



CITY OF FORT LUPTON
City Council
NOTICE OF PUBLIC MEETING
Monday, August 8, 2022
6:30 PM
203 S. Harrison Ave.

Notice is hereby given that City Councilmembers may be attending the meeting for the Wastewater Preliminary Design Conversion Notice is hereby given that City Councilmembers may be attending the City of Fort Lupton Recreation Center Facility Expansion Public Meeting.

Call to Order

Roll Call

Discussion Items

a. WWTP Preliminary Design Conversion

Adjourn



July 15, 2022

Roy Vestal
City of Fort Lupton
Public Works
130 S McKinley Ave.
Fort Lupton, CO 80621

Re: Wildlife and Habitat Memo
Metro Connection – Forcemain and Lift Station
Fort Lupton, Colorado

Dear Mr. Vestal:

Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell) was retained by the City of Fort Lupton (City) to perform a biological survey to support environmental permitting for the Metro Connection – Forcemain and Lift Station (Project), near the city of Fort Lupton in Weld County, Colorado. This memo summarizes the methods and results of the habitat, avian, and stick nest survey and also analyzes the potential for federally protected species to be impacted by the Project.

INTRODUCTION

The Project is required to deliver wastewater flows from the City's current wastewater treatment plant (WWTP) to Metro Wastewater's regional wastewater facility (Metro). A lift station is required at the current WWTP to deliver the required flows. After installation of the forcemain and lift station, all wastewater flows to the current WWTP will be transferred to Metro for treatment.

The Project is located northeast of Denver in Fort Lupton, Colorado and runs adjacent to US Highway (HW) 85. The proposed centerline begins just north of HW 52 and terminates just north of East 168th Avenue in Weld County, Colorado (Figure 1 in Attachment A).

Burns & McDonnell conducted a habitat evaluation and stick nest survey. The survey included a 0.5-mile buffer around the proposed Project centerline (Survey Area) (Figure 1). The goal of this survey was to field verify the habitat data included in the desktop review memo (Burns & McDonnell, January 2022) and to assess the Survey Area for stick nests and suitable nesting habitat to comply with the following regulations:

- Endangered Species Act (ESA) (16 U.S.C. 1531 et seq.) as implemented by the U.S. Fish and Wildlife Service (USFWS)
- Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668) as implemented by the USFWS
- Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703) as implemented by the USFWS

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METHODS

The *Colorado Parks and Wildlife (CPW) Raptor Monitoring Handbook* (CPW, 2018), was used as a guide when planning and executing this survey. A stick nest survey was conducted by Burns & McDonnell wildlife biologists equipped with binoculars, digital camera, and a global positioning system (GPS). Representative photographs were taken throughout the Survey Area.

The biologists drove on accessible county roads visually inspecting the Survey Area using binoculars to locate stick nests. Particular attention was given to potential nesting habitat (e.g., riparian corridors and other treed areas, and solitary trees). Observed nests were documented with a photograph and an estimated GPS point taken from the area of observation. Species and occupancy of each nest was determined to the extent practicable. To determine nest status, the biologists used *The Wildlife Survey Requirements/Protocols and General Conservation, Protection, and Avoidance Measures for Ground Disturbing Activities on BLM SLVFO Land* (BLM 2020), guidelines as listed below.

- *Active* – Adults exhibiting courtship, nest building, incubating, or chick-rearing behavior are observed and/or eggs or nestling/fledging chicks are observed.
- *Inactive* – No sign of activity as described for active nests.
- *Undetermined* – Status cannot be determined for any reason (for example, conditions unsafe to assess, view into nest not available, length of time nest observed insufficient to document status).

Prior to the survey, a desktop review was completed and submitted on January 27, 2022. The seven species identified in the USFWS's Information for Planning and Consultation (IPaC) report as potentially occurring in the Survey Area were reviewed and evaluated for the potential to occur in the Survey Area.

The biologists also recorded habitat types and incidental wildlife sightings throughout the Survey Area. Habitat types were later digitized in ArcGIS using US Geological Survey (USGS) National Land Cover categories and any additional habitat type that was dominant throughout the Survey Area, but not included in the USGS categories.

RESULTS

Stick Nests, Wildlife and Habitat

The habitat, avian, and stick nest survey was completed on April 22, 2022. The survey conditions were sunny with temperatures ranging from 70 to 82 degrees Fahrenheit, with light wind in the morning and heavy wind in the afternoon. Habitats within the Survey Area consisted of developed, cultivated crops, pasture/hay, grassland, water, woody wetland and riparian woodland (Figure 4).

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Five stick nests were observed within the Survey Area and one just outside the Survey Area (Table 1, Figure 2). The five nests were of undetermined status due to insufficient time to document status.

Table 1: Stick Nests Observed in the Survey Area

Stick Nest ID	Distance to pipe centerline	Nest Status
Stick Nest 1	0.32 mile	Undetermined
Stick Nest 2	0.35 mile	Undetermined
Stick Nest 3	0.23 mile	Undetermined
Stick Nest 4	0.54 mile*	Undetermined
Stick Nest 5	0.43 mile	Undetermined
Stick Nest 6	0.18 mile	Undetermined

*outside of Survey Area

Five black-tailed prairie dog (*Cynomys ludovicianus*) colonies were observed in the Survey Area. Three black-tailed prairie dog colonies were observed adjacent to County Road 8, located approximately 0.26-mile, 0.37-mile, and 21-feet west of the Project. The colonies were approximately 8.46 acres, 1.05 acres, and 57.86 acres in size. The colonies were near each other and were likely part of the same colony although they were bisected by County Road 8 and the South Platte River (Figure 3). Two black-tailed prairie dog colonies were observed adjacent to County Road 6, located approximately 0.76-mile west of the Project. The two colonies are likely part of the same colony although they are bisected by County Road 6. The two colonies are 0.60 acre and 0.86 acre in size.

One bald eagle was observed soaring above the South Platte River near County Road 6 (Figure 2). No bald eagle nests were observed in the Survey Area. Additionally, twenty-one bird species, and three mammal species were incidentally observed in the Survey Area (Table 2).

Table 2: Incidental Wildlife Species Observed in the Survey Area

Common Name	Scientific Name
Mammals	
Black-tailed prairie dog	<i>Cynomys ludovicianus</i>
Cottontail	<i>Sylvilagus sp.</i>
Fox squirrel	<i>Scirus niger</i>
Birds	
American goldfinch	<i>Spinus tristis</i>

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Common Name	Scientific Name
American kestrel	<i>Falco sparverius</i>
American robin	<i>Turdus migratorius</i>
American white pelican	<i>Pelecanus erythrorhynchos</i>
Bald eagle	<i>Haliaeetus leucocephalus</i>
Belted kingfisher	<i>Megaceryle alcyon</i>
Black-billed magpie	<i>Pica hudsonia</i>
Blue jay	<i>Cyanocitta cristata</i>
Bufflehead	<i>Bucephala albeola</i>
Canada geese	<i>Branta canadensis</i>
Common grackle	<i>Quiscalus quiscula</i>
Double-crested cormorant	<i>Nannopterum auritum</i>
European starling	<i>Sturnus vulgaris</i>
Mourning dove	<i>Zenaida macroura</i>
Northern flicker	<i>Colaptes auratus</i>
Red-tailed hawk	<i>Buteo jamaicensis</i>
Red-winged blackbird	<i>Agelaius phoeniceus</i>
Swallow sp.	
Western meadowlark	<i>Sturnella neglecta</i>
White-crowned sparrow	<i>Zonotrichia leucophrys</i>
Yellow warbler	<i>Setophaga petechia</i>

Migratory Birds

The IPaC report also identified three migratory bird species protected by the MBTA, including Bald Eagle (*Haliaeetus leucocephalus*), which is also protected by the BGEPA; Ferruginous Hawk (*Buteo regalis*); and Lesser Yellowlegs (*Tringa flavipes*). Migratory birds likely utilize areas of the Project, especially the riparian corridor surrounding the South Platte River, for nesting and foraging. The removal of vegetation in construction areas could reduce the availability of forage, shelter, or nesting habitat for some migratory bird species. However, these impacts would be minimal as only a small portion of available migratory bird habitat is located within the Project Area. To avoid adverse effects on migratory birds within the Project Area, vegetation clearing activities would occur outside of migratory bird breeding season, generally between April 1st and August 31st. If vegetation clearing were to occur between April 1st and August 31st, a qualified biologist will survey the Project Area for the presence of migratory bird nesting activity and, if nests are found, proper mitigation measures will be required to protect the nest until the nesting activity concludes.

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Threatened and Endangered Species

Table 3 below provides an analysis of the seven threatened and endangered species from the IPaC report.

Table 3: Assessment of Threatened and Endangered Species That May Occur in the Study Area

Common Name	Scientific Name	Status ^a	Suitable Habitat Description	Habitat Present in Study Area?
Plants				
Ute ladies'-tresses orchid	<i>Spiranthes diluvialis</i>	T	Moist meadows associated with perennial stream terraces, floodplains, and oxbows. May also occur in seasonally flooded river terraces, sub-irrigated or spring-fed abandoned stream channels and valleys as well as lakeshores. Occurs between 4,200 and 7,000 feet in elevation.	Not likely. While suitable habitat is present the level of disturbance in the riparian areas is not conducive to this species.
Mammals				
Preble's meadow jumping mouse	<i>Zapus hudsonius preblei</i>	T	Typically found in heavily vegetated, shrub-dominated riparian habitats with adjacent, relatively undisturbed grassland communities with a nearby water source. Uses upland habitats as far as 330 feet beyond the 100-year floodplain.	No. Suitable habitat is not present as the level of disturbance in the riparian areas is not conducive to this species.
Birds				
Eastern black rail	<i>Laterallus jamaicensis ssp. jamaicensis</i>	T	Black rails occupy the upper zone of tidal marshes. They nest in marshes and wet meadows across North America, including riparian marshes, coastal prairies, saltmarshes, and impounded wetlands. Habitat must have stable shallow water, usually just 1.2 inches deep at most.	No. Suitable habitat with shallow standing water within wet meadows is not present.
Platte River Species				
Pallid sturgeon	<i>Scaphirhynchus albus</i>	E	These species occur in the downstream reaches of the Platte River System. The project will not lead to a consumptive use of water or have the potential to affect water quality in the Platte River System.	
Piping plover	<i>Charadrius melodus</i>	T		

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Common Name	Scientific Name	Status ^a	Suitable Habitat Description	Habitat Present in Study Area?
Western prairie fringed orchid	<i>Platanthera praeclara</i>	T		
Whooping crane	<i>Grus americana</i>	E		

DETERMINATION OF EFFECT AND RATIONALE

Ute ladies'-tresses orchid (*Spiranthes diluvialis*)

Ute Ladies'-Tresses are restricted to small, sporadic microhabitat represented by calcareous, wet-mesic, temporarily inundated meadow in shallow wetlands. Ute ladie's-tresses orchid is not likely to be directly impacted by activities associated within the Project considering wetland habitat within the Survey Area is of low quality and the species was not observed during the site visit. Most construction activity will occur within the highway ROW, away from the riparian area. The Project would have **no effect** for Ute ladie's-tresses orchid.

Preble's meadow jumping mouse (*Zapus hudsonius preblei*)

Preble's meadow jumping mouse is not likely to be directly impacted by activities associated within the Project considering the habitat is of low quality and the species requires relatively undisturbed grassland communities. Most construction activity will occur within the highway ROW, away from the riparian area. The Project would have **no effect** for Preble's meadow jumping mouse.

Eastern black rail (*Laterallus jamaicensis ssp. jamaicensis*)

Eastern black rail is not likely to be directly impacted by activities associated within the Project considering suitable habitat does not occur in the Survey Area, decreasing the likelihood of activities occurring where this species resides. Furthermore, according to CPW, the Eastern black rail has not been recorded in Weld County. The Project would have **no effect** for Eastern black rail.

Pallid sturgeon (*Scaphirhynchus albus*), Whooping crane (*Grus americana*), Piping plover (*Charadrius melodus*), Western prairie fringed orchid (*Platanthera praeclara*)

No water depletions are anticipated as a result of the Project. Additionally, the pipeline will be constructed by drilling underneath the South Platte River, avoiding many of the impacts to the riparian areas. Although impacts will be avoided to the extent possible, there may be some temporary impacts to riparian and aquatic species that occur. These impacts that will be properly

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mitigated for. With the implementation of mitigation measures to further minimize potential effects, the Project would have **no effect** to these Platte River species.

