

Fax

Docket 40-8584



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
4000 Airport Parkway
Cheyenne, Wyoming 82001

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|----------|-----------------|--------|----------------|
| To: | Elaine Brummett | From: | Kathleen Erwin |
| Fax #: | 301-415-5955 | Pages: | 11 w/cover |
| Phone #: | | Date: | 9/2/04 |
| Re: | Uranium Mine | cc: | |

Urgent For Review Please Comment Please Reply As Requested

• **Comments:**

Please call if you have question

Ky-e

* Elaine,

Can you please email me

at Kathleen-erwin@fws.gov and
give me the name of the mine for
filing purposes. Thanks

of call
307-772-2374
x28





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Ecological Services
 4000 Airport Parkway
 Cheyenne, Wyoming 82001

Threatened and Endangered Species of SWEETWATER County, Wyoming Last Updated September 2004

| SPECIES | STATUS | HABITAT |
|---|------------|---|
| Bald eagle (<i>Haliaeetus leucocephalus</i>) | Threatened | Found throughout state |
| Black-footed ferret (<i>Mustela nigripes</i>) | Endangered | Prairie dog towns |
| Ute ladies'-tresses (<i>Spiranthes diluvialis</i>) | Threatened | Seasonally moist soils and wet meadows of drainages below 7000 feet |

If the proposed action will lead to water depletions (consumption) in the Colorado River System, impacts to threatened and endangered species inhabiting the downstream reaches of this system should be included in the evaluation.

| | | |
|---------------------|------------|--|
| Colorado River fish | Endangered | Downstream riverine habitat of the Yampa, Green and Colorado river systems |
|---------------------|------------|--|

Bald eagle: While habitat loss still remains a threat to the bald eagle's full recovery, most experts agree that its recovery to date is encouraging. Adult eagles establish life-long pair bonds and build huge nests in the tops of large trees near rivers, lakes, marshes, or other wetland areas. Although bald eagles may range over great distances, they usually return to nest within 100 miles of where they were fledged. During winter, bald eagles gather at night to roost in large mature trees, usually in secluded locations that offer protection from harsh weather. Bald eagles often return to use the same nest and winter roost year after year.

In order to reduce potential adverse effects to the bald eagle, a disturbance-free buffer zone of 1 mile should be maintained around eagle nests and winter roost sites. Activity within 1 mile of an eagle nest or roost may disturb the eagles and result in take. If a disturbance-free buffer zone of 1 mile is not practicable, then the activity should be conducted outside of February 15 through August 15 to protect nesting birds and November 1 through April 15 to protect roosting birds.

Black-footed ferret: Black-footed ferrets may be affected if prairie dog towns are impacted. Please be aware that black-footed ferret surveys are no longer recommended in black-tailed prairie dog towns statewide or in white-tailed prairie dog towns except those noted in our

enclosed February 2, 2004, letter. However, we encourage the Federal agency to protect prairie dog towns for their value to the prairie ecosystem and the myriad of species that rely on them. We further encourage you to analyze potentially disturbed prairie dog towns for their value to future black-footed ferret reintroduction.

If white-tailed prairie dog towns or complexes greater than 200 acres will be disturbed, surveys for ferrets may be recommended in order to determine if the action will result in an adverse effect to the species. Surveys are recommended even if only a portion of the white-tailed prairie dog town or complex, as identified in our enclosed letter, will be disturbed. According to the Black-footed Ferret Survey Guidelines (USFWS 1989), a prairie dog complex consists of two or more neighboring prairie dog towns less than 7 km (4.3 miles) from each other. If a field check indicates that prairie dog towns may be affected, you should contact this office for guidance on ferret surveys.

