

**NORTHEASTERN GREAT BASIN STANDARDS AND
GUIDELINES ASSESSMENT 2009
DRAFT DETERMINATION**

Badlands/Goshute Mountain Allotments



BLM

Elko District Office, Nevada

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Cover photo by Bruce W.C. Thompson, Wild Horse Specialist

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BADLANDS/GOSHUTE MOUNTAIN ALLOTMENTS

Wells Field Office

I. Introduction

In accordance with 43 CFR 4180, the Wells Field Office is required to complete standards and guidelines assessments on grazing allotments in order to determine whether or not existing grazing management practices are resulting in the attainment of the standards for rangeland health and are in conformance with the guidelines. The following assessment is based on an evaluation of monitoring data obtained between 1989 and 2007. This assessment is in accordance with BLM Manual 4180-1, Rangeland Health Standards, approved on January 19, 2001. The approved standards for rangeland health that will be evaluated in this assessment are as follows:

Standard 1. Upland Sites: Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate and landform.

Standard 2. Riparian and Wetland Sites: Riparian and wetland areas exhibit a properly functioning condition and achieve state water quality criteria.

Not applicable in the Badlands/Goshute Mountain Allotments as there are no perennial waters or riparian areas.

Standard 3. Habitat: Habitats exhibit a healthy, productive, and diverse population of native and/or desirable plant species, appropriate to the site characteristics, to provide suitable feed, water, cover and living space for animal species and maintain ecological processes. Habitat conditions meet life cycle requirements of threatened and endangered species.

Standard 4. Cultural Resources: Land use plans will recognize cultural resources within the context of multiple use.

Standard 5. Healthy Wild Horse and Burro Populations: Wild horses and burros exhibit characteristics of a healthy, productive, and diverse population. Age structure and sex ratios are appropriate to maintain the long term viability of the population as a distinct group. Herd management areas are able to provide suitable feed, water, cover and living space for wild horses and burros and maintain historic pattern of habitat use.

II. Description of the Allotments

The Badlands Allotment is located in southeastern Elko County, Nevada, east of Alternate Highway 93, south of the Ibapah Road and approximately 45 miles south of Wendover,

Nevada. The north boundary of the allotment borders the Utah/Nevada South Allotment, and the White Pine County Line and the Goshute Mountain Allotment serve as the southern boundary. The Utah State Line lies to the east and Antelope Valley Allotment to the west. The Badlands Allotment is in extreme southeastern Elko County (see map #1)

The Goshute Mountain Allotment is directly south of the White Pine County Line and west of the Utah State Line, bordering the south boundary of the Badlands Allotment. The allotment lies within the Ely District.

The Badlands Allotment encompasses 19,812 public acres. The Goshute Mountain Allotment has a total of 5,736 public acres. Both allotments are licensed at 100 percent public land (see map #2).

The elevation of the two allotments ranges from 5,280 to 6,300 feet. The topography consists of rolling hills and valley floors. Most of the Badlands/Goshute Mountain Allotments are dominated by black sagebrush communities. However, the eastern portion of the Badlands is dominated by white sagebrush communities.

An administrative agreement signed in 1983 between the Ely and Elko District Offices states that grazing administration for the Goshute Mountain Allotment will be the responsibility of the Elko District Office. Grazing administration includes the responsibility of grazing supervision, conducting range studies, project development and the determination of grazing capacity.

The livestock permittee for both allotments is DBA Need More Sheep Company.

An allotment evaluation was completed for the allotments on July 21, 1997 and it was determined that Standard 1 (Upland Sites) and 3 (Habitat) were not being met in the Badlands/Goshute Mountain Allotments. However progress was being made toward attainment of these Standards for Rangeland Health. Livestock grazing was determined to be a casual factor in the non-attainment of both the Upland and Habitat standard for the Badlands and Goshute Mountain Allotments.

The Elko District Office issued a Final Multiple Use Decision (FMUD) for the Badlands/Goshute Mountain Allotments on June 18, 1998, implementing the management actions identified in the evaluation (available for review at the Elko District Office). The FMUD reduced the carrying capacity of the Badlands Allotment from 2,647 AUMs to 1,018 AUMs.

The Badlands/Goshute Mountains FMUD established the following Key Area objectives:

Key Area	Allowable Use %
BA-01	ORHY – 60% EULA5– 50%
BA-02	ORHY – 60% ARARN – 50%
KA-01	ORHY – 60% ARARN – 50%
BA – Badlands Allotment KA – Goshute Mountain Allotment Indian ricegrass – ORHY White sage – EULA5 Black sagebrush - ARARN	

Wild Horses

The Badlands Allotment is within the Antelope Valley Herd Management Area (HMA). The Goshute Mountain Allotment is within the Antelope Herd Management Area. Census data has shown that less than 1% of the Antelope Valley herd uses the Badlands Allotment during the winter months. Wild horse use in the Goshute Mountain Allotment is considered to be incidental, and an appropriate management level (AML) of zero was established for the Goshute Mountain Allotment. The AML for the Badlands Allotment established in the FMUD is 5 AUMs. The AML of 5 AUMs established for the Badlands Allotment will accommodate incidental use in the adjacent Goshute Mountain Allotment (the allotment boundaries are unfenced).

In 2007 the Nevada Department of Transportation fenced Alternate US Highway 93 which prevented wild horses from moving from the eastern portion of the Antelope Valley HMA to the western portion of Antelope Valley HMA (see map #1). There are no fences to restrict the movement of wild horses between Alternate Hwy 93 and the Badlands/Goshute Mountain Allotments.

In the fall of 2007 a census flight found 14 wild horses in the Badlands Allotment. The AML for the allotment is 3 horses for approximately 5 months or incidental use by wild horses. The 2007 gather removed 413 horses from the eastern portion of the Antelope Valley HMA. The AML for that portion of the Antelope Valley HMA east of Alternate Highway 93 is 38 head.

There are no streams or springs on the Badlands/Goshute Mountain Allotments.

There have been no impacts by fire in or around the Badlands/Goshute Mountain Allotments.

1. Actual Use Summary 1997 through 2008.

The season of use in the Badlands/Goshute Mountain Allotments is 11/1 to 3/31. Total permitted use on the Badlands Allotment is 1,018 AUMs and on the Goshute Mountain Allotment is 465 AUMs for a total of 1,483 AUMs. Actual use is presented from 1997 to 2008.

Actual Use (AUMs)			
Year	Badlands Allotment	Goshute Mountain Allotment	Total Badlands/Goshute Mountain Allotment ¹
97-98	735	474	1,209
98-99	648	286	834
99-00	538	379	917
00-01	744	339	1,083
01-02	n/a	n/a	570 ²
02-03	1,239	77	1,316 ³
03-04	867	269	1,136
04-05	282	121	404
05-06	1,054	216	1,270
06-07	730	281	1,011
07-08	Non-use	Non-Use	Non-Use
Average	760	271	1,031

¹Actual use is not shown by grazing fee year (March 1 to Feb 28). Use is shown by season of use Nov 1 through March 31. Actual use shown covers two grazing fee years.
² Actual use not broken out by Allotment.
³ Use from grazing bill. Actual use was not submitted in the spring of 2003.