CONCLUSION AND RECOMMENDATIONS

Seven federally listed species were analyzed; no impacts are anticipated from the Project. Five prairie dog colonies and six stick nests, likely belonging to hawks, were observed in or adjacent to the Survey Area. No eagle nests were observed in the Survey Area. The nearest stick nest was approximately 0.18 from the centerline and was located in a residential neighborhood on the east side of HW85. As the construction for the Project will mainly occur within the US85 ROW, adverse impacts to these nests are not anticipated due to the proximity of the nests from the proposed Project, the type of construction activities, and the assumed tolerance of the raptors nesting within a wildland-urban interface.

To avoid adverse effects on nesting birds, an effort will be made to schedule vegetation clearing activities outside of the migratory bird breeding season, generally April 1 through August 31. If vegetation clearing were to occur between April 1 and August 31, a qualified biologist will survey for the presence of nesting migratory birds prior to clearing. If active nests are found, mitigation measures such as establishing a spatial buffer around the nest and monitoring will be required to protect the nest until nesting activity concludes.

Should you have any questions or need additional information, please feel free to contact me at (303) 583-0347 or apwoehler@burnsmcd.com

Sincerely,

A handwritten signature in black ink, appearing to read "A. Woehler".

Angie Woehler
Senior Environmental Scientist

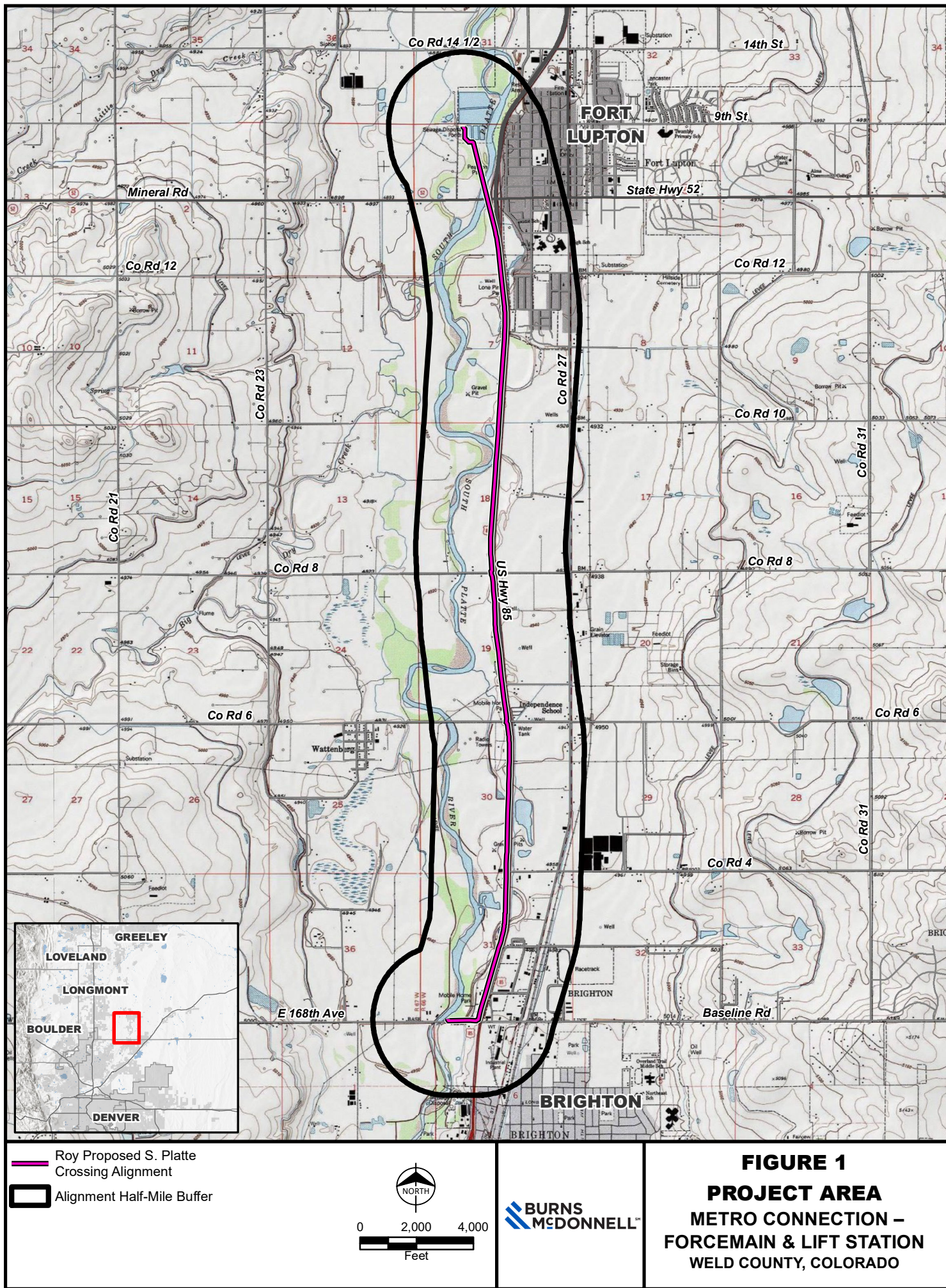
A handwritten signature in black ink, appearing to read "Kalli Kilmer".

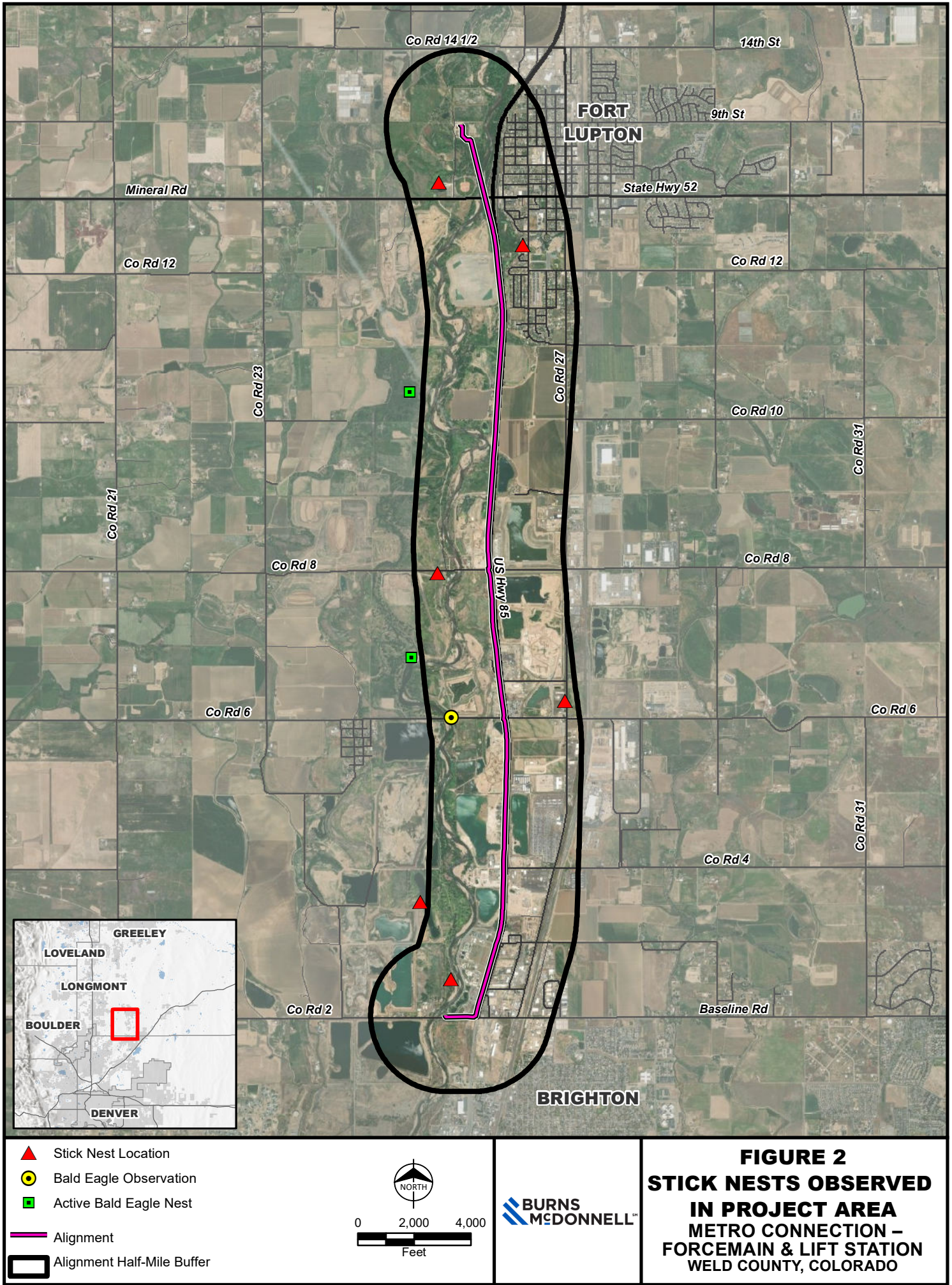
Kalli Kilmer
Staff Environmental Scientist

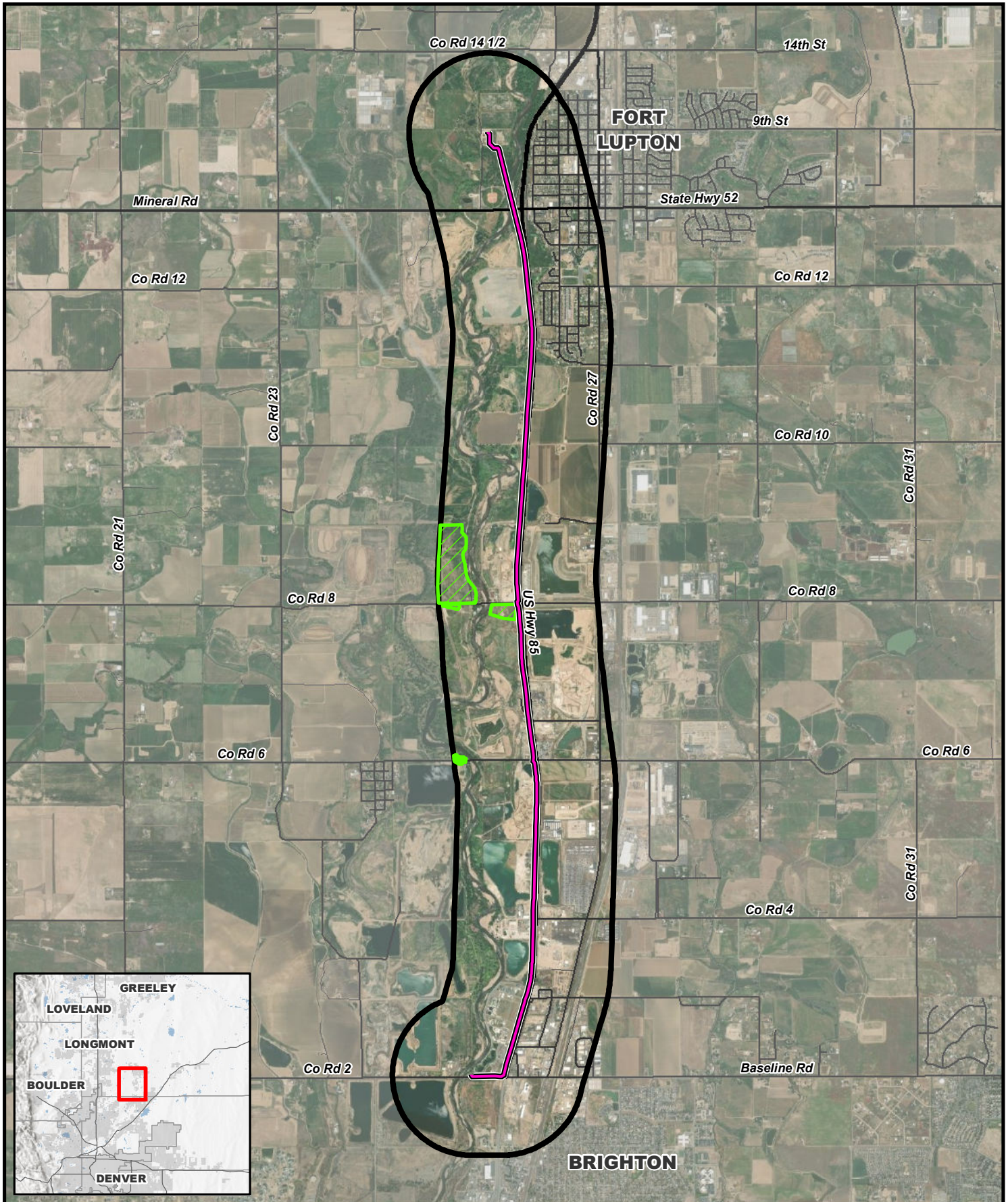
Attachments:

