. The Ely BLM District issued a bird watching list in 1979 and includes over 160 species of migratory birds which may be found on the public lands managed by the Ely BLM Field Office. Species specific to the salt desert shrub community would be common on the allotment.

Numerous species of migratory birds occur in the Hiko, Nevada area which is only a few short miles from the allotment (west of the North Pahroc Range). It is expected that a number of these species could be observed in the allotment. Many could breed and/or nest somewhere on the allotment. Nests could occur on the ground, in low-lying shrubs, or tall shrubs and/or trees.

C. 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.

D. 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.

E. Special Status Animal and Plant Species (Proposed or Candidate and State Sensitive Species)

The eastern portion of the allotment supports habitat for the Desert Valley kangaroo mouse (*Microdipodops megacephalus*), a Nevada Special Status Species. It is identified by U.S. Fish and Wildlife Service as a Species of Concern. The Nevada Natural Heritage Database indicates there is a known population of the mouse just west of the dry lake bed on the Rattlesnake Allotment. The mouse is usually found among bushes growing in soils covered with gravel or on sand dunes (Kim, D. 1999) and prefer a dry, sandy habitat, often bordering alkaline dry lakes and sinks (Zipcode Zoo. 2007).

F. 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

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 (*Krasheninnikovia 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 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.

G. Wildlife

The allotment provides year round habitat for game animals such as mule deer and elk. 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. The Rattlesnake Allotment is in Big Game Hunting Unit 223. American antelope are often observed on the allotment as well.

Wintering and breeding raptors are assumed to occupy and forage 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/Range/Standards and Guidelines

Proposed Action: Permitted livestock use would be affected by the reduction 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 two extra weeks of grazing in the fall.

The adjustment to the allowable use levels takes into account the reduction of winterfat, fourwing saltbush, and cool season perennial grasses at the key areas. Allowable use levels set the limit which livestock can graze plants based expressed in the percent of the plants' above ground biomass used. For example, 40% use on Indian ricegrass restricts usage to this level.

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. Migratory Birds

Reduced spring use by cattle would improve vegetative conditions for the migratory and semi-migratory birds using the area.

No Action: The migratory birds could be affected by the selection of the No Action Alternative. The season of use would not be changed. The reduction of one month of grazing use in the spring reduces the likelihood of livestock impacting ground nests. This change would not occur under the No Action Alternative.

C. 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 in 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.

D. 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.

E. Special Status Animal and Plant Species (Federally listed, Proposed or Candidate Threatened or Endangered Species, and State Sensitive Species)

Proposed Action: The Desert Valley Kangaroo Mouse habitat would be enhanced with increased vegetative cover for escape from predators and forage, stable soil surfaces for burrow construction and use, and improved foraging conditions. Improved vegetative conditions resulting from reduced spring grazing use would affect the mouse and its habitat. Allowable use levels would ensure that key forage plants are not reduced beyond their capability to re-grow, reproduce, and provide forage and cover to the mouse in its habitat.

The proposed action would result in progressing toward achieving the Standards for Rangeland Health, particularly the Habitat and Biota Standard through improvement of habitat for the kangaroo mouse.

No Action: Vegetative conditions could continue to decrease which could eventually have an impact on the kangaroo mouse and its habitat in the allotment.

F. 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)

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.

G. 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.

H. 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 Chokecherry 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 and no comments were received.

The draft version of this EA will be posted on the Ely external webpage for thirty days, inviting public comment. A hard copy of the EA will be 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. Changes in the EA based on public input, will be given consideration.

Interested publics will be notified by mail or email when the Decision Record 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 that have requested a hard copy. 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 Ely Field Office mailed the annual Consultation, Cooperation, and Coordination (CCC) letter on January 30, 2007 to individuals and organizations that have expressed an interest in rangeland management related actions. Those receiving the annual CCC letter have the opportunity to request from the Ely Field Office more information regarding specific actions. 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
Steven Carter
Steve Foree
Brad Hardenbrook
Lincoln County Commissioners
Curt Leet
Betsy MacFarlan
Cindy MacDonald
John McLain
Nevada State Clearinghouse
Mike Scott
Katie Fite

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 Lesher	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

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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.

