Environmental Assessment

Belleville Allotment

EA-NV-030-07-020

May 2007

U.S. Department of Interior
Bureau of Land Management
Carson City Field Office
5665 Morgan Mill Road
Carson City, Nevada 89701

I. INTRODUCTION/PURPOSE AND NEED

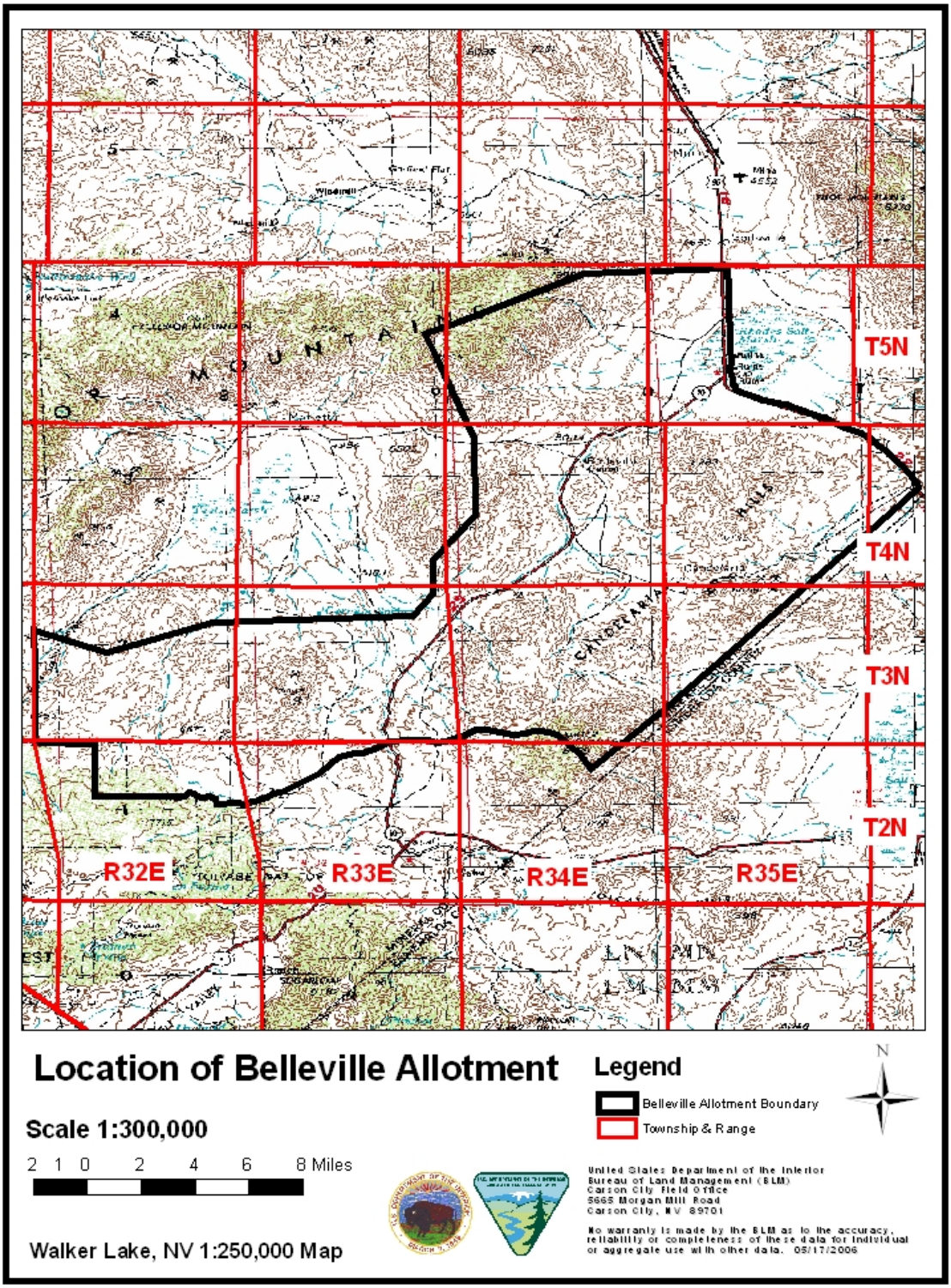
Introduction

This Environmental Assessment (EA) analyzes the impacts resulting from the use of the Belleville Allotment (Figure 1) for grazing purposes. It analyzes the impacts that are anticipated to result from the implementation of the proposed action, modification of the existing utilization levels by adoption of the technical recommendations presented in the Belleville Allotment Standards and Guidelines Analysis (2006), and the No Action Alternative, and No Grazing alternative. This EA relies on and incorporates by reference a large portion of the recent Belleville Allotment Standards and Guidelines Analysis (2006).

