

**NORTHEASTERN GREAT BASIN STANDARDS AND GUIDELINES ASSESSMENT
2006
FINAL DETERMINATIONS**

RUBY #8 ALLOTMENT

Elko Field Office

I. Introduction

In accordance with 43 CFR 4180, the Elko 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 a review of an evaluation of monitoring data completed in the spring of 2006 and analysis of monitoring information obtained between 1990 and 2005. 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 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.

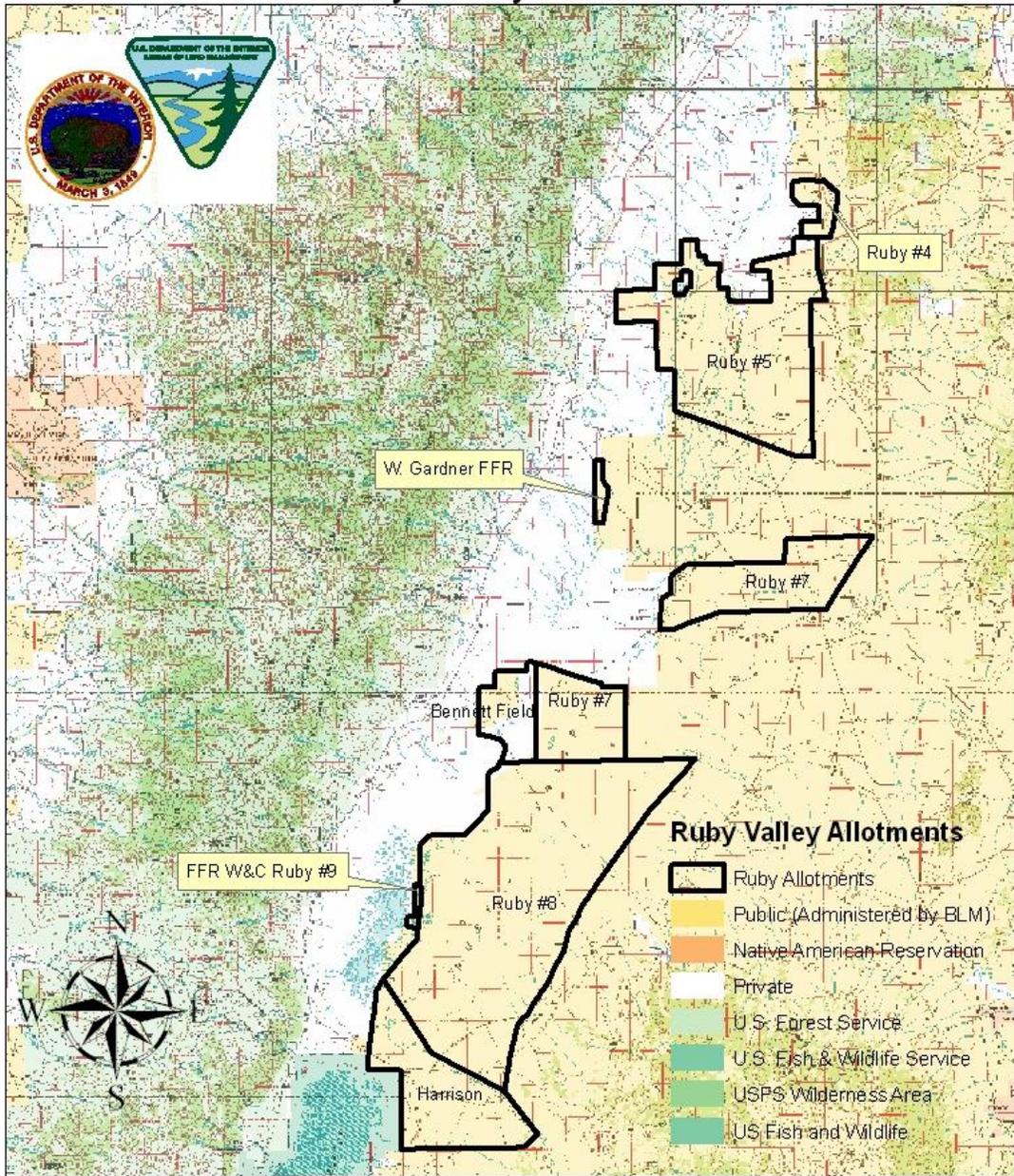
This assessment does not include an assessment of Standard 2 (Riparian and Wetland Sites) or Standard 5 (Healthy Wild Horse and Burro Populations) because there are no riparian or wetland sites, and no wild horse herd management areas in this allotment.

II. Description of the Allotment

Located in southern Ruby Valley, this allotment contains 29,205 acres which 174 acres are unfenced private lands located within the allotment. It is grazed in common by three permittees who hold a combined total of 1,960 AUMs in active grazing preference. The allotment's southwest boundary is the Franklin Lake, which rose to unprecedented levels in 1983 and 1984 and flooded a significant portion of the native pasture. Between 1983 and 1985, up to 85% of the native pasture was inundated by the lake. In 1988 it was estimated that 4,455 acres (19% of the native pasture) were under water.

Map 1.