2. Utilization Summary

LIVESTOCK/WILD HORSES

Utilization was recorded on previous year's growth.

Utilization: BA-01			
Key Species: Indian ricegrass (ORHY)			
White sage (EULA5)			
Allowable Use: 60% on ORHY			
50% on ARARN			
Year	Average Utilization ¹		Livestock Actual Use ²
	ORHY	EULA5	
1997-1998	39%	36%	735
1998-1999	61%	65%	648 High use on the east side of the Badlands Allotment attributed to cattle drift from UT.
1999-2000	Not recorded	Not recorded	538

Utilization: BA-01			
Key Species: Indian ricegrass (ORHY)			
White sage (EULA5)			
Allowable Use: 60% on ORHY			
50% on ARARN			
Year	Average Utilization¹		Livestock Actual Use²
	ORHY	EULA5	
2000-2001	Not recorded	Not recorded	1,083
2001-2002	Not recorded	Not recorded	Actual Use not broken out by Allotment.
2002-2003	Not recorded	Not recorded	1,316 ³
2003-2004	Not recorded	Not recorded	1,136 Snow conditions limited use to the western portions of the allotment.
2004-2005	Not recorded	Not recorded	404
2005-2006	23%	13%	1,270
2006-2007	11%	7%	1,011
2007-2008	Not recorded	Not recorded	Non-Use
Average	34%	30%	
¹ Utilization is combined use by wild horses, livestock, and wildlife.			
² Actual use is not shown by grazing fee year (March 1 to Feb 28). Use is shown by season of use Nov1 through March 31.			
³ Use from grazing bill. Actual use was not submitted in the spring of 2003.			

Utilization: BA-02			
Key Species: Indian ricegrass – ORHY Black sagebrush – ARARN)			
Allowable Use: 60% on ORHY 50% on ARARN			
Year	Average Utilization		Livestock Actual Use²
	ORHY	ARARN¹	
1997-1998	16%	18%	735
1998-1999	31%	62%	648 High use on the east side of the Badlands Allotment attributed to cattle drift from UT.
1999-2000	Not recorded	Not recorded	538
2000-2001	Not recorded	Not recorded	1,083
2001-2002	Not recorded	Not recorded	Actual Use not broken out by Allotment.
2002-2003	Not recorded	Not recorded	1,316 ³
2003-2004	61%	65%	1,136 Snow conditions limited use to the western portions of the allotment.
2004-2005	Not recorded	Not recorded	404
2005-2006	43%	17%	1,270
2006-2007	3%	6%	1,011
2007-2008			Non-Use
Average³	31%	34%	

¹Utilization is combined use by wild horses, livestock, and wildlife.
²Permitted use is not shown by grazing fee year (March 1 to Feb 28). Use is shown by season of use Nov1 through March 31.

Utilization: KA-01			
Key Species: Indian ricegrass – ORHY Black sagebrush – ARARN)			
Desired Use: 60% on ORHY 50% on ARARN			
Year	Average Utilization		Livestock Actual Use¹
	ORHY	ARARN	
1997-1998	Not recorded	Not recorded	474
1998-1999	Not recorded	Not recorded	286
1999-2000	Not recorded	Not recorded	379
2000-2001	Not recorded	Not recorded	339
2001-2002	Not recorded	Not recorded	Actual Use not broken out by Allotment.
2002-2003	Not recorded	Not recorded	77
2003-2004	Not recorded	Not recorded	269
2004-2005	Not recorded	Not recorded	121

Utilization: KA-01			
Key Species: Indian ricegrass – ORHY Black sagebrush – ARARN)			
Desired Use: 60% on ORHY 50% on ARARN			
Year	Average Utilization		Livestock Actual Use¹
	ORHY	ARARN	
2005-2006	26%	3%	216
2006-2007	0%	2%	281
2007-2008	Not recorded	Not recorded	Non-Use
Average	13%	2.5%	
1Utilization is combined use by wild horses, livestock, and wildlife.			
2Permitted use is not shown by grazing fee year (March 1 to Feb 28). Use is shown by season of use Nov1 through March 31.			

Wildlife

1. Terrestrial Wildlife Species including Migratory Birds and BLM Special Status Species

The Badlands/Goshute Mountain Allotments in association with the surrounding native sagebrush vegetation may provide habitat for approximately 100 bird species, 70 mammal species, and several reptile and amphibian species that potentially inhabit similar sagebrush habitats throughout the northern Nevada. Many of these species are shown in the 2006 Nevada Department of Wildlife’s Wildlife Species List for the allotment (Appendix A), and the 1992 BLM Nevada Elko District Bird, Mammal, and Reptile and Amphibian Lists available through BLM Elko Field Office. Some of the species are shown or duplicated in Migratory Birds by Habitat Type list from Nevada Partners in Flight Bird Conservation Plan in Table 1.

The Badlands/Goshute Mountain Allotments provides antelope year-round habitat and yearlong and intermediate deer habitat.

Federally Listed and Candidate species - On July 9, 2007, the bald eagle was removed (“de-listed”) from the list of threatened and endangered species. BLM is coordinating with the Nevada Department of Wildlife (NDOW) to ensure compliance with state regulations regarding the bald eagle. As of August 30, 2007, BLM policy is to consider the bald eagle as a BLM Sensitive Species.

After de-listing, bald eagles will continue to be protected under the Bald and Golden Eagle Protection Act (BGEPA) and the Migratory Bird Treaty Act. Both of these laws prohibit killing, selling or otherwise harming eagles, their nests, or their eggs. In June 2007, the Service clarified its regulations implementing the BGEPA and published the National Bald Eagle Management Guidelines. The U.S. Fish and Wildlife Service (FWS) is in the process of establishing a permit program under the BGEPA that would authorize limited take of bald and golden eagles consistent with the purpose and goal of the BGEPA. The FWS has also prepared a draft post-delisting bald eagle monitoring plan. These documents and more

information about the bald eagle are available on the FWS's website at <http://www.fws.gov/migratorybirds/baldeagle.htm>.

Though not expected to use these habitat types heavily for foraging or other behaviors, transient-foraging could occur during the winter months in the Badlands and Goshute Mountains allotments. Additionally, bald eagles may use areas surrounding the allotments which contain quality winter foraging areas. Suitable habitat on uplands, irrigated lands and riparian areas is widely dispersed over tens of thousands of acres throughout the Elko District.

The U. S. Fish & Wildlife Service has identified the yellow-billed cuckoo (a candidate species), the peregrine falcon (an endangered species) and the Columbia spotted frog (a candidate species) as species that may occur in the Badlands/Goshute Mt. Allotments (March 9, 2006, File No. 1-5-06-SP-093.). The Nevada Department of Wildlife has supplied a list of species that may occur within the area including the Badlands/Goshute Mountain Allotment. This list is not specific to which species are actually likely to occur with the Badlands/Goshute Mountain Allotments or those which have been documented within the allotment. The list also included "Locally Extirpated" species, due to the fact that area habitat once could support said species. See Appendix A for this species list. The Nevada Department of Wildlife's (NDOW) 2006 Wildlife Species List for the allotment also includes the endangered California condor (*Gymnogyps californianus*). However, this same list shows these condor and cuckoo species as "locally extirpated." In addition, there are no known historical California condor site records on the BLM Elko District nor is there any yellow-billed cuckoo appropriate cottonwood-willow forest tract habitat within the Badlands/Goshute Mountain area. No riparian habitat exists in the Badlands/Goshute Allotment to support Columbia spotted frogs. The peregrine falcon may also be a transient forager through the area but there is no documented nesting habitat within any of the Badlands/Goshute Mountain area.