On February 12, 1997, Secretary of the Interior Bruce Babbitt approved the Standards and Guidelines for Rangeland Health and Grazing Management to be applied to BLM public lands in the State of Nevada. These standards and guidelines were developed in consultation with the Resource Advisory Councils (RAC) for the Bureau of Land Management (BLM) in Nevada to help ensure that grazing use of these public lands result in productive and sustainable rangelands for the use and enjoyment of future generations.

Standards and Guidelines are being implemented through two processes; (1) determination that the terms and conditions of the grazing permit are consistent with the Standards and Guidelines applicable to the allotment and (2) the allotment evaluation process to determine whether or not the current grazing utilization is expected to achieve the specific resource goals and objectives identified for the Belleville Allotment in the applicable Resource Management Plan (RMP) and Rangeland Program Summary (RPS).

The EA references parts of the 2006 Belleville Allotment Standards and Guidelines Analysis and Standards and Guidelines developed for the Sierra Front - Northwestern Great Basin Area (the specific area that includes the Belleville Allotment). The Standards and Guidelines Analysis is on file at the Carson City Field Office.



Belleville Allotment Boundaries

Purpose and Need

The purpose of the proposed action is two fold; (1) Administer grazing and implement grazing practices on the Belleville Allotment in a manner consistent with the attainment of site specific objectives for the allotment found in the Carson City Field Office Consolidated Resource Management Plan 2001 and (2) Implement grazing practices that would ensure compliance with the Standards and Guidelines for Rangeland Health and Grazing Management.

The need for the proposed action stems from BLM mandates to conduct grazing activities in an ecologically sound manner. Grazing use of the Belleville Allotment as well as requirements to conduct grazing activities in a manner consistent with the principles of multiple use and sustained yield and in an ecologically sound manner are found in the provisions of the Taylor Grazing Act of 1934, the Federal Land Policy and Management Act of 1976 (FLPMA), the recently adopted 1995 Standards and Guidelines for the Rangeland Health and Grazing Management, as well as various other federal laws and regulations.

Land Use Plan Conformance Statement

The proposed action and alternatives described below are in conformance with the Carson City Field Office Consolidated Resource Management Plan, pages LSG-1.

- Maintain or improve the condition of the public rangelands to enhance productivity for all rangeland and watershed values.
- Initially, manage livestock use at existing levels.
- Provide adequate, high quality forage for livestock by improving rangeland condition.
- Improve overall range administration.

II. PROPOSED ACTION AND ALTERNATIVES

Proposed Action

- Issue a new Term Grazing Permit for the Belleville Allotment in order to implement the technical recommendations in the 2006 Belleville Allotment Standards and Guidelines Analysis and/or other changes to improve management of the range resource.
- In the Belleville Allotment, 55 cattle would be grazed with a period of use of November 1 to April 15 each year, for a total of 303 Animal Unit Months (AUM's).

- Limit utilization on desirable shrubs, such as antelope bitterbrush (*Purshia tridentata*), spiny hopsage (*Grayia spinosa*), budsage (*Artemisia spinescens*), fourwing saltbush (*Atriplex canescens*), and winterfat (*Kraschenninnikovia lanata*), so as not to exceed 45% in the upland key areas in the allotment. The utilization levels would be checked, and when maximum utilization is reached, animals would be removed from the area.

- Limit utilization on desirable grasses, such as Indian ricegrass (*Achnatherum hymenoides*), Thurber's needlegrass (*Stipa thurberiana*), galleta grass (*Hilaria jamesii*), and Sandberg bluegrass (*Poa secunda*), so as not to exceed 45% in the upland key areas in the allotment. The utilization levels would be checked, and when maximum utilization is reached, animals would be removed from the area.

- Water hauling in the allotment would be required each year.

- Control and eradicate noxious weed infestations, should they occur.

- There would be no grazing system.

- Improve existing ecological condition and trend.

Alternatives

1. No Action

- Maintain current management and status of the Belleville Allotment.

- In the Belleville Allotment, 55 cattle would be grazed with a period of use of November 1 to April 15 each year, for a total of 303 AUMs. Cattle would be allowed to graze season long throughout the whole allotment as they are currently.

- There are no maximum utilization standards in place.

- There is currently no form of grazing system in place.

- Maintain existing ecological condition and trend.

2. No Grazing Alternative:

Under this alternative, no Term Grazing Permit would be issued, and no grazing would occur on this allotment in the future. There would be no further range improvements constructed on the allotment, and no grazing permittee to maintain current range improvements, including fences and water sources. A permittee would not be present on

the allotment to continue proper day-to-day management, so these vital activities would no longer be performed.