- Attachment A - Figures
- Attachment B - IPaC Species List

ATTACHMENT A - FIGURES







-  Alignment
-  Alignment Half-Mile Buffer
-  Prairie Dog Colony

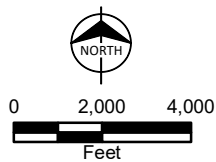
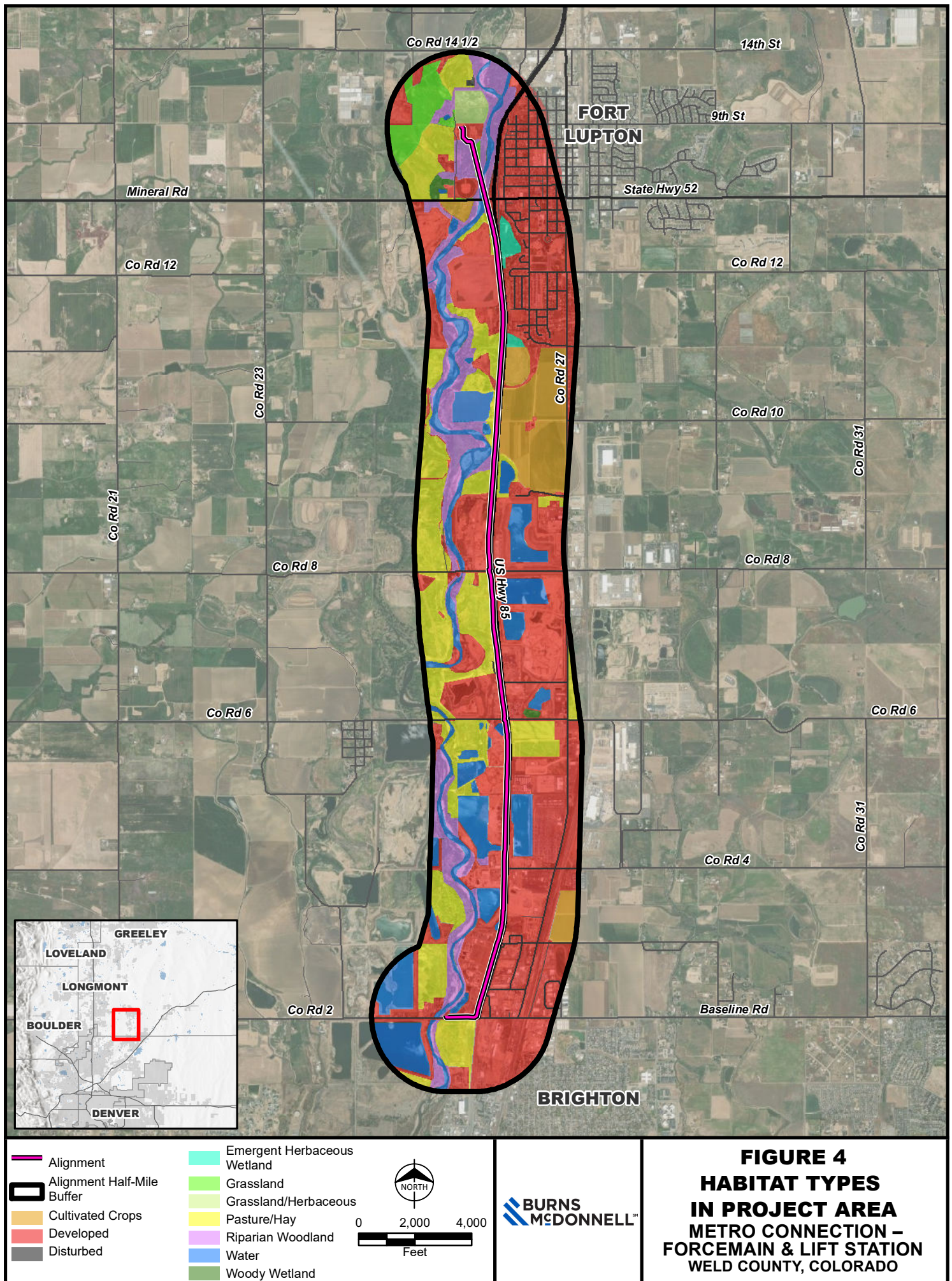


FIGURE 3
PRAIRIE DOG COLONIES
OBSERVED IN PROJECT AREA
METRO CONNECTION –
FORCEMAIN & LIFT STATION
WELD COUNTY, COLORADO



ATTACHMENT B - IPAC SPECIES LIST



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Colorado Ecological Services Field Office
Denver Federal Center
P.O. Box 25486
Denver, CO 80225-0486
Phone: (303) 236-4773 Fax: (303) 236-4005
<http://www.fws.gov/coloradoES>
<http://www.fws.gov/platteriver>

In Reply Refer To:

January 11, 2022

Consultation Code: 06E24000-2022-SLI-0418

Event Code: 06E24000-2022-E-01047

Project Name: Fort Lupton

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service 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. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at:

<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>;

<http://www.towerkill.com>; and

[http://](http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html)

www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds
- Wetlands

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Colorado Ecological Services Field Office

Denver Federal Center
P.O. Box 25486
Denver, CO 80225-0486
(303) 236-4773

Project Summary

Consultation Code: 06E24000-2022-SLI-0418

Event Code: Some(06E24000-2022-E-01047)

Project Name: Fort Lupton

Project Type: DEVELOPMENT

Project Description: Ford Lupton

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@40.04381225,-104.82026401223435,14z>



Counties: Adams and Weld counties, Colorado

Endangered Species Act Species

There is a total of 8 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 4 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [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.

Mammals

NAME	STATUS
Preble's Meadow Jumping Mouse <i>Zapus hudsonius preblei</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/4090 General project design guidelines: https://ecos.fws.gov/ipac/project/M4TIGUJB2ZHFFJEBAW3NJS27VM/documents/generated/6861.pdf	Threatened

Birds

NAME	STATUS
Eastern Black Rail <i>Laterallus jamaicensis ssp. jamaicensis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10477	Threatened
Piping Plover <i>Charadrius melodus</i> Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is final critical habitat for this species. The location of the critical habitat is not available. This species only needs to be considered under the following conditions: 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. Species profile: https://ecos.fws.gov/ecp/species/6039	Threatened
Whooping Crane <i>Grus americana</i> Population: Wherever found, except where listed as an experimental population There is final critical habitat for this species. The location of the critical habitat is not available. This species only needs to be considered under the following conditions: 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. Species profile: https://ecos.fws.gov/ecp/species/758	Endangered

Fishes

NAME	STATUS
Pallid Sturgeon <i>Scaphirhynchus albus</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: 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. Species profile: https://ecos.fws.gov/ecp/species/7162	Endangered

Insects

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

Flowering Plants

NAME	STATUS
Ute Ladies'-tresses <i>Spiranthes diluvialis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2159	Threatened
Western Prairie Fringed Orchid <i>Platanthera praeclara</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: ▪ 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. Species profile: https://ecos.fws.gov/ecp/species/1669	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

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 OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

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.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

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
Bald Eagle <i>Haliaeetus leucocephalus</i> 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/1626	Breeds Oct 15 to Jul 31
Ferruginous Hawk <i>Buteo regalis</i> 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	Breeds Mar 15 to Aug 15

NAME	BREEDING SEASON
Lesser Yellowlegs <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere

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.

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 (|)

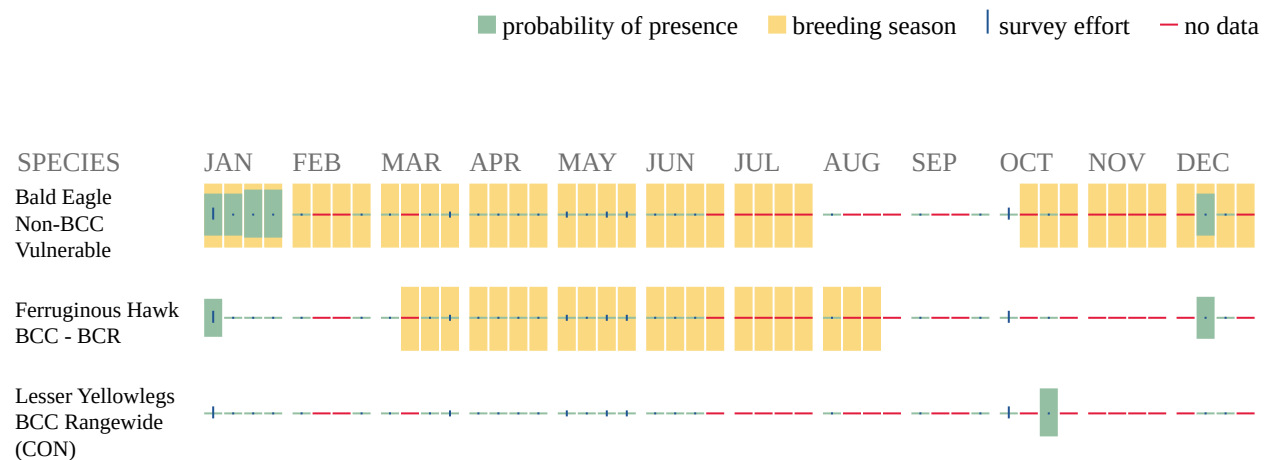
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

Migratory Birds FAQ

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 migratory birds potentially occurring 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 [AKN Phenology 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 to 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, migrating or present year-round in my project 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 refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). 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.

Wetlands

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](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

WETLAND INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED.
PLEASE VISIT [HTTPS://WWW.FWS.GOV/WETLANDS/DATA/MAPPER.HTML](https://www.fws.gov/wetlands/data/mapper.html) OR CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.



January 27, 2022

Roy Vestal
City of Fort Lupton
Public Works
130 S McKinley Ave.
Fort Lupton, CO 80621

Re: Biological and Cultural Desktop Review
Metro Connection – Forcemain and Lift Station
Fort Lupton, Colorado

Dear Mr. Vestal:

Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell) was retained by the City of Fort Lupton (City) to perform a biological and cultural desktop review. This review includes cultural resources, water resources, and federally listed threatened, endangered, or other protected species that may be impacted by the construction of the Metro Connection – Forcemain and Lift Station (Project), near the city of Fort Lupton in Weld County, Colorado.

INTRODUCTION

The Project is required to deliver wastewater flows from the City's current wastewater treatment plant (WWTP) to Metro Wastewater's regional wastewater facility. A lift station is required at the current WWTP to deliver the required flows. After installation of the forcemain and lift station, all wastewater flows to the current WWTP will be transferred to Metro for treatment.

The Project is located northeast of Denver in Fort Lupton, Colorado and runs adjacent to US Highway (HW) 85. The proposed centerline begins just north of HW 52 and terminates just north of East 168th Avenue in Weld County, Colorado (Figure 1 in Attachment A).

To evaluate the potential for threatened, endangered, or protected species (sensitive species), and cultural and water resources, Burns & McDonnell conducted a desktop review. Water resources and sensitive species were evaluated within a one-mile buffer of the forcemain centerline (Study Area), and cultural resources were evaluated with the Study Area and a smaller 200 foot-buffer.

The following sections describe the methods and results of the desktop review, and identifies potential sensitive resources to comply with the following regulations:

- Endangered Species Act (ESA) (16 U.S.C. 1531 et seq.) as implemented by the U.S. Fish and Wildlife Service (USFWS)
- Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668) as implemented by the USFWS
- Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703) as implemented by the USFWS
- Section 106 of the National Historic Preservation Act (NHPA) (54 U.S.C. 306101)

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City of Fort Lupton
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BIOLOGICAL RESOURCES

The Study Area is within the High Plains Level 3 Ecoregion¹, which is comprised of smooth to slightly irregular plains having a high percentage of cropland. Grama-buffalo grass (*Bouteloua dactyloides*) is the dominant natural vegetation in this region. The Study Area is within the Flat to Rolling Plains Level 4 Ecoregion. Soils within this area are generally silty with a veneer of loess. Dryland farming is extensive throughout this ecoregion with areas of irrigated cropland scattered throughout. The Study Area runs through five different types of land cover²: water, scrub/shrub, developed area, crops, and bare ground.