Ruby Valley Allotments



1:250,000

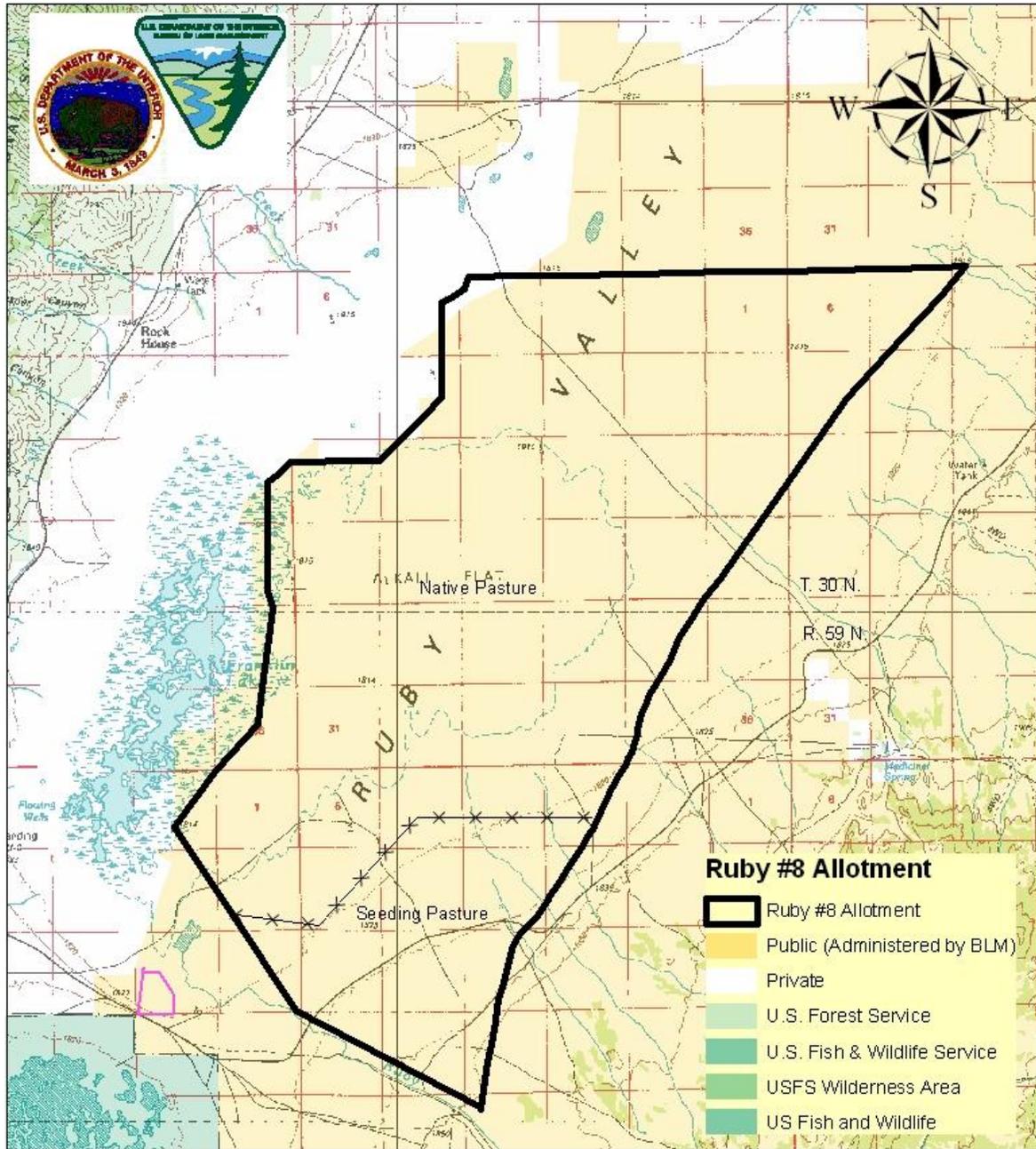
Date published in:
North American Datum 1983 (NAD83)
UTM coordinates, Zone 11, in meters

Sept 13, 2006
bwct

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The allotment is divided into two pastures, the Seeding Pasture and the Native Pasture.
Map 2.

Ruby #8 Allotment



0 0.5 1 2
 Miles

1:100,000

Date published in:
 North American Datum 1983 (NAD83)
 UTM coordinates, Zone 11, meters

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Sept 11, 2006
 bwct

The Seeding Pasture encompasses 5,700 acres, of which 1,320 acres were actually seeded with crested wheatgrass in 1967.

The allotment is not currently under a formal grazing system. As stated above, Franklin Lake flooded large portions of the allotment in the 1980's. This flooding led to a change in vegetation, reducing brush (killing greasewood and sagebrush) and increasing alkali grass. In 1987 an adjustment to the carrying capacity of the allotment was made to account for the change in vegetation.