Other Special Status Species – There are 35 species designated as Nevada BLM Sensitive Species which potentially use this allotment in association with other habitat areas. See Appendix B for a complete list of these species.

The area around and including the Badlands/Goshute Mountain Allotments provides habitat for the following avian Nevada BLM Sensitive Species on a seasonal or yearlong basis: loggerhead shrike, burrowing owls, golden eagles, Swainson's hawks, ferruginous hawks, ospreys, vesper sparrows, short-eared owls, and prairie falcons.

Sage Grouse

The allotments are within the East Valley Sage Grouse Population Management Unit (PMU) in Northeastern Nevada considered under the Elko Strategy by the Northeastern Nevada Stewardship Group Inc. (NNSG). There are no sage grouse leks (breeding display areas) within the Badlands/Goshute Mountain Allotments. There is no nesting habitat or winter sage grouse habitat. Approximately 30% of the Goshute Mountain Allotment located in White Pine County is sage grouse summer habitat. Habitat risk identified as "high" in the The Elko County Sagebrush Ecosystem Conservation Strategy for the East Valley PMU

include habitat quantity and quality, cycles/populations, and climate/weather. Livestock grazing was identified as a “low” risk for this PMU.

Pygmy rabbits

Pygmy rabbits are a BLM Sensitive Species petitioned for listing as threatened or endangered under the Endangered Species Act of 1973. On May 20, 2005, the U.S. Fish and Wildlife Service announced a 90-Day finding in the Federal Register indicating that, “... the petition does not provide substantial information indicating that listing the pygmy rabbit may be warranted. The Finding does not downplay the need to conserve, enhance or protect pygmy rabbit habitat. Pygmy rabbits are found in a variety of vegetation types that include big sagebrush that are suitable for creating their burrow system. However the majority of the allotments are comprised of black sagebrush communities. The soils associated with this community primarily consist of shallow calcareous, duripans which are not associated with pygmy rabbit habitat.

Bats

Fifteen BLM sensitive bat species have been documented in the Elko District with the potential to occur in the Badlands/Goshute Mountains area. These fifteen are: the Pallid Bat, Townsend’s Big-eared Bat, Big Brown Bat, Silver Haired Bat, Western Red Bat, Hoary Bat, California Myotis, Western Small-footed Myotis, Little Brown Myotis, Long-eared Myotis, Long-legged Myotis, Yuma Myotis, Western Pipistrelle, Brazilian Free-tailed Bat, and the Fringed Myotis (Nevada Bat Conservation Group, 2002).

Other Game and Non-game Species

There are approximately 100 bird species, 70 mammalian species, and several reptile and amphibian species that potentially inhabit sagebrush habitats on the allotment. Many of these species are shown in the 2006 Nevada Department of Wildlife's Wildlife Species List for the allotment (Appendix A), and the 1992 BLM Nevada Elko District Bird, Mammal, and Reptile and Amphibian Lists available through BLM Elko Field Office.

Raptors

Nineteen raptor species are present in the Elko District with the potential to occur in the Badlands/Goshute Mountain area. Of the nineteen, the following have known nest sites within the Elko District: American Kestrel, Burrowing Owl, Cooper’s Hawk, Ferruginous Hawk, Golden Eagle, Great Horned Owl, Northern Goshawk, Prairie Falcon, Red-tailed Hawk, Sharp-shinned Hawk, Swainson’s Hawk, and Long-eared Owl. The Red-shouldered Hawk, Merlin, Gyrfalcon, and the Flammulated Owl are known to forage in the Elko District as of December 2004 (BLM Raptor Listing, 2005).

The Badlands/Goshute Mountain Allotments provides foraging and nesting habitat for ferruginous and Swainson’s hawks, prairie falcons, American kestrels, and golden eagles. The area is also likely used as wintering habitat for the golden eagle, and bald eagle.

Habitat for both short-eared and burrowing owls is present in the Badlands/Goshute Mountain area. Short-eared owls are often associated with marshy or grassy areas, while the

burrowing owl occupies drier grassland and sagebrush habitats. Burrowing owls nest in underground burrows often excavated by ground squirrels, badgers, and other mammals. Suitable sagebrush habitat for burrowing owls exists within the Badlands/Goshute Mountain allotments.

Migratory Birds

On January 11, 2001, President Clinton signed the Migratory Bird Executive Order 13186 titled "Responsibilities of Federal Agencies to Protect Migratory Birds". It directs executive departments and agencies to take certain actions to further implement the Migratory Bird Treaty Act and to conserve migratory birds. Relative to the Executive Order, the species shown in Table 1 are "priority" migratory bird species that may occur in the habitat types on BLM administered lands. This listing is from the 1999 Nevada Partners in Flight Bird Conservation Plan.

According to the BLM Elko Field Office "Bird List", there are approximately 246 species that could inhabit the Field Office area of jurisdiction on a seasonal or yearlong basis (BLM, 1999). The Badlands/Goshute Mountain Allotments include habitat for some or all of these migratory bird species on a seasonal or yearlong basis. Predominant habitat types within the Goshute/Badlands Allotment include: sagebrush, pinyon/juniper, and salt desert scrub. The Nevada Partners in Flight Bird Conservation Plan identifies the bird species associated with these predominant ecotypes, as listed in Table 1.

Table 1. Migratory Birds by Ecotype

Salt Desert Scrub	Sagebrush	Pinyon/Juniper
<p><u>Obligates:</u>* None</p> <p><u>Other:</u>** Loggerhead shrike Burrowing owl Sage thrasher Sage sparrow Horned lark Brewer's sparrow Black-throated sparrow Lark sparrow Rock wren</p>	<p><u>Obligates:</u> Sage Grouse</p> <p><u>Other:</u> Black Rosy Finch Ferruginous Hawk Gray Flycatcher Loggerhead Shrike Vesper Sparrow Prairie Falcon Sage Sparrow Sage Thrasher Swainson's Hawk Burrowing Owl Calliope Hummingbird Brewer's Sparrow Western Meadowlark Black-throated Sparrow Lark Sparrow Green-tailed Towhee Brewer's Blackbird Horned Lark Lark Sparrow</p>	<p><u>Obligates:</u> Pinyon Jay Gray Vieo</p> <p><u>Other:</u> Ferruginous Hawk Gray Flycatcher Juniper Titmouse Mountain Bluebird Western Bluebird Virginia's Warbler Black-throated Gray Warbler Scott's Oriole Mountain Quail Scrub Jay Black-billed Magpie Clark's Nutcracker Mountain Chickadee</p>

* "Obligates" are species that are found only in the habitat type described in the section. [Habitat needed during life cycle even though a significant portion of their life cycle is supported by other habitat types]

** "Other" are species that can be found in the habitat type described the Nevada Partners in Flight Bird Conservation Plan.