Ute ladies'-tresses: Ute ladies'-tresses (*Spiranthes diluvialis*) is a perennial, terrestrial orchid, 8 to 20 inches tall, with white or ivory flowers clustered into a spike arrangement at the top of the stem. *Spiranthes* typically blooms from late July through August, however, depending on location and climatic conditions, it may bloom in early July or still be in flower as late as early October. *Spiranthes* is endemic to moist soils near wetland meadows, springs, lakes, and perennial streams where it colonizes early successional point bars or sandy edges. The elevation range of known occurrences is 4,200 to 7,000 feet in alluvial substrates along riparian edges, gravel bars, old oxbows, and moist to wet meadows. Soils where *Spiranthes* have been found typically range from fine silt/sand, to gravels and cobbles, as well as to highly organic and peaty soil types. *Spiranthes* is not found in heavy or light clay soils or in extremely saline or alkaline soils. *Spiranthes* seems intolerant of shade and small scattered groups are found primarily in areas where vegetation is relatively open. Surveys should be conducted by knowledgeable botanists trained in conducting rare plant surveys. *Spiranthes* is difficult to survey for primarily due to its unpredictability of emergence of flowering parts and subsequent rapid desiccation of specimens. The Service does not maintain a list of "qualified" surveyors but can refer those wishing to become familiar with the orchid to experts who can provide training or services.

Colorado River water depletions: Formal consultation is required for projects that may lead to depletions of water to the Colorado River system. Federal agency actions resulting in water depletions to the Colorado River system may affect the endangered Bonytail (*Gila elegans*), Colorado pikeminnow (*Ptychocheilus lucius*), Humpback chub (*Gila cypha*), and Razorback sucker (*Xyrauchen texanus*) downstream in the Green and Colorado river systems.

In general, depletions include evaporative losses and/or consumptive use of surface or groundwater within the affected basin, often characterized as diversions less return flows. Project elements that could be associated with depletions include, but are not limited to, ponds (detention/recreation/irrigation storage/stock watering), lakes (recreation/irrigation storage/municipal storage/power generation), reservoirs (recreation/irrigation storage/municipal storage/power generation), hydrostatic testing of pipelines, wells, dust abatement, diversion structures, and water treatment facilities. Any actions that may result in a water depletion should be identified. The document should also include an estimate of the amount and timing of average annual water depletion (both existing and new depletions), describe methods of arriving at such estimates, describe location of where depletion occurs as specifically as possible, if and

when it will be returned to the system and what the depletion is being used for. Note that if the project has peculiarities or oddities, the Service may have more specific questions regarding these particular water depletions.

U.S. Fish and Wildlife Service. 1989. Black-footed ferret survey guidelines for compliance with the Endangered Species Act, April 1989. U. S. Fish and Wildlife Service, Denver, Colorado and Albuquerque, New Mexico. 15pp.

Migratory Bird Species of Management Concern in Wyoming
(*Migratory Birds of High Federal Interest*)

Based on the *Wyoming Bird Conservation Plan* (Cerovski et al. 2000)

May 2, 2002

U.S. Fish and Wildlife Service, Wyoming Field Office,
4000 Airport Parkway, Cheyenne, Wyoming 82001

The Wyoming Field Office of the U.S. Fish and Wildlife Service (Service) has compiled the following list from the ongoing work among State and Federal agencies, non-governmental organizations, and the interested public that produced the Wyoming Bird Conservation Plan. This list will now serve as the Service's list of Migratory Bird Species of Management Concern in Wyoming, in place of the previous list based on the Migratory Nongame Birds of Management Concern in the United States: the 1995 List. The Wyoming Bird Conservation Plan identified "priority species" based on a number of criteria (see below) using the best information available for these generally un-studied species. In many cases, this list reflects identified threats to habitat because no information is available on the species population trends. In some cases it reflects identified population declines though no causal factors have been identified.

The following tables and explanatory text are taken directly from the Wyoming Bird Conservation Plan (Cerovski et al. 2000). For more information on this listing process, this report is available from the Service's Wyoming Field Office, 4000 Airport Parkway, Cheyenne, Wyoming 82001; or Wyoming Game and Fish Department (WGFD), Nongame Branch, 260 Buena Vista, Lander, Wyoming 82520.

