

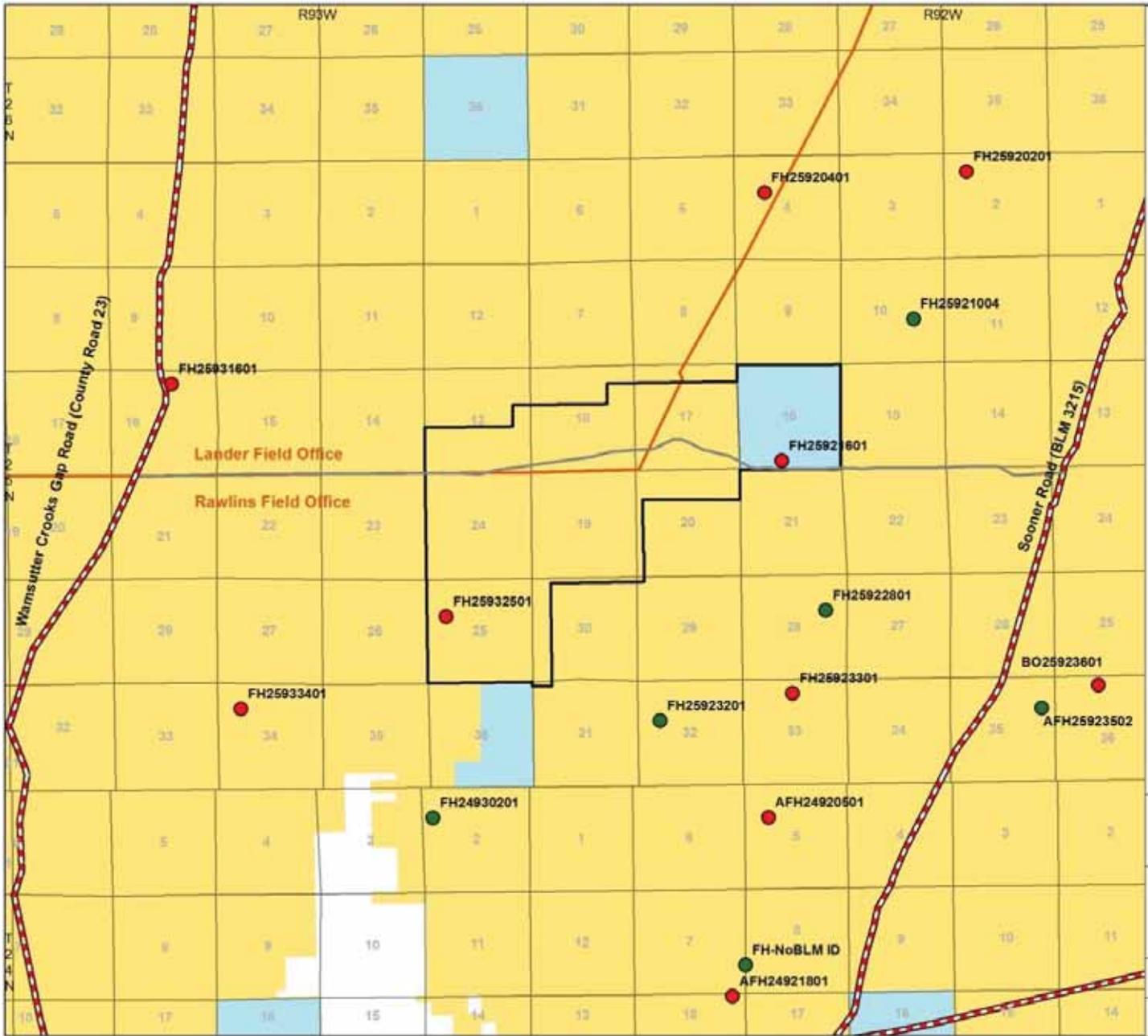
3.8.3.3 Raptors

A raptor nest survey of the entire Permit Area and a one-mile buffer zone has been completed annually each spring since 2006. The survey provided status updates on nests previously identified by BLM and WGFD and identified new nests, if any. Surveys were conducted on foot or using four-wheel-drive vehicles; additional surveys were completed by air while looking for Greater sage-grouse leks. Raptor observations were made using binoculars and a high-powered spotting scope. Special attention was made to avoid disturbance of any active nests while completing the wildlife surveys.

Agency files were reviewed for data on raptor nests in the survey area. The file review identified 12 previously documented raptor nests within a one-mile buffer zone of the Permit Area. The status and locations of any of these nests that were still present in 2007 are shown on **Figure 3.8-9**. **Figure 3.8-10** shows the status and locations of these nests as of 2011.

No active raptor nests were observed within the Permit Area as of the 2010 monitoring; however, surveys during the summer of 2011 found an active ferruginous hawk nest (FH25932502) on the western boundary of the Permit Area (**Figure 3.8-10**). This nest was a stick nest built in the cross-arms of a transmission pole. This nest blew down sometime during the fall of 2011 and is no longer present (personal communication with E. Berg LWR Consultants, Inc., 2012). Nest FH25921601, in the eastern portion of the Permit Area, was inactive on multiple visits in 2006 through 2011 and was observed to be in very poor condition. During spring 2012, the BLM's field survey concluded that this nest is now considered historic. One active raptor nest was found within the one-mile buffer zone. Nest FH25921004, to the northeast of the Permit Area, was occupied by a pair of ferruginous hawks annually. This nest is located on an artificial nest platform. Seven other nests that had been previously documented by BLM in the one-mile buffer zone surrounding the Permit Area (**Figure 3.8-10**) were not located during the annual nest surveys. These nests are no longer present. Global Positioning System (GPS) units were used to visit the sites of these nests, but none were located. No new raptor nests were identified during the 2006 through 2010 field surveys.

Several other raptor species were recorded within the study area, but nests were not documented. These species include the Swainson's hawk, red-tailed hawk, northern harrier, golden eagle, kestrel, prairie falcon, and turkey vulture. Habitat conditions are present for the northern harrier and American kestrel to nest within the Permit Area; however, specific nest sites were not located. Northern goshawk, merlin, and peregrine falcons were not observed in the study area.