USDA – NRCS. 1998. Nevada Plant List.

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

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

USDI – BLM. 1979. Caliente Environmental Statement

Zipcode Zoo. "*Microdipodops megacephalus* (Dark Kangaroo Mouse)" [Online] Available 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

X Not Achieving the Standard, and <u>not</u> making significant progress toward standard

Causal Factors

X 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

X **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 exclosure 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 plan 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

X **Not Achieving the Standard, and <u>not</u> making significant progress toward standard**

Causal Factors

X Livestock are a contributing factor to not achieving the standard.

□ Livestock are not a contributing factor to not achieving the standard

X **Failure to meet the standard is related to other issues or conditions**

Guidelines Conformance:

X 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

X Not Achieving the Standard, <u>not</u> making significant progress toward standard

Causal Factors:

X 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:

X Not in conformance with the Guidelines

<u>Conclusion: *Standard Not Achieved*</u>

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% total above ground production at the key areas or areas serviced by temporary water sites or supplements (3/4 to one mile from source).

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: 50% use from 10/1-3/14 on production (based on growth occurring prior to grazing use.

This use level is necessary to allow desirable perennial key browse species to develop branchlets and woody stature able to withstand the pressure of grazing use. Use will be read in March or prior to the spring regrowth. Use during spring contributes to following season's use level. This prevents reading use after spring growing season occurs which skews the reading on shrubs.

4. Rotate use by livestock in the spring months (3/15 – 4/30) to facilitate spring rest while remaining on the allotment.

The condition of the allotment is not so severe that the livestock need to be completely removed from the allotment in the spring. Use of supplements, water control/placement and herding can be used to rest the east or west portions of the allotment (east of the North Pahroc Range).

5. All reservoirs on the allotment will be supplemented by the permittee with troughs and fitted with float valves for water conservation purposes. Unless otherwise specified in prior existing rights and in conformance with the laws of the State of Nevada, water will be left at the spring source sufficient enough to support riparian vegetation, supply a saturation zone, and provide for wildlife habitat. During times of extreme cold periods, the floats can be removed to allow water to overflow into the reservoirs to prevent freezing and damage to the pipeline facility. Floats are to be replaced within a reasonable timeframe to maintain the spring conditions. A reasonable timeframe to accomplish these tasks will be determined through CCC with the permittee.

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

7. The permittee will maintain range improvement projects on the allotment.

Prepared by:

Shirley Johnson, Rangeland Management Specialist _____
Date

Reviewed by:

Chris Mayer, Lead Rangeland Management Specialist _____
Date

I concur:

_____ _____
Authorized Officer Date

REFERENCES

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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.

3. Precipitation Data

Mustang		**(N 37 41.731**	**W 114 50.750**	**UTM'S**	**689926**	**4174010)**	
Month	2000	2001	2002	2003	2004	2005	2006
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		
Total	**11.34**	**6.15**	**2.67**	**7.42**	**9.91**	**8.42**	**7.19**

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
KEY AREA 1		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		
KEY AREA 2		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		
KEY AREA 3		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. 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.

6. 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.)
	Doublas' 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.