The western portion of the Badlands Allotment is dominated by black sagebrush communities with white sage communities in the eastern portion of the Badlands Allotment. Pinyon and juniper trees are scattered in the allotment, but can be found mainly in the center of the Badlands/Goshute Mountain Allotments. There are two wildlife habitat key areas for antelope established on the Badlands Allotment.

The wildlife key areas (AY-03-T-(BA-01), AY-3-T-(BA-02) are located in the eastern and western sections of the allotment and are characterized as within white sage or black sagebrush communities

The entire Goshute Mountain Allotment is considered pronghorn antelope yearlong range.

Wildlife monitoring data completed in 1989 and 1994 at both key areas was used to determine yearlong habitat condition for antelope. Habitat ratings for both key areas rated as fair habitat for both years. The limiting factors for both key areas, was water availability and forage diversity. The forb composition for both key areas was < 5%. Because of the low site potential for these areas, forb composition is not expected to increase significantly above

recorded levels. Even in late seral condition these sites are limited to approximately 5% forb composition.

Although the allotment is considered mule deer intermediate range and yearlong range it provides only marginal habitat values for mule deer and no Rangeland Program Summary (RPS) objectives were established for mule deer. Habitat condition ratings for mule deer rated as poor for intermediate range (spring/fall). This rating is based on the fact that the key species associated with the primary vegetative types (black sage and salt desert) represent poor to fair preference values for mule deer which result in a poor forage diversity index rating. The ecological sites in the allotments do not have the capability to produce species which provide high preference values for mule deer. This would be a limiting factor for the habitat condition rating for mule deer.

IV. Conclusions and Determinations

This section draws conclusions and makes determinations regarding:

- A. Progress towards or attainment of the standards for rangeland health, and
- B. Whether livestock management is in conformance with the guidelines, and
- C. Whether existing grazing management or levels of grazing use are significant factors in failing to achieve the standards or conform with the guidelines.

Standard 1. Upland Sites: Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate and land form.

This standard is being met, and livestock grazing management practices are considered to be in conformance with the guidelines.

Rationale: In the previous determination the Upland Standard was not being met due to current livestock grazing. However, the 1998 FMUD reduced livestock AUMs in the allotment by 62%.

In 2007, specialists did not observe any erosion, compaction, disturbance or any other impact to soils which compromises soil productivity or stability. The dominant soils in the Badlands and Goshute Mountain Allotments are coarse ranging from silt loams to very gravelly loams. They are positioned on fan piedmonts and are composed of alluvium derived from limestone, dolomite and other rocks. Although runoff potential for these soils is moderate to high when wet; these soils are seldom saturated or impacted by long duration storms. In addition, hazard of erosion for these soils is only slight to moderate when soils are disturbed. These characteristics result in a natural ability for these soils to resist erosion and compaction would result in harmful erosion.

Standard 3. Habitat: Habitats exhibit a healthy, productive, and diverse population of native and/or desirable plant species, appropriate to the site characteristics, to provide suitable feed, water, cover and living space for animal species and maintain ecological processes. Habitat conditions meet life cycle requirements of threatened and endangered species.

This standard is being met, and livestock grazing management practices are considered to be in conformance with the guidelines.

Rationale: The livestock season of use occurs primarily during the dormant season for the key species representative of the area. The season of use allows associated wildlife species to utilize the allotment for nesting and fawning with no direct disturbance by livestock. The predominant plant communities in the Badlands/Goshute Mountain Allotments are composed of species appropriate to the sites. Although livestock impacts in the past have resulted in some isolated incidences of overuse of the key species the current carrying capacity, as established in the 1998 FMUD, is appropriate for the site. The carrying capacity is allowing appropriate utilization levels to be realized which provides adequate forage and cover values for those wildlife species within the area. Utilization levels have never been exceeded at key area 1 (KA-01) in the Goshute Mountain Allotment. Although utilization levels were exceeded at both key areas BA-01 and BA-02 (Badlands Allotment) in 1999 it was attributed to unauthorized livestock use from a neighboring allotment and was corrected. Utilization levels were also exceeded at key area BA-02 in 2004 as a result of heavy snows which concentrated livestock in the western portion of the allotment. Utilization monitoring data collected in 2006 and 2007 showed that utilization averages for all three key areas were slight or light.

The presence of different habitats is appropriate to the site characteristics and provides suitable feed, water, cover and living space for mule deer, antelope and other wildlife. The allotment provides habitat diversity sufficient to provide existing desirable habitat for nesting, brood-rearing, hiding, foraging, and prey base habitat for sensitive game and non-game species including sage grouse, bats, migratory birds, mammals and birds of prey.

The level of current livestock use as well as the season of use in the Badlands/Goshute Mountain Allotments is not expected to impact the continued achievement of this standard.

The season of use in the current permit (11/1 – 3/31) results in no direct disturbance by sheep to sage grouse using the area as summer/late brood rearing habitat.

Standard 4. Cultural Resources: Land use plans will recognize cultural resources within the context of multiple use.

This standard is being met, and livestock grazing management practices are considered to be in conformance with the guidelines.

Rationale: Based on the evaluation of existing information pertaining to range improvements and grazing, cultural resources are being recognized within the context of multiple use management in the Badlands/Goshute Mountain Allotments.

Standard 5. Healthy Wild Horse and Burro Populations: Wild horses and burros exhibit characteristic of a healthy, productive, and diverse population. Age structure and sex ratios are appropriate to maintain the long term viability of the population as a distinct group. Herd management areas are able to provide suitable feed, water, cover and living space for wild horses and burros and maintain historic pattern of habitat use.

Rationale: This standard is being met on the Badlands/Goshute Mountain Allotments. Wild horses characteristic of a healthy, productive, and diverse populations are considered to be in conformance with the guidelines.

Determination

Based on the data presented in this assessment, I have determined that Standards 1, 3, 4, and 5 for rangeland health are being met. As stated above, Standard 2 does not apply to the Badlands/Goshute Mountain Allotments. Existing livestock grazing is in conformance with the guidelines for each standard for rangeland health.

Appendix A.

Badlands/Goshute Mountain Wildlife Species List Nevada Department of Wildlife

Birds

Order: *Gaviiformes* (Diver/Swimmers)

Family: *Gaviidae* (Loons)

Common Loon *Gavia immer*

Order: *Podicipediformes* (Flat-toed Divers)

Family: *Podicipedidae* (Grebes)

Pied-billed Grebe *Podilymbus podiceps*
Horned Grebe *Podiceps auritus*
Eared Grebe *Podiceps nigricollis*
Western Grebe *Aechmophorus occidentalis*
Clark's Grebe *Aechmophorus clarkii*

Order: *Pelecaniformes* (Four-toed Fisheaters)

Family: *Pelecanidae* (Pelicans)

American White Pelican *Pelecanus erythrorhynchos*

Family: *Phalacrocoracidae* (Cormorants)

Double-crested Cormorant *Phalacrocorax auritus*

Order: *Ciconiiformes* (Long-legged Waders)

Family: *Ardeidae* (Bitterns, Herons, Egrets)

American Bittern *Botaurus lentiginosus*
Least Bittern *Ixobrychus exilis*
Great Blue Heron *Ardea herodias*
Great Egret *Ardea alba*
Snowy Egret *Egretta thula*
Cattle Egret *Bubulcus ibis*
Green Heron *Butorides virescens*
Black-crowned Night Heron *Nycticorax nycticorax*

Family: *Threskiornithidae* (Ibises)

White-faced Ibis *Plegadis chihi*

Family: *Cathartidae* (New World Vultures)

Turkey Vulture *Cathartes aura*
California Condor *Gymnogyps californianus*(L.E.)