Legend

Raptor nest status

- Active
- Historic

- Lost Creek Permit Area
- BLM Field Office Boundary
- Access Road

Surface Land Owner

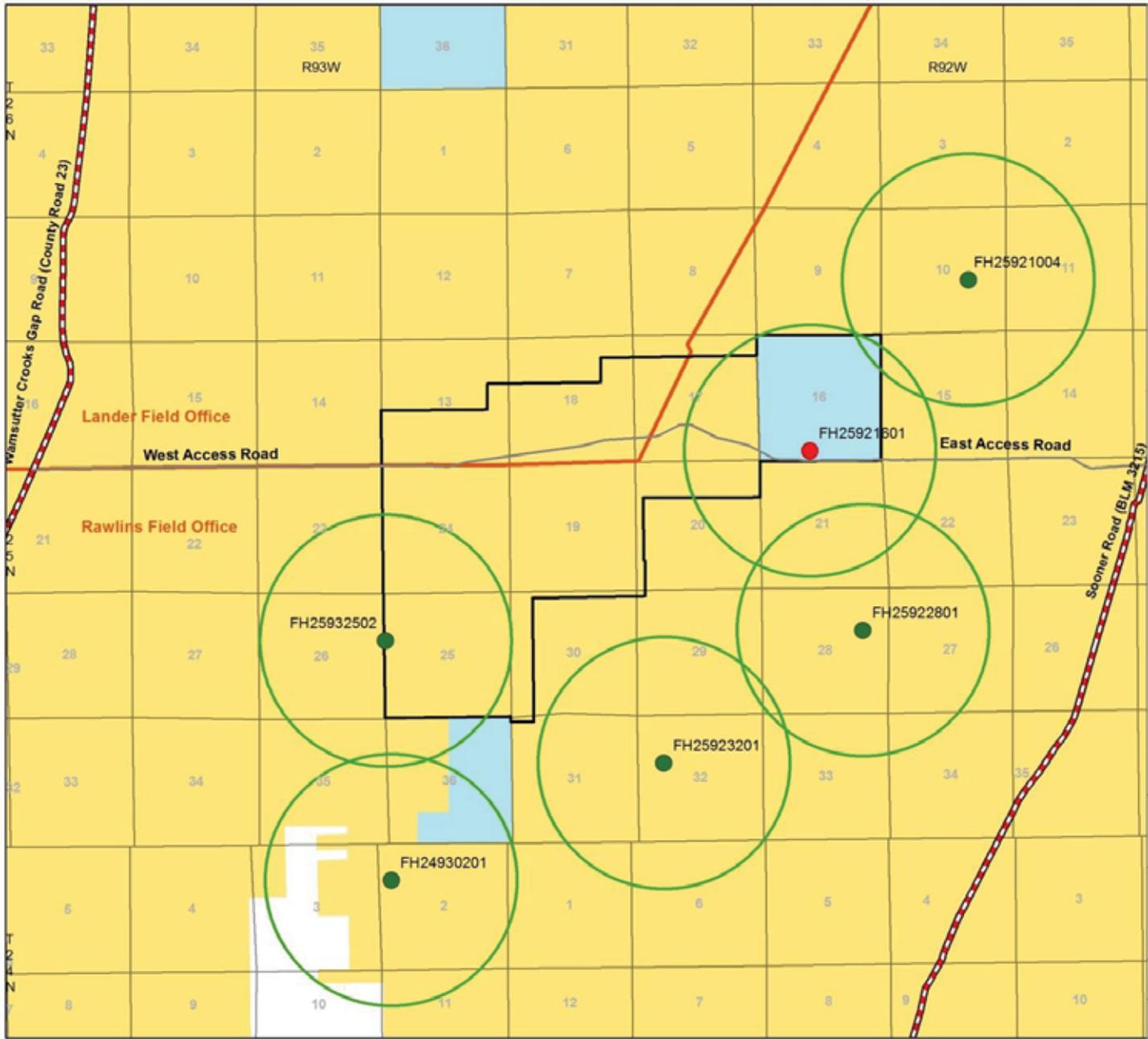
- BLM - administered
- Private
- State

Lost Creek Uranium *In-Situ* Recovery Project
Sweetwater County, WY

Figure 3.8-9
Raptor Nests, 2007 Status



No warranty is made by the BLM for use of the data for purposes not intended by BLM



Legend

- Raptor nest status**
- Historic
 - Active
 - 1 Mile Buffer
 - ▭ Lost Creek Permit Area
 - ▭ BLM Field Office Boundary
 - ▭ County/BLM Road
 - Access Road
- Surface Land Owner**
- BLM - administered
 - Private
 - State

Lost Creek Uranium *In-Situ* Recovery Project
Sweetwater County, WY

Figure 3.8-10
Raptor Nests within or near
1 mile of the Permit Area (2011)



No warranty is made by the BLM for use of the data for purposes not intended by BLM

3.8.3.4 Waterfowl and Shorebirds

Two waterfowl species (mallard, Canada goose) have been observed during bird and wildlife surveys (**Table 3.8-1**). In the Permit Area, habitat for waterfowl and shorebirds is sparse. The man-made Crooked Well Reservoir fills in March or April, when there is sufficient snowmelt runoff in East Battle Springs Draw, and is dry for most of the year (**Figure 3.5-4**). Limited use by waterfowl and shorebird species would be expected in the Permit Area during migrations in the spring and fall, with additional use in the summer months if standing water is present. Late fall and winter use of the Permit Area by waterfowl and shorebirds is believed to be very limited.

If the stock ponds associated with the four BLM wells within one mile of the Permit Area (**Sections 3.6.3.1**) were kept full, they would provide additional water sources and potential areas for limited use by waterfowl and water birds near the Permit Area. (However, based on the elevated radionuclide concentrations in Battle Spring Draw Well No. 4451 [**Table 3.6-7**], sampling of these wells is recommended prior to use as a water source.) It is uncertain if two of the stock ponds have been filled in recent years. The other two stock ponds have been filled recently. The BLM Battle Spring Draw Well No. 4451 was observed filling its stock pond in April 2009 (**Figure 3.5-10**). Battle Spring Well No. 4777 and the Battle Spring Draw Well No. 4451 were pumped in 2011. However, as the wells would usually not be pumped over an entire growing season, surface water would not continually fill the stock ponds and a wetland should not develop.

The nearest high-use waterfowl and waterbird habitat is located within the Chain Lakes WHMA, about seven miles south of the Permit Area (**Figure 3.1-3**).