The permittees are Buster and Gwen Wines, Neil and Kristin McQueary and Overland Land & Livestock, and the allotment is currently permitted as follows:

| Permittee | Season of Use | AUMs |
|-----------------------------|---------------|-------|
| Buster and Gwen Winter | 4/20-9/30 | 1,001 |
| Neil and Kristin McQueary | 4/25-9/01 | 178 |
| Overland Land and Livestock | 5/01-9/01 | 781 |
| Total | | 1,960 |

The Ruby #8 Allotment is identified pronghorn antelope yearlong range. There are a total of four key areas in the allotment; two are used for wildlife habitat monitoring. Key Area 03 in the Native pasture is used to monitor antelope habitat conditions.

III. Assessment

A. Indicators and Studies Summary

1. Actual Use Summary 1987 through 2005

| Year | Actual Use Buster and Gwen Wines | Actual Use ¹ Neil and Kristen McQueary | Actual Use Leanord Wines / Overland Land and Livestock |
|------|--|---|---|
| 1987 | 254 | 48 | Non-use |
| 1988 | 468 | 92 | Non-use |
| 1989 | 831 | 79 | Non-use |
| 1990 | 637 | 167 | Non-use |
| 1991 | 378 | 169(+329) ² | Non-use |
| 1992 | 518 | 186+316 ² | Non-use |
| 1993 | 579 | 111+467 ² | 256 |
| 1994 | 968 | 108 | 841 |

| | | | |
|----------------|----------------|-----------------------|---------------|
| 1995 | 1029 | 44+230 ² | 874 |
| 1996 | 1306 | 84+475 ² | 733 |
| 1997 | 997 | 143 +486 ² | 713 |
| 1998 | 989 | 395 ² | 1040 |
| 1999 | 1135 | 63 | 693 |
| 2000 | 723 (+355 TNR) | 400 ² | 706 |
| 2001 | 709 (+548 TNR) | 373 ² | 742 |
| 2002 | 958 | 163 ² | 742(+263 TNR) |
| 2003 | 662 | Non-use | 375 |
| 2004 | 739 | Non-use | 399 |
| 2005 | 707 | 172 | 541 |
| Average | 818 | 300 | 693 |

1 - There are 8 AUMs on FFR that are not reflected in the AUMs

2 - Use occurred during the winter and across calendar years but remained in the grazing fee year. The grazing fee year is from March of one year through the end of February of the next year. Example is 3/01/06-2/28/07.

Average actual use for the three permittees combined is 1, 811 AUMs.

2. Key Area Utilization/Actual Use Summary 1996 through 2005.

| Utilization Summary | | | | |
|----------------------------|--|---|---|--|
| Year | Key Area 01 - Seeding Crested Wheatgrass (desired use:45%) Utilization | Key Area 02 - Native¹ Inland saltgrass, Western wheatgrass (desired use:45%) Utilization | Key Area 03 - Native Inland saltgrass, Western wheatgrass (desired use:45%) Utilization | Key Area 04 - Native: Est. 2004 Inland saltgrass, Western wheatgrass (desired use:45%) Utilization |
| 1987 | 28% | 6% | 6% | Not established |
| 1988 | 65% | 38% | 25% | |
| 1989 | 40% | Not recorded | 18% | |
| 1990 | 58% | 0% | 29% | |
| 1991 | 30% | Not recorded | 58% | |
| 1992 | 51% | Not recorded | Not recorded | |
| 1993 | Not recorded | 27% | Not recorded | |
| 1994 | Not recorded | 19% | Not recorded | |
| 1995 | Not recorded | 0% | 26% | |
| 1996 | Not recorded | 7% | Not recorded | |
| 1997 | 49% | Not recorded | Not recorded | |
| 1998 | 26% | Not recorded | 7% | |
| 1999 | 21% | 28% | Not recorded | |
| 2000 | 42% | Not recorded | Not recorded | |
| 2001 | 35% | Not recorded | Not recorded | |
| 2002 | 28% | 5% | 14% | |

| Utilization Summary | | | | |
|--|--|---|---|--|
| Year | Key Area 01 - Seeding Crested Wheatgrass (desired use:45%) Utilization | Key Area 02 - Native¹ Inland saltgrass, Western wheatgrass (desired use:45%) Utilization | Key Area 03 - Native Inland saltgrass, Western wheatgrass (desired use:45%) Utilization | Key Area 04 - Native: Est. 2004 Inland saltgrass, Western wheatgrass (desired use:45%) Utilization |
| 2003 | Not recorded | 28% | 15% | 37% |
| 2004 | Not recorded | Not recorded | Not recorded | Not recorded |
| 2005 | 29% | 8% | 29% | 8% |
| AVG. | 37% | 15% | 23% | 21% |
| 1 - the highest recorded utilization is presented here; i.e., if AGSM had 15% use and DIST had 25% use, 25% is presented in the table. | | | | |

3. Carrying Capacity Calculations

The carrying capacity calculation for the Ruby #8 Allotment will be completed at a later date through the allotment evaluation process.

B. Wildlife

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

The Ruby #8 Allotment in association with the surrounding native Wyoming big 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. Additional species are also found in the vicinity of riparian and meadow habitats on a seasonal or yearlong basis. 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 Ruby #8 allotment extends through the Ruby Valley salt flats parallel to Franklin Lake. The very southern portion of the allotment is a crested wheatgrass seeding that contains increasing big sagebrush. The entire allotment is identified as mule deer intermediate range (MDI) and the eastern edge as antelope crucial winter habitat. A limited number of mule deer and antelope utilize the allotment as summer habitat and mule deer migrate through during the spring and fall (see map 3).