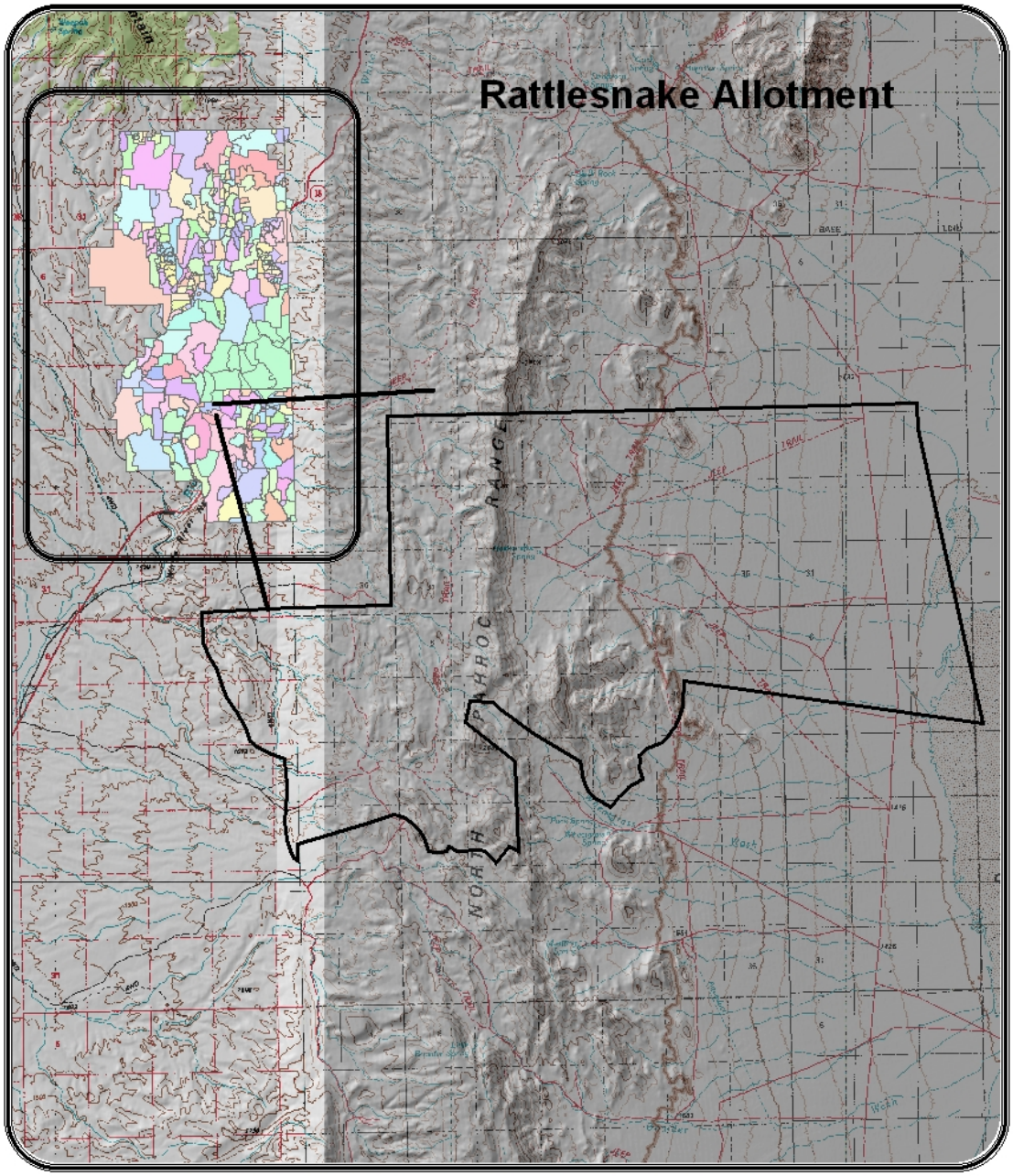
7. Major soil units represented on the allotment by acreage:

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	

SDD - APPENDIX II

ALLOTMENT MAP



General Location Map

EA - APPENDIX II

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

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

The allotment summary is as follows:

Allotment	Active AUMs	Suspended AUMs	Total AUMs
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 CRF 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.

Additional Terms and Conditions for the Rattlesnake 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: _____ _____

Bonnie Waggoner Date
Ely District Noxious & Invasive Weeds Coordinator