Water Resources

According to National Wetlands Inventory³ (NWI) data, wetlands are present within the Study Area (Table 1) and also cross the proposed forcemain centerline (Figure 1). According to the National Hydrography Dataset⁴ (NHD), the South Platte River runs parallel and in one area, crosses the proposed centerline. Several unnamed tributaries cross and run adjacent to the Study Area. The Federal Emergency Management Agency (FEMA) National Flood Hazard⁵ data identified a 100-year floodplain associated with the South Platte River (Figure 1).

Table 1: NWI³ Wetlands within Study Area

Wetland Type	Acres
Freshwater Emergent Wetland	186.05
Freshwater Forested/Shrub Wetland	453.44
Freshwater Pond	33.87
Lake	29.36
Riverine	336.49
Total	1,039.21

¹ U.S. Environmental Protection Agency (EPA). 2022. Ecoregions. <https://www.epa.gov/eco-research/ecoregions>

² U.S. Geological Survey (USGS). 2016. National Land Cover Dataset. <https://www.usgs.gov/data/national-land-cover-dataset-nlcd-2016-products>

³ U.S. Fish & Wildlife Service (USFWS). 2022. National Wetlands Inventory (NWI). <https://fws.gov/wetlands/>

⁴ USGS. 2022. National Hydrography Dataset (NHD). <https://www.usgs.gov/national-hydrography/national-hydrography-dataset>

⁵ Federal Emergency Management Agency (FEMA). 2022. National Flood Hazard Layer. <https://www.fema.gov/flood-maps/national-flood-hazard-layer>

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Protected Species

The USFWS Information for Planning and Conservation System⁶ (IPaC) was used to identify federally protected species that could potentially occur in the Study Area (Attachment B). The IPaC report identified seven ESA-listed species: one mammal, three birds, one fish, and two plants, which have the potential to be impacted by the Project. No designated critical habitat is within the Study Area. Table 2 summarizes these species and discusses whether suitable habitat is present in the Study Area.

Table 2: Threatened and Endangered Species That May Occur in the Study Area

Common Name	Scientific Name	Status ^a	Suitable Habitat Description	Habitat Present in Study Area?
Plants				
Ute ladies'-tresses orchid	<i>Spiranthes diluvialis</i>	T	Moist meadows associated with perennial stream terraces, floodplains, and oxbows. May also occur in seasonally flooded river terraces, sub-irrigated or spring-fed abandoned stream channels and valleys as well as lakeshores. Occurs between 4,200 and 7,000 feet in elevation.	Yes. The riparian corridor surrounding the South Platte River may contain suitable habitat.
Mammals				
Preble's meadow jumping mouse	<i>Zapus hudsonius preblei</i>	T	Typically found in heavily vegetated, shrub-dominated riparian habitats with adjacent, relatively undisturbed grassland communities with a nearby water source. Uses upland habitats as far as 330 feet beyond the 100-year floodplain.	Yes. The riparian corridor surrounding the South Platte River may contain suitable habitat.
Birds				
Eastern black rail	<i>Laterallus jamaicensis ssp. jamaicensis</i>	T	Black rails occupy the upper zone of tidal marshes. They nest in marshes and wet meadows across North America, including riparian marshes, coastal prairies, saltmarshes, and impounded wetlands. All of its habitats have stable shallow water, usually just 1.2 inches deep at most.	Yes. Nesting habitat with shallow standing water is not likely present. Though the species may utilize the Study Area during migration.

⁶ USFWS. 2022. Information for Planning and Consultation (IPaC). <https://ecos.fws.gov/ipac/>

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Common Name	Scientific Name	Status ^a	Suitable Habitat Description	Habitat Present in Study Area?
Platte River Species Critical Habitat				
Pallid sturgeon	<i>Scaphirhynchus albus</i>	E	These species occur in the downstream reaches of the Platte River System. If the Project may lead to a consumptive use of water or have the potential to affect water quality in the Platte River System, there may be impacts to these species.	
Piping plover	<i>Charadrius melodus</i>	T		
Western prairie fringed orchid	<i>Platanthera praeclara</i>	T		
Whooping crane	<i>Grus americana</i>	E		

Source: USFWS IPaC (<https://ecos.fws.gov/ipac/>)

(a) T = Threatened, E = Endangered

The IPaC report also identified three migratory bird species protected by the MBTA, including bald eagle (*Haliaeetus leucocephalus*), which is also protected by the BGEPA; the ferruginous hawk (*Buteo regalis*); and lesser yellowlegs (*Tringa flavipes*). Migratory birds likely utilize areas of the Study Area, especially the riparian corridor surrounding the South Platte River, for nesting and foraging.

Based on ariel imagery, a prairie dog colony (*Cynomys* spp.) may exist at the southwest corner of HW 85 and County Road 8. Black-tailed prairie dog (*Cynomys ludovicianus*) are a State Special Concern species but are not protected. However, burrowing owl (*Athene cunicularia*) are State Threatened and they are known to inhabit and/or nest in abandoned prairie dog burrows.

CNHP and CPW Data

A Colorado's Conservation Data Explorer⁷ (CODEX) report was created for the Study Area (Attachment C). The report queries multiple conservation datasets and includes a synthesis of the Colorado Natural Heritage Program (CNHP) and Colorado Parks and Wildlife (CPW) data for sensitive species and natural communities.

The CODEX report identified three bald eagle occurrences within the Study Area. Golden eagle (*Aquila chrysaetos*) and Preble's meadow jumping mouse (*Zapus hudsonius preblei*) were noted

⁷ Colorado Natural Heritage Program (CNHP). 2022. Colorado's Conservation Data Explorer (CODEX). <https://cnhp.colostate.edu/maps/codex/>

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to have the potential to occur within the Study Area. The ranges (including overall winter, summer, and migration range) of over 80 species intersect the Study Area (see Tables 4 and 5 in Attachment C).

A potential conservation area (PCA) is an ecological conservation and planning tool used to highlight unique elements of biodiversity. Six PCAs were identified within the Study Area (Attachment C).

Raptor and eagle nesting habitat occurs within the wooded areas surrounding the Project, specifically the riparian area associated with the South Platte River. The CPW raptor nest database identified four nests within the Study Area, two active bald eagle nests and two red-tailed hawk (*Buteo jamaicensis*) nests of undetermined status.

CULTURAL RESOURCES

Burns & McDonnell completed a preliminary Class I Records Review, or file search, with the Colorado Office of Archaeology and Historic Preservation (SHPO) to support compliance with implementing regulation 36 Code of Federal Regulations Part 800, Section 106 of the National Historic Preservation Act (NHPA) of 1966 (as amended). For the purposes of this preliminary review, the proposed area of potential effects (APE) is defined as a 200 foot-buffer from the proposed forcemain centerline. The Study Area for the file search and historical background review included a one-mile buffer surrounding the centerline (Figure 1).

In addition to the file search, a review of historical General Land Office survey maps, topographical maps, plat maps, aerial photographs, and a historical atlas was completed. These resources were used to identify the locations of previous farmsteads, trails, roads, mines, or other historic features located within the APE or Study Area.

Results

The preliminary Class I indicates 20 previous cultural resource surveys have been conducted within the Study Area which, when combined, cover approximately 10 to 15 percent of the APE. Five of these previous inventories cross into the APE. The previous inventories resulted in the documentation of 223 cultural resources within the Study Area. Ten of these sites are located within the proposed APE; these include one architectural site, one historical archaeological site, and eight sites with both an architectural and historical archaeological component.

Cultural resources within the Study Area include historic structures, transmission lines, bridges, roads, and ditches. Several resources that are eligible for listing on the National Register of Historic Places (NRHP) exist within the Study Area; however, no known eligible resources are located within the APE. Two of the previously documented architectural sites within the Study

Roy Vestal
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Area are listed on the NRHP and the Colorado State Register of Historic Places (SRHP). These sites are historic structures located in downtown Fort Lupton and Brighton and are not at risk of being disturbed by Project activities. Cultural resources within the APE include ditches, an overhead transmission line, culverts, a bridge, and two roads/trails.

Two parallel trail resources—the route of Long’s Expedition and the Overland Trail— have been previously estimated to extend roughly north-south along the eastern bank of the South Platte River. The northern ends of both resources are within the APE; however, both trail locations were estimated based on map imagery in the 1980’s and the locations have not been field-verified. Plat maps from 1863 and 1865 depict a single trail route that follows the alignment of Highway 85, suggesting Long’s Expedition utilized the Overland Trail (rather than being a separate parallel route). While it is probable that the physical traces of the trail or trails were destroyed by the construction of Highway 85, a field survey, archival research, and agency coordination may be required to confirm or disprove this hypothesis.

During the background research, Highway 85 was also noted on early historical topographic and plat maps. While the highway hasn’t been previously recorded as a historic resource, it is a historic route and would require inventory, documentation, and evaluation to ascertain its eligibility for inclusion on the NRHP.

CONCLUSION AND RECOMENDATIONS

Based on the information obtained from the IPaC and CODEX report, there is potential for federally protected species to be present within the Study Area. A habitat survey is recommended to verify if suitable habitat for the Ute ladies’-tresses orchid, Preble’s meadow jumping mouse, or black rail is present. If suitable habitat is present, additional protocol-level surveys and consultation with the USFWS may be required for Project compliance with the ESA. Because the Project involves a water-related activity (i.e., wastewater system), coordination with the USFWS is recommended to determine whether ESA consultation for impacts to the Platte River Species will be required. If it is required, a streamlined consultation process under the Platte River Recovery Implementation Program may be an available consultation option.

The Study Area consists of a mix of developed and undeveloped areas. The riparian corridor surrounding the South Platte River is important habitat likely utilized by migratory birds. Raptor and eagle nests have been identified near the Project. Therefore, strategic construction scheduling (i.e., conducting clearing/grubbing outside of the nesting season) and pre-construction surveys for nesting birds are recommended to avoid impacts to MBTA and BGEPA protected species. If tree removal or vegetation clearing is scheduled to take place within the general nesting season (April 1 to August 31), pre-construction surveys within seven days of tree or vegetation removal are recommended to avoid impacts to nesting migratory birds. If active

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nests are discovered, an appropriately sized buffer will be placed around the nest in consultation with USFWS and the nest will be monitored by a biologist. No activities may occur within this buffer until the nestlings have fledged or the nest is no longer occupied.

Bald eagle nests are documented within the Study Area. CPW recommends no permitted, authorized, or human encroachment activities within 0.5-mile radius of active nests from December 1 through July 31. If Project construction will occur in this time, a nest survey and coordination with USFWS and CPW is recommended.

The Project crosses the South Platte River, a jurisdictional water regulated by the USACE. A wetland and waterbody delineation should be conducted, and Section 404 permitting requirements should be discussed with the USACE. The Project is likely permissible under Nationwide Permit 58 - Utility Line Activities for Water and Other Substances. A pre-construction notification to the district engineer prior to commencing the activity is required if the discharge will result in the loss of greater than 0.1-acre of waters of the United States. All general conditions for this permit must be met including avoiding disruptions to the movement of aquatic life, migratory bird breeding areas, protected species, and historic properties. The USACE may consult with the USFWS and the state SHPO to verify these conditions have been met.

According to the cultural resources review, no NRHP listed or eligible resources are located within the APE. However, a field survey, archival research, and agency coordination may be required to verify the historic nature of trails and roads near the Project. The Colorado Department of Transportation (CDOT) requires a Class I report be submitted for potential historic or archaeological resources, as well as a file search through the University of Colorado Museum, Boulder and the Denver Museum of Nature and Science to ascertain if paleontological resources have been previously identified in or near the permit area. Further discussion is needed with Weld County to determine any relevant requirements for further cultural resource studies.



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City of Fort Lupton
January 27, 2022
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Should you have any questions or need additional information, please feel free to contact me at (303) 583-0347 or apwoehler@burnsmcd.com

Sincerely,

A handwritten signature in black ink, appearing to read "A. Woehler".