The western edge and the most southern portions of the allotment are also identified as sage grouse summer habitat. In addition, these southern areas were deemed sage grouse winter habitat.

Federally Listed and Candidate species - The U. S. Fish & Wildlife Service has identified that the bald eagle (a threatened species) 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 Ruby Valley 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 Ruby #8 Allotment. This list is not specific to which species are actually likely to occur with the Ruby #8 Allotment 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 these 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 appropriate habitat (cottonwood-willow forest) for yellow-billed cuckoos located within or in close proximity to the Ruby #8 allotment. The bald eagle is a migrant and winter resident on the allotment. Suitable winter habitat is widely dispersed on uplands, irrigated lands and riparian areas throughout the Elko District as documented during formal surveys completed through coordination by BLM and the Nevada Department of Wildlife. The peregrine falcon may also be a transient forager through the Ruby Valley but there is no documented nesting habitat within any of the Ruby Allotments. There have been no spotted frog sightings within the Ruby Valley.

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 Ruby #8 allotment 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, prairie falcons, black-rosy finches, least bittern, white-faced ibis, Sandhill cranes, and sage grouse.

Sage Grouse

The allotment is within the Ruby 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 Ruby #8 allotment boundary. All areas not within the central salt flat area of the Ruby #8 allotment potentially provides sage grouse habitat having both big sagebrush and low sagebrush which are required for food and cover. Sage grouse utilized this allotment as primarily summer and winter habitat. There are no leks, though nesting/ brood rearing habitat may occur. The native salt grassland in the northern sections of the allotment contain big sagebrush islands which provide forage and cover and healthy sage stands to the south are adjacent to the abundant riparian vegetation of the Franklin Lake marshes. These areas were deemed adequate to provide hens with the needed cover and nutritional requirements for breeding activities. Also, the areas of the allotment adjacent to Franklin Lake may provide succulent riparian vegetation needed by juvenile birds.

Shrub cover is vital for providing more diverse habitats. The seeded areas of the allotment are being reestablished with big sagebrush and at present there is about 30% to 40% shrub cover based on data collected in 2002 and field observations in 2006.

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. Though no known formal surveys have been completed on the Ruby #8 allotment, pygmy rabbits have been reported by BLM personnel on adjacent BLM-administered allotments within the Ruby Valley. The sites were stands of historic or reestablished basin big sagebrush either within ephemeral drainages or on toe-slopes of surrounding highlands.

Bats

Fifteen BLM sensitive bat species have been documented in the Elko District with the potential to occur in the Ruby Valley Allotments. 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).

Although no surveys for bats have been conducted, the Ruby Valley area is important for many sensitive bat species. Bats occur in a variety of habitats in eastern Nevada, which include spring riparian areas, canyons, coniferous forests (including juniper), and deciduous forests. Wetlands and surface water associated with springs and Franklin Lake, sagebrush rangelands and artificial structures provide habitat for some or all of these species. The majority of the Ruby #8 allotment is relatively open and natural roost sites are marginalized to the pinyon/juniper woodlands to the east and the Ruby Mountains to the west. There are numerous structures and homesteads throughout the Ruby Valley where bats can roost on a temporary or permanent bases. Foraging areas are provided on the allotments' native uplands, spring sources and where use could occur in concert with use of the Franklin Lake marshes. Bats could transient forage throughout all but the salt flat areas of the Ruby # 8 allotment as they commute between the woodlands, mountains or artificial structures and the marshes.

Improvement or maintenance of range conditions, including maintenance of some sagebrush cover, would improve foraging habitat conditions for these species of bats as a variety of insects are associated with sagebrush habitats.

Other Game and Non-game Species

There are approximately 100 bird species, 70 mammalian species, and several reptile and amphibian species that potentially inhabit sage brush habitats on the allotment. Additional species are also found in the vicinity of riparian and meadow habitats on a seasonal or yearlong basis. During wet years, waterfowl nest along the river where tall grass is available for nesting cover. 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 Ruby Valley Allotments. Of the nineteen, the following have known nest sites within the 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 Short-eared Owl, Barn Owl, and Northern Harrier may have unconfirmed nesting sites as young of the year have been observed. 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 Ruby Valley area provides important 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 northern goshawk, golden eagle, and bald eagle. The combination of shrub communities overlooking broad valleys, woodlands, and riparian areas associated with springs and Franklin Lake are present in the Ruby #8 Allotment area and provide habitat for these species.

Habitat for both short-eared and burrowing owls is present in the Ruby Valley. 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 Ruby #8 allotment.