Table 1 – Comparisons of the Different Alternatives

	Proposed Action	No Action	No Grazing
Number of Livestock	55	55	0
AUM's	303	303	0
Period of Grazing	11/1-4/15	11/1-4/15	No Grazing
Max. Utilization (Shrubs)	45%	N/A	0
Max. Utilization (Grasses)	45%	N/A	0
Grazing System	None	None	None
Range Improvements	Two Water Hauls	None	None
Max. Utilization Reached	Removed	None	None

III. AFFECTED ENVIRONMENT

Scoping and Issue Identification

On November 9, 2006 a letter was sent to possible interested publics to identify those individuals and organizations interested in specific actions on specific Allotments under the jurisdiction of the Carson City Field Office. The purpose of the scoping letter was to gather information and determine who would be further interested in participating in the evaluation process on the Carson City Field Office grazing allotments.

The Environmental Assessment for the Belleville Allotment Standards and Guidelines Analysis will be sent out for public review. A copy will be sent to the Nevada State Clearinghouse for distribution amongst state agencies. In addition, copies will be sent to the following:

Robert McKay
Western Watersheds Project

The Internal scoping with the BLM staff occurred from June of 2006 through January of 2007, which included the Belleville Allotment Standards and Guidelines Analysis, Rangeland Health Assessments, and this Environmental Assessment.

Proposed Action

General Setting:

The Belleville Allotment is comprised of 154,491 acres of public lands in Mineral County, Nevada. These are low production desert lands as precipitation averages only around 5 inches a year. The allotment has historically been a cattle allotment during the winter and spring, with the majority of the use being west of the Candelaria Hills. The area is mostly Bailey's greasewood (*Sarcobatus vermiculatus var. baileyi*), Wyoming big sagebrush (*Artemisia tridentata* ssp. *wyomingensis*), and mountain big sagebrush (*Artemisia tridentata* ssp. *vaseyana*) plant communities.

Critical Elements of the Human Environment:

The following critical elements are not present or would not be affected by the analyzed alternatives: Air Quality, Areas of Critical Environmental Concern, Prime or Unique Farmlands, Flood Plains, Hazardous Materials, Wetlands/Riparian, Water Quality, Wilderness, Wild and Scenic Rivers, Environmental Justice, Paleontology, Invasive, Nonnative Species, and Threatened / Endangered Species.

Both Cultural Resources and Native American Religious Concerns also are present but would not be affected by the alternatives. The analyses conducted to reach these decisions are discussed.

Cultural Resources:

Following BLM regulations (43 CFR Part 8100) and other federal laws including the National Historic Preservation Act (16 USC § 470f) and its implementing regulations (36 CFR Part 800), as amended, BLM reviewed the immediate region for historic properties prior to a federal undertaking (issuance of a federal permit). By definition, an historic property is a "prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places" and includes "artifacts, records, and remains that are related to and located within such properties" (36 CFR 800.16(l)(1)).

Based on research of files at the Carson City Field Office and the Nevada State Museum, known historic properties represent significant past human use of the landscape in and immediately adjacent to the BLM-managed lands of the Belleville Allotment. These include prehistoric-period lithic scatters, stone alignments, and camp sites of an extensive period of time ranging from the Paleoarchaic (over 8500 years ago) through the nineteenth-century. Also present are historic-period debris scatters; stone structures and buildings; roads associated with mining, limited settlement, and transportation; and include the mining town sites of Belleville and Candelaria. Further details on local site types and the potential for effect to historic

properties from livestock activities associated with the issuance of a grazing permit are available in a technical report prepared for this permit renewal (CRR 3-2330, Carter 2007) and the published Carson City District Cultural Resources overview report (Pendleton et al. 1982).

Based on review of the reports on areas previously inventoried in or near the allotment, a cursory visit to the allotment by a BLM archaeologist, and a Class III inventory at a location with a high potential for cultural resources (Belleville Spring), livestock grazing is not a significant impact to historic properties (Carter 2007). Based on review of range use data, use of the allotment landscape is slight to light, and grazing is not likely to be a significant impact to currently unknown cultural resources. Therefore, relative to cultural resources, there exists no need to alter the proposed term grazing allotment permit proposed action for the Belleville allotment in order to prevent unnecessary or undue degradation.

