



Project: El Paso Rail Yard
Date: May 22, 2023
To:
From: Sirena Brownlee, Senior Scientist/Project Manager, HDR, Inc.
Subject: Wildlife and Waters of the U.S. Technical Memorandum

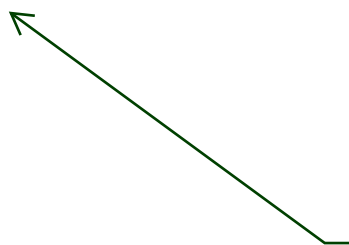
Introduction

This report presents the findings of a review of federal- and state- listed species and wetlands and waters of the U.S. (WOUS) conducted by HDR, Inc. for the proposed Industrial Rail Park near the incorporated limits of Fountain, Colorado. The site is located south of the city of Fountain and west of Interstate 25 in El Paso County, Colorado. The property is within Sections 18, 19, 20 and 30, Township 16 South, Range 65 West. The site is bounded by Interstate 25, Union Pacific Railroad, and Burlington Northern Santa Fe Railroad on the east, Charter Oak Ranch Road on the north, Fort Carson Military Base on the west, Fort Carson and the Ray Nixon Power Plant on the south (Figure 1). The land is owned primarily by Edward C. Levy Company, with smaller relevant properties being owned by five private lot owners, the City of Fountain, and Kiewit Construction. Overall, the project site encompasses 3,875 acres.

The April 2013 City of Fountain Comprehensive Plan Update identifies the properties land use classification as Business Park/Planned Industrial. Current land use is primarily gravel mining operations and agriculture, as well as a few residential lots. Some limited grazing occurs in the project area.

Methods and Site Visit

A site visit was conducted on September 11, 2018, by Sirena Brownlee, senior scientist with HDR. The purpose of site visit was to assess the project area for the presence and suitability of potential habitat for federal- and state- listed species, and determine if wetlands and WOUS are present in the project area.



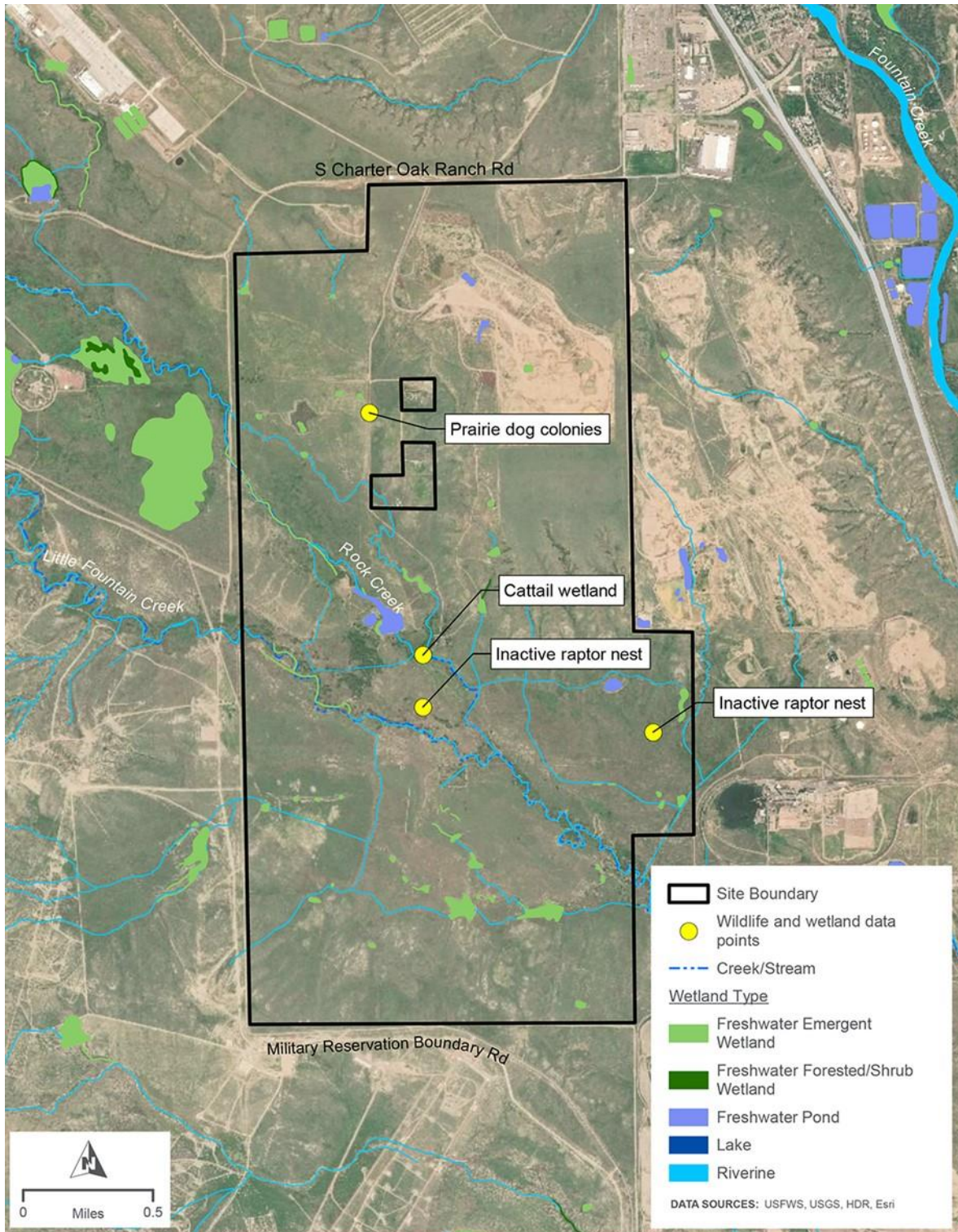
Please provide the corresponding images from the site visit that helped to establish findings for the features identified, such as rapture nests, wetlands, ponded areas, outcroppings and other natural features, if any etc.