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 Ruby Valley Allotments include habitat for some or all of these migratory bird species on a seasonal or yearlong basis. The Nevada Department of Wildlife's (NDOW)

2006 Wildlife Species List indicates all species likely to utilize the habitats present within all the Ruby Valley Allotments. Species more specific to use of Ruby #8 Allotment are the following:

Table 1. Nevada Partners in Flight Bird Conservation Plan Elko District Ecotypes

| Species | Sage brush | Lowland Riparian | Agri-culture | Species | Sage brush | Lowland Riparian | Agri-culture |
|-------------------------|------------|-------------------|--------------|--------------------------------|------------|-------------------|--------------|
| Ash-throated Flycatcher | | X | | Swainson's Hawk | X | | X |
| Gray Vireo | | | | Pinyon Jay | | | |
| Juniper Titmouse | | | | Black-throated Gray Warbler | | | |
| Scott's Oriole | | | | Western Bluebird | | | |
| Bank Swallow | | X | | Vesper Sparrow | X | | |
| Black Rosy Finch | X | | | Virginia's Warbler | | X | |
| Burrowing Owl | X | | | Yellow-breasted Chat | | X | |
| Calliope Hummingbird | X | | | Southwestern Willow Flycatcher | | X | |
| Cooper's Hawk | X | | | Prairie Falcon | X | | X |
| Ferruginous Hawk | X | | X | Red-naped Sapsucker | X | | |
| Gray Flycatcher | X | | | Sage Grouse | X | | |
| Lewis' Woodpecker | X | | | Sage Sparrow | X | | |
| Loggerhead Shrike | X | | | Sage Thrasher | X | | |
| Blue Grosbeak | | X | | Bobolink | | | X |
| Greater Sandhill Crane | | | X | Long-billed Curlew | | | X |
| White-faced Ibis | | | X | | | | |
| Species | | Salt Desert Scrub | Wetland | Species | | Salt Desert Scrub | Wetland |
| Ash-throated Flycatcher | | | | Swainson's Hawk | | | |
| Gray Vireo | | | | Pinyon Jay | | | |
| Juniper Titmouse | | | | Black-throated Gray Warbler | | | |

| | | | | | | | |
|------------------------|--|---|---|--------------------------------|--|---|---|
| Scott's Oriole | | | | Western Bluebird | | X | |
| Bank Swallow | | | | Vesper Sparrow | | | |
| Black Rosy Finch | | | | Virginia's Warbler | | | |
| Burrowing Owl | | X | | Yellow-breasted Chat | | | X |
| Calliope Hummingbird | | | | Southwestern Willow Flycatcher | | | |
| Cooper's Hawk | | | | Prairie Falcon | | | |
| Ferruginous Hawk | | | | Red-naped Sapsucker | | | X |
| Gray Flycatcher | | | | Sage Grouse | | | |
| Lewis' Woodpecker | | X | | Sage Sparrow | | | |
| Loggerhead Shrike | | X | | Sage Thrasher | | | |
| Blue Grosbeak | | | | Wilson's Warbler | | | |
| MacGillivray's Warbler | | | | Short-eared Owl | | | |
| Phainopepla | | X | | Lucy's Warbler | | X | |
| Orange-crowned Warbler | | | X | White-faced Ibis | | | X |
| Snowy Plover | | | X | American Avocet | | | X |
| Black Tern | | | X | American White Pelican | | | X |
| Clark's Grebe | | | X | Long-billed Curlew | | | X |
| Short-eared Owl | | | X | Greater Sandhill Crane | | | X |

2. Wildlife Habitat Conditions Monitoring Summary

The area contains native grasslands, salt flat areas, riparian vegetation consisting of the Franklin Lake marshes, agricultural lands, big sagebrush/native grass communities and crested wheatgrass stands with increasing sagebrush.

The wildlife key areas (AY-01-02, AY-01-03) are located the northern and southern sections of the allotment and are characterized as either native salt grassland on alkali soil type with isolated islands of big sagebrush species (02) or within the salt flats (03).

Wildlife habitat monitoring at these key areas completed on July 19, 1988 indicated that canopy cover was comprised of saltgrass (42%), phacelia (20%), seepweed (22%), black greasewood (10%) with saltgrass (96%) being the dominant grass. Habitat was rated as being in good condition for pronghorn antelope. This transects has not be monitored since this 1988 date other than site visits in 2000, 2002 and 2006.

During the summer of 2006 visit, conditions were noted as being similar to those documented in 1988. Crested wheatgrass was sparse in the seeding. Shrub canopy cover was not sampled in this area, although ocular observations estimated it to be 30-40%. Though some sage plants were dead or decadent (decadent means greater than 50% of individual plant canopies are dead or dying) the majority of plants were vigorous and healthy. Ocular observations showed grass/forb understory was limited due to the higher soil alkali content characteristic of the allotment (see photos).

Wildlife habitat values being met between the various vegetation communities. Though all wildlife values are not met in every area of the allotment, they are appropriate to the site.

Big Game Key Browse – Wyoming big sagebrush age, form class and vitality was in satisfactory condition in 2006. As such mule deer and antelope habitat standards were met.