Table 1. Level I Species (Conservation Action). Species clearly needs conservation action. Includes species of which Wyoming has a high percentage of and responsibility for the breeding population, and the need for additional knowledge through monitoring and research into basic natural history, distribution, etc.

| Species | PIF Score ^a | AI ^b | PI ^c | Primary Habitat Type(s) |
|------------------------------|---------------------------|-----------------|-----------------|----------------------------------|
| Mountain Plover ^d | 28 | 4 | 3 | Shortgrass Prairie, Shrub-steppe |
| Trumpeter Swan | 26 | 3 | 3 | Wetlands |
| Sage Grouse | 26 | 5 | 3 | Shrub-steppe |
| McCown's Longspur | 26 | 3 | 2 | Shortgrass Prairie, Shrub-steppe |
| Baird's Sparrow | 26 | 2 | 3 | Shortgrass Prairie |
| Ferruginous Hawk | 23 | 4 | 3 | Shrub-steppe, Shortgrass Prairie |

Migratory Bird Species of Management Concern in Wyoming - 2002

2

Table 1. Level I Species (Conservation Action), continued.

| Species | PIF Score ^a | AI ^b | PT ^c | Primary Habitat Type(s) |
|--------------------|------------------------|-----------------|-----------------|---|
| Brewer's Sparrow | 23 | 5 | 5 | Shrub-steppe, Mountain-foothills Shrub |
| Wilson's Phalarope | 22 | 3 | 5 | Wetlands |
| Franklin's Gull | 22 | 3 | 3 | Wetlands |
| Sage Sparrow | 22 | 5 | 2 | Shrub-steppe, Mountain-foothills Shrub |
| Swainson's Hawk | 21 | 3 | 3 | Plains/Basin Riparian |
| Long-billed Curlew | 21 | 2 | 3 | Shortgrass Prairie |
| Short-eared Owl | 20 | 3 | 3 | Shortgrass Prairie |
| Northern Goshawk | 19 | 4 | 3 | High Elevation Conifer, Mid Elevation Conifer, Aspen |
| Peregrine Falcon | 19 | 3 | 3 | Specialized (cliffs) |
| Burrowing Owl | 19 | 3 | 4 | Shortgrass Prairie |
| Forster's Tern | 19 | 2 | 3 | Wetlands |
| Bald Eagle | 18 | 3 | 3 | Montane Riparian, Plains/Basin Riparian |
| Upland Sandpiper | 18 | 2 | 2 | Shortgrass Prairie |
| Black Tern | 18 | 3 | 3 | Wetlands |
| Whooping Crane | n/a | n/a | n/a | Wetlands |
| Piping Plover | n/a | n/a | n/a | Wetlands, Aquatic |

^a From the PIF Priority Database (Carter et al. 1997).

^b AI = Area Importance (from the PIF Priority Database, Carter et al. 1997).

^c PT = Population Trend (from the PIF Priority Database, Carter et al. 1997).

^d Species in all capital letters previously appeared on the Service's 1995 list.

Migratory Bird Species of Management Concern in Wyoming - 2002

3

Table 2. Level II Species (Monitoring). The action and focus for the species is monitoring. Includes species of which Wyoming has a high percentage of and responsibility for the breeding population, species whose population trend is unknown, species that are peripheral for breeding in the habitat or state, or species for which additional knowledge is needed.