Additional allotment improvements may be part of the issuance of this grazing permit, but all proposed project improvements have the potential to adversely affect cultural resources. Per 36 CFR Part 800 and 43 CFR Part 8100 (BLM), as amended, BLM is required to identify and evaluate cultural resource within the area of potential effect from an undertaking such as a waterline, fence, creation of new water haul locations, or other area that concentrates livestock. Any historic properties within a proposed improvement project area will be avoided by proposed improvements. If these cannot be accomplished, specific project undertakings will be cancelled, or the allotment use will be modified to result in no adverse effect to the historic property(ies) pursuant to 36 CFR Part 800, and in consultation with the local tribal entity and the Nevada State Historic Preservation Office.

Native American Religious Concerns:

The Native American tribe that has cultural affiliation with the area within the allotment is the Yomba Shoshone Tribe. Per 36 CFR Part 800 and 43 CFR Part 8100 (BLM), as amended, a consultation letter with a general summary of the proposed lease renewal program, and map of the allotment location were sent to the tribe on June 26, 2006 concerning the Belleville grazing permit renewal. During various face to face meetings and phone calls in the past the Tribe has shared information concerning grazing activities within their aboriginal territory. The Tribe has stated that any impacts to cultural resources should be avoided, however to date there are no Native American Religious concerns relative to this grazing permit renewal.

Any proposed improvements may potentially have an effect on tribal concerns. Per 36 CFR Part 800 and 43 CFR Part 8100 (BLM), as amended, BLM would review known tribal concerns and conduct Native American coordination and consultation, as necessary.

Resources Present but not Affected (other than critical elements):

The following elements are present but would not be affected by the proposed action, no action and no grazing alternatives: Geologic Resources and Lands, Forestry, Recreation, Visual, and Socioeconomic.

Resources Present and Brought Forward for Analysis:

Livestock:

Livestock grazing is authorized as a cow/calf operation. Permitted use in the Belleville Allotment is 55 cattle from November 1 to April 15, for a total of 303 AUM's. In the fall/winter, livestock graze both shrubs and grasses, with the majority of the use being west of the Candelaria Hills. This allotment has historically been a cattle allotment during the winter/spring.

Wildlife:

The allotment area has good general wildlife diversity potential due to elevation changes within it, the variety of habitat types and topographical features present. General wildlife habitat is in good condition. Several terrestrial wildlife habitats occur within the allotment area (Suminski 2007).

The eastern and southern portion of the allotment is deer winter range (BLM 1988, Axtell 2007). Because two of the three known springs are functionally at risk, fawning areas associated with these would be in poor condition (Suminski 2007). Quantity and quality of the key summer range is probably not ideal due to naturally low precipitation and poorer soil types.

The allotment provides yearlong habitat for bighorn sheep (Axtell 2007). Bighorn probably don't use the lower elevation springs used by livestock, but use may overlap at higher elevations.

Yearlong pronghorn habitat is found through out the allotment (Axtell 2007). General habitat condition is good because plant and wildlife habitat is in functional condition. No key areas have been identified.

Black bear can be found in the foothills and mountains of the allotment yearlong (Axtell 2007).

There are no known sage grouse leks within the Belleville Allotment. Because two of

the three known springs on the allotment are functionally at risk, potential sage grouse use areas associated with these would be in poor condition.

A few mourning doves can be found in the allotment. These birds congregate around

springs. The exotic species chukar partridge can be found on the allotment.

Wild Horses & Burros:

Parts of three HMA's (Herd Management Areas) occur within the Belleville Grazing Allotment:

Garfield Flat:	11,524 acres	8% of HMA
Marietta (burros):	13,559 acres	20% of HMA
Montgomery Pass:	27,088 acres	13% of HMA

The U.S. Forest Service has the lead for the Montgomery Pass horse area and has not set an AML (Appropriate Management Level). The AML for the Belleville portion of the Garfield Flat HMA is set at zero, and the AML for the Marietta burro area was not broken down by allotment.

Soils:

The soils within the Belleville Grazing Allotment vary considerably in physical, chemical, and biological characteristics. Parent material, surface and subsurface textures and rock fragments, elevation, aspect, and slope determine the inherent productivity. Erosion and runoff potential, while affected greatly by these factors, are also dependent upon the basal and canopy cover of vegetation on site. Also, roads, livestock and horse use, mining and other overland activities, and general motorized vehicle use have impacted soils in certain areas. Generally the soils in this allotment are classified as aridic, with much of the area in the four to six inch precipitation zone. Soil reactions are moderately to strongly alkaline. Detailed descriptions of the soils within the allotment can be found within the Mineral County Soil Survey, issued in 1991 by the U.S. Dept. of Agriculture-Soil Conservation Service.

Vegetation:

Key upland species on the Belleville Allotment include five shrubs and four grass species. They are antelope bitterbrush, spiny hopsage, budsage, fourwing saltbush, winterfat, Indian ricegrass, Thurber's needlegrass, galleta grass, and Sandberg bluegrass.