Southern Areas



Salt flats

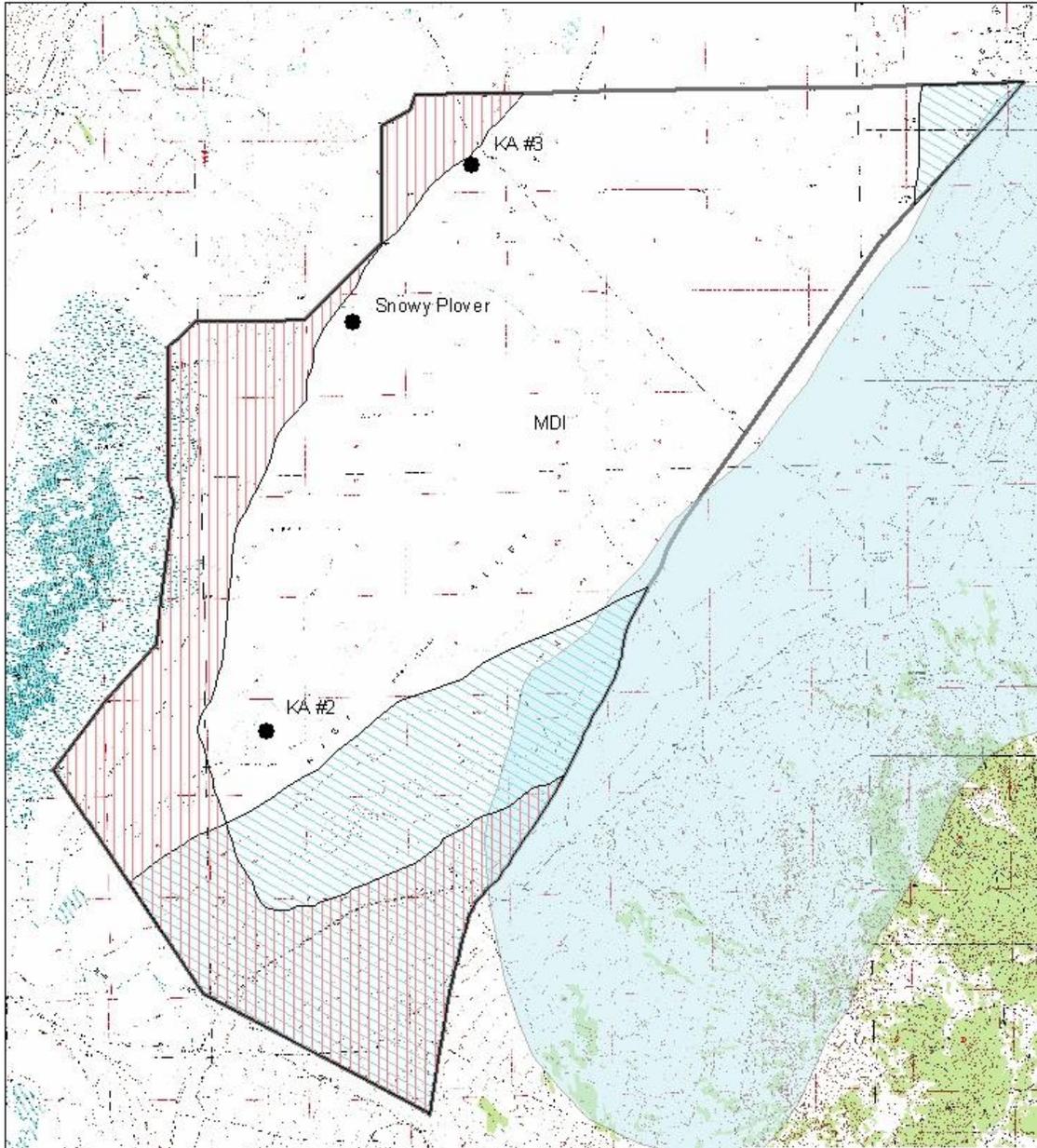


Northern Areas



Map 3.

Ruby #8 Wildlife Data



Legend

-  Sage Grouse Summer
-  Sage Grouse Winter
-  Antelope Crucial Winter

1 0 2 Miles

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
LUCKO FIELD OFFICE



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: Interpretation of the utilization data coupled with recent field observations at the key area indicates that this standard is being met. In 1967 5% of the native plant community within the Ruby #8 Allotment was converted to a crested wheatgrass seeding. Plant communities dominated by crested wheatgrass in this ecological site have the potential of achieving favorable site stabilization characteristics associated with the attainment of this standard.

Soils on the Ruby #8 allotment are located on lake plains and terraces, alluvial flats, barrier beaches, spits and dunes. These soils are deep and have medium to heavy textures. Many of the soils are frequently ponded in the top foot. Most of the soils have a slight water erosion hazard and a moderate wind erosion hazard. Commonly the soils have a very slightly saline to strongly saline horizon within 30 inches of the soil surface. They also have a slightly sodic to strongly sodic horizon within 30 inches of the surface.

The utilization objective of 60% average not to exceed 70% in any one year for crested wheatgrass seedings has been met. The attainment of the utilization objective in conjunction with the appropriate season of use has resulted in a healthy and vigorous crested wheatgrass plants in the seeding. The vegetative cover required to stabilize soils and ensure appropriate infiltration and permeability rates is being maintained in the allotment here.