3.8.3.5 Passerine and Breeding Birds

A breeding bird survey of all representative habitats of the Permit Area was conducted during the peak of the nesting season in June 2006, using methods recommended in WDEQ-LQD Wildlife Guideline No. 5, Wildlife (1994b). Surveys were completed in both plant communities within the Permit Area (Upland and Lowland Big Sagebrush Shrublands). There were 12 breeding bird species observed within the Permit Area during breeding bird surveys. However, the Lowland Big Sagebrush Shrubland habitat provided higher densities and diversity of breeding birds.

All avian species observed when completing wildlife surveys are documented in the species list in **Table 3.8-1**. A total of 31 passerine species were recorded during the surveys. The most common species in the Permit Area were the horned lark, Brewer's sparrow, and sage sparrow.

3.8.3.6 Migratory Birds of High Federal Interest

MBHFI were inventoried during all site visits. This was accomplished by searching all suitable or potentially suitable habitats and recording all species encountered. The breeding bird surveys also included MBHFI species. Many of the MBHFI species are also BLM sensitive species or state SSS. Additional MBHFI surveys were completed during summer 2010 and 2011. Detailed results of these investigations are included in the Project's 2010 and 2011 Annual Wildlife Monitoring Report LWR Consultants, Inc. and Wyoming Wildlife Consultants, Inc., 2011 and 2012, respectively [Appendix C].

Several MBHFI species are known to occur in the region. Level I MBHFI species are described by USFWS as in need of conservation, while Level II MBHFI species are described as in need of monitoring. Level I MBHFI species in the region include the bald eagle, ferruginous hawk, Swainson's hawk, peregrine falcon, burrowing owl, Greater sage-grouse, mountain plover, Brewer's sparrow, and sage sparrow. Of these, the ferruginous hawk, Greater sage-grouse, Brewer's sparrow, and sage sparrow were documented in the Permit Area; the mountain plover and burrowing owl have been noted in adjacent areas. The bald eagle may occur as a sporadic migrant, and may forage on-site occasionally. The nearest known bald eagle nest to the Permit Area is greater than five miles from the Permit Area.

Level II species documented in the Permit Area include the sage thrasher, loggerhead shrike, vesper sparrow, and lark sparrow. Level II MBHFI species known to exist in the region, but not documented in the Permit Area, include the merlin, Cassin's kingbird, black-billed cuckoo, loggerhead shrike, and lark bunting.

The ferruginous hawk nests were previously discussed, as were Greater sage-grouse and their leks. The breeding Brewer's sparrow and sage sparrow were found throughout the big sagebrush habitats of the Permit Area. The breeding sage thrasher, loggerhead shrike, vesper sparrow, and lark sparrow were also located within the Permit Area. The Lowland Big Sagebrush Shrubland habitat provided the greatest species diversity for MBHFI species use.

Mountain Plover

The mountain plover (*Charadrius montanus*) is one of twelve endemic birds of the western Great Plains. They breed in grassland and shrubstep habitats and have a short to mid-distance migration (Smith and Keinath, 2004). It is thought that populations of mountain plovers have declined in the last century. Wyoming, Colorado, and Montana make up the vast majority of remaining populations. The population of breeding mountain plover in Wyoming is currently between 2,000 and 5,000 individuals and may account for a quarter of the global breeding population (Smith and Keinath, 2004). The USFWS has reinstated a proposal for the mountain plover to be listed as threatened under the Endangered Species Act

3.0 AFFECTED ENVIRONMENT

in 2010 (USFWS, 2010a). The mountain plover is also a BLM sensitive species and a state SSS.

No mountain plover have been observed on or near the Permit Area during spring and summer surveys completed between 2006 and 2011. However, mountain plover have been noted in nearby open grassland and shrubland habitats. The Permit Area was evaluated for mountain plover habitat. The extensive tall shrub cover and absence of grassland or open shrub habitats make the Permit Area poorly suited to the mountain plover. Small open areas (grassland and disturbed areas) do occur in the Permit Area, but are very small and isolated. Mountain plover prefer open low grasslands, bare ground, disturbed areas, prairie dog colonies and sparse shrubland habitats for nesting. Good potential mountain plover habitat occurs a few miles to the south and west of the Permit Area. Good potential mountain plover nesting habitat is not present in the Permit Area and no mountain plover have been observed on-site during extensive field studies. Based on this, it is unlikely that mountain plovers nest within the Permit Area.

3.8.3.7 Other Mammals

All mammal species observed (either by direct observation or sign) during the field studies were recorded and are documented on the species list in **Table 3.8-1**. A total of 19 mammal species were recorded in the Permit Area. The most common species seen were the white-tailed jackrabbit, desert cottontail, Wyoming ground squirrel, thirteen-lined ground squirrel, deer mouse, and meadow vole. The coyote was the most abundant predator.

Aerial and ground surveys of the entire Permit Area were conducted to locate prairie dog towns. There were no active colonies in the Permit Area.

3.8.3.8 Federal T&E Species, BLM Special Status Species, and State-Listed Species of Concern

T&E and candidate wildlife species surveys were completed during all site visits by searching suitable habitats for the target species. As part of baseline data collection, specific surveys were completed for many species (Greater sage-grouse, raptors, Pygmy rabbits, passerine birds).

Table 3.8-1 includes a list of federally listed species, candidate species, BLM sensitive species and state SSS observed or potentially occurring in the Permit Area.

Federally Listed or Candidate Species

The black-footed ferret (endangered) is the only federally listed species that may occur in the vicinity of the Permit Area according to WGFD WOS data (WGFD, 2008a). A black-footed ferret survey was not required, since black-footed ferrets

live exclusively in prairie dog colonies, which are not present within the Permit Area.

The bald eagle has recently been delisted, but bald eagle nesting habitat does not exist within the study area. The bald eagle may occur as a sporadic migrant, and may forage on-site occasionally (**Table 3.8-1**). As discussed in **Section 3.8.3.2**, the Greater sage-grouse is a candidate for federal listing.