Identify and map the perceived wetland that are jurisdictional, and non jurisdictional in context of the land uses proposed in the sketch plan - which are to remain or be mitigated with development?

Please identify any other features/environmentally sensitive areas, & wildlife habitat in the context of the land uses proposed sketch plan.

Was an updated visit completed in 2023 to verify nest sites- this report is from 2018?

Figure 1. El Paso Rail Park Wildlife and Waters of the U.S.



Source/Notes

Prior to conducting the site visit, HDR conducted a desktop review of available sources to identify potential for wetlands and federal- and state- listed species with the potential to occur in the project area. The Desktop review information was confirmed and IPaC species list updated on 5/22/2023. The following information sources were reviewed:

- USFWS IPaC interactive program which lists federal species potentially found in El Paso County, Colorado (USFWS 2023).
- Colorado Natural Heritage Program (CNHP) spatial data (CNHP 2018).
- eBird for recent sightings of federally listed birds in the project area (Sullivan et al. 2009).
- Colorado Breeding Bird Atlas data (Wickersham 2016).
- Colorado Parks and Wildlife Species Activity Data (CPW 2023a).
- Colorado sensitive, threatened, and endangered species as identified by the Colorado Parks and Wildlife (CPW 2023b).
- Natural Resources Conservation Service soil survey data and National Wetlands Inventory data, to identify potential locations for aquatic resources, including Waters of the U.S.

This report provides summaries of the regulations, data reviewed, wildlife species of interest potentially occurring at the project site, and recommendations.

Project Area Habitat Description

The project area topography slopes down in a southeast direction at approximately 2 percent slope to Little Fountain Creek. Little Fountain Creek flows in a southeast direction, with the southwest portion of the site sloping into the creek at approximately 5 percent slope in a northeast direction. The southwest corner of the project site sits at a 5,620 feet of elevation, and slopes down to Little Fountain Creek at approximately 5,500 feet of elevation. The northwest corner of the site sits at approximately 5,740 feet of elevation, sloping to the creek. The northeast portion of the site sits on a flatter area at 5,680 feet of elevation. Rock Creek is a smaller stream and crosses into the site from the northwest, but does not have a published floodplain. There are steeply sloping areas adjacent to Little Fountain Creek and other dry bed areas to the east of the project site that would be too encumbered for development and would likely be utilized as approximately 500 acres of open space.

