

BUREAU OF LAND MANAGEMENT

**ELKO DISTRICT
Wells Field Office**

Metropolis Seeding Allotment

**DRAFT
NORTHEASTERN GREAT BASIN
STANDARDS AND GUIDELINES FOR
RANGELAND HEALTH ASSESSMENT**

Elko District, Nevada

Wells Field Office

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Table of Contents

I. Introduction.....	1
II. Allotment Description, Resource Values, and Uses.....	2
III. Summary of Available Monitoring Data.....	6
IV. Conclusions and Determinations.....	8
Literature Cited.....	12

Attachments

- Map 1: Metropolis Seeding Allotment.
- Map 2: Metropolis Seeding Allotment Antelope Winter Habitat.
- Map 3a: Metropolis Seeding Allotment Sage Grouse Nesting Habitat.
- Map 3b: Metropolis Seeding Allotment Sage Grouse Summer Habitat.
- Map 3c: Metropolis Seeding Allotment Sage Grouse Winter Habitat.

Appendices

- A: Birds by Habitat Type within the Metropolis Seeding Allotment.
- B: Mammals by Life Zone within the Metropolis Seeding Allotment.
- C: Mammals by Vegetation Association within the Metropolis Seeding Allotment.
- D: Bats by Vegetation Type within the Metropolis Seeding Allotment.
- E: Reptiles and Amphibians by Vegetation Association within the Metropolis Seeding Allotment.
- F: Vertebrates by Key Habitats within the Metropolis Seeding Allotment.
- G: BLM Sensitive Terrestrial Vertebrates Species within the Metropolis Seeding Allotment.

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NORTHEASTERN GREAT BASIN STANDARDS AND GUIDELINES ASSESSMENT
2009

METROPOLIS SEEDING ALLOTMENT
Wells Field Office

I. Introduction

The Bureau of Land Management (BLM) grazing regulations at 43 CFR 4130.3-1(c) require that grazing permits issued by the BLM contain terms and conditions that ensure conformance with BLM regulations at 43 CFR 4180, which are the regulations under which the *Northeastern Great Basin Standards and Guidelines for Grazing Administration (1997)* were developed. Recently, the Wells Field Office completed an assessment of the achievement of these standards on the Metropolis Seeding Allotment. The results of this assessment are presented in this report. This assessment will serve to inform the BLM's determination as to whether these standards are being met, and, if they are not met, whether existing grazing management practices contribute to their lack of attainment. The approved standards for rangeland health 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.

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 patterns of habitat 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 on public lands, and there are no wild horse herd management areas in this allotment.

II. Allotment Description, Resource Values, and Uses

The Metropolis Seeding Allotment is located approximately thirteen miles northwest of Wells, NV. See Map 1. Elevations in the allotment range from 5,460 to 5,530 feet above sea level. Topography in the allotment is generally flat, with low ridges and shallow swales. The allotment contains approximately 2,457 acres of land, all of which are public.

In 1985, the Wells Resource Management Plan categorized the Metropolis Seeding Allotment as a class “I”, or Improve, allotment. Characteristics of Category I allotments were:

- Existing range improvements are inadequate. Redesign and/or removal of existing projects and development of new ones is required.
- The potential is moderate to high for a positive economic return on public investment for potential new range improvements and vegetative manipulations. There is potential for high cost effectiveness.
- There are one or more major resource conflicts present and they are responsive to or correctible through management.
- The land ownership objective states that when called for in the planning system, the public lands will be retained/consolidated to meet future management goals.
- Livestock distribution is poor to fair. Not all of the areas are being used proportionately. The current level of use by all grazing animals may exceed what the resource can support.
- The present activity plan if implemented is deficient and requires modification to resolve resource conflicts such as range improvements. There are physical problems that inhibit implementation of a new plan at the present time if one is required.
- The current ecological range and watershed condition is unsatisfactory. The primary concern is with stabilizing any downward trends and improving them where cost effective. The average climax potential is moderate to high.

The RMP placed Metropolis Seeding into the “I” category due to poor livestock distribution caused by a lack of available water, especially in the southwest portion of the allotment.

The allotment has no interior pasture fences. See Map 1. The entire allotment was seeded to crested wheatgrass during the 1960’s. Wyoming big sagebrush along with a variety of other native shrubs, forbs, and grasses have become re-established in the plant community. The only waters in the allotment are found at a well and a trough on a pipeline that extends into Metropolis Seeding from an adjacent allotment, both of which are located towards the northern part of the allotment. See Map 1 for the location of water developments.