| Species | PII ^a Score ^a | AT ^b | PT ^c | Primary Habitat Type(s) |
|-------------------------------|--|-----------------|-----------------|--|
| Calliope Hummingbird | 23 | 5 | 3 | Mid Elevation Conifer, Montane Riparian |
| Lewis' Woodpecker | 23 | 3 | 3 | Low Elevation Conifer, Plains/Basin Riparian |
| Cassin's Kingbird | 22 | 3 | 3 | Juniper Woodland, Plains/Basin Riparian |
| Lark Bunting | 22 | 4 | 4 | Shortgrass Prairie, Shrub-steppe |
| American White Pelican | 21 | 3 | 3 | Aquatic |
| Williamson's Sapsucker | 21 | 3 | 3 | Mid Elevation Conifer |
| Black-backed Woodpecker | 21 | 3 | 3 | Mid Elevation Conifer, High Elevation Conifer |
| Gray Flycatcher | 21 | 3 | 3 | Juniper Woodland, Mountain-foothills Shrub |
| Juniper Titmouse ^d | 21 | 3 | 3 | Juniper Woodland |
| Dickcissel | 21 | 3 | 3 | Shortgrass Prairie |
| Chestnut-collared Longspur | 21 | 2 | 3 | Shortgrass Prairie |
| Harlequin Duck | 20 | 3 | 3 | Montane Riparian |
| Snowy Plover | 20 | 3 | 3 | Wetlands |
| Black-chinned Hummingbird | 20 | 2 | 3 | Plains/Basin Riparian, Shrub-steppe |
| Rufous Hummingbird | 20 | 2 | 3 | Mid Elevation Conifer |
| Red-naped Sapsucker | 20 | 3 | 2 | Aspen |
| Three-toed Woodpecker | 20 | 4 | 3 | Mid Elevation Conifer, High Elevation Conifer |
| Willow Flycatcher | 20 | 3 | 4 | Montane Riparian, Plains/Basin Riparian |
| Hammond's Flycatcher | 20 | 2 | 3 | High Elevation Conifer with Aspen, Montane Riparian |
| Cordilleran Flycatcher | 20 | 3 | 3 | Montane Riparian, Mid Elevation Conifer |
| Pygmy Nuthatch | 20 | 3 | 3 | Low Elevation Conifer |
| Marsh Wren | 20 | 3 | 4 | Wetlands |
| American Dipper | 20 | 3 | 3 | Montane Riparian |

Migratory Bird Species of Management Concern in Wyoming - 2002

4

Table 2. Level II Species (Monitoring), continued.

| Species | PIF Score ^a | AI ^b | PI ^c | Primary Habitat Type(s) |
|--------------------------------------|---------------------------|-----------------|-----------------|---|
| Plumbeous Vireo | 20 | 3 | 3 | Mid Elevation Conifer, Low Elevation Conifer |
| Townsend's Warbler | 20 | 3 | 3 | High Elevation Conifer, Mid Elevation Conifer |
| Dusky Flycatcher | 19 | 3 | 2 | Low Elevation Conifer, Aspen, Mountain-foothills Shrub |
| Western Bluebird | 19 | 3 | 3 | Juniper Woodland, Low Elevation Conifer |
| Sage Thrasher | 19 | 5 | 2 | Shrub-steppe |
| Grasshopper Sparrow | 19 | 3 | 5 | Shortgrass Prairie, Shrub-steppe |
| Bobolink | 19 | 2 | 3 | Shortgrass Prairie, Shrub-steppe |
| Common Loon | 18 | 3 | 3 | Wetlands |
| Black-billed Cuckoo | 18 | 2 | 3 | Plains/Basin Riparian |
| Red-headed Woodpecker | 18 | 2 | 3 | Plains/Basin Riparian, Low Elevation Conifer |
| Yellow-billed Cuckoo | 18 | 3 | 3 | Plains/Basin Riparian |
| Eastern Screech-Owl | 18 | 3 | 3 | Plains/Basin Riparian |
| Western Screech-Owl | 18 | 3 | 3 | Plains/Basin Riparian |
| Great Gray Owl | 18 | 3 | 3 | Mid Elevation Conifer, High Elevation Conifer |
| Boreal Owl | 18 | 3 | 3 | High Elevation Conifer |
| Broad-tailed Hummingbird | 18 | 2 | 2 | Montane Riparian, Plains/Basin Riparian, Mid Elevation Conifer |
| Western Scrub-Jay ^d | 18 | 3 | 3 | Juniper Woodland |
| Loggerhead Shrike | 18 | 3 | 3 | Shrub-steppe |
| Vesper Sparrow | 18 | 5 | 4 | Shrub-steppe |
| Lark Sparrow | 18 | 3 | 4 | Shrub-steppe |
| Golden-crowned Kinglet | 17 | 3 | 3 | High Elevation Conifer |
| MacGillivray's Warbler | 17 | 3 | 1 | Montane Riparian, Plains/Basin Riparian |
| Ash-throated Flycatcher ^d | 16 | 2 | 3 | Juniper Woodland |
| Bushlit ^d | 16 | 3 | 3 | Juniper Woodland |
| Brown Creeper | 16 | 3 | 3 | Mid Elevation Conifer, High Elevation Conifer |
| Merlin | 15 | 3 | 3 | Low Elevation Conifer |
| Sprague's Pipit | n/a | n/a | n/a | Grassland, Plains/Basin Riparian, Shortgrass Prairie |