Order: *Anseriformes* (Waterfowl)

Family: *Anatidae* (Ducks, Geese, Swans)

Greater White-fronted Goose *Anser albifrons*
Snow Goose *Chen caerulescens*
Canada Goose *Branta canadensis*
Tundra Swan *Cygnus columbianus*
Trumpeter Swan *Cygnus buccinator*
Wood Duck *Aix sponsa*
Gadwall *Anus strepera*
American Widgeon *Anus americana*
Eurasian Widgeon *Anus penelope*
Mallard *Anus platyrhynchos*
Blue-winged Teal *Anus discors*

Cinnamon Teal	<i>Anus cyanoptera</i>
Northern Shoveler	<i>Anus clypeata</i>
Northern Pintail	<i>Anus acuta</i>
Green-winged Teal	<i>Anus crecca</i>
Canvasback	<i>Aythya valisineria</i>
Redhead	<i>Aythya americana</i>
Ring-necked Duck	<i>Aythya collaris</i>
Greater Scaup	<i>Aythya marila</i>
Lesser Scaup	<i>Aythya affinis</i>
Long-tailed Duck	<i>Clangula hyemalis</i>
Bufflehead	<i>Bucephala albeola</i>
Common Goldeneye	<i>Bucephala clangula</i>
Barrow's Goldeneye	<i>Bucephala islandica</i>
Hooded Merganser	<i>Lophodytes cucullatus</i>
Common Merganser	<i>Mergus merganser</i>
Red-breasted Merganser	<i>Mergus serrator</i>
Ruddy Duck	<i>Oxyura jamaicensis</i>

Order: *Falconiformes* (Diurnal Flesh Eaters)

Family: *Accipitridae* (Hawks, Eagles, Osprey)

Osprey	<i>Pandion haliaetus</i>
Bald Eagle	<i>Haliaeetus leucocephalus</i>
Northern Harrier	<i>Circus cyaneus</i>
Sharp-shinned Hawk	<i>Accipiter striatus</i>
Cooper's Hawk	<i>Accipiter cooperii</i>
Northern Goshawk	<i>Accipiter gentilis</i>
Red-shouldered Hawk	<i>Buteo lineatus</i>
Broad-winged Hawk	<i>Buteo platypterus</i>
Swainson's Hawk	<i>Buteo swainsoni</i>
Red-tailed Hawk	<i>Buteo jamaicensis</i>
Ferruginous Hawk	<i>Buteo regalis</i>
Rough-legged Hawk	<i>Buteo lagopus</i>
Golden Eagle	<i>Aquila chrysaetos</i>

Family: *Falconidae* (Falcons)

American Kestrel	<i>Falco sparverius</i>
Merlin	<i>Falco columbarius</i>
Gyr Falcon	<i>Falco rusticolus</i>
Peregrine Falcon	<i>Falco peregrinus</i>
Prairie Falcon	<i>Falco mexicanus</i>

Order: *Galliformes* (Chicken Relatives)

Family: *Phasianidae* (Grouse, Partridge)

Chukar	<i>Alectoris chukar</i>
Himalayan Snowcock	<i>Tetraogallus himalayensis</i>
Gray Partridge	<i>Perdix perdix</i>
Greater Sage-Grouse	<i>Centrocercus urophasianus</i>
Blue Grouse	<i>Dendragapus obscurus</i>
C. Sharp-tailed Grouse	<i>Tympanuchus phasianellus c. (L.E.)</i>
Wild Turkey	<i>Meleagris gallopavo</i>

Family: *Odontophoridae* (New World Quail)

California Quail	<i>Callipepla californica</i>
Mountain Quail	<i>Oreortyx pictus (L.E.)</i>

Order: *Gruiformes* (Cranes and Allies)

Family: *Rallidae* (Rails, Coots)

Virginia Rail	<i>Rallus limicola</i>
Sora	<i>Porzana carolina</i>
Common Moorhen	<i>Gallinula chloropus</i>
American Coot	<i>Fulica americana</i>

Family: *Gruidae* (Cranes)

Greater Sandhill Crane	<i>Grus canadensis tabida</i>
Lesser Sandhill Crane	<i>Grus canadensis canadensis</i>

Order: *Charadriiformes* (Wading Birds)

Family: *Charadriidae* (Plovers)

Black-bellied Plover	<i>Pluvialis squatarola</i>
Snowy Plover	<i>Charadrius alexandrinus</i>
Semi-palmated Plover	<i>Charadrius semipalmatus</i>
Killdeer	<i>Charadrius vociferus</i>
Mountain Plover	<i>Charadrius montanus</i>

Family: *Recurvirostridae* (Avocets)

Black-necked Stilt	<i>Himantopus mexicanus</i>
American Avocet	<i>Recurvirostra americana</i>

Family: *Scolopacidae* (Sandpipers, Phalaropes)

Greater Yellowlegs	<i>Tringa melanoleuca</i>
Lesser Yellowlegs	<i>Tringa flavipes</i>
Solitary Sandpiper	<i>Tringa solitaria</i>
Willet	<i>Catoptrophorus semipalmatus</i>
Spotted Sandpiper	<i>Actitis macularia</i>
Long-billed Curlew	<i>Numenius americanus</i>
Marbled Godwit	<i>Limosa fedoa</i>
Western Sandpiper	<i>Calidris mauri</i>
Least Sandpiper	<i>Calidris minutilla</i>
Baird's Sandpiper	<i>Calidris bairdii</i>
Long-billed Dowitcher	<i>Limnodromus scolopaceus</i>
Common Snipe	<i>Gallinago gallinago</i>
Wilson's Phalarope	<i>Phalaropus tricolor</i>
Red-necked Phalarope	<i>Phalaropus lobatus</i>

Family: *Laridae* (Gulls, Terns)

Franklin's Gull	<i>Larus pipixcan</i>
Bonaparte's Gull	<i>Larus philadelphia</i>
Ring-billed Gull	<i>Larus delawarensis</i>
California Gull	<i>Larus californicus</i>
Herring Gull	<i>Larus argentatus</i>
Caspian Tern	<i>Sterna caspia</i>
Forster's Tern	<i>Sterna forsteri</i>
Black Tern	<i>Chlidonias niger</i>

Order: *Columbiformes* (Pigeons and Allies)

Family: *Columbidae* (Doves)

Rock Dove	<i>Columba livia</i>
White-winged Dove	<i>Zenaida asiatica</i>
Mourning Dove	<i>Zenaida macroura</i>