The BLM completed an allotment evaluation for this allotment in 1990. The findings of the evaluation resulted in a grazing agreement that governed livestock grazing management on the allotment. The agreement called for the construction of a cross fence and additional water sources, after which the following grazing system would be implemented:

Metropolis Seeding Allotment Standards and Guidelines Assessment

Year	# Cattle	Pasture A	Pasture B
1	413	April 1- May 10	May 11- June 22
2	413	May 11- June 22	April 1- May 10
3	Repeat Cycle		

However, the projects specified in the agreement have not been implemented. Therefore, the permittee has grazed the entire allotment as a single pasture during the time period specified on the permit (April 16 - August 1) annually since 1990.

Total permitted use amounts to 1,126 Animal Unit Months (AUMs). The allotment is grazed by one permittee, Winchell Ranch.

Utilization objectives for the key species in the allotment are set as follows:

Table 1.

Key Species	Utilization Objective
crested wheatgrass	Maximum annual utilization level of 60%

The Metropolis Seeding Allotment in association with the surrounding habitat may provide habitat for a multitude of bird, mammal, reptile, and amphibian species that commonly or occasionally inhabit sagebrush habitats throughout the northeastern Nevada. A list of species that potentially inhabit the types of habitats found in this allotment are presented in Appendices A through F. The BLM developed these lists from multiple sources and considers them to be a representation of the species most likely to be present on or transitory through this allotment.

Big Game Species

The entire allotment is mule deer intermediate habitat. Additionally, the southern 2/3 of the allotment is identified as antelope crucial winter range (see Map 2).

Federally Listed and Candidate Species

There are no known threatened or endangered species present or known to exist in the Metropolis Seeding Allotment. The gray wolf (endangered) and the black bear (threatened) are potential transients (at best) to this District. The gray wolf is listed on the Nevada Department of Wildlife Master List for northeastern Nevada as being "locally extirpated." The black bear is on the BLM Nevada Elko District Mammal List with the notation that "occasionally one will wander in from Idaho." Neither has been recently documented on the district. The yellow-billed cuckoo is a candidate species that may occur in this portion of the Elko District, however none have been documented in the allotment. Furthermore, there is no appropriate habitat (cottonwood-willow forest) for yellow-billed cuckoos located within or in close proximity to the Metropolis Seeding Allotment. Another candidate species that potentially inhabit this portion of the District is the Columbian spotted frog. None have been documented by the BLM in the allotment. The Nevada Natural Heritage Program identified the Lahontan cutthroat trout (a threatened species) and the Columbian spotted frog as a species that have been recorded within 8

km of the allotment. Habitat suitable for these species only exists in riparian areas on private land outside of the allotment.

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 Service 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 Service has also prepared a draft post-delisting bald eagle monitoring plan. These documents and more information about the bald eagle are available on the Service’s website at <http://www.fws.gov/migratorybirds/baldeagle.htm>.

Though not expected to use the habitat types found in this allotment heavily for foraging or other behaviors, transient-foraging could occur during the winter months. Additionally, bald eagles may use areas surrounding the allotment 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.

Special Status Species

There are 31 bird, mammal, reptile, and amphibian species designated as Nevada BLM Sensitive Species which potentially use the habitat types present in this allotment. See Appendix G for a complete list of these species.

Greater Sage Grouse

The allotment is within the O’Neil Basin Sage Grouse Population Management Unit (PMU) in Northeastern Nevada considered under the Elko Strategy by the Northeastern Nevada Stewardship Group Inc. (NNSG). The western one third of the allotment lies within sage grouse nesting and early brood rearing habitat, with the entire allotment lying within late summer and winter sage grouse habitat (see Map 3a – 3c). There are no sage grouse leks (breeding display areas) within the Metropolis Seeding Allotment boundary. The nearest known lek is approximately 5.7 miles northeast of the allotment.