BLM Special Status Species

BLM SSS that have the potential to occur within the study area are shown in **Table 3.8-5** (BLM, 2002; WGFD, 2008a). These species include: Long-eared Myotis, Townsend's Big-eared Bat, Pygmy Rabbit, White-tailed Prairie Dog, Wyoming Pocket Gopher, White-faced Ibis, Trumpeter Swan, Bald Eagle, Northern Goshawk, Ferruginous Hawk, Peregrine Falcon, Burrowing Owl, Greater sage-grouse, Long-Billed Curlew, Mountain Plover, Loggerhead Shrike, Sage Thrasher, Brewer's Sparrow, Sage Sparrow, Northern Leopard Frog, and Spadefoot Toad. BLM Sensitive Species that have been documented within the Permit Area include: Pygmy Rabbit, Ferruginous Hawk, Greater sage-grouse, Loggerhead Shrike, Sage Thrasher, Brewer's Sparrow, Wyoming Pocket Gopher, and Sage Sparrow.

Surveys were conducted for Pygmy rabbits (BLM Sensitive Species, NSS3 species). Pygmy rabbits were observed in the Permit Area during the fall of 2006, 2010, and 2011. Based on these surveys, Pygmy rabbits occur in most Lowland Big Sagebrush Shrubland habitat (**Figure 3.7-1**). Scat, burrows, and individual Pygmy rabbits were observed along each transect within the Lowland Big Sagebrush Shrubland habitat of the Permit Area. Locations of observed Pygmy rabbit burrows and pellets during 2010 are presented in **Figure 3.8-11**.

Table 3.8-5 Special Status Wildlife Species Potentially Occurring in the Permit Area (Page 1 of 3)

Common Name	Scientific Name	Status ¹	Confirmed in Permit Area
Mammals			
Long-eared Myotis	<i>Myotis evotis</i>	BLM Sensitive Species, NSS2	
Little Brown Myotis	<i>Myotis lucifugus</i>	NSS3	
Long-legged Myotis	<i>Myotis volans</i>	NSS2	
Hoary Bat	<i>Laiurus cinerus</i>	NSS4	
Silver-haired Bat	<i>Lasionycterius noctivagans</i>	NSS4	
Big Brown Bat	<i>Eptesicus fuscus</i>	NSS3	
Townsend's Big-eared Bat	<i>Plecotus townsendii</i>	BLM Sensitive Species, NSS2	
Pallid Bat	<i>Antrozous pallidus</i>	NSS2	
Pygmy Rabbit	<i>Brachylagus idahoensis</i>	BLM Sensitive Species, NSS3	Yes
White-tailed Prairie Dog	<i>Cynomys leucurus</i>	BLM Sensitive Species, NSS3	No prairie dog colonies present
Wyoming Pocket Gopher	<i>Thomomys idahoensis</i>	BLM Sensitive Species, NSS3	Yes
Black-footed Ferret	<i>Mustela nigripes</i>	Endangered, NSS1	No prairie dog colonies present
Olive-backed Pocket Mouse	<i>Perognathus fasciatus</i>	NSS3	
Prairie Vole	<i>Microtus ochrogaster</i>	NSS3	
Birds			
American White Pelican	<i>Pelecanus erythrorhynchos</i>	NSS3	Potential use Chain Lakes, 7 miles south
Great Blue Heron	<i>Ardea herodias</i>	NSS4	Potential use Chain Lakes, 7 miles south
Snowy Egret	<i>Egretta Thula</i>	NSS3	Potential use Chain Lakes, 7 miles south
White-faced Ibis	<i>Plegadis chihi</i>	BLM Sensitive Species, NSS3	Potential use Chain Lakes, 7 miles south
Sandhill Crane	<i>Grus canadensis</i>	NSS3	Potential use Chain Lakes, 7 miles south
Northern Pintail	<i>Anas acuta</i>	NSS3	Potential use Chain Lakes, 7 miles south
Redhead	<i>Aythya americana</i>	NSS3	Potential use Chain Lakes, 7 miles south
Canvasback	<i>Aythya valisineria</i>	NSS3	Potential use Chain Lakes, 7 miles south

Table 3.8-5 Special Status Wildlife Species Potentially Occurring in the Permit Area (Page 2 of 3)

Common Name	Scientific Name	Status ¹	Confirmed in Permit Area
Trumpeter Swan	<i>Cygnus buccinator</i>	BLM Sensitive Species, NSS2	
Bald Eagle	<i>Haliaeetus leucocephalus</i>	BLM Sensitive Species, NSS2	Potential winter use, no known nests
Northern Goshawk	<i>Accipiter gentilis</i>	BLM Sensitive Species, NSS4	No, forested areas not present
Swainson's Hawk	<i>Buteo swainsoni</i>	NSS4	
Ferruginous Hawk	<i>Buteo regalis</i>	BLM Sensitive Species, NSS3	Yes
Merlin	<i>Falco columbaris</i>	NSS3	
Peregrine Falcon	<i>Falco peregrinus</i>	BLM Sensitive Species, NSS3	No nesting habitat
Short-eared Owl	<i>Asio flammeus</i>	NSS4	
Burrowing Owl	<i>Athene cunicularia</i>	BLM Sensitive Species, NSS4	
Greater Sage Grouse	<i>Centrocercus urophasianus</i>	BLM Sensitive Species, Candidate	Yes
Upland Sandpiper	<i>Bartramia longicauda</i>	NSS4	
Long-billed Curlew	<i>Numenius americanus</i>	BLM Sensitive Species, NSS3	
Mountain Plover	<i>Charadrius montanus</i>	BLM Sensitive Species, NSS4	
Willow Flycatcher	<i>Empidonax traillii</i>	NSS3	
Loggerhead Shrike	<i>Lanius ludovicianus</i>	BLM Sensitive Species	Yes
Lark Bunting	<i>Calamospiza melanocorys</i>	NSS4	
Grasshopper Sparrow	<i>Ammodramum savannarum</i>	NSS4	Yes
Sage Thrasher	<i>Oreoscoptes montanus</i>	BLM Sensitive Species, NSS4	Yes
Brewer's Sparrow	<i>Spizella breweri</i>	BLM Sensitive Species, NSS4	Yes
Sage Sparrow	<i>Amphispiza belli</i>	BLM Sensitive Species, NSS4	Yes
Chestnut-collared Longspur	<i>Calcarius ornatus</i>	NSS4	Yes
McCown's Longspur	<i>Calcarius ornatus</i>	NSS4	
Bobolink	<i>Dolichonyx oryzivorus</i>	NSS4	

