



# United States Department of the Interior



## FISH AND WILDLIFE SERVICE

Ecological Services  
5353 Yellowstone Road, Suite 308A  
Cheyenne, Wyoming 82009

OCT 09 2015

In Reply Refer To:  
06E13000-2015-CPA-0221

Lydia W. Chang, Chief  
Environmental Review Branch  
U.S. Nuclear Regulatory Agency  
Mail Stop T-4B16  
Washington D.C. 20555

Dear Ms. Chang:

Thank you for your letter of September 16, 2015, received in our office on September 22, regarding the expansion of the Jane Dough In-Situ Uranium Recovery Project (Project) through application for a license amendment for Uranerz Energy Corporation. The amendment area consists of 3,680 acres of privately owned land located in Johnson and Campbell Counties, Wyoming. This Project is an In-Situ Uranium Recovery (ISR) facility in which ISR technology is used to extract uranium from low-grade ores or deeper deposits not economically recoverable by conventional methods.

You have requested information regarding species listed under the Endangered Species Act of 1973, as amended (ESA), 16 U.S.C. 1531 *et seq.* In response to your request, the U.S. Fish and Wildlife Service (Service) is providing recommendations for protective measures for threatened and endangered species in accordance with the ESA. We are also providing recommendations concerning migratory birds in accordance with the Migratory Bird Treaty Act (MBTA), 16 U.S.C. 703, and the Bald and Golden Eagle Protection Act (Eagle Act), 16 U.S.C. 668. Wetlands are afforded protection under Executive Orders 11990 (wetland protection) and 11988 (floodplain management), as well as section 404 of the Clean Water Act. Other fish and wildlife resources are considered under the Fish and Wildlife Coordination Act, as amended, 16 U.S.C. 661 *et seq.*, and the Fish and Wildlife Act of 1956, as amended, 16 U.S.C. 742a-742j.

The Service has transitioned to a new online program to deliver species lists: the Information, Planning, and Conservation (IPaC) system. To obtain a current list of endangered, threatened, proposed, and candidate species and their designated and proposed critical habitat that occur in or may be affected by actions associated with your proposed project, please visit our website at <http://ecos.fws.gov/ipac/>. This website will provide you with an immediate response to your

species list request. The response will also include information regarding other Service trust authorities.

In accordance with section 7(c) of the ESA, we have determined that the following species or their designated habitat may be present in the proposed project area. We would appreciate receiving information as to the current status of each of these species within the proposed project area.

**Endangered, Threatened, Proposed, and Candidate Species  
And Their Designated and Proposed Critical Habitat That Occur  
In or May Be Affected by Actions in the Proposed Project Area**

October 2015

<u>Species</u>	<u>Scientific Name</u>	<u>Status</u>	<u>Habitat</u>
Northern Long-eared Bat	<i>Myotis septentrionalis</i>	Threatened	Under bark, in cracks, crevices, and cavities of trees in upland forests; also in buildings and under bridges
Canada Lynx	<i>Lynx canadensis</i>	Threatened	Montane forests
Ute Ladies'-tresses	<i>Spiranthes diluvialis</i>	Threatened	Seasonally moist soils and wet meadows of drainages below 7,000 ft. elevation
Sprague's Pipit	<i>Anthus spragueii</i>	Candidate	Open grasslands/prairies

**Northern Long-Eared Bat:** The northern long-eared bat (*Myotis septentrionalis*) is listed under the ESA as a threatened species (80 FR 17974; April 2, 2015). The listing decision included an interim special rule under section 4(d) of the ESA that provides flexibility to landowners, land managers, government agencies and others as they conduct activities in areas that could be northern long-eared bat habitat. In areas of the northern long-eared bat's range that have not yet been affected by white-nose syndrome, as defined in the interim 4(d) rule, such as in Wyoming, incidental take (unintentional harm to bats incidental to otherwise lawful activities) is not prohibited. Even though the 4(d) rule exempts incidental take, Federal agencies still have an obligation to consult on may affect determinations. In addition, based on the interim 4(d) rule, removing bats from human dwellings does not need to be regulated. However, purposeful take, other than removal of bats from dwellings, is prohibited. Critical habitat is not proposed at this time. More information about the 4(d) rule and a current white-nosed syndrome buffer map are available at <http://www.fws.gov/midwest/endangered/mammals/nleb/>.