Pygmy rabbits

Pygmy rabbits have been petitioned for listing as threatened or endangered under the Endangered Species Act of 1973. On January 8, 2008, the U.S. Fish and Wildlife Service announced a 90-Day finding in the Federal Register indicating that, “... the petition presents substantial scientific or commercial information indicating that listing the pygmy rabbit may be warranted.” The Finding identifies the need to conserve pygmy rabbit habitat. Pygmy rabbits are found in a variety of vegetation types, including big sagebrush, that are suitable for creating their burrow system. Though no known formal surveys have been completed on the Metropolis Seeding

Metropolis Seeding Allotment Standards and Guidelines Assessment

Allotment, pygmy rabbits have been reported by BLM personnel approximately 2.8 miles away in the Tabor Flats area. The sites were within stands of big sagebrush.

Bats

Sixteen BLM sensitive bat species have been documented in the Elko District. The Metropolis Seeding Allotment has the potential to provide habitat for a variety of these species (Appendices B through D). Although no surveys for bats have been conducted in the Metropolis Seeding Allotment, the potential exists for bat use of the allotment for roosting and foraging. Bats occur in a variety of habitats in eastern Nevada, which include spring riparian areas, canyons, coniferous forests, and deciduous forests. Wetlands and surface water associated with springs, sagebrush rangelands and aspen stands provide habitat for some or all of these species. However, the Metropolis Seeding Allotment lacks all of these habitat components, and bats must travel off the allotment to find them. There are numerous structures and homesteads throughout the greater Metropolis area where bats can roost on a temporary or permanent basis. Foraging areas are provided on the allotments' native uplands and in riparian areas located in the general area, particularly along Tabor Creek. Bats could transient forage throughout the area.

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.

Raptors

Ten diurnal raptor and owl species are present in the Elko District with the potential to occur in the Metropolis Seeding Allotment, based upon habitat types present. The following have been documented nesting within the District: turkey vulture, northern harrier, Cooper's hawk, northern goshawk, ferruginous hawk, golden eagle, American kestrel, prairie falcon, and burrowing owl. Rough-legged hawks may winter in the allotment.

Migratory Birds

On January 11, 2001, President Clinton signed the Migratory Bird Executive Order 13186 entitled "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. Pursuant to this act, special attention is given to birds, both migratory and resident, that may occupy habitat in this allotment.

According to the BLM Elko District Bird List, there are approximately 246 species that could inhabit the District area of jurisdiction on a seasonal or yearlong basis (BLM, 1999). Careful review of the Nevada Breeding Bird Atlas and widely accepted range maps reveal several more species that may possibly inhabit the District. The Metropolis Seeding Allotment includes habitat for many of these bird species on a seasonal or yearlong basis. Bird species likely to use the Metropolis Seeding Allotment and the habitat(s) where they are likely to be found are included in Appendix A. This listing is modified from the 1999 Nevada Partners in Flight Bird Conservation Plan.

Metropolis Seeding Allotment Standards and Guidelines Assessment

Recreational Use

No established recreational areas exist on the Metropolis Seeding Allotment. However, the allotment does receive dispersed recreational use due to the close proximity to the community of Wells. Most of this recreational activity consists of off road vehicle use (all terrain vehicles, dirt bikes, and four wheel drive vehicles) and target practice.

III. Summary of Available Monitoring Data

A. Indicators and Studies Summary

1. Key Area Utilization

A key area is a representative site within a use area selected to monitor trends in the plant community or soil. A key area is monitored to determine how management and natural factors are affecting similar areas in the allotment. The use levels summarized below represent the highest levels off annual use on key forage species at the key areas in the allotment. n years not listed utilization data was not collected.

Key Area #1	
Key Species: crested wheatgrass (<i>Agropyron cristatum</i>)	
Year	Crested wheatgrass
1988	46%
1989	46%
1990	40%
1992	37%
1995	14.5%
1997	10%
1998	27%
2006	12.5%

Key Area #2	
Key Species: crested wheatgrass (<i>Agropyron cristatum</i>)	
Year	Crested wheatgrass
1988	43%
1990	41%
1992	44%
1995	13.5%
1997	11.5%
1998	27%
2006	12.5%

2. Actual Use

Actual use data is provided annually by the permittee by allotment to determine the amount of AUMs used by livestock during each grazing year. Actual use data is summarized by year in the table below.

Actual Use: Metropolis Seeding	
Year	Actual use (AUMs)
1986	842
1987	713
1988	792
1989	749
1990	697
1991	560
1992	501

Metropolis Seeding Allotment Standards and Guidelines Assessment

Actual Use: Metropolis Seeding continued	
1993	509
1994	603
1995	687
1996	279
1997	318
1998	376
1999	379
2000	559
2001	540
2002	380
2003	348
2004	408
2005	644
2006	552
2007	325

3. Weight-Estimate Production

Weight-estimate production data measures the vegetative production at a site in relation to its site potential. The total dry weight production for crested wheatgrass at Key Area 1 in 1986 is summarized below.