Migratory Bird Species of Management Concern in Wyoming - 2002

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|------------------|-----|-----|-----|---|
| Barn Owl | n/a | n/a | n/a | Shortgrass Prairie, Urban |
| White-faced Ibis | n/a | n/a | n/a | Wetlands, Aquatic |
| American Bittern | n/a | n/a | n/a | Wetlands, Aquatic |
| Common Tern | n/a | n/a | n/a | Wetlands, Aquatic |
| Purple Martin | n/a | n/a | n/a | Wetlands, Aquatic/Basin Riparian, Montane Riparian |

- ^a From the PIF Priority Database (Carter et al. 1997).
- ^b AI = Area Importance (from the PIF Priority Database).
- ^c PT = Population Trend (from the PIF Priority Database).
- ^d Nicholoff, S. 2002. Wyoming Bird Conservation Plan, Version 1.1. Wyoming Partners In Flight and Wyoming Game and Fish Department, Lander. In press.

Wyoming Partners In Flight Process for Prioritizing Species

Wyoming Partners In Flight participants developed the current list of priority species based on a combination of the seven criteria in the national Partners In Flight Priority Database (Carter et al. 1997). This database serves as a defensible method of prioritizing both species and habitats in need of conservation. The criteria include Wyoming-dependent and Wyoming-independent factors. The Wyoming-independent criteria are constant over a species' range and do not vary for each species. The Wyoming-dependent criteria were the key components used to prioritize species and their conservation action needs. In the absence of any more rigorous statewide surveys, Breeding Bird Survey data dating back to 1968 were used to determine population trends in Wyoming.

Criteria

Within each criterion below, a species was given a rank score ranging from 1 to 5, with 1 being the least critical rank and 5 the most critical. Each ranked species could potentially receive a low score of 7 and a high score of 35. However, setting conservation goals based only on total score could be misleading; therefore, each total score was reviewed in conjunction with its component parts. In Wyoming, species were initially ranked using total score, area importance, and population trend.

1. Relative Abundance (RA) - The abundance of a bird, in appropriate habitat within its entire range, relative to other bird species. This criterion gives an indication of a species' vulnerability to withstand cataclysmic environmental changes. A low score would indicate a higher relative abundance, therefore reducing the risk of complete extirpation from losses in one or more regions. Higher scores indicate a lower relative abundance, thus more vulnerability to drastic losses or population changes.

Migratory Bird Species of Management Concern in Wyoming - 2002

6

2. Breeding Distribution (BD) - A relative measure of breeding range size as a proportion of North America [defined as the main body of the continent, excluding Greenland, through Panama and the islands of the Caribbean, comprising an area of 22,059,680 km² (National Geographic Society 1993)], and as such it provides an index of a species' vulnerability to random environmental events. High scores indicate localized breeding, thus a higher likelihood of serious decline from drastic environmental changes. Low scores indicate wide breeding distribution, therefore less likelihood of extirpation. Used for breeding birds only.