Most of the utilization monitoring in this allotment has been measured on Indian ricegrass, Thurber's needlegrass, galleta grass, and Sandberg bluegrass. Since this is currently a fall/winter allotment, shrubs are the primary plant type consumed by livestock and must be considered in its management. Shrubs are higher in protein, phosphorus, and carotene (vitamin A) than grasses, whereas the grasses during this time period provide fiber and some energy.

Special Status Species:

BLM Sensitive Species

BLM Manual 6840 defines sensitive species as "…those species not already included as BLM Special Status Species under (1) Federal listed, proposed or candidate species; or (2) State of Nevada listed species. Native species may be listed as "sensitive" if it: (1) could become endangered or extirpated from a state or significant portion of its range; (2) is under review by the FWS/NMFS; or (3) whose numbers or habitat capability are declining so rapidly that Federal listing may become necessary, or (4) has typically small and widely dispersed populations; (5) inhabits ecological refugia, specialized or unique habitats; (6) is state-listed, but is better conserved through application of the BLM sensitive species status." It is BLM policy to provide sensitive species with the same level of protection that is given federal candidate species. The major objective of this protection is to preclude the need for federal listing (BLM 2003).

The NNHP database has no record of any BLM sensitive species (Tonenna 2007). Nevada BLM sensitive species expected, or found in or near the allotment are shown in Appendix A (BLM 2003).

Neo-tropical Migratory Birds

On January 11, 2001, President Clinton signed Executive Order 13186 (Land Bird Strategic Allotment) placing emphasis on conservation and management of migratory birds. The species are not protected under the Endangered Species Act, but most are protected under the Migratory Bird Treaty Act of 1918. No BLM policies have been developed to provide guidance on how to incorporate migratory birds into NEPA analysis. However, advice based on past USFWS MOU's, list items the USFWS believes are fundamental for the analysis of impacts to and planning for these birds. These items are (1) effects to highest priority birds listed by Partners in Flight; (2) effects to important bird areas (IBA's); (3) effects to important over wintering areas. Avifaunal Biomes that are found on the allotment are described by Partners in Flight (PIF) [Beidleman 2000], PIF-Nevada (Neel 1999) and Nevada Wildlife Action Plan (Nevada Wildlife Action Plan Team 2006). The Intermountain West is the center of distribution for many western birds. Over half of the biome's Species of Continental Importance have 75% or more of their population here. Many breeding species from this biome migrate to winter in central and western Mexico or in the Southwestern biome (Beidleman 2000). There are no Important Bird Areas (IBA) associated with this allotment. The species of concern listed by PIF that could occur in the allotment are shown in Appendix B.

Alternatives:

The description of the affected environment for the No Action and No Grazing alternatives would be the same as that for the proposed action.

IV. ENVIRONMENTAL CONSEQUENCES

Proposed Action – Environmental Impacts:

Livestock:

The maximum number of 55 cattle and 303 AUM's would still be permitted on the allotment; however, utilization levels will be limited to 45% for all plant species.

Implementation of the Proposed Action would require the use of water haul sites throughout the allotment, which would more evenly distribute the grazing use. This will increase the need for the permittee to watch his cattle so that they can be moved from area to area as utilization levels reach 45%. Because cattle are just as dependent on water sources as forage, they will use new areas of the allotment as the water haul sites are moved. Both livestock distribution and the condition of the vegetation would be improved. Proposed water haul locations are as follows:

T. 4 N., R. 35 E., Section 24
T. 3 N., R. 33 E., Section 28

Wildlife:

The rangeland health assessment completed for this allotment indicated that soils were stable in the allotment and supported functional plant groups that would be expected on this site. Because general wildlife habitat is in good, though drought affected condition, livestock grazing isn't impacting general wildlife habitats in the allotment (Suminski 2007).

Livestock grazing would occur when wintering deer are on the allotment. Forage overlap would generally not affect deer use. One proposed water haul site is in the valley and would not overlap deer use areas. The second proposed water haul site occurs in a rougher foothill area that deer would use in winter. This water may open up new country to livestock grazing that could move deer to a less desirable area and/or use previously ungrazed forage. During drought, if livestock used shrubs more, direct forage competition could occur in this area where it didn't before (Suminski 2007).

Bighorn sheep do not do as well when they share ranges with cattle (Krausman et al 1995). However, the livestock season of use provides the best possible situation. Livestock and bighorn use areas would not overlap extensively, so competition for forage would not be great. Additionally, livestock would be out of the allotment just as grasses were greening, which would be best for the bighorn. The reduced utilization levels on

shrubs and grasses
would be beneficial. Neither water haul would open new areas to livestock that are important for the bighorn.