Production Data: Metropolis Seeding	
Species	Total Dry Weight Production (lbs./acre)
1986	
Key Area 1	
Crested wheatgrass	879

4. Point Sampling Cover

Point sampling cover is a method for measuring the percentage of ground surface covered by vegetation and other site components. The point sampling cover collected at the key areas in the allotment in 2000 is summarized below.

Point Sampling Cover								
Key Area	Basal Cover (%)	Canopy Cover (%)	Total Vegetative Cover (%)	Litter (%)	Bare Ground (%)	Rock (%)	Cryptogrammic Crust (%)	Total Observations
KA #1	15	11	26	6	66	1	1	500
KA #2	14	18	32	4	64	0	0	500

Metropolis Seeding Allotment Standards and Guidelines Assessment

5. Key to Plant Species

Key to Plant Acronyms		
Plant Acronym	Species name	Common name
AGCR	Agropyron cristatum	crested wheatgrass

6. Wildlife Studies

No wildlife key areas have been set up in the Metropolis Seeding Allotment. Visual observations were made throughout the allotment in 2008 in order to estimate sagebrush canopy cover and herbaceous vertical cover. Sagebrush canopy cover, where it occurs was estimated at 20% to 30% based on data collected in 2002 and field observations in 2006 and 2008. These areas are adequate to provide sage grouse with the needed cover and nutritional requirements for year-round activities.

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 to the guidelines.

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

Rationale:

Landforms present are predominately low rolling hills. The Metropolis Seeding Allotment lies in the valley floor off the west side of the Snake Mountains Range.

During the 1960's, the native plant community was converted to crested wheatgrass seedings. Crested wheatgrass was seeded for the purpose of providing forage for livestock and to increase flexibility in grazing management options in other areas. The dominant ecological site within the crested wheat seedings in the Metropolis Allotment is Loamy 8"-10" precipitation zone. The site characteristics and the average annual precipitation associated with this ecological site are suitable for producing healthy and vigorous crested wheatgrass plant communities. 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.

The dominant soils in the Metropolis Seeding Allotment are from the Bioya-Orovada soil series. They are positioned on fan piedmont and composed of mixed fine-sandy alluvium. They are moderately deep and well drained with a sandy texture. According to the U.S. Natural Resource

Metropolis Seeding Allotment Standards and Guidelines Assessment

Conservation Service Nevada site description, the approximate vegetative ground cover of native vegetation appropriate for the Loamy 8 to 10" precipitation zone ecological site ranges between 20% to 30%.

Recent monitoring information including cover data accompanied by field observations indicate that sufficient vegetative cover, litter and rock fragments are present to meet the requirements of this standard given the potential of the sites monitored. Furthermore, the utilization objectives established on both allotments have been achieved. The attainment of the utilization objective has resulted in healthy and vigorous crested wheat plants in the allotment. The vegetative cover required to stabilize soils and ensure appropriate infiltration and permeability rates is being maintained in the allotment.

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. **Met.**

Rationale: The evaluation of existing data indicates that this standard is being met in the uplands.

The Upland habitat values within the allotment were altered in the 1960s when the native plant community was seeded with crested wheatgrass. Crested wheatgrass seedings were commonly established during this time period to provide additional spring forage for livestock on range sites that exhibited low productivity. Although this practice is controversial from a wildlife standpoint, one benefit of establishing these seedings was to relieve livestock grazing pressure on higher elevation range sites which were more productive and diverse. Although the plant community continues to be dominated by crested wheatgrass, some native species such as Wyoming big sagebrush, Douglas rabbitbrush, rubber rabbitbrush, lupine, and Sandberg's bluegrass have re-established. The upland habitat has been evaluated towards meeting this standard based on the potential of crested wheatgrass and other existing upland species to provide suitable feed, water, cover and living space for animal species and to maintain ecological processes within the allotment.

Production as an attribute provides insight into plant vigor and takes into account vegetation attributes such as height, basal diameter, number of stems or leaf whorls and volume. These attributes are reflected in the biomass or production of plants. Although production is affected by annual precipitation, inferences can be made to the expected productivity of the site in relation to its potential. The review of more recent information including key area photographs, shows no indication that the productive capacity or the viability of the seeding has been reduced since the last production estimates.