This bat is a medium-sized bat, distinguished from other *Myotis* species by its characteristically large ears and long, pointed tragus (projection of skin in front of the external ear). Northern long-eared bats are found throughout eastern and central North America and occur in the extreme northeastern portions of Wyoming. Northern long-eared bats emerge at dusk to fly through the understory of forested hillsides and ridges feeding on moths, flies, leafhoppers, caddisflies, and beetles, which they catch in flight using echolocation, or by gleaning (picking) from vegetation.

In the summer, male and reproductive female bats roost singly or in colonies in cracks, crevices, cavities, and under the bark of live and dead trees, while other males and non-reproductive females roost in cooler places like caves and mines. Northern long-eared bats can also be found roosting in buildings and under bridges. Maternity habitat for the northern long-eared bat is summer habitat used by juveniles and reproductive (pregnant, lactating, or post-lactating) females. Breeding occurs in late summer and fall when bats swarm at entrances of hibernacula; however, females delay fertilization until spring when they emerge from hibernation.

The northern long-eared bat is threatened by white-nose syndrome (WNS), a disease caused by the cold-loving fungus, *Pseudogymnoascus (Geomyces) destructans*. First observed in New York in 2006, WNS has spread rapidly across the Northeast and into the Midwest and Southeast. Throughout the range of WNS, up to 99 percent of infected bats die from the disease. Although there is uncertainty about the spread of WNS, experts agree that the fungus will likely spread throughout the United States. The northern long-eared bat is also threatened by the loss and degradation of summer habitat caused by human development, and by collision with or barotrauma (injury to the lungs due to a change in air pressure) caused by wind turbines. Mine closures and vandalism of winter roosts and hibernacula also pose threats to this species. In areas that may provide potential habitat for the northern long-eared bat, we recommend tree-clearing and controlled burns be avoided during the roosting season (approximately April through September) unless an emergence or other survey developed in coordination with the Service determines that no northern long-eared bats are using the area. Actions to benefit the northern long-eared bat include installing bat boxes in a safe, sunny location (instructions at <http://www.fws.gov/midwest/endangered/mammals/inba/pdf/BatBoxPlanForIN.pdf>), protecting hibernacula, and reducing insecticide use that targets prey species of the northern long-eared bat.

**Canada Lynx:** In Wyoming, Canada lynx (*Lynx canadensis*) live in subalpine/coniferous forests of mixed age and structural classes. Mature forests with downed logs and windfalls provide cover for denning sites, escape, and protection from severe weather. Early to mid-successional forests with high stem densities of conifer saplings provide optimal habitat for the lynx's primary prey, the snowshoe hare (*Lepus americanus*). Snowshoe hares reach their highest densities in regenerating forests that provide visual cover from predators and thermal cover. To benefit lynx, habitats should retain an overstory for concealment and forested connectivity between feeding, security, and denning habitats.

Historically, lynx were observed in every mountain range in Wyoming. The majority of lynx observations presently occur in western Wyoming in the Wyoming and Salt River ranges and north through the Tetons and Absaroka ranges in and around Yellowstone National Park. Numerous records have also come from the west slope of the Wind River Range, with fewer observations in the Bighorn and Uinta mountains. Critical habitat for the Canada lynx (50 CFR 17.95(a)) has been designated for portions of Fremont, Lincoln, Park, Sublette, and Teton Counties, including parts of Yellowstone National Park and the Bridger-Teton and Shoshone National Forests. For additional information see Federal Register notice (74 FR 8615; February 25, 2009). Maps of the critical habitat and more detailed location information are available at <http://www.fws.gov/mountain-prairie/species/mammals/lynx/>.

**Ute Ladies'-tresses:** Ute ladies'-tresses (*Spiranthes diluvialis*) is a perennial orchid, 8 to 20 inches tall, with white or ivory flowers clustered into a spike arrangement at the top of the stem. Ute ladies'-tresses typically blooms from late July through August. However, it may bloom in early July or still be in flower as late as early October, depending on location and climatic conditions. Ute ladies'-tresses 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 (although no known populations in Wyoming occur above 5,500 feet). Soils where Ute ladies'-tresses have been found typically range from fine silt/sand, to gravels and cobbles, as well as to highly organic and peaty soil types. Ute ladies'-tresses is not found in heavy or tight clay soils or in extremely saline or alkaline soils. Ute ladies'-tresses typically occurs in small, scattered groups found primarily in areas where vegetation is relatively open.