Livestock grazing at the moderate level can cause some rangelands to be in a sub-climax vegetative condition which is ideal for pronghorn (Yoakum et al 1993). Forage competition in fall and winter between cattle and pronghorn on rangeland that is in fair to good condition is slight because pronghorn use forbs and shrubs, and cattle use grasses primarily (Yoakum et al 1995; Authenrieth et al 2006). Both proposed water haul sites may open up new country to livestock grazing that could move pronghorn to a less desirable area and/or use previously ungrazed forage. Although pronghorn will use water hauls, these would not be available in summer.

Bears and cattle would not necessarily overlap areas of use. Neither the grazing nor the proposed water hauls would affect bears.

In general, sage grouse winter habitats are not adversely impacted from moderate cattle grazing Axtell 2007). The proposed water hauls shouldn't affect sage grouse.

Moderate grazing levels on upland areas, as have been practiced in recent years, and that are proposed for this action, would not have an effect on upland game bird species (Guthery 1995). The proposed water hauls shouldn't affect dove or chukar.

Wild Horses & Burros:

The proposed action is essentially a continuation of the current grazing conditions and is not likely to substantially impact the horses or burros.

Soils:

The implementation of this alternative would probably have little effect on the overall soils resource within the allotment; however, some positive benefit could be realized by the decrease in grass and shrub utilization by livestock.

Vegetation:

The general allotment use is from 11/01 to 04/15. The grasses and shrubs enter dormancy after 08/15.

The utilization level would be limited to 45% for grasses and shrubs. Although this maximum utilization level is in the Moderate Use Class (41% to 60% for grasses or shrubs), this level should increase the potential number of antelope bitterbrush, spiny hopsage, budsage, fourwing saltbush, winterfat, Indian ricegrass, Thurber's needlegrass, galleta grass, and Sandberg bluegrass plants.

Special Status Species

BLM Sensitive Species

Potential effects of livestock grazing on desert bighorn sheep have been discussed. Livestock grazing allows some species to respond positively, some to respond negatively and some to have a mixed response (Finch et al 1993). This means only that some species may use a grazed area more, some may use it less. It doesn't necessarily preclude the presence of a species (Fagerstone and Ramey 1995). Livestock grazing in this allotment is not a threat to the BLM sensitive species because this allotment is in acceptable functioning condition overall for soils and vegetation, and utilization levels are generally moderate. The proposed water hauls wouldn't affect the BLM sensitive species due to the waters being activated in winter.

Neo-tropical Migratory Birds

Livestock grazing allows some species to respond positively, some to respond negatively and some to have a mixed response (Finch et al 1993). This means only that some species may use a grazed area more, some may use it less. It doesn't necessarily preclude the presence of a species. Livestock grazing was not listed as a threat to loggerhead shrike (www.natureserve.com). Although overgrazing can be an issue for Brewer's sparrow and sage thrasher (www.natureserve.com, Finch et al 1993) this is not occurring. Because this allotment is in acceptable functioning condition for soils and vegetation, migratory birds that nested or foraged in this allotment would not be affected by livestock grazing. The proposed water hauls would not affect neo-tropical migratory birds since bird escape ladders are a standard design feature.

No Action Alternative – Environmental Impacts

Livestock:

Implementation of the No Action Alternative would not change the current number of livestock utilizing the allotment, authorized AUM's, or the season of use.

Wildlife:

Effects to general wildlife and game species would be the same as the proposed action except that grass and shrub utilization would be higher. This would not be as beneficial as utilization levels in the proposed action alternative.

Wild Horses & Burros:

Impacts would be similar to those associated with the proposed action.

Soils:

Soil conditions would remain the same.

Vegetation:

Under the no action alternative, grazing practices would remain the same as they have been for many years. There would be no maximum utilization levels, and no water haul sites would be established to help improve livestock distribution and prevent overuse in specific areas.

Vegetation conditions would remain pretty much static across the allotment. This would be acceptable, as the allotment conditions currently meet applicable Standards and Guidelines for grazing use. However, conditions would not improve as much, and at the same rate, as would be allowed under the proposed action.

Special Status Species:

BLM Sensitive Species
Effects to BLM sensitive species and Neotropical migratory birds would be the same as the proposed action except that grass and shrub utilization would be more. This would not be as beneficial as utilization levels in the proposed action alternative.

Neo-tropical Migratory Birds
Effects to Neotropical migratory birds would be the same as the proposed action except that grass and shrub utilization would be more. This would not be as beneficial as utilization levels in the proposed action alternative.

No Grazing Alternative – Environmental Impacts

Livestock:

Implementation of the No Grazing Alternative would result in no cattle utilizing the allotment.