Production studies also provide insight into plant diversity, a key component describing this standard. Existing monitoring data have not shown any re-occupation by native vegetation at the study site, however, sagebrush, other native shrubs, and native forbs and grasses have noticeably begun to establish themselves in other areas within the seeding. The primary vegetative

Metropolis Seeding Allotment Standards and Guidelines Assessment

component remains crested wheatgrass. The Land Use Plan objective for this allotment is to maintain prior seeded areas; however, any future maintenance activities that may be considered would analyze impacts to wildlife values that were not originally considered in the original conversion. Sage grouse conservation planning efforts are currently underway within the Elko District Office. Specific Population Management Units (PMUs) have been established and will be evaluated to determine priority attention based on identified risk factors, which include habitat alteration. Based on these determinations a series of appropriate practices designed to enhance sage grouse habitat will be assessed and incorporated as recommended.

Recorded utilization levels have been below desired use levels and have resulted in sufficient residual herbaceous vegetation to provide cover and forage for wildlife species relying upon the habitat values in the allotment. Wildlife values, specifically sage grouse values, have increased in these seedings as the diversity of vegetation and increase in sagebrush cover have increased significantly from the original vegetation conversion and will continue to increase over time. Further, this level of use in accordance with existing management has ensured that crested wheatgrass plants are vigorous, able to reproduce and increase in long term productivity. The presence of these vegetative attributes, indicate that upland habitat values given the present capability of the allotment, supports the attainment of this standard.

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

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 Metropolis Seeding Allotment.

Determination

Based on information provided in this assessment, I have determined that all standards are being met and current livestock grazing is in conformance with the standards.

Bryan K. Fuell
Manager, Wells Field Office

Date

Literature Cited:

NDEP, 2000. *Water Quality Regulations*. Nevada Division of Environmental Protection, Bureau of Water Quality Planning, Carson City, Nevada.

NRCS, 1987 and 2002. *Nevada site Descriptions, Major Land Resource Area 28B (1987) and Soil Survey of Elko County, Southeast Part (2002)*. National Resource Conservation Service, Washington D.C.

Bernard, S. R. 1974. Distribution of mammals, reptiles, and amphibians by BLM physiographic regions, and A. W. Kuchler's associations for the eleven western states. Bureau of Land Management Technical Note 301, Washington, D. C., USA.

Bureau of Land Management. 1992. BLM Nevada Elko District Bird List. Bureau of Land Management, Elko, Nevada, USA.

Bureau of Land Management. 1992. BLM Nevada Elko District Mammal List. Bureau of Land Management, Elko, Nevada, USA.

Bureau of Land Management. 1992. BLM Nevada Elko District Reptile and Amphibian List. Bureau of Land Management, Elko, Nevada, USA.

Hall, R. E. 1995. *Mammals of Nevada*. University of Nevada, Reno, Nevada, USA.

Nevada Partners in Flight Working Group. 2006. Nevada Partners in Flight bird conservation plan. Nevada Partners in Flight, Nevada, USA.

Sibley, D. A. 2003. *The Sibley field guide to birds of Western North America*. Alfred A, Knopf, New York, New York, USA.

Metropolis Seeding Allotment Standards and Guidelines Assessment

Appendix A: Birds by habitat type in the Metropolis Seeding Allotment. This list was developed from the BLM Elko Bird List, the Nevada Breeding Bird Atlas, the range maps in the Sibley Guide to Birds, the April 2005 NDOW Master Species List, and the Nevada Wildlife Action Plan Range Maps, as well as those known to exist in the District. Habitat information is from the Nevada Partners in Flight Bird Conservation Plan.

Species	Sagebrush
Turkey Vulture	F
Northern Harrier	M
Cooper's Hawk	F
Northern Goshawk	F
Ferruginous Hawk	B
Rough-legged Hawk	F
Golden Eagle	F
American Kestrel	F
Prairie Falcon	F
Gray Partridge	B
Chucker	B
Columbian Sharp-tailed Grouse	B
Greater Sage Grouse	B
Mountain Quail	B
California Quail	B
Burrowing Owl	B
Common Nighthawk	B
Common Poor-will	B
Rufous Hummingbird	M
Gray Flycatcher	B
Loggerhead Shrike	B
Horned Lark	B
Bushtit	B
Mountain Bluebird	F
Sage Thrasher	B
Black-throated Sparrow**	B
Sage Sparrow	B
Brewer's Sparrow	B
Vesper Sparrow	B
Lark Sparrow**	B
Snow Bunting***	I
Western Meadowlark	B
Brown-headed Cowbird	B
Black Rosy Finch	W
American Goldfinch	M

* B = Breeding, F = Feeding, I = Incidental, M = Migration, W = Wintering.