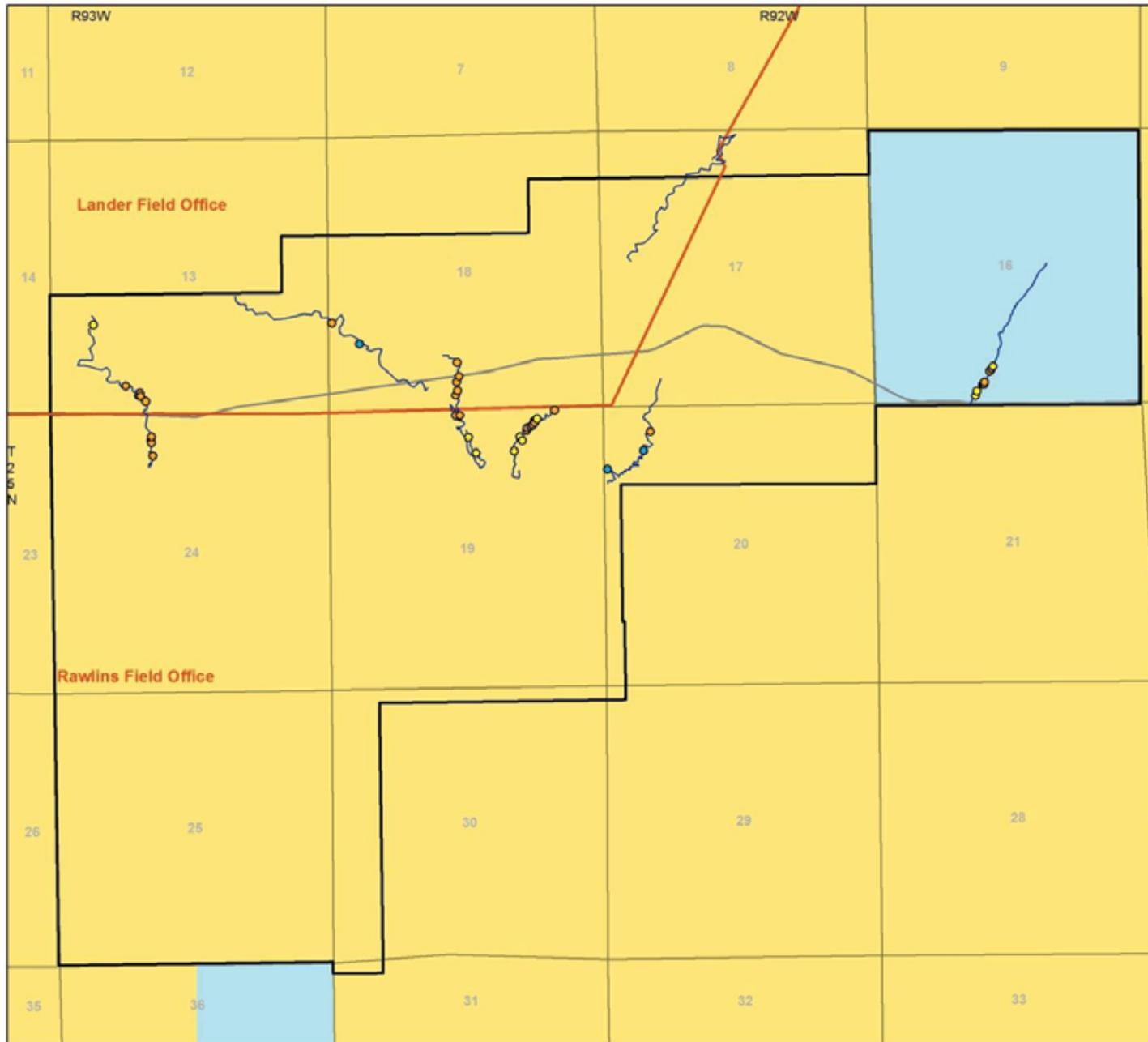
Table 3.8-5 Special Status Wildlife Species Potentially Occurring in the Permit Area (Page 3 of 3)

Common Name	Scientific Name	Status ¹	Confirmed in Permit Area
Amphibians			
Northern Leopard Frog	<i>Rana pipiens</i>	BLM Sensitive Species, NSS4	
Great Basin Spadefoot	<i>Spea intermontana</i>	BLM Sensitive Species, NSS4	

¹ Sensitive Species = BLM Sensitive Species List

Endangered, Threatened, Candidate = Status under the Endangered Species Act

- NSS1 = State of Wyoming Native Species Status 1: Populations are greatly restricted or declining, extirpation appears possible ~OR~ on-going significant loss of habitat.
- NSS2 = State of Wyoming Native Species Status 2: Populations are declining, extirpation appears possible; habitat is restricted or vulnerable, but no recent or ongoing significant loss; species may be sensitive to human disturbance. ~OR~ Populations are declining or restricted in numbers and/or distribution; extirpation is not imminent; ongoing significant loss of habitat.
- NSS3 = State of Wyoming Native Species Status 3: Populations are greatly restricted or declining, extirpation appears possible; habitat is not restricted, vulnerable, but no loss; species is not sensitive to human disturbance. ~OR~ Populations are declining or restricted in numbers and/or distribution; extirpation is not imminent; habitat is restricted or vulnerable, but no recent or ongoing significant loss; species may be sensitive to human disturbance. ~OR~ Species is widely distributed; population status or trends are unknown, but are suspected to be stable; ongoing significant loss of habitat.
- NSS4 = State of Wyoming Native Species Status 4: Restricted. ~OR~ Populations are declining or restricted in numbers and/or distribution; extirpation is not imminent; habitat is not restricted, vulnerable, but no loss; species is not sensitive to human disturbance. ~OR~ Species is widely distributed; population status or trends are unknown but are suspected to be stable; habitat is restricted or vulnerable, but no recent or ongoing significant loss; species may be sensitive to human disturbance. ~OR~ Populations are stable or increasing and not restricted in numbers and/or distribution; ongoing significant loss of habitat.