The utilization objective of 45% average, while never exceeding 60% use in any single year on native range, has also been met every year since 1987 with the exception of one reading of 48% on Western wheatgrass in 1991. Within the native plant community of the Ruby #8 Allotment, species diversity is good with good representation of life forms and number of species present. Community structure was observed to have good diversity of height, size and distribution of plants and roots. Plant health and vigor within the native communities is excellent with the majority of the plants productive and alive. Seed production within the native communities observed was good with the majority of seed stalks adequate for stand maintenance soils were also stable here with infiltration and permeability rates being appropriate for the site.

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: A small portion of the upland habitat within the southern areas of the Ruby #8 allotment was altered in 1967 when the native plant community was seeded with crested wheatgrass. The plant community in the Ruby #8 Allotment at this time consists of native salt grasslands, salt flats, riparian vegetation associated with the Franklin Lake marshes, agricultural lands, native big sagebrush/grass communities and seedings. The upland habitat has been evaluated towards meeting this standard based on the potential of represented species to provide suitable feed, water, cover and living space for animal species and maintain ecological processes within the allotment.

The review of 2002 and 2006 information shows habitats do exhibit a healthy, productive, and diverse population of native and/or desirable plant species, appropriate to the site characteristics and can provide suitable feed, water, cover and living space for mule deer and antelope. The allotment is characterized as mule deer intermediate habitat and as observations in 2006 showed vegetation to be diverse and expressing high vigor throughout the allotment, there are no conflicts that prohibit the meeting of the standard for mule deer. Pronghorn antelope were observed utilizing the entire allotment, even the salt flat areas, in the summer of 2006. Sage grouse can utilize habitats for summer and winter use as well as nesting and brood rearing activities. Habitat is not used primarily by any know threatened or endangered species. Habitat provides adequate raptor forage habitat and bats have the potential to utilize forage throughout all portions of the allotment.

The level of livestock use observed in the Ruby #8 allotment in 2006 and past livestock use levels are not impacting the maintenance of sufficient residual herbaceous vegetation to provide habitat for wildlife species. Sage grouse habitat quality is increasing in the seeding without substantial impact to the habitat values of this area as a perennial grassland.

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 Ruby #8 Allotment.

Determination

Based on the data presented in this assessment, I have determined that Standards 1, 3 and 4 for rangeland health are being met. As stated above, Standard 2 and 5 do not apply to the Ruby #8

Allotment. Existing livestock grazing is in conformance with the guidelines for each standard for rangeland health.

/s/ Bryan K. Fuell Acting for

08/29/2007

SHANE DeFOREST
Assistant Field Manager
Renewable Resources

Date

Appendix A.

Clover North Ruby BLM Allotments (Snow Water Lake, Warm Creek, Ruby 1-8, West Gardner, Bennett Field, Harrison)

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 *Anus cyanoptera*

| | |
|------------------------|------------------------------|
| 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>Tetrao gallus 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 *Grus canadensis canadensis*

Order: Charadriiformes (Wading Birds)

Family: Charadriidae (Plovers)

Black-bellied Plover *Pluvialis squatarola*
Snowy Plover *Charadrius alexandrinus*
Semi-palmated Plover *Charadrius semipalmatus*
Killdeer *Charadrius vociferus*
Mountain Plover *Charadrius montanus*

Family: Recurvirostridae (Avocets)

Black-necked Stilt *Himantopus mexicanus*
American Avocet *Recurvirostra americana*

Family: Scolopacidae (Sandpipers, Phalaropes)

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

Family: Laridae (Gulls, Terns)

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

Order: Columbiformes (Pigeons and Allies)

Family: Columbidae (Doves)

Rock Dove *Columba livia*
White-winged Dove *Zenaida asiatica*
Mourning Dove *Zenaida macroura*

Order: Cuculiformes (Cuckoos and Allies)

Family: Cuculidae (Cuckoos and Roadrunners)

Yellow-billed Cuckoo *Coccyzus americanus (L.E.)*

Order: Strigiformes (Nocturnal Flesh Eaters)

Family: Tytonidae (Barn Owls)

Barn Owl *Tyto alba*

Family: Strigidae (Owls)

Flammulated Owl *Otus flammeolus*
Western Screech-Owl *Otus kennicottii*
Great Horned Owl *Bubo virginianus*
Snowy Owl *Nyctea scandiaca*
Northern Pygmy-Owl *Glaucidium gnoma*
Burrowing Owl *Athene cucularia*
Long-eared Owl *Asio otus*
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 *Tachycineta thalassina*
Bank Swallow *Riparia riparia (L.E.)*
N. Rough-winged Swallow *Stelgidopteryx serripennis*

Cliff Swallow *Petrochelidon pyrrhonota*
Barn Swallow *Hirundo rustica*

Family: Paridae (Chickadees, Titmice)

Black-capped Chickadee *Poecile atricapillus*
Mountain Chickadee *Poecile gambeli*
Juniper Titmouse *Baeolophus griseus*

Family: Aegithalidae (Bushtits)

Bushtit *Psaltriparus minimus*

Family: Sittidae (Nuthatches)

Red-breasted Nuthatch *Sitta canadensis*
White-breasted Nuthatch *Sitta carolinensis*

Family: Certhiidae (Creepers)

Brown Creeper *Certhia americana*

Family: Troglodytidae (Wrens)