Implementation of the No Grazing Alternative would result in no maintenance of range improvements. The water development sites would have no water because the permittee would not be hauling water during the grazing season.

Wildlife:

Any forage competition, especially in drought stressed years, would be lessened. Sage grouse nesting success is positively correlated to residual grass cover near the nest sight. Therefore, the no grazing alternative may benefit sage grouse if they are attempting nesting

within this portion of their habitat (Axtell 2007). At risk springs would have somewhat less damage. Horse and burro damage would remain.

Wild Horses & Burros:

This could allow for an increase in horse numbers as more forage could be consumed if the allowable utilization levels were unchanged. However, due to the modest size of the HMA within this allotment and low productivity of this area, only a small increase in horse numbers (9 head) could be accommodated. However, increasing the AML may not be desirable as the forage production in this area is low and unpredictable.

Soils:

The implementation of this alternative would have a small positive effect on the soil resource within the allotment due to the elimination of vegetative utilization by livestock.

Vegetation:

The No Grazing Alternative proposed would have a number of effects. The vegetation across the allotment would continue to improve. Ground cover and species diversity could increase at a faster pace than with any level of grazing. Eventually, some forage species on the allotment could reach an over mature stage of growth, and the vigor of the plants could suffer. Certain species of grass plants may become wolfy with dead crown centers. This alternative would also not allow for the proper use of a renewable resource (range forage) as provided for by various Federal Acts and in the Carson City Field Office Consolidated Resource Management Plan 2001.

Special Status Species:

BLM Sensitive Species

Sage grouse nesting success is positively correlated to residual grass cover near the nest sight. Therefore, the no grazing alternative may benefit sage grouse if they are attempting nesting within this portion of their habitat (Axtell 2007). The response of BLM sensitive species would be reverse of the grazing alternatives as those species which responded positively to grazing might not be as abundant, while those that respond with no grazing might increase. At risk springs would have somewhat less damage, horse and burro damage would remain.

Neo-tropical Migratory Birds

The response of Neotropical migratory birds would be reverse of the grazing alternatives as those species which responded positively to grazing might not be as abundant, while those that respond with no grazing might increase. At risk springs would have somewhat less damage. Horse and burro damage would remain.

Cumulative Impacts:

All resource values have been evaluated for cumulative impacts. It has been determined that cumulative impacts would be negligible as a result of the proposed action or alternatives.

The issuance of the term grazing permit for the Belleville Allotment is a specific action and would cause no known cumulative impacts to the environment when considered in combination with any known or anticipated actions on these or adjacent lands in the past, present, or reasonably foreseeable future. Any effects of the grazing levels proposed would be limited to the project areas. Grazing at or below moderate utilization levels has not been shown to be injurious to plant or animal species in the area. The effects of grazing, along with associated activities in the management of this allotment, such as the maintenance or use of range improvements, would be limited to the immediate area of the allotment. They would not combine with any known or reasonably foreseeable activities on these or adjacent lands to produce any detrimental cumulative impacts in the area.

Monitoring:

Range monitoring would continue for the Belleville Allotment as it has in the past. This would include (1) Photo Point, (2) 100' Quadratic Frequency (3) Utilization, (4) Use Pattern Maps, (5) Rangeland Health Assessments, (6) Actual Use Reports, and (7) Weather Data. Actual methods used would depend on monitoring needs, conditions, and resources available.

V. CONSULTATION & COORDINATION

List of Preparers:

1.	Peter A. Raffetto	Rangeland Management Specialist
2.	Jill Devaurs	Rangeland Management Specialist
3.	Russell Suminski	Senior Rangeland Management Special
4.	Jim Carter	Archaeologist
5.	James T. deLaureal	Soil Scientist
6.	Terry F. Knight	Recreation Planner
7.	Jim Schroeder	Hydrologist
8.	Rita Suminski	Wildlife Biologist
9.	Charles Kihm	Reality Specialist
10.	Terri Knutson	Environmental Coordinator
11.	John Axtell	Wildlife Biologist – Sage Grouse, Game, Horses
12.	Dean Tonenna	Plant Ecologist

Persons, Groups or Agencies Consulted:

Robert McKay	Western Watersheds Project
Walker Lake Paiute Tribe	Fallon Paiute-Shoshone Tribe
Nevada State Clearing House	RCI

VI. APPENDICES OR ATTACHMENTS:

Appendix A – BLM Sensitive Species Associated With Belleville Allotment

Appendix B - Neo-tropical Migratory Birds, Species of Continental Importance on Belleville Allotment