Legend

- Burrows
- Burrows + Fresh Pellets
- Burrows + Old Pellets
- Collapsed
- Possible Burrow
- Transects
- ▭ Lost Creek Permit Area
- ▭ BLM Field Office Boundary
- Surface Land Owner**
- BLM - administered
- State



Lost Creek Uranium *In-Situ* Recovery Project
Sweetwater County, WY

Figure 3.8-11
Location of Pygmy Rabbit Burrows and Pellets (2010)

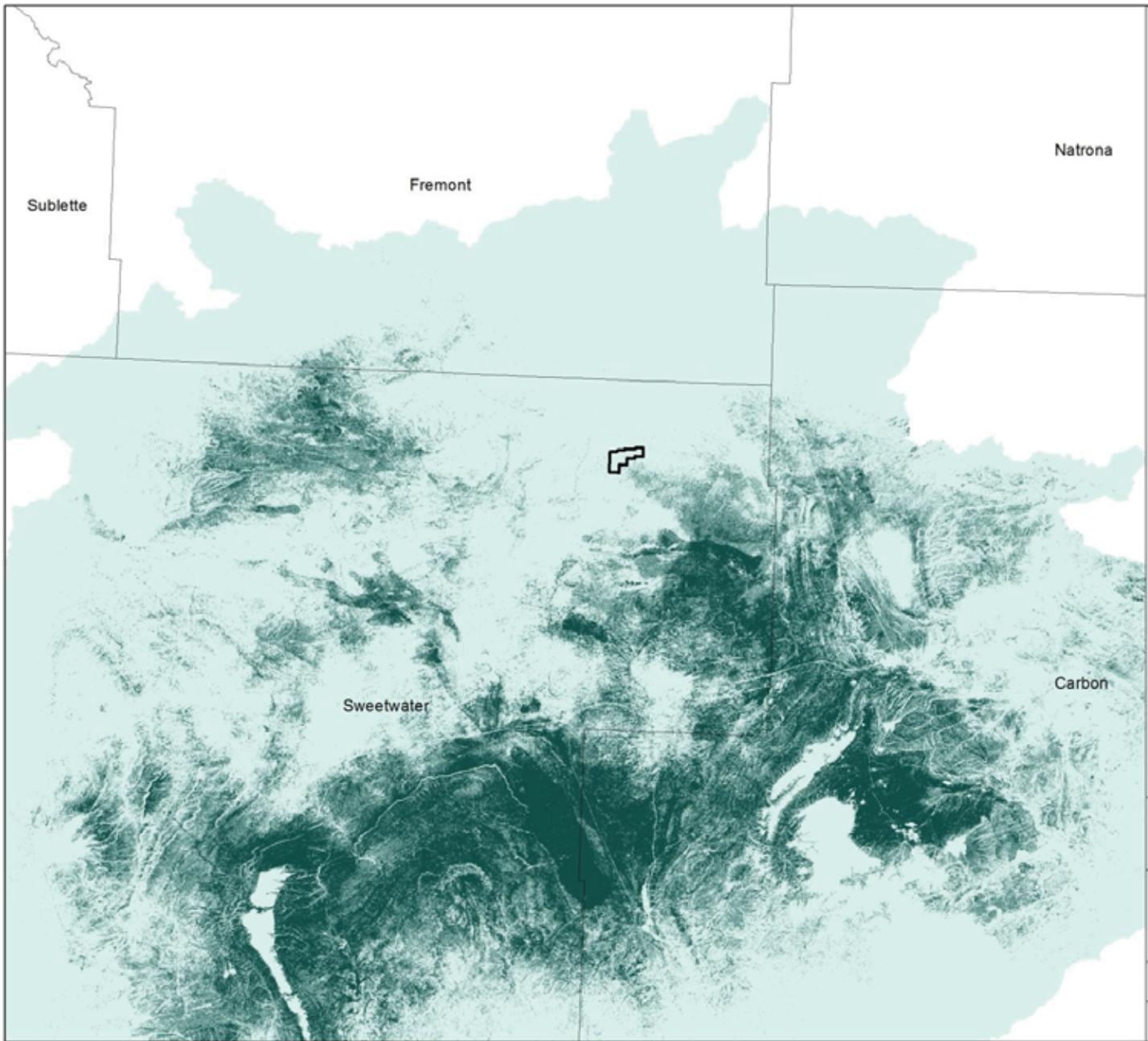


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Wyoming Pocket Gopher

The Wyoming pocket gopher (*Thomomys clusius*) is a BLM and USFS sensitive species, a State imperiled species (WNDD G2/S2 rank), and was petitioned to be listed as a T&E species. The USFWS has recently reviewed existing data to determine if the Wyoming pocket gopher should be federally protected as a T&E species (USFWS, 2010b). Based on this review, the USFWS made a determination that listing is not warranted. The Wyoming pocket gopher is restricted to a very small portion of south-central Wyoming and possibly into very northern Colorado (Clark and Stromberg, 1987). The Wyoming pocket gopher is a small, lighter-colored member of the Giomyidae family with a length of approximately six to seven inches and a weight of 1.5 to 2.5 ounces. The more common northern pocket gopher (*T. talpoides*) range overlaps the Wyoming pocket gopher range. Habitat analyses suggest that Wyoming pocket gophers occur predominantly on gentle slopes where Gardner's saltbush and winterfat are present and big sagebrush is absent or subdominant. Wyoming pocket gopher sites also tend to have less grass, rock, and litter cover when compared to control sites and those occupied by the more common northern pocket gopher (Griscom et al., 2010). As shown in **Figure 3.8-12**, predictive models show the Permit Area within potential habitat areas.

Trapping was completed during fall 2010 to determine if Wyoming pocket gophers are present within the Lost Creek Disturbance Area (approximately 345 acres anticipated to be disturbed by the Project). Based on the trapping effort, Wyoming pocket gophers are present throughout the Lost Creek Disturbance Area. Wyoming pocket gophers were captured in nine different locations within the Disturbance Area. Additional active burrow complexes were located throughout the Disturbance Area. Active burrow complexes were located within very small grassy openings within the sagebrush plant community (**Figure 3.8-13**). There is a high likelihood that Wyoming pocket gophers are present throughout the Permit Area.