** These were not on the BLM Elko Field Office Bird List but were documented as breeding in the district by the Great Basin Bird Observatory in their Atlas of the Breeding Birds of Nevada.

*** This species was not on the BLM Elko Field Office Bird List but is shown in the Sibley Guide to Birds as having a winter range that overlaps the Elko District.

Metropolis Seeding Allotment Standards and Guidelines Assessment

Appendix B: Mammals by life zone in the Metropolis Seeding Allotment. This list was developed from the BLM Elko Mammal List, the April 2005 NDOW Master Species List, and the Nevada Wildlife Action Plan Range Maps, as well as those known to exist in the District. Data on life zones are from Hall's Mammals of Nevada.

Species	Upper Sonoran (Sagebrush)
Merriam's Shrew	X
Vagrant Shrew	X
Water Shrew	X
Preble's Shrew	X
Pallid Bat	X
Townsend's big-eared Bat	X
Big Brown Bat	X
Spotted Bat	X
Silver-haired Bat	X
Western Red Bat*	X
Hoary Bat	X
Western Small-footed Myotis	X
Little Brown Bat	X
Fringed Myotis	X
Long-legged Myotis	X
Yuma Myotis*	X
Western Pipistrelle*	X
Black-tailed Jack Rabbit	X
Nuttall's Cottontail	X
Desert Cottontail	X
Pygmy Rabbit	X
Yellow-bellied Marmot	X
Townsend's Ground Squirrel	X
Wyoming Ground Squirrel	X
Belding's Ground Squirrel	X
White-tailed Antelope Squirrel	X
Least Chipmunk	X
Townsend's Pocket Gopher	X
Botta's Pocket Gopher*	X
Southern Pocket Gopher*	X
Little Pocket Mouse	X
Great Basin Pocket Mouse	X
Dark Kangaroo Mouse	X
Ord's Kangaroo Rat	X
Chisel-toothed Kangaroo Rat	X
Western Harvest Mouse	X
Canyon Mouse	X
Deer Mouse	X
Brush Mouse**	X
Pinon Mouse	X
Northern Grasshopper Mouse	X
Desert Woodrat	X
Montane Vole	X
Sagebrush Vole	X
Muskrat	X

Metropolis Seeding Allotment Standards and Guidelines Assessment

Beaver	X
Black Rat	X
House Mouse	X
Porcupine	X
Coyote	X
Red Fox	X
Gray Fox	X
Kit Fox	X
Raccoon	X
Ringtail	X
Long-tailed Weasel	X
Mink	X
River Otter	X
Badger	X
Western Spotted Skunk	X
Striped Skunk	X
Mountain Lion	X
Bobcat	X
Mule Deer	X
Pronghorn	X
Bighorn Sheep	X
Elk	X

* These were not on the BLM Elko Field Office Mammal List but were on the April 2005 NDOW Master List.

** This species was not on the BLM Elko Field Office Mammal List but is potentially on the District according to Nevada Wildlife Action Plan.

Metropolis Seeding Allotment Standards and Guidelines Assessment

Appendix C: Mammals by vegetation association in the Metropolis Seeding Allotment. This list was developed from the BLM Elko Mammal List, the April 2005 NDOW Master Species List, and the Nevada Wildlife Action Plan Range Maps, as well as those known to exist in the District. Data on plant communities is from the USDI BLM Technical Note Distribution of Mammals, Reptiles, and Amphibians by BLM Physiographic Regions and A.W. Kuchler's Associations for the Eleven Western States. X = Habitat Association was listed. Y = Habitat Association not actually listed, but referred to in the narrative for the species.