Many orchid species take 5 to 10 years to reach reproductive maturity; this appears to be true for Ute ladies'-tresses (FR 57 2048). Furthermore, reproductively mature plants do not flower every year. For these reasons, 2 to 3 years of surveys are necessary to determine presence or absence of Ute ladies'-tresses. Surveys should be conducted by knowledgeable botanists trained in conducting rare plant surveys.

**Sprague's Pipit:** Sprague's pipit (*Anthus spragueii*) is a candidate for listing under the ESA (75 FR 56028; Sept. 15, 2010). Sprague's pipit is a relatively small ground nesting passerine bird that breeds in open grasslands of the Northern Great Plains. Males and females are similar in appearance with buff and blackish streaking on the crown, nape, and underparts, and a plain buff-colored face with a large eye-ring. Sprague's pipit is closely tied to native prairie habitat and breeds in the north-central United States in Minnesota, Montana, North Dakota, and South Dakota, as well as south-central Canada. Wintering occurs in Arizona, Texas, Oklahoma, Arkansas, Mississippi, Louisiana, and New Mexico. A number of threats to its continued existence have been identified including: habitat fragmentation on the breeding grounds, energy development, roads, and the inadequacy of existing regulatory mechanisms.

## **SPECIES OF CONCERN**

**Black-tailed Prairie Dog:** The range of the black-tailed prairie dog (*Cynomys ludovicianus*) once spanned the short and mixed grass prairies of North America east of the Rockies from southern Canada to northern Mexico. This species still occurs over much of its historic range; although, in more widely scattered large colonies. Black-tailed prairie dogs occur within the eastern third of Wyoming. A population thought to have been intentionally introduced outside of this range also occurs in the Bighorn Basin. We encourage the conservation of prairie dog colonies for their value to the prairie ecosystem and the many species that rely on them. Threats that may be significant to conserving black-tailed prairie dog populations include disease (sylvatic plague) and some control programs (poisoning). Prairie dogs serve as the primary prey species for the black-footed ferret (*Mustela nigripes*) and several raptors, including the golden eagle (*Aquila chrysaetos*) and ferruginous hawk (*Buteo regalis*). Prairie dog colonies and burrows also provide shelter or nest sites for species like the mountain plover (*Charadrius montanus*) and burrowing owl (*Athene cunicularia*). Because black-tailed prairie dog colonies in Wyoming do not currently support any ferret populations, black-footed ferret surveys are not

necessary within Wyoming. However, we do encourage evaluating black-tailed prairie dog colonies for the potential reintroduction of black-footed ferrets.

**Greater Sage-grouse:** On October 2, 2015, the Service announced that the greater sage-grouse (*Centrocercus urophasianus*) does not warrant listing under the ESA (80 FR 59857). Formal conservation commitments made by federal, state, and private landowners to protect the greater sage-grouse and its habitat were an important component of the Service's finding to not list the greater sage-grouse. Regulatory mechanisms provided by federal and state plans, which incorporate conservation principles identified by scientific experts, have reduced the potential of future impacts from the primary threats to the species in approximately 90 percent of the breeding habitat. The Service will review the status of the greater sage-grouse in five years; therefore, we encourage continued implementation and development of formal conservation commitments across the range of the greater sage-grouse.

The greater sage-grouse is a large, round-winged, ground-dwelling bird. This grouse weighs from two to seven pounds and is up to 30 inches long and two feet tall. It has a long, pointed tail and legs that are feathered to the base of the toes. Females are a mottled brown, black, and white. Males are larger and have a large white ruff around their neck and bright yellow air sacks on their breasts, which they inflate during their mating display. The birds are found at elevations ranging from 4,000 to over 9,000 feet and are highly dependent on sagebrush for cover and food.

Greater sage-grouse are dependent on sagebrush habitats year-round. Habitat loss and degradation, as well as loss of population connectivity have been identified as important factors contributing to the decline of greater sage-grouse populations rangewide. Therefore, any activities that result in loss or degradation of sagebrush habitats that are important to this species should be closely evaluated for their impacts to sage-grouse.