Angie Woehler
Senior Environmental Scientist

A handwritten signature in black ink, appearing to read "Bradley Byrne".

Bradley Byrne
Assistant Cultural Resources Specialist

Attachments:

- Attachment A - Figure
- Attachment B - IPaC Species List
- Attachment C - CODEX Report

ATTACHMENT A - FIGURE

Path: I:\ESRI\Projects\Water\122081_FtLupton\FtLupton_Fig.mxd apwoehler 1/25/2022

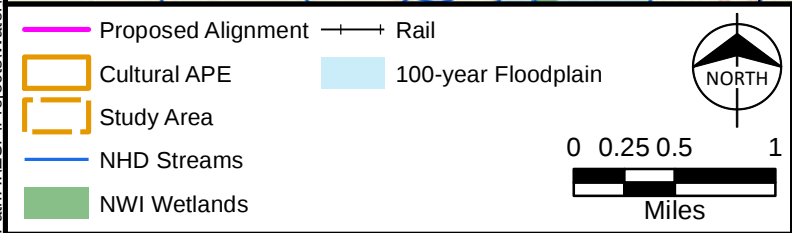
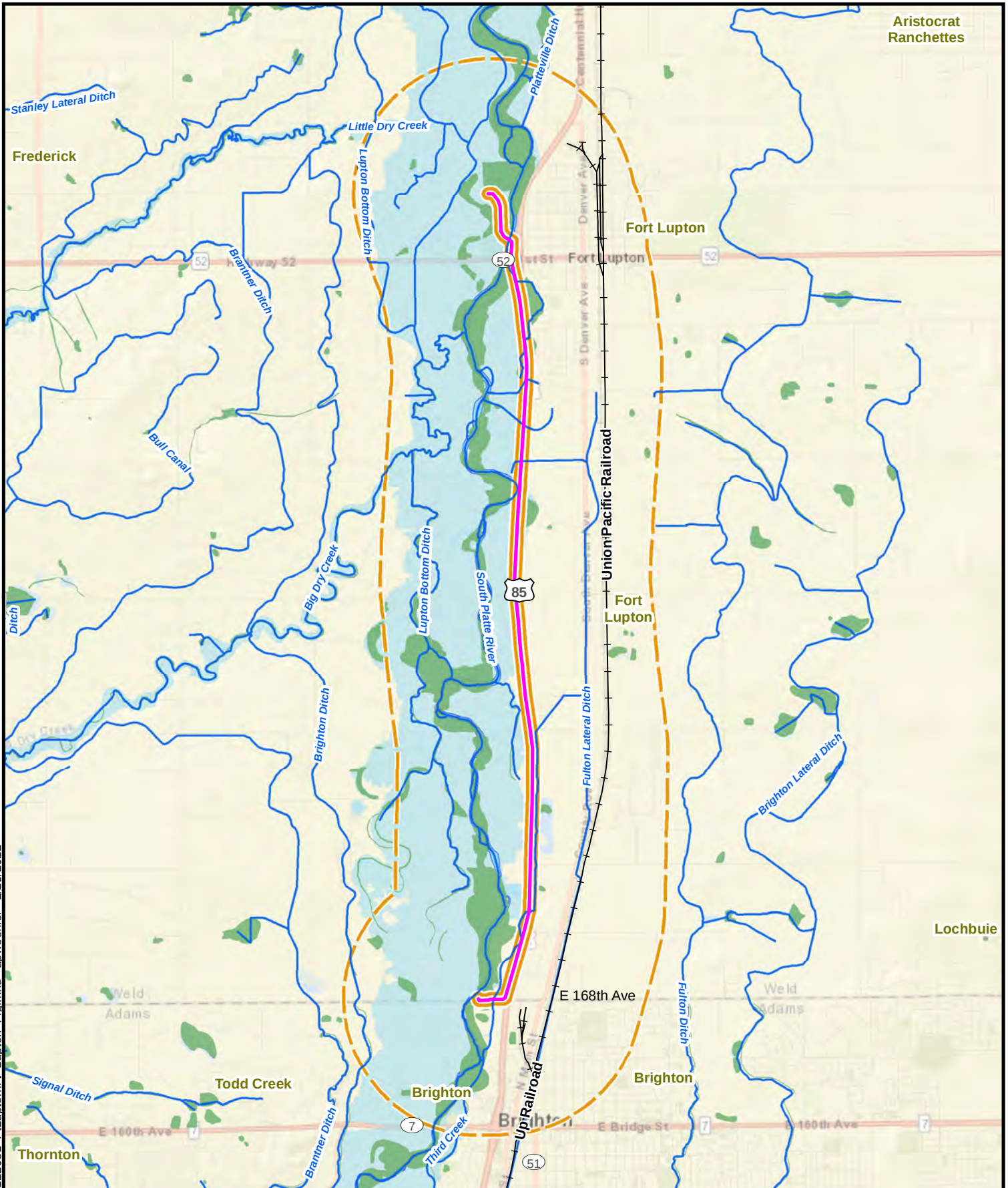


Figure 1
Project Location and Study Area
Forcemain and Lift Station
Fort Lupton, CO

ATTACHMENT B - IPAC SPECIES LIST



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Colorado Ecological Services Field Office
Denver Federal Center
P.O. Box 25486
Denver, CO 80225-0486
Phone: (303) 236-4773 Fax: (303) 236-4005
<http://www.fws.gov/coloradoES>
<http://www.fws.gov/platteriver>

In Reply Refer To:

January 11, 2022

Consultation Code: 06E24000-2022-SLI-0418

Event Code: 06E24000-2022-E-01047

Project Name: Fort Lupton

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service 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. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at:

<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>;

<http://www.towerkill.com>; and

[http://](http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html)

www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds
- Wetlands

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Colorado Ecological Services Field Office

Denver Federal Center
P.O. Box 25486
Denver, CO 80225-0486
(303) 236-4773

Project Summary

Consultation Code: 06E24000-2022-SLI-0418

Event Code: Some(06E24000-2022-E-01047)

Project Name: Fort Lupton

Project Type: DEVELOPMENT

Project Description: Ford Lupton

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@40.04381225,-104.82026401223435,14z>



Counties: Adams and Weld counties, Colorado

Endangered Species Act Species

There is a total of 8 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 4 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [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.

Mammals

NAME	STATUS
Preble's Meadow Jumping Mouse <i>Zapus hudsonius preblei</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/4090 General project design guidelines: https://ecos.fws.gov/ipac/project/M4TIGUJB2ZHFFJEBAW3NJS27VM/documents/generated/6861.pdf	Threatened

Birds

NAME	STATUS
Eastern Black Rail <i>Laterallus jamaicensis ssp. jamaicensis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10477	Threatened
Piping Plover <i>Charadrius melodus</i> Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is final critical habitat for this species. The location of the critical habitat is not available. This species only needs to be considered under the following conditions: 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. Species profile: https://ecos.fws.gov/ecp/species/6039	Threatened
Whooping Crane <i>Grus americana</i> Population: Wherever found, except where listed as an experimental population There is final critical habitat for this species. The location of the critical habitat is not available. This species only needs to be considered under the following conditions: 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. Species profile: https://ecos.fws.gov/ecp/species/758	Endangered

Fishes

NAME	STATUS
Pallid Sturgeon <i>Scaphirhynchus albus</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: 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. Species profile: https://ecos.fws.gov/ecp/species/7162	Endangered

Insects

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

Flowering Plants

NAME	STATUS
Ute Ladies'-tresses <i>Spiranthes diluvialis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2159	Threatened
Western Prairie Fringed Orchid <i>Platanthera praeclara</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: ▪ 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. Species profile: https://ecos.fws.gov/ecp/species/1669	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

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 OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

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.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

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
Bald Eagle <i>Haliaeetus leucocephalus</i> 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/1626	Breeds Oct 15 to Jul 31
Ferruginous Hawk <i>Buteo regalis</i> 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	Breeds Mar 15 to Aug 15

NAME	BREEDING SEASON
Lesser Yellowlegs <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere

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.

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.

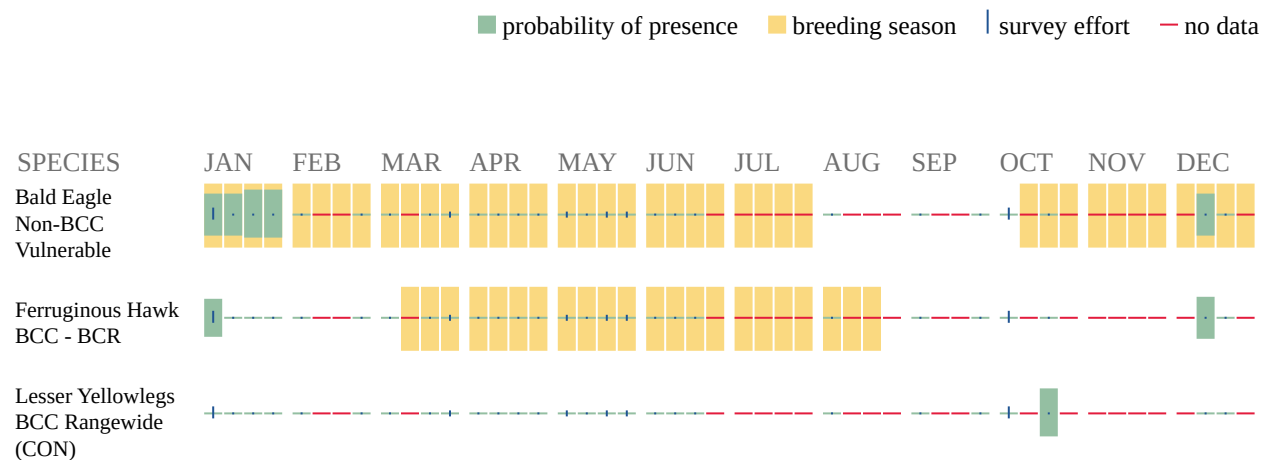
Survey Effort (|)

No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

Migratory Birds FAQ

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 migratory birds potentially occurring 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 [AKN Phenology 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 to 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, migrating or present year-round in my project 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 refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). 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.

Wetlands

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](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

WETLAND INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED.
PLEASE VISIT [HTTPS://WWW.FWS.GOV/WETLANDS/DATA/MAPPER.HTML](https://www.fws.gov/wetlands/data/mapper.html) OR CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

ATTACHMENT C - CODEX REPORT



Colorado's Conservation Data Explorer

Project Review Report

Project Description

Line

Project Information

Report Generation Date: 1/11/2022 10:23:11 AM

Project Title: Fort Lupton

User Project Number(s):

System Generated ID: CODEX-243

Project Type: Energy

Project Size: 52.89 (acres)

Latitude/Longitude: 40.006453 / -104.819966

County(s): ADAMS, WELD

Watershed(s) HUC 8: Middle South Platte-Cherry Creek

Township/Range and/or Section(s): 001N066W - 06 - 6P, 001N066W - 07 - 6P, 001N066W - 18 - 6P, 001N066W - 19 - 6P, 001N066W - 30 - 6P, 001N066W - 31 - 6P, 001S066W - 06 - 6P

Contact Information

Organization: Burns & McDonnell

Contact Name: Natalie Moreno

Contact Phone: 3615437504

Contact Email: nnmoreno@burnsmcd.com

Contact Address: 9785 MAROON CIRCLE, CENTENNIAL, CO 80206

Submitted On Behalf Of: CONSULTING

Prepared By:

Project Report:

The information contained herein represents the results of a search of Colorado's Conservation Data Explorer (CODEX) and can be used as notice to anticipate possible impacts or identify areas of interest. This tool queries multiple conservation datasets and includes a synthesis of Colorado Natural Heritage Program (CNHP) and Colorado Parks and Wildlife (CPW) data for sensitive species and natural communities. Care should be taken in interpreting these data.

Please note that the absence of data for a particular area, species, or habitat does not necessarily mean that these natural heritage resources do not occur on or adjacent to the project site, rather that our files do not currently contain information to document their presence. CODEX information should not replace field studies necessary for more localized planning efforts, especially if impacts to wildlife habitat are possible. Although every attempt is made to provide the most current and precise information possible, please be aware that some of our sources provide a higher level of accuracy than others, and some interpretation may be required. CODEX data is constantly updated and revised. Please contact CNHP, CPW and our partners for assistance with interpretation of this report or to obtain more information.