Species	Great Basin Sagebrush (38)	Sagebrush Steppe (55)
Merriam's Shrew	X	X
Preble's Shrew		X
Pallid Bat		X
California Myotis*		X
Yuma Myotis*		X
Western Pipistrelle*	X	
Brazilian Free-tailed Bat	X	
White-tailed Jack Rabbit	X	
Black-tailed Jack Rabbit	X	X
Nuttall's Cottontail	X	X
Desert Cottontail	X	
Pygmy Rabbit	X	X
Townsend's Ground Squirrel	X	X
Wyoming Ground Squirrel	X	X
Least Chipmunk	X	X
Townsend's Pocket Gopher	X	X
Little Pocket Mouse	X	
Great Basin Pocket Mouse	X	X
Dark Kangaroo Mouse	X	
Ord's Kangaroo Rat	X	X
Chisel-toothed Kangaroo Rat	X	
Western Harvest Mouse		X
Canyon Mouse	X	
Deer Mouse		Y
Pinon Mouse		X
Northern Grasshopper Mouse		X
Desert Woodrat	X	
Bushy-tailed Woodrat		X
Montane Vole		X
Long-tailed Vole		X
Sagebrush Vole	X	X
Porcupine		X
Gray Wolf*		X
Coyote	Y	Y
Gray Fox	X	
Kit Fox	X	
Western Spotted Skunk	Y	Y
Striped Skunk	Y	Y
Bobcat	Y	Y

Metropolis Seeding Allotment Standards and Guidelines Assessment

Mule Deer	Y	Y
Pronghorn		X
Bison*		X

* These were not on the BLM Elko Field Office Mammal List but were on the April 2005 NDOW Master List.

** This species was not on the BLM Elko Field Office Mammal List but is potentially on the District according to Nevada Wildlife Action Plan.

Metropolis Seeding Allotment Standards and Guidelines Assessment

Appendix D: Bats by vegetation type in the Metropolis Seeding Allotment. This list was put together from species information in the 2006 Nevada Bat Conservation Plan and may not be a complete list of potential habitats.

Species	Sagebrush	Comments
Pallid Bat	X	
Townsend's big-eared Bat	X	
Big Brown Bat	X	
Spotted Bat	X	
California Myotis*		Variety of habitats
Western Small-footed Myotis	X	
Long-eared Myotis	X	
Long-legged Myotis	X	
Yuma Myotis*	X	
Western Pipistrelle*	X	
Brazilian Free-tailed Bat		Variety of habitats

* These were not on the BLM Elko Field Office Mammal List but were on the April 2005 NDOW Master List.

Metropolis Seeding Allotment Standards and Guidelines Assessment

Appendix E: Reptiles and amphibians by vegetation association in the Metropolis Seeding Allotment. This list was developed from the BLM Elko Reptiles and Amphibians List, the April 2005 NDOW Master Species List, and the Nevada Wildlife Action Plan Range Maps, as well as those known to exist in the District. Data on plant communities is from the USDI BLM Technical Note Distribution of Mammals, Reptiles, and Amphibians by BLM Physiographic Regions and A.W. Kuchler's Associations for the Eleven Western States. X = Habitat Association was listed. Y = Habitat Association not actually listed, but referred to in the narrative for the species.

Species	Great Basin Sagebrush (38)	Sagebrush Steppe (55)
Tiger Salamander		X
Great Basin Spadefoot	X	X
Western Toad	X	X
Woodhouse's Toad		X
Pacific Treefrog	X	X
Great Basin Collared Lizard*	X	
Desert Collared Lizard	X	
Long-nosed Leopard Lizard	X	X
Western Fence Lizard	X	
Sagebrush Lizard	X	X
Side-blotched Lizard	X	X
Desert Horned Lizard	X	
Short-horned Lizard		X
Greater Short-horned Lizard**	X	
Western Skink	X	X
Western Whiptail	X	X
Racer	X	X
Striped Whipsnake	X	X
Great Basin Gopher Snake**	X	X
Common Kingsnake**	X	
Gopher Snake	X	X
Long-nosed Snake	X	
Common Garter Snake		X
Western Terrestrial Garter Snake	Y	Y
Ground Snake	X	X
Night Snake	X	X
Western Rattlesnake		X

* This species was not on the BLM Elko Field Office Reptile and Amphibian List but is potentially on the District according to Nevada Wildlife Action Plan.

** These were not on the BLM Elko Field Office Reptile and Amphibian List but were on the April 2005 NDOW Master List.

Metropolis Seeding Allotment Standards and Guidelines Assessment

Appendix F: Vertebrates by key habitats in the Metropolis Seeding Allotment. This was developed from species shown in the Nevada Wildlife Action Plan to inhabit the District as well as those from BLM Elko District Lists, the April 2005 NDOW Master Species List, and widely accepted range maps. Key Habitat Types are from the Nevada Wildlife Action Plan.