References

APPENDIX A

BLM Sensitive Species associated with Belleville Allotment

Animal

Chuckwalla – *Sauromalus ater*
Golden Eagle – *Aquila chrysaetos*
Ferruginous Hawk - *Buteo regalis*
Burrowing owl - *Athene cunicularia*
Prairie Falcon – *Falco columbarius*
Swainson's Hawk- *Buteo swainsoni*
Short-earred Owl – *Asio flammeolus*
Junipter Titmouse – *Baeolophus griseus*
Pinon Jay – *Gymnorhinus cyanocephalus*
Loggerhead shrike- *Lanius ludovicianus*
Vesper Sparrow – *Pooecetes gamineus*
Bendire thrasher – *Toxostoma bendirei*
Desert bighorn sheep – *Ovis Canadensis nelsoni*
Silver-haired bat – *Lasionycteris noctivagans*
Townsend's big-eared bat – Corynorhinus townsendii
Big brown bat – *Eptesicus fuscus*
Hoary bat – *Lasiurus cinereus*
Small-footed myotis – *Myotis ciliolabrum*
Yuma myotis – Myotis yumanensis
Little brown bat – *Myotis lucifugus*
Long-legged myotis – *Myotis volans*
Pallid bat – *Antrozous pallidus*
Long-earred myotis – Myotis evotus
Spotted bat – *Euderma maculatum*
Western Pipistrelle Bat – *Pipistrellus hesperus*
Brazilian free-tailed bat - *Tadarida braziliensis*
Fringed myotis – *Myotis thysanodes*
California myotis – *Myotis californicus*
Pygmy rabbit – *Brachylagus idahoensis*

Source: www.natureserve.com, www.heritage.nv.gov, CCFO Habitat Management Plans, misc. observ

APPENDIX B

Neo-tropical Migratory Birds, Species of Continental Importance on Belleville Allotment

Salt Desert Scrub (Beidleman 2000) **–** This biome experiences harsh climactic variation and is often dominated by salt-tolerant shrubs. Species of concern associated with this habitat type in the project area are:

Loggerhead Shrike – *Lanius ludovicianus* (Neel 1999, Nevada Wildlife Action Plan 2006)
Burrowing Owl – *Athene cunicularia* (Neel 1999)

Issues related to this habitat type include physical destruction of salt desert shrubs, habitat conversion and use of rangeland pesticides (Neel 1999). Off-road vehicle activity and non-native species invasion has also been identified as an issue (Nevada Wildlife Action Plan 2006).

Western Shrublands (Beidleman 2000) – Shrubsteppe was identified as the highest priority habitat for conservation for breeding birds. This habitat type supports the largest nesting-bird species list of any upland vegetation type in the West (Beidleman 2000). Species of concern associated with this habitat type in the plan area:

Shrub-Steppe
Brewer's sparrow – *Spizella breweri* (Beidleman 2000)
Sage Sparrow – *Amphispiza belli* (Neel 1999, Beidleman 2000, Nevada Wildlife Action Plan 2006)
Sage Thrasher – *Oreoscoptes montanus* (Neel 1999, Beidleman 2000, Nevada Wildlife Action Plan 2006)

Issues related to this habitat type include fragmentation from man-caused activities. Threats to this habitat type include overgrazing of grasses and forbs that alter community structure, invasion of non-native grasses and fire suppression / crown-killing wildfire (Beidleman 2000). Loss of shrub understory, increasing human infrastructure which fragments and degrades habitat, and increases soil erosion was also identified (Nevada Wildlife Action Plan 2006).

Woodland – Pinyon-juniper woodlands are characteristic of this habitat type Species of concern associated with this habitat type in the plan area,

Gray Flycatcher – *Empidonax wrightii* (Beidleman 2000)
Gray Vireo - *Vireo vicinior* (Beidleman 2000)
Juniper Titmouse – *Baeolophus ridgwayi* (Beidleman 2000)
Mountain Bluebird – *Sialia currucoides* – cavity nester (Neel 1999)
Pinyon Jay – *Gymnorhinus cyanocephalus* (Neel 1999)
Western Bluebird- *Sialia mexicana* – snags / hollow tree (Neel 1999)

Issues related to this habitat type include fragmentation from man-caused activities (Beidleman

2000).

Riparian – This habitat type supports the highest bird diversity of any western habitat type but is one of the rarest. Species of concern associated with this habitat type in the plan area,

Calliope hummingbird – *Stellula calliope*- (Beidleman 2000)

Issues related to this habitat type include de-watering and alteration of water flows / channels, road construction, nonnative species, logging, recreation and overgrazing (Beidleman 2000). Groundwater withdrawal and shallow aquifer pollution were mentioned as specific Nevada issues (Nevada Wildlife Action Plan 2006).

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