Legend

Predicted Probability of Occurrence

- Low
- Medium
- High
- Lost Creek Permit Area
- Wyoming Counties

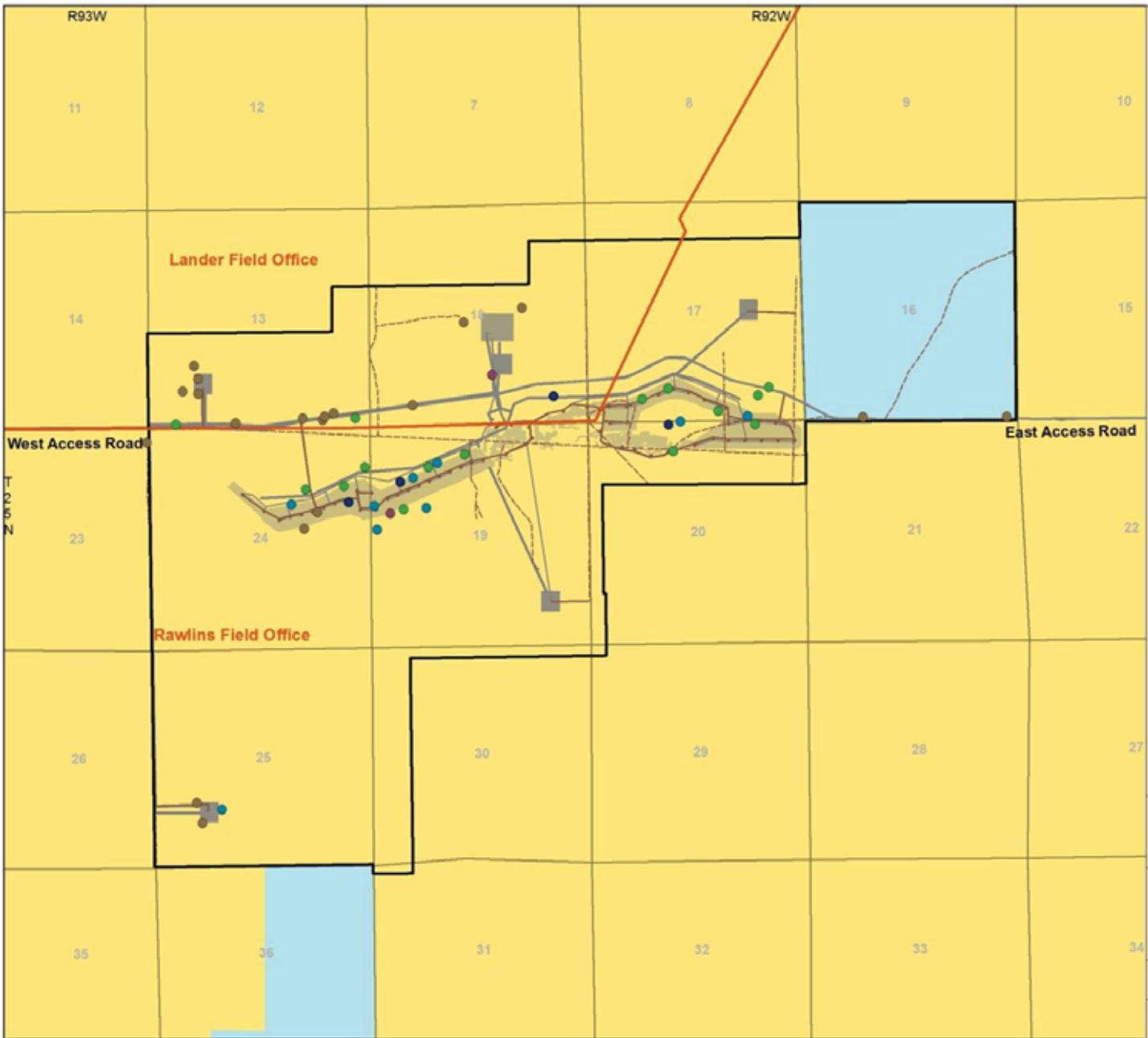


Lost Creek Uranium *In-Situ* Recovery Project
Sweetwater County, WY

FIGURE 3.8-12
Wyoming Pocket Gopher
Distribution



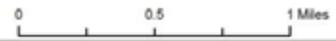
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- Legend**
- Active - Not Trapped
 - Inactive - Not Trapped
 - Northern Pocket Gopher
 - None Caught
 - Wyoming Pocket Gopher
 - Project Infrastructure
 - ▭ Lost Creek Permit Area
 - ▭ BLM Field Office Boundary
- Roads**
- Main Access Road
 - Secondary Road
 - - - Existing Two Track
- Surface Land Owner**
- BLM - administered
 - State

Lost Creek Uranium *In-Situ* Recovery Project
Sweetwater County, WY

Figure 3.8-13
Wyoming Pocket Gopher Survey (2010)



No warranty is made by the BLM for use of the data for purposes not intended by BLM

State-Listed Special Status Species

The state-listed wildlife species (WGFD, 2005a; WGFD, 2005c) not included under other wildlife categories, and their probability of occurrence in the Permit Area, are listed in **Table 3.8-6**. State-listed species that may occur in the Permit Area are classified as NSS 2, 3, or 4. Status 2 species have declining populations that are threatened with extirpation, and have restricted or vulnerable habitat. These species may also be sensitive to human disturbance or have significant habitat loss. Status 3 species have: 1) populations that are restricted or declining with the threat of extirpation, 2) habitat that is restricted or vulnerable, or 3) a wide distribution and unknown population, with significant habitat loss. Status 4 species have: 1) populations that are restricted or declining with stable habitat, 2) widely distributed stable populations with restricted habitat that are sensitive to human disturbance, or 3) stable or increasing populations with significant loss of habitat.

State-listed avian species that may occur in the Permit Area have been classified as NSS 3 or 4 (WGFD, 2005a). The listed waterfowl and shorebird species (e.g., American white pelican, upland sandpiper, and long-billed curlew) and passerines (e.g., McCown's longspur, and bobolink) are unlikely to be in the Permit Area because there is no suitable habitat for these species. However, they may pass through the Permit Area during migration. The sage thrasher, Brewer's sparrow, and sage sparrow (all NSS4 species) were observed in the Permit Area. An isolated observance of a chestnut collared longspur within the Permit Area was noted in 2010. Suitable habitat exists for the lark bunting, though this species was not observed.

State-listed mammal species that may occur in the Permit Area have been classified as NSS 2, 3, or 4 (WGFD, 2005c). Several listed shrew and bat species (e.g., dwarf shrew, vagrant shrew, hoary bat, and silver-haired bat) have ranges that include the Permit Area. There is no suitable habitat in the Permit Area, so they are unlikely to be present. Suitable roosting habitats for the western small-footed myotis, little brown myotis, long-legged myotis, big brown bat, Townsend's big-eared bat, and pallid bat might be found in rock crevices, rock outcrops, or trees near the Stratton Rim, approximately ten miles to the northeast of the Permit Area. These species could also potentially roost in the vertical walls of eroded streambeds in the Permit Area. However, none of these species were observed in the Permit Area. The state-listed olive-backed pocket mouse and prairie vole were not observed in the Permit Area either. Suitable habitat exists in the Permit Area, and these species are known to be in the region (WGFD, 2004a).