We recommend you contact the Wyoming Game and Fish Department to identify important greater sage-grouse habitats, recommended seasonal restrictions within the project area, and appropriate measures to minimize potential impacts from the proposed project. The Service recommends surveys and mapping of important greater sage-grouse habitats where local information is not available. The results of these surveys should be used in project planning to minimize potential impacts to this species. No project activities that may exacerbate habitat loss or degradation should be permitted in important habitats.

**Mountain Plover:** On May 12, 2011, the Service announced the decision to withdraw the proposed listing of the mountain plover (*Charadrius montanus*) as a threatened species under the ESA (76 FR 27756). However, the plover remains protected under the Migratory Bird Treaty Act. The mountain plover is a migratory, terrestrial shorebird averaging 8 inches in body length. Mountain plovers are light brown above and white below, but lack the contrasting band characteristic of other plovers. They feed on invertebrates, primarily beetles, crickets, and ants. Mountain plovers arrive at their breeding grounds in the western Great Plains and Rocky Mountain states in the spring. Southbound migration is prolonged, starting in late June and continuing through October.

We encourage project planners to develop and implement protective measures if mountain plovers, or suitable mountain plover habitat, occur within or around project areas. Measures to protect the mountain plover from further decline include: (1) avoidance of suitable habitat during the plover nesting season (April 10 through July 10), (2) prohibition of ground disturbing activities in prairie dog towns, and (3) prohibition of any permanent above ground structures that may provide perches for avian predators or deter plovers from using preferred habitat. Suitable habitat for nesting mountain plovers includes grasslands, mixed grassland areas and short-grass prairie, shrub-steppe, plains, alkali flats, agricultural lands, cultivated lands, sod farms, and prairie dog towns.

## **MIGRATORY BIRDS**

Under the MBTA, the Eagle Act, and Executive Order 13186 (66 FR 3853; January 17, 2001), Federal agencies have an obligation to protect all species of migratory birds, including eagles and other raptors, which may occur on lands under their jurisdiction. Of particular focus are the species identified in the Service's Birds of Conservation Concern 2008. In accordance with the Fish and Wildlife Conservation Act (16 USC 2912 (a)(3)), this report identifies "species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing" under the ESA. This report is intended to stimulate coordinated and proactive conservation actions among Federal, State, and private partners and is available at <http://www.fws.gov/migratorybirds/NewReportsPublications/SpecialTopics/BCC2008/BCC2008.pdf>.

The Migratory Bird Treaty Act (MBTA), enacted in 1918, prohibits the taking of any migratory birds, their parts, nests, or eggs, except as permitted by regulations, and does not require intent to be proven. Section 703 of the MBTA states, "Unless and except as permitted by regulations ... it shall be unlawful at any time, by any means or in any manner, to ... take, capture, kill, attempt to take, capture, or kill, or possess ... any migratory bird, any part, nest, or eggs of any such bird..." The Bald and Golden Eagle Protection Act (Eagle Act) prohibits knowingly taking, or taking with wanton disregard for the consequences of an activity, any bald or golden eagles or their body parts, nests, or eggs, which includes collection, molestation, disturbance, or killing.

Removal or destruction of such nests or causing abandonment of a nest could constitute violation of one or both of the above statutes. Removal of any active migratory bird nest or nest tree is prohibited. For golden eagles, inactive nest permits are limited to activities involving resource extraction or human health and safety. Mitigation, as determined by the local Service field office, may be required for loss of these nests. No permits will be issued for an active nest of any migratory bird species, unless removal of an active nest is necessary for reasons of human health and safety. Therefore, if nesting migratory birds are present on or near the project area, timing is a significant consideration and needs to be addressed in project planning.

Work that could lead to the take of a migratory bird or eagle, their young, eggs, or nests (e.g., if you are going to erect new roads, or power lines in the vicinity of a nest), should be coordinated with our office before any actions are taken. If nest manipulation is proposed for this project, the project proponent should contact the Service's Migratory Bird Office in Denver at 303-236-8171

to see if a permit can be issued for this project. No nest manipulation is allowed without a permit. If a permit cannot be issued, the project may need to be modified to ensure take of a migratory bird or eagle, their young, eggs or nest will not occur.