Order: *Cuculiformes* (Cuckoos and Allies)

Family: *Cuculidae* (Cuckoos and Roadrunners)

Yellow-billed Cuckoo	<i>Coccyzus americanus</i> (L.E.)
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Order: *Strigiformes* (Nocturnal Flesh Eaters)

Family: *Tytonidae* (Barn Owls)

Barn Owl	<i>Tyto alba</i>
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Family: *Strigidae* (Owls)

Flammulated Owl	<i>Otus flammeolus</i>
Western Screech-Owl	<i>Otus kennicottii</i>
Great Horned Owl	<i>Bubo virginianus</i>
Snowy Owl	<i>Nyctea scandiaca</i>
Northern Pygmy-Owl	<i>Glaucidium gnoma</i>
Burrowing Owl	<i>Athene cucularia</i>
Long-eared Owl	<i>Asio otus</i>

Short-eared Owl *Asio flammeus*
Northern Saw-whet Owl *Aegolius acadicus*

Order: *Caprimulgiformes* (Night Jars)

Family: *Caprimulgidae* (Goatsuckers)

Common Nighthawk *Chordeiles minor*
Common Poorwill *Phalaenoptilus nuttallii*

Order: *Apodiformes* (Small Fast Fliers)

Family: *Apodidae* (Swifts)

White-throated Swift *Aeronautes saxatalis*

Family: *Trochilidae* (Hummingbirds)

Black-chinned Hummingbird *Archilochus alexandri*
Calliope Hummingbird *Stellula calliope*
Broad-tailed Hummingbird *Selasphorus platycercus*
Rufous Hummingbird *Selasphorus rufus*

Order: *Coraciiformes* (Cavity Nesters)

Family: *Alcedinidae* (Kingfishers)

Belted Kingfisher *Ceryle alcyon*

Order: *Piciformes* (Cavity Builders)

Family: *Picidae* (Woodpeckers)

Lewis' Woodpecker *Melanerpes lewis*
Red-naped Sapsucker *Sphyrapicus nuchalis*
Downy Woodpecker *Picoides pubescens*
Hairy Woodpecker *Picoides villosus*
Northern Flicker *Colaptes auratus*

Order: *Passeriformes* (Perching Birds)

Family: *Tyrannidae* (Flycatchers)

Western Wood-Pewee *Contopus sordidulus*
Willow Flycatcher *Epidonax traillii*
Hammond's Flycatcher *Epidonax hammondii*
Gray Flycatcher *Epidonax wrightii*
Dusky Flycatcher *Epidonax oberholseri*
Say's Phoebe *Sayornis saya*
Ash-throated Flycatcher *Myiarchus cinerascens*
Western Kingbird *Tyrannus verticalis*
Eastern Kingbird *Tyrannus tyrannus*

Family: *Laniidae* (Shrikes)

Loggerhead Shrike *Lanius ludovicianus*
Northern Shrike *Lanius excubitor*

Family: *Vireonidae* (Vireos)

Plumbeous Vireo *Vireo plumbeus*
Warbling Vireo *Vireo gilvus*

Family: *Corvidae* (Jays)

Western Scrub-Jay *Aphelocoma californica*
Pinyon Jay *Gymnorhinus cyanocephalus*
Black-billed Magpie *Pica pica*
American Crow *Corvus brachyrhynchos*
Common Raven *Corvus corax*

Family: *Alaudidae* (Larks)

Horned Lark *Eremophila alpestris*

Family: *Hirundinidae* (Swallows)

Tree Swallow *Tachycineta bicolor*

Violet-green Swallow	<i>Tachycineta thalassina</i>
Bank Swallow	<i>Riparia riparia</i> (L.E.)
N. Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>
Cliff Swallow	<i>Petrochelidon pyrrhonota</i>
Barn Swallow	<i>Hirundo rustica</i>

Family: Paridae (Chickadees, Titmice)

Black-capped Chickadee	<i>Poecile atricapillus</i>
Mountain Chickadee	<i>Poecile gambeli</i>
Juniper Titmouse	<i>Baeolophus griseus</i>

Family: Aegithalidae (Bushtits)

Bushtit	<i>Psaltriparus minimus</i>
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Family: Sittidae (Nuthatches)

Red-breasted Nuthatch	<i>Sitta canadensis</i>
White-breasted Nuthatch	<i>Sitta carolinensis</i>

Family: Certhiidae (Creepers)

Brown Creeper	<i>Certhia americana</i>
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Family: Troglodytidae (Wrens)

Rock Wren	<i>Salpinctes obsoletus</i>
Canyon Wren	<i>Catherpes mexicanus</i>
Bewick's Wren	<i>Thyromanes bewickii</i>
House Wren	<i>Troglodytes aedon</i>
Winter Wren	<i>Troglodytes troglodytes</i>
Marsh Wren	<i>Cistothorus palustris</i>

Family: Cinclidae (Dippers)

American Dipper	<i>Cinclus mexicanus</i>
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Family: Regulidae (Kinglets)

Golden-crowned Kinglet	<i>Regulus satrapa</i>
Ruby-crowned Kinglet	<i>Regulus calendula</i>

Family: Sylviidae (Gnatcatchers)

Blue-gray Gnatcatcher	<i>Poliophtila caerulea</i>
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Family: Turdidae (Thrushes)

Mountain Bluebird	<i>Sialia currucoides</i>
Townsend's Solitaire	<i>Myadestes townsendi</i>
Hermit Thrush	<i>Catharus guttatus</i>
American Robin	<i>Turdus migratorius</i>
Varied Thrush	<i>Ixoreus naevius</i>

Family: Mimidae (Thrashers, Mockingbirds)

Northern Mockingbird	<i>Mimus polyglottos</i>
Sage Thrasher	<i>Oreoscoptes montanus</i>

Family: Sturnidae (Starlings)

European Starling	<i>Sturnus vulgaris</i>
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Family: Motacillidae (Pipits)

American Pipit	<i>Anthus rubescens</i>
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Family: Bombycillidae (Waxwings)

Bohemian Waxwing	<i>Bombycilla garrulus</i>
Cedar Waxwing	<i>Bombycilla cedrorum</i>

Family: Parulidae (Wood Warblers)

Orange-crowned Warbler	<i>Vermivora celata</i>
Nashville Warbler	<i>Vermivora ruficapilla</i>
Virginia's Warbler	<i>Vermivora virginiae</i>
Yellow Warbler	<i>Dendroica petechia</i>
Yellow-rumped Warbler	<i>Dendroica coronata</i>
Black-throated Gray Warbler	<i>Dendroica nigrescens</i>
MacGillivray's Warbler	<i>Oporornis tolmiei</i>
Common Yellowthroat	<i>Geothlypis trichas</i>
Wilson's Warbler	<i>Wilsonia pusilla</i>
Yellow-breasted Chat	<i>Icteria virens</i>

Family: Thraupidae (Tanagers)

Western Tanager	<i>Piranga ludoviciana</i>
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Family: Emberizidae (Sparrows, Towhees, Juncos)