3. Non-breeding Distribution (ND) - A relative measure of non-breeding, or winter, range size as a proportion of North America, and as such it provides an index of a species' vulnerability to random environmental events. High scores indicate localized distribution on the non-breeding grounds. Low scores indicate wide distribution on the non-breeding grounds, therefore less likelihood of extirpation. Used for wintering birds only.

4. Threats on Breeding Grounds (TB) - The ability of a habitat in an area to support populations of a species in that area. Two factors are considered here: 1) each species' demographic and ecological vulnerability (the potential inability of a species to recover from population loss by normal reproductive effort due to low reproductive rate, high juvenile mortality, or both; and the level of ecological specialization of a species and, hence, its potential inability to withstand environmental change), and 2) habitat loss or disruption (a combination of the amount of habitat or conditions necessary for survival and reproductive success that has been lost since 1945, and the amount that is anticipated to be lost in the future). High scores indicate either a large loss of habitat or a species that is an extreme ecological specialist. Low scores indicate a stable or increasing habitat or a species that is an ecological generalist. Used for both breeding and wintering birds.

5. Threats on Non-breeding Grounds (TN) - Range-wide threats on non-breeding, or winter, grounds. This is scored using the same criteria as threats on breeding grounds but reflects non-breeding issues, including migratory habitat. Used for wintering birds only.

6. Population Trend (PT) - The overall population trend of each species assigned independently for each state, province, or physiographic area. This criterion must meet two thresholds, reliability and magnitude, to warrant either a very high or very low score. When possible, a score was assigned using BBS data, which incorporated a population trend uncertainty score based on the statistical validity of the BBS data (i.e. a species must be detected on a minimum of 14 BBS routes per state for population trends to have statistical significance). This criterion was chosen to alert managers to species with modest, but certain, population declines.

Migratory Bird Species of Management Concern in Wyoming - 2002

7

7. **Area Importance (AI)** - The abundance of a species within a state, province, or physiographic area relative to its abundance throughout its range. This criterion helps direct conservation efforts toward areas that are most important to a species' survival. Area Importance is scored locally; therefore, high scores indicate that a large proportion of the species' breeding or winter range occurs in Wyoming, or a species is using a habitat that is only available in Wyoming. Low scores indicate that a small proportion of the species' range occurs in Wyoming, or the preferred habitat is widespread across its range. Used for both breeding and wintering birds.

Priority Species

Priority bird species in Wyoming were identified from the PIF Priority Database (Carter et al. 1997) and by qualitative, informed decisions. Those species with a total score of 18 or above, Area Importance (AI) of 3 or above, and/or Population Trend (PT) of 3 or above from the database, or with a total score less than 18 but of significant local interest were identified as the highest priority species. However, as more information becomes available, the highest priority species for Wyoming may change, as this is a dynamic database that allows for updated information to be periodically inserted and reviewed. The primary habitat type or types required for breeding were identified for each species to determine the highest priority habitat types for the state.

Literature Cited

- Carter, M. P., W. C. Hunter, D. N. Pashley, J. S. Bradley, C. S. Aid, J. Price, and G. S. Butcher. 1997. Setting landbird conservation priorities for states, provinces, and physiographic areas of North America. Partners In Flight Priority Database Final Report, Colorado Bird Observatory, Brighton.
- Cerovski, A., M. Gorges, T. Byer, K. Duffy, and D. Felley. 2000. Wyoming Bird Conservation Plan, Version 1.0. Wyoming Partners In Flight, Lander, WY.
- Nicholoff, S. 2002. Wyoming Bird Conservation Plan, Version 1.1. Wyoming Partners In Flight and Wyoming Game and Fish Department, Lander. In press.