### **WETLANDS/RIPARIAN AREAS**

Wetlands or riparian areas may be impacted by the proposed project. Wetlands perform significant ecological functions which include: (1) providing habitat for numerous aquatic and terrestrial wildlife species, (2) aiding in the dispersal of floods, (3) improving water quality through retention and assimilation of pollutants from storm water runoff, and (4) recharging the aquifer. Wetlands also possess aesthetic and recreational values. If wetlands may be destroyed or degraded by the proposed action, those wetlands in the project area should be inventoried and fully described in terms of their functions and values. Acreage of wetlands, by type, should be disclosed and specific actions should be outlined to avoid, minimize, and compensate for all unavoidable wetland impacts.

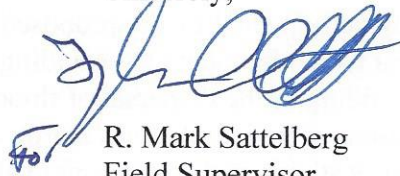
Riparian or streamside areas are a valuable natural resource and impacts to these areas should be avoided whenever possible. Riparian areas are among the most productive wildlife habitat types in North America. They support a greater variety of wildlife than any other habitat. Riparian vegetation plays an important role in protecting streams, reducing erosion and sedimentation as well as improving water quality, maintaining the water table, controlling flooding, and providing shade and cover. In view of their importance and relative scarcity, impacts to riparian areas should be avoided. Any potential, unavoidable encroachment into these areas should be further avoided and minimized. Unavoidable impacts to streams should be assessed in terms of their functions and values, linear feet and vegetation type lost, potential effects on wildlife, and potential effects on bank stability and water quality. Measures to compensate for unavoidable losses of riparian areas should be developed and implemented as part of the project.

Plans for mitigating unavoidable impacts to wetland and riparian areas should include mitigation goals and objectives, methodologies, time frames for implementation, success criteria, and monitoring to determine if the mitigation is successful. The mitigation plan should also include a contingency plan to be implemented should the mitigation not be successful. In addition, wetland restoration, creation, enhancement, and/or preservation does not compensate for loss of stream habitat; streams and wetlands have different functions and provide different habitat values for fish and wildlife resources.

Best Management Practices (BMPs) should be implemented within the project area wherever possible. BMPs include, but are not limited to, the following: installation of sediment and erosion control devices (*e.g.*, silt fences, hay bales, temporary sediment control basins, erosion control matting); adequate and continued maintenance of sediment and erosion control devices to insure their effectiveness; minimization of the construction disturbance area to further avoid streams, wetlands, and riparian areas; location of equipment staging, fueling, and maintenance areas outside of wetlands, streams, riparian areas, and floodplains; and re-seeding and re-planting of riparian vegetation native to Wyoming in order to stabilize shorelines and streambanks.

We appreciate your efforts to ensure the conservation of endangered, threatened, and candidate species and migratory birds. If you have questions regarding this letter or your responsibilities under the ESA and/or other authorities or resources described above, please contact Kim Dickerson of my office at the letterhead address or phone (307) 772-2374, extension 230.

Sincerely,



R. Mark Sattelberg  
Field Supervisor  
Wyoming Field Office

cc: WGFD, Statewide Nongame Bird and Mammal Program Supervisor, Lander, WY  
(Z. Walker) (zack.walker@wyo.gov)  
WGFD, Statewide Habitat Protection Coordinator, Cheyenne, WY (M. Flanderka)  
(mary.flanderka@wyo.gov)  
WGFD, Habitat Protection Secretary, Cheyenne, WY (N. Stange)  
(nancy.stange@wyo.gov)



**U.S. DEPARTMENT OF THE INTERIOR**  
FISH AND WILDLIFE SERVICE

5353 YELLOWSTONE RD., SUITE 308A  
CHEYENNE, WYOMING 82009

**OFFICIAL BUSINESS**

PENALTY FOR PRIVATE USE, \$300



POSTAGE AND FEES PAID  
U.S. DEPARTMENT OF THE INTERIOR  
INT-423

Lydia W. Chang, Chief  
Environmentla Review Branch  
U.S. Nuclear Regulatory Agency  
Mail Stop T-4B16  
Washington D.C. 20555