Table 3.8-6 Wildlife Species of Special Concern (Page 1 of 2)

Species	Status ¹	Preferred Habitat	Potential Occurrence	Identified in Permit Area
Birds				
American White Pelican	NSS3	Big rivers, lakes, reservoirs, estuaries, islands, peninsulas	Unlikely	
Great Blue Heron	NSS4	Wetlands, water banks, rivers, lakes, fields, meadows	Present	
Snowy Egret	NSS3	Marshes, water banks, and shallow rivers, lakes, ponds	Possible	
Northern Pintail	NSS3	Riparian/wetlands, rivers, lakes, ponds in grasslands, fields, boreal forest	Likely	
Canvasback	NSS3	Riparian/wetlands, big rivers, lakes, ponds	Present	
Redhead	NSS3	Wetlands, lakes, rivers	Likely	
Sandhill Crane	NSS3	Wetlands, grasslands, banks of rivers, lakes, ponds	Possible	
Upland Sandpiper	NSS4	Fen, cropland, grassland, fields	Unlikely	
Long-billed Curlew	NSS3	Wetland/riparian, grassland, meadows	Unlikely	
Western Burrowing Owl	NSS4	Grasslands, deserts, and savannas in burrows	Likely	
Short-eared Owl	NSS4	Wetland, fen, grassland, cropland, savanna	Possible	
Willow Flycatcher	NSS3	Riparian, shrubland, woodland	Possible	
Sage Thrasher	NSS4	Desert, shrubland, sagebrush plains	Present	x
Brewer's Sparrow	NSS4	Desert, shrubland, sagebrush plains	Present	x
Sage Sparrow	NSS4	Desert, shrubland, sagebrush	Present	x
Lark Bunting	NSS4	Cropland, desert, grassland, shrubland	Likely	
Grasshopper Sparrow	NSS4	Grasslands, fields, savanna	Present	x
McCown's Longspur	NSS4	Cropland, grassland	Unlikely	
Chestnut-collared Longspur	NSS4	Cropland, desert, grassland	Present	x
Bobolink	NSS4	Wetland, cropland, grassland	Unlikely	

Table 3.8-6 Wildlife Species of Special Concern (Page 2 of 2)

Species	Status ¹	Preferred Habitat	Potential Occurrence	Identified in Permit Area
Mammals				
Dwarf Shrew	NSS3	Wetlands in alpine, scree, conifer forest, grassland, shrubland, woodland	Possible	
Vagrant Shrew	NSS3	Wetland/riparian, fen, conifer forest, woodland, grassland, field, shrubland	Possible	
Western Small-footed Myotis	NSS3	Roost in rock crevices, caves, tunnels, under boulder, loose bark, buildings, mines in desert, badland, semiarid habitat	Possible	
Little Brown Myotis	NSS3	Roost in buildings, caves, hollow trees in fens, wetland/riparian, forests, shrublands, woodlands	Possible	
Long-legged Myotis	NSS2	Roosts in caves, mines, buildings, rock crevices, under bark, hollow trees in riparian, desert, forest, woodland	Possible	
Hoary Bat	NSS4	Roasts in tree foliage, rock crevices, tree trunks and cavities in riparian, conifer forest, woodland	Unlikely	
Silver-haired Bat	NSS4	Tree cavities of conifer forest adjacent to lakes, ponds, streams	Unlikely	
Big Brown Bat	NSS3	Roost in buildings, trees, rock crevices, tunnels, caves in woodlands and conifer forests	Possible	
Townsend's Big-eared Bat	NSS2	Roost in caves, mines, buildings, tree cavities in conifer forest, woodland sagebrush, riparian	Possible	
Pallid Bat	NSS2	Roost in rock crevices in desert and grasslands	Possible	
Pygmy Rabbit	NSS3	Burrows in dense big sagebrush and desert	Present	x
Olive-backed Pocket Mouse	NSS3	Burrows in cropland, grassland, shrubland	Likely	
Prairie Vole	NSS3	Burrows in grasslands, fields, shrubland	Likely	

¹ State – Native Species Status

NSS1: Native Species Status 1 - Populations are greatly restricted or declining, extirpation appears possible and on-going significant loss of habitat.

NSS2: Native Species Status 2 - Populations are declining, extirpation appears possible; habitat is restricted or vulnerable but no recent or ongoing significant loss; species may be sensitive to human disturbance.

NSS3: Native Species Status 3 - Populations are greatly restricted or declining, extirpation appears possible; habitat is not restricted, vulnerable but no loss; species is not sensitive to human disturbance.

NSS4: Native Species Status 4 - Populations are greatly restricted or declining, extirpation appears possible; habitat is stable and not restricted.

3.8.3.9 Reptiles and Amphibians

Several species of reptiles were observed during general surveys, as noted in **Table 3.8-1**. Reptiles included the greater short-horned lizard, prairie rattlesnake, and western terrestrial garter snake. No amphibians were observed within the Permit Area. Incidental herpetology observations are recorded as part of the annual monitoring and would continue beyond baseline for the purposes of monitoring and determining species composition.

Specific auditory surveys for the Great Basin spadefoot toad (*Spea intermontana*) were completed within the Permit Area during the spring and early summer of 2010 and 2011 as a part of the baseline data collected at the request of WGFD and BLM. No spadefoot toad vocalizations were heard during either survey. Detailed methods and results of the 2010 and 2011 investigations are included in the Project's 2010 and 2011 Annual Wildlife Monitoring Report (LWR Consultants, Inc. and Wyoming Wildlife Consultants, Inc., 2011 and 2012, respectively [**Appendix C**]).

3.8.3.10 Fish and Aquatic Life

The Permit Area is predominately dry shrubland. There is no aquatic habitat for most of the year. The Crooked Well Reservoir is an ephemeral stock pond that is dry except for a short period of time after spring snowmelt (**Figure 3.5-4**). The Permit Area is bisected by several intermittent drainages that provide running water only after large storm events. There is no habitat for fish within the Permit Area. Aquatic habitat is limited to ephemeral streams and stock ponds.