Green-tailed Towhee	<i>Pipilo chlorurus</i>
Spotted Towhee	<i>Pipilo maculatus</i>
American Tree Sparrow	<i>Spizella arborea</i>
Chipping Sparrow	<i>Spizella passerina</i>
Brewer's Sparrow	<i>Spizella breweri</i>
Vesper Sparrow	<i>Poocetes gramineus</i>
Lark Sparrow	<i>Chondestes grammacus</i>
Black-throated Sparrow	<i>Amphispiza bilineata</i>
Sage Sparrow	<i>Amphispiza belli</i>
Savannah Sparrow	<i>Passerculus sandwichensis</i>
Grasshopper Sparrow	<i>Ammodramus bairdii</i>
Fox Sparrow	<i>Passerella iliaca schistacea</i>
Song Sparrow	<i>Melospiza melodia</i>
Lincoln's Sparrow	<i>Melospiza lincolnii</i>
White-throated Sparrow	<i>Zonotrichia albicollis</i>
Harris' Sparrow	<i>Zonotrichia querula</i>
Gambel's White-crowned Sparrow	<i>Zonotrichia leucophrys gambelii</i>
Mountain W-crowned Sparrow	<i>Zonotrichia leucophrys oriantha</i>
Golden-crowned Sparrow	<i>Zonotrichia atricapilla</i>

Family: *Emberizidae* (Sparrows, Juncos, cont.)

Dark-eyed Junco(Oregon)	<i>Junco hyemalis therburi</i>
Dark-eyed Junco(Gray-headed)	<i>Junco hyemalis caniceps</i>
Lapland Longspur	<i>Calcarius lapponicus</i>

Family: *Cardinalidae* (Grosbeaks, Buntings)

Black-headed Grosbeak	<i>Pheucticus melanocephalus</i>
Blue Grosbeak	<i>Guiraca caerulea</i>
Lazuli Bunting	<i>Passerina amoena</i>
Indigo Bunting	<i>Passerina cyanea</i>

Family: *Icteridae* (Blackbirds, Orioles)

Bobolink	<i>Dolichonyx oryzivorus</i>
Red-winged Blackbird	<i>Agelaius phoeniceus</i>
Western Meadowlark	<i>Sturnella neglecta</i>
Yellow-headed Blackbird	<i>Xanthocephalus xanthocephalus</i>
Brewer's Blackbird	<i>Euphagus cyanocephalus</i>
Great-tailed Grackle	<i>Quiscalus mexicanus</i>
Brown-headed Cowbird	<i>Molothrus ater</i>
Bullock's Oriole	<i>Icterus bullockii</i>
Scott's Oriole	<i>Icterus parisorum</i>

Family: *Fringillidae* (Finches, Grosbeaks)

Gray-crowned Rosy-Finch	<i>Leucosticte tephrocotis</i>
Black Rosy-Finch	<i>Leucosticte atrata</i>
Purple Finch	<i>Carpodacus purpureus</i>
Cassin's Finch	<i>Carpodacus cassinii</i>
House Finch	<i>Carpodacus mexicanus</i>
Red Crossbill	<i>Loxia curvirostra</i>
Common Redpoll	<i>Carduelis flammea</i>
Pine Siskin	<i>Carduelis pinus</i>
Lesser Goldfinch	<i>Carduelis psaltria</i>
American Goldfinch	<i>Carduelis tristis</i>
Evening Grosbeak	<i>Coccothraustes vespertinus</i>

Family: *Passeridae* (Old World Sparrows)

House Sparrow	<i>Passer domesticus</i>
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Mammals

Order: *Insectivora* (Insect Eaters)

Family: *Soricidae* (Shrews)

Merriam's Shrew	<i>Sorex meriammi</i>
Dusky Shrew	<i>Sorex monticolus</i>
Vagrant Shrew	<i>Sorex vagrans</i>
Water Shrew	<i>Sorex palustris</i>

Order: *Chiroptera* (Bats)

Family: *Vespertilionidae* (Plainnose Bats)

California Myotis	<i>Myotis californicus</i>
Western Small-footed Myotis	<i>Myotis ciliolabrum</i>
Long-eared Myotis	<i>Myotis evotis</i>
Little Brown Bat	<i>Myotis lucifugus</i>
Fringed Myotis	<i>Myotis thysanodes</i>
Long-legged Myotis	<i>Myotis volans</i>
Yuma Myotis	<i>Myotis yumanensis</i>
Western Red Bat	<i>Lasiurus blossomii</i>
Hoary Bat	<i>Lasiurus cinereus</i>
Silver-haired Bat	<i>Lasionycteris noctivagans</i>
Western Pipistrelle	<i>Pipistrellus hesperus</i>
Big Brown Bat	<i>Eptesicus fuscus</i>
Townsend's Big-eared Bat	<i>Corynorhinus townsendii</i>
Spotted Bat	<i>Euderma maculatum</i>
Pallid Bat	<i>Antrozous pallidus</i>

Family: *Molossidae* (Freetail Bats)

Brazilian Free-tailed Bat	<i>Tadarida brasiliensis</i>
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Order: *Lagomorpha* (Pikas, Hares, Rabbits)

Family: *Leporidae* (Hares, Rabbits)

White-tailed Jackrabbit	<i>Lepus townsendi</i>
Black-tailed Jackrabbit	<i>Lepus californicus</i>
Mountain Cottontail	<i>Sylvilagus nuttalli</i>
Desert Cottontail	<i>Sylvilagus audubonii</i>
Pygmy Rabbit	<i>Brachylagus idahoensis</i>

Order: *Rodentia* (Rodents)

Family: *Sciuridae* (Squirrels)

Least Chipmunk	<i>Tamias minimus</i>
Cliff Chipmunk	<i>Tamias dorsalis</i>
Uinta Chipmunk	<i>Tamias umbrinus</i>
Yellow-bellied Marmot	<i>Marmota flaviventris</i>
White-tailed Antelope Squirrel	<i>Ammospermophilus leucurus</i>
Townsend's Ground Squirrel	<i>Spermophilus townsendii</i>
Belding's Ground Squirrel	<i>Spermophilus beldingi</i>
Wyoming Ground Squirrel	<i>Spermophilus elegans</i>
Golden-mantled Ground Squirrel	<i>Spermophilus lateralis</i>

Family: *Geomyidae* (Gophers)

Botta's Pocket Gopher	<i>Thomomys bottae</i>
Northern Pocket Gopher	<i>Thomomys talpoides</i>
Townsend's Pocket Gopher	<i>Thomomys townsendii</i>

Family: *Heteromyidae* (Kangaroo Rodents)

Little Pocket Mouse	<i>Perognathus longimembris</i>
Great Basin Pocket Mouse	<i>Perognathus parvus</i>
Dark Kangaroo Mouse	<i>Microdipodops megacephalus</i>
Ord Kangaroo Rat	<i>Dipodomys ordii</i>
Chisel-toothed Kangaroo Rat	<i>Dipodomys microps</i>

Family: *Castoridae* (Beavers)

American Beaver	<i>Castor canadensis</i>
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Family: *Cricetidae* (Mice, Rats, Voles)