Disclaimer:

1. This is a preliminary environmental screening tool. It is not a substitute for the potential knowledge gained by having a biologist conduct a field survey of the project area. **This review does not constitute environmental consultation (including federal consultation under the Endangered Species Act), land use permitting, or the review of site-specific projects by CNHP and CPW and our partners.**
2. This Project Report is based on the project study area that was entered. The report must be updated if the project study area, location, or the type of project changes.
3. The Conservation Data Explorer (CODEX) data is constantly changing and being updated and is not intended to be the final word on the potential distribution of special status species. Colorado is large and diverse with plants, animals, and environmental conditions that are ever changing. Consequently, many areas may contain species that biologists do not know about or species previously noted in a particular area may no longer occur there. CODEX data contains information about species occurrences that have actually been reported to CNHP, CPW and our partners. Not all of Colorado has been surveyed for special status species, and surveys that have been conducted have varied greatly in scope and intensity. Such surveys may reveal previously undocumented population of species of special concern.

Location Accuracy Disclaimer:

Project locations are assumed to be both precise and accurate for the purposes of environmental review. The creator/owner of the Project Review Report is solely responsible for the project location and thus the correctness of the Project Review Report content.

Contact for CODEX Support:

Colorado Natural Heritage Program (CNHP)

CNHP
Colorado State University
1475 Campus Delivery
Fort Collins, CO 80523-1475

Tel: (970) 491-7331

Email: CNHP_codex_support@mail.colostate.edu

CNHP Website: cnhp.colostate.edu

Colorado Parks and Wildlife

For support regarding project review of land use impacts to wildlife, please contact the regional office in which your project resides and visit <https://cpw.state.co.us/conservation/Pages/CON-Energy-Land.aspx>

CPW Website : cpw.state.co.us

Northeast Region

Denver Office
6060 Broadway
Denver, CO 80216
Tel: (303) 291-7227

Northwest Region

Grand Junction Office
711 Independent Avenue
Grand Junction, CO 81505
Tel: (970) 255-6100

Southeast Region

Colorado Springs Office
4255 Sinton Road
Colorado Springs, CO 80907
Tel: (719) 227-5200

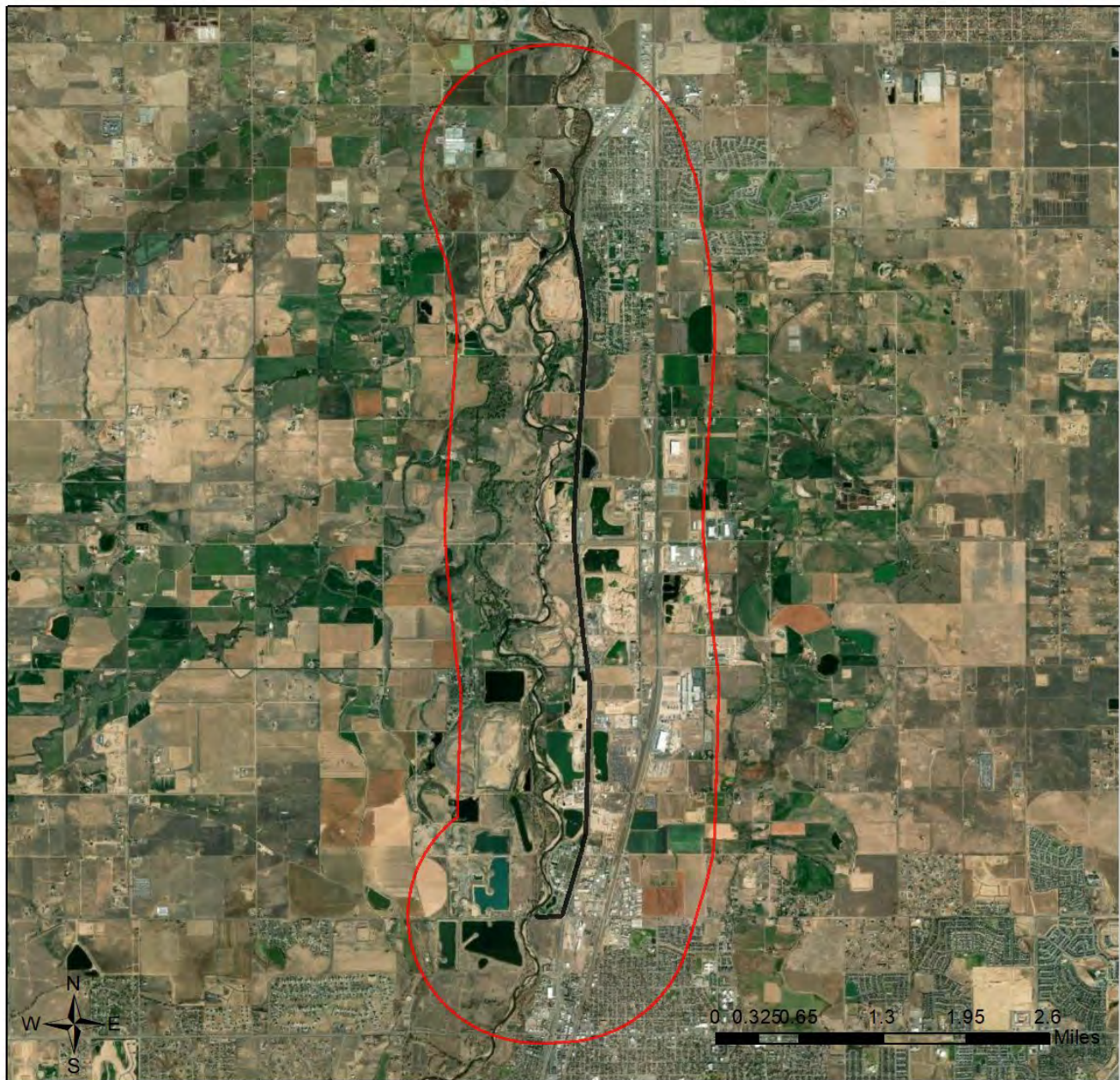
Southwest Region

Durango Office
151 East 16th Street
Durango, CO 81301
Tel: (970) 247-0855

For questions regarding CPW data in CODEX please contact 303-291-7152 or matt.schulz@state.co.us

Fort Lupton

Aerial Image with Locator Map

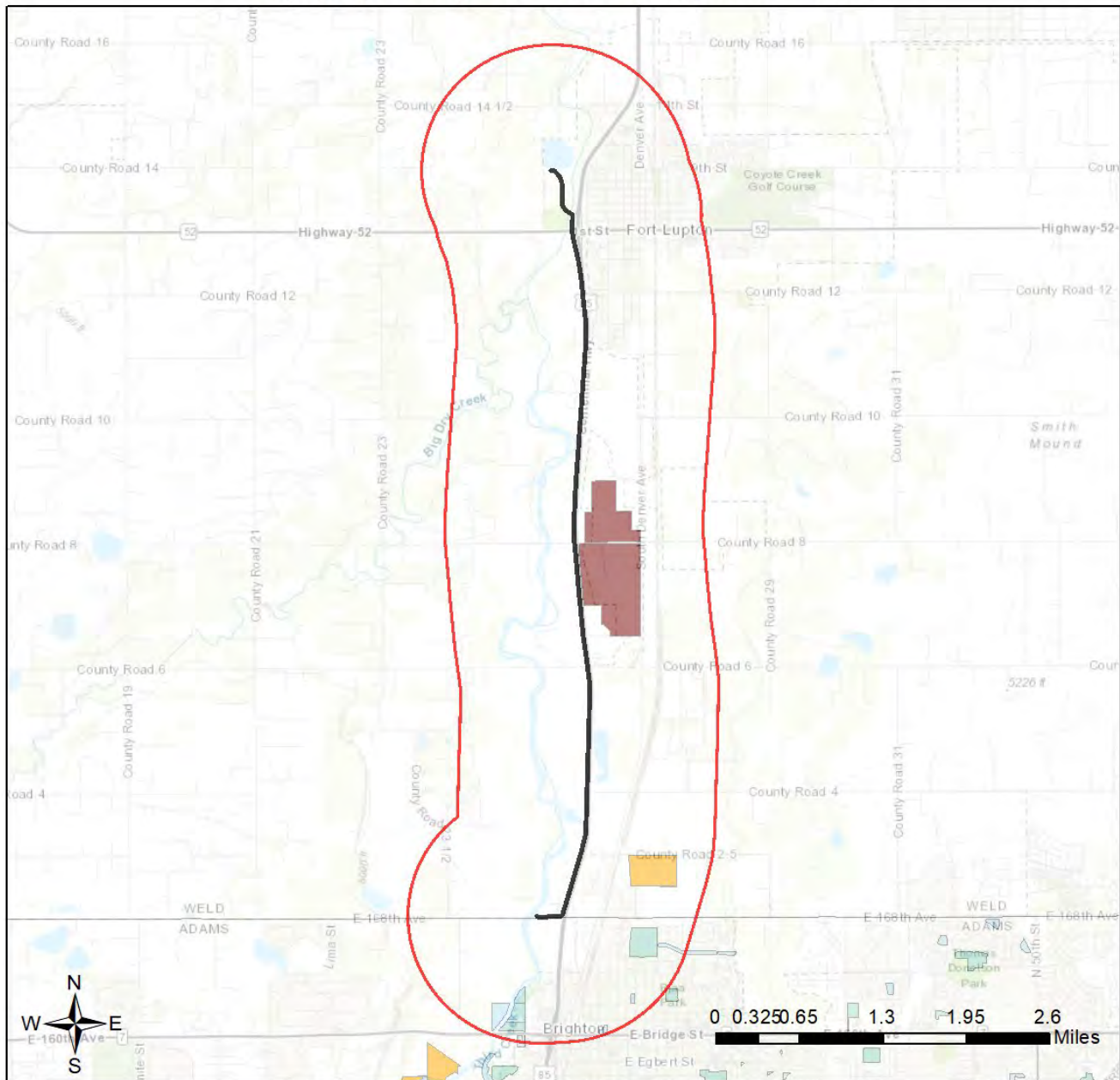


-  Project Boundary
-  Buffered Search Area



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

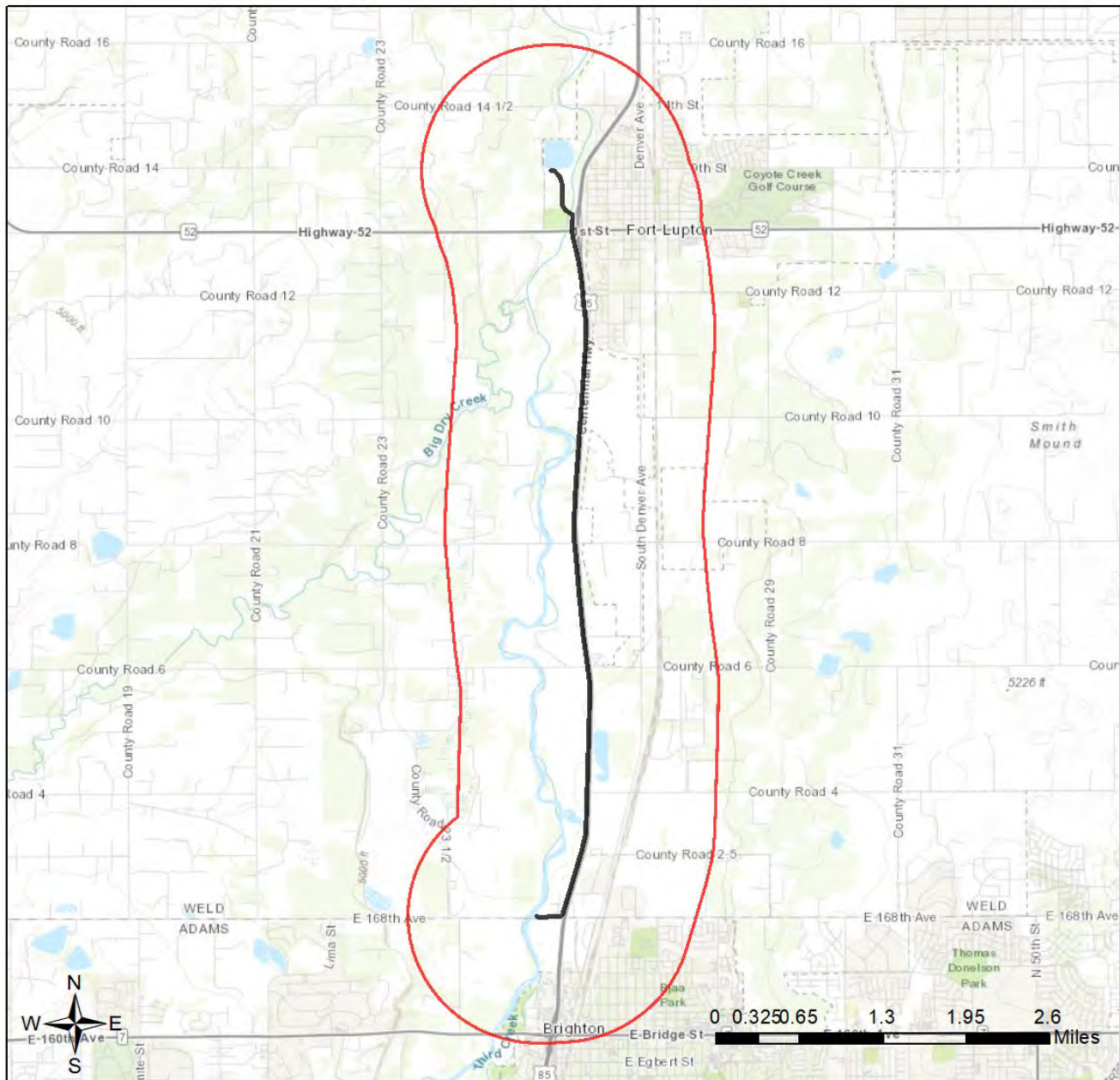
Fort Lupton Topographic Map with Land Management Status