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

Family: Cinclidae (Dippers)

American Dipper *Cinclus mexicanus*

Family: Regulidae (Kinglets)

Golden-crowned Kinglet *Regulus satrapa*
Ruby-crowned Kinglet *Regulus calendula*

Family: Sylviidae (Gnatcatchers)

Blue-gray Gnatcatcher *Poliophtila caerulea*

Family: Turdidae (Thrushes)

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

Family: Mimidae (Thrashers, Mockingbirds)

Northern Mockingbird *Mimus polyglottos*
Sage Thrasher *Oreoscoptes montanus*

Family: Sturnidae (Starlings)

European Starling *Sturnus vulgaris*

Family: Motacillidae (Pipits)

American Pipit *Anthus rubescens*

Family: Bombycillidae (Waxwings)

Bohemian Waxwing *Bombycilla garrulus*
Cedar Waxwing *Bombycilla cedrorum*

Family: Parulidae (Wood Warblers)

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

Family: Thraupidae (Tanagers)

Western Tanager *Piranga ludoviciana*

Family: Emberizidae (Sparrows, Towhees, Juncos)

Green-tailed Towhee *Pipilo chlorurus*
Spotted Towhee *Pipilo maculatus*
American Tree Sparrow *Spizella arborea*

| | |
|--------------------------------|--|
| 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 lincolni</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.)

| | |
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| 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> |
|---------------|--------------------------|

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)

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| 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)

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|--------------------------------|----------------------------------|
| 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> |
|-----------------|--------------------------|

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 tigrus*

Family: Boidae (Boas, Pythons)

Rubber Boa *Charina bottae*

Family: Colubridae (Solid-toothed Snakes)

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

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| 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> |
|-------------------------|---------------------------------|

Amphibians

Order: Anura (Frogs and Toads)

Family: Pelobatidae (Spadefoots)

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|----------------------------|---------------------------------|
| Great Basin Spadefoot Toad | <i>Scaphiopus intermontanus</i> |
|----------------------------|---------------------------------|

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> |
|--------------|--------------------|

Family: Hylidae (Treefrogs)

| | |
|------------------|---------------------|
| Pacific Treefrog | <i>Hyla regilla</i> |
|------------------|---------------------|

Fish

Order: Salmoniformes

Family: Salmonidae (Salmon and Trout)

| | |
|-------------|------------------------------|
| Brook Trout | <i>Salvelinus fontinalis</i> |
|-------------|------------------------------|

Order: Scorpaeniformes

Family: Cottidae (Sculpins)

| | |
|----------------|-------------------------|
| Paiute Sculpin | <i>Cottus beldingii</i> |
|----------------|-------------------------|

Order: Cypriniformes

Family: Cyprinidae (Carps and Minnows)

| | |
|---------------------|----------------------------------|
| Chiselmouth | <i>Acrocheilus alutaceus</i> |
| Northern Pikeminnow | <i>Ptychocheilus oregonensis</i> |
| Relict Dace | <i>Relictus solitarius</i> |
| Longnose Dace | <i>Rhinichthys cataractae</i> |
| Speckled Dace | <i>Rhinichthys osculus</i> |
| Redside Shiner | <i>Richardsonius balteatus</i> |

Family: Catostomidae (Suckers)

| | |
|------------------|-------------------------------|
| Bridgelip Sucker | <i>Catostomas columbianus</i> |
|------------------|-------------------------------|

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) | <i>Pandion haliaetus</i> |
| White-faced ibis (sensitive) | <i>Plegadis chihi</i> |
| Least bittern (sensitive) | <i>Ixobrychus exilis</i> |

Mammals

| | |
|---------------------------------------|---|
| Pygmy rabbit (sensitive) | <i>Brachylagus idahoensis</i> |
| Townsend's big-eared bat (sensitive) | <i>Corynorhinus townsendii townsendii</i> |
| Spotted bat (sensitive) | <i>Euderma maculatum</i> |
| Brazilian free-tailed bat (sensitive) | <i>Tadarida brasiliensis</i> |
| Hoary bat (sensitive) | <i>Lasiurus cinereus</i> |
| Pallid bat (sensitive) | <i>Antrozous pallidus</i> |
| Silver-haired bat (sensitive) | <i>Lasionycteris noctivagans</i> |
| Western red bat (sensitive) | <i>Lasiurus blossevillii</i> |
| Big brown bat (sensitive) | <i>Eptesicus fuscus</i> |
| Little brown myotis (sensitive) | <i>Myotis lucifugus</i> |
| Small-footed myotis (sensitive) | <i>Myotis ciliolabrum</i> |
| Long-eared myotis (sensitive) | <i>Myotis evotis</i> |
| Fringed myotis (sensitive) | <i>Myotis thysanodes</i> |
| Long-legged myotis (sensitive) | <i>Myotis volans</i> |
| Yuma myotis (sensitive) | <i>Myotis yumanensis</i> |
| Occult myotis (sensitive) | <i>Myotis lucifugus occultus</i> |
| Western pipistrelle (sensitive) | <i>Pipistrellus hesperus</i> |
| Preble's shrew (sensitive) | <i>Sorex preblei</i> |