Western Harvest Mouse	<i>Reithrodontomys megalotis</i>
Canyon Mouse	<i>Peromyscus crinitus</i>
Deer Mouse	<i>Peromyscus maniculatus</i>
Pinon Mouse	<i>Peromyscus truei</i>
Northern Grasshopper Mouse	<i>Onychomys leucogaster</i>
Desert Woodrat	<i>Neotoma lepida</i>
Bushy-tailed Woodrat	<i>Neotoma cinerea</i>
Mountain Vole	<i>Microtus montanus</i>

Long-tailed Vole *Microtus longicaudus*
Sagebrush Vole *Lemmiscus curtatus*
Muskrat *Ondatra zibethica*

Family: Zapodidae (Jumping Mice)

Western Jumping Mouse *Zapus princeps*

Family: Erethizontidae (New World Porcupines)

Porcupine *Erethizon dorsatum*

Order: Carnivora (Flesh-Eaters)

Family: Canidae (Dogs)

Coyote *Canis latrans*
Gray Wolf *Canis lupus (L.E.)*
Common Gray Fox *Urocyon cinereoargenteus*
Kit Fox *Vulpes velox*
Red Fox *Vulpes vulva*

Family: Procyonidae (Raccoons and Allies)

Ringtail *Bassariscus astutus*
Common Raccoon *Procyon lotor*

Family: Mustelidae (Weasels and Allies)

Short-tailed Weasel *Mustela erminea*
Long-tailed Weasel *Mustela frenata*
Mink *Mustela vison*
Wolverine *Gulo gulo (L.E.)*
American Badger *Taxidea taxus*
Striped Skunk *Mephitis mephitis*
Western Spotted Skunk *Spilogale gracilis*

Family: Felidae (Cats)

Mountain Lion *Felix concolor*
Lynx *Lynx lynx (L.E.)*
Bobcat *Lynx rufus*

Order: Artiodactyla (Hoofed Mammals)

Family: Cervidae (Deer)

Rocky Mountain Elk *Cervus canadensis*
Mule Deer *Odocoileus hemionus*

Family: Antilocapridae (Pronghorn)

Pronghorn *Antilocapra americana*

Family: Bovidae (Bison, Sheep, Goats)

American Bison *Bos bison (L.E.)*
Rocky Mountain Bighorn Sheep *Ovis canadensis Canadensis*

Reptiles

Order: Squamata (Lizards, Snakes)

Family: Iguanidae (Iguanas and Allies)

Western Fence Lizard *Sceloporus occidentalis*
Sagebrush Lizard *Sceloporus graciosus*
Side-blotched Lizard *Uta stansburiana*
Greater Short-horned Lizard *Phrynosoma hernandesi*
Desert Horned Lizard *Phrynosoma platyrhinos*

Family: Scincidae (Skinks)

Western Skink *Eumeces skiltonianus*

Family: Teiidae (Whiptails)

Western Whiptail *Cnemidophorus tigris*

Family: Boidae (Boas, Pythons)

Rubber Boa *Charina bottae*

Family: Colubridae (Solid-toothed Snakes)

Ringneck Snake *Diadophis punctatus*
Striped Whipsnake *Masticophis taeniatus*

Great Basin Gopher Snake	<i>Pituophis cantenifer deserticola</i>
Long-nosed Snake	<i>Rhinocheilus lecontei</i>
Western Terrestrial Garter	<i>Thamnophis elegans</i>
Ground Snake	<i>Sonora semiannulata</i>
Night Snake	<i>Hypsiglena torquata</i>

Family: Viperidae (Vipers)

Great Basin Rattlesnake	<i>Crotalus viridis lutosus</i>
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Amphibians

Order: Anura (Frogs and Toads)

Family: Pelobatidae (Spadefoots)

Great Basin Spadefoot Toad	<i>Scaphiopus intermontanus</i>
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Family: Ranidae (True Frogs)

Columbia Spotted Frog	<i>Rana luteiventris</i>
Northern Leopard Frog	<i>Rana pipiens</i>
Bullfrog	<i>Rana catesbeiana</i>

Family: Bufonidae (Toads)

Western Toad	<i>Bufo boreas</i>
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Family: Hylidae (Treefrogs)

Pacific Treefrog	<i>Hyla regilla</i>
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L.E. = Locally Extirpated

Note: This list is a combination of wildlife sight record data and our best effort to predict what wildlife species live in this area in all seasons and under optimum habitat conditions.

*With the exception of the European Starling, House Sparrow, and Rock Dove, all birds are protected in Nevada by either the International Migratory Bird Treaty Act, Endangered Species Act or as game species. Several mammal, reptile, amphibian and fish species are also protected as either game, sensitive, threatened, endangered or priority species. For further information on a species status, visit our web site at NDOW.ORG.

Updated: 5/2006 - Peter V. Bradley - Nevada Department of Wildlife - Elko, Nevada.

APPENDIX B

Birds

Mountain plover (sensitive)	<i>Charadrius montanus</i>
Northern goshawk (sensitive)	<i>Accipiter gentilis</i>
Western burrowing owl (sensitive)	<i>Athene cunicularia hypugea</i>
Ferruginous hawk (sensitive)	<i>Buteo regalis</i>
Loggerhead shrike (sensitive)	<i>Lanius ludovicianus</i>
Golden eagles (sensitive)	<i>Aquila chrysaetos</i>
Swainson's hawks (sensitive)	<i>Buteo swainsoni</i>
Ferruginous hawks (sensitive)	<i>Buteo regalis</i>
Vesper sparrows (sensitive)	<i>Chondestes gammacus</i>
Short-eared owls (sensitive)	<i>Asio flammeus</i>
Prairie falcons (sensitive)	<i>Falco mexicanus</i>
Black-rosy finches (sensitive)	<i>Leucosticte atrata</i>
Sage grouse (sensitive)	<i>Centrocercus urophasianus</i>
Greater Sandhill crane (sensitive)	<i>Grus canadensis Canadensis</i>

Osprey (sensitive)
White-faced ibis (sensitive)
Least bittern (sensitive)

Pandion haliaetus
Plegadis chihi
Ixobrychus exilis

Mammals

Pygmy rabbit (sensitive)
Townsend's big-eared bat (sensitive)
Spotted bat (sensitive)
Brazilian free-tailed bat (sensitive)
Hoary bat (sensitive)
Pallid bat (sensitive)
Silver-haired bat (sensitive)
Western red bat (sensitive)
Big brown bat (sensitive)
Little brown myotis (sensitive)
Small-footed myotis (sensitive)
Long-eared myotis (sensitive)
Fringed myotis (sensitive)
Long-legged myotis (sensitive)
Yuma myotis (sensitive)
Occult myotis (sensitive)
Western pipistrelle (sensitive)
Preble's shrew (sensitive)

Brachylagus idahoensis
Corynorhinus townsendii townsendii
Euderma maculatum
Tadarida brasiliensis
Lasiurus cinereus
Antrozous pallidus
Lasionycteris noctivagans
Lasiurus blossevillii
Eptesicus fuscus
Myotis lucifugus
Myotis ciliolabrum
Myotis evotis
Myotis thysanodes
Myotis volans
Myotis yumanensis
Myotis lucifugus occultus
Pipistrellus hesperus

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