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Fort Lupton

Web Map As Submitted By User



- ☐ Project Boundary
- ☐ Buffered Search Area

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Regulatory Species

Table 1. Documented Occurrences Within 1 Miles Of Project Area

Major Group	Scientific Name	Common Name	Data Type	Global Rarity	State Rarity	Viability Rank	Last Observation	ESA Status	CO Status	Other Status	CNHP Identifier	Data Source
Birds	Haliaeetus leucocephalus	Bald Eagle	CPW Nests - Active	G5	S3B,S3N		2020-10-28		SC	BGEPA/BLM/SWA P Tier 2/USFS		CPW 20201203
Birds	Haliaeetus leucocephalus	Bald Eagle	CPW Roost Sites	G5	S3B,S3N				SC	BGEPA/BLM/SWA P Tier 2/USFS		CPW 20201203
Birds	Haliaeetus leucocephalus	Bald Eagle	CPW Winter Concentration Area	G5	S3B,S3N				SC	BGEPA/BLM/SWA P Tier 2/USFS		CPW 20201203

Table 2. Potential Regulatory Species within Project Area: Models, Range Maps, or Records with Low Precision

Major Group	Scientific Name	Common Name	Data Type	Global Rarity	State Rarity	ESA Status	CO Status	Other Status	Data Source
Birds	Aquila chrysaetos	Golden Eagle	CPW Breeding Range	G5	S3S4B,S4N			BGEPA/SWAP Tier 1	CPW 20201203
Birds	Haliaeetus leucocephalus	Bald Eagle	CPW Winter Forage	G5	S3B,S3N		SC	BGEPA/BLM/SWAP Tier 2/USFS	CPW 20201203
Mammals	Zapus hudsonius preblej	Meadow Jumping Mouse Subsp	CPW Overall Range	G5T2	S1	LT	ST	SWAP Tier 1	CPW 20201203

Table 3. Fish & Wildlife Service Critical Habitats within 1 Miles of Project Area

No results were found for this project area.

Other Species of Concern

Table 4. Documented Occurrences within 1 Miles of Project Area: Rare Species, Natural Communities, and Species of Economic, Recreational or Conservation Value

Major Group	Scientific Name	Common Name	Data Type	Global Rarity	State Rarity	Viability Rank	Last Observation	ESA Status	CO Status	Other Status	CNHP Identifier	Data Source
Amphibians	Lithobates pipiens	Northern Leopard Frog	CNHP EO	G5	S3	H	1965-05-06		SC	BLM/SWAP Tier 1/USFS	16009	CNHP 2010920
Birds	Branta canadensis	Canada Goose	CPW Brood Concentration Area	G5	S5							CPW 201203
Birds	Branta canadensis	Canada Goose	CPW Production Area	G5	S5							CPW 201203
Birds	Branta canadensis	Canada Goose	CPW Winter Concentration Area	G5	S5							CPW 201203
Birds	Meleagris gallopavo	Wild Turkey	CPW Production Area	G5	S5							CPW 201203
Birds	Meleagris gallopavo	Wild Turkey	CPW Winter Concentration Area	G5	S5							CPW 201203
Birds	Pelecanus erythrorhynchos	American White Pelican	CPW Foraging Area	G4	S1B					BLM/SWAP Tier 2		CPW 201203
Fish	Etheostoma exile	Iowa Darter	CPW HUC12 Presence	G5	S3				SC	SWAP Tier 2		CPW 201203
Fish	Fundulus sciadicus	Plains Topminnow	CPW HUC12 Presence	G4	S4					SWAP Tier 1		CPW 201203
Fish	Lepomis humilis	Orangespotted Sunfish	CPW HUC12 Presence	G5	S5					SWAP Tier 1		CPW 201203
Mammals	Odocoileus hemionus	Mule Deer	CPW Highway Crossing	G5	S4							CPW 201203
Mammals	Odocoileus hemionus	Mule Deer	CPW Migration Corridors	G5	S4							CPW 201203
Mammals	Odocoileus hemionus	Mule Deer	CPW Resident Population Area	G5	S4							CPW 201203
Mammals	Odocoileus hemionus	Mule Deer	CPW Severe Winter Range	G5	S4							CPW 201203
Mammals	Odocoileus virginianus	White-tailed Deer	CPW Concentration Area	G5	S5							CPW 201203
Mammals	Odocoileus virginianus	White-tailed Deer	CPW Highway Crossing	G5	S5							CPW 201203

Table 5. Potential Occurrences within Project Area: Models, Range Maps, or Records with Low Precision

Major Group	Scientific Name	Common Name	Data Type	Global Rarity	State Rarity	ESA Status	CO Status	Other Status	Data Source
Birds	Ammodramus savannarum	Grasshopper Sparrow	CPW Breeding Range	G5	S3S4B			SWAP Tier 2/USFS	CPW 20201203
Birds	Athene cunicularia	Burrowing Owl	CPW Breeding Range	G4	S4B		ST	BLM/SWAP Tier 1/USFS	CPW 20201203
Birds	Botaurus lentiginosus	American Bittern	CPW Breeding Range	G5	S3S4B			SWAP Tier 2/USFS	CPW 20201203
Birds	Branta canadensis	Canada Goose	CPW Foraging Area	G5	S5				CPW 20201203
Birds	Branta canadensis	Canada Goose	CPW Molting Area	G5	S5				CPW 20201203
Birds	Branta canadensis	Canada Goose	CPW Winter Range	G5	S5				CPW 20201203
Birds	Buteo swainsoni	Swainson's Hawk	CPW Breeding Range	G5	S5B			SWAP Tier 2	CPW 20201203
Birds	Calamospiza melanocorys	Lark Bunting	CPW Breeding Range	G5	S4			SWAP Tier 2	CPW 20201203
Birds	Catharus fuscescens	Veery	CPW Breeding Range	G5	S3B			SWAP Tier 2	CPW 20201203
Birds	Circus hudsonius	Northern Harrier	CPW Breeding Range	G5	S3B			SWAP Tier 2/USFS	CPW 20201203
Birds	Columba fasciata	Band-tailed Pigeon	CPW Breeding Range	G4	S4B			SWAP Tier 2	CPW 20201203
Birds	Falco mexicanus	Prairie Falcon	CPW Breeding Range	G5	S4B,S4N			SWAP Tier 2	CPW 20201203
Birds	Meleagris gallopavo	Wild Turkey	CPW Overall Range	G5	S5				CPW 20201203
Birds	Meleagris gallopavo	Wild Turkey	CPW Winter Range	G5	S5				CPW 20201203
Birds	Passerina amoena	Lazuli Bunting	CPW Breeding Range	G5	S5B			SWAP Tier 2	CPW 20201203
Birds	Pelecanus erythrorhynchos	American White Pelican	CPW Overall Range	G4	S1B			BLM/SWAP Tier 2	CPW 20201203
Birds	Peucaea cassinii	Cassin's Sparrow	CPW Breeding Range	G5	S4B			SWAP Tier 2/USFS	CPW 20201203
Birds	Phasianus colchicus	Ring-necked Pheasant	CPW Overall Range	G5	SNA				CPW 20201203
Birds	Selasphorus rufus	Rufous Hummingbird	CPW Migration Range	G4	SNA			SWAP Tier 2	CPW 20201203
Birds	Spizella breweri	Brewer's Sparrow	CPW Breeding Range	G5	S4B			BLM/SWAP Tier 2/USFS	CPW 20201203
Insects	Atrytone arogos	Arogos Skipper	Range Map - within range	G2G3	S2			SWAP Tier 2	CNHP 20210615
Insects	Bombus (Bombus) occidentalis	Western Bumble Bee	Range Map - within range	G4	S3S4			SWAP Tier 2	CNHP 20210615
Insects	Bombus (Cullumanobombus) fraternus	Southern Plains Bumble Bee	Range Map - within range	G2G4	S2S3			SWAP Tier 2	CNHP 20210615
Insects	Bombus (Cullumanobombus) morrisoni	Morrison's Bumble Bee	Range Map - within range	G3	S2S4			SWAP Tier 2	CNHP 20210615
Insects	Bombus (Thoracobombus) pensylvanicus	American Bumble Bee	Range Map - within range	G3G4	S2S3			SWAP Tier 2	CNHP 20210615
Insects	Bombus fervidus	Yellow Bumble Bee	Range Map - within range	GNR	S3S4			SWAP Tier 2	CNHP 20210615
Insects	Celastrina humulus	Hops Feeding Azure	Range Map - within range	G2G3	S2			SWAP Tier 2	CNHP 20210615
Insects	Danaus plexippus	Monarch	Range Map - present	G4	S5			SWAP Tier 2	CNHP 20210615
Insects	Euphilotes rita coloradensis	Colorado Blue	Range Map - within range	G3G4T3	S2			SWAP Tier 2	CNHP 20210615

Table 5. Potential Occurrences within Project Area: Models, Range Maps, or Records with Low Precision