Species	Sagebrush
Great Basin Collared Lizard*	X
Long-nosed Leopard Lizard	X
Pygmy Short-horned Lizard	X
Desert horned Lizard	X
Greater Short-horned Lizard**	X
Merriam's Shrew	X
Preble's Shrew	X
Western Small-footed Myotis	X
Pygmy Rabbit	X
Wyoming Ground Squirrel	X
Dark Kangaroo Mouse	X
Sagebrush Vole	X
Kit Fox	X
Mule Deer	X
Greater Sage Grouse	X
Columbian Sharp-tailed Grouse	X
Mountain Quail	X
Ferruginous Hawk	X
Western Burrowing Owl	X
Short-eared Owl	X
Loggerhead Shrike	X
Brewer's Sparrow	X
Sage Sparrow	X

* These were not on the BLM Elko Field Office Species Lists but are potentially on the District according to Nevada Wildlife Action Plan.

** These were not on the BLM Elko Field Office Species Lists but were on the April 2005 NDOW Master List.

*** These were not on the BLM Elko Field Office Species Lists but were documented as breeding in the district by the Great Basin Bird Observatory in their Atlas of the Breeding Birds of Nevada.

Appendix G: BLM Sensitive Terrestrial Vertebrate Species in the Metropolis Seeding Allotment. This list was developed by selecting those species in the previous appendices that are on the current BLM Sensitive Species List.

Birds

Common Name	Genus	Species
Northern Goshawk	<i>Accipiter</i>	<i>gentilis</i>
Ferruginous Hawk	<i>Buteo</i>	<i>regalis</i>
Golden Eagle	<i>Aquila</i>	<i>chrysaetos</i>
Prairie Falcon	<i>Falco</i>	<i>mexicanus</i>
Columbian Sharp-tailed Grouse	<i>Tympanuchus</i>	<i>phasianellus</i>
Greater Sage Grouse	<i>Centrocercus</i>	<i>urophasianus</i>
Mountain Quail	<i>Oreortyx</i>	<i>pictus</i>
Burrowing Owl	<i>Athene</i>	<i>cunicularia</i>
Loggerhead Shrike	<i>Lanius</i>	<i>ludovicianus</i>
Juniper Titmouse	<i>Baeolophus</i>	<i>ridgwayi</i>
Vesper Sparrow	<i>Pooecetes</i>	<i>gramineus</i>
Black Rosy Finch	<i>Leucosticte</i>	<i>atrata</i>

Mammals

Common Name	Genus	Species
Preble's Shrew	<i>Sorex</i>	<i>preblei</i>
Pallid Bat	<i>Antrozous</i>	<i>pallidus</i>
Townsend's big-eared Bat	<i>Corynorhinus</i>	<i>townsendii</i>
Big Brown Bat	<i>Eptesicus</i>	<i>fuscus</i>
Spotted Bat	<i>Euderma</i>	<i>maculatum</i>
Silver-haired Bat	<i>Lasionycteris</i>	<i>noctivagans</i>
Western Red Bat	<i>Lasiurus</i>	<i>blossevillii</i>
Hoary Bat	<i>Lasiurus</i>	<i>cinereus</i>
California Myotis	<i>Myotis</i>	<i>californicus</i>
Western Small-footed Myotis	<i>Myotis</i>	<i>ciliolabrum</i>
Little Brown Bat	<i>Myotis</i>	<i>lucifugus</i>
Fringed Myotis	<i>Myotis</i>	<i>thysanodes</i>
Long-legged Myotis	<i>Myotis</i>	<i>volans</i>
Yuma Myotis	<i>Myotis</i>	<i>yumanensis</i>
Western Pipistrelle	<i>Pipistrellus</i>	<i>hesperus</i>
Brazilian Free-tailed Bat	<i>Tadarida</i>	<i>brasiliensis</i>
Pygmy Rabbit	<i>Sylvilagus</i>	<i>idahoensis</i>
River Otter	<i>Lontra</i>	<i>canadensis</i>

Reptiles

Common Name	Genus	Species
Short-horned Lizard	<i>Phrynosoma</i>	<i>douglassi</i>

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