The project area is located within the Southern Rocky Mountains and Central Shortgrass Prairie ecoregions (Chapman et al. 2006). The Central Shortgrass Prairie ecoregion is characterized by rolling plains and tablelands dissected by streams, canyons, badlands, and buttes and dominated by shortgrass, mixed-grass, and sandsage prairie. Small patches of remnant tallgrass prairie occur along the base of the foothills and in other areas where the soils and moisture regime are appropriate.

Vegetation in the project area consists of short grass prairie, disturbed vegetation around developed areas, and riparian habitat. The dominant plant species in the short grass prairie are smooth brome (*Bromis inermis*), crested wheatgrass (*Agropyron cristatum*), soapweed yucca

(*Yucca glauca*), blue grama (*Bouteloua gracilis*), galleta (*Pleuraphis jamesii*) and western wheatgrass (*Pascopyrum smithii*). There is a diverse forb component and occasional shrubs including saltbush (*Atriplex canescens*), three-leaf sumac (*Rhus trilobata*), rabbitbrush (*Chrysothamnus nauseosus*), and yucca (*Yucca glauca*). Other common herbaceous species include common sunflower (*Helianthus annuus*), fringed sage (*Artemisia frigida*), plains prickly pear (*Opuntia polyacantha*), Indian ricegrass (*Achnatherum hymenoides*) and broom snakeweed (*Gutierrezia sarothrae*).

Riparian habitat is located along Little Fountain Creek and other small drainages in the project area and included plains cottonwood (*Populus deltoides*), Siberian elm (*Ulmus pumila*), green ash (*Fraxinus pennsylvanica*), reed canary grass (*Phalaris arundinacea*), saltcedar (*Tamarix* spp.), cattail (*Typha* spp.), and bulrush (*Schoenoplectus* spp.).

Vegetation in disturbed/developed areas consists of smooth brome, cheat grass (*Bromus tectorum*), thistle species, common mullein (*Verbascum thapsus*), diffuse knapweed (*Centaurea diffusa*) and field bindweed (*Convolvulus arvensis*).

Wildlife observed during the site visit include pronghorn antelope (*Antilocapra americana*), red-tail hawk (*Buteo jamaicensis*), black-capped chickadee (*Poecile atricapillus*), and black-tailed prairie dog (*Cynomys ludovicianus*). Several small active black-tailed prairie dog colonies are located on the north end of the project area adjacent to Millbrose Road (Figure 1).

There are several areas with mature trees that provide nesting habitat for migratory birds and raptors within or immediately adjacent to the project area. Two inactive raptor nests (possibly red-tailed hawk) were observed in the project area. One is located on the south side of the project area near Little Fountain Creek and the other one is located on the southeast side of the project area (Figure 1). Both nests were inactive at the time of the site visit and the nest on the southeast side was in poor condition and had not been used recently. The grasslands provides good habitat for raptors and the presence of prairie dogs in the study area provides a source of prey for raptors.

The project area is mapped as elk and pronghorn overall range by the Colorado Parks and Wildlife (CPW 2019a).

Applicable Federal and State Regulations

This report has been prepared to ensure impacts to federal-, state-listed, and sensitive species are determined in accordance with the following federal and state regulations:

- **Endangered Species Act.** The Endangered Species Act is administered by the U.S. Fish and Wildlife Service (USFWS) and protects plant and wildlife species threatened with extinction.
- **Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act.** The USFWS administers these acts that protect migratory bird nesting habitat and active migratory bird and eagle nests.

- **Colorado Non-game, Endangered, and Threatened Species Conservation Act.** Colorado Parks and Wildlife (CPW) is responsible for listing species of concern, threatened, and endangered within the state. This act provides some protection for state-listed wildlife.
- **Section 404 of the Clean Water Act.** Waters of the U.S. including wetlands are regulated under Section 404 of the Clean Water Act by the U.S. Army Corps of Engineers.

Federal-and State-Listed Species

Based on the USFWS online IPaC System (Appendix A), there are eight federally listed threatened or endangered species and one candidate species with the potential to occur in the project vicinity (USFWS 2023). No critical habitat for any federally listed species occurs in the project area.

In addition to federally listed species and migratory birds, the CPW lists 74 species of amphibians, birds, fish, mammals, reptiles, and mollusks as endangered, threatened, or of special concern within the state of Colorado (CPW 2023b). The majority of these species are not expected to occur in the project area because it is outside of their range and/or appropriate habitat is not present. Table 1 lists the federal and state-listed species as well as migratory birds that have the potential to occur within the project area and their associated habitat.

Table 1. Federal and State-Listed Species and their Potential to occur the in Project Area

Species	Status ¹	Habitat	Potential for Occurrence in Project Area
Birds			
Eastern black rail (<i>Laterallus jamaicensis</i>)	FT	Requires dense overhead cover and are primarily associated with herbaceous, persistent, emergent wetland plants	Unlikely to occur. No suitable habitat in project area and outside known range.
Piping plover* (<i>Charadrius melodus</i>)	FT, ST	Wetlands, lakeshores, and marshes. Nesting habitat is along reservoirs, lakes and rivers with bare sandy/pebbly areas with sparse vegetation.	Unlikely to occur. No suitable habitat in study area and outside known range. This species is included because it occurs in the Platte River system.
Bald eagle (<i>Haliaeetus leucocephalus</i>)	SC	Habitat includes reservoirs and along major rivers (South Platte, Arkansas, Rio Grande, Yampa, Colorado) during both the summer and winter.	May occur. No known nesting sites or habitat in project area however winter range habitat is mapped 1 mile east of project area along Fountain Creek (CPW 2023a). The presence of prairie dog colonies may attract wintering bald eagles.
Burrowing owl (<i>Athene cunicularia</i>)	ST	Prairie dog colonies are primarily used by the owl for nesting and hunting. The owl is a migrant that can arrive in March and is typically migrating south by October.	May occur. Suitable habitat for this species is present in prairie dog colonies that occur in the project area.

Table 1. Federal and State-Listed Species and their Potential to occur the in Project Area

Species	Status ¹	Habitat	Potential for Occurrence in Project Area
Ferruginous hawk (<i>Buteo regalis</i>)	SC	Open areas such as grassland or shrubsteppe. Nests in rock outcrops, buttes, large shrubs, haystacks, and low cliffs.	May occur. Suitable foraging habitat is present in the project area and species has been documented adjacent to project area (Sullivan et al. 2009).
American peregrine falcon (<i>Falco peregrinus anatum</i>)	SC	Requires rocky outcrops for nesting. Uses a variety of habitats during the spring and fall migration.	May occur. No suitable nesting habitat but could use habitat in project area for foraging.
Mammals			
Gray wolf (<i>Canis Lupus</i>)	FE	Occupy a wide range of habitats, including temperate forests, mountains, tundra, taiga, and grasslands.	Unlikely to occur. Most wolves are located in northern and western portions of the state.
Preble's Meadow Jumping Mouse (<i>Zapus hudsonius preblei</i>)	FT, ST	Found in riparian areas and adjacent wet meadows. Prefer dense shrub, grass and forb ground cover along creeks, rivers, and associated waterbodies. Hibernate underground in burrows (CPW 2022).	Unlikely to occur, no suitable habitat in project area.
Black-tailed prairie dog (<i>Cynomys ludovicianus</i>)	SC	Habitat consists of intermixed shrublands, sagebrush habitat, and/or shortgrass and mixed grass prairie.	Known to occur. Black-tailed prairie dog colonies are present on the north end of the project area.
Fish			
Pallid Sturgeon* (<i>Scaphirhynchus albus</i>)	FE	Inhabits large, silty rivers with a diversity of depths and velocities formed by braided channels, sand bars, sand flats and gravel bars.	Unlikely to occur. No habitat in the project area. This species is included because it occurs in the Platte River system.
Greenback Cutthroat Trout (<i>Oncorhynchus clarki stomias</i>)	FT	Species prefers mid- to high-elevation streams with cold, clear water of moderate gradient.	Unlikely to occur. No suitable habitat in project area
Insects			
Monarch butterfly (<i>Danaus plexippus</i>)	FC	Occurs throughout most of the contiguous U.S., requiring milkweed (<i>Asclepias</i> spp.) for reproduction which larval monarchs feed on. Adults feed on nectar from native plant species, including milkweed (NWF 2021).	May occur. Migration habitat present in the project area
Flowering Plants			

Table 1. Federal and State-Listed Species and their Potential to occur the in Project Area

Species	Status ¹	Habitat	Potential for Occurrence in Project Area
Ute ladies' tresses orchid (<i>Spiranthes diluvialis</i>)	FT	Sub-irrigated alluvial soils along streams; open meadows on floodplains including riparian areas.	Unlikely to occur. Outside known range in Colorado and no open meadows habitat in project area. Poorly documented historical occurrences in El Paso county only.

Source: USFWS 2023; CPW 2023a

¹Status Codes: FE = Federally Endangered; FT = Federally Threatened; FC = Federal Candidate; SE = State Endangered; ST = State Threatened, SC = State Special Concern;

* Water-related activities/use in the N. Platte, S. Platte and Laramie River Basins may affect listed species in Nebraska.

Wetlands and Waters of the U.S.

Wetlands are a category of WOUS and are defined by 33 CFR part 328.3 as areas that are “inundated or saturated by surface or ground water at a frequency and duration sufficient to support—and that under normal circumstances do support—a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.” However, temporarily or seasonally flooded depressions that receive overland storm runoff or overbank floodwaters can meet the necessary criteria and be considered wetlands. This is often because of the slowly permeable soils that remain inundated or saturated and result in anaerobic, hydric soils after just 12 to 14 consecutive days.

No wetland delineation was conducted in the project area during the September 2018 site visit. However, several areas that are likely wetlands were observed during the site visit including one cattail marsh located along Rock Creek near the old homestead and a dried up freshwater pond west of Millbrose Road (Figure 1). National Wetlands Inventory data classifies the freshwater pond as wetland and shows a few small freshwater emergent wetlands in the vicinity (USFWS 2018).

The jurisdictional extent of a stream is defined by the ordinary high water mark (OHWM), which is defined as the line on the shore/bank established by flowing and/or standing water, marked by such characteristics as a clear, natural line impressed on the bank, erosion shelving, changes in the character of soil, destruction of terrestrial vegetation, presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas (USACE 2007).

Several jurisdictional streams were observed during the site visit but no data on OHWM was collected. Little Fountain Creek is an intermittent creek that occurs on the southern end of the project area and drains into Fountain Creek. Fountain Creek is a stream that originates in Woodland Park in Teller County and flows through El Paso County to its confluence with the Arkansas River near Pueblo in Pueblo County, Colorado. Rock Creek is an intermittent creek that crosses under Millbrose Road in a culvert and drains into Little Fountain Creek (Figure 1). Several other small drainages occur in the project area but are not likely jurisdictional.

Conclusions and Recommendations

There are eight USFWS federally-listed species that have the potential to occur in the project area. Only the monarch butterfly has potential to occur as a migrant in the project area. However, the USFWS online IPaC System list is only valid for 90 days; therefore, the accuracy of this species list should be verified after 90 days. The USFWS recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information.

State-listed species that could potentially occur in the project area include bald eagle, burrowing owl, ferruginous hawk, and American peregrine falcon.

The potential exists for breeding birds protected by the MBTA to occur within the project area. Ground-nesting migratory birds may nest in grasslands and shrub vegetation in the project area. However, the project site is disturbed because of heavy industrial activity adjacent to the area as well as grazing activity and, therefore, may only provide limited habitat for ground-nesting birds. Ground-nesting migratory birds are generally active April 1 through August 31.

Large cottonwood and Siberian elm trees that could support nesting raptors occur adjacent to Little Fountain Creek and near the old homesteads in the project area. Two inactive raptor nests (possibly red-tailed hawk) are located within the project area (Figure 1). The grasslands in the project area provide good habitat for raptors and the presence of prairie dogs provides a source of prey for raptors.

Clean Water Act Permitting Recommendations

Based on the potential presence of wetlands and WOUS observed during the September 2018 site visit, HDR recommends the following actions to ensure compliance with the Clean Water Act:

- Conduct an official wetland and waters of the U.S. delineation in areas that would be impacted by project construction.
- Coordinate with the USACE, Southern Colorado Branch Office, if impacts to features identified as wetlands or WOUS would result from the proposed project to determine which Nationwide Permit may be applicable.

MBTA Recommendations

In order to comply with the MBTA, HDR recommends the following conservation measures for future vegetation removal or construction activities at the project site:

- To the extent practical, all vegetation removal will be conducted outside of the nesting season for migratory birds (February 1 to August 31).
- A survey of the project area for nesting migratory birds will be completed by the Contractor's Biologist prior to any vegetation removal during the nest season. If active nests are located, appropriate buffers must be provided around active nests. These survey and buffer

requirements for migratory bird nests do not apply if the vegetation removal or work on structures is conducted outside of the February 1 to August 31 migratory bird nest season.

- A raptor survey will be conducted prior to the start of construction if construction occurs between February 1 and August 31 and will be performed no more than 7 days prior to construction. If an active raptor nest is observed within 0.5 mile of the project area, the CPW will be notified in order to determine compliance with the CPW Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptors guidance.
- Prior to any ground disturbance near active and inactive prairie dogs colonies in the project area, a qualified biologist will conduct a survey to identify if Western burrowing owls are present in any of the colonies. Based on CPW Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptors, no human encroachment within 150 feet of the nest site will occur from March 15 through October 31 (CPW, 2020). Although Burrowing Owls may not be actively nesting during this entire period, they may be present at burrows up to a month before egg laying and several months after young have fledged. Therefore, it is recommended that efforts to eradicate prairie dogs or destroy abandoned towns not occur between March 15 and October 31 when owls may be present. Because nesting Burrowing Owls may not be easily visible, it is recommended that targeted surveys be implemented to determine if burrows are occupied. More detailed recommendations are available in a CPW document entitled “Recommended Survey Protocol and Actions to Protect Nesting Burrowing Owls.”

References

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Appendix A: USFWS IPaC Report

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

El Paso County, Colorado



Local office

Colorado Ecological Services Field Office

☎ (303) 236-4773

📅 (303) 236-4005

MAILING ADDRESS

Denver Federal Center

P.O. Box 25486
Denver, CO 80225-0486

PHYSICAL ADDRESS

134 Union Boulevard, Suite 670
Lakewood, CO 80228-1807

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

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1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
<p>Gray Wolf <i>Canis lupus</i></p> <p>This species only needs to be considered if the following condition applies:</p> <ul style="list-style-type: none">Lone, dispersing gray wolves may be present throughout the state of Colorado. If your activity includes a predator management program, please consider this species in your environmental review. <p>There is final critical habitat for this species. https://ecos.fws.gov/ecp/species/4488</p>	Endangered
<p>Preble's Meadow Jumping Mouse <i>Zapus hudsonius preblei</i></p> <p>Wherever found</p> <p>There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/4090</p>	Threatened

Birds

NAME	STATUS
<p>Eastern Black Rail <i>Laterallus jamaicensis ssp. jamaicensis</i></p> <p>Wherever found</p> <p>No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/10477</p>	Threatened
<p>Piping Plover <i>Charadrius melodus</i></p> <p>This species only needs to be considered if the following condition applies:</p> <ul style="list-style-type: none">Project includes water-related activities and/or use in the N. Platte, S. Platte, and Laramie River Basins which may affect listed species in Nebraska. <p>There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/6039</p>	Threatened

Fishes

NAME	STATUS
Greenback Cutthroat Trout <i>Oncorhynchus clarkii stomias</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2775	Threatened
Pallid Sturgeon <i>Scaphirhynchus albus</i> Wherever found This species only needs to be considered if the following condition applies: <ul style="list-style-type: none">• Project includes water-related activities and/or use in the N. Platte, S. Platte, and Laramie River Basins which may affect listed species in Nebraska. No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/7162	Endangered

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Flowering Plants

NAME	STATUS
Ute Ladies'-tresses <i>Spiranthes diluvialis</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2159	Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
<p>Bald Eagle <i>Haliaeetus leucocephalus</i></p> <p>This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.</p>	Breeds Oct 15 to Jul 31
<p>Chimney Swift <i>Chaetura pelagica</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Mar 15 to Aug 25
<p>Ferruginous Hawk <i>Buteo regalis</i></p> <p>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/6038</p>	Breeds Mar 15 to Aug 15
<p>Golden Eagle <i>Aquila chrysaetos</i></p> <p>This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680</p>	Breeds Dec 1 to Aug 31
<p>Lesser Yellowlegs <i>Tringa flavipes</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679</p>	Breeds elsewhere
<p>Lewis's Woodpecker <i>Melanerpes lewis</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9408</p>	Breeds Apr 20 to Sep 30
<p>Long-billed Curlew <i>Numenius americanus</i></p> <p>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/5511</p>	Breeds Apr 1 to Jul 31
<p>Long-eared Owl <i>asio otus</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3631</p>	Breeds Mar 1 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (I)

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn

more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

El Paso County, Colorado



Local office

Colorado Ecological Services Field Office

☎ (303) 236-4773

📅 (303) 236-4005

MAILING ADDRESS

Denver Federal Center

Denver Federal Center
P.O. Box 25486
Denver, CO 80225-0486

PHYSICAL ADDRESS

134 Union Boulevard, Suite 670
Lakewood, CO 80228-1807

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

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1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
<p>Gray Wolf <i>Canis lupus</i></p> <p>This species only needs to be considered if the following condition applies:</p> <ul style="list-style-type: none">Lone, dispersing gray wolves may be present throughout the state of Colorado. If your activity includes a predator management program, please consider this species in your environmental review. <p>There is final critical habitat for this species. https://ecos.fws.gov/ecp/species/4488</p>	Endangered
<p>Preble's Meadow Jumping Mouse <i>Zapus hudsonius preblei</i></p> <p>Wherever found</p> <p>There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/4090</p>	Threatened

Birds

NAME	STATUS
<p>Eastern Black Rail <i>Laterallus jamaicensis ssp. jamaicensis</i></p> <p>Wherever found</p> <p>No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/10477</p>	Threatened
<p>Piping Plover <i>Charadrius melodus</i></p> <p>This species only needs to be considered if the following condition applies:</p> <ul style="list-style-type: none">Project includes water-related activities and/or use in the N. Platte, S. Platte, and Laramie River Basins which may affect listed species in Nebraska. <p>There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/6039</p>	Threatened

Fishes

NAME	STATUS
Greenback Cutthroat Trout <i>Oncorhynchus clarkii stomias</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2775	Threatened
Pallid Sturgeon <i>Scaphirhynchus albus</i> Wherever found This species only needs to be considered if the following condition applies: <ul style="list-style-type: none">• Project includes water-related activities and/or use in the N. Platte, S. Platte, and Laramie River Basins which may affect listed species in Nebraska. No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/7162	Endangered

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Flowering Plants

NAME	STATUS
Ute Ladies'-tresses <i>Spiranthes diluvialis</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2159	Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
<p>Bald Eagle <i>Haliaeetus leucocephalus</i></p> <p>This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.</p>	Breeds Oct 15 to Jul 31
<p>Chimney Swift <i>Chaetura pelagica</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Mar 15 to Aug 25
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<p>Lesser Yellowlegs <i>Tringa flavipes</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679</p>	Breeds elsewhere
<p>Lewis's Woodpecker <i>Melanerpes lewis</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9408</p>	Breeds Apr 20 to Sep 30
<p>Long-billed Curlew <i>Numenius americanus</i></p> <p>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/5511</p>	Breeds Apr 1 to Jul 31
<p>Long-eared Owl <i>asio otus</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3631</p>	Breeds Mar 1 to Jul 15

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Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

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Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn

more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

V1_Riparian Analysis comment.pdf Markup Summary

dsdparsons (1)



Subject: Callout
Page Label: 1
Author: dsdparsons
Date: 10/25/2023 2:04:56 PM
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Please provide the corresponding images from the site visit that helped to establish findings for the features identified, such as rapture nests, wetlands, ponded areas, outcroppings and other natural features, if any etc.

Identify and map the perceived wetland that are jurisdictional, and non jurisdictional in context of the land uses proposed in the sketch plan - which are to remain or be mitigated with development?

Please identify any other features/environmentally sensitive areas, & wildlife habitat in the context of the land uses proposed sketch plan.

Was an updated visit completed in 2023 to verify nest sites- this report is from 2018?