Major Group	Scientific Name	Common Name	Data Type	Global Rarity	State Rarity	ESA Status	CO Status	Other Status	Data Source
Insects	Hesperia ottoe	Ottoe Skipper	Range Map - within range	G3	S2			SWAP Tier 2/USFS	CNHP 20210615
Insects	Plathemis subornata	Desert Whitetail	Range Map - present	G4	S3				CNHP 20210615
Insects	Polites origenes	Cross-line Skipper	Range Map - within range	G5?	S3				CNHP 20210615
Insects	Sympetrum madidum	Red-veined Meadowfly	Range Map - present	G5	S2			SWAP Tier 2	CNHP 20210615
Mammals	Cynomys ludovicianus	Black-tailed Prairie Dog	CPW Overall Range	G4	S3		SC	BLM/SWAP Tier 2/USFS	CPW 20201203
Mammals	Cynomys ludovicianus	Black-tailed Prairie Dog	CPW Potential Occurrence	G4	S3		SC	BLM/SWAP Tier 2/USFS	CPW 20201203
Mammals	Eptesicus fuscus	Big Brown Bat	CPW Overall Range	G5	S5				CPW 20201203
Mammals	Lasionycteris noctivagans	Silver-haired Bat	CPW Overall Range	G3G4	S3S4				CPW 20201203
Mammals	Lasiurus borealis	Eastern Red Bat	CPW Overall Range	G3G4	S2S3B				CPW 20201203
Mammals	Lasiurus cinereus	Hoary Bat	CPW Overall Range	G3G4	S3S4B			SWAP Tier 2/USFS	CPW 20201203
Mammals	Lepus townsendii	White-tailed Jackrabbit	CPW Overall Range	G5	S4			SWAP Tier 2	CPW 20201203
Mammals	Myotis lucifugus	Little Brown Myotis	CPW Overall Range	G3	S4			SWAP Tier 1	CPW 20201203
Mammals	Odocoileus hemionus	Mule Deer	CPW Overall Range	G5	S4				CPW 20201203
Mammals	Odocoileus hemionus	Mule Deer	CPW Winter Range	G5	S4				CPW 20201203
Mammals	Odocoileus virginianus	White-tailed Deer	CPW Overall Range	G5	S5				CPW 20201203
Mammals	Odocoileus virginianus	White-tailed Deer	CPW Winter Range	G5	S5				CPW 20201203
Mammals	Perimyotis subflavus	Tricolored Bat	CPW Overall Range	G2G3	S2				CPW 20201203
Mammals	Perognathus fasciatus	Olive-backed Pocket Mouse	CPW Overall Range	G5	S3			SWAP Tier 1	CPW 20201203
Mammals	Perognathus fasciatus	Olive-backed Pocket Mouse	Range Map - within range	G5	S3			SWAP Tier 1	CNHP 20210615
Reptiles	Aspidoscelis sexlineata	Six-lined Racerunner	CPW Overall Range	G5	S5				CPW 20201203
Reptiles	Chelydra serpentina	Snapping Turtle	CPW Overall Range	G5	S4				CPW 20201203
Reptiles	Chrysemys picta	Painted Turtle	CPW Overall Range	G5	S5				CPW 20201203
Reptiles	Coluber constrictor	Racer	CPW Overall Range	G5	S5				CPW 20201203
Reptiles	Crotalus oreganus	Western Rattlesnake	CPW Overall Range	G5	SNR				CPW 20201203
Reptiles	Crotalus viridis	Western Rattlesnake	CPW Overall Range	G5	S5				CPW 20201203
Reptiles	Heterodon nasicus	Plains Hognose Snake	CPW Overall Range	G5	S4				CPW 20201203
Reptiles	Holbrookia maculata	Lesser Earless Lizard	CPW Overall Range	G5	S5				CPW 20201203
Reptiles	Lampropeltis gentilis	Central Plains Milk Snake	CPW Overall Range	G5	S5			SWAP Tier 2	CPW 20201203
Reptiles	Phrynosoma hernandesi	Hernandez's Short-horned Lizard	CPW Overall Range	G5	S5				CPW 20201203
Reptiles	Pituophis catenifer sayi	Bullsnake	CPW Overall Range	G5T5	S5				CPW 20201203
Reptiles	Plestiodon multivirgatus epipleurotus	Variable Skink	CPW Overall Range	G5T5	S3				CPW 20201203

Table 5. Potential Occurrences within Project Area: Models, Range Maps, or Records with Low Precision

Major Group	Scientific Name	Common Name	Data Type	Global Rarity	State Rarity	ESA Status	CO Status	Other Status	Data Source
Reptiles	Plestiodon multivirgatus	Many-lined Skink	CPW Overall Range	G5	S4				CPW 20201203
Reptiles	Sceloporus consobrinus	Fence/prairie/plateau Lizard	CPW Overall Range	G5	S5				CPW 20201203
Reptiles	Sceloporus tristichus	Southern Plateau Lizard	CPW Overall Range	G5	S3				CPW 20201203
Reptiles	Tantilla nigriceps	Plains Blackhead Snake	CPW Overall Range	G5	S4				CPW 20201203
Reptiles	Terrapene ornata ornata	Ornate Box Turtle	CPW Overall Range	G5T5	S5				CPW 20201203
Reptiles	Thamnophis elegans	Western Terrestrial Garter Snake	CPW Overall Range	G5	S5				CPW 20201203
Reptiles	Thamnophis radix	Plains Garter Snake	CPW Overall Range	G5	S5				CPW 20201203
Reptiles	Thamnophis sirtalis	Common Garter Snake	CPW Overall Range	G5	S3		SC	SWAP Tier 2	CPW 20201203
Reptiles	Trionyx spiniferus	Spiny Softshell	CPW Overall Range	G5	S4				CPW 20201203

Special Areas and Land Status

Table 6. CNHP Potential Conservation Areas and Other Special Areas within 1 Miles of Project Area

Name	Data Type	CNHP Biodiversity Rank	CNHP Edit Date	CNHP Identifier	Data Source
Aquatic Native Species Conservation Water	SB181 High Priority Habitat				CPW 20210120
Aquatic Sportfish Management Water	SB181 High Priority Habitat				CPW 20210120
Bald Eagle Roost or Communal Roost	SB181 High Priority Habitat				CPW 20210120
Mule Deer Migration Corridor	SB181 High Priority Habitat				CPW 20210120
Mule Deer Severe Winter Range	SB181 High Priority Habitat				CPW 20210120
South Platte River	CNHP PCA	B4: Moderate Biodiversity Significance	2012-01-06	2167	CNHP 20210920

Table 7. Managed Areas within Project Area

Name	Owner	Manager	Management Description	Public Access*	Protection Mechanism	Easement Holder	Data Source
	PRIVATE	PRIVATE	Private Land	No	NA		COMaP v20190306

* It is the responsibility of the user to verify public access on any site as access can change over time. Entering an area that is not open to the public subjects an individual to possible

sanctions for trespass under Colorado law.

Water and Wetlands

Table 8. National Wetland Inventory (NWI) Features within Project Area

NWI Code	Wetland Type	Total Acres	System	Class	Water Regime	Modifier	Data Source
PEM1A	Emergent	21.48	Palustrine	Emergent/Herbaceous	Temporarily Flooded	None	CNHP 20210122
PEM1F	Emergent	2.45	Palustrine	Emergent/Herbaceous	Semipermanently Flooded	None	CNHP 20210122
PFOA	Forested	3.33	Palustrine	Forested	Temporarily Flooded	None	CNHP 20210122
PUBFx	Pond	0.78	Palustrine	Unconsolidated Bottom	Semipermanently Flooded	Excavated	CNHP 20210122
R2UBG	Rivers & Streams	1,348.94	Riverine	Unconsolidated Bottom	Intermittently Exposed	None	CNHP 20210122
R4SBC	Rivers & Streams	1.31	Riverine	Stream Bed	Seasonally Flooded	None	CNHP 20210122
R4SBCx	Rivers & Streams	13.96	Riverine	Stream Bed	Seasonally Flooded	Excavated	CNHP 20210122
Rp1FO	Riparian	30.36	Riparian	Forested/Shrub Riparian	N/A	None	CNHP 20210122

Project Report Appendix

Please visit the [CNHP website](#) for a more extensive collection of definitions for CODEX reports in addition to what is provided here below.

About CNHP Data

One of CNHP's core research activities is managing a statewide database that details the locations of rare and imperiled species and natural plant communities in Colorado. We gather data from CNHP surveys and monitoring projects, as well as from partners and other trusted sources like herbariums. All of our data are compiled and managed in the Biodiversity Information Management System (Biotics), a web-enabled database platform hosted by [NatureServe](#). The species and natural plant communities we track are assigned global and state imperilment ranks based on rarity, threats, and trends, and their locations are mapped as element occurrences. Element occurrences include spatial data as well as details on condition, size, and landscape context. This information allows us to track both overall distribution and site-specific details describing how well

elements are thriving at each location. We use element occurrences to delineate Potential Conservation Areas that represent the primary area needed to support the element occurrences, and often include additional suitable habitat or buffers from disturbance. **Please visit the [CNHP website](#) for more definitions and details related to CNHP data in CODEX.**

CODEX Report Definitions

CNHP Biodiversity Rank – The significance of a potential conservation area in terms of its biological diversity ranging from B1 (Outstanding Biodiversity significance meaning protection of this potential conservation area can prevent a species from going extinct) to B5 (General interest or open space for more globally secure species).

CNHP Edit Date– The date the CNHP potential conservation area record was last updated.

CNHP Identifier– A unique identifier for each CNHP data type, applicable only to CNHP data records.

CO Status – State status per Colorado Parks & Wildlife: Endangered (SE), Threatened (ST), or State Special Concern (SC).

Common Name – The common name of the species or plant community.

Critical Habitat Status – Critical habitat status for federally listed species under the Endangered Species Act.

Proposed – Proposed critical habitat

Final – Final critical habitat

Critical Habitat Federal Register- The volume number and first page of

Managed Areas Name – Name of the managed area.

Manager – The general land Manager.

Management Description - The general category of how the feature is managed.

Other Species of Concern – Other globally rare species and plant communities, BLM or USFS sensitive species, state listed species, or Tier 1 and Tier 2 priority species from Colorado's State Wildlife Action Plan, and species of economic and recreational value.

Other Status – Other status such as BLM sensitive species (BLM), U.S Forest Service sensitive species (USFS), and Tier 1 and Tier 2 priority species from Colorado's State Wildlife Action Plan (SWAP Tier 1, SWAP Tier 2).

Owner – The general land owner.

Public Access – Level of public access to the feature.

Protection Mechanism – Any mechanism of protection assigned to the managed area.

the federal register publication describing the critical habitat.

Critical Habitat Publication Date - Federal Register publication date.

Data Source – The agency and date of the data provided.

Data Type –

[CNHP EO](#) – A location in which an element is, or was, present.

CNHP General EO – An element occurrence with imprecise directions; broadly mapped and typically historical or extirpated.

[CNHP Observation](#) – Sightings of species on CNHP's watchlist or sightings of tracked elements that do not meet the minimum criteria necessary to make an occurrence.

[CNHP PCA](#) – Areas in the state contributing to Colorado's biological diversity.

CNHP Model – Modeled presumed presence or habitat for a particular species.

CNHP PCA (Important Plant Area) – B1 or B2 CNHP potential conservation area supporting globally rare plants.

CNHP Range Map – Overall range for a particular species by HUC 10 and HUC 12 for aquatics.

[Important Bird Area](#) – The most important places for birds as identified by the National Audubon Society.

Regulatory Species – Species with federal protection under the Endangered Species Act or Bald and Golden Eagle Protection Act along with FWS designated critical habitat.

Return on Investment Report - Provides maps and the estimated annual benefit in dollars of conserved ecosystem services by ecosystem type within the project area in PDF format. Ecosystem types are derived from the 2016 National Land Cover Database (NLCD).

Scientific Name – The scientific name of the species or plant community

Special Areas and Land Status – CNHP Potential Conservation Areas ([PCA](#)), [State Designated Natural Areas](#), [Important Bird Areas](#), and managed lands from the Colorado Ownership, Management and Protection database ([COMaP](#)), SB181 High Priority Habitat

Special Areas Name – The name of the special area.

State Rarity - The [rarity rank](#) used by CNHP and The Natural Heritage Network to track how rare a species or plant community is in Colorado, ranging from S1 (rarest) to S5 (most common).

Viability Rank – The estimated viability of the species or ecological integrity of the natural community based on condition, size, and landscape context, ranging from A (excellent) to D (poor).

Water and Wetlands – Wetland types from the [National Wetland Inventory database](#).

Class - The general appearance of the habitat in terms of either the

State Natural Area - Areas that contain at least one unique or high-quality natural feature of statewide significance as designated by the Colorado Natural Areas Program.

CPW <description> - CPW data with a long list of data types: observations, nest sites, leks, etc.

Easement Holder – Organization or agency holding an easement (if present).

ESA Status – Federal status under the [Endangered Species Act](#): Endangered (E), Threatened (T), or Federal Candidate (C) with qualifiers for Partial Status (PS) and experimental populations (XN).

Global Rarity – The [rarity rank](#) used by CNHP and The Natural Heritage Network to track how rare a species or plant community is globally, ranging from G1 (rarest) to G5 (most common).

Last Observation – The most recent field observation.

Major group – The major group in which the element falls: Amphibians, Birds, Crayfish, Fish, Insects, Mammals, Mollusks, Natural Communities, Nonvascular Plants, Reptiles, and Vascular Plants.

dominant life form of the vegetation, or the physiography and composition of the substrate.

Modifier - Modifier assigned to further describe wetlands and deepwater habitats within the classification hierarchy based on water chemistry or pH, wetland or deepwater alteration, or soil type.

NWI Code – An alpha-numeric code corresponding to the classification nomenclature that best describes a particular wetland habitat. For more information on NWI data values, visit <https://www.fws.gov/wetlands/data/wetland-codes.html>

System – A complex of wetlands and deepwater habitats that share the influence of similar hydrologic, geomorphologic, chemical or biological factors.

Water Regime - Description of water duration within a wetland habitat.

Wetland Total Acres - Total acres of the wetland type in the project area.

Wetland Type – The generalized [Cowardin